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**ASPECTS OF ORGANISATIONAL DECLINE AND
CRISIS: THE MULTI DIMENSIONAL CRISIS
IN THE UNITED KIBBUTZ MOVEMENT**

A THESIS

SUBMITTED IN PARTIAL FULFILMENT

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This Doctoral Thesis is dedicated to my life companion, Arza, without whose tenacity, confidence and love this thesis could not have come to fruition.

ASPECTS OF ORGANISATIONAL DECLINE AND CRISIS: THE MULTI-DIMENSIONAL CRISIS IN THE UNITED KIBBUTZ MOVEMENT 1983 - 1988

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ABSTRACT

The thesis refers to the occurrence, evolution and analysis of a multi-dimensional crisis in the kibbutzim affiliated with Israel's largest Kibbutz Federation, the United Kibbutz Movement. Concurrent with and preceding the all-encompassing crisis, a latent if persistent organisational decline is known to have affected most of the kibbutzim. The thesis, therefore, simultaneously addresses aspects of organisational decline and organisational crisis. None of the aforementioned phenomenon have as yet been appropriately researched within the framework of the kibbutz.

It is generally argued that the kibbutz developed a large measure of organisational inertia, was shielded by a favouring task-environment, hence numbed its boundary spanning capacity. Adverse environmental jolts triggered a major crisis which exposed a wide variety of structural-organisational dysfunctions. This study encompasses a relatively large number of aspects consanguine with theories of both organisational decline and crisis.

A number of reasons highlight the scholarly requisite in attending to these topics. On the one hand, the literature on organisational decline and crisis from different disciplines, posits often contradictory directions for both the synthesis of a coherent body of knowledge and prescriptions for crisis management. On the other hand, negative organisational trends within the kibbutz system have been very passably

addressed. Since both decline and crisis digress from normative organisational conduct that underscores growth, they present somewhat more challenging research topics.

Growing awareness as to the accelerated pace of organisational retrenchments and business failures alike have invoked academic as well as managerial interest. The rarity of either cross-sectional and specifically longitudinal data reflecting the dynamics of crisis and decline have resulted in proliferous theoretical treatises that, almost invariably lacked a comprehensive empirical substantiation.

This thesis encompasses a population of crisis-ridden organisations based upon a longitudinal data-base. The study investigates antecedents, causes and responses to the crisis, employing statistical methodologies (Multiple Correspondence Analysis, Multiple Discriminant Analysis and Pooled Regression Analysis), hitherto not applied in the emerging discipline of organisational decline, crisis and demise. The findings support important theoretical propositions relevant to the roots of organisational response and organisational mobilisation towards a turnaround or organisational change.

Essentially, many of the theoretical presumptions are akin with the normative dichotomy between not-for-profit and business organisations. To a large extent, these theories have been found to adequately mirror the situation in the kibbutz

despite the structural co-existence of business and public domains under one organisational framework. The study points to three major types of crises; an economic, demographic and a crisis of meaninglessness. These may not be viewed singularly but should be conceptualised as a multi-dimensional or multi-faceted crisis. Indications abound as to the existence of vicious circles entailing the organisational, economic and demographic facets of the kibbutz. Empirical findings lend support mainly to theories ranging from brain-drain, prediction of organisational crisis, organisational goals and resistance to change. The thesis systematises a modest basis for further research as well as advances robust methodologies to facilitate future analyses of declining and demising organisations.

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ABBREVIATIONS

CA	CORRESPONDENCE ANALYSIS
BEBTRN	DEBT DIVIDED BY TURNOVER
EXP	EXPENDITURES
EXT. JOB	EXTERNAL JOBS
IDF	ISRAEL DEFENCE FORCES
INF	INFLATION
INV	INVESTMENT
KIB	KIBBUTZ
MANUF	MANUFACTURE
MCA	MULTIPLE CORRRESPONDENCE ANALYSIS
MDA	MULTIPLE DISCRIMINANT ANALYSIS
ND	NET DEBT
NIS	NEW ISRALI SHEKEL
ODD	ORGANISATIONAL DEMOGRAP[HIC DEPLETION
ORG	ORGANISATIONAL
OT	ORGANISATION THEORY
T	THE YEAR 1988
T-1	1987, T-2 1986 etc.
TRNVR	TURNOVER
UKM	UNITED KIBBUTZ MOVEMENT

INTRODUCTION

"No organization is immune to encounters with disappointment or failure. More significantly, organizations that strive for outstanding success and major power, or seek to contribute something new and different to society, are especially vulnerable to episodes in which reality does not conform to their objectives, episodes which constitute serious crises. Far from being a prelude to failure as an organization, such crises may actually be occasions for renewed growth and the beginning of truly outstanding success" (Fink, Beak & Taddeo, 1971:16¹)

General Background and Statement of the Research Problem

Much like the eclectic nature of underlying theories concerning organisational decline and crisis, the topic of our research agenda is comprehensive and entails many essential components which, eventually, will have to be synthesized into a coherent presentation. The research problem revolves around a major occurrence in the annals of the kibbutz, earmarking an overwhelming turning point which is believed to have transformed the face of the kibbutz in an unprecedented fashion and in an unequalled thrust. In a nutshell, the kibbutz, being a unique creation of the Zionist movement, experienced, for a considerable length of time, a preferential institutional interest, befitting the extraordinary national assignments it assumed since its inception. Having assumed foremost national tasks, it had become part of the so-called Israeli elite. As such, the kibbutz was invariably shielded from having to grapple with genuine environmental threats. The historical domination of the Labour Alliance not only legitimised kibbutz's special

¹Paraphrasing Zaleznik's (1967:70) statement.

status but had unknowingly contributed to an almost complete desensitisation of its environmental awareness. The kibbutz has had remarkable achievements which far exceed its proportional size. The kibbutz movement manufactures in excess of forty percent of the total agricultural produce, about twelve percent of the total industrial output and contributes almost ten percent of Israel's GNP. These figures constitute the net economic contribution of a mere 3.3 percent of the Jewish population in Israel. The kibbutz is renowned in its qualitative contribution to such national institutions as the Israeli Defence Forces (IDF) where even the absolute number of kibbutz-born troopers serving in spearhead units as well as in the officer corps is extraordinarily high. Rapid economic developments within the kibbutz framework coupled with accelerated economic growth in Israel at large, intensified internal pressures to drastically increase standards of living on the one hand and a fervent drive leading towards an unmanageable economic expansion on the other. Being devoid of environmental spanning capability and adequate managerial faculties, the kibbutz had expanded beyond its actual capacity. The relative safety rendered by a favourable environment facilitated economic and demographic growth on the one hand but enervated organisational structure and ossified organisational goals. Hence, day to day norms and practices were moderately and incrementally modified, forming a wide discrepancy with the fast-changing surroundings. The largely self-imposed social

seclusion and aloofness incorporated with numbed environmental perception faltered in identifying major and generally antagonistic undercurrents within the Israeli socio-political loci.

The growing economic instability which typified the West primarily following the 1973 oil crisis, ensued an acceleration in the occurrences of business failures on the one hand and public-organisational retention and downsizing on the other. Unlike the "*predictable times*" between the Marshal Plan and the Opec Cartel when "*fundamentals tend to be taken for granted*" (Drucker, 1980:9) the 1980s earmarked an era of massive and widespread failures. Concurrent with the noticeable growth in environmental turbulence and the ensued occurrences of organisational crises, the hitherto diluted literature addressing organisational decline and crisis expanded both in terms of modelling crises and phases of organisational decline and demise and in furnishing empirical evidence-based research. Though neither the conceptual clarity nor the non-integrative nature of organisational decline merits the theory a paradigmatic status, the extent of both theoretical treatises and empirical research reached proportions not known in other areas of organisational theory. Chiefly as a result of the need to provide answers to a host of managerial/organisational difficulties arising from frequent crises in both the private and the public sectors.

In a way, the kibbutz is but another instance of an organisation that failed to effectively interpret major alterations in its environment and reacted belatedly to antecedents or overhanging early warning signals. However, the kibbutz constitutes a unique organisational phenomena in that it integrates atypical communal aspects with singular characteristics of business administration. The current lingering and multi-faceted crisis which seem to oscillate in its intensity since 1984, bears many characteristics which have yet to be studied. Of particular interest would be to examine the applicability of theories highlighting not-for profit-organisations and theories underlying aspects of business failure. Intuitively, since the kibbutz constitutes an amalgamation of both organisational extremes, one tends to doubt the relevance and validity of either of the two when applied to kibbutz's locus, assuming that the kibbutz merits unique theoretical constructs. Indeed, this apprehension may partially clarify the avoidance on the part of students of the kibbutz from undertaking purely organisational-oriented research.

Summing up the aforementioned broadly-stated propositions and reflections, a need arises to bring to the fore the inevitable query. What makes our initial reflections a matter of meaningful and current interest ?

Unlike previous crises of minor proportions, the current one appears to have engulfed every facet of the complex system called kibbutz.

The current crisis is an all-encompassing one and grossly permeates individual's perceptions. Therefore a coherent demarcation of a perceptual 'sub crises' is inevitably called for.

Accordingly, four major occurrences of crisis are observed, each of which calls for a comprehensive consideration.

a. An **economic** crisis; the general, multi-dimensional crisis is still referred to as 'economic' by uninformed quarters. Indeed, both exogenously and endogenously, economic factors are assumed to have served as major catalysts. As, initially, the economic pinch is the most conspicuous angle of the general predicament, the crisis in its entirety is labelled 'economic'.

b. A **demographic** crisis: an almost immediate organisational response involves a sequence of increasingly powerful negative demographic propensities triggered, initially, by economic uncertainties.

c. A crisis of **meaningfulness**: Growing indications exist as to the widening cleavage between what we refer to as the 'establishing principles of kibbutz' and the way these constructs are perceived and mainly materialised by grass-root kibbutzniks. Their perceptual anchor appear to have been seriously undermined.

d. **Organisational**: In the narrow sense, namely, pertaining exclusively to matters of structure, the crisis may be broadly viewed as exposing intrinsic dysfunctions as well as inadequacies directly attributed to other crisis-related

facets. This crisis has interminably occupied kibbutz's public agenda for approximately six years.

General aspects of kibbutz life (economic, sociological, anthropological, educational) have all been extensively attended to. However, declivity as a general concept associated with any of the above and the organisational scene in main, have yet to trigger a major scholastic interest.

Issues appertain to policy and quantitative analysis in particular, have been addressed normally from the confined and largely political slant. The general notion has it that UKM's policies and course of action are closely associated with antecedents to the crisis as well as with crisis management practices.

With the exception of four studies (The Recovery Plan, 1989; Sheaffer, 1987; Helman, Glick & Goldemberg, 1988, Niv & Sheaffer, 1991), no major research endeavour has been launched, thus far, examining organisational decline, policy analysis as well as the mutuality between endogenous and exogenous factors in the evolution of crisis. This study constitutes an attempt to analyse all these factors.

Organisational decline has thrived, as an independent theory, primarily on theoretical treatises, models and propositions calling for empirical confirmation. Unlike in other aspects of organisational theory, aspects of decline, crisis and demise within that same theoretical

framework confront distinct difficulties in gathering empirical data. Organisations in crisis will hardly lend themselves to scientific research as they are geared towards a rescuing endeavour. Furthermore, aspects pertaining to decline necessarily imply a dynamic process which can best be addressed by employing a longitudinal research design. The proposed study has the potential of undertaking an in-depth analysis into an entire population of organisations, based on a rare temporal data base. Grievances concerning the rarity of such a data base are still abound. Since the kibbutz in itself is a unique organisational phenomenon, it is suggested that this thesis may hold some interesting keys to further our understanding in an area which lacks a comprehensive empirical basis.

The aspect further to be considered is policy analysis. As previously alluded to, noticeable significance is given to the plausibility of UKM's economic policies upon the evolution of the crisis. The relatively strong institutional linkage between the UKM and the affiliated kibbutzim is presumed to have resulted in a unilateral contingency where kibbutzim voluntarily subjugated themselves to institutionally decreed norms in most aspects of their economic behaviour. In order to qualitatively establish the extent of this willingly assumed dependence, a systematic content-analysis will evaluate UKM economic policies from 1982 to 1988. A minor research question concerns an old scholarly as well as practical dispute

apropos the detachment between kibbutz income and consumer behaviour. A group of theorists lead by Dr. A. Helman of the Ruppin Institute proposed in the 1970s that the above disjunction was to have triggered a major crisis. Subsequently, the validity of their hypothesis will be tested 1987²). It is proposed that despite the overwhelming impact of the crisis this economic behaviour has not been discontinued.

Previous studies have partially assessed the balance between external- environmental catalysts and internal perpetrators as either triggers or transmitters of exogenous impacts upon endogenous processes. Conceptually, a consistent and acceptable definition of the crisis is required in order to undertake relatively accurate predictions and inferences. The problem of the "chicken or the egg who came first" will be an inseparable ingredient of the statistical modelling of the crisis.

These models will seek to identify certain causality. As this research design is predicated on longitudinal data sets, it would be feasible to statistically validate or refute hypotheses as well as partially differentiate

²Helman, A. P. & G. G. G. G., 1988.

The following major questions are addressed.

What are the environmental and the internal causes for a decrease in the number of members and candidates ? What are

the exogenous and endogenous apparent causes for a rapidly deteriorating economic situation as exemplified by the precipitous rise in debts ?

A major question to be addressed is the incongruity between stated principles of the kibbutz and the way kibbutzniks perceive them. This study will undertake a quantitative examination as to the apparent cleavage and measure the applicability, suitability and perception of organisational goals by both organisational members and superiors.

The demographic scene calls for a prominent position within the research agenda. The pending research question pertains to the likelihood of a brain-drain process as a perturberance of the crisis. Treating people as human resources or human capital is new to the kibbutz scene where members were considered an essential and steady ingredient of the system, much more so then, say, physical assets. Human resources were taken for granted. Descriptive statistics imply an impending demographic precariousness. The processes will be quantitatively tested using a statistical methodology not hitherto employed in organisational research.

A crucial element of crisis management is an intelligible classification of the population of organisations (kibbutzim) into mutually exclusive categories predicated

upon a variety of differentiating factors. In addition we are intrigued by an inadequate and at times, incorrect prediction of crisis situations. Various research strategies have been applied aiming to forecast business failures or bankruptcies. The applicability of a specific methodology not hitherto undertaken within the theoretical framework of organisational crisis and decline will be tested. The underlying intricacy is pertinent to both practices of crisis management and to the enhancement of the utilisation of ephemeral theoretical tools. Consequently, the following questions are analysed fully. How would it be possible to accurately classify categories of kibbutzim at the climax of a multi-dimensional crisis? The second question concerns the statistical methodology.

It is assumed that a practical and reliable statistical methodology can correctly characterise and predict the occurrence of organisational crisis by way of assigning a variety of organisational, economic and demographic variables into a synthetic model.

This model will best characterise organisational crisis as epitomised by economic and demographic indicators.

A common response to organisational crisis and an accelerated state of organisational decline is the proclivity to structural enhancement by way of bolstering supportive elements of an organisation (not-for-profit, in the main) i.e. administrative overhead as well as elements

indirectly associated with the stated reason d'etre of the declining or retrenching organisation. In light of the aforementioned depiction the following questions are formulated:

Is kibbutz typified by the propensity to increase supportive elements of the organisation following a crisis impact which causes a general demographic decline and secondly,

has administrative overhead increased as a response to the crisis ?

A frequent response to massive and sudden retrenchment in public organisations results in an upward convergence of powers as well as a marked weakening of links in intermediate and lower levels of the organisational hierarchy. Similar reaction is likely in business organisations as a result of comprehensive downsizing triggered by a crisis impact. It would be essential to examine the extent to which the kibbutz conforms with the above theory as it intertwines both business and communal facets.

General managerial/administrative responses to crisis include such practices as the upwardly convergence of powers, restriction on lateral communication, structural intensification and resistance to change. Alternatively, a proactive response would include adhocracy and a drive towards a radical organisational change.

Subsequently a question is raised as to what managerial response will characterise a randomly selected population of kibbutzim, or how this population will be clustered around a pre-set common managerial response ?

Conventionally four major phases of organisational crisis are observed: shock, defensive withdrawal, acknowledgement, adjustment and change or organisational demise.

In general, the data base enables an empirical examination of the first three stages. Though marginally we possess certain indications as to the interim phase between the institutional acknowledgement of the crisis and adaptation towards organisational change. Therefore it seems essential to determine the following questions:

How can kibbutzim be classified in accordance with their organisational mobilisation towards change ?

Hence, which organisational properties can best differentiate amongst sub-groups of kibbutzim previously categorised by a variable epitomising the drive towards mobilisation.

The need also arises to examine kibbutz's perception of organisational change. Since an ephemeral phase is addressed it must be confined to the question as to what aspects of the kibbutz's agenda are viewed as deserving organisational priority. These aspects include routine issues and radical ones. Based on the aforementioned presentation, a number of pertinent issues arise. Is kibbutz change-oriented or change-resistant in the

limelight phase between 'acknowledgement' and 'change' ?

Overview of Proposed Research Design

As previously alluded to, the general objective of the thesis is to examine empirically several aspects of organisational crisis in UKM kibbutzim as well as to investigate some aspects of organisational decline within an empirical framework. Consequently, the following major aspects will be analysed:

- a. Antecedents to and apparent causes for the crisis.
- b. Organisational responses to the crisis.
- c. Prediction and characterisation of crisis.
- d. Mobilisation towards change.
- e. Crisis-ensued organisational-change.

These main research objects will be conceptualised as separate research models and are designed to constitute a certain sequential logic albeit they can be viewed as separate research entities integrated by the general concern which makes them relevant to one another. Moreover, the general aim is to eventually present a synthesis of a **particular** body of knowledge possessing a common intrinsic conceptual perspective.

Indeed, one of the theory's major drawbacks lies in its desegregative nature, namely the concurrent multi-disciplinary preoccupation with aspects of organisational

decline, crisis and demise. With the exception of policy evaluation, all other aspects will be conceptualised as quantitative models. The policy evaluation will be carried through a comprehensive content-analysis. However kibbutz consumer behaviour will be quantitatively approached mainly by way of analysing Pearson's correlations coefficients. Descriptive statistics will also be extensively employed.

The conceptualisation of antecedents to the crisis, hence apparent causes, endogenous and exogenous, will be handled by way of applying pooled regression techniques. The limited number of years does not allow the application of time-series analyses yet the pooled regression procedure is equally accurate in its statistical inferential power. Moreover, this econometric method is widely used primarily in political economy as well as in economics. The procedure markedly surpasses the cross-sectional approach which is based on one point in time for both the dependent and the independent variables. The benefit of a time-lagged model is particularly advantageous in circumstances where organisational dynamics constitutes the essence of the researched process. Multiple discriminant analyses (MDA) will be the statistical procedure used for the prediction of various crisis situations as well as for an intelligible classification of distressed categories of kibbutzim. The processing of a structured questionnaire enables a factorial analysis where it is intended to synthesize factors possessing the 'code' for the differentiation

between outdated organisational goals and the wants of organisational members.

In situations where dichotomous and continuous variables must be 'crossed', the research will resort to sophisticated statistical techniques enabling the user to both graphically display statistical associations and concurrently infer and generalise. Though not as accurate as various other procedures, this methodology is far more sophisticated than the mundane Chi². The method enables the application of time-series analysis where we have a number of 'dependent' variables (years), which can not be applied by the ordinary regression-based time-series analysis. Correspondence analysis will process five research items. To sum up, this thesis will attempt to introduce a number of statistical procedures which have not, thus far, been used in a study focusing on organisational decline and crisis. These 'imported' techniques possess some mathematical properties which, it is believed, make them particularly consanguine to the unique problems we have stated which are invariably within the conceptual framework of organisational decline and crisis.

Data Bases - Sources and Applications and Statistical Packages

Data bases for the pooled regressions, MDA, descriptive statistics and graphs constitute a longitudinal design

mostly with a sequence of six years (1983 - 1988) including, at least three quarters of the population of UKM kibbutzim. The data were adjusted for the statistical purposes by either of the two methods:

a. Conversion from a PDP environment into Quattro-pro or Lotus spreadsheets. The next stage involved a conversion of the spreadsheet raw data into ASCII files suiting either SPSSpc or SASpc statistical packages. These conversions apply to most demographic data. Contingency and Burt-designed tables constituting the basis for MCA and CA analyses involving brain-drain constitute the arithmetic summation of nine PDP files.

b. Conversion of LOTUS 123 files into ASCII. This pertains all the economic and part of the organisational data.

Data bases for all Correspondence Analyses (CA), Multiple correspondence Analysis (MCA) and Factorial Analyses will be based on several structured questionnaires distributed and processed in 1989 and 1990. The generated data account for a variable number of kibbutzim ranging from 55 to 130.

Pooled time-series analyses as well as Multiple discriminant analyses (MDA) models will use SPSSpc Version 2, 1987. MCA and CA use SASpc.

The thesis will emphasise the usage of graphs. With the exception of a number of graphs detailing variance analysis

and all the MCA and CA graphical displays, all of which are processed by SASpc, the graphs are programmed using Quattro-pro version 3, 1991.

PART ONE

THEORETICAL BACKGROUND

CHAPTER ONE

THE KIBBUTZ: DEFINITIONS AND A CONTEXTUAL SURVEY

**We always used to say: at our kibbutz
a pride we had in a shirt of a pioneer.
Pain was, not considered unless collective...
It was all heroic if not a bit naive.
We always used to strive to vote before
being granted permission to have our pain announced...**

Michal Snounit: Kibbutz Fantasy (Trans. Sheaffer)

As indicated in the introduction, the research will employ the kibbutz as an organisational case study, using its unique 'organisation-system' characteristics as essential tools in our encompassing endeavour to substantiate pivotal theoretical components of organisational decline. The following definitions and brief outline, will focus on relevant distinctions. Therefore this study will not dwell upon the comprehensive scientific and historical literature, part of which will be discussed in advanced stages of the thesis. Various aspects of communal life will be highlighted in order to allow for a comprehensive and systematic understanding of consequent analyses.

Definitions

It would not be unpresumptuous to try and provide a

definition that will, concurrently, be comprehensive, exhaustive yet accurate and agreeable. As the broader theoretical basis for this study, i.e. organisational theory (henceforth, OT), is rather eclectic, the required denotation should be parsimonious whilst encompassing, allowing for the variety of integrated facets to be adequately pronounced. The kibbutz is a unique amalgamation of complex economic enterprises, inseparably intertwining advanced communal aspects. These, coexist within a systematic and multifarious organisational framework, incorporating a universal-humanistic approach as a cornerstone for inter-personal relationships.

According to the document constituting the revised version of principles ¹: "The kibbutz is a collective community of labourers, constructing an independent economy and society on nationally-reclaimed land. The community directly amalgamates - labour, means of production and property governed by one authority, the authority of all members. The kibbutz is predicated upon the negation of private property and is organised in accordance with the principles of common consumption and production, in equality and mutual guarantees and self-labour, ensuring common education to all children. All education factors: society, family, movement and youth-movement are integrated in a general unity; maintaining an independent administration of society and economy on democratic principals and within the

¹"The Principles of (UKM) Platform, (a document submitted to the first UKM convention's preparatory committee), 21-23/VI/1979.

framework of the movement's fundamentals and upon resolutions endorsed by its institutions; each member gives according to his (her) ability and receives according to his (her) needs within the framework of kibbutz's capacities".

The Hebrew word "kibbutz" stands for: "to bring together", "cohesion", "amalgamation". This word has infiltrated the extensive academic literature, primarily in the social sciences and the arts, attesting to the extensive academic interest in one of the Western world's most durable cooperative systems.

The first kibbutz was founded in 1909 on the southern shores of the Sea of Galilee by a group of young Jewish pioneers from Russia, profoundly imbued by universal socialist-humanistic vision that incorporated strong Zionist-territorial aspirations. These Halutzim (Hebrew for pioneers) escaped the general instability following the abortive coupe of 1905 in Tsarist Russia. This group of ten was part of a greater wave of Jewish immigrants originated in Eastern Europe who constituted the Second Aliyah (Hebrew for Ascent to Zion or 'wave of immigration', namely, the epitomization of Zionism's most essential dictum: Leaving the Diaspora and emigrating to Eretz Yisrael (Land of Israel). The impact of this particular wave of newcomers to Palestine far surpassed its actual size.

Eisenstadt (1985) argues that only five to ten percent of the Second Aliyah immigrants eventually remained in

Palestine.

Eisenstadt (1985:161;245;251-253), emphasises the internal ideological cohesion of the Second Aliyah as a motivating force for the creation of a bridge-head prior to the ensuing waves of immigrants.

These pioneers held their accentuated elitistic tendencies in order to materialise pretentious ideological plans. It was particularly apparent in their aspirations to lead the entire Zionist epic.

Kanter, (1972); Shepher, (1976); Oved, (1986); Eisenstadt, (1985) and others, all stressed communal virtues such as social cohesion, adherence to strict norms and social values, principles and beliefs, as imperative tools in both the making of and clinging to the ethos of young colonial nations. The kibbutz as based on principles of equality, common production and consumption and secular-asceticism (Talmon, 1955), became a focal point for intellectuals-turned-farmers who had later inspired others and, practically propelled the national pioneering endeavour. The collective ideal fast became an indispensable instrument as an effective way of resolving acute problems of adjustment to the physically, politically and ethnographically hostile environment. The combination of socialist-voluntary-collective ideals coupled with the national aspirations of the redemption of the Jewish people through extensive settlement and reclamation of the

desolated lands, proved effective until after the inception of the State of Israel. The assumption of national leadership functions did not terminate and, in fact, it would be correct to say that the nation at large viewed the kibbutz as a national avant-garde (Shepher, 1976:26, Prag 1962).

Kibbutz Principles-An Overview

As previously alluded to, there are a number of elemental principles which seem indispensable to the broader context of the kibbutz. The comprehension of these principles is not imperative for students of kibbutz but will constitute a useful footing for the cognizance of the research questions and the ensuing analyses and discussion.

The following discussion will describe the principles without either reflecting on their validity or attempting to make adjustments commensurate with the advent of time. The principles as presented here originated from 'classic' sources, irrespective of the major transformations the kibbutz is known to have experienced over the last three decades.

Equality

The major idea behind this equalitarian society is the

Marxian dictum: "From each according to his abilities to each according to his needs". This principle is the cornerstone for the entire system and meant to avert any stratification amongst members. This was made possible by the negation of material rewards other than these allotted equally regardless of excellence, better performance or social status. The entire system was so structured as to refrain from any breach of the above principal. In practice, position-holders are bound by the norm to undertake managerial rotation in order to refrain from accumulation of powers. Each kibbutz member is entitled to the same amount and quality of services provided by the kibbutz. Paramount decision-making powers reside with the kibbutz general assembly. All income-generated either within kibbutz's economic infrastructure or externally, is funnelled through the kibbutz, hence enabling equal allocation of benefits. We may, therefore, define this version of equality as: 'Structured Equality' in that it is distinctly and comprehensively structured within the system. (Shur & Ya'ar, 1987; Shepher, 1976; Ben David 1975).

Direct Democracy

The kibbutz embodies a pure form of participative democracy. Basically, the kibbutz equips each member with the rudimentary right to partake actively in the decision-making process pertaining to the governance of the kibbutz.

The kibbutz is probably the only commune availing this natural democratic right without any restrictions, structural, legislative or otherwise. Generally speaking, participative democracy obligates an uninterrupted participation of the entire commune (members) in the decision-making process.

The institutionalisation of direct democracy has created a situation whereby the legislative, judicial and executive branches are fully overlapping. The general assembly consolidates all three branches although the kibbutz is devoid of a formal judicial capacity. Practically, the general assembly is autonomous to deal with any public-related issue, to pass motions, to demand accountability from position-holders and institutions alike, to ratify or abrogate any major or minor decision appertaining to the kibbutz, to enact or abolish rules, to introduce and ratify annual balance sheets and the kibbutz's annual budget, to nominate/vote for or dismiss officers. Peres, (1963); Golomb & Katz, (1971); Rosner, (1975); Rosner 1986:10), succinctly summarise the main characteristics:

- a. Kibbutz democracy is held as an objective in its own merits, promoting members' commitment.
- b. Kibbutz democracy pervades all aspects of life and is not a mere political tool.
- c. Political activity is not restricted to casting ballots or voting for the kibbutz institutions, a political involvement is part of daily life.
- d. Democratic decision-making is perceived, in the main,

as a problem-solving procedure for the public weal.

- e. Political activity is expressed not only by communal decision-making at the general assembly and in committees but through involvement in managing different aspects of life. Many minor managerial positions are not even a part-time-job.
- f. Basically, motivation for political activity is a channel for self-expression and commitment for the society.

Mutual Guaranties and Mutual Responsibility

Both mutual responsibility and mutual guarantees unite the kibbutz in the fullest meaning of the word. This mutuality is fundamentally cementing all other components and is stemming from or constitute the underpinning for three essential strata (Meron, 1989):

- a. The social-moral level,
- b. the economic-existential level,
- c. The judicial aspect,

The first level suggests the social acceptance within a given group of people who voluntarily opt for communal/moralistic life based on values and dictums in which humane and moral responsibilities are perceived as not only essential but self-evident. The second tier concerns the material-economic layer which derives from the moralistic-value level albeit it is said to restrict the above in accordance with the availability of economic

resources. The third level entails the formal-legal aspects of the entire issue of mutuality. Despite the ambiguity of the kibbutz's legal framework, there exists a set of legally binding rules institutionalising all commitments emanating from both the moral-social voluntary obligation/culpability and its economic derivative. A distinction is ought to be made between the externally-oriented (but also internally-effectuated), and legally-binding: "The Kibbutz - Set of Regulations" and the written and unwritten norms, rules and codes as delineated individually by each kibbutz and affecting its inhabitants.

Communal (Collective) Production

The kibbutz differs markedly from other societies (Leviatan, 1984:69) in that it has communal production objectives rather than individual ones. The same applies to the consumption sphere. These are collectively-agreed upon. Priorities are being decided upon by the **entire community**. The usage of resources for either production purposes or consumption goals is, naturally, a result of a communal consensus consequently subject to the supreme decision-making body.

Self Labour

Rayman (1981:16), asserts that: *"The single most important*

tenet of Socialist-Zionism was self-labour, a policy of utilizing only Jewish labour". This principle was the extension of the ideology which dictated that the materialisation of a Jewish Homeland was "intimately bound up with the application of the principle of Jewish labour" (Granovsky, 1940:100). This doctrine coincided with and evolved simultaneously with the concept of humanistic socialism that negates any form of exploitation of a fellow human being for the sake of profits. Moreover, the Borochovist notion of tipping over the occupational pyramid of the Jewish occupational structure by turning Jews in Palestine into farmers and labourers, accomplished both the concept and its realisation.

Universal Aspects of Western Communes

A brief explanatory introduction about the universal elements of communal life is necessary. Although communes, communistic and otherwise are not a rare phenomena, chiefly in large parts of the Commonwealth of Independent States and the People's Republic of China, they still cater for a very small number of inhabitants in Western societies. The following paragraph will deal with distinctive characteristics, (Niv, 1980:376-377), relevant to the topic at hand.

The overwhelming criteria differentiating communes from the external society is the adherence to a comprehensive ideology. This ideology is underpinned by general

presumptions concerning an aspired-for social order and human nature.

Predominant objectives derived from these assumptions suggest an entity in which all members will exhaust their potential for the commune. An equally significant portion of the ideology pertains to the communes' approach towards the environment. The second guiding criteria concerns the totality of this form of life. This totality alludes to the introverted nature of this entity, in which all members live, undertake roles and meet their needs. The third foundation relates to the complexity and wholeness of communes. The communes dictate and intertwine a variety of functions which consequently require unique, articulated and interpersonally-coded communication. The fourth element requires a clear delineation, "size and hight" of the encircling boundaries with the environment. This element entails the physical layout, selection, enlisting and socialisation of candidates. The fifth constituent is comprised of **"Egalitarianism and equality as values and operational forms"** (Niv, 1980:377). The following sub-components are directly associated with the above:

- a. Common ownership of all means of production.
- b. Central distribution of services & goods (based on strict equality)
- c. Granting equal educational opportunities.

The sixth rudiment entails the voluntary willingness to harmoniously share life with fellow members. Niv stresses

that this feature of interpersonal relations assists the commune to accomplish other objectives whilst it is regarded as an end by itself. Niv, following Weber (1947), establishes a significant distinction between two types of communes. The **Model Commune** typified by its negative attitude towards the human nature. Their presumptions vis a vis humanity perceive mankind as indolent, unimaginative, indirect, unimpressive, untrustworthy, uncollaborative, and an inorganic part of nature. Conversely, the **Pioneer** commune views human nature positively. With regards to the relationship between human nature and the environment, the Pioneer type welcomes change and improvement and is desirous of promoting these processes. The Model type will stifle any change which is likely to undermine its rigid framework. The differences are reflected in all other aspects of communality and derive primarily from the erstwhile outlook towards human nature. In general, the Pioneer type is open, interacts with the environment, the Model type, however is introverted and suspicious thus minimises its links with its environs. It would be of crucial importance for this study to note the ensuing essence of this dichotomy as summarised by Niv: **"Our analysis suggests that stagnation will characterise disintegration in communes of the model type, whereas assimilation will occur in Pioneer-like communes"**.

Most of the Model-type communities comprise of religious communes, chiefly in the USA but also in Great Britain and Australasia (Oved, 1986). The Pioneer type commune is best

embodied by the kibbutz. Further elaboration as to the divergence between the two types exceeds the scope of this thesis.

CHAPTER TWO

The Historic Dilemma: Communalism Versus Organisational/Economic Rationality - A Theoretical Discussion

Any attempt to expand on kibbutz as an organisation would be ineffectual without first dwelling on the ever-widening cleavage between communalism as opposed to the growing need in rationalising the organisational structure and the economic system. It is commonly agreed that the kibbutz displayed aspects of utopian community (Manuel & Manuel, 1979; Erasmus, 1977; Blasi, 1978; Kanter, 1979; Niv, 1980; Rosner & Tannenbaum 1987). The first kibbutzim were established with an overt intention of creating a small, intimate, cohesive and homogeneous community. They stressed close social interrelations as they assumed that this intimacy would compensate and redeem the willingly-uprooted individual (Shepher et. al.). The communal patterns were made relatively easy by both the homogeneous age groups and the autarchic and rudimentary economic structure. The very smallness of these kibbutzim facilitated the enforcement of this unpretentious communal pattern.

The embryonic organisation had hardly any forms of differentiation, communications were made in the most straightforward fashion, hierarchy and span of control were unheard of. People conducted all imperative assignments with hardly any division of labour. Male and female members

undertook, literally, the same functions. The simplicity, modesty and asceticism were not incidental and stemmed from Anarcho-Socialist ideals which prevailed in Tsarist Russia at the turn of the century. In accordance with historical documents collated and reviewed by Derech (1970:154), a state of 'anarchy' and 'disorganisation' predominated. This was reflected primarily in the governance of the kibbutz but had later made further inroads into the entire system. This era was characterised as a 'spontaneous democracy' portraying a deliberate state of disorganisation. Cohen (1967) asserts that the reason for this conscious 'acceptable anarchy' arises chiefly from kibbutz's willingness to accomplish direct interpersonal relations in all spheres of life.

Shepher (1977:105-106), notes that **"the kibbutz had distinct anarchic outlines in which conformity is first and foremost ensured by identification and not by a formal code of rules and a systematic judicial procedure"**. He suggests that kibbutz perpetuated these features until at least the mid 1970s. It seems obvious that at the time there was no need for a more elaborate organisational structure. Indeed, one of the Jordan Valley's old-timers, Shmuel Harchol of kibbutz Kinneret, commented humorously that during the first decade 1914-1924, CEO's functions were tucked in the left hand pocket of my coveralls, the financial manager's in the right hand side of my coveralls and the kibbutz accountancy in the back pocket of my trousers.

This anecdote vividly illustrates the uncomplicated

organisational structure and the fact that the entire board of directors was practically assumed by one person who was, most of the time preoccupied with his basic bread-winning tasks rather than 'redundant' administration. The rationale was strikingly simple. Members had to earn cash in order to sustain the community. Thus, even management was not regarded as an occupation aimed at facilitating the kibbutz's sustenance since it incurred no direct material results and therefore all managerial tasks were conducted after work.

Chronologically, four major stages, can summarise this structural evolution:

- a. **The Primal era** (spontaneous democracy 1909-1940)
- b. **The Second era** (federal economy 1940-1950)
- c. **The Third era** (industrialisation growth & maturity 1950-1982)
- d. **The Fourth era** (crisis, decline & early change [1982-])

Generally speaking, the era of spontaneity and disorganisation helped in shaping an elaborate and stolid organisational structure aimed at ensuring the validity of the application of kibbutz objectives in all domains of life (Sheaffer 1987:36).

The kibbutz of the early 1990s is an ideological, social and economic entity, encompassing all spheres of life. Consequently, its organisational structure is highly

differentiated, horizontally and laterally. The configuration is multi-faceted and is comprised of well-ramified, informally and formally functional units.

In the mid 1950s, it was suggested by Etzioni (1957) that an organisational structure is acutely required in the kibbutz due to its own 'system' disposition. Etzioni suggested that this necessity coincides with parallel development in the Israeli society at large and the kibbutz movement in particular. This requirement is further exacerbated by alterations within each kibbutz. The rapid development created a communal society defined as modern by Eisenstadt (1985). In as much as the kibbutz is no longer a small, spontaneous and simple community, founding principles have neither been altered nor significantly-modified since their inception. It would, however, be incorrect to say that the resulting-functional implementation of these principles are not being modified periodically. Particularly interesting is the way in which these ideals are reflected in the organisational-economic behaviour of the kibbutz.

Kanter (1972:148), criticises, utopian societies asserting that **"Social life cannot be both humane and efficient"**.

Blasi (1978), suggests that any community encounters the eternal dilemma of Gemeinschaft-Gesellschaft. It is important to record that utopian communes' effectiveness is postulated upon mankind's positive nature and this brings us to Niv's distinction between the 'model' type commune, basically religious, and the 'pioneer type'. Whereas the

former strives to eliminate evil, the other will seek harmony, perfectibility, mutuality and fruitful coexistence with the environment. Both seem, however, to favour mutuality of deeds and interests, cooperation and equality as opposed to exploitation, brutal competition and contention.

It would be essential to dwell upon arguments portraying elements that motivate mankind to function effectively without resorting to material rewards. Tonnies (1955) for example, following Marx and others, argued that the positive nature of mankind may be brought forth by introducing adequate social conditions. It was Marx who suggested that egocentrism which reflects the capitalist system will be substituted by social perfectibility and mutual responsibility. Cooley (1962), suggests that identification, and acceptance by the social realm will assist in achieving full self-realisation. It is obvious that given these ideal circumstances, greed and authoritarianism will become irrelevant. Skinner (1971), follows, suggesting that people may learn through non-coercive reinforcement to be fully cooperative and altruistic. No doubt, these people will be far more self-fulfilled and happier.

Mayo (1945), Likert (1961) and others, have all shared the seemingly naive postulation of mutuality of ideals and interests, cooperation and harmony as attributes inherent with human life. They insisted that the type of

organisational configuration resembling Gemeinschaft will underscore personal relations, improved human communications as opposed to the inhumane and impersonal bureaucracy. No essential problem arises, in so far as these authors are concerned, between the humanistic and the technological-rational imperatives. They, therefore observe no contradiction between efficacy and human aspects in a given organisation. Weber (1947:205), contends that: "Communitistic systems for the communal or associational organisation of work are unfavourable to calculation and to the consideration of means for obtaining optimum production, because they tended to be based on the direct feeling of mutual solidarity".

Weber assumed that organisations based on fraternity will necessarily fail in the loveless reality of the economic world should they attempt to act rationally. It may be concluded, then, stating that Weber argued an incongruence between technological progress and humanistic-associational organisation. Paradoxically, Rosner et al, (1989:83), quoting from Marxist literature asserts an industrial determinism dictating hierarchy. Accordingly, a democratic industry is liable to undermine efficiency.

The prolific kibbutz literature appears to favour this line of reasoning. Vallier (1962), observes that a discrepancy exists between production imperatives on the one hand and tenets of participative democracy and egalitarianism on the other. Cohen (1966), suggested that internally-oriented and

potentially-hazardous contradictions arise from the kibbutz's ideology which is based on a humanistic form of socialism and a unique concept of Zionism. There seem to be an persistent discord between these ideological dictums and the "uncommunal" influences of the external environment. That is, to any urbanism, patterns of Western consumption, and a decrease in ideological awareness within the Israeli society.

Certain dilemmas appear salient: self realisation versus utopian collectivism, lavish spending as opposed to secular asceticism, the technological imperative versus communal doctrine (intensive solidarity and spontaneity). Kibbutz organisational structure needs frequent revisions whereas communal tendencies remain deeply-ingrained and seemingly alien to any attempt of reconstruction. The structural-rigid aspect embodies the rational progress whereas communality is situated at the opposite polar. This polarisation generates permanent inner tension. Cohen (1966) concludes, that the kibbutz lives in two contrasting worlds: Progress (Modernism) and communality (Primitivity). Dahrendorf (1970) offers a more specific angle of this dichotomy by confronting managerial rotation in the kibbutz as a hindrance to both achieving equality and the rational prerequisite for efficiency and stability. He appears to be consistent with his earlier assertions (Dahrendorf, 1959) which stated quite explicitly that any society and even an organisation requires a certain differentiation for positions of governance and positions of obedience. There

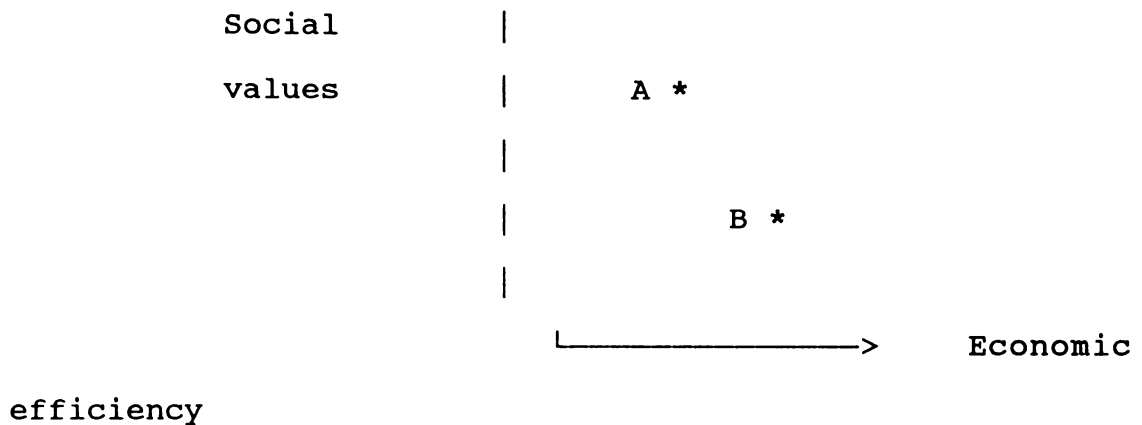
seem to be no reason to believe that a stable society can function relying on constant rotation within a team holding status of authority.

Schoek (1969), argued that there exists a vicious circle of authorities: the dearth of rewards will diminish the role call of those willing to assume responsibility, consequently only the aggressive and ambitious and those showing real concern for the group's welfare will remain. However, this is an unreplaceable minority and the inevitable outgrowth is an ever-escalating conflict between the leaders and subordinates. A substantial managerial argument, to that effect, was suggested by Jensen & Meckling (1979) who stressed the contradiction between democracy and efficiency in firms where inconsistent democratic decisions undermine professional and managerial authority. Niv (1980:187), asserted that **"Values of equality and egalitarianism may be in conflict with organizational efficiency and effectiveness"**. He demonstrates a comprehensive and inclusive synopsis and his general motto suggests the immanence of a continuous friction between the two polars. He argued that openness and a continuous dialogue with the environment, as opposed to isolationism, helps to sustain a commune.

Rayman (1981:264-265), alleges that in sociological terms, **"Gesellschaft pushed those of Gemeinschaft, the profane against the sacred, alienation against integration, a new managerial class of members has been created. The Weberian image of world dominated by obedient professional managers**

& bureaucrats, which had been so far from the early kibbutz ideology of practice, has come much closer to being rooted in kibbutz organization". The incomplementarity between the two polars attracted the attention of economists (Helman, 1976; Helman & Kroll, 1979; Levkovitch & Bashan, 1979; Gan, 1980; Helman, 1982a;1982b) primarily from the mid-seventies onwards. Helman is probably the leading dissenter who has indefatigably insisted that there seem to be a rapidly widening divide between the actual economic strength of kibbutz and its economic behaviour as expressed by its consumption patterns. Helman argued doggedly and methodically that the process of severance between consumption and income is on the upswing due predominantly to a reduction in the perception of solidarity amongst members and the emergence of kibbutzniks as standard rational consumers (1976:392). Helman (et.al.) assumed that excessive consumerism stemming from the above causes will eventually lead to an economic collapse, following a process of de-communism. He asserted that, in principle, there is no difference between kibbutz management and Western-style democracies. Furthermore, Helman doubts whether with the absence and degradation of values, the kibbutz still maintains economic vitality. Subsequently, he doubted the extent of which the kibbutz is 'impact resistant' during crises. In an article depicting the evolution of professional managers in the kibbutz, Helman (1987:1031), graphically portrays the contrast between economic efficiency and social values.

The transformation curve shows that the passage from A to B entails a partial surrendering of social values in favour of increased economic efficiency:



Helman, appears to have made significant progress towards reassuring and solidifying his firm stance regarding the mismatch between the kibbutz ideology and economic rationality. In an essay devoted fully to that issue (Helman 1988) he analyses not only the discrepancy but its apparent and ominous outgrowth. Helman, strives to refute most of the traditional canons by heavily resorting to economic methodology. He links the existing incongruence with the crisis and alludes to the apparent contextual linkage between adherence to lofty but irrelevant ideals and the emergence of an overwhelming imbroglio. In as much

as this dichotomous situation attracted critical researchers from different disciplines, there were a proportionately large number of scholars whose views differ. They, generally speaking, were not particularly attentive as to both the potential of the discrepancy between the two contraries and the threat it is liable to ensue in case of an engulfing crisis.

Rosner & Palgi (1979), found a positive statistical association between ideological conformity as expressed by the organisational behaviour of a sample of kibbutz industries and their organisational efficiency. They claimed that discipline patterns in the kibbutz industries are normative and are not based upon economic expediency. They, therefore, conclude that the legitimisation for the power structure in the plant should be reliant upon a democratic decision-making and conformity with ideological imperatives. They take issue with Etzioni (1961), who contends the existence of an inconsistency between normative disciplinary patterns and the functional needs of business firms. Rosner et.al. adduced evidences, alleging that the relevant principles of the kibbutz ideology confute the assumptions of 'industrial logics' based on hierarchy and inequality in rewards.

Eden & Leviatan (1976), found an inverted statistical association between measures of organisational formality and economic efficiency. The closer one gets to the reverberation of the current crisis, the lesser becomes the number of studies taking issue with the Weberian stance. It

would be essential to record that despite some conclusive findings as to a statistical association between various predictors of economic success and ideological imperatives, these linkages are not necessarily causal hence, their inferential power is very limited. Rosner & Tannenbaum (1987:543) ascertained the opposing effects of the two imperatives. They claim to have validated the "*Consistency of the assertion that all societies face a basic Gemeinschaft-Gesellschaft value dilemma*". And: "*The technological imperative appear to have negative implications for some democratic and egalitarian practices and for aspects of equality itself*". They assume that an applicable manner in which to ensure the coexistence of traditional values with economic efficiency depends on the kibbutz willingness to plan adequate and consistent complementarity between the contrasting ends. This, by all means, is hardly an accurate let alone an applicable traversing prescription. Lanir (1990), In a qualitative analysis, suggests that the kibbutz ideology has triggered the growing schism between the members' perception of principles and their daily application. He found conclusive corroboration to the notion of the inapplicability and the ossification of almost all of kibbutz tenets during the current crisis primarily amongst young kibbutzim. Lanir's findings seem to be bolstered by the results of a quantitative study (Helman, Glick & Goldemberg 1988). This research studied the kibbutz economic behaviour during the current crisis and encompassed a random sample of twenty

kibbutzim affiliated with the three kibbutz federations. Most answers¹ reflect an attitude convincingly at odds with the basic kibbutz ideology. For instance, 78 percent object to economically assist impoverished kibbutzim. This finding appears to refute the essential tenet of inter-kibbutz mutual guarantees. Moreover,

88.3 percent prefer the idea of an "autonomous kibbutz" in which the standard of living will be determined by the kibbutz's economic performance and not by an imposed movemental norm.

This finding undermines traditional presumptions pertaining to the 'macro' application of the Marxian dictum: "From each according to his ability to each according to his needs". The reason being that the kibbutz federations acted as a "central mutual guarantor & regulator" ensuring, by facilitating finance and serving as undersigner, that consumption in the affiliated kibbutzim will be commensurate with a movemental norm. Recent quantitative research (Chen 1989), indicates that there appears to be an inverted statistical linkage between ideological imperatives and economic success in a large sample of UKM manufacturing industries. It would be pretentious to assume that the hidden friction on Cohen's (1966) continuum has either subsided or surfaced in the current crisis. However, there seem to be an almost unanimous consensus as to the impact this friction causes in a wide variety of aspects.

¹A structured questionnaire answered by a randomised sample of 800 kibbutz members.

Furthermore, there are growing empirical evidences indicating that no longer these polars may peacefully coexist without a noticeable change of ideological imperatives. As suggested by both quantitative and qualitative studies, the entire value systems delineating the kibbutz life require a substantial overhaul commensurate with current transformations.

CHAPTER THREE

THEORETICAL FRAMEWORK: DEFINITION OF MAJOR CONCEPTS

Prologue

This thesis will be based upon an emerging offshoot of organisational theory which has not been acknowledged as a well-defined body of knowledge until the late 1970s. This branch of theory is known as organisational decline and is conceptually linked and based on the more eclectic or multi-disciplinary area of organisation theory (OT). In broader terms, it may be said that different emphases may be relevant, depending on the major disciplinary point of departure. Decline as a behavioural Phenomena may be dealt with by natural sciences, social sciences and the humanities. Not least important should be management aspects which are contextually linked with the more encompassing field of OT. These aspects will include primarily the upwardly convergence of managerial powers following and during crisis and general managerial responses to organisational decline and crisis. Having to survey, research, analyze and discuss such a multi-faceted area, one is naturally inclined to be theoretically anchored to a logical and practical delineation. At times it seems rather confusing having to establish whether organisational decline is a branch of the management sciences or a legitimate offshoot of organisation theory. In practice, this sub-discipline is addressed by sociologists, psychologists, social psychologists and economists. Indeed, it seems rather obvious that a great

deal of integration is called for within the multi-faceted framework of organisational decline and organisational crisis.

Organisational change will not be addressed separately but as a logical and perceptual link between decline and the ensuing change or alternatively demise. Contiguous aspects of crisis-induced organisational change will be researched. General aspects of change inevitably relate to various turnaround policies, all of which are indirectly related to wider concepts of organisational life-cycles. Organisational life cycles involve essential aspects of organisational ecology or the ecology of population of organisations. These will provide essential basis for parts of the empirical study. Various crises or dysfunctions associated with decline resulted in various theories such as the question of administrative-overhead or administrative ratio. These will be alluded to and empirically researched. Economic aspects of decline known in the literature as business failures, bankruptcies or dissolutions will be fairly widely attended to very much due to the supposedly overriding impact of economic factors on the evolution of the crisis. No economic theories per-se will be included though econometric methodology will be widely practised. This will be chiefly in the area of evaluating the proportional impact of endogenous and exogenous predictors on the crisis. Attempts will be made to temporally predict organisational crisis using

techniques hitherto employed largely for predicting business failures.

In a much wider context, historians (Tuchman 1984), employed various relevant facts to vividly and accurately describe decline, collapse and demise processes, usually orchestrated in a political context by oafish leaders throughout history. The following chapter will discuss the major disciplinary affiliations in order to enable an improved outlook and comprehension as to the logical position of organisational decline as an independent body of knowledge. The theory chapter will seek to comprehensively cover other affiliated and relevant theories since the nature of both our case study and the major theory is rather multi-faceted. The major part of the theoretical background i.e. organisational decline and organisational crisis, will be dealt with comprehensively in a separate chapter. This chapter, therefore, is aimed at linking the more encompassing and general theories with the specific theoretical aspects.

Organisation Theory, Management Sciences and Organisational Behaviour - A Distinction

Organisation implies the integration and structuring of any deliberate activities. This, in turn, presupposes interdependent relations amongst people towards the accomplishment of a given objective. The very concept of

interrelatedness insinuates a social realm. It may be thus argued that organisations include (Kast & Rosenzweig 1985:5): 1. Goal oriented arrangements, 2. psychological & psychosocial systems, 3. technological systems, 4. an integration of structured activities or patterned relationships.

A useful distinction as to the linkage between management and organisation theory or science may suggest that the latter, as a coherent body of knowledge, entails hypotheses and assumptions arising from studies in what is defined as **organisation science** (Kast & Rosenzweig et. al.). This science is largely applied in nature, as it entails information essential for various leadership or managerial tasks. Additional distinction should be made between organisational theory and organisational behaviour. This distinction is not insignificant as it encompasses the thin line connecting the "inhabitants" who virtually *man* the organisational structure and the perceived medium defined as structure. Organisation theory tends to view and analyze the organisation as if the actual activators or actors are surreal. Organisational behaviour on the other hand, describes organisational members and groupings irrespective of the structural dimensions which shape these human clusters or locate these people in a specific organisational job (Ford, Armandi & Heaton;1988:12). These authors visualise an artificial boundary between the two sub areas of **management science**.

In so far as our theses is concerned, there will be a reliance on organisational theory. More accurately, the subdiscipline of organisational decline which is an offshoot of OT. However, as a noticeable part of our study concerns people, it would be erroneous to dismiss organisational behaviour as of lesser relevance. Organisational Behaviour is then, "A field of study that investigates the impact that individuals, groups and structure have on behaviour within organizations, for the purpose of applying such knowledge toward improving an organization's effectiveness" (Robbins 1989:5).

A Brief Survey of the Major Schools of Thought in OT

It appears to be rather obvious that due to the eclectic nature of our thesis, the theoretical basis will have to be comprehensive whilst succinct and well focused. As indicated, the wider theoretical grounds will draw heavily on OT as it is the main conceptual anchor for our chief theory: organisational decline. This, in turn will again be split into several sub areas. Hence, a summary of the essential and major concepts will be discussed. Gradually the scope will be widened as the thesis approaches the most relevant theory and its affiliates.

Organisation Theory

It would be appropriate to refer to Weber as the most

influential forerunner of modern organisation theory. His concepts are aimed at employing bureaucracy as an instance of the structural form taken by the political strategy of rational-legal domination (Weiss 1983:244). The basics of modern organisation theory draw, then, heavily on the original concepts of the classical structure. Barnard (1938), defined a formal organisation as a system of consciously coordinated activities of two or more people. There appears to be a dichotomous situation where for the first time people were acknowledged as the activators of this harsh and impersonal definition: **"Formal Organisation"**. Chester Barnard paved a new avenue where people were referred to as the ones who virtually *man* the theoretical structure. His criticism was aimed at the superficiality and the descriptive nature of classical organisation theory. His main arguments negated the traditional application of authority which according to Weber was directed from top down. Barnard assumed the opposite direction and argued that, in fact, authority arises from subordinates upwards. Barnard stressed that the human participants play the most essential role in everything that entails a formal organisation. He also contended that the existence of a collaborative system depends on the participants' ability to communicate and their willingness to serve and strive towards a collective purpose. Barnard was the forefather of modern organisation theory. His influential book, "The Functions of the Executive" paved the way for three predominant schools of

thought.

The Main Approaches in Organisational Theory

The **System Approach** looked at the organisation as a system comprised of interacting parts. The **Open System** approach places heavy emphasis upon the duality and interaction between the organisation and its environment. Kast & Rosenzweig (1985:15), define a system as: "**An organized unitary whole composed of two or more interdependent parts, components, or subsystems and delineated by identifiable boundaries from its environmental supersystem**". Katz & Golomb (1974:284), provide a tripartite model which serves as an analytical basis for organisational study using an open system approach. They suggest that the open system approach deals with three levels and the interdependence amongst them.

1. The Individual level-Motivations and beliefs attracting individuals to the system, retain them in the system and determine their performance within the system.
2. The System Level-Endogenous system processes, the internal integration, system effectiveness and the impact of the system upon its members.
3. The Supra-System Level-The interdependence between the system and its task environment.

Organisation-Environment relationships have had an

overwhelming impact on modern organisation theory. The system asserts that organisations should be viewed and researched as a whole bearing in mind the interrelationships within the organisation and as alluded to, the mutuality with its environment. There appears to be endless interactions which entail the absorption of inputs, a throughput processes and the resulting outputs. Surely, it connotes openness as the organisation relies on its environs for its very survival. In a seminal study illuminating this holistic approach, Kats & Kahn (1978) focus on ten different attributes of a given system and their applicability for organisational research. The system approach will be a useful ground for the understanding of various issues throughout the thesis and its application to organisational research at large is essential as well. The ten properties are:

Importation of Energy: Open systems draw their vitality from the surrounding environment. There should be an incessant absorption of energy from other organisations, materials and people in order to ensure the viability of the organisation. Throughput: Organisations act as throughput by converting environmental inputs into services, products or any other alteration of the inputs. The process includes all internal activities within the organisation. Inter-organisational efficacy determines the quality of the output.

Output: There exists an export of finished outputs

following the throughput process, into the environment. The perpetuation of the operation depends on the way in which the finished outputs are received by the environment. It is incumbent upon the organisation to produce goods and services in accordance with the changing demand in the environment. This determines the longevity of the organisation.

Systems as Cycles of Events: The sequence of input-throughput-output, is being perpetuated whilst the organisation operates. It is indispensable for the organisation to import the suitable inputs and produce an output that is desired by the environment. This cyclical process is applicable to all organisations irrespective of their particular nature. It becomes obvious, then, that any cessation in the cycle causes the following cycle to be radically altered.

Negative Entropy: Entropy is a law of nature that implies a process through which all organised forms will, eventually, disorganise and demise. The survivability of an organisation depends, therefore, on the reversal of the process. Negative entropy should, then, be spotted and saved. This process involves the storage of superfluous energy from the environment in the form of organisational slack.

Informational Input: Information received from the environment is also an input. The availability of essential and relevant information enables the organisation to adopt to environmental whims or fluctuations.

The Steady State: The organisation is being steadied by the import of energy to contain entropy. This situation results in a volatile equilibrium since the exchange of inputs and outputs with the environment is perpetual. A fundamental principle guiding this equilibrium is that it preserves the nature of the system. In order for the organisation to attain a steady state it ought to develop and gain dominance over those disturbing factors within the environment. The attempt to achieve a degree of safety is a predictable property of all organisations.

Differentiation: An essential property of the organisation involves a well differentiated specialisation of functions and roles. This, in turn, allows the organisation to better cope

with and control over its environment.

Coordination and integration: A well-differentiated organisation needs to cultivate a method by which it can reintegrate its diverse and specialized domains. The devices employed are rules, priority setting, operating procedures, scheduling, controls etc.

Equifinality This attribute suggests that there are various ways in which to arrive at the same point. Consequently, not every organisation has to begin from the same point or employ identical stratagem in order to succeed.

To sum up, the open system approach advocates a careful screening and examining of inputs and specific selection mechanisms employed for it. Adapting these principles by managers compels them to develop a strong environmental awareness and prevent them from focusing solely on endogenous processes. It also suggests that there are different ways to achieve objectives. System theory or approach provides a new paradigm for the study of social organisations and their management (Kast & Rosenzweig, 1985:15). The system approach facilitates analysis and synthesis in a dynamic, complex and demanding environment.

Since the system approach assumes ongoing interactions amongst its subsystems and as this pattern of interaction exists between the supersystem and the system, it requires further comprehension of synergistic aspects. The immediate follow-up is the "**Informational Approach**" which analyzed organisations from the point of view of their capacity to process information so as to cut down the level of uncertainty as a hindrance for improved managerial decision making. Inasmuch as this approach is by all means essential for the study of OT it only vaguely pertains to this thesis. A much more relevant framework is the contingency approach that will be addressed in a more comprehensive way. Kast & Rosenzweig (1973), discuss the contingency approach alleging that it seeks to comprehend the interrelatedness within and amongst subsystems and between

the environment and the organisation. It also strives to demarcate and interpret patterns of associations or configuration of variables. The contingency approach underscores the multivariate nature of organisations and attempts to perceive the ways in which organisations function under unstable circumstances. The integration of development of several disciplines into a synthesis manifesting a whole, is applicable and in fact fits well into the multi-disciplinary nature of OT.

This strategy is not recommending any single best fashion in which to manage and asserts that the organisation ought to adjust itself to current environmental circumstances. This approach seeks to integrate all three strategies and indeed, in practice, they more then occasionally overlap one another. The open system and the information processing approaches both rely on the environment as a source for inputs and as an indispensable partner for interaction. However, the contingency approach ascribes different environments to specific organisational configurations, in fact, there exists a basic assumption suggesting that the environment affects the specific structural configuration. Pioneers in adopting and developing this approach were the British Tavistok group followed by the influential work of Burns & Stalker (1961) and Woodward (1965). Their work was then elaborated upon and refined by Lawrence & Lorsch (1967), Thompson (1967), Perrow (1970) and his colleagues from the famous Aston Group.

The thesis will draw upon the contingency approach largely due to its "dependency" nature, that is to say, the permanent reliance of a given organisation upon frequent perturbations in its task environment. Moreover, as indicated, it is presumed that organisational structure should be 'adjustable' and it must alter its structure according to the frequently changing environmental circumstances. Whereas the System approach is a generalised one and, in a sense, a macro perspective, the contingency view is more particularistic and underscores specific organisational properties and patterns amongst its sub-domains. The contingency view appreciates the uniqueness of each organisation, its subsystems and the relevant environment. According to Kast & Rosenzweig (1986), the contingency approach posits a middle ground between:

1. the assumption that each organisation is unique and that each situation should be analyzed individually.
2. the assertion concerning the existence of universal principles and management.

Nightingale & Toulouse (1977), are among the first to suggest that there should be a congruence between the organisation and its environment. An appropriate sync between the environment and suitable organisational design will eventually result in greater efficiency, effectiveness and the overall contentment of the actors. Miller (1981), criticizes the simplistic approach of many theorists. He

asserts that their goal is to perceive how and why organisations are capable of coping effectively with different types of environments. Miller further criticises the partist approach which stresses a tightly circumscribed set of linear relationships. Miller insinuates to the overwhelming advantage of employing "organizational configurations that are richly described by the dynamic interaction among variables of organization, environment and strategy". He, in fact, refers to the *whole*, namely, the system approach. His main contribution and the relevance to this study is the longitudinal approach in organisational analysis. Miller advocates a comprehensive, (multi-faceted and multivariate) evolutionary (Longitudinal) methodology.

Despite the thirty odd years since Burns & Stalker published their influential study, their fundamental dichotomy appears to be most appropriate in so far as this thesis is concerned. Theirs is a distinct whilst an exhaustive definition. The **mechanistic** organisational design is most pertinent whilst:

- a. The environment is placid, stable and certain.
- b. The organisational objectives are adequately formulated and long lasting.
- c. Decision making is structured and rigid. Coordination & span of control and differentiation tend to make a compact and structured hierarchical framework feasible.

- d. A comparatively homogeneous and stable technology.
- e. Most organisational activities are routine and the organisation is production-oriented.

The **adaptive-organic** organisational configuration is most pertinent whilst:

- a. The environment is turbulent and unpredictable.
- b. Goals are diverse and constantly alternating.
- c. The organisational climate provides for openness, creativity and innovativeness.
- d. The technological setting is multifarious and dynamic.
- e. The "Human Make up" is highly motivated.

DeGreene (1982:24-26), based on past assumptions relevant to

the contingency theory, suggests a number of contingencies:

- a. Features of external environment; market, technology, diversity, complexity and the pace of change.
- b. Technology within the organisation.
- c. Size of the organisation.
- d. Types of employees.
- e. Management strategies and political behaviour.
- f. Management personality types.

DeGreene summarises various features whose presence determine the effectiveness of the organisation in dealing with the environment:

1. Internal differentiation consistent with the complexity, diversity and rate of change in the environment.
2. Internal integration consistent with demands for interdependence imposed by the environment.
3. Resolution of conflict at the level at which there is the necessary knowledge about the environment.

The domain to whose the organisation bears contingencies and to whom it attributes its successes and failures is the environment at large or the task environment i.e. the source and destination of its immediate interactions.

The next chapter will address this topic and will seek to reach a more explicit overview prior to the main theoretical locus.

The Environment-definitions and Applicability

"At one level, the environment is not a very mysterious concept. It means the surroundings of an organization; the 'climate' in which the organization functions. The concept becomes challenging when we try to move from simple description of the environment to analysis of its properties" (Dill 1962:57).

Having a simple whilst exhausting and comprehensive definition of an environment, I can ignore considerable parts of the voluminous literature dealing with this aspect of OT.

It would be appropriate to liken environmental impact upon organisations as '*environmental Jolts*' (Meyer 1982). This term is also referred to as '*transient perturbations*'. There appears to be a differential capacity to effectively absorb these perturbations. If the organisation is robustly designed with perfect complementarities amongst its components, and provided it interacts intelligibly with its environment, environmental jolts are unlikely to jeopardise its survival. On the other hand, environmental perturbations may also constitute propitious openings. However, as this dissertation revolves around the 'negative' facets in organisation theory, organisational change will be discussed within the context of organisational decline. Fundamental and relevant classifications of environments will be analysed. Most definitions were coined many years ago but are still applicable. Prior to resorting to various classifications it will be essential to address the basic distinction between the *general* and the *task* environments. Whereas the general environment implies the same for all organisations, the task environment is specific for each organisation and entails the ingredients which seem to be most relevant to that particular organisation.

Duncan (1972:315), classified relevant components of the environments, for a typical industrial firm. He subdivided the components into five major groups: customer, suppliers, competitor, socio-political, and technological. The very basic division of an environmental 'attitude' towards an

organisation, prior to any categorisation, pertains to how, fundamentally, does the environment view the organisation. March & Simon (1958), suggested that either *benign* relationships exist between the organisation and its (task) environment [plentiful resources, subdued competition amongst organisations] or *hostile* ones [lack of resources, rejection of outputs by customers and fierce competition].

Emery & Trist's (1965) taxonomy draws to some extent upon assumptions relevant to the impact of forces on the environment as well as on the evolutionary nature of organisation-environment relationships. These principles of classification are:

1. Random, Placid Environments. All threats and opportunities associated with the organisation are randomly distributed. These environments are most unlikely to be found and are theoretical in nature.
2. Clustered, Placid environments. There is an orderly fashion in which threats and opportunities are clustered within a given environment.
3. Disturbed, Reactive Environments. The application of various strategies and tactics by several organisations propels the environment towards dynamism. This type of environments characterised the situation prior to the 'Turbulent 1970s'
4. Turbulent Field Environment. The dynamism or

perturbations in this type of environment stem from both events and activities created in the environment and interactions amongst organisations.

About twenty years elapsed and the nature of relationships on the one hand and the intensity of events on the other seemed to call for an additional category. McCann & Selsky (1984) offered the following categorisation:

5. The Partitioned Environment. Arises as a result of social triage and partitioning. This environment is comprised of highly bounded domains named "Social Enclaves" and "Social Vortices".

A social enclave implies a "behaviour of members (organisations) that effectively protect adaptive capacity". The opposing polar posits: "Populated domains of very low adaptive capacity relative to the surrounding environment". These domains are called social vortices" (McCann et. al.).

Thompson (1968) and Lawrence & Losch (1966) offered similar classification:

<u>Thompson</u>	<u>Lawrence & Lorsch</u>
1. homogeneous, stable	Low diversity, not dynamic
2. Homogeneous, shifting	Low diversity, highly dynamic
3. Heterogeneous, stable	High diversity, not dynamic

4. Heterogeneous, shifting High diversity, dynamic

Both classifications are rather simple and fairly reflective. There is a gradual increase in the rate of dynamism from type one to four. Basically, they express the same intention with a different phraseology.

Terreberry (1968), offered an interpretation of the evolutionary process of environments. She draws heavily on Darwin's deterministic theories. She, thus represents a purely ecological approach. Terreberry managed to establish the existence of an increased turbulence of the environments. She evidenced that an upsurge in exogenously-induced change triggers a similar change in the organisation. She also found a growing evidence of unanticipated output-input interactions with the environment. Environmental evolution results in three major stages in organisations:

1. from systems within the disorganised-clustered-placid environment.
 2. through an intermediate bureaucratic stage, to 3.
- Hence, an effective organisation is judged, by its perseverance to learn and unlearn and to perform as a function of alternating environmental contingencies.

A most exhaustive and accurate typology was offered by Jurkovich (1974). He displays a comprehensive matrix comprised of 64 cells each of which accommodates a specific organisational environment.

Yurkovich's matrix is perhaps the most precise conceptual model and had later been empirically researched in order to allow for a more sophisticated measurement and study of the organisation-environment relationship. The prolific literature pertinent with this general concept is widespread and consists of a wide variety of views.

Nonetheless, it may be concluded that all approaches, particularly the recent ones agree as to the acute need to constantly scan, monitor and analyze the task environment so as to ensure an unremitting congruence. To be consistent with the task environment means to acquire the capability not only to fruitfully interact with the environment but to *affect* it as well. An organisational characteristic no less vital is the allotment of sufficient resources for a boundary spanning capacity. As a result of a growing uncertainty and the hyperturbulent nature of the environment, the organisational anticipatory ability must become an indispensable part of structure. Moreover, it should be integrated within the realm of the organisational climate.

Environmental Carrying Capacity

It is essential to characterise the environment from the point of view of its carrying capacity or its ability to sustain organisations within its sphere of resources. This term relates to the capability of the environment to

provide the organisations with the resources necessary for their vitality. This suggests certain contingencies which the organisation should tackle (Pfeffer & Salancik, 1978 ; Tushman & Anderson, 1986). Hannan & Freeman (1977), define this property as the ability of the environment to support a population of organisations. There is no need to expand on the issue of the nature of dependence since this has been referred to before. However a few distinctions seem in place. Zammuto & Cameron (1985), distinguish between sudden and gradual reduction in the carrying capacity. Their definition is: **contraction and erosion** respectively. Harrigan (1980) suggested that given ample opportunity and time for readjustment, declining firms possess the capacity to consolidate and remain lucrative. Staw Sunderland & Dutton (1981) concluded that organisational demise is more likely under a situation of sudden environmental shrinkage or decline.

A view to the contrary is advanced by Tichy & Devanna (1986) and Merry (1990), who employ the "boiled frog phenomenon". This simple zoological experiment displays two frogs one is dropped into a pail of hot water and instantly hops out for safety. The second is dropped into cold water which is then being heated gradually until the frog is cooked. Obviously, they favour the sudden environmental shrinkage as possessing improved chances for recovery. A key concept in this essential issue is the bio-sociological distinction made by Wilson (1980), as cited by Whetten (1987:348-9). This pertains to r-extinction and k-

extinction. There is an upper limit "K" representing the maximum population size which can be supported by the resource base in that niche. Organisations declining prior to reaching this upper limit are generally victims of poor management. To the contrary, organisations failing at the peak of the environment's carrying capacity are victims of a depleted resource pool (K-extinction). Organisational ecology became a fashionable theoretical approach within the wider framework of OT at large and organisational decline in particular. Organisational ecology has drawn the attention of leading organisational theorists (Hannan & Freeman, 1977,1986; Carrol, 1984; carrol & Delacroix, 1982; Delacroix & Carrol, 1983; Carrol, Delacroix & Goodstein, 1988) who contributed proliferous literature with an emphasis on quantitative methodology and modelling.

CHAPTER FOUR

ORGANISATIONAL DECLINE - SOURCES AND CAUSES

A LITERATURE SURVEY

"The term organisational decline has become somewhat similar to that of schizophrenia, it describes a collection of symptoms rather than the etiology of the phenomenon"
(Zammuto & Cameron, 1985:225)

Introduction

Organisational decline has only recently been recognised as a distinct body of knowledge. This recognition, however, does not necessarily indicate the acceptance of a new paradigm. The extent, robustness and coherence of the body of knowledge in this subdiscipline is not sufficiently refined and advanced as to yield a fully intelligible paradigm which encompasses a universally-acceptable and interdependent system of models and predictions. Whetten (1980:582), refers to this issue recommending that: "An important task for researchers is to improve the conceptual clarity of organizational decline". He contends that it is necessary to operationalise decline in order that academics may proceed with further research. These directions were decided upon a decade ago and since then much has been accomplished in this respect, though organisational decline has yet to achieve an independent theoretical status. In fact it is a subdiscipline or an increasingly acceptable research and theoretical approach within the wider realm of OT. Weitzel & Jonsson (1989:91), request -52-that: "we lack an acceptable conceptual framework in par with the present knowledge about expansion which is amenable to empirical

testing and is of assistance to managers in opting for prevention and turnaround strategies". The approbation of this increasingly essential offshoot of OT stems primarily from the acute need in coping with and recovering from increasingly frequent organisational crises over the past fifteen years or so. The growing complexity, variability, and volatility of the environment at large and the task environment in particular trigger endless intersectional predicaments which, increasingly terminate in organisational demise. It ought to be said that the impressive upsurge in the number of theoretical treatises as well as quantitative and qualitative research seems to have sprung up involuntarily. Simply put, the accelerated occurrence of declining organisations and crises have quite naturally, attracted a considerable number of organisation scholars to contribute research models based on hypotheses and assumptions which bear on the negative and precarious facets of the organisational life cycle.

Cameron, Whetten & Kim (1987:126) following Quarantelli (1978:2), aptly describe the increase in interest in organisational decline which is reflected by an 'exponential' growth in relevant literature and research. To that effect, Zammuto & Cameron (1985:224) noted that corresponding with the impressive increase in business failures since the mid 1970s, the dearth in theory and guidelines which characterised organisational decline and crisis, was rectified.

In general, sociological studies preceded other disciplines in pursuing the behavioural study of disasters. In as much as these pioneering works are essential, they reflect a distinct sociological orientation hence depart from the current organisational approach.

Prior to further survey and discussion it may be helpful to provide some definitions. An adequate terminology is likely to be helpful specifically when addressing a relatively new theoretical domain.

The Collins Cobuild English Language Dictionary (1988), refers to decline as: "...the condition or process of becoming less in quantity, importance or quality...If something is on the decline it is gradually decreasing in importance or becoming less powerful". The Oxford Paperback dictionary (1985): "To slope downwards, to decrease, to lose strength or vigour".

A rather comprehensive definition is provided by the Random House Dictionary (1988): "To fail in strength, vigor, character, value etc. To fail or dwindle, sink or fade away. A downward slope, declivity, a downward movement, diminution. A failing or gradual loss as in strength, character, power or value, deterioration. Progress downward or toward the close". The Chambers 20th Century Dictionary (1983): "To fail or decay, to draw to an end. A falling off, deviation, decay; a gradual sinking. On The Decline: In the process of becoming less, deteriorating". As one

turns to definitions linking the lingual with the discipline one quite naturally expects to find denotations which are less narrow and relate to a wider contextual scope. Whetten (1980:345-346), defines decline as a situation implying cutback in size (or *downsizing* as it later appears in the literature) of an organisational workforce, profits, budget, clients etc. This means a decrease in the organisations' control over environmental resources as a result of a decreased competitive edge or an abatement in the environmental munificence.

The term **decline**, however, connotes a general organisational climate or orientation. Thompson (1967), described decline as a situation in which rapid and unpredictable changes in the environment force the organisation to restructure if it is to survive. If the organisation fails in attending to those changes it leads to a slide toward dissolution. Kottler (1980), discussed the terminology from the point of view of marketing research. He likens the product to an organisation since a product life cycle is basically reflecting that of an organisation. Hence, a decreasing demand for the product will result in decline. Mintzberg (1984:221), was rather deterministic in his "life cycle" approach denoting decline: "Once established, organizations peak in their service to society and then begin to decline". Whetten (1980) points to life cycle models where the literature speaks of mature organisations which turned stagnant,

bureaucratic and languid. This type arises as a result of stagnation whereas the second type, decline as cutback, is characterised by curtailments in size due in the main to the loss of market niche or a reduction in the organisations' capacity to successfully compete. Greenhalgh's view is fairly similar (1983:232), he asserts that: "Decline occurs when the organisation fails to maintain the adaptiveness of its response to a stable environment, or when it fails to either broaden or increase its domination of a niche which has a diminishing carrying capacity". Cameron, Whetten & Kim (1987:120), assert that decline "Involves restricted resources and pressures to cutback".

In short, decline is viewed as the antithesis of an effective adaptation. Whereas a diminishing size does not necessarily indicate a drop in the organisation's capacity to survive the predicament, a decrease in its capability to effectively compete in a vibrant market definitely will. Levy (1986), provided a succinct but far-reaching and comprehensive definition, He claims that a decline is a stage where internal and external needs are inappropriately met and early warning signals indicating the need for change are unheeded. Whetten (1987:344), criticised the authors' proclivity to focus upon a decrease in the organisations' population or financial assets. He contends that various combinations of organisational variables such as size, performance and munificence are not so easy to

categorise. He resorts, nevertheless, to a definition which draws upon size and budget. Weitzel & Jonssons' (1989:94) definition is, by and large, a culmination or a strenuous endeavour to attempt to crystallise a more coherent and primarily a more inclusive definition. **"Organizations enter the state of decline when they fail to anticipate, recognize, avoid, neutralize or adapt to external or internal pressures that threaten the organization's long-term survival"**.

Weitzel & Jonsson (1989:91-96), generally follow Whettens' criticism. They refer, however, to the failure on the part of various authors to observe that, by the time when organisational definitions match the situation, the organisations' effectiveness has deteriorated further. Moreover, they contend that almost all definitions refer to either downward trends or stagnation. However, 'no expansion' or 'contraction' may not necessarily connote decline but rather an accumulation of resources under inauspicious environmental predicaments. Surely, as time progresses more models of organisational decline are added and more hypotheses tested. Treatises being advanced will diverge from previously accepted theoretical frameworks. This, in turn, enlarges and enriches the discipline and the obvious result is a wider and more accurate perspective. This situation enables, more comprehensive and precise definitions.

Summing up the different variations examined here it may be

concluded that organisational decline is conceived in the following terms:

- *Failure to adapt or undertake change so as to conform with exogenous pressures.
- *Belated or total failure in detecting early warning signals pertaining to acutely needed changes in order to remain competitive (or having a relative advantage).
- *A reduction in measures of organisational size.
- *A decline is a downturn trend in organisational life cycle.
- *Endogenous stagnation, organisational inertia and inefficiency.
- *A need for the introduction of a proactive organisational strategy.

Patterns of Decline

Organisational

decline is not a uniform process. The period preceding dissolution, bankruptcy or alternatively, organisational rejuvenation, may be described in terms of the actual internal conditions as well and an analysis of the exogenous impact upon endogenous variables. D'Aveni (1989:579-8), collated various definitions from the literature. He then conceived a model depicting patterns of declining resources preceding bankruptcy.

The first pattern is typified by a rapid disintegration of

the firm followed by a sudden bankruptcy. This pattern is called **Sudden Decline**. Argenti (1976) spotted firms whose rapid decline followed hasty decision-making that resulted in high risk ventures such as major and frequent acquisitions and massive organisational expansion. Miller & Friesen defined these companies as "**impulsive firms**". Tushman & Rumanelli (1985) found that these are, usually, competitively disadvantaged and comparatively small firms which opt for frequent and bold strategic reorientations. These strategic shifts stretch these firms' financial resources to the limit. A pattern of incremental decline of a firm which is followed by receivership procedures at the end of the decline is called *Gradual Decline*. Miller et.al., have two definitions for this pattern, headless firms and stagnant bureaucracies. The two patterns gradually whither away due, in the main, to their aimlessness and rigidity which result in an insensitivity towards their task environments. Tushman et.al. take it that the roots of their failure stem from maladaptiveness and lack of strategic initiative. The third pattern is characterised by "**firms that decline, either rapidly or gradually, but then delay bankruptcy for several years. They exist in a postdecline state of inadequate financial and managerial resources**" D'Aveni (1988). This pattern is called: *Lingering*. These firms usually employ efficiency measures (downsizing or cutbacks) which keep them temporarily solvent

The Fixation With Growth

Most of the literature dealing with various aspects of organisational evolution or life cycles is preoccupied with and focus on the ascending and descending phases of the organisational life cycle. This has been the case ever since OT was engaged in probing causes, responses and effects of organisational growth. Scott (1974), suggested that organisational theories are ,in general, based upon presumptions of growth and therefore research in this area has centred predominantly on growth. Whetten (1980:577), brought to the fore three common assumptions contemplating a bias in favour of growth:

1. The existence of a positive correlation between *size and age* as a result of which there appears to be a greater need for organisations to manage growth upon maturity.
2. *Size is a desirable organisational phenomena.*
3. *growth is synonymous with effectiveness.*

Blau (1970) and Blau & Schoenher (1971), dealt with problems arising from growth. These problems pertain to the maintenance of adequate coordination whilst the hierarchical structure expands. These problems quite naturally connote the inherent issue of administrative ratio (Indik 1964; Rushing 1967; Pondy 1969; Freeman & Hannan 1975; Levine 1978; Levine 1979; Ford 1980; Zammuto 1983 and others), which has been a popular research topic primarily because of the relative ease with which variables are operationalised.

Organisational Development (henceforth OD) owes much of its prolific literature and research to problems emanating from organisational growth. This entails overbearing bureaucratic procedures, monotonous jobs, alienation etc. These predicaments may be remedied by OD intervention (Bennis & Slater 1968), involving the restoration of organisational climate prevailing in small firms, moral uplifting, conflict-resolution techniques, intimate team-building etc.

Size As a Preferable Organisational Phenomena

Economies of scale is known to have been the major factor advocating enlargement of organisations. Kaufman (1973), followed by Selznick (1974), Argenti (1976) and Perrow (1979) proposed that organisational size serves as a cushion against environmental jolts. They further enhance their argument contending that growth endows a competitive edge which, to a great extent, outshines the less desirable facets of big firms chiefly in so far as management is concerned. Selznick (1975), alleges that the aspirations of different organisations to expand arise mainly because of managers' willingness to be transformed into what he terms "**statesmen**".

The size of organisations as an index of effectiveness is deeply entrenched in the American business and organisational culture. Thompson was amongst the first

organisation theorists who suggested that organisational robustness is displayed by historical improvements which are best embodied by expansion. Persig (1974), brings to the fore the American obsession with large quantities. He asserts that quality had become ,therefore, of lesser significance. It becomes rather obvious that the system approach fits well into universal perceptions of growth and has even affected the conceptual fixation with growth. This is aptly demonstrated by Katz & Kahn (1966) who recommended that in order for organisations to avoid entropy they had better invest more in both financial and human inputs. This investment should exceed any consummation of these inputs. The additional inputs are required so as to maintain homoeostasis between the environment and the organisation. It is self-evident that investing additional 'energies' will result in organisational growth, hence the recommendation. Scott (1979), reinforced this assertion claiming that growth is the desirable organisational state as it involves vitality.

Surely, an organisation in decline is unhealthy and ineffective since it is characterised by contraction. Emery & Trist (et. al.), Buckley (1967) and Terryberry (et. al.) had a similar line of reasoning. They linked avoidance of decline and the elimination of environmental jolts by attenuating growth which is supposed to maintain a steady state of interaction with the task environment. Generally speaking, there seem to be a number of basic reasons (or

causes) for organisations to grow. Whetten (1987:340-341), offers three rationalities:

a. growth may be the result of other strategies. Any success related to the organisation almost invariably results in expansion.

b. Pfeffer & Salancik (1978) offer that any increase in organisational slack facilitates adherence to organisational objectives from all organisational components, thus resolves potential discontent amongst these factions.

c. Caves (1970) and Marris & Wood (1971), suggest that bigger organisations have a more stable and long lasting performance. This reduces the possibility of being incorporated into larger firms by way of merger. They also contend that growth of organisations enables a reduction in their reliance on the environment.

Reasons for Stressing Growth

Whetten (1980:579-581), devoted a substantial part of his study to apparent reasons for the preference of growth. Based on Boulding (1975) he assumed that "**Organization theories and research accurately reflect prevailing organizational reality**". The fundamental reason for this prevalence stems from growth in most aspects of life. This situation has been predominant throughout the Western world and chiefly in the USA since the Second World War.

Boulding, attributes institutional survival to adaptation to a swift surge. The pressure to expand may be ascribed to the parallel increase in markets and the natural propensity of industries, states and federations of states, to abide by the seemingly insatiable demand. According to Kotter & Sathe (1978), managers' main concern is to trigger growth and simultaneously cope with its repercussions.

Whetten's second reason for the preference of growth is as follows: "The growth bias in organizational research reflects a broader social ideology". Bendix (1956), as quoted by Whetten (ibid) argued that theories of administration reflected the conventional ideology of a society. Cameron (1983:360-361), adduced his reflections to that effect arguing that the reason for the unpreparedness of managers and administrators to face up to issues related to decline is that current organisational theory draws heavily upon presumptions of growth. This approach is not far removed from Whetten's claim (1981:84) that managers are inclined to think largely in terms of various practices linked with past successes. This may be explained by their narrow conceptual framework (Starbuck et. al.) which stems from their imprinted reaction of interpreting situations other than success, as if they were a variation of previously encountered problems. This, again, has to do with intoxication with success and the resulting failure. Quinn & Cameron (1983), found that of ten life cycle models only one alludes to organisational decline. The rest simply

assume an indefinite configuration of growth.

Surely, conventional ideologies reflect on managers' reluctance to lend themselves to issues negating expansion. This, in turn, prevents taking any preemptive measures to tackle a looming decline. This proclivity to cling to ideologies of expansion even though it might threaten the survival of the firm arises from basic and traditional American optimism. The American business creed, argues Whetten, is comprised of four key elements: practicality, austerity, individualism and optimistic affirmation. This optimism lies in the very foundations of the Western heritage. Scott (1974:247), widens the scope and observes as follows: "What politician, public administrator, or business executive in practice supports overtly to, its constituents policies of economic contraction, reduction of agency services, or stabilization of sales volume and corporate earnings? How many university courses are offered in how to shrink a business? How frequently do articles appear in professional literature about management strategies of organizational stability or decay? These things seldom happen because they reflect values that are foreign to American expectations and, thereby are foreign to the main stream of management thought and practice".

In as much as this optimism is by all means a positive and important managerial quality, and although expansion is indeed generally correlated with indices of success,

decline in organisations may not be regarded as a mere irrelevant anomaly. The new era following the 1973 Oil Crisis, has resulted in a considerable upswing in business failures and the collapse of other organisations after a period of decline. No longer can the concepts, beliefs and the resulting organisational climate idolising growth, disregard an increasingly tangible organisational phenomena depicting the *undesirable* occurrences in the organisational life cycle. Argenti (1976), advocated a more practical approach. He furnished evident concepts explaining the proclivity to the exaggerated focus on the positive aspects of management. In advance of most students of organisation theory, Argenti had become aware of the need for further insight to alert business managers and scholars alike to looming environmental jolts which in the mid 1970s, turned hostile, risky and highly competitive. Merry (1990:13-14), suggests a number of explicit characteristics for the current "transitional era" which have precipitated the global upswing in crises:

- *The world as one market*
- *Accelerated change in all areas.*
- *The growing complexity*
- *The growing instability*
- *Explosion of knowledge*
- *The fundamental change in values*
- *The uncertainty and the sought-after meaningfulness*
- *The alterations in populations of organisations*
- *The changeover to knowledge-oriented industries*

**The spill-over in state influence*

**The expansion in the supply of consumption goods.*

It is assumed that the accumulation of these over a comparatively short period of time, necessarily shifted a growing attention to the "non-growth" organisational aspects, (Stagnation, inertia, decline and demise). Whetten (1987:343), defined it as the **"nongrowth periods of organizational development & evolution"**. It is obvious why the random occurrence of these attributes prior to the transitional era, made preoccupation with organisational decline and crisis, seem unimportant if not irrelevant. Therefore, it was not surprising if all those whose occupation was relevant to aspects of the organisational life cycle, should in particular relate to matters of growth. Argenti (ibid:3), coined a significant and ever-relevant phrase: **"The avoidance of failure is as much a part of a managers' job as the achievement of success"**. This is self-evident. One may not expect to bring success as an organisational objective, on a par with the managerial capacity to withstand with competence decline and crisis.

Causes and Sources of Organisational Decline and Crisis

There are different ways in which to approach this major issue in organisational decline. Naturally, this subject constitutes the axis around which the chapter about

organisational decline revolves. *Causes and sources*, endogenous and exogenous, which triggered the recent crisis in the United Kibbutz Movement will be analyzed. Antecedents to organisational decline and crisis are amongst the most encompassing and well-studied facets in organisational decline theory, although, largely by way of proposing theoretical frameworks and treatises (Cameron, Whetten & Kim 1987:126), with the minority of studies based on quantitative data. There seem to be a great many apparent and imperceptible causes and sources for downturn-post-maturity periods in the organisational life cycle. Moreover, the dynamics governing the passage between each of these periods intensifies previously-detected or undetected causes of decline. As the process of decline is dynamic, one ought to be doubly attentive to *longitudinal alterations* or developments.

In so far as causes of decline are concerned, it may be asked whether the cumulative impact generates new causes or just compounds the original ones? An alternative fashion in which to analyze the theme is by resorting to the distinction between business and not-for-profit organisations. This partition seems reasonable though somewhat inadequate. Fundamentally many of the causes of decline will apply fairly equally for the two types. An alternative way in which to diagnose causes could be by way of subdividing them into internal or external factors. This dichotomy entails the evaluation of endogenous organisational processes on the one hand and the appraisal

of exogenous impact upon intra-organisational mechanism. A simplified method would be to sort causes in accordance with their origin, either external or internal. Although this is, at times, a useful analytical technique, it leaves much to be desired in that it might underestimate the interaction between the two sets of variables or causes.

Whetten (1980:354) divides the approaches dealing with the analysis of sources into categories, A and B. The first category discusses sources for crises as if they are an objective phenomenon (Balderston 1972). The second category deals with sources from the point of view of misperception of organisational members (Starbuck et. al. ; Weick, 1979; Beyer, 1981; Nystrom & Starbuck, 1984). Whetten recommended a typology which will conform with both orientations such as Levine's (1978). This analysis will approach the subject mainly from the point of view of evaluating external/environmental causes and negative organisational endogenous mechanisms. The literature does not always, as indicated, confront the two sets of causes. There are a number of authors for whom the *global* picture is essential whereas for some the focus on external or internal is more desirable.

As indicated, this discussion will provide no clear-cut distinction between business and not-for-profit organisations. The apparent reason is that the highlight of this thesis revolves around a unique organisation where business **and** not-for-profit characteristics are intertwined in most aspects of organisational life.

Moreover, it is understood that this interwoven organisational configuration is one of the intrinsic catalysts for various system dysfunctions within the kibbutz. This issue will be discussed in the chapter dealing with kibbutz organisational theories. The apparent causes and sources for decline will be thematically dealt with. This taxonomy seems to be useful both in terms of the ability to dwell extensively on each cause and the fact that it facilitates a comparative analysis.

General Models of Organisational Decline

Several models were proposed in order to systematically separate and assess external and internal causes and sources for organisational decline. Three typical patterns of organisational decline were advanced by Argenti (1976) in a general model. The three trajectories are comprehensive and include a wide variety of sources for decline. The first trajectory reflects the normal life cycle pattern.

The second trajectory illustrates the risks of an unprecedented success. A swift growth is followed by a steep decline. Entrepreneurial and charismatic managers inebriated by success turn inattentive. This unmindfulness breeds failure. The second and third tracks depict two ways of the "success breeds failure" syndrome which was

previously suggested by Cyert & March (1963). They took it that organisations delineate heuristic programmes to tackle recurring problems. A useful, comprehensive and valid model of organisational causes for decline was proposed by Levine (1978:318). This model exemplifies causes for decline in public organisations, yet it is not far-removed from the business reality. His typology goes along two dimensions: a. Causes triggered by external conditions or internally-induced; b. The subjective source for cause /political or economic/technical/ comprises the horizontal dimension. This typology can be summarised as follows¹:

INTERNAL	EXTERNAL
Political Vulnerability	Problem Depletion
Organisational Atrophy	Environmental Entropy

**Problem Depletion*; this typically regards governmental involvement in short-term crises (natural disasters), medium range interventions (employment programmes, recovery plans, monetary measures) and long-term programmes.

**Environmental Entropy*; occurs when "The capacity of the environment to support the public organisation at a prevailing level of activity erodes".

**Political Vulnerability*; A situation reflecting high level

¹The model and the attached explanations and paraphrases are taken from the same source (Levine, 1978).

of frailty and precariousness that obstructs organisational ability to resist budget decrements or other environmental imperatives for self-curtailement. *Organisational Atrophy; Usually entails declining performance or organisational malfunctioning leading to resource cutbacks. This property involves a large number of negative organisational characteristics.

Levine's model encompasses a much wider range of causes than previously advanced by authors who discussed decline in business organisations.

An interesting and practicable conceptual framework was proposed by Cameron, Kim & Zammuto (1983). They, however, focus on external forces only, therefore will be discussed under the heading External Causes for Organisational Decline.

Despite the fact that Tushman, Newman & Romanelli (1986), devoted their article to organisational change they proposed three patterns of decline which may be defined as a general model. The three patterns correspond with Levine's basic sources of decline (organisational atrophy, vulnerability, environmental entropy and loss of legitimacy), these three sources of pressure prompting organisational decline are: Industry discontinuities, product life cycle shifts and internal dynamics.

A different approach highlighting the advantages of a

formal organisation over market mechanisms was proposed by Williamson (1975). His influential paradigm discusses market failures from a comparative angle. Williamson is a micro-economist who argues that the formal organisational framework will possess some structural advantages over the market mechanisms. Market failure stems from a confluence of opportunism and small-scale bargaining. Williamson argues that an "internal organisation" or "hierarchy" will function more effectively and will muster the market exchange (i.e., will provide large numbers and organised bargaining capacity and will overcome the egocentrism expressed by consumer opportunism).

Expanding on this issue will digress from the discussion. Yet, it would be instructive to note Williamson's scenario for a firm collapse or decline. Based on this logic, an organisation will show signs of decline when its transactional efficiency will erode.

This highly multifarious and universal model is somewhat alien to the organisational literature but is useful in its provision of a more eclectic interpretation.

Organisational life cycle theorists provide some rudimentary yet highly general & descriptive models of organisational decline. One of the latest and more original ones is that of Adizes (1988). Adizes' model is generally simple and reflects the basic stages of an aging organisation. Basically, there are two major parts in any

organisations' life. These involve the *Growing* and the *Aging* stages.

The Aging stage commences following the organisations' peak time (*Stable*). This stage consists of three sub-phases: Aristocracy, Early Bureaucracy and Death. DeGreenes' model is exclusively dichotomous consisting fundamentally of growth and decline which in turn are subdivided into two 'mini' phases. The main difference is that DeGreene focuses on the down-turn proclivity and provides more detailed descriptions of the final or turnaround phase.

The Bureaucracy and Death phases (or Severe Diseconomies and System Crisis) will be focused on since the preceding levels are not terminal and are rather extensively dwelled upon in the literature. The Bureaucracy stage is characterised by insufficient generation of resources and its justification is provided by the mere existence of the organisation. Major traits are:

- *Many systems with little functional orientation.**
- *Self-centred disassociation from the environment.**
- *Lack of sense of control.**
- *Limited accessability to the organisation by its clientele (the need for bypasses).**

Adizes contends, in broad terms, that there exists a shift from emphasis on **function** (rowing stage) to emphasis on

form in the aging stage. He relates to all post -growing phases as pathological. Niv (1976), furnished some characteristics regarding the dissolution of communes. Though relatively a private case, the disintegration of communes is essential if one wishes to comprehend decline in total organisations. Niv distinguishes between the Model and the Pioneer types. Basically these types differ in their general attitudes towards the environment. The Model type is more introverted, change-shy and adheres to theological concepts. The Pioneer type reflects more openness, is more change-oriented and mainly secular. In so far as decline is concerned, the Model type will subside because of internal disintegration due, in the main, to self-imposed social isolation and geographical remoteness. Pioneer type, however, will dissolve because of assimilation which resulted from over exposure to the environment. This is a highly generalised distinction. The kibbutz exhibits characteristics prevalent in both types. all reasons (Sheaffer 1987) for its decline have yet to be established, some may be attributed to both assimilation and disintegration processes.

INTERNAL CAUSES FOR ORGANISATIONAL DECLINE

Ideological Constraints

General

The ideological component is a double-edged sword for any organisation. On the one hand, an organisation's ideology, as expressed by its climate in general and its objective in particular, is a cementing and stabilising element. In fact, no organisation can come into being, let alone survive without any form of ideology. Thus, it may be postulated, that ideology is an inseparable and indispensable ingredient of any organisation. On the other hand, ideology is likely to become a handicap, a hindrance, in fact, a liability, and consequently a stimulus to organisational degeneration. Turner (1971), praised the development of elements of continuous culture which are related to their functions and task environment. He ascribes part of the organisational effectiveness to these cultures. However, this very attribute carries the danger of collective blindness to significant issues (Turner; 1976).

The second situation is apparent when ideologies are "change-resistant", deeply ingrained and rigid in their constructs. Most authors discuss the ideological element when dealing with organisational resistance to change. It is argued in this study that deeply entrenched ideology has an inherent propensity to stagnate if not to stifle the organisation. Therefore it is assumed that stagnation followed by organisational inertia is a source of decline. Beyer (1981) asserts that : "*Organizational ideologies are viewed as constellations of shared beliefs that bind values to actions*". She defines organisational ideology as:

"Relatively coherent sets of beliefs that bind people together and explain their worlds in terms of cause and effect relations" (Ibid:166). These ideologies are "manifested in language, stories and ceremonial acts" (Pettigrew, 1979).

Pfeffer (1981), followed, relating to a situation where organisations are buffeted by the environment and espoused ideologies assume increasing importance. Dunbar, Dutton & Torbert, (1982:91) argue as follows: Definition: "Ideologies as shared beliefs reflecting social experience in a particular context at a specific time". As ideologies interpret and assess the general societal situation, it may be presumed that their importance is pervasive. Ideologies are then the *steering conceptual anchor* for any form of organised society. Therefore, organisational members may not doubt them or view them as the source of their misconceptions, frustrations and loss of security (Torbert 1972; Lanir,1991).

Weick (1979), took it that any novel stimuli are interpreted through the aims of previously encountered occurrences. Any deviation from the acceptable and known is interpreted in terms of the *prevalent norms*. If unknown behaviours were to have been excepted then members' faith in their ideology as an "answering machine" for the interpretation of events, would be undermined. There is an implicit propensity within the organisation to refrain from equivocalities. Starbuck, Greve & Hedberg (1978), follow an essential feature regarding the adherence to ideological

constructs. They assert that in the short run there is a unanimous commitment to existing ideologies and this allows for clear objective setting. When, however the organisation matures and ramifies, goals become diffused, new technologies are deemed necessary and reconstruction becomes vital.

If previous inculcation and investments in current ideology are too high, organisation ossification is likely to occur. Starbuck (et. al.) followed this and held that managers tend to interpret the environment in terms of their current goals, methods and competencies. They call it "*Perceptual Distortions*". This is, in fact, a rationalisation of current objectives which arise from conservative ideologies. Managers' perceptions are highly likely to be distorted by conservative directions.

A somewhat different angle relevant to this discussion is offered by Beyer (1981), who analyses hindrances to organisational adaptation to the environment. She regards the ideologies espoused by organisations as a fatal element in the organisation's capacity to adjust. Stolid & unrelenting ideological constructs are a major obstacle for a smooth adaptation. Thus, deeply-rooted ideologies are a source of stagnation which, usually signifies inertia. Meyer's seminal study on the adaptation to environmental jolts (1982), produced some eductive and significant indications about the positive statistical association

between organisational resilience and ideological predictors. In his study, a hospital that enacted flexible and open-minded ideology proved to be more efficient, self-reliant and successful in grappling with environmental buffets.

The unlearning of yesterday's ideas and organisational members' reluctance to abandon their current beliefs is dwelled upon by Nystrom & Starbuck (1984:55). As current beliefs and procedures stem from rational analysis and successful experience, evidence must be adduced to counter their effectiveness prior to any introduction of new ones. Usually the perpetuation of organisational crisis belatedly provides the evidence.

A feature concerning cleavage between superiors and subordinates reflects another important source of discontent and consequently a decline. Weber (1947), established that superiors define consistent ideologies, defend and embody them. Subordinates are said to be guided in ideological matters by their superiors and carry out functions emanating from these constructs. Hagen (1962), assumed that if subordinates doubt ideology's relevance, they become irrational and existing ideology ceases to be valid.

To that effect, Dunbar (et. al. :95), further developed the subject suggesting that members fully loyal to their organisations tend to interpret the world by sifting

meanings in terms of their guiding principles so as to deem experimentation and change unnecessary. An endeavour to introduce change elicits a vigorous resistance.

This presumption holds true especially in the kibbutz where deep-seated collectivist beliefs blinded and stifled an acutely needed ideological reconstruction. Surely, this inherited resistance seem to be a substantial impetus for organisational decline. The widening cleavage between managerial perception of the current ideology and kibbutz members' comprehension and realisation of both the ideology and the resulting policies have become a significant predictor of current kibbutz crisis (Lanir, 1990). Although this paragraph will not dwell on organisational change, it seems appropriate to point out that ideological alterations are more likely to be introduced *following* an exogenous impact. An ideal organisational ideology would be the one that simultaneously allows for stability and expedites change.

Organisational ideology has not been dealt with as a separate cause for decline. It seems easier to associate it with a number of other internal sources. Since ideology occupies a particularly pivotal place in kibbutz it is appropriate to expand. Further elaboration on this theme will be provided in the paragraph dealing with communes.

Organisational Atrophy

Organisational enervation is a persisting theme in the literature. There are many ways in which to assess degenerating processes in organisations. This process is largely a result of a routinisation of an idea (Weber 1980) which keeps the vitality of the organisational entrepreneurial spirit and its agility reinvigorated throughout the growing (Adizes 1988) phase. Cyert & March (1972), are the first organisational theorists to suggest that organisations tend to draft heuristic schemes to tackle recurring predicaments. This is "because situations appear equivalent as long as they can be handled by the same programs, programs remain in use after the situations they fit have faded away", Starbuck & Hedberg (1977:250).

Behn (1977) and Cyert (1978) are both critical of that situation which they claim to be the source of denigrated inertia. Whetten (1980:355), contends that: "organisations that habitually use programs based on their previous utility tend to become desensitized to environmental change". Argenti (1976), dwelled on this pattern of a repetitive managerial repertoire claiming that it affects established, well-connected and stifled firms that deceive themselves by the illusion of invulnerability. It is believed by these organisations that because of their longevity they have been granted immortality. Hedberg (et. al.) call this phenomenon: "success breeds failure".

A somewhat different approach is discussed by Bibeault

(1982:42), who addresses the "inbred bureaucratic management" characterised by "organisational senility" which are "organizations so controlled that they don't take chances". More specifically, Bibeaault details some of the managerial failings which seem to bolster organisational inertia:

- * Adherence of managers to old routines irrespective of ~~the~~ changing situations.
- * Failure in defining meaningful, fresh and challenging objectives.
- * Institutionalized contentment; Firms turn secure and stable and not venturesome.
- * "Old Wisdom" transferred to a younger generation of managers. Old ideas and antiquated approaches.
- * Intolerance of criticism. suppression of individualistic thinking.

The ensuing problems breed tension between internally induced and change-oriented forces and other forces that resist it. A comprehensive and causally-deductive study concerning the roots of organisational inertia which includes all the above and other aspects, was conducted by Hannan & Freeman (1984). This study systematically clarifies the meaning of structural inertia and tests the strength of inertial forces as expressed by age, size and complexity. These researchers are among the flag bearers of the ecological theory of organisational change. Because of

the comprehensiveness and depth of this study, some main highlights will be discussed, all of which are relevant to the theoretical discussion. The same authors (1977:957), claimed that in many organisations strong inertial pressures are likely to be found. These strains emanate from both internal and external forces. The perspective at hand is described as: "**random transformation theory**", (Hannan & Freeman 1984:150). It holds that organisational structures change *primarily* in response to internal processes. Furthermore, the survival of organisations is contingent upon the sync between the rapidity of organisational response and the temporal patterns of the environment. An essential organisational attribute pertains to reliability and accountability. On the one hand these are necessary elements for the survival of organisations. Those lacking the attributes will be booted out by way of negative selection.

On the other hand, the very creation of these traits requires that organisations will be highly reproducible, propagative or replicative. This is done by introducing processes of institutionalisation and by constructing highly standardised routines. This, as Hannan (et. al.) suggest, is a two-edged sword in that the other edge of the sword is inertia, i. e. the very factors precipitating reproducibility turn the organisation into a change-resistant entity. Nelson & Winter (1982:96), view organisational routine as "**sources of continuity in the behavioural patterns of organizations**". Underpinned by

this logic: "collective knowledge is the basis for organisational routines and decays rapidly with disuse". Routines are then patterns of activity that can be invoked repeatedly by the organisation. Repetition in evoking patterns of organisational activity constitutes the encasement of organisational learning. The routine execution of organisational memoir is the source of inertia according to Nystrom & Starbuck (1984). They also link the cognitive structure of managers and organisations alike with the likelihood of contracting organisational inertia by way of avoiding "unlearning". In so far as the age is concerned, structural reproducibility increases monotonically as time passes. Subsequently, older, reproducible and more inert organisations are found. However, established, reproducible and inert firms are less likely to contract or decline as epitomised by the liability of newness and smallness (Hannan et. al.).

Dynamic Decline and Vicious Circles

The spiral dynamism that typifies organisational processes is discussed by De Greene (1982). He asserted that every organisational evolution is anything but linear. This is due in the main, to the fact that any organisation consists of many variables which have a differential rate of growth or decline. These rates are expressed mathematically in differential equations which are non-linear in nature. Masuch (1985) also recommended a formal way of representing

organisational vicious circles by simultaneous equations. Surprisingly he overlooked De Greene's pioneering work although neither actually provides a practical example. The symptoms of decline or rather crisis, concur with Miller's definition of "a *pathological system*" (1978:81). He refers to the unstable state of certain variables in an organisation, propounding that: "the costs of the adjustment processes required to keep them within their range of stability are significantly increased". Merry & Brown (1986:27), followed this line of reasoning suggesting that the above definition reflects also a "neurotic organisational behaviour" which is a form of a pathological organisational behaviour. All of these authors indirectly relate to the chain reaction effect of contracting vicious circles. De Greene always links a certain stage in organisational evolution with some added impact emphasising the irreversibility of stages specifically when this stage is *beyond* Stage II which demarcates the downward trend.

The logic behind a vicious circle, in so far as organisational members are concerned, appears rather similar in most papers dealing with the pathology. Whenever people try to evade undesired results they practically create or enhance them. Any persistence of the same action reproduces a replica of these undesirable predicaments. (Smart & Vertinsky 1977; Hannan et. al.; Masuch 1985). Weick (1969) reasoned, relating to the logic of the repeated action, that any structure is created by a

repeated act.

Any change leads to a counter act reproducing the original act. This is called an *action loop* (Masuch 1985:15). An action loop occurs whenever an activity triggers a chain of other activities which eventually reproduce the original act. Masuch relies heavily on cybernetics and refers to vicious circles as action loops with counterproductive results.

The process is of a chain reaction type. Once a critical threshold is crossed a contracting circle is set off until the system collapses. The amplifying effect of typical contracting circles within an organisation is best depicted when an incremental change is proposed.

For instance, an organisation facing the final stages of crisis must prepare a strategy for organisational change. If, however the organisation has yet to reach maturity, in terms of readiness for change, it will, most likely engage a vicious circle syndrom which, in organisational terms takes the following form:

CHANGE IS REQUIRED-->enforcing rules-->increased formalisation-> apathy incurred-->growing alienation-->low motivation-->near total dysfunctioning-->**MANAGEMENT AMPLIFIES JURISDICTION**-->enforcing new rules...

Hambric & D'Aveni (1988), conducted a longitudinal study in which they identified four major stages in a downward

spiral portraying organisational decline. The decline period lasted ten years but each phase is rather accurately identified and measured.

They have managed to find a significant statistical association between these two variables (slack resources and performance²) and further decline. By all means, these two precipitating or decline heralding predictors are mere operationalised variables which do not, necessarily, indicate or encompass other potential sources. The main problem lies with organisational slack which carries double meaning. On the one hand it is a cushion enabling a firm to better absorb environmental buffets (Singh 1986) and indicates positive aspects of the firm, on the other, the availability of slack is liable to induce complacency, thus becomes change-averse (Whetten 1980; Tushman & Romanelli 1985). Whetten et.al. findings seem to support Masuch's theory of contracting action loops which form the basis for self-magnifying vicious circles.

Masuch describes a more intricate version of these circles. This occurs when action loops encounter a network of circles. Each of these circles is derived or represents a similar organisational situation. These are called **Explosive Circles** which are best described in the mutual multiplication of bureaucrats by Parkinson (1967). The phenomenon of ruinous chain reaction which consumes

²**Organisational slack resources** is defined as its unused borrowing capacity or equity to debt ratio. **Performance** is defined as after-tax return on total assets.

existing reaction structures is also dwelled upon by Perrow (1984). Masuch (1985), suggests that the accumulation of vicious circles may explain organisational stagnation. Further, he asserts that organisations lacking slack may develop more action structures bearing negative effects. He claims to have been able to lend support to Miller's quantum vs. piecemeal change theory (1982), by suggesting that action loops with negative impact are more likely to occur in incremental changing organisations.

Sources and causes of organisational decline are varied. Many have to a great extent been only partially substantiated by way of a resort to statistical causal models. Even recent authors (Merry & Brown 1986; Hambrick & D'Aveni 1988; Weitzl & Jonsson 1989; D'Aveni 1989) claim that a great deal of empirical research based largely on longitudinal data is required in order to consolidate a more coherent & independent body of knowledge. There seems to be no end to sources for organisational deterioration and it is doubly challenging to try and classify the reasons in accordance with a universally-acceptable typology.

In broader terms, there is a wider agreement as to the basic categorisation of eras in the organisational life cycle where it is expected to spot signs of slackening in organisational agility towards the end and during maturity. However, the literature is not absolutely consistent in

fixing the exact timing of the emerging pathologies. This has become somewhat clearer following several longitudinal studies (Freeman, Carrol & Hannan, 1983; Hambrick et. al.; D'Aveni, 1989). These researches follow the dynamic nature of organisational decline and therefore have managed to be more accurate in the *processual* nature of cause-effect. In as much as some substantial inroads have been made in this area, Meyer (1982:522), addressed the difficulties in separating causes and effects in any evolutionary study claiming that :"**...intertwined causes and effects render causal attributions problematic**". The inseparable nature of cause-effect is particularly puzzling when dealing with business failures.

A large number of economists who have extensively dwelled upon the fine boundary between externally and internally-induced business collapse (Gardner, 1965; Altman, 1971; Argenti, 1976; Clifford 1977; Bibeault 1982) attest to this inherent difficulty. Bibeault (1982:17), despite his heavy economic emphasis acknowledged that: "**The seeds of future crisis are sown by failure to cope with current people and organizational problems. The future of an organization is therefore less determined by outside forces than by the organization's history**". Adhering to this argument, Bibeault notes that (1982:35-47): "**decline is therefore caused by internal factors about eight out of ten times**". Moreover, he specifically attributes decline "**not to bad luck, but to recurring patterns of nonconstructive conduct**

by management". Clearly, Bibeault's perception of organisational decline is highly one-sided in that he relates exclusively to business or manufacturing firms. Furthermore, he completely ignores a wide range of apparent causes dwelled upon by organisation theorists and focuses on a rather generalised aspect which though very meaningful to the decline scene do not encompass and provide an in-depth insight into other facets. Despite these constraints, his interpretations are simple, (based on an extensive field study involving around a hundred American corporations and other large firms) as well as highly instructive, and portray, in detail, managerial shortcomings directly associated with business failures. The following is a summation of Bibeault's managerial defects which he alleges to be failure triggers.

*** Managerial Incompetence**

The elevation to higher managerial positions irrespective of the person's capacity to cope with adverse economic strain. **"some people have the natural abilities to manage and some not"** (Bibeault, 1982:73)".

*** Narrow Vision**

Not all managers are capable of widening their horizons if unprepared or inherently devoid of the capacity to handle a wide range of responsibilities. The delegation of authorities is useful but insufficient where the manager

does not, himself, focus on the main issue on the firm's agenda.

***Displacement Activity**

"Many a businessman is so busy doing the things he likes to do he has no time for the things he should do" .

This managerial dysfunction is mainly apparent when managers deal not with what the urgent assignment at hand requires but engage themselves in activities they are considered to be experts in.

***The Visible Symptoms of Bad Management**

One-man rule, lack of management depth, management succession problems, inbred bureaucratic management, a weak financial executive, an unbalanced top management team, a nonparticipative board. The above are listed in accordance with Bibeault's order of importance based on his survey of chief executives. Being preoccupied with a seemingly "one-sided" theorist primarily towards the end of this essential chapter is coincidental. Bibeault, despite his blatantly managerial/economic approach acknowledges that, basically, what counts are the people and their superiors. They, alone, carry out dysfunctional organisational behaviour which may then be interpreted as "endogenous causes" or "internal causes". Bibeault conducted a seminal survey

(Bibeault, 1978) aided by Dun & Bradstreet, where he interviewed eighty one turnaround company chief executives. Summing up his findings it appears as if "*seventy percent of the time decline is internally-caused, although in some cases internal weaknesses are triggered by outside forces*" (Bibeault, 1978:25-26).

EXTERNAL CAUSES FOR ORGANISATIONAL DECLINE

Levine's (1978:318) model of organisational decline, which has been discussed earlier is relevant in the broader sense. This concern is the external causes, i.e. problem depletion and environmental entropy:

**Problem Depletion*; this typically refers to governmental involvement in short term crises (natural disasters), medium range interventions (employment programmes, recovery plans, monetary measures) and long term programmes such as space scientific research, master plans. There are three major forms of problem depletion: demographic shifts. problem redefinition, policy termination.

Environmental Entropy*; occurs when "The capacity of the environment to support the public organisation at a prevailing level of activity erodes**" (Levine, 1978:318)

A interesting and practical-conceptual framework is proposed by Cameron, Kim & Zammuto (1983) who argued that if environmental niches erode gradually and predictably the organisation will stagnate and eventually decline. If

changes in the niche size diminish through contraction and are unforeseeable, the organisation is facing a palpable threat to its existence. When there are gradual shifts in the niche's form, a conflict arises within the organisation about policy it should pursue. Unpredictable, swift and comprehensive changes will result in the collapse of the niche and subsequently disorder prevails. Levy & Merry (1986:272), explore the niche aspect from an opportunity point of view like the discovery of unexpected market niches, the sudden availability of financial resources and technological breakthroughs. They indicate, however, that ignoring these essential issues is likely to trigger a negative event.

An interesting insight into the external factors that precipitate a business firm's crisis is extensively discussed by Bibeault (1982:27-33). He mainly speaks of "*the impact of change*" which occurs within the complex, ever alternating and steadily moving environment. These trends and events are liable to strike "**at the core of the company's business**". Bibeault expands on **external constraints** which obstruct management freedom of action. These constraints may include, governmentally-enforced monetary measures, political upheavals, and other forms of problem depletions (specifically policy redefinitions and policy terminations). Tushman et.al (1986:36), classify these constraints as part of the forces leading to *Frame-Breaking Change*. The specific factor is named "*industry*

discontinuities" which involves the same problem depletion items: "**sharp changes in legal, political or technological conditions**". Bibeault's book coincided with DeGreen (1982) and they both are heavily influenced by the rapidity and suddenness of environmental jolts. Their work resembles DeGreene's environmental typology though with less specificity. Bibeault classifies external factors into five categories:

***Economic;** Business slump, boom, international monetary crises, interest rate hikes, credit squeeze, inflation, investors expectations, etc. Levy et.al. regard, though, corporate merger, acquisition or take-over as "*political interference*" triggering organisational crisis. Quoting Altman's prediction technique (1971), associating failure rates with GNP, share market index and money supply, Bibeault demonstrates a reliable way to forecast decline;

$$\text{Failure Rate} = 1.54\text{GNP}_1 - 1.90\text{SP}_1 + 0.49\text{MS}_1 + e$$

Where: FR is the failure rate from one quarter of the year to the next, **GNP** the change in **GNP** in billions of dollars between these quarters, **SP** is the change in the Standard & Poor Index of the Stock Market Prices, and **MS** is the change in money supply in billions of dollars, **e** symbolises the error term.

***Competitive Change;** mergers, emergence of new producers,

introduction of lower prices by competitors, the advent of new products. Tushman et.al. call this change "*product life cycle shifts*" which entail the alteration of different strategies along the product life cycle, and Levy et.al.: "**unexpected innovations by competitors**".

***Government Constraints;** Pertain to governmental impingement

upon corporate life by taxation, welfare legislation, pollution control, product safety, consumer welfare legislation.

***Social Change;** work attitudes, incorporation of workers in management, job satisfaction.

***Technological Change;** material processes, manufacturing techniques (has mainly to do with lack of foresight). In most cases, unawareness of technological progress may hinder firms, cause them to modify strategies or lower profits but it causes no decimation.

Summing up, the effects of exogenous precipitators to organisational crisis are very extensive indeed. The problem at hand is to identify and isolate those external factors that may independently 'foment' organisational crisis. Levine's model (1979) appears to be a comprehensive, sensible and accurate typology of external and internal triggers. It therefore constitutes a firm

theoretical ground for analyses of both business and not-for-profit organisations. Virtually, any identified factor can be matched with one of Levine's rubrics although these were originally intended for public organisations.

CONCLUSION

The problem of integrating the literature, amongst the different subdisciplines addressing organisational decline and crisis seems to be particularly pressing. The various aspects of the literature advance prescriptions for grappling with organisational decline that are congruous with their underlying theoretical outlook. However, distinct contradictions often occur when one endeavours to examine the literature in its entirety. The different approaches involve organisational crisis (Herman, 1963; Milburn, 1972; Argenti, 1976; Staw, Sanderland & Dutton, 1981; Marry, 1990 and others), business failures (Altman, 1971; 1982; 1988; Argenti, 1976 Bibeault, 1982; DeGreene, 1982; Hambrick & D'Aveni, 1988; D'Aveni, 1989 etc.

and public administration (Boulding, 1975; Cyert, 1978; Levine, 1978,1979; Zammuto, 1981; Whetten, 1981 and others). The different guidelines and prescriptions stem largely (Zammuto & Cameron, 1985:225) from "**differences in the underlying dynamics of decline among the types of organizations on which they focus**". These inconsistencies were evident even during the review of the literature but to an extent may be advantageous in more advanced stages

primarily because of the intertwining nature of the kibbutz where public and business facets coincide.

This chapter has provided a concise summary of the relevant theories within the realm of organisational crisis and decline. Though the two processes differ somewhat, they are substantially interrelated hence the concurrent discussion. This analysis has also provided an essential passage between basic organisation theories. These serve as a conceptual point of departure for the more specific discussion dealing with the actual prelude to the empirical study. Noteworthy is the fact that during the last two decades the sub-discipline of organisational decline has greatly proliferated and is slowly making inroads into the the mainstay of organisational theory and management sciences. Current economic recession in the West as well as unprecedented political precariousness in Eastern Europe coupled with growing trends towards democratisation in other parts of the world, induce greater likelihood of continuing organisational crises. Therefore, any expansion and in-depth analyses of decline processes in organisations seem more relevant then ever before.

CHAPTER FIVE

EARLY WARNING SIGNALS

...What does he expect-a world in which taxes and laws are not changed ? This is like the captain of a ship which is grossly overloaded blaming a two-foot wave for the sinking-and, in one case, he is right; it was a two foot wave that sank it ! But what about all the other ships near by which are still afloat ?"

J. ARGENTI, CORPORATE COLLAPSE, 1976.

General

Early warning signals play a significant part in the literature of organisational decline. This phenomenon is also addressed by authors who restrict their studies to organisational crisis. The issue is not unpopular amongst historians, sociologists and psychologists who discuss it from their disciplinary angle. However, in this study a relevant sociological definition conceptualising phases of pre-disaster warning will be addressed. Later a psychological interpretation of anticipation of disaster will be briefly examined. Tuchman's (1984) detailed historical analysis reiterates that ignoring clear ominous signals of a looming political upheaval is one of leaders' major signals of their imprudence. Her descriptions are, very much analogous to various organisational situations, and as such are both enlightening and illuminating. Perhaps the widest coverage of this essential topic, insofar as business firms are concerned, is advanced by Bibeault (1982:61-71) who discusses the problem from a most pertinent perspective. Being fairly commensurate with our case study, his interpretations will be extensively referred to.

A literature Survey

A useful point of departure would be to associate the ignoring of early warning signals with general contingency theories which state that for the organisation to survive, it must maintain a dynamic compatibility with its task environment. De Greene (1982), was amongst the first to comprehensively discuss the vital role of boundary spanning units in scanning the environment and transforming reliable updated and environmentally encompassing information to decision makers. To that effect, Starbuck, Greve & Hedberg (1980:115), advised that organisations should have loose links with the environment so as to adjust to the one that yields compatible attributes. However, societal trends may alternate swiftly and the organisation has to be aware of risks which are often amplified by "faulty perceptions of environmental events". Too loose a connection is liable to provide erroneous judgment. Quite often a mistaken judgement as to early symptoms of decline is the application of weathering-the-storm strategies as well as "superficial cover-ups" (Nystrom & Starbuck, 1982:59).

The business scene provides ample field for adequate comparisons and relevant occurrences. Bibeault, (Ibid), argues that business warning signals must be looked for, they do not spring up. "Early problem signals are, almost by definition, weak signals. Often these weak surface

manifestations are, at best, symptoms, rather than causes, and often the least revealing ones". Quite naturally, the closer the firm is to collapse the more widespread and clearer the signals.

This is, irrespective of denials and detrimental neglect on the part of managers who tend to shrug them off. Notwithstanding, authors are by and large unanimous in holding that declining firms need to be rocked and shocked by exogenous jolts before a constructive action is taken to ward off the imminent crisis. Bibeault found that 80 percent of his surveyed firms ignored early warning signals. As usually is the case, perspicacious observers play the role of sound alarm bells. As Raphael (1986:31), elucidated in her psychological analysis of the anticipation of disaster: "...a searching the environment for signs and warnings, for omens that may help them anticipate what they fear".

Meyer's study about the adjustment to environmental jolts (1982:528-530), has produced a valid proof of the importance of early attendance to warning signals by effectively spanning critical sections within task environments. He found that:

* Organisations that keenly monitor and scan numerous task environments have an improved foresight which in turn improves their jolt-absorption-capacity. *

Responses to exigencies will be facilitated by task

structures set up when the environment is placid.

* The more effective, innovative and widely spanned the market strategy is, the better are the chances for early detection of a looming crisis and the resulting preemptive measures.

* The more formalised the job structure and the more centralised decision making is, the lesser is the forewarning capacity.

The importance of Meyer's study stems primarily from its predictive validity which is based solely on quantitative analysis. He has been amongst the first researchers to have measured forewarning signals and their impact upon organisational variables.

As indicated before, organisational dysfunctions tend to gather negative momentum. The vicious circle or the snow-ball effect of unheeded warning signals has the tendency to multiply, complicate and eventually to become unmanageable. (Lorange, Morton & Ghoshal 1986). There appear to be many indications of the considerable length of time between early faint signals and demise. Traditionally, weak signals are overlooked by management because of their "smallness". They are not spectacular (Lorange & Nelson 1987:41) enough to demand instantaneous action.

Turner (1976:391), includes the failure to fully assess the emerging danger and the underestimation of it, within the "incubation period" in the evolution of decline which is one of the initial phases. Most organisations fail to

allocate the necessary resources for this typical boundary spanning function.

Lorange (et. al.) provide the following typology of reasons for delayed action in response to early warning signals:

*Excess personnel. Magnifies the problem due to extended information channels and a cumbersome hierarchy.

*Tolerance of incompetence. The uncoupling of managers from immediate business objectives triggers an atmosphere where managerial ineptitude is camouflaged.

*Cumbersome administrative procedures. These entail: excessive paper work, slow approval system, endless alternative evaluations, inappropriate committee decisions. The resulting inefficiency creates a serious delay in any organisational procedures.

*Disproportionate staff power. In excessively hierarchical firms, staff increases its influence which exceeds their advisory role. A phenomenon developed where staff co-manage the firm.

*Replacement of substance with form. Strategy planning outputs are laden with unfocused and irrelevant information which does not enlighten managers as to environmental perturbations.

*Scarcity of clear goals & decision bench marks. Decision bench-marks are blurred because of excessive time spent on decisional criteria and not on the decision itself.

*Fear of embarrassment and conflict. The side-stepping conflict when organisations mature. People prefer not to

rock the boat and as a consequence badly err in not being engaged in potentially controversial issues.

*Loss of effective communications. Ossification of both lateral and horizontal flow of information.

*Outdated organisational structure. Often, an organisational structure mirrors firm's past. Outmoded organisational constraints inhibit mutual interactions with the task environment.

It is quite obvious that organisation theorists would avoid delving into the deeper strata of managerial perception of an impending danger. Albeit that it seems appropriate, nevertheless, to integrate a sociological observation to that effect. Mileti, Drabek & Haas (1975:24), quoting Shatzman (1960), suggested that any individual tends to persistently underestimate a hazard. Consistent with this assumption, they observe that **"cues about a hazard are usually interpreted in normal terms so that the effect is to depress their significance"**. There is no reason to presume that managers perceive danger in the form of a looming organisational crisis, in a considerably dissimilar fashion. In as much as these indicators are not entirely mutually exclusive and are qualitative in nature, they largely cover the potential range of explanations. Rodekohl's dissertation (1974) points out that school principals tended to reject any information regarding a decrease in enrolments by simply doubting the validity of the data. A defence mechanism invented in order to refute

ominous information is referred to by Argenti (1976:66), as "creative accounting". Whetten (1980:362), alluded to the "programmed" cognizance of managers who reject implications of information incompatible with their reasoning, specifically when it pertains to negative developments. An interesting aspect of ignoring threatening information as an essential input in a decision-making pathology known as "group think", is advanced by Smart & Vertinski (1977:645). They found that amongst the symptoms of group-think which eventually lead to decline or during decline, there is the tendency to: **"ignore warnings and negative feedback that might force a reassessment of a decision..."** .

The crisis management literature is studded with elucidations of the importance of heeding early warning signals. Mitroff, for instance, (1988:18), goes as far as suggesting that unmindfulness of the signals virtually **causes** the crisis. He contends that reactive organisations not only ignore signs, they even **"block them deliberately"**.

The awareness regarding the acute need for early detection of a looming crisis seem to have made some inroads into the latest crisis management literature. Merry (1990:94-104), devotes a whole chapter which he names "How to cope with crisis in its outset". Moreover, he writes extensively about crisis-immune systems, pointing out that successful firms manage to develop sensitive links with the

environment and awareness to endogenous alterations. Fink (1988) and Regester (1989) also dwell extensively upon this issue in their "manuals" for coping with crisis.

The Warning As a Process

Moore (1963:15), suggested that any warning signals preceding a major crisis or disaster should be conceptualised as a process rather than an isolated event. This sociological approach proposes a seven-phase process: 1. **detection** ; 2. **prediction**; 3. **dissemination**; 4. **reception**; 5. **evaluation**; 6. **reinforcement**; 7. **recall**. These stages are described as a "*warning communication process*" by Blanshan (1978:177) who researched forewarning processes in hospitals threatened by floods. Blanshan points out that 'recall' did not, in fact, occur in all cases since the warning stage was not virtually terminated until a day following the impact. Mileti et.al. (1975:35-36) related to similar phases concluding that, fundamentally, there are three basic elements: evaluation, dissemination and response. These are rather fuzzy and highly descriptive models which assert that clues were perceived as threatening, the warning was formalised by way of drafting an 'order' and was then disseminated amongst the hospital wards or communal sections. There is a great deal of overlapping between stages and the lengthy definitions are hardly economical.

Forecasting Early Warning Signals

Bibeault (1982:62-71), proposed three major strategies to anticipate crisis, based on early detection of various warning signals.

1. The Z Score Method (Altman, 1971); forecasting failures in the short term. The method is based on five ratios of management ability and financial soundness to arrive at a Z score. Firms scoring >1.81 have a high probability of failure within two years whereas firms scoring <3.00 are less prone to bankruptcy. The precision of these models is a function of the duration of forecasting, namely, its accuracy falls off consistently the farther ahead the forecast is made.

2. Estimation of liquidation value of a firm (Wilcox, 1973); basically this forewarning method entails a simple formula which requires that all current liabilities and long-term debt will be subtracted from its assets. The method goes on to determine what the yearly liquidation value is. Surely as time passes, the liquidation value drops gradually (or worse, suddenly) until it reaches a negative value. Bibeault notes that Wilcox's formula predicted bankruptcy five years ahead in 76% of the cases but its accuracy increases as firms approach bankruptcy filing.

3. Accountancy methods, considered fairly inaccurate and subjective in forecasting decline. Bibeault emphasises that the Z-score is consistently more accurate in prediction of

financial crisis. The reasons being: misstated interim statements, outdated data and generally: "the quantitative approaches cannot pinpoint the dynamic reality of ongoing problems at an early stage. Other early warning signals are definitely needed".

Bibeault provides a list of adverse trend signals which add up into a substantial tip-off whilst being aware of the existence of irregularities in certain economic indices. The following table enables a quantitative insight into these economic predictors and their relative weight in the overall picture:

Table No. 1

EARLY WARNING | RANKED FIRST | WEIGHTED RANK
SIGNAL | |

EARLY WARNING SIGNAL	NUMBER	PERCENT	NUMBER	PERCENT
Declining Margins	22	32	40	25
Declining Market Share	16	25	29	18
Debt Increasing Rapidly	12	19	33	21

EARLY WARNING SIGNAL	NUMBER	PERCENT	NUMBER	PERCENT
Declining Margins	22	32	40	25
Working Capital Declining	5	8	25	16
Management Turnover	4	6	16	10
Other	6	9	17	10
TOTAL	65	100	160	100

* Source: D. B. Bibeault, *Survey of Eighty-One Turnaround Company Chief Executives*, April 1978. (In Bibeault (1982:67)

* Declining margins; Increased sales are not translated into profits.

* Loss of market share; monitors the foundations of a given business.

* Rapidly increasing debt; A firm stretching the limits of its cash-flow; cost of capital for the firm rises, only short-term loans become available.

* Working capital; decreases markedly due to a severe squeeze on the part of banks.

* Managerial turnover; affects chiefly middle ranks.

In general, Bibeault takes it that "flesh & blood methods" are more adequate for forecasting decline as compared to "The more antiseptic quantitative approaches". Moreover, he adduces evidences of the effectiveness of "adverse behavioral signals" like poor communication or good communication. A low morale, in his opinion "is symptomatic of a company that is neither successful nor failing". He does however concede that it provides "some confirmatory value in predicting failure".

Noteworthy is Bibeault's ambiguous attitude towards the "flesh & blood" methods. He does acknowledge the indispensability of these techniques, yet his essential book almost invariably resorts to quantitative methodology. In no uncertain terms it should be established that no single approach should be exclusively utilised. Whereas quantitative methods provide a seemingly precise picture, it only pertains to an elapsed point in time and neither encompasses nor demonstrates the dynamic nature of the human factor. Merry & Brown (1986), Merry (1990) Lorange & Nelson (1984) and others, provide a wide range of qualitative indicators which seem to be both invaluable and

equally vital for a dynamic diagnosis of various early warning signals. It would be instructive and useful to refer to a combined technique which would integrate the two approaches. Whilst Merry & Brown's are solely based on a skilful and experienced diagnosis of organisational consultants, there is no reason why some of their approaches should not be tested empirically.

Various approaches have been analyzed from different disciplinary viewpoints. To expand on a specific scientific persuasion will require an in-depth investigation which exceeds the scope of this study. In general, each approach sheds light on a different angle of an impending irregularity which, if unheeded, is liable to gather momentum and implicate the organisation in a spiralling crisis. Establishing a sensitive organisational capacity to constantly monitor and continuously interpret blipping signals in order to better cope with potentially adverse eventualities, should be an inseparable part of any organisation. This appears to provide the most consistent safeguard against an uncontrolled complication. It also ensures that a looming crisis will be confined to one dimension rather than embroiling the organisation in a

multi-dimensional and multi-component crisis. The attempt to synthesise various aspects of forewarning attests to the multi-disciplinary character of organisational crisis and the need to include all facets of the organisational spectrum.

To a no small extent, the kibbutz serves as a microcosm where signals were consistently bleeping but mostly unheeded. Helman, in a series of convincingly-argued papers raised a long list of economic irrationalities which he claimed were knowingly ignored. Helman managed to portray fairly accurately the bleak results of inaction and adherence to inadequate policies. Towards the end of the 1970s (Helman, 1979;1982) he specifically raised the imminence of a major crisis should these inadequacies would not be attended to. It so happened that most of Helman's forewarning have eventuated. The scope and depth of the current crisis have only partially been studied. However, it seems that the accuracy of forecasting and the intellectual integrity demonstrated by Helman render yet another example, illustrating theories described here. Golomb published a number of articles (1973; 1974; 1976)

revolving around various organisational inconsistencies prevalent in the kibbutz. His articles present an important linkage between the early 1970s forewarning and critique and the actual occurrence of organisational decline leading to the current crisis.

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CHAPTER SIX

ORGANISATIONAL RESPONSE TO DECLINE AND CRISIS

General

This aspect of the theory of organisational decline is probably the most widely researched and documented.

Causes and sources of this phenomenon are puzzling and complicated. Why has so much been written about types of responses to decline on both the personal level (managerial, staff and other organisational members), level and the organisational level (various facets of organisational behaviour). In order to be concise and comprehensive, not all aspects concerning response will be addressed and given equal weight. The following topics considered in this research are: decision making under duress, the inverse administrative ratio, brain drain, the attribution theory, silencing of dissenters and general organisational pathologies emanating from decline.

Cameron et. al. (1986), briefly sum up organisational elements on the upswing during decline: conservatism, scapegoating, formalisation, centralisation, secrecy, rigidity and inner conflict. The elements on a downhill trend are: long term planning, participation, innovativeness, morale and management influence. There seems to be a consensus amongst theorists of organisational decline concerning these and other pathologies in spite of

the fact that empirical substantiation is still fairly limited. The following paragraphs will survey principal dysfunctions.

General Models of Responses to Decline

There are a number of general models depicting various responses to decline. Thompson (1967) viewed responses to decline as reactive vs. proactive. Burgoyne (1975), employed a variety of responses to decline highlighting learning, defense mechanism and avoidance. Miles, Snow & Pfeffer (1974) however, proposed four patterns of organisational response: domain defenders, reluctant reactors, anxious analyzers and enthusiastic prospectors. These four reflects the degree to which the organisation is ready to digest and act in response to an overwhelming threat.

The literature centred largely around the attitude toward change (Whetten, 1980:362). Based upon these ideas, Whetten (1980:363) proposed a simple but exhaustive and logical model:

Generating	Reacting	Defending	Preventing
(Proactive)	(Reactive)	(Reactive)	(Proactive)

Positive<----- *Attitude toward change*----->**Negative**

The model summarises management responses to environmentally induced change. It consists of the main and most likely responses in a wide variety of circumstances. Hence its usefulness.

The positive polar starts with the *generating* mode. Researchers upholding this pattern (Hedberg, Nystrom & Starbuck, 1976,1977; Staw, 1977; Weick, 1977; Starbuck, Greve & Hedberg and others) underscored the self-designing organisation. These organisations are characterised by informality, abundance of slack, adhocracy, self evaluation and innovativeness. They maintain active boundary spanning activities (Meyer, 1982 and DeGreene 1982) stress minimal faith, minimal rationality and minimal consistency.

Reacting mode is specifically dwelled upon by public administrators. Smart & Vertinsky (1977), Starbuck, Greve & Hedberg advanced various forms of ad-hoc decision-making teams to better tackle decline. Levine (1978 and 1979) and Glassberg (1978), criticised the common reactions to retrenchment. That is to say across the board curtailments, redundancies based on seniority and performance. The adhocracy pattern is an important feature in their arguments. Its main task is to contain various dysfunctions and to manage crisis. There is also some emphasis on external counselling. The *Preventing* mode is characterised as the most negative attitude towards change. This mode

involves various tactics for the manipulation of the environment for the sake of stressing competitive edge and invoking favourable regulations. Whetten assumes that the logic behind this mode lies in organisations' willingness to avoid uncertainties. This prompts administrators to prevent the need for a responsive change. The *defending* mode illustrates stolid, established, highly bureaucratic and ideologically imbued organisations. Whetten quotes Merton (1957) who cited large governmental organisations which undergo means-end shifts over time. Simply put, they ascribe more importance to the rules and procedures than to organisational objectives.

It is also customary amongst these organisations to defend their integrity during decline. Hirshman (1970) and Roessner (1979) asserted that a typical reaction to budgetary cuts would be to argue for the sacred values upon which the institution is based. Further funding results in fulfilling missions other than the original organisational objectives. Starbuck (et.al.) did not classify these organisations according to their orientation. They referred to their rationality which is "**solidified in integrated forms**" (Starbuck et.al p.120), and results in a very stiff response to crisis. This response is expressed in keeping structures intact. However, shoring up is but a temporary remedy.

Staw, Sanderland & Dutton (1981:516), presented a model of

organisational response to threat. Although threat is not interchangeable with crisis, it results in a very similar organisational response. For the sake of clarity, the authors observe that "Threat is the driving force behind most of the events that the term crisis attempts to explain" (Ibid:512).

Cameron Whetten & Kim (1987:128), summed up dysfunctional consequences of decline listing the various organisational attributes and explanations.

ATTRIBUTES	EXPLANATIONS
Centralisation	Decision making is passed upwards, participation decreases. Control is emphasised.
No long term planning	Crisis & short term needs drive out strategic planning.
Innovation curtailed	No experimentation, risk aversion, scepticism.
Scapegoating	Leaders are blamed for the pain & uncertainty.
Resistance to change	Conservatism & turf protection reject new alternatives.

Turnover	Most talented leaders tend to leave first
Brain-drain	Causing leadership anaemia.
Low morale	Few needs are met, infighting prevails.
Loss of slack	Uncommitted resources are used to cover operating expenses.
Fragmented Pluralism	Special interest groups organise and become more vocal.
Loss of credibility	Leaders lose the confidence of subordinates.
Nonprioritised cuts	Efforts to ameliorate conflict lead to attempts to equalise cutbacks.
Conflict	Competition & infighting for control predominate when resources are scarce.

In expanding the subject somewhat, a number of dominant characteristics discussed by authors seem to be common. Effectiveness vs. efficiency. This topic has aroused much interest. (Rubin, 1979; Bozman & Slusher 1979; Whetten 1981; Staw, Sunderland & Dutton 1981; Cameron 1983; Freeman

et.al. 1984; Whetten 1987). These authors stress that decline results in efficiency taking precedence over effectiveness. This phenomenon is closely related to the "threat rigidity response", (Staw, Sanderland & Dutton 1981; Gladstein & Reilly 1985) short term orientation and the organisational orthodox approach. Conditions of crisis and decline inherently entail the usage of organisational slack to shore up immediate operational requirements. This results in a fast deterioration in organisational munificence, therefore the organisation becomes more inflexible. The disorganised distribution of funds is largely due to managerial attempts to boost morale and alleviate discord (Bozman & Slusher, 1979). The natural tendency of declining organisations to possess fewer resources results in greater pressures to retrench and a noticeable upsurge in infighting primarily over a shrinking budget or other resources. (Levine 1978,1979; Whetten 1980; 1987; Weitzl & Jonsson 1989). There is a great deal more politicking as various interest groups demand their share (Pfeffer & Salancik 1978; Pfeffer 1981; Whetten 1981). A topic that has drawn a great deal of research interest is down-sizing. This process involves such managerial actions as across-the-board cutbacks (Levin 1978, 1979), as opposed to prioritised curtailments. This takes place mainly in order to appease infighting and minimise fall-out of retrenchment (Whetten 1980, 1987; Cyert 1978; Boulding 1975) due to the natural need for shrinkage.

A different approach analyzing organisations in decline and their responses to deteriorating conditions, was presented by Merry & Brown (1986:6). Theirs is qualitative analysis based on the Gestalt theory where emphasis is placed upon the alterations in organisational behaviour in firms subject to vicious circles of recurring crisis. The list consists of *criteria*. This list was shortened and furnishes seven major criteria and related aspects:

1. A failure self-image

Feelings of organisational inadequacy.

A failure script.

2. A low-energy climate

Lack of energy, low motivation.

Much individual frustration & unhappiness.

3. Breakdown of communication

Interpersonal & intergroup conflict.

Breakdown of communication, feedback & monitoring.

4. Disagreement on goals & values; norm disruptment

5. Organisational dysfunctioning.

Decreasing outputs and inputs.

Inability to cope with everyday problems.

Inability to plan ahead.

Neglect of physical facilities.

6. Deteriorating conditions

Breakdown of leadership.

Negative selection in membership.

Recurring intensifying periods of crisis.

7. The organisation tendency to maintain its dysfunctional

life-style despite its self defeating character (difficulty in changing these patterns)

Merry et.al. conclude that overall organisational response to crisis amounts to "neurotic organisational behaviour" suggesting maladaptiveness, faulty evaluation of reality and tendency to avoid problems rather than tackling them head-on. The tendency to persist with this life-style despite its pathological self-defeating nature. Similarly, this situation was defined by Coleman (1972) as "the neurotic paradox". Underscoring the organisational behaviour approach results in an excessive focus on 'descriptive' organisational pathologies but definitions are very detailed and yield an accurate assessment of the intra-organisational scene. Merry & Brown are short on generalities and strive to touch the roots and the encompassing psycho-organisational characterisation of neurotic responses. The authors stress that neurotic organisational behaviour need not necessarily reflect declining organisations but this seems to be generally the case. The neurosis is apparently one stage preceding decline though there is a great deal of overlapping. A declining organisation reflects an acute organisational neurosis. criteria of functioning: Merry & Brown (1986:44, Table 3-1)

Merry & Brown's approach is a diagnostic-clinical one and despite the lack of a quantitative validation, their diagnosis is generalisable.

The next part will deal with typical organisational responses to decline. These issues are considered to be essential and relatively more researchable than others. The other reason for the selection of these subjects stems from their immediate relevance to organisational decline in the kibbutz. The four topics: decision-making, brain drain, the administrative ratio and the problem of dissenters.

The Impact of Decline on Organisational Decision-Making.

It is quite obvious that decision-making in declining organisations is carried out under certain duress so the authors dealing with the subject have had to base many of their assumptions and hypotheses on psychological grounds. Hermann (1972), addressed exactly this line of reasoning,

claiming that any group under conditions of crisis is faced with:

- * Dearth of time
- * High level of emotional stress
- * High level of physical stress
- * Threat to highly prioritised goals
- * Uncertainty

Whetten (1981:82), defines organisational decision-making as being performed under the contradiction of routine and the unexpected. Organisations become accustomed to existing programmes and are less used to the novelty of frequently arising new conditions. Whetten (op. cit.), asserts the incompetence of the dictum "*the past holds the key to understanding the future*". He paraphrases March & Simon, (1958) who asserted that decision makers are inclined to opt for the first acceptable solution they encounter and that organisational problems tend to be formulated in terms of available solutions. The combination of stress and the inherently precarious setting for organisational decision-making may lead to a better understanding of decision-making under conditions of decline.

Raifa (1968), Smart & Vertinsky (1977), suggested as follows: the quality of decisions during organisational crisis is subject to a number of dangers:

1. **Rejecting the correct course of action.**
2. **Accepting a wrong solution to the right problem.**
3. **Solving the wrong problem.**
4. **Belatedly solving the right problem**

This error is apparently the most common and widely documented in the public administration literature. The main source for this mistake stems from the tendency amongst administrators to resort to incremental response since "man cannot rationally choose between alternatives drastically different from present reality" (Wildavsky, 1964). Authors such as (Smart et.al.; Bozman & Slusher, 1978; Whetten, 1980) indicated the intensification of this tendency under duress as well as the inclination amongst public administrators to offer incremental solutions to quantum problems (Glassberg, 1978).

Decision quality depends also on quality of information inputs into the decision making process, the accuracy of objective articulation and trade-off evaluation and the cognitive capacity of decision makers. Under conditions of organisational crisis, Smart & Vertinski, 1979:642), provide some crisis pathologies which undermine effective decision making:

- * **Narrowing of cognitive processes;** affecting chiefly the creation of alternatives and the consideration of consequences.
- * **Information distortion;** affecting the assessment of alternatives and selection of their outgrowth.

* **Rigidities in programming**; affecting mainly the range of alternatives and the choice process. *

Group pathologies; affecting the range of alternatives considered, the appraisal of alternatives' feasibility, identification of true objectives and evaluation of consequences.

* **Lack of decision readiness**; affecting indirectly all the above pathologies by intensifying the stress rooted in the crisis situation.

Greater significance is attributed to a group pathology called "*group think*", as this pattern of decision making appears to reflect fairly closely the situation, the kibbutz. Groupthink, according to Janis (1972:13), is "**a powerful source of defective judgement that arises in cohesive groups-the concurrence seeking tendency, which fosters overoptimism, lack of vigilance and sloganic thinking about the weaknesses and immoralities of other groups**". The same author posited (1982), that external threat along with other antecedent conditions, result in fundamental alterations in a group's decision-making process. This pathology reflects a desire for inner group consistency through a discontorted reflection of reality. The following are the major symptoms:

* Ignoring warnings and negative feedbacks that are likely to reassess decisions. Rationalisation of status quo.

* A strong commitment to in-group's morality.

- * An illusion of invulnerability and excessive optimism all of which prompt high risk decisions.
- * Hyperactivity is attributed to the desire to evade the vicious circle of decline. It also prompts managers to extreme risk-taking.
- * Stereotyped views of the environment in adversarial situations.
- * Self-censorship, avoidance of washing dirty linen in public.
- * Group members share an illusion that unanimity means truth.
- * The appointment of "*mindguards*" whose task is to shield the group from information opposing their views.

Centralisation of Powers

One of the pathologies characterising decision-making in crisis is centralisation of leadership influence. Hermann (1963), suggested that increased centralisation is manifested by **contraction in authority, reduction in the number of decision makers and the accentuated shift of decision-making toward the upper levels of the hierarchy.** His assumptions were supported by Holsti (1971) and Paige (1972), who found a reduction in the size of decision units during crisis. Khandwalla (1972) and Rubin (1977) also found indications for excessive centralisation of organisations facing threat. There are two main forms of reaction to threat as manifested by diversified and

decentralised organisations and functional rigidly-structured organisations. The first respond by dissolving weak links towards the top while strengthening intra-unit links, depicting a "debureaucratisation" process. The second, will respond by enhancing links to the top and loosening links amongst departments thus creating a more centralised pattern.(Staw 1981).

Centralisation of influence occurs when, under threat, members concur with the leader's opinion (Janis, 1972). Staw (1981), for example, found that a decreasing number of senior decision makers during organisational decline indicates a high degree of centralisation. Based on the above and other assumptions, Gladstein & Reilly (1985:617), proposed that: **"Threat is positively associated with stress in decision making. An event highly likely to lead to considerable loss that a group must respond to under severe time pressure, will increase the level of perceived pressure"**. It may be interesting to liken this situation to the "strategic extremism & vacillation" mode which indicates the "early impairment" stage in Humbrick & D'Aveni's downward spiral of organisational decline (1988:14). They asserted that at that stage managers are liable to engage in impaired decision making because of increased stress. The upswing in perceived pressure is caused by an earlier stage where the organisation faces deterioration of slack and performance.

The Problem of Administrative Ratio

Freeman & Hannan (1975) were the first to advance a model that refuted previous assumptions concerning the identical intra-organisational relations under conditions of both decline and growth. The following chapter will deal with a traditional and well-documented organisational problem concerning administrative intensity. This subject refers to the ratio between the administrative component and the main organisational element - the "production-worker" or the main element for which the organisation operates. Henceforth "administrative intensity" (Freeman et.al. 1975). Central to this issue was the notion that highly elaborated structures reflect large organisations with a developed horizontal and vertical differentiation. Blau (1970;1971;1972), assumed that size improves administrative intensity since highly elaborated organisations recruit more staff so as to compensate for coordination problems arising from sheer size. Blau also (1972:18) postulated that economies of scale apply here as "**...the investment of administrative time required for organizing operations is not proportionate to their volume, increasing far less than the volume of work increases**". He, therefore takes it that size=efficiency. Blau (1972:18), however, asserts that if the volume of operations increases proportionately more than the administrative assignments and if the volume of work exceeds the number of persons needed to accomplish it in both operations and administrations, it is likely that

"the number of persons in administration increases less than that of operations; and hence that the proportion of administrative personnel decreases as the total number of employees decreases" (1972:18).

Freeman et.al. (1975:215), contend that although the increase in organisational size results in economies of scale, it leads to increase in differentiation which prompts expansion in administrative intensity. They also argue that as in most organisations the negative direct effect of size surpasses the positive indirect consequence, the bivariate relationship is negative. The above supposition basically epitomises the famous inverted statistical association between the administrative and the work/production sectors in most organisations. Hendershot & James (1972) have been the first theorists to empirically substantiate this hypothesis. They found that districts experiencing growth, depicted negative association between administrative intensity and size. They also found that slow organisational growth produced an **increase** in administrative intensity and the fast expanding ones displayed a **decrease** in administrative intensity. Freeman & Hannan employed a causative, time-series based model which will be discussed later as a model similar to those proposed in this thesis. They claimed that the underlying logic for the inverted ratio stems from organisational emphasis on overstaffing since in the short-run curtailments in the supportive (staff/administrative)

component is more costly.

The very cyclical alterations in enrolments to these schools (in Freeman et.al. 1975 study) actually increased administrative intensity. They regarded teachers as the direct component, namely, the professional work-force which is supposed to be commensurate with the number of pupils. The supportive element consists of school administrators. Consequently, an increase in enrolments is said to be positively correlated with an increase in the number of teachers. Likewise, an accelerated enrolment should be accompanied by an increase in the supportive component though this increase ought to be more moderate owing to the indirect role it plays in actual education. A reduction in enrolment should reflect a comparable decrease in the direct (teachers) component but equally a reduction in the supportive element. However, as administrators are heavily involved in all administrative measures, they are less keen on self curtailments. Freeman et.al. showed that declining and growing schools will behave similarly in relation to size of the direct component but the supportive element will not be curtailed at the same pace as the direct component during decline.

It may be inferred that decline and growth are likely to cause different impacts on the degree of differentiation (vertically and horizontally), centralisation and formalisation. Higher demand will equally increase

supportive and direct components. A reduced demand, however, will result in dissimilar decrease in the two components. The loss in the supportive component will be much slower than that of the direct one. The administrative intensity increases, then, in any environmental perturbation.

The inverted ratio was validated by Ford (1980) who claimed to have substantiated the hypothesis that during decline the number of administrative personnel **increased**. This finding enhances Freeman et.al.'s and Hannan & Freeman's (1978) views. They confirmed the fact that the number of administrators merely decreases at a slower pace than that of the direct component. Ford likens this phenomenon to hysteresis in physics. This law pertains to a lag in the effect in a body when the magnetising force acting on this body changes.

The magnetising force is removed after a while. The object, however loses its gained magnetism "**at a slower rate than it was gained**". There is a lag which is the level of magnetism as the intensity of the magnetising force is changed. This lag is called **hysteresis**. [magnetising force (M); rate of magnetization (I); the material (OA); slower rate(AB); residual magnetism(OB); application of an opposite magnetising force (OC); negative saturation point (D)].

Ford's analogy between the physical hysteresis and the relationship between organisational size and the administrative component is enlightening. The gained magnetism in the alloy is likened to the gained administrative size which despite the decline is retained. This phenomena was named *structural hysteresis*. Ford goes further hypothesing that the level of structure as depicted by formalisation, centralisation, differentiation and administrative intensity "Will be greater in the same organisation during decline then for the same level of size during growth". It has already been noticed that during decline organisations tend to increase centralisation and formalisation. There seem to be several reasons for the inverted ratio:

- * Material inducements to organisation members during decline mainly to prevent personnel defection (Clark 1979).

- * Organisational commitment. Maintaining organisational structure due to resistance to change. Reaffirmation of current structures. (Salancik 1977).

- * Organisational politics and coalitions. Members striving to maintain their positions through procrastinating bargaining. (Hills & Mahoney, 1978; Hannan & Freeman, 1978).

The problem of inverted administrative ratio or the enhancement of administrative intensity during decline, is one step further from an isolated organisational response such as centralisation of power or increased formalisation.

This phenomenon exhibits a combination of typical organisational pathologies into a major structural occurrence which is prevalent mainly amongst public institutions.

Brain Drain As a Response to Organisational Decline

A Literature Survey

One of the natural consequences of organisational decline is the tendency amongst the more "marketable" organisational members to gradually desert the sinking ship. This phenomenon is not unusual in any declining entity. It may be associated with the natural selection model where those having more sought-after qualifications are more likely to survive hard times. The environment offers endless opportunities. However, whereas an entire organisation responds slowly due to its sheer size, the more capable members can act swiftly by responding to opportunities befitting their qualifications elsewhere. This decline characterization is rather widely documented in the organisational literature though little empirical validation has been provided.

There are different ways in which authors approach this critical issue. From the view point of evolutionary theory and population ecology orientation, Campbell (1969) and Whetten (1981) suggested that the organisation most likely to survive following environmental changes is the one with the broadest pool of internal variety.

However, as Hirshman (1970) and Levine (1979) argued, a retrenched organisation is faced with an awesome task of dissuading its most talented and qualified human resources from deserting. These people leave because of a variety of reasons most significant of which are their imprinted desire to "survive the decline" by cashing in on their marketability. Another reason (Whetten op.cit.) is their desire not to be tainted by failure. Any effective turnaround stratagem is endangered by managerial vacillations owing to the fact that managers are amongst the more marketable people as well as other talented employees. This exodus of a qualitative workforce is difficult to reverse (Greenhalgh, 1983; Weitzl & Jonsson 1989). A natural result of the desertion of the best and the brightest is that the organisation ought to either regenerate or recruit innovative people so as to stop the qualitative demographic haemorrhage. However, this may be hampered by the very same reason that the critically skilled (Levine, 1978:322) have already departed and the vicious circle goes on. As Masuch (1985:28) notes: **"high performers leave while outside talent stays away"**.

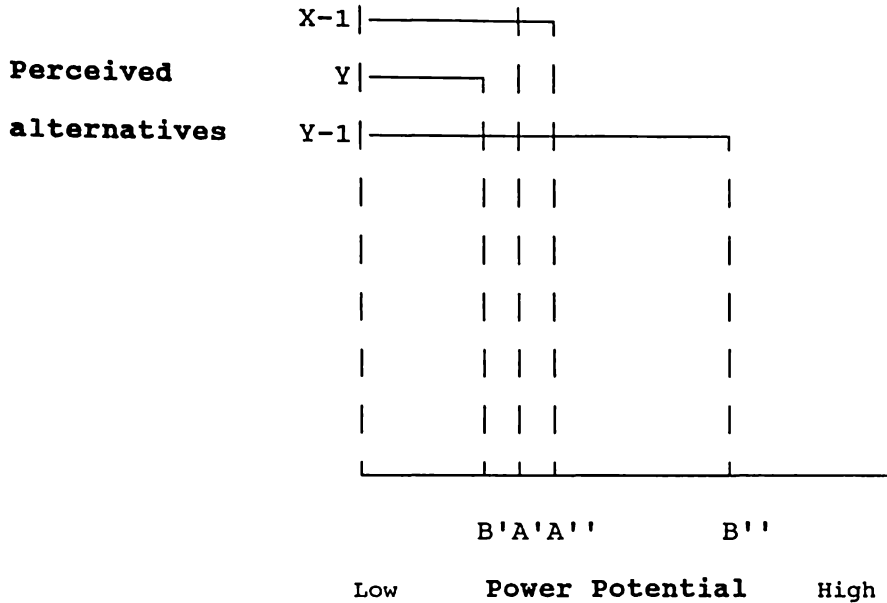
A few authors describe the situation following the departure of the skilled and talented personnel. Starbuck et.al. (1980:120), suggest that when the average level of ability deteriorates the brunt of the hardships falls upon the remaining who mediocre as they are, are told to work harder and to receive fewer rewards. As a result their

performance diminishes and their morale lessens. A few authors were gullible enough to suggest some banal ploys to prevent desertion. These include assuring staff that quality will not be compromised during retrenchment (Behn, 1980) and : to co-opt the highly qualified into key leadership positions Whetten (1987:351). To sum up, a recent and major research in the field, (D'Aveni 1989:578), indicates that: **"Declining organisations decline with respect to two critical resources: financial and human managerial resources"**.

This issue was dealt with at length by economists (Becker, 1975) who bemoan the decreasing number of prestigious high echelon employees who all comprise the given human capital of a firm. An interesting demonstration of brain drain is suggested by Robbins (1989:348-9) who relates to *"elasticity of power"*. As is the case in economics with the elasticity of demand - the responsiveness of a certain quantity effect required to alterations in price, he defines elasticity of power as **"the relative responsiveness of power to change in available alternatives"**. Applied economic interpretation to differential marketability of employees/members in declining organisations is the issue at hand. Although Robbins relates to the differential bargaining capacity of professionally sought-after employees as opposed to the least required in terms of the ability of superiors to wield influence, this study aims at the elasticity alone:

Figure 1

X|—————|



A's elasticity curve is relatively inelastic. He is the more likely to find more job opportunities outside the firm. He may not be threatened or less likely to be manipulated by her/his superiors. A reduction of alternatives from x to x-1 increases his superiors slightly, A' to A''. B's curve, however is relatively elastic. There are (fewer job alternatives owing to age, education etc. Therefore B is more dependent upon his organisation and his superior. If he/she loses his/her job (Y to Y-1) he/she faces unemployment. This demonstration later in order to explain that members with inelastic curves are the ones more likely to escape declining organisation.

The Dilemma: Efficiency Versus Effectiveness

An almost automatic response to an impending crisis or, alternatively, a lingering yet acknowledged organisational decline, involves an immediate emphasis on organisational efficacy. This holds true mainly when an organisation faces a sudden discontinuance in a credit line, a shortfall in revenues or steep plunge in liquidity. The organisation tightens budgets, intensifies efforts to ensure accountability. Schendel, Patton & Riggs (1976), indicated the increased tendency towards redundancies and budget and cost control in firms facing decline in market performance. Starbuck & Hedberg (1977), documented a case study where decline followed high premium placed on efficiency measures. Universities plagued by budget cuts also seem to resort to efficiency measures to stave off further deterioration (Rubin, 1977). Bozeman & Slusher studied scarcity in the public sector which increased technological efficiency and accountability and thus, eliminated creativity in the decision making process. This, to some extent, is a reflexive managerial reaction aimed at arresting further deterioration, and focusing attention on all the firm's departments with the capacity to spend. Virtually, this amounts to a first aid with the intention of forestalling further aggravation. The classical model of organisational performance efficiency is viewed as an essential tool to achieve effectiveness. Namely the means (*efficiency*), obtains ends (*effectiveness*) (Whetten 1981:89).

Merry (1990), discusses efficiency in the context of stages of tackling an organisational crisis. He observes five stages of extrication from organisational crisis:

1. **Warning**; threatening reality, people ignore.
2. **Shock** ; serious situation impossible to ignore.
3. **Shoring off**; mobilisation of forces to thwart further deterioration.
4. **Reorganisation**; Cutting off from the past, looking for new avenues.
5. **Change**; paving a new road, rejuvenation and growth.

During the third stage, people aim at maximum efficiency so as to stabilise the situation. These activities include a tight control on expenditures, rigorous auditing, strict accountancy and attempts to improve information channels and reports.

Methodological problems concerning measurement of the two variables (Cameron, 1978; Cameron, 1983:363), involve the difficulty of defining organisational effectiveness. It appears obvious that efficiency is not only easier to measure but its effects are visible. Organisations have budget monitoring devices. However, mechanisms for monitoring effectiveness are not only rarer but are amongst the first to be curtailed *due* to over-efficiency. Organisational devices to monitor **effectiveness** include evaluation units and policy and strategy planning units.

The ideal of "self evaluating organisation" (Wildavsky, 1972), though absolutely indispensable primarily in crisis, is highly susceptible to various "efficient measures". Levine (1978:317) contends that **"Retrenchment compounds the choice of management strategies with paradoxes"**. During organisational munificence the development of various managerial aids such as policy analysis, information systems and strategy formulation peak. However, these become rather irrelevant (Caiden & Wildavsky, 1974) since **"...habit, intuition, snap judgement and other forms of informal analysis will suffice for most decisions"**. During crisis when these analytical tools are acutely needed for minimising the damage as well as to redefine organisational goals (effectiveness), the organisation has curtailed itself "across the board". Worse, funds are unavailable for either implementation of contingency programmes or for the institutionalisation of these units.

It would be appropriate to note that the application of efficient measures does not necessarily indicate that the organisation is declining. At times, an organisation will be willing to revamp certain sections within its domain by applying more efficiency. D'Aveni (1989:578) discussed the difference between decline and downsizing: **"downsizing involves changes in organisational size and scope, such as limiting sales, selling off fixed assets or subsidiaries, and pruning product-market domains. Although in many declining organisations downsizing and decline do not**

always occur simultaneously or at the same rate". Gibson, Ivanovich & Donnelly (1976), attributed various viewpoints of organisational effectiveness to a temporal dimension. Their model illustrates and clarifies not only essential concepts relevant to effectiveness but adds the time dimension so as to relate each of the organisational characteristics to an evolutionary process:

TIME

Short-Run

Intermediate

Long-Run

Production

Adaptiveness

Survival

CRITERIA Efficiency

Development

Satisfaction

Production; The ability of organisations to produce the quantity and quality of outputs as required by the environment.

Efficiency; The ratio of inputs to outputs.

Satisfact-

tion ; Refers to that of participants and customers.

Adaptive-

ness ; The extent to which the organisation responds to internal and external changes.

Survival; The organisation's ability of surviving in the long run.



The two measures, effectiveness and efficiency, may be likened to the simple but accurate definition which states that the **What** this organisation is all about indicates effectiveness whereas the **How** how to achieve an organisational goal. In as much as this universal convention is rational in many cases, chiefly during decline and crisis, organisations pursue effectiveness as a mean for itself and not as a tool for maximizing organisational effectiveness. Brown, (1978), defined this situation: "By focusing discourse on the efficiency of alternative means, instrumental reason displaces attention from the appropriateness of pre-given ends".

Crisis of Relevance

Crisis of relevance is not far removed from the problem of cultural constraints as catalysts for decline. The concept is new and other than partial attendance to some of its constructs, has not been addressed. In this thesis greater significance is attributed to the general concept of erosion of relevance as an organisational behaviour. In general, it is commonly agreed that in order for an organisation to function effectively, there is a

rudimentary requirement, on the part of organisation members to maintain adequate conformity with organisational ideology. A crisis of relevance characterises a human system which has endowed its members with meaning and at one stage ceased to do so. This is due to the fact that the systems' goals have become inconsistent with alterations within and outside of the system. Structurally, the system has severed itself from its environment and from its own principles, (Merry 1990:81). Irrespective of the bureaucratic convention pertaining to the task of superiors to define consistent ideologies, delineate existent ones and symbolise what these ideologies have accomplished (Weber, 1947), the question of the adequacy of these ideologies in so far as subordinates are concerned, remains open.

Hagen (1962), asserted that if subordinates question ideologies' pertinence or their superiors' aptitude, subordination becomes irrational and the current ideologies lose credibility. Nystrom & Starbuck (1984:55), analysed the issue by advancing the "unlearning" theory. They take it that organisation members rarely abandon their beliefs **"merely because alternatives might offer better results"**. Their supposition proposes that the adherence to current beliefs is a result of **"rational analysis and successful experience"**. Thus, evidence must be adduced to the effect that these beliefs are inadequate prior to any substantial changes. The occurrence of organisational crisis provides

this change.

At this stage, people challenge the conceptual foundation of their organisation, and confidence in current leadership begins to erode. Dunbar et.al. argue that should ideological limitations exist, they, under crisis, may seem to be ludicrously constricted, serving only superiors' interests and obscuring discernment rather than facilitating it. Following the undermined ideologies, subordinates delineate utopian beliefs which may contradict the current ones (Mannheim, 1936). Crisis of interpretation or meaninglessness, appears to have an exceptionally overwhelming influence in ideologically imbued organisations, primarily those integrating most aspects of life such as communes. Kanter (1977), alluded to the proclivity of communes to enlist people who submerge their perceptions and fully comply with the communes' ideology. During decline and mainly during a lingering one, members attempt to reformulate organisational goals and question ideology at large. As Dunbar et.al. pointed out, shifts in ideology are more likely to occur whilst the organisation has to grapple with "continuing external pressures".

Crisis of relevance has been the conceptual footing for Lanir's exhaustive research, (1990), in which he studied and characterised the underlying sources for the lingering multi-dimensional and multi-level crisis in young kibbutzim during 1988-89. Though not conceptually and practically

different from roots and causes for the crisis engulfing the rest of the kibbutz movement, the epitomisation of the crisis in young communities provide a more detailed outlook because of the liability of newness on the one hand and the uncomplicated structure on the other. As the crisis intensifies, both the movemental and national systems fail to dispense adequate remedies, belief in kibbutz ideals appear to rapidly wear out. Furthermore, most members feel betrayed by the above systems which, literally, dispatched these youngsters to undertake seemingly first class National- pioneering assignments. The sense of insecurity is further magnified by inconsistent movement policies as well as by the crumbling external hoops of the kibbutz 'barrel'. Notwithstanding the different approaches between Lanir who focuses on direct impacts of the crisis, and Merry, (1990:84-5), who tends to associate this same crisis with the ensuing change, it is instructive to attend to the latter's exhaustive and comprehensive characteristics:

1. Crisis of relevance is hard to diagnose. There is a tendency to attribute its symptoms to other factors.
- 2..A crisis of relevance requires a radical change or a second degree change. A second degree change (Levy & Merry 1986) entails a transformation in both the vision and the goals of the organisation.
3. A crisis of relevance is hard to muster. Any system will strive to retain its basic values. The transformation will be met with fierce resistance.

4. Loss of commitment. People lose their commitment to the organisation owing to loss of motivation or receding self-esteem. Members exploit the system but contribute the bare minimum.
5. Decreasing energy.
6. Opportunity. A crisis of relevance constitutes a chance to renew the system.

In general, most organisational dilemmas in the kibbutz such as equality, collective conventions versus individual freedoms, informalities versus formal necessities etc. are existensial in nature, are insoluble and their validity is "ineternal". Lanir assumes that any attempt to resolve these dilemmas are bound to lead to a social-organisational convention which is self defeating. In order for an organisation to conserve the ideological constructs it has to strive to reinterpret it anew, whenever fundamental alterations occur in its task environment.

Crisis of relevance is alluded to from a different disciplinary point of departure though equally eclectic. Dror (1987), discusses the undermined sync between kibbutz and its task-environment, asserting that even the environment tackles an ideological crisis. He anticipates that values upon which kibbutz is predicated will continue to erode as the very same ideals are in a process of extinction in the environment. However, new spirit may be

regained should the kibbutz assume **"ideological and social creativity, through a partial adjustment of kibbutz values to the newly emerging circumstances"**. Theories of organisational change depart from stance underscoring the need for organisational change following the imperceptible or explicit loss of meaning ascribed to organisational goals. Levy¹, proposed that in so far as the general current kibbutz destiny is concerned: **"The previous destiny does not reflect reality and does not endow people with meaning in today's kibbutz"**. Levy's assertion is predicated upon a number of prevalent discrepancies between the **"declared"** hence, irrelevant kibbutz objectives and existent kibbutz realities. The incongruities are mainly in the areas of:

* The current tendencies emphasising the uplifting of the individual. The focus of community should be the fullest development of its members and **the freedom of the individual** versus the obsolete notion of the subordination of the individual to the authoritative collective stressing the importance of society's objectives.

* The partially antiquated **collective venture**, guarantees and values, versus a new social climate based on mutual respect and the acceptance of the **dissimilar**.

* Within the labour sphere, the somewhat outmoded **"work**

¹Levy, A., Existing Paradigm Versus a Different Paradigm, An internal discussion paper, UKM's Institute of Social & Organisational Consultancy, Tel Aviv, 1988, Mimeo (in Hebrew).

according to kibbutz requirements" and viewing labour as a "supreme value", obliging members to work anywhere they are needed as opposed to the realisation that the solution to the declining work ethic would be the devising of an environment that will increase the **motivation to work**.

An attempt to conjoin demographic depletion with real and threatening retrogression in the degree of social acceptance amongst members as to the "basic value system", was discussed by Leviatan (1988:2). For him, a crisis of meaninglessness is reflected by the disappearance of the common denominator in many facets indispensable for collective life. Glick (1991²), argues about the existence of a rampant deficiency in the kibbutz values which is due to various deeply-entrenched fallacies. These misconceptions, triggered by both the demographic depletion and the loss of kibbutz legitimacy. Characteristically, a growing number of members question the meaningfulness and rationale of their being kibbutzniks. Leviatan (Ibid), attributes the primary reason for the crisis to the loss of ideological meaningfulness specifically in so far as kibbutz leadership is concerned. In light of or owing to the magnitude of the crisis, no conceptual anchor such as internal coherence, kibbutz political status or economic stability can be taken for granted. To sum up, there are three major approaches reflecting similar inconsistencies

² Collated Minutes: The Collective Movement Seminar, Givat-Haviva, May 2 1991 (in Hebrew).

which constitute the exposed incongruence between ossified organisational objectives and the actual objectives, lucid or still ambiguous, as envisaged by organisational members. The current kibbutz crisis has conspicuously divulged this inevitable organisational process, hence provides a unique opportunity for related studies.

CHAPTER SEVEN

STAGES OF DECLINE AND CRISIS: THEORETICAL MODELS

THREAT AND CRISIS: A DISTINCTION

It will be necessary to make a distinction between threat and crisis since the two tend to overlap and, at times, erroneously interchange. This holds true in various models some of whom will be addressed in this chapter. Stew, Sanderland & Dutton (1981:502), contend that threat "is an environmental event that has impending negative or harmful consequences for the entity". To that effect, "a threat is an apparently negative trigger of less intensity than a crisis" (Gladstein et.al). Sunderland et.al. managed to substantiate the threat rigidity hypothesis. They found that increase in environmental threat during organisational crisis tends to increase. It also restricts intra-organisational processes. This means diminished information inputs, fewer communication channels and less interpersonal interaction. All three indicate that decision-making in crisis is tangibly hampered by organisational pathologies which are already associated with the threatening environment. It must be reiterated that a crisis is a zenith point of situations which are not necessarily linked with a lingering state of decline. It can be argued, however, that organisational decline is

indeed a continuous crisis. Therefore, it is presumed that crisis and decline are, at times, synonymous or interchangeable.

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A TYPOLOGY OF CRISES

Lanir (1990), proposes four kinds of crises representing four different depths of crisis which, in fact, exemplify four different levels of gravity.

Level A; **Responsive Crisis.** The basic or the lowest level. An organisation engaged in a responsive crisis represents an imbalanced system or an organisation which fails to maintain homoeostasis with its environment. The kibbutz scene provides an instance (as perceived by economists) when incompatibility occurs between the consumption level and disposable income.

Level B; **A structural Crisis.** An organisation whose structure is no longer capable of effectively confront problems emanating from environmental jolts. The crisis will not be overcome unless a comprehensive and radical structural change is introduced. The kibbutz scene provides the example of those who take it that the crisis will be resolved by either reorganising the entire system or interacting more intensively with the environment or coopting sections of it.

Level C; **A Task Crisis.** An organisation will engage a task crisis when its objectives have become irrelevant to the changing environment. As many presume, the kibbutz has

ceased to fulfil various national objectives as these have become irrelevant. Those adhering to that concept argue that an extrication from the crisis is only feasible if newly formulated pioneering tasks will again be challenged by the kibbutz movement.

Level D; A Crisis of Relevance. An organisation whose interpreting conceptual system became extraneous to the environment and turned meaningless for its people who are supposed to expound themselves, their past and their future in accordance with the former interpreting conceptual system. In the kibbutz context, perceiving the crisis as a crisis of relevance means that explanations given to the kibbutz ideals are no longer relevant in light of the perturbing environment. These explications have become meaningless for a large number of kibbutz members.

As to the classification of a crisis according to its severity, an organisation grappling with a higher level of crisis (the levels and directions of gravity are A->B->C->D) will depict symptoms of lower levels of crisis. Lanir (Ibid.) argues that normally and even though it has been acknowledged that the organisation confronts the highest level, (a crisis of relevance), the tendency is to commence from the lower levels. Merry (1990:141), also reflected upon the "more of the same" approach as a futile organisational attempt to extricate itself from a "boxed-in" situation. Lanir's reasoning is that if merely lower levels of crisis are attended to, the repercussions entail

further complications. The difference between the authors' approaches relates to the definition of the organisational situation. Merry views the situation as requiring **change-oriented attention** whereas Lanir, describing similar situations, confines his diagnostic concepts to the crisis stage.

MODELS OF DECLINE AND CRISIS

Over the last two decades several models have been advanced by different organisation theorists. This chapter will characterise general models of organisational decline and crisis that reflect, as most models do, a succinct manifestation of theoretical treatises as well as empirically substantiated concepts. Models of decline and crisis will be examined because both seem to be relevant in this case study. In general, models of decline are of a "lingered" nature. They tend to illustrate persisting downturn organisational dysfunctions until a triggering occurrence (exogenous, in the main) exposes the weaknesses of the buffeted organisation and accelerates the inclination towards either demise or rejuvenation. Models describing organisational crisis differ primarily in temporal sense. The stages are shorter, less indistinct and usually mirror a major juncture in the organisational life cycle.

A **descriptive** framework for arranging the sequence of

events during crisis and predictive framework for anticipating the occurrence of these events is outlined by Fink, Beak & Taddeo (1971). They also provide a useful definition for a state of crisis which draws heavily upon psychological theories. "A human system (individual, group, organization or other) is assumed to be in a state of crisis when its repertoire of coping responses is not adequate to bring about the resolution of a problem which poses a threat to the system".

The model is composed of two axes. The horizontal consists of organisational properties, that are more likely to be directly affected by crisis. The vertical axis summarises the typical phases during crisis, hence it entails a temporal dimension.

Noteworthy are the missing pre-crisis phases such as early warning signals and managerial disregard of initial environmental perturbations. These phases had later been supplemented and dwelled upon as the theory accumulated more empirical evidences which were synthesised into a more inclusive and detailed paradigm. Fink et.al.'s model was the first comprehensive attempt to provide a structured conceptual footing for future analyses and research.

Figure 2

PHASE	INTERPERSONAL RELATIONS	INTERGROUP RELATIONS	COMMUNICATIONS	
SHOCK	fragmented	disconnected	random	
DEFENSIVE	protective	alienated	ritualised	
RETREAT	cohesion			
ACKNOWLED- -GMENT	confrontation	mutually	searching	
ADAPTATION & CHANGE	interdependent	coordinated	authentic & congruent	

PHASE	LEADERSHIP & DECISIONMAKING	PROBLEM HANDLING	PLANNING & GOAL SETTING	STRUCTURE
SHOCK	paralysed	none	dormant	chaotic
DEFENSIVE	autocratic	mechanistic	expedient	tradit- -ional
RETREAT				
ACKNOWLED- -GMENT	automatic	explorative	sybthesising	experimen- -ting
ADAPTATIO & CHANGE	participative	flexible	exhaustive	organic integrative

The authors stress that the model is an extrapolation of the individual model and is based on theoretical grounds as well as on clinical experience.

Levy & Merry (1986:274), proposed their "Second-Order Planned Change", in which the crisis phase is part of a circular pattern of organisational change involving:

- * Crisis
- * Transformation

- * Transition
- * Stabilisation & development

Of greater relevance for this study is the crisis phase involving the following sub-stages:

- a. A triggering event
- b. Procrastination
- c. Resistance
- d. Avoidance
- e. Denial

External and internal strains are inappropriately attended to and forwarnings are unheeded. This is then followed by some improper incremental changes which result in "**crisis, chaos and procrastination**" (such as the introduction of stringent budgetary refinement programmes). The ensuing process involves a tendency to reinstate or repossess previous positions and a resistance to a painstaking quantum change (Miller, 1982). These prompt organisational fluctuations induce a **critical point beyond which the alternative is demise or revitalization**. Levy et.al.'s is a useful model yet it tends to be theoretically more relevant to organisational change rather than the organisational crisis. It, therefore details change-oriented processes and only partially addresses actual crisis.

Greiner's classical multi-phase revolutionary-evolutionary model (1972) is still considered to be a useful and valid replica of mini crises which occur periodically throughout the organisational life cycle. In principal, his model succinctly depicts crises incurred by the natural evolutionary stage of any organisation. The transition between each evolutionary phase is characterised by a revolutionary stage which mirrors a crisis. This model illustrates an inclusive and detailed overview of potential complications at vital junctures which may lead to a comprehensive crisis if the minor crises are not adequately tackled. The mini crises do not imply a state of decline nor do they suggest an organisational crisis per-se. The major advantage of Greiner's model is its capacity to provide a rather accurate analogy to be drawn with almost any organisation be it either a business firm or a not-for-profit organisation.

Turner was the first to suggest a rudimentary six-stage model of organisational decline (1976:391). The model is basically, a qualitative analysis predicated on three disasters. Of the six stages only four represent the decline and the resulting crisis. The rest have to do with recovery.

Stage 1 **Initial beliefs & Norms** (disobedience to existing regulations)

Stage 2 **Incubation period** (rigidities of belief &

perceptions, ignoring outsiders' complaints, boxed-
in information, minimising of emergent danger). Stage
3 **Precipitating Event** Stage
4 **Onset**.

The above model is fairly limited in terms of generalisability but it does provide an interesting insight into the deterioration phases of a almost any organisation. Unlike Fink et.al.s' pattern, Turner's model describes very general stages of crisis without reflecting upon the micro-intra-organisational processes as displayed by organisational characteristics. Its generalisability and useful applicability to most organisational crises is presumed to be its main analytical advantage.

Merry & Brown (1986) approach the issue of organisational decline from the point of view of a **clinical diagnosis**. They argue that organisations intermittently display dysfunctional neurotic behaviour. Based on their observations, they propose the following general model of organisational downturn:

STATE OF THE ORGANISATION

Normal functioning

--> Neurotic organisational behaviour

--> Declining organisation

-->organisational

demise.

Merry et.al. assume that the "severity of the development of the organisational behaviour plays a part in catalyzing an organisation's move from one state to another".

Business failures have attracted various writers from different disciplinary persuasions. Argenti (1976) has greatly influenced writers focusing on business collapse. Bibeault (1982:13-15) expounded on Argenti's basic propositions which elaborate on Type three companies. These firms are "sluggish and have lost touch with their markets and the needs of their customers". Townsend (1971:9), suggested that: "Big successful institutions aren't successful because the way they operate but in spite of it. They didn't get to the top doing things the way they do them now". In Bibeault's terms (Ibid) these firms tackle decline when "a number of internal and external events of a detrimental nature occur simultaneously". This stage is mostly buffered or warded off employing the balance sheet simply by "debt financing" in order to boost leverage "in a futile attempt to regain the old position".

This stage is called "A plateau of performance mediocrity" and is typified by a financial deterioration since the firm holds on to all its activities including the losing ones. At this stage the firm is "waterlogged" or highly leveraged and may engage itself in three recovery schemes:

* **Do nothing.** Wait until a business hazard mortally blows

it off.

* **Introduce stringent profit improvement programmes; change of organisational culture, selling off losing units, paying debts to decrease leverage. The company actually shrinks which is an anathema to the fixation with growth.**

* **A take over or a merger with a larger sounder firm.**

Bibeault's two other stages are **initial collapse** prior to the "plateau of performance mediocrity" and, following the plateau it is mostly a **final collapse**.

A detailed, comprehensive, generalisable, multi-phased and longitudinal model was advanced by Hambrick & D'Aveni (1988:14). Their model is aimed strictly at depicting decline stages of a corporation and therefore has but few similarities with any public organisation. However partial this model is, it details accurately and temporally phases of organisational deterioration based on a causal framework. The model combines exogenous and endogenous parameters. The two terminal phases of the model are enlarged and seeks to furnish a descriptive characterisation based on four lateral organisational and environmental predictors. The following is the Five Stage Model of organisational decline suggested by Weitzel & Jonsson, (1989):

STAGES OF ORGANIZATIONAL DECLINE AND CORRESPONDING
ORGANIZATIONAL ACTION

Figure 3

Stages*	Organizational Action
1. Blinded	Failure to anticipate or detect pressures toward entropy; decline begins.
2. Inaction	Failure to decide on corrective action; decline becomes noticeable.
3. Faulty Action	Faulty decisions; faulty implementation of decisions;
4. Crisis	Given faulty action stage & unforgiving environment:last chance for reversal.Given forgiving environment:slow erosion. (Includes the entire Fink et.al.' model)
5. Dissolution	Given crisis stage & unforgiving environment;rapid demise;given forgiving environment:slow demise.

The consequences of decline are reversible in all stages except the dissolution stage, in which severely diminished resources prevent recovery.

Conceptually, in as much as models of decline reflect a different approach, they are akin to psychological and sociological models based on pshychosocial behaviour under stress. Organisational authors tend to emphasise the organisational implications or the fact that organisational models are a superimposition of social and psychological situations. Therefore the inclusion of several models of the later category seem to be appropriate.

Post warning phases of a crisis or disaster are detailed by Blanshan (1978:177-178) in a simple sequential model. The model includes activation, evacuation or influx, impact, post-impact emergency and recovery. These stages resemble Wettennhall's model (1975) of Time Dimension of Disaster:

PRE-DISASTER CONDITIONS --> WARNING --> THREAT --> IMPACT ->

-> INVENTORY --> RESCUE --> REMEDY --> RECOVERY.

Raphael (1986:7), provides a general-psychological explanation of these stages. The **warning** stage is typified by a shift from institutionalised channels of communication to a more improvised process of communication. This stage is characterised by apprehension owing to recognisable conditions that may lead to disaster. The **threat** phase involves clear indications that danger is imminent. The **impact** stage is the actual shock (Fink et.al.'s "shock" phase). The immediately following stage is **inventory** when the disaster starts taking stock of its effect the destruction, and the ensuing troubles. **Rescue** is when the victims and their rescuers organise assistance. **Remedy** is when specific and formal steps of relief are taking place and recovery entails a prolonged period of return to normalcy, adjustment and equilibrium. This pseudo model is rather generaliseable and may be of assistance for the sake of possible comparisons with crises of a different nature.

This, according to Raphael is the most commonly used model amongst psychologists who deal with disasters and their implications.

CONCLUSION

An attempt has been made to outline a wide range of crises interpretations. It is quite noticeable that a certain resemblance exists amongst the various disciplinary viewpoints. A wider consensus prevails regarding the evolutionary nature of an organisational or communal crisis. Between the heavily psychological rendition of Raphael's and Bibeault's purely economic model there are a number of synthesised organisational archetypes. These include Merry et.al.'s and Weitzl et.al.'s staged designs of general decline. Irrespective of the disciplinary point of departure, most models involve forewarning, a precipitating or triggering event, a shock or initial impact, the actual organisational handling of the crisis and, finally, various repossessions of earlier position, demise or rejuvenation.

CHAPTER EIGHT

ORGANISATION THEORY: THE KIBBUTZ SCENE

INTRODUCTION

The current transitional era poses substantial problems in any attempt to describe the kibbutz from the point of view of its organisation or any related feature. The kibbutz of the early 1990s has undergone far-reaching alterations creating a situation where not a single structural component is being overlooked by the drive to revamp. The contemporary kibbutz is grappling with an increasingly turbulent task-environment which poses overwhelming challenges to constantly adjust to its unpredictable and frequent jolts. Although this chapter will not chronicle the current crisis, the contextual linkage between all facets of the kibbutz organisation and the crisis far-reaching impact seems inevitable. The kibbutz, is a highly intricate, multi-faceted system that intertwines the community and its business sector into a cumbersome organisational structure. This chapter will systematically and chronologically analyze relevant literature focusing on the evolution of the organisational system.

STRUCTURAL EVOLUTION

Not unlike other embryonic organisations, the first

kibbutzim reflected a flat organisational structure (Drucker 1989). The early kibbutz depicted a highly homogenised community where most tasks were carried out by all members. There was virtually no reason for any differentiation. Communication was direct befitting the intimate atmosphere and the community was devoid of any hierarchy. Coordination was achieved by direct and informal communication and authority was delegated and exercised in a spontaneous and subtle fashion. Derech (1970), observed three main periods in the organisational evolution of the kibbutz. Historically, however, four major eras can be observed (Meron, 1988:19). The following general chronological division will synthesise this evolutionary process.

Table No. 2

Period	Main Characteristics
1. 1910-35	Crystallisation of ideology Embryonic
2. 1936-49	National objectives: settlement in peripheral regions; absorption of immigrants; The Second Era stabilising organisational structure, mixed farming.
3. 1950-66	Massive economic socio demographic growth; The Third Era institutalisation of organisational structure;

Peak of political power relative to size.

4. 1967-90 Industrialisation; children dwellings with
The Fourth parents; massive demographic and economic
Era growth

From 1985, multi-dimensional, multi-
component multi-stage crisis; early signs
of an all encompassing structural change.

The Embryonic Era

This phase is known as "spontaneous democracy" where "disorganisation" and premeditated anarchy characterised the kibbutz at large. Etzioni (1957:413), defined this era as the "tribal" or the "Gemeinschaft" phase. This definition is illustrated by intensive solidarity, informal communication, high ideological awareness. Latest organisational life cycle literature refers to this era as "Infancy" (Adizes, 1988:32-33) where major organisational phenomena include: high risk -taking and uncertainty, negative cash flow, efforts yielding commitment, lack of managerial depth, amorphous structure and no delegation of authority. As indicated earlier, this governance pattern was not only commensurate with the simple structure but reflected the anarchic-socialist ideology of the early Twentieth century.

The general assembly was an unstructured-casual gathering of members who discussed any matters on the public agenda as well as any personal issues. There were few position holders who, until approximately the mid 1920s did not assume these positions in addition to their "blue collar" jobs. During this phase committees were set up which resembled elected panels dealing with specific kibbutz issues (culture, finances, work, security, education etc.). The economic enterprise was simple and undifferentiated, consisting basically of members working outside of the kibbutz. There were but a few agricultural industries and the service sector was minimal in both its extent and substance. The most important organisational feature in this phase was the near total flatness of the structure. This levelness reflects also a voluntary, comrade-like, non-committal, consensus-based and spontaneous decision-making process. Etzioni (Ibid) observed that all factors **requiring** organisation are non-existent and the factors **weakening** the necessity for organisation are highly intensive.

Helman (1986:20), defined these circumstances:"... primordial group, purely democratic, consisting of spontaneous relationships devoid of established and crystallised patterns where leadership is elected in accordance with ideological and charismatic criteria, wobbly and undefined organisational structure, with the general assembly informally convened for the sake of dealing with almost every issue". It would be hard to try

and identify the end of this ephemeral phase. It is generally assumed (Derech, 1970; Shepher, 1976; Barkai, 1977), that the termination of the era of deliberate "disorganisation" was caused by an inherent need for further rationalisation due to the demographic expansion with the absorption of new immigrants and an expansion of the economic base with new agricultural branches, a growing service sector. The transition into the second phase was marked by:

further differentiation reflected by an institutionalisation of man-power management, i.e. the establishment of a "Work Committee" and "Work Coordinator". Added to this was the enlargement of service branches, such as nurseries, dining-hall & kitchen, laundry and sawing rooms. Further development of both the economic committee and the secretariat took place as well.

The organisational communication was improved by a publication of a kibbutz newsletter and the institutionalisation of the "Notice Board". Minuting committee meetings and general assemblies became institutionalised.

It is hard to pinpoint the exact chronological timing of these transitions which occurred at an individual pace in each kibbutz. As Etzioni (1957:413), indicated, each kibbutz has its own history and each kibbutz undergoes, sooner or later, major stages in the evolutionary process.

The transitional phase between the first stage and the second mirrors the evolution within the kibbutzim established before and slightly following the First World War, circa 1920-35. The institutionalisation of the process of kibbutz foundation process was accomplished around 1936. Each kibbutz displayed, by and large, the same evolutionary phases. The transitory phase is adequately described by Adizes (Ibid), as "GoGo" which largely indicates the routinisation of the idea. Early age difficulties were overcome. This era is also characterised by a multitude of important issues and a failure to assign priorities to them in terms of organisational goals.

The Second Era

This stage reflects a routinisation of various transitory organisational processes which occurred throughout the first era. Owing to a noticeable enlargement of the demographic basis, more organisational features became permanent. The main organisational features characterising this stage are an intensification of the economic infrastructure resulting in an enlargement of existing agricultural branches and an early industrialisation. Additional agricultural branches. An elevation of the the secretariat as a major governing instrument was accomplished. The kibbutz secretariatship became a full-time-job dealing with formal correspondence; administrative tasks; chairmanship of kibbutz assemblies; organisational

coordination; partial external representation of the kibbutz and the chairmanship of regular secretariat meetings. The institutionalisation of the kitchen administrator role was accomplished while further responsibilities were delegated to various committees (education, work, cultural affairs, security). An increase in the importance of the economic committee took place as well. The Economic Coordinator becomes a full-time job and this person chaired regular economic committee meetings. During this period the inception of annual economic programme was institutionalised and a structured accountancy methods and auditing procedure was added. The economic coordinator became an ex officio member of the secretariat. Central position holders were elected in the general assembly for one or two year stints and the roles of heads of agricultural branches became clearly defined. A similar problem took place with the role of Treasurer as the Financial Manager became ex-officio member of the Secretariat and the Economic Committee. The role of the Heads of service branches were identified and institutionalised. The powers of the secretariat had become excessive. The Secretariat had "near" final say on most matters in most aspects of kibbutz life, other than economic issues pertaining to the general monitoring of the production sector and partially the consumption area. This era can be seen as introducing stability to the organisational structure, and establishing a more complex structure to the kibbutz (Daniel 1972). Eizenstat

(1978:107) suggested that the phenomenon that best characterises this era of the ethos of elitist pioneering is the "routinization of ideology". This, in effect, meant that such issues as economic growth and modernisation at large became to a large extent confined by the institutionalisation of kibbutz ideology.

The Third Era

This stage signifies The "Coming of Age" or adolescence in the life cycle literature. The main organisational characteristics of this era include further dichotomisation and differentiation between aggregated agriculture and industry. This reflects on social issues (additional hierarchy); economic stability of the kibbutz; professionalisation. The higher standard of living resulted in: effects on the kibbutz as a consumer society; specialised committees (housing, health etc); further specialisation of services (holidays, library, movies, electrician, workshops, storing, kibbutz 'small groceries', dentistry, differentiated services, fashion). More indications of structured equality included features such as early codification of "Seniority Rights" and other sets of rules; the increase in the importance of the Members Committee (all matters pertaining to problems between members and the "Establishment"; drafting and codifications of various norms regarding members' rights; elements of the acknowledgements of higher education as associated with

professionalism, training of managerial 'reserves', teaching and nursing force. Separation of the procurement roles from financial management; institutionalisation of the general buyer role. Further increase in the relative importance of the Secretariat and the economic committee were highlighted by the institutionalisation of the 'Administrative Secretary'.

Work Coordinator as an elected officer. The institutionalisation of Annual General Meetings was exemplified by the kibbutz annual economic programme where political, national and movemental Issue were discussed as well. Accountability; irregular reports by position-holders to the general assembly, regularly published minutes taken at committees' meetings. Institutionalisation of cultural functions. A decrease in the number of members taking part in social activities.

The major theoretical characteristic associated with this stage which is relevant to a unique organisation such as the kibbutz is the delegation of authority (Adizes Ibid). As indicated, this era displays a noticeable growth in all organisational facets. The kibbutz became highly differentiated both laterally and horizontally.

In order to effectively manage the rapid expansion, authority had to be delegated to newly established organisational units through increased specialisation, coordination and professionalism. The third stage of organisational evolution earmarks the final passage from

the "tribal" era into the "community" phase. According to Etzioni (Ibid) and Beth-Or's (1970:581), sociological interpretation, the main characteristics of the kibbutz as "community" are: a considerable demographic expansion, the widening of age span, a weakening of solidarity and informal communication. The period during which the third stage of kibbutz organisational evolution took place cannot be easily defined. The crystallisation of its structural constructs evolved and reached a certain stagnation until and throughout the long industrialisation process which took a significant momentum from the early 1960s onward.

THE KIBBUTZ AS AN ORGANISATION: MAIN CHARACTERISTICS

The kibbutz constitutes a social, ideological and economic entity. The system is inclusive i.e. it encompasses all facets of life. This highly intertwined structure reflects a vertical as well as horizontal multi-dimensional differentiation. The intricate configuration encompasses formal units alongside informal structures in all facets of life (Shepher, 1976; Sheaffer, 1987). The "totality" (Niv, 1980) of this organisational pattern constitutes a natural laboratory to examine the Open-System approach of OT and indeed, as early as 1974, Katz & Golomb published a study analyzing the kibbutz from that point of view. They saw the kibbutz as a "*micro cosmos society*" or a "*total inclusion system*". They observed three crucial analytical levels (Ibid, 285):

1. **The Individual Level;** motivations and beliefs attracting the individual to the system and relating to his performance within the system.
2. **The System Level;** processes within the inner system and internal integration of the system. System effectiveness and the its effect upon the behaviour of its members.
3. **The Supra-System Level;** the interaction between the kibbutz and its task and general environments. One of their earlier conclusions is that the kibbutz is unable to "**reach maximum or optimal solutions at all levels simultaneously**". Another essential point pertains to the utopian situation where the kibbutz objectives should be commensurate with the goals of the individual members.

Broadly speaking, the authors claim to have supported their earlier study (Golomb & Katz 1971:110), regarding the successful integration of the three levels and establish that owing to the a unique combination of circumstances the kibbutz as an organisation is effective, adaptive and embarks on a great deal of innovation in many aspects of its organisational life. They, however, were completely oblivious of the fact that the environment was almost invariably receptive and supportive, hence, the kibbutz was not threatened in terms of having to tackle major environmental perturbations.

Beth Or (1970), based on Etzioni's (Ibid) functional approach, made a number of essential observations. He claimed that the

kibbutz is the most collective society; the kibbutz is ideologically-oriented; the kibbutz maintains direct democracy; the kibbutz maintains a planned, differentiated and professional economy; the kibbutz strives to maintain a seemingly improbable modus-vivendi between aspirations for economic rationality and values of solidarity, and informality.

The kibbutz organisation is said to simultaneously carry out three major roles:

- a. social needs (inculcation of ideological principles, solidarity needs {'nurturing' of the community}).
- b. economic needs.
- c. professional and technological needs.

There are four main areas of activity which reflect the uniqueness of the organisational structure. These areas are embodied by position-holders and professionals whose roles are characterised as follows:

1. **Professional Functions;** require specification, tenure, and experience. (engineers, teachers, accountants & book-keepers)
2. **Managerial Positions;** require mainly personal authority and social acceptability. Former experience. Formal training mainly for business managers.
3. **Ideological Roles;** no professional training required.

social seniority, social acknowledgement.

4. **Roles of solidarity;** Social status, personal inclinations, natural tendencies for leadership, seniority.

The above constitute the "classic" division in which several drawbacks are apparent. The definitions are not mutually-exclusive, there is certain overlapping amongst the different roles. Furthermore, there are positions such as the secretary's which encompasses all four roles. This fault stems from a misconception of the secretary role which stands for CEO. However, the person must incorporate a professional capacity as both trained and experienced manager. His (her) solidarity role draws upon the complex social situation whereas the ideological role is the least important though it is expected that the person will at least conform with the basic norms. Owing to the tightly knit nature of the organisation, almost all managerial positions should embrace all characterisations except the ideological role. The fourth role has dwindled drastically and is almost non-existent in UKM kibbutzim.

The basic organisational characteristics of office-holders are:

- * a moderate motivation to run for the job (position holders only).
- * no material rewards delineating hierarchy.
- * informal intra-organisational communication.

- * position holders are elected by the entire community.
- * imposed managerial rotation dictated by ideological constraints negating stratification.
- * growing needs and strengthening tendencies towards the the recognition of management as an indispensable function in the kibbutz.

There have been some significant changes since Etzioni wrote his seminal study. Although, as we shall see, the organisational structure hardly changed, certain shifts did occur. In so far as office holders are concerned, a relatively large number of various committee chairpersons ceased to "volunteer" for their jobs and fulfil it as part or full-time-job. In order to compare managerial roles with the accepted principles of management, it would be instructive to compare the Weberian (1947:14) principles with the classic kibbutz organisational principles (Rosner, 1965:26).

Table No. 3

The principles of kibbutz
Organisation

The principles of
bureaucratic
organisations

-
- | | |
|---|---|
| 1. Managerial positions based on rotation | Managerial positions based on continuity. |
|---|---|
-
- | | |
|--|--|
| 2. An informal and flexible definition of rights & duties. Personality of officer may alter the above. | Execution of roles within a framework rights & duties based on impersonal relations. |
|--|--|
-
- | | |
|---|--|
| 3. Equality of the value of positions. an informal definition of levels of authority. | Officers' authority part of the hierarchy authority. |
|---|--|
-
- | | |
|---|---|
| 4. Elections for officers. Criteria include personality & character and objective qualifications. | Officers nominated in accordance with objective qualifications. |
|---|---|
-
- | | |
|---|---------------------------------|
| 5. Public officers mostly work elsewhere. Public office considered largely voluntary. | Public positions full-time-job. |
|---|---------------------------------|
-
-

DECISION-MAKING - KIBBUTZ SCENE

Decision-making in the kibbutz constitutes a unique organisational process in modern Western societies, partially resembling the Japanese consensus approach in business firms. We have already dwelled upon the governance system which is, probably the purest embodiment of participative or direct democracy. The underlying principle of direct democracy is the free and voluntary access to the decision-making process of any member of the community. The process itself does not end up in the highest decision-making body - the general assembly. The general assembly

constitutes both the board of trustees and its workers gathering.

This is the most efficient fashion in which to attach the organisational structure to the collective goals (Etzioni, 1957:427). As later parts will show, this mechanism is not unproblematic and in fact, patterns of representative democracy have begun to take hold in a large number of kibbutzim. Beth Or (1970:585) argued that the general assembly is the **"main body for policy delineation and goal-setting in a given value framework"**. However, the various committees, most notably the secretariat and the economic committee, are the major and practical **decision-drafting bodies**. In these committees policies are discussed in detail, communicated upward for ratification by the general assembly and concurrently execute decisions made by the assembly. In this respect, these bodies act as a pivotal two-way ameliorating pipeline for any major decision pertaining to essential aspect of the kibbutz life.

Generally speaking, the assembly tends to accept recommendations made by the different committees. In fact, notes Beth Or (Ibid), the committees are also decision-making bodies which frequently draw upon the general assembly authority to decide and execute resolutions. Having all this in mind one may conclude that the general assembly assumes the formal and legal authority for policy making and regulating relationships in all facets of life,

(Peres 1963:97).

The general assembly embraces, then, all three authorities, the executive, the legislative and the judicial. To a certain extent, noted Levy (1988:2), the separation of authorities which is the cornerstone of Western democracy, hardly exists in the kibbutz. This argument, however, alludes only to one problem. The concentration of powers within the secretariat creates a situation whereby the assembly is basically a rubber stamp or a ritual ratifying forum and this is a more serious problem. Several writers observed this anomaly asserting that the role of the assembly is belittled by highly competent and proactive committees (Etzioni, 1957; Peres, 1963; Beth-Or, 1970; Shepher, 1976; Levy, 1988). As a quasi judicial organ, the assembly resolves controversies between contending parties and it also serves as a quasi-judicial body having the final say in matters pertaining to contention between the "establishment" and the individual member. This quasi legislative role is expressed by the initiation and enactment of rules, the delineation of policies and by the revocation of norms, supplementing existing ones and drafting new ones. The executive organ is symbolised basically by the secretariat and the economic committee and to a lesser extent by other committees). However, since these bodies execute decisions made by the assembly, they thus serve as an executive arm of the assembly. It may be concluded that in fact, even this governing arm is indirectly an expansion of the will of the assembly. The

process of group decision-making mechanism, is best displayed by the fact that up to 70 percent of the members take part in the process by being members of various committees. This figure compensates for the steep decrease of participation in the general assembly (Peres, 1963; Rosner, 1965; Golomb, 1966; Katz & Golomb, 1974; Shalev, 1976; Shepher 1977; Cohen, 1983; Sheaffer, 1987). Golomb (1966:81), described this mechanism as endowing kibbutz members with personal involvement and a sense of free choice. A more philosophical approach as to the role of direct democracy is presented by Cohen (1983:41) who argued that the basic goal of kibbutz-democracy is "to overcome the division between rulers and the ruled and to avoid the possible conflict between the private needs of the kibbutz". This democratic pattern is aimed at:

- * Increasing identification of the member with the community.
- * Awareness of community needs.
- * Attentiveness of the member towards fellow members.

However, the incorporation of a noticeable percentage of kibbutz members into the process constitutes a double edged sword. It enables the majority of the kibbutzniks to directly partake in the process. At the same time, however, considerable elements of amateurism became involved. The peril of involving non-professionals in the decision-making procedures and primarily in the general assembly is one of

the major dilemmas of direct democracy. On the one hand, a basic maxim advocates comprehensive participation, on the other, the growing need for expertise, professionalism and skilfulness in all aspects of life poses a major challenge for the ideal of direct democracy.

A useful and effective way to overcome the drawbacks of direct democracy as a framework for a decision-making process is the **Kibbutz Council** which operates in large kibbutzim and is steadily gaining grounds in medium sized ones. The Council is, practically, an elected body of members consisting of an adequate composite of human experience, skilfulness, social acceptability and professionalism. Its task is to replace the assembly as a regularly-summoned decision-making governing forum. Structurally and hierarchically, the council is placed **below** the general assembly thus it constitutes an effective, representative of an intermediate level into whose range of authorities most major issues requiring effective, efficacious and professional consideration are funnelled.

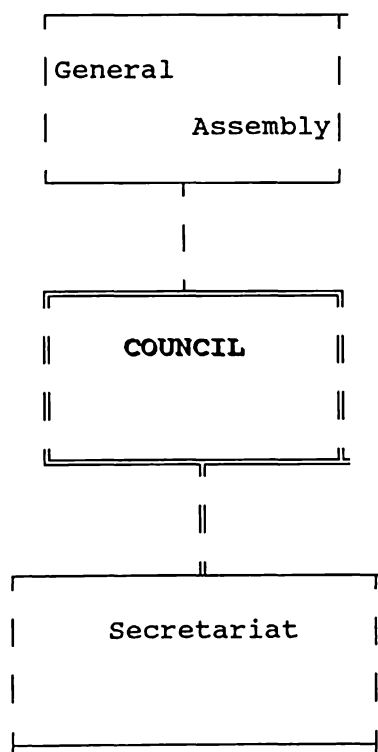
According to the 1989 UKM's Social & Organisational Marathon¹ (Sheaffer & Verdsheim, 1989:11), 11 percent of

¹Marathons - a UKM sponsored AGM where most economic matters relating to the past and coming year are discussed and minuted. The meeting is attended by both the secretariat and the economic committee as well as by other members. On the part of the UKM, a number of high officials usually attend. The economic results of the past year are submitted and constitute the basis for the

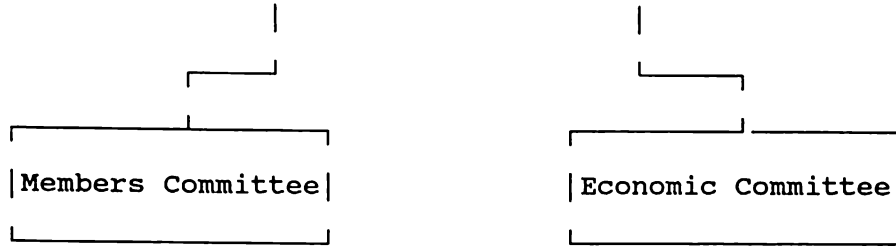
the kibbutzim had an operational council in 1988 (N=84). No updated data is available as to councils in either 1989 or 1990 but the trend towards the institutionalisation of councils primarily due to the decreasing number of participants in the general assembly has been on the upswing. Providing no accurate figure, Lanir (1990:243), argues that in 60 percent of the kibbutzim there exists no intermediate institution bridging between the secretariat and the general assembly.

A Structural Pattern of Kibbutz Council looks as follows:

Fig. No. 8a



policies pertaining to the macro level as delineated by the UKM.



THE EXECUTION OF DEMOCRATIC RIGHTS - THE DILEMMA OF PARTICIPATION

Several authors have dwelled on participation in the general assembly and discussed it from different angles. The dwindling number of participants was documented as early as 1957 (Etzioni, 1957a). Whereas Etzioni (Ibid), Golomb (1974; 1976), Sheaffer (1987) and Levy (1988), viewed the diminishing number of participants as an organisational dysfunction, Peres (1963 [apathy versus participation]) Shalev (1976), Rosner (1983; 1986) examined the ideological and the sociological aspects of participative democracy. Though their arguments and empirical findings as to the high degree of participation in the democratic process, as a whole, are not incorrect, they largely ignore the steep decline in members' involvement in the decision making process at the general assembly. Moreover, Rosner, (1986:11) notes that **"the MAJORITY of members in the majority of kibbutzim participate in a large number of assemblies"**. He does, however, mention that there seems to be **"a problematic development - the decline in participation in the weekly assembly"**. Participation in the general assembly is mentioned as

problematic in a large number of documents issued by individual kibbutzim during the 1970s and 1980s. The main problem, however, stems from the lack of longitudinal evidence, something that requires a separate research initiative.

A comparison between a 1974 reference and Horovitz 1989; references reaffirms the decline in the number of participants in the General Assembly. The comparison is not easy owing to the classification of reference groups. It is clear, however, that the frequent reference group (percent of members attending assembly) marking a larger number kibbutzim of fewer participants in 1989 (31 % of the kibbutzim with 16-20 percent of the members attending as opposed to 19 % of the kibbutzim where 26 to 30 attendance in 1974²)

Table No. 4

Kibbutz Meuchad Data 1974

Percent Participants	Number of	% ³
	Kibbutzim	
<hr/>		

²Data based on an undated questionnaire, held until April 1987 at the UKM Social Committee's archive.

³Data based on Horovitz's survey in UKM kibbutzim in 1989. The survey was sponsored by UKM Institute of Organisational Counseling.

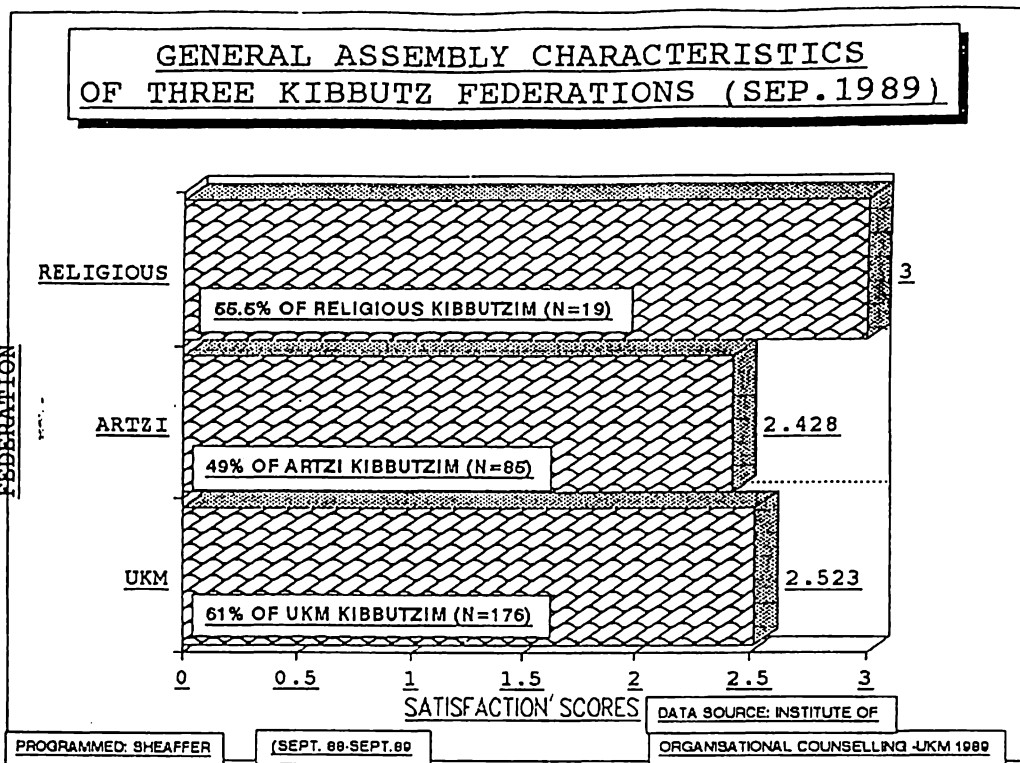
1974	>20%		1		3
N=37	20-25%		6		16
———	26-30%		7		19
	31-35%		6		16
	36-40%		3		8
	41-45%		3		8
	46-50%		2		5
	>50%		9		24

* Rounded

Table No. 5a
Horovitz UKM's Data 1989⁴

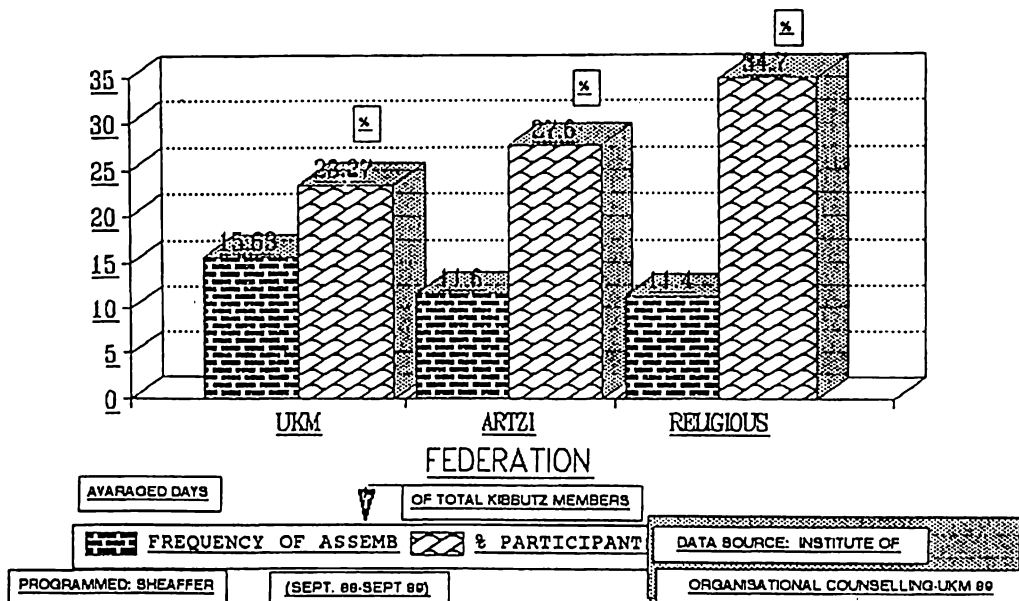
Percent Participants of total Membership		Number of Kibbutzim		Percent
1989	5-10%		10	12

displayed in 1974.



GRAPH 2

GENERAL ASSEMBLY CHARACTERISTICS OF THREE KIBBUTZ FEDERATIONS (SEP. 1989)



GRAPH 3

N=84	11-15%		17		20
—	16-20%		16		31
	21-25%		15		18
	26-30%		12		14
	>31%		4		5

Sheaffer (1987:98) [graph reproduced], provided a longitudinal graph depicting 26 years of participation in a medium-sized established kibbutz. The trend in this kibbutz appears to be indicative of the general inclination of a declining attendance in assemblies within UKM and equals the 1974 frequencies though no data is available for 1988 and 1989.

Horovitz's data has been processed so as to enable a basis for comparison with other kibbutz federations. The first graph (No. 2) depicts the frequency of the assembly convention (in days) and the percentage of participants. Both variables provided for UKM, Hakibbutz Hartzzi and the Religious Kibbutz.

The findings indicate very clearly that assembly participation in UKM kibbutzim is the lowest and so is the frequency of the assemblies. The results are interesting and invite a comparative research which could shed light on federational differences. The relevance for our study lies in the need to compare an important decision-making facet which characterises the conspicuous erosion of kibbutz's organisational effectiveness. The second graph shows

average satisfaction scores for the three federations based on a continuum of 1-5 (1=most unsatisfied; 5=extremely satisfied). The evident facts seem to refute Rosner's assumption regarding the level of participation.

* Whereas the frequent kibbutz seemed to have fallen within the 50 percent range of participation in 1974, in 1989 the frequent kibbutz displayed a considerably lower participation rate of around 18 percent.

* A different sample of UKM kibbutzim (N=94), supports the general trend of decline. The finding shows a somewhat higher participation than in 1989. The figure for 1988: is 22 percent.

* In 1974 (Kibbutz Meuchad) frequency of summoning the assembly was (N=43).

The underlying reasons for the decreased attendance as the kibbutz grows, arise mainly from the greater heterogeneity, the declining communal facets of an intergenerational kibbutz, and the greater possibilities for members to express themselves in other decision-making arenas such as work place and committees. The last reason is closely related to the degree of differentiation which, in turn, correlates positively with organisational size and complexity.

**Opening Hour of the Assembly as an Organisational
Dysfunction**

Commencement of the assembly seems to indicate another facet of organisational malfunctioning. Although no studies have validated this supposition thus far, various writers (Golomb, 1977; Levy, 1988; Sheaffer, et.al) have noticed that the relatively late hour of commencement greatly impedes the decision making process. In general, assemblies are held on Saturday evening between 2100-2200 following a hectic weekend. As the assembly is said to regularly discuss and make the most crucial decisions in a wide range of topics, it appears fairly unlikely that owing to the relatively late hour, deliberations and subsequently decisions, will epitomise effectiveness, level of cognitive depth, the ability to coherently draw conclusions and the necessary degree of thoughtfulness. The late hour has several underlying reasons:

- * Ensuring greater participation following Saturday evening TV shows.
- * Ensuring greater participation following family obligations (putting children to bed).

However, all the above seem to bear the opposite results in so far as participation is concerned over the last two decades. An additional stumbling block is the growing professionalism required in an increasingly growing number of both economic and communal subjects. As the assembly is open to all members and so is the 'floor', the combination of late hour unprofessionalism and, at times, amateurish

chairmanship, may hardly be conducive to an efficient and effective decision-making process.

In 1987 (Sheaffer, 1989a) the average commencement hour in UKM kibbutzim (N=94), was 21:40, the frequent assembly started at 21:50. The following graph demonstrates the distribution of assembly commencement hours in 1988 (N=84).

Table No. 6

Frequency	No.	%
Every week	29	68%
Three times		
per month	8	20%
Every		
fortnight or		
3 weeks	5	12%

In 1987 and 1988 the average number of assemblies per year in UKM's kibbutzim (N=94 and N=73 respectively) was 29 (Verdesheim & Sheaffer, 1989).

In 1989 (Horovitz Op.Cit.) in UKM kibbutzim (N=86):

Table No. 7

Frequency	No.	%
------------------	------------	----------

Every week	22	26%
Fortnight	37	43%
3 Weeks	16	19%
Every month	8	9%
<Month	3	3%

Summing up the main decision-making properties of kibbutz democracy:

* Participation in decision making through the assembly,

committees and in work places. A remarkable decline in participation in the main decision making body over the years.

- * General assemblies have become far less frequent. From a weekly meeting to one every fortnight on average (UKM).
- * Determination of means by majority vote (or ballot box) based on value consensus. No declared pressure groups.
- * Particularist approach with overabundance (Levy, 1988) of legally unbinding norms and regulations.
- * Dispersion of authority. Blurred rather than overt linkage between authority and responsibility mainly pertaining to central office holders - defective scalar principle.
- * Kibbutz Council becoming increasingly frequent with a radical shift of the decision making point of gravity from the assembly to the partially representative form of democracy.
- * An increasingly growing number of kibbutzim replace part of the assembly roles as a voting arena by using a ballot box, thus increasing the number of participants in the decision making process. (In 1989, 76 percent of UKM kibbutzim diverted part of the assembly decision-making roles to the ballot box (voting for central office holders, major issues, committees, studies and most issues required by members and approved for voting by the assembly)).
- * 62 percent of UKM kibbutzim in 1989 (Horovitz Op.Cit.)

have aimed at introducing modifications in the assembly, council and most other decision-making features.

STAGE FOUR - THE INDUSTRIALISED KIBBUTZ DESCRIPTION AND CRITIQUE

Prologue: Indications For An Inconsistent Structure

The fourth phase reflects the current organisational structure. A comprehensive narrative would require to cover the issue chronologically and thematically, although not much has been changed in principles, until the early 1990s. The earliest published evidence as to the partial inadequacy of kibbutz organisational facets was Golombs' critical essay (1966), in which he raised various drawbacks in the routine organisational functioning of the kibbutz. Later, (1973:147), he published a study, fully devoted to the stagnation of the organisational structure. He disapproves of the fact that despite the "increase in the extent in the social and economic activities which had brought about an enormous growth in the decision-making process, the organisational structure has remained unchanged".

A comprehensive critique regarding the unpreparedness of the kibbutz as a system to tackle the turbulent environment and the acute need to enact proactive strategies was detailed by Golomb (1975). The imbalance between the social

and the economic aspects as reflected by the organisational structure and the need for more rationality, long-range planning and a whole new integrative structure was proposed by the same author a year later, (Golomb, 1976). The organisational literature provides more evidences as to the ossification of the organisational structure irrespective of the passage of time. In 1983, Cohen (1983:42) argued that no basic transformation of the organisational structure took place and the basic structural constructs as opposed to the bureaucratic ideal-type remained intact. Concurrent with the overwhelming crisis, a large number of kibbutzim have begun a reevaluation of their organisational structure. Sheaffer (1987), offered an indirect quantitative evidence as to the inconsistency of the classical structure vis a vis frequent environmental perturbations. In a remarkably critical essay fully devoted to the gross discontent of kibbutz members because of the cumbersome, ineffectual, reproductive and highly interwoven structure, Levy (1988), is clearly epitomising the problem. Merry, (1989), denigrated the ineffective structure from an even more irregular angle. He argued that kibbutz organisational structure:

- * Encourages people not to take responsibility.
- * Inflates the usage of manpower to ensure flexibility in order to better cope with the ever-changing environment.
- * Creates overabundance of organisational functions (see

Freeman & Hannan's "reproductiveness", 1984).

- * Has become over-pervasive, encompassing too many facets of life thus misshaping collectiveness by transferring most responsibilities from the individual to the collective sphere.

To claim that the kibbutz has stagnated as a **system** would be grossly inaccurate. Striking transformations occurred chiefly in the following areas:

- * A massive industrialisation process. A passage from an agriculturally oriented economy into a relatively advanced industrial economy (Rosner, 1983:8 ; Eisenstadt, 1985).
- * The process of individualisation is best illustrated by the housing of children at their parents dwellings.

The interesting feature is that the striking evolution has been incommensurate with a parallel advancement and refinements in the organisational structure.

The following part of this chapter will critically examine various organisational characteristics. The chronological outline will seek to eventually synthesise a current (or "phase four") structure as well as a structure deemed appropriate within the next couple of years.

1. Openness to environmental influences

This part will examine relevant literature dealing with the wider perspective of the kibbutz - environment relationships. The interaction between the kibbutz and the surrounding Israeli society has been comprehensively researched. However, since these studies reflect primarily sociological perspectives only aspects which will facilitate the inclusive organisational approach will be referred to. Golomb & Katz (1971), were the first to analyze kibbutz-environment reciprocal relationships. They discussed the diffusion of inputs and outputs from and to the kibbutz as essential for both the kibbutz and the Israeli society. The adaptability of the kibbutz to external transformations is likened to a pendulum or a dynamic balance. Overall, drawing upon the open system approach, the authors extol kibbutz's adaptive nature. They advance demographic evidences of continuous growth as an unequivocal proof of the kibbutz adaptive character and in this respect seem to follow the general organisational literature idolising growth. However they fail to realise that the distinctly favourable environmental conditions enabled the kibbutz to function, for a long time, within a placid-randomised environment.

The impact of the Israeli society on the kibbutz has grown considerably since the early 1970s. Being receptive to these influences, the kibbutz does indeed represent adaptiveness, though incomplete and selective. However, in adopting an imbalanced conformity with the environment, the

kibbutz jeopardises its identity. A constructive and measured adjustment is the maintenance of a status-quo between the preservation of the collective identity and adequate permeability of kibbutz boundaries. (Golomb, 1974; Niv, 1980). Golomb (Op.Cit.) argues that the kibbutz seem unprepared to positively grapple with and enlist environmental resources for renewal and reinvigoration. A sociological analysis assessing the interaction between the kibbutz and the Israeli society is advanced by Shepher (1976, 223-42). His main conclusion likens the kibbutz to an inward-looking entity disregarding external perturbations, thus creating an atmosphere of mediocrity in most aspects of life. Countering the critical view of an imbalanced adaptiveness, Katz & Golomb (1974:294), asserted that the kibbutz managed to retain its identity as a **contra-culture** because of the pluralistic nature of the Israeli society. Hence ,they conclude that a dynamic equilibrium between integration and separation exists. This symmetry prevents the American-style demise of utopian communes. Rosner (1983:6), attributes the successful longevity of the kibbutz to, among other causes, : **"inter-generational continuity, while many other communes the world over crumbled when their founders aged"**. Boundary spanning tasks such as identifying the pace of dynamism within Israeli society and processing these inputs through expediting adjustment and increased impact upon the environment, are indirectly discussed by Golomb (1975:194).

Reflecting an equally optimistic outlook is Rosner (Ibid) who introduced a seminal analysis arguing that : "It showed that it was capable of adapting itself to the changing conditions which occurred in its internal economic and social structure as well as to the fluctuating relations in various sectors of Israeli society". Meron's (1988:22), analysis of the adjustment to the environment is untroubled if not vainglorious (in the midst of the overwhelming crisis); he argues that: "in accordance with many manifestations, the kibbutz is facing an era positing new challenges and a momentum of growth and advancement surpassing the last generation. The truth ingrained within the kibbutz is again proving that it is stronger than any transient permutations in the environment". It appears as if Golomb, (1976:120), being a perspicacious observer, realised in advance the complexity, turbulence and competitiveness of the environment. He alluded to the potentially negative impact of these properties upon the sophisticated individualistically-oriented second, third and fourth generation kibbutzniks. Not until 1987 (Sheaffer 1987) had the impact of the environment upon the kibbutz been quantitatively assessed.

Sheaffer's conclusive evidences as to the bearing of the economic environment on the acceleration of the current crisis, rebuts conventional assertions concerning the adaptability of the kibbutz. Ya'ar, (1989), advanced a qualitative enhancement to that effect. He linked the

latest crisis to the violation of the balance reflecting reciprocity between outputs and inputs from the kibbutz to Israeli society (embodying the task environment at large) and vice versa. Yadlin (1989), indirectly associated the crisis to the introverted nature of the kibbutz and its lack of openness to the environment. Levy (1988:5), listing various organisational blemishes illustrated by the outdated structure indicated the acute need for a long-range planning and boundary-spanning capacity. The ideal interaction between the kibbutz and the environment is proposed by Merry (1989:4). Synthesising the unique kibbutz setting with recent theoretical assumptions, he proposes as follows:

- *Proximity to the market using minimal intermediary phases.
Interaction based on real-time.
- *Information systems with sensitive environmental sensors.
 - *Multi-level cooperation with external agencies.
- *Using external workers as sources of information.
- *Diversified economy considering fast-changing market requirements.
- *Expansion of boundary spanning-capacity to overseas markets.

To sum up, it is fairly noticeable that aside from a few perspicacious observers (Golomb, Shepher and Helman), most authors were intoxicated by the relative success and continuous and impressive growth. They almost invariably

misconstrued the steadily intensifying environmental jolts and tended to associate earlier transformations, within the kibbutz, with a permanent capability to adapt. Hence, rather than invoking alternative reflections of the situation, they advanced the notion that the agility depicted earlier by the kibbutz is structurally integral, constituting a persisting feature. Also, most studies steadfastly ignored and were oblivious to:

* The gradual erosion in the status of the kibbutz as a leading segment of Israeli society. Mainly the piecemeal termination of its erstwhile pioneering tasks.

* Despite an impressively dynamic economy, the economic philosophy stagnated and did not catch up with latest technological developments. (knowledge-oriented industries, emphasis on marketing, ignoring the synergetic capacity of the kibbutz manufacturing industries, agriculture and services).

* Opposing trends within the Israeli society as reflected by:

a. The rise of the Right and correspondingly the decline of the Labour movement (politically and economically).

b. The ethnic make-up of Israeli society. The demographic increase in the Afro-Asian component).

c. Growing alienation from the underprivileged (development towns). (Pavin, 1989).

d. The relative decrease in the elitist status of the

kibbutz as a separate ideological group (Eisenstadt, 1985:252).

- * Lack of long-range planning capacity as part of the organisational structure.
- * Insufficient or marginal emphasis on boundary spanning -capacity, information systems.

Merry (1990:143), furnished an original whilst matching explication the above misconceptions, arguing that: "the convention and the destination 'relay' one thing whilst the world demands something else. In between, appear the people whose lives have been moulded and have gained relevance through the basic presumptions, vision and covenant".

The covenant constitutes a glasses-like aid

through which people view the world. When a problem occurs, it is almost impossible to get rid off the glasses. The reason, argues Merry is that: **"doubting the glasses means questioning the very thing mediating between the people and reality"**. The UKM's Recovery Plan (1989:2-3), submitted to the Treasury in February 1989, specifies various factors leading to the crisis. These are "aggregated" factors, attributed to the **entire** UKM reflecting causes believed to have been "beyond control" or 'constraints' (Bibeault, 1982) within the task environment. Other reasons originated within the economic environment which could have been more effectively tackled if the kibbutzim had greater openness towards their task environment. Categorized factors are the passage from an agriculturally-oriented into a manufacturing-industrially-oriented economy. The endogenous factors are:

- * Lack of adequate experience and managerial infrastructure.
- * Technological manpower: managerial & marketing limited to the proportional size of the kibbutz and not to its practical needs.
- * The business sector inseparably interwoven with the social domain and heavily affected by ideological constraints. Thus, decision making procedures subject to economically irrational considerations.
- * Lacking monitoring & control mechanisms.
- * Production-oriented manufacturing industries with

disregard to marketing.

- * Neglecting service industries (tourism, food catering etc.)
- * Imbalanced vocational structure (excess of services over bread-winning jobs.
- * Easily available & tempting credit lines were massively used irrespective of kibbutz's repayment capacities.
- * Deficient boundary spanning capacities (market research, feasibility studies etc.) as a result of which imprudent investment strategies were introduced.
- * Indiscreet massive investments in consumption-oriented services.

The above are transparent, direct and quantitatively supported causes, part of which have been verified as early as June 1987 (Sheaffer, 1987). It should be reiterated that the above are necessary indications to substantiate most of the unoperationalised presumptions surveyed so far. The openness to the environment became an increasingly essential topic.

As indicated, however, the stimulus for a more comprehensive as well as the operationalisation of necessary derivatives have not been affected since the mid to late 1980s. As the extent and depth of the multi-dimensional crisis became more apparent and publicly acknowledged, the UKM decided to dedicate its first

conference⁵ to the interaction between UKM and the Israeli society⁶. In a preparatory workshop, Professor S. Eisenstadt offered Weber's model which states that the indispensable processes reflecting a "revolutionary victorious movement" are: (given in a logical order)

- * Institutionalisation
- * Expansion and organisational intensification
- * Cessation of creativity.
- * Introversion
- * Irrelevance to the new era and the new environment.

Eisenstadt (Ibid), asserts that renovation and recreation of relevance may be possible only by way of a massive absorption of new forces. However, organisations engaged in the "advanced stage" shut themselves off thus prevent new forces, potential young members and new ideas. This introversion, according to Harel, (1985:16) is reflected by:

* Inability to introduce knowledge-oriented industries due to:

- a) Dearth of suitable manpower.
- b) Inadequate educational system.
- c) Lack of awareness.

* RD has been slowed down

⁵Held at Givat Haim 4-6 June 1985.

⁶The Green Page, 26 April 1985.

- * Conservative youth movements, depicting irrelevant patterns in terms of adequacy to youth, contemporary and future kibbutz.
- * Selective and conformity-oriented absorption, intolerance to "rogues" who are vital for rejuvenation & change.
- * The kibbutz as a cultural and ethnic reservation, alienating its environment and inattentive to frequent environmental changes.

A most instructive overview of the kibbutz-environment relationships was provided by Dror⁷: "The kibbutz movements do not face a mere 'changing environment' but brave a partial national decline. A true assessment of the environment and its trends, through comparisons with trends and capabilities within the kibbutz movements are a prerequisite for a successful encounter". Dror goes on to say that "without adjusting the kibbutz economy to a changing economic environment, its economic strength will be eroding further...without economic soundness there is no confidence in the future of the kibbutz". Dror asserts that the kibbutz ought to "assume goals of national leadership" since: "without the realisation of ideological-national mission, together with the ability to affect the environment, the very basis of kibbutz is undermined. This is the worst shortcoming on the part of the kibbutz movements". Dror's approach is comprehensive and reflects

⁷"Coping With a Changing Environment", Theses provided by Professor Y. Dror for 'Kibbutz - The Next Step', A Seminar at Yad Tabenkin, 25 February 1988.

the eclectic character of policy sciences which appear to be his point of conceptual departure.

It is apparent that awareness of the growing schism between the kibbutz and its task environment was proportionate to the increasingly menacing crisis. It is noted that a formal acknowledgement of the need to realign the kibbutz's sinch with its task environment has been salient, yet the actual application is painstakingly piecemeal and the implicit effectuation has been subject to repeated environmental impacts.

2. Formalisation of Activities

The basis for understanding the problem of formalisation in the kibbutz lies with a very spontaneous and informal nature of interpersonal relationships in an inwardly-oriented and intimate community. The inherent rational need for the formalisation of roles, activities or procedures, as opposed to solidaric, informal and uninstrumental (Etzioni, 1957:423) relationships, created many dilemmas in most aspects of kibbutz life. The kibbutz managed to maintain a modus operandus between the two contradicting ends. Etzioni (Ibid) discussed that incongruence, arguing that the basic framework of interpersonal relationships in the kibbutz reflects intimate solidarity and informality. It may be added that coupling these relationships in **all other** areas of life aggravates the situation even further.

Thirty three years ago a leading scholar (Etzioni) stressed the apprehension that due to "over-solidarity and informality, the instrumental considerations will be disturbed". The main problem is that many activities in numerous facets of life are highly influenced by considerations other than those reflecting organisational rationality. The following are a number of major areas where these considerations are most prominent:

- * The definition of roles.
- * The definitions of activities.
- * Warding of resolutions & rules (Etzioni, 1957; Shepher 1976).
- * Elections for positions (central and minor).
- * Toothless sanctions (Golomb, 1966:78; Beth Or, 1970; Shepher Ibid).
- * Rotation in managerial positions (Etzioni, 1957; Helman 1982).
- * Higher education (Helman, 1985).
- * Informal communication system. (Beth Or, Ibid)
- * The incompatibility between responsibilities and authorities (Levy, 1988).
- * The relatively weak emphasis on professionalism (due to common division of labour) (Eizenstadt, 1978:109).

Beth Or established that: "what characterises the kibbutz is the solidaric/value realm which wields an overwhelming influence on all other domains". Golomb (1965) listed

characteristics of an informal organisation as based on the kibbutz scene:

- * Informal authority is not endowed by virtue of rights or roles.
- * Informal authority may not be delegated.
- * Informal authority is internally-induced.
- * Informal authority must be continuously regained. It grants gratitudinal rewards rather than direct well-defined material and status rewards.

Unlike most organisations, personal authority is considered to be the most essential attribute for any position holder in the kibbutz. No quality of outstanding personality, experience, skilfulness and professionalism will enable an office holder to function without a naturally-possessed and publicly-acknowledged personal authority. A mutually offsetting reciprocity must exist between the formal mechanisms as expressed by the formal authority granted to various managerial positions and the informally-acquired authority. The mutual coexistence is vital for the smooth functioning of a kibbutz.

Beth Or (1970:590-91), assumed that the larger, the more differentiated, the more formal, the more impersonal, the more centralised and the more formally-communicative the kibbutz becomes, the more the kibbutz is liable to face anonymity, anomie and decreased spontaneity. He further synthesises the issue claiming that the key problem is:

"for kibbutz based on voluntary values is to introduce established activity patterns which will ensure the implementation of tasks and concurrently benefit the social needs of its activating individuals". In a quantitative cross-sectioned model, Rosner & Palgi (1980), following Leviatan (1980), claim to have refuted various assumptions (Kerr et.al.; Vallier, 1962's: "the value pattern inappropriateness" and Cohen, 1966) concerning the inconsistency between equalitarian organisational conformity and organisational effectiveness. Although their findings are statistically significant and they, indeed found a positive association between measures of industrial effectiveness and adherence to ideological constructs, theirs is not a causal model, but a cross-sectional one enabling a mere cautious inference. Hence, data reflecting a single point in time indicate a possible direction but should not be seen in the light of established principle. For instance, informal relationships on the shop floor results in a high industrial effectiveness. In another study, (Rosner, 1980) using a weighted averages method, found more evidence as to the "positive relationship between the degree of consistency in implementing kibbutz principles and the degree of social, organizational and economic efficiency".

Though only imperceptively expressed, there seem to have been indications as to the discrepancy between the dynamic economy and sluggish social relationship.

Despite the implicit informal nature of various organisational features, a growing bureaucratisation, inflexibility, lack of long-term thinking and too-few clear-cut long range goals (Golomb, 1976:186) characterised the kibbutz for a considerable length of time. These are qualitative impressions unsubstantiated empirically although the actual manifestations of the organisational dysfunctions are apparent and may have been rationalised as reflecting an imbalance between the formal and the informal features. An interesting approach favouring the positive aspects of informality in the kibbutz was proposed by Leviatan (1983). He identified three mechanisms which facilitate and diminish the disadvantages of the hierarchical structures in kibbutz industries. The hierarchical structure remains constant, provided the kibbutz is intensively activating direct democracy, managerial rotation and the mechanism of independent status dimensions. Doing duty in a senior position in one facet of the organisation is concurrent with the assumption of no central position in another organisational domain. For instance, the kibbutz CEO will do wash-up service in the dining hall. The differentiation between blue collars and managers is thus tapered off. This multi-dimensional status capacity enables a variability in the organisational life so that more individuals can take part in managing different organisational domains.

Likewise, this setup may compensate members in lower

hierarchical positions by offering alternative rewards. Thus, the majority of members enjoy rewards very different from formal organisations where the opposite is the case. It would be hard to find the exact point of transition between the era when informal dimensions of the organisational structure overshadowed the formal ones. However, it became clear that a paradoxical situation evolved where informality with all its encumbrances and the lack of precise role & function distinction in the main resulted in an overblown organisational structure. This overabundance of functions, has become inimical to the very nature of informality as expressed by spontaneity, flexibility and rapidity of response. One of the notorious outgrowths of the informal nature of kibbutz is the unwillingness to legitimise a mechanism of independent and objective judgement (Levy, 1988:4). Moreover, a mechanism of unbiased comptrollership and accountability is completely lacking. The informal approach has it that these functions should be addressed by functionaries (CEO's) who are already overburdened, occasionally unqualified and said to govern a unique, multi-variable and interwoven structure. It is presumed that the highly differentiated, intricate, multi-dimensional and socially-intertwined structure has persisted as an ill-coordinated attempt to integrate the formal with the informal organisational facets.

Etzioni, Golomb and Shepher's forewarning went unheeded despite the ample time available for reconstruction. The

latest research evidence on the unwieldy formal arrangement observed in young kibbutzim is discussed by Lanir (1990): "...the arrangements said to have guided them in the complex reality of their lives, and the detailed sets of rules in particular, are unable to encompass the intricacy of reality and, indeed, contribute in no small measure to further confound the system". This view, vividly and aptly portrays the paradox of formalisation in the kibbutz. It is a self-entangling reality where inconsistent informalities persistently clash with an abundance of comparatively incoherent and unbinding rules that frequently reproduce themselves so as to bypass the same inconsistency.

3. Differentiation and Specialisation of Activities

Some of the problems associated with differentiation and specialisation have been alluded to in the previous paragraph. This is due to the fact that formalisation of activities largely encompasses many components of organisational life. Some of the more specific issues relevant to the current discussion will be considered. Generally speaking, Beth Or (1970), following Etzioni (1957a) and Golomb (1965) view specialisation and differentiation as an integral part of an established and patterned organisational structure which has been and will be evolved on a par with kibbutz growth. They allude to the impersonal implications of apathy, anonymity on the part of the grass-root kibbutzniks and tendencies towards excessive

centralisation amongst office holders. Golomb (1966), focused on the increased differentiation and the ensued organisational dysfunctions. The specialisation and more specific delineation of tasks, roles and areas of organisational activity seem to be indispensable (Golomb, Ibid) and further procrastination will result in a major state of confusion across the entire organisational spectrum (Levy,1988). Golomb (1973:148) listed six organisational dysfunctions each of which is directly associated with deficient specialisation and differentiation:

- * Organisationally unattended areas.
- * Duplication in attending to certain areas.
- * Overburdened office holders.
- * Illogical and equivocal distribution of authorities.
- * Dearth of formal information.
- * Inadequate coordination amongst position holders and committees.

4. Coordination

The mechanistic approach argues that coordination is achieved through ordained administrative procedures and hierarchy. The organic structure will seek informal interpersonal interaction amongst other means of communication. It appears obvious that the kibbutz structure more closely resembles the organic version. Of

main organisational characteristics, coordination is perhaps the most smoothly implemented. In most bureaucratic settings coordination is formalised, indirect and processed by a cumbersome chain of command or by unwieldy horizontal channels. Coordination in the kibbutz is straightforward, personally-affected and ignores many imperceptible hierarchical channels.

Irrespective of steady coordination, there seem to be limits to the effectiveness of verbal coordination. Golomb, (1973:148) mentioned the insufficiency of horizontal coordination, chiefly amongst heads of committees. Additional criticism of one aspect of coordination is dwelled upon by Merry (1989). He brings up the overabundance of people as a solution for many structural problems. An excess of personnel people incur extra coordination which inflates the already overblown structure (Levy, 1988). In the above survey, attempted has been made to describe major organisational constructs since they are reflected in the current structure. Various analytical approaches as expressed by sociologists and organisation theorists have been analyzed. The differences are apparent. Most sociologists depart from earlier presumptions vis a vis the kibbutz as a unique entity which defies many classic Weberian suppositions. However, as their point of departure is sociological, they fail to adequately describe distinctive organisational dysfunctions that seem to escape classification under the traditional sociological approach.

5. Centralisation of Power

Previous authors (Golomb, 1973;1976 and Levy, 1988), indicated the trend towards centralisation of authority by both the Economic Committee and the Secretariat on the one hand and the secretary and the economic coordinator on the other. The trend seems to be a result of the dearth of the scalar principle, namely, lack of complementarity between managerial responsibilities and authorities. Owing to the ambiguity in demarcation of roles, span of control (mainly of the medium echelons of the hierarchical structure) and range of authorities, the result of the exaggerated informality, a growing number of unresolved issues accumulate at the top of the managerial hierarchy. Many kibbutzim (chiefly large ones) tend to have two secretaries whose tasks differ either along demographic lines (certain cross-sections of the population) or topical focus. That is, each of the officers attends to different issues. The same applies to the economic coordinator whose job in the more differentiated kibbutzim tends to be divided into two functions, one dealing with the productive sector and the other with the consumption/services sector. These are only partial remedies which, on the one hand, dilute job structure but simultaneously increase managerial overhead. A practical way in which to partially assess centralisation of authorities and managerial work-loads was proposed by Verdsheim and Sheaffer (1989). Concurrently with the above assumptions they investigated the extent which central

office holders are members, ex-officio, of various committees. The random sample included 84 kibbutzim, nearly fifty percent of UKM kibbutzim.

It appears obvious that secretaries' work-loads, based on this indicator, are relatively high. However, the lower participation of economic coordinators in different committees does not indicate a lesser work-load. Also, there is a tangible indication of the specific areas of activity. Secretaries tend to oversee social spheres and coordinators are inclined to actively participate in all economic decision-making forums.

The following tables summarise the main differences between the mechanistic-stable structure, the organic-adaptive structure and the unique kibbutz setting as mirrored by organisational characteristics⁸.

Table No. 8

⁸The first three columns adapted from Kast & Rosenzweig, 1985:265).

ORGANISATIONAL CHARACTERISTICS	STABLE MECHANISTIC	ADAPTIVE ORGANIC
OPENNESS TO ENVIRONMENTAL & INFLUENCES	relatively closed, to select & minimise env. influences & reduce uncertainty.	relatively open, designed to adapt. env. influences cope with uncertainty.
FORMALISATION ACTIVITIES	More formally based on structure	Less formally based on structure.
DIFFERENTIATION SPECIALISATION OF ACTIVITIES	Specific, mutually exclusive, functions & departments.	General, sometimes overlapping activities.
COORDINATION	Primarily thru the hierarchy & well defined administr. procedures.	Multiple means & interpersonal interaction.
AUTHORITY STRUCTURE	Concentrated, hierarchic.	Dispersed, multiple
SOURCES OF AUTHORITY	Position	Knowledge &, or expertise.

RESPONSIBILITY	Attached to specific position &/or roles.	Shared by many participants.
TASKS, ROLES & FUNCTIONS	Clearly defined & specified in org. charts. Position description etc.	Loosely defined & determined by circumstances. Mutual expectation.
INTERACTION	Superior->subordinate	Superior<>subordinate
INFLUENCE PATTERNS	hierarchical.	Horizontal & diagonal.
PROCEDURES & RULES	Many, specific, mostly written & formal.	Few, general, often unwritten & informal.
STRATIFICATION	More difference between levels.	Less difference between levels.
DECISION MAKING	Centralised, concentrated shared toward the top.	Decentralised, across the organisation.

PERMANENCY OF STRUCTURAL FORMS	Tends to be relatively fixed.	Continually adapting situations.
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ORGANISATIONAL CHARACTERISTICS **KIBBUTZ ORGANISATIONAL STRUCTURE**

ORGANISATIONAL	As an economic entity proved rather resilient.
OPENNESS TO ENVIRONMENTAL INFLUENCES	As an organisation fails to keep up with frequently changing env. Organisational slack (mainly human) keeps uncertainty at bay.
FORMALISATION OF ACTIVITIES	Excessive informality generates an overabundance of compensatory quasi-formal functions. (The paradox of informality). A highly differentiated structure camouflages dearth of formal and operational definitions for organisational functions.
DIFFERENTIATION	Ambiguous definitions & overlapping functions.
SPECIALISATION	Economic functions highly specialised, equivocal social functions. Generally, a

highly differentiated organisational structure.

COORDINATION Highly informal, an essential relic of the spontaneous era. Loss of vital information due to informal channels of communication.

AUTHORITY

STRUCTURE The "authority paradox", Generally dispersed and multiple. Due to vague definitions of roles the non-existent scalar principle, a high degree of concentration of powers by CEO and economic coordinator. Hierarchy moderated by: direct democracy, managerial rotation, the mechanism of independent status dimensions.

SOURCES OF AUTHORITY (Decreasing order) Social acceptance, personality, experience, knowledge, skilfulness.

RESPONSIBILITY Tends to be dispersed. The more centralised the position the greater the responsibility.

TASKS, ROLES & FUNCTIONS

A relatively ambiguous delineation primarily in socially-oriented roles.

INTERACTION-

INFLUENCE

PATTERNS

The mechanism of independent status dimensions generates reciprocal interaction based on structured equality. Superior<->subordinate in all organisational domains. Influence used to coordinate various functions and for the coordination of its functions as a collective unit (Cohen & Rosner, 1987:30).

PROCEDURES &
RULES

A growing tendency to regulate, introduction of a large number of very partially binding rules. Procedures mostly informal.

STRATIFICATION

A classless society. Structured equality. Statuses exist. Status acquired mainly by social acceptability seniority & expertise.

DECISION MAKING

By a wide consensus. Early "cooking" of major decisions. Participative democracy.

PERMANENCY OF
STRUCTURAL
FORMS

Tends to be relatively rigid. Marginal & incremental additions. Adhocracy prevails during uncertainty.

The table could be a useful way in which to gain a succinct insight into major differences between the three types of

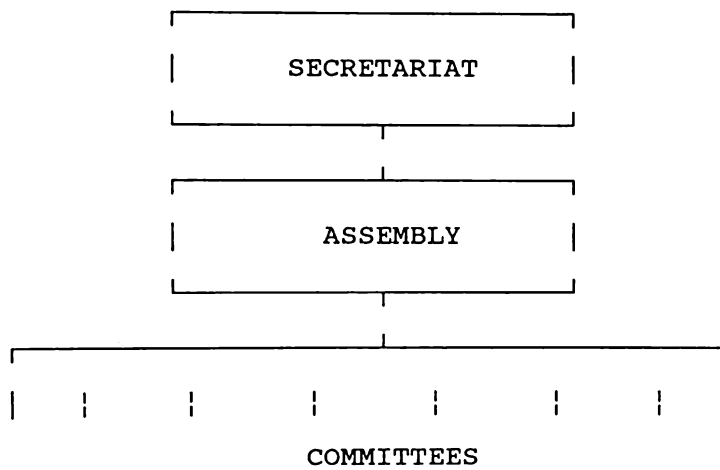
The table could be a useful way in which to gain a succinct insight into major differences between the three types of structure. It is fully appreciated that the characteristics are not mutually exclusive, yet they seem to be a satisfactory idiosyncrasy and reflect the common methodology in the literature. Having all the criticism and counter suppositions in mind, what seems to be the least flawed and most useful and collapsible (Hedberg et.al) structure ? Recent attempts to outline a skeletal organisational structure in UKM's kibbutzim (Sheaffer et.al.) provide some useful insights. A questionnaire

distributed in all UKM kibbutzim displayed four frequent skeletal organisational structures:

*** Pattern A**

1. Most decisions funnelled through secretariat
2. Indirect linkage between assembly & committees

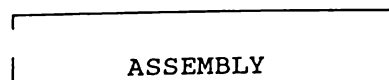
Figure 5



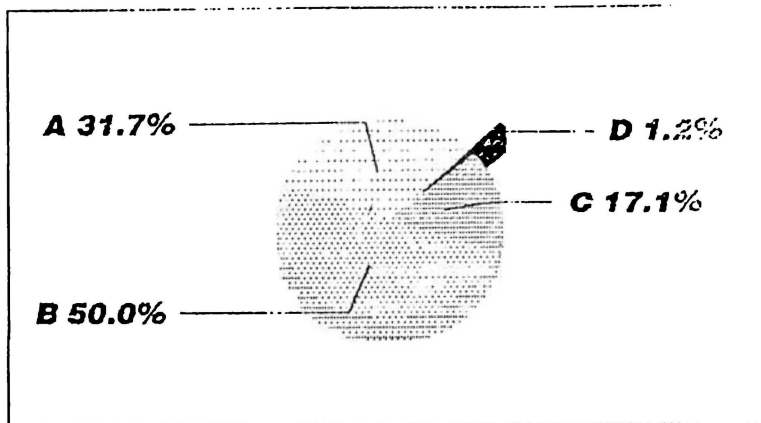
*** Pattern B**

1. Closer interaction assembly-committees, through reporting & coordination with secretariat.
2. In case of disagreement, assembly rules.

Figure 6

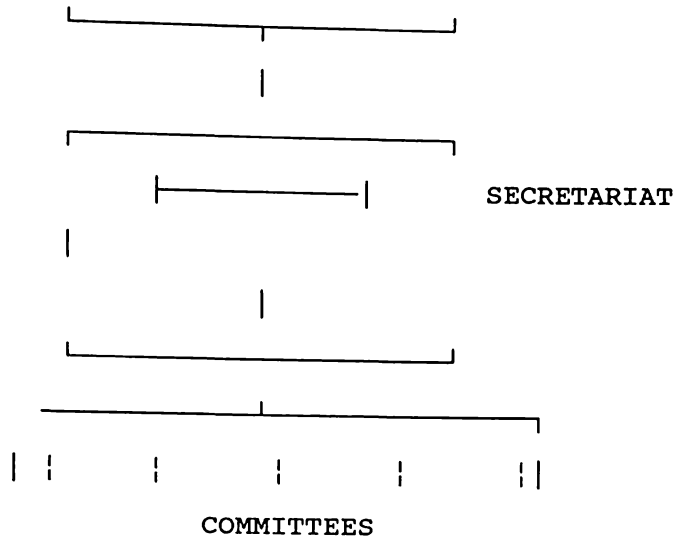


Organisational Patterns UKM: 1988
Social Committee Data



GRAPH

N = 94

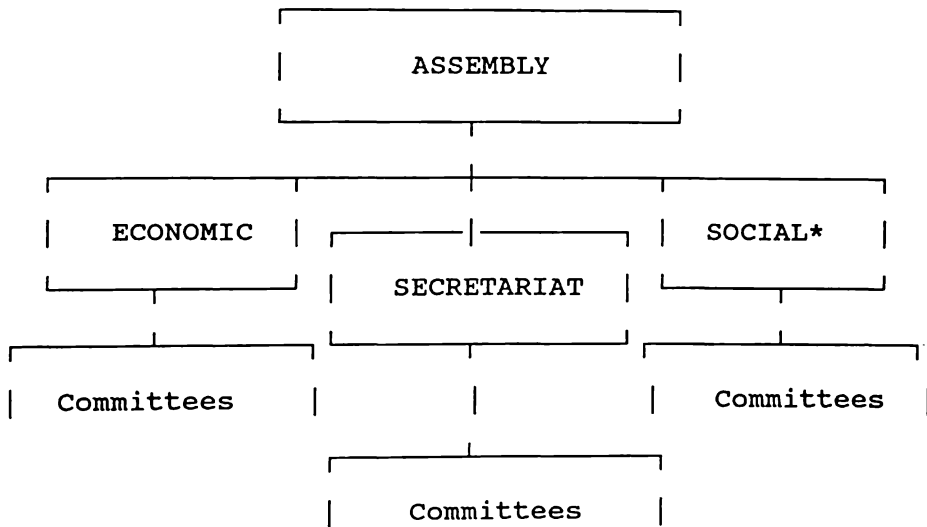


COMMITTEES

Figure 7

* Pattern C

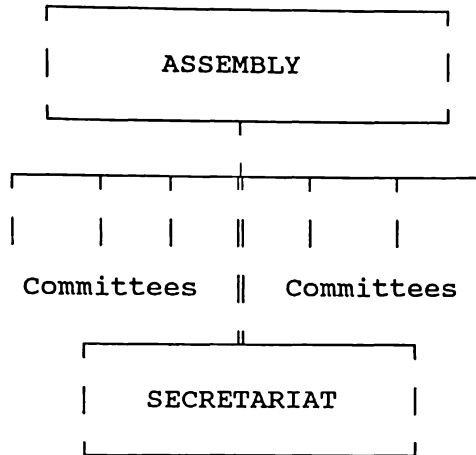
1. All committees act within the framework of divisions.
Major decisions passed at divisions.



* Pattern D

Figure 8

1. A "democratic" structure
2. Secretariat attends only to general and external economic policy.



Even though there is a noticeable increase in the number of "decentralised" kibbutzim (Pattern "B": 32 percent in 1987 and 50 percent in 1988), Sheaffer et.al. presumed that: **"these patterns reflect largely the shifting of tendencies of decision-making 'points of gravity'.** It appears unlikely that the organisational structure has changed, perhaps more issues are brought before the assembly". Another reasonable supposition suggests that the severity of the crisis compels office holders to rely on a wider consensus when the frequency of more consequential subjects increases.

In order to partially establish which design may be characterised as tending towards more decentralised decision -making pattern a T test was ran between two

combined organisational patterns: 1. decentralised (Patterns B & D), variable denotation "0"; 2. centralised (patterns A & C) variable denotation "1". A variable more likely to be significantly correlated with most organisational variables is organisational size as reflected by the total number of members. The test confirmed that kibbutzim with a larger membership tend to opt for a more decentralised organisational pattern. It is assumed that, as indicated before, the larger the kibbutz, the more differentiated it is. Decentralisation appears to be a prerequisite for large, inter-generational and highly differentiated in all organisational spheres.

THE ECONOMIC DOMAIN: REFLECTIONS ON ALLEGED INCOMPATIBILITY

Prologue

In an earlier chapter an attempt has been made to explicate the theoretical observations concerning the plausibility of the concurrent functioning of economic rationality with values of solidarity and equality. Two opposing approaches have been proposed. On the one hand the sociological traditionalists most notably various publications during the 1970s and 1980s by Rosner, Palgi, Leviatan, N. Cohen. They draw heavily on ideological constructs and largely in conformity with the official ideologies. On the other hand, there is the non-conforming economic school, some of whose

authors (Helman, 1976; Helman & Kroll, 1979; Gan, 1980; Helman, 1982) foretold the imminent crisis as early as 1975. It is, perhaps not surprising to face this dichotomous situation as the economists and organisation theorists (Etzioni, Golomb) were more likely to expose structural weaknesses owing to the inflexibility of economic and organisational analytical tools. Although many of the sociological analyses are quantitative in nature, sociological theories lend themselves, apparently, more easily to methodological manipulations and allow for more theoretical leeway. An unsubstantiated presumption would be that most sociological studies were conducted within the organisational hence financial framework of the two kibbutz federations whereas most economic research and criticism was carried out by independent scholars.

As the multi dimensional crisis intensified, doubts surfaced (Helman, Glick & Goldemberg 1989:4), about the possibility of achieving "Distributive Justice". This form of justice is expressed by the kibbutz undertaking to adhere to the Marxian tenet: "from each according to his ability to each according to his needs".

The Dilemma of Compulsive Equalisation

There are a large number of economic inconsistencies within the kibbutz framework. Except for certain periods in the history of the kibbutz and even during those periods, the

kibbutz never declared that it was uninterested in profit-making. Being profitable, however, was never a specifically pronounced policy. The apparent reason was that even though profits have always been essential and the economy was geared toward the accumulation of assets, the kibbutz, traditionally, was conceived as altruistic, pursuing Protestant ethics of repetitive investments of profits rather than consuming them (Shepher, 1977). Talmon, (1970) went further in likening this ethic to "**secular asceticism**". This study will expose the irrelevance of these moralisings from 1970s onwards.

There are five major tenets governing the production and the distribution of income through the consumption services (Barkai, 1977:7):

- * Common ownership of property (all means of production).
- * Self labour.
- * Manpower is at the disposal of the community.
- * Equality in the distribution of real income.
- * Severance of the link between contribution to the community and the total goods & services provided to the individual.
- * Communal education system.

Prior to the inception of the State, production principles had not been guided by considerations of economic profitability (Shepher, 1977:86). Kibbutz guidelines and

objectives were delineated first and foremost in accordance with national considerations (Rayman, 1981; Eisenstadt, 1985). The guiding principles were:

- * Settlement in geographically peripheral but strategically important locations. Shepher (Ibid) found that in 1976, the standard distance of all 220 kibbutzim from the centre of gravity all settlements in Israel was 77 km whereas the standard distance of all settlements was 55 km. The difference indicates that kibbutzim are more peripheral, hence, scattered and situated far closer to Israel's international borders.
- * A massive intake of new immigrants.
- * The introduction of various agricultural branches irrespective of their economic feasibility. The last ploughed furrow determines the international boundary and establishes Jewish possession of the land.

Barkai (Ibid) mentions that these tenets are inconsistent with the "modus operandi" of the market economy and they are not conforming with the socialist or centrally planned-economy. To that effect Peleg, (1978:184), argued that the kibbutz economic model has "three levels of decisions, the individual, the kibbutz and the federation. A close linkage exists between the economy and the rest of society's aims". Hence, the kibbutz depicts the following economic

characteristics:

* **In the production domain;** a mixed economy, not for the maximisation of profits but permanent jobs, professional promotion and contribution to the kibbutz income.

* **In the capital and financing domain;** no model of maximum dividends for self-capital. Reliance on national capital and a gradual accumulation of assets for more autonomy according to a pre-set economic model.

* **In the consumption domain;** the severance between individual economic contribution and standard of living. The kibbutz strives to adjust the level of consumption to "movemental standards". The movement provides a normative model of consumption and the affiliated kibbutzim, irrespective of their economic performance, conform with the "standard". This procedure is supported by mutual guarantees amongst the kibbutzim and the funnelling of state-directed credit lines and other financing agencies.

Based on this traditional economic approach one can find a distinct rapport with Rosner's accolade of the advantages of kibbutz economic structure (1983:10):

* A complex and highly productive economy, **without using material incentives.**

* Satisfying needs of a heterogeneous population on an egalitarian basis without using money and caring for individual needs.

- * A community based on direct democracy with **full participation of members**. Rotation of managerial positions.
- * Maintaining industrial economy and urban culture in a rural environment.

This part of the thesis is not pretending to dwell on the prolific sociological, economic and philosophical literature praising the wonders of kibbutz economy and the "work without pay". Principally controversial issues which either feature pronounced incongruence or try to confront opposing viewpoints will be focussed on.

Helman (1976), was the first to argue that the Marxian dictum "from each according to his abilities to each according to his needs" which distinguishes between contribution and consumption, is economically distorted, morally deficient and virtually mortal in its import. However, Gan (1975) had previously supported some of the hypotheses pertaining to:

- a. the marginal propensity to consume
- b. that no significant correlation will be found between kibbutz income and its expenditures on subsistence.

$$C_{it} = 2077 + 0.087Y_{it}$$

where: C=consumption and Y=income. The correlation coefficient in ten years (1962-71) was insignificant (when

P=0.05) between .12 to .28 (N=40).

Helman found that:

$$* C_{1973} = 6239 + .29Y_{1973}; R^2 = .11$$

$$* C_{1974} = 8078 + .20Y_{1974}; R^2 = .12$$

Further to the above, Helman & Kroll (1979), found for 1973-76:

$C(1973-76) = 57,574 + 0.07 Y(1973-76)$; $R^2 = .10$, (N=85), which validates earlier findings. As to investments in consumption, it appears obvious that their extent is determined irrespective of the kibbutz income. Where IC=investments in consumptions:

$$IC(1973-76) = 22,447 + 0.083Y(\underline{1973-76}); R^2 = 0.04$$

They hypothesised that investments in consumption are not necessarily influenced by income but by the 'good sources' at the kibbutz disposal, i.e. net income (Y)+mid & long term loans (L).

$$IC(1973-76) = 17850 + 0.089 Y+L (1973-6) R^2 = 0.03$$

The results indicate a complete lack of statistical association between the variables. Consequently,

⁹i.e. Various loans provided in exceptionally easy terms.

consumption in the kibbutz is entirely independent of both financial assets and income. Similar results reported by Levkovitch & Bashan, 1979.

Gan (1980) used a more sophisticated model, employing a step-wise multiple regression analysis. He had a ten year times forty kibbutzim which he regarded as 400 observations. He hypothesised that the step-wise exclusion of variables (an index of economic success consists of: cost of capital, liquidity, debt structure [Goldsmith & Shashua 1975]) will eventually allow for some explanatory power of the level of expenditures on consumption (dependent variable). Another explanatory variable was the "sanctified" movemental standard of consumption. The results indicated again an insignificant linkage between consumption and economic performance. In 1987 (Helman, et.al.), explored the consumption function of a sample of kibbutzim (N=20) when disposable income was to have explained consumption:

$$C = 7610 + 0.042Y ; (R^2=.13)$$

and with the net-debt/member:

$$C = 7690 + 0.032Y ; (R^2=.06)$$

Consequently, they concluded that neither income nor the exponentially growing net debt have had any impact on the level of consumption. Furthermore, these findings relate to data indicating the economic performance at the zenith of the crisis. Sheaffer (1987), using a pooled regression analysis for four years (1983-86), found an inverted

relationship between the overall investment in consumption and the net debt. This finding which indicates certain causality (dependent variable: net debt), reflects a more rational approach on the part of UKM kibbutzim (N=100) who drastically curtailed investments in consumption (including public & private construction) due to the escalating economic pinch as of 1984. The different results between Helman et.al. and Sheaffer, stem from the definition of the consumption variable. Sheaffer's consumption variable accounted for the **all** ingredients including construction and Helman et.al. related to all budgetary consumption items **but** construction which is the major component. Also, Sheaffer's model indicates causality and measured exogenous variables' impact along with endogenous ones.

It is appropriate to pursue this line of argumentation by attempting to statistically employ lagged relevant data from 1986, 1987 and 1988. Despite the fact that the methodology used may not, necessarily, indicate causality, the lagged positioning of the variables enables no potential of reciprocity i.e. the possibility that in a two variable regression equation there will be a mutual effect of each variable. The aim is to identify the nonexistence of any statistical linkage between the economic situation of the kibbutz and its consumption behaviour. Consequently, it is hypothesised that no statistical association exists between the economic performance of the kibbutz (as expressed by its t-1 net-debt and t-1 internal source) and

its consumption patterns (as expressed by its maintenance expenditures and investments in consumptions (t)).^{10 11}

Table No. 9

DEPENDENT VARIABLE	INDEPENDENT VARIABLE	r ¹²
Net debt 1986	Investments in consumption 1987	.01
Net debt 1987	Investments in consumption 1988	.04
Net debt 1986	Maintenance expenses 1987.	.01
Net debt 1987	Maintenance expenses 1988	.02
Internal source 1986	Maintenance expenses 1987	.05
Internal source 1987	Maintenance expenses 1988	.04
Internal source 1986	Investments in	

¹⁰N=170 kibbutzim, economic data based on the annual "marathons" for 1986;87;88.

¹¹Economic data are per member, i.e. divided by the total number of members in the corresponding year.

¹²Pearson.

	consumption 1987	.00
Internal		
source 1987	Investments in	
	consumption 1988	.01
<hr/>		

* All correlation coefficients are insignificant.

** N = 168 kibbutzim

The economic interpretation of these findings implies that kibbutz consumption is grossly inelastic. The main reason for inelasticity stems from the fact that virtually, the consumption ingredient is a dictated movemental standard ("axiomatic" [Bliss, 1971]), which the kibbutz adheres to notwithstanding its economic performance. The equality in kibbutzim's consumption function was quite noticeable (Barkai 1971), between 1954-65 when the Gini coefficient was a mere 0.09 and in 1968, 0.204 (Simchoni & Shmueli). Helman concluded that the kibbutzim do not alter their level of consumption, disregard fluctuations in their income and have a near zero marginal propensity to consume. This economic behaviour indicates inelasticity and unwillingness to rationally respond to a reduction in income. He doubts (Ibid; 393) whether the kibbutz would be sufficiently resilient in time of crisis. In fact, somewhat later, Helman (1982b:396-7) indicated that during the 1970s the kibbutzim, largely, increased financial reserves but whereas the wealthy ones maintained a levelled consumption function, the poor ones did not abate their consumption

patterns. Referring to a potential crisis he states: "currently, the social/organisational structure does not create the mechanism necessary to reduce consumption whilst income decreases when social identification of members with the kibbutz system decreases. Russian and American communes developed a strong tendency to consume which led to their demise. Following a decline in income on the one hand and inelasticity of consumption on the other, one may expect ominous signals as to what the kibbutz will face in time of crisis. It also indicates a need to adequately organise consumption".

Gan (1980), found a significant correlation coefficient between maintenance expenditures in kibbutzim over the years and the movemental norm or pre-set standard ($r=.70$). This finding supports earlier hypotheses concerning the "sanctified" movemental consumption policies (Peleg, 1978; Helman, 1976). Summing up these seemingly puzzling findings which hardly demonstrate rational economic behaviour, one may list apparent reasons for the discrepancy. Not all authors attempted to fathom the reasons behind the economic models. Helman (1976:391) listed a number of reasons which seem to have brought about this situation:

- * Accessible loans (temporary liquidity).
- * The economic "elite" does not consist of experts in the area of consumption.
- * The economic planners are kibbutz members, thus unwilling

to "hurt" their fellow members by imposing curtailments of consumption in dire times.

* Office holders tend to refrain from cuts in consumption items that can be directly related to their jobs.

* The inroads of private property and consequently the dilemma: to equalise (for the have nots) or not.

* The tendency to equalise kibbutz standards of living on-par with external levels.

Citing Bliss (1971) and Kanovski (1966), Helman (1982b) adduced further evidence regarding the fact that to a great extent the economic establishment has a negligible impact upon the level of consumption. Kanovski (Ibid; 6) was, in fact the first to indicate the independence of consumption as a factor determined fully by the consumption norms. The principle of equalising amongst kibbutzim stems primarily from the same philosophical suppositions upon which the structured equality exists within the individual kibbutz. The kibbutz federations, irrespective of actual economic performance of the affiliated kibbutzim, adhere to the traditional ideological concept determining that each kibbutz is socially and economically autonomous and is guided, assisted and directed (in fact should be 'subjugated') by the kibbutz federation (Helman, 1982a). Helman (Ibid), argues that the decline of younger kibbutzim is the primary reason for the movemental dictate and demand for an artificial and centrally monitored equality amongst kibbutzim. Other reasons seem to be:

- * A differential absorption capacity.
- * Problems of growing inequality within younger and economically unstable kibbutzim due to "rogues" and pressures to bring standards on par with wealthy kibbutzim.
- * Apparent differences amongst students from various kibbutzim in district primary and high schools.

Helman points out (Ibid; 3), that, indeed, "the justification for equalising amongst kibbutzim is not necessarily within the realm of morality and principles of justice but within the practical range of sustaining the (economically) infirm kibbutzim". The issues of liability of newness of young kibbutzim as well as a detailed survey & analysis of actual UKM policies will be dealt with in a different part of the thesis.

Economic Inequality Amongst Kibbutzim

As previously mentioned, some aspects of inequality amongst kibbutzim are reflected by the Gini coefficient. Helman (Ibid) argues that in the kibbutz as elsewhere, the real index of long-range economic potential should be the level of outputs and income. However, as considerations of long-range planning in the kibbutz are minimal (Golomb, 1977; Sheaffer, 1987; Levy, 1988), consumption data seem to be the best approximation for the standard of living for the short run. It should be emphasised that the forced

equality (Barkai, 1977:156), attests to the effect that: "the consumption standards in kibbutzim are to a certain extent an institutional datum" amongst kibbutzim is not assumed to be a major factor in the crisis but a factor indicating an inappropriate economic strategy which has exacerbated the overall decline of the kibbutz movement. Measuring inequality amongst kibbutzim is a complex task involving several parameters (Helman, 1982a:4).

- * Differences in kibbutz's economic structure.
- * Alternating leisure and standard of living.
- * The spillover effect of geographical-environmental variables affecting standard of living.
- * The demographic make-up.
- * Economies of Scale.
- * Methods of auditing and accounting. Validity and reliability of statistical data.

Most studies (Barkai, 1977; Kroll & Helman, 1979; Gan, 1980;) indicated a noticeable equality in consumption patterns amongst kibbutzim with the exception of Sheaffer whose study reflects the situation from 1983-86. The following table displays relevant findings.

Table No. 10

GINI

AUTHOR	YEAR	COEFFICIENT	REMARKS
Barkai	1977	.07-.08	for 1954-65 Lawrence index of disposable income and consumption.
Simchoni & Shmueli	1974	L1957=.079 L1968=.073	Same as Barkai.
Sheaffer	1987	L1983=.371 L1984=.352 L1985=.220 L1986=.087	The Gini coefficient computed by using: disposable income (X) and kibbutz population (Y). (N=100).

As Sheaffer used other parameters, the results as well as timing are markedly different and indicate a steep decrease in the inequality of disposable income (surplus after financing expenses). The decrease also presumed to have indicated that only a negligible number of kibbutzim enjoyed high returns and that inequality dropped not due to changing movemental norms but because of a massive deterioration in the overall economic conditions.

Mutual Guarantees Amongst Kibbutzim: Impediment or Advantage

The tenet of mutual guarantees constitutes one of the kibbutz's most sanctified and important tenets. It asserts that the kibbutz maintains absolute mutual responsibility amongst its members and the kibbutz as an institution fully guarantees its members. This tenet requires that the kibbutz will ensure its members' social security, will back up any members' plight and will underwrite exclusive common rights incurred by the collectiveness of its social and economic arrangements. The principle applies also to kibbutz members' responsibility towards the kibbutz. Namely, a kibbutz member is obligated (though not legally binding) to perform and live up by the basic obligations and norms emanating from his/her membership. This principle symbolises the voluntarily-applied "social adhesive" without which the very kibbutz concept is meaningless. Issue is not taken against the inwardly-exercised principle and no further elucidations will be necessary. However, when these principles are applied within the inter-kibbutz scene the situation becomes somewhat more intricate.

There seems to be little doubt about the essentiality of the inter-kibbutz mutuality as expressed by reciprocity of obligations, rights and the very inner strength arising from joint assistance through commonly agreed upon objectives. All these held true primarily when the kibbutz movement, during past eras, could collectively transform national goals into daily practicalities. There is also no

doubt about the advantage of collectively waging economic arbitrations, gaining benefits, chiefly economic but otherwise as well on the merits of collective stance, and the improved collective capacity to assist weak kibbutzim. The centrally-coordinated regulatory mechanism within the kibbutz federations was practically, capable of bailing out weak kibbutzim by availing liquidity through an intricate network of improved conditions for loans. The slogan: "No kibbutz will be placed under receivership" seems to have proved right.

Whether or not the capacity of these kibbutzim to sustain themselves during adverse conditions of crisis is due to the movemental provisions embodied by the mutual guarantees, remains to be seen. The above holds true in both prosperity and recession. However, when persistently outperformed kibbutzim constitute the majority and when kibbutz movements doggedly insist upon equalising (Peleg, 1979) and even promoting (Helman, 1988:16) consumption among kibbutzim, the picture may seem different.

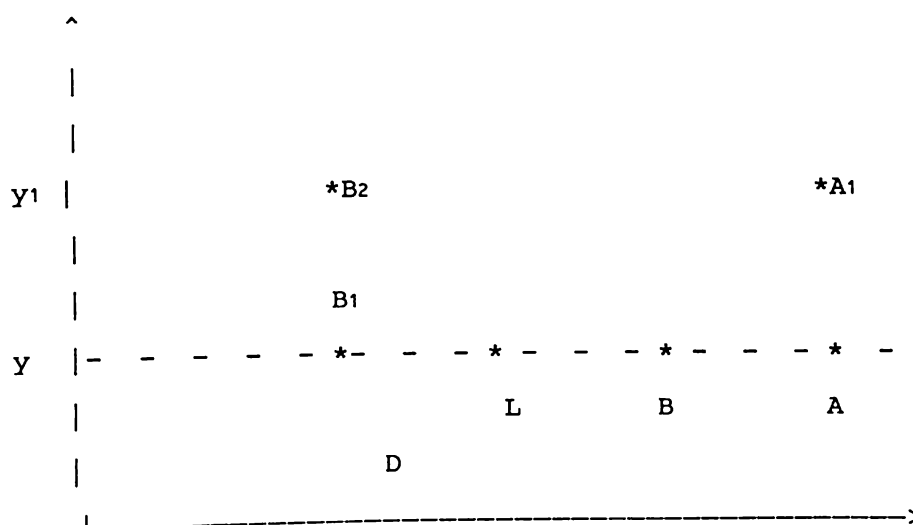
Peleg, persists his adherence to the principle of forced movemental equality even when the crisis was impending. In 1983 (Peleg, 1983:7-8), he concedes the growing economic disparity between the rich and poor. Moreover, he asserts that this gap "became significant from the point of view of the kibbutz social robustness and its faith in its ability to survive. Namely, we ought to retain the tenet that for

the long run a kibbutz can have no adequate existence below *movemental norms*". Unlike Helman (1983), Peleg argues that each kibbutz has a fixed level of expenditures "it has a roof and floor which are independent of income. We live by this principle many decades and in no way we should alter it".

In order to reinforce his argumentation he brings forth those kibbutzim who would have collapsed if the movement had not assisted them. The dilemma of forced equality amongst kibbutzim, the mutual dependence and the actual standard of living in the kibbutzim, is displayed by the following graph (Helman, 1988:19):

Table No. 11

Consumption



Income

Kibbutzim A & B maintain equal consumption. Movemental norm (y).. As economic situation deteriorates, B's income

plummets it requires assistance B₁D if it is to maintain the same consumption level (y). In accordance with mutual guarantees the movement will force A to freeze consumption on level (y) so as not to pull behind the laggard kibbutz B to level A₁. As time goes by the movemental norm rose to y₁ and the danger exists that the outperforming A will (owing to equalisation in consumption) stimulate the economically unstable to increase consumption. Kibbutz B, meantime is bound to be assisted by the unlimited guarantees. This time the movement should really exert its responsibility and sustain B and provide finances to stay on par with A in terms of the level of consumption. When economic stability prevailed, (or apparently prevailed), most kibbutzim were situated right of point L. However as economic environment worsens and decline predominates, most kibbutzim clustered around B₁ namely left of L albeit, at that time (1984 onwards), there was little the movement could do in terms of mobilising resources. As a clearance banking branch it dwindled completely and external sources became rarer and prohibitively dear.

Consumption - The UKM's Stance

Though too late, these economic inconsistencies did not go unnoticed by the kibbutz federations. As early as 1984, UKM's economic committee commenced a campaign aimed at reducing consumption expenses as a remedial tool facilitating the curbing of the looming crisis. As is the

case with most declining organisations, kibbutzim resorted to the more apparent budgetary items such as consumption in order to stave off major deficits and shore up crumbling economies in general. Brief reference is made to the role of the regulatory agency, i.e. the centrally-dictated (movemental) norms. Later economic and social UKM policies which acted as checks and balances in the face of the multi-dimensional crisis will be analyzed. In general, consumption in the kibbutz is regulated by five budgetary patterns (Sheaffer, 1989a).

* **General Budget;** a budget given at the discretion of various committees for monitoring & control.

* **Personal Budget;** a budget structured "per" member. Given to all members & candidates on a personal basis.

* **Normative Budget;** patterned "per" member according to pre-set norms. Distribution based on needs.

* **"Points" budget;** budgeted goods and services by "points" specified normatively per capita. *

Incurred; consumption expenditures incurred by an external payment such as superannuation and income tax.

Whereas the rational solution for consumption would be to transfer most items to individual discretion, there have been a considerable number of items in 1989 that were still recommended by the central regulatory agency (UKM's Economic Committee) to be distributed according to pre-arranged norms. It is believed that the free rider

phenomenon is deeply entrenched in the kibbutz and that free distribution of various goods & services gives rise to a great deal of waste. In an informative collation of data and observations, MaYafit, (1989:2) acknowledges UKM's emphasis on **needs** and negligent disregard of the indispensable association, **economic performance - needs**. However he still speaks of "red lines" associated with "kibbutz ideology" which have to be cautiously tackled whilst transferring collectively monitored items to individual discretion. A similar conclusion was expressed by Shmueli (1989:34), who in a comparative analysis between familial consumption in the kibbutz and its corresponding Israeli quintile, supported earlier hypotheses. He establishes that the movemental norm is the best predictor for consumption expenses; moreover, in 1986-7 no linkage was detected between income and consumption in the Kibbutz Artzi. The entire kibbutz system was at that time functioning in an ambiguous-not to say incoherent fashion. It thus became increasingly complicated to determine a reasonable division between personally and collectively-controlled consumer items. MaYafit (Ibid) concedes: **"Acknowledging and knowing that the grave economic situation propels an immediate need to reach a true and good relationship between needs and performance..."**.

It would be interesting to note how members observe the determination of standard of living in terms of whether the movement should set the norm or the norm should be

determined by the kibbutz's actual economic performance. Helman et.al. found that in UKM kibbutzim (in 1987) only 9.1 percent think that standard of living should be determined by the movement and around 92 percent think that this must be on par with the kibbutz ability. A situation where the major items of consumption are provided on a liberal basis (food, electricity, water, housing etc.) i.e. they are budgeted globally and consumption is free, causes a great deal of economic inefficiency. Shmueli (1989), found that the level of consumption of a kibbutz family equals the seventh quintile of an urban Israeli family. Whereas we do agree that economies of scale account for the capacity of kibbutz to spend less on goods & services, at the time of study the kibbutz movement owed approximately US \$ 4 billion and, in fact only 6.25 percent of UKM kibbutzim declared net-profit (after depreciation).

According to any economic sense, consumption should have been drastically lower. This chapter serves as an essential link between the general theories and the main part of the thesis. This chapter summarises organisational theories as well as certain economic approaches aimed at investigating the degree of relevance to the actual kibbutz scene. In many respects, the kibbutz can hardly be viewed, let alone analyzed, using ordinary organisational theories as a conceptual basis.

The kibbutz differs markedly from any known organisational

pattern, hence it can hardly be incorporated into any conventional typology. It mixes the formal with the informal aspects of business with those of the public or community domain. Certain inborn incongruities appear to be rather prominent. These organisational discrepancies mainly involve, the insoluble conflict between the community and its basic solidarity requirements and the need to maintain a competitive, profitable and efficient economy.

This conflict impinges on numerous other structural inadequacies which are further exacerbated by, direct and indirect impacts of incessant environmental turbulence. The current crisis provides a rare opportunity to investigate the pertinence of earlier suppositions concerning the kibbutz as an organisation as well as various presumptions pertaining to the seemingly irrational economic/organisational behaviour as observed in present kibbutz functioning. This chapter will be augmented by an additional one dealing specifically with the crisis.

CHAPTER NINE**THE CRISIS: A CONJECTURAL AND CHRONOLOGICAL EVOLUTION**

He who beholds us from the outside, much like the one who observes and witnesses from within, will arrive at the same conclusion - this is a crisis ridden society engaged in an unstoppable plunge. From any aspect, any angle and any dimension of observance, it appears as if the deteriorating process is in full thrust and its end is unseen" (Leviathan, 1988:1).

INTRODUCTION

It is not uncommon to occasionally come across articles, minutes and other memoranda where the term crisis is used so as to portray a situation which, transiently, digresses from the seemingly routine life in the kibbutz. This situation is frequently labelled as "crisis" irrespective of the extent, the duration and the structural characteristics of the event. It is, perhaps, not incidental that being part and parcel of the State of Israel, the kibbutz shares, in many respects, the dynamic and erratic nature of domestic as well as international circumstances that shape Israel's turbulent environment. Unlike other organisations of which the evolution and onset are not necessarily marked by a major precipitating event other than the all-pervading entrepreneurial spirit, the kibbutz was conceived and begun as on stage in an outstanding revolution in the annals of the Jewish people. One, therefore, may well presume, though only in some meta-theoretical way, that the kibbutz, having established the routinisation process (Webber, 1980), is on the one hand resisting institutional bureaucracy, and currently embodies a concealed aspiration for a permanent

This political crisis and the ensuing organisational merger left its social and organisational marks for many years to come (Darin-Drabkin, 1964; Sloutzki, 1973; Shepher, 1977). The organisational repercussions entailed mainly the establishment of new kibbutzim based on members who left politically-opposing kibbutzim. Properties, possessions, and lands were subdivided and many families split on political grounds. In as much as this radical political upheaval was traumatic and demarcated political cleavages for nearly two decades, it was not a crisis suiting the theoretical criteria employed in the disciplines on which this thesis draws. It was not a potentially ruinous crisis and one can unearth no manifestations of doom and gloom which accompanied the current one. There is hardly a consensus as to the duration of the early 1950s' crisis. Rosner (Ein-Dor 1986:4), has "no doubts" as to the crisis-ridden aftermath which lingered on until the end of the decade. He argues that between 1955-60, the kibbutz movement underwent total demographic stagnation, no new kibbutzim were established and there was a relative decline in terms of the centrality of the kibbutz within Israeli society.

The above period is defined by Shapira (1987) as "an era of stagnation". His study seems to be the only validation for what Rosner defines as "crisis" and he attributes it to demographic vacuum created by the negligible number of people joining kibbutzim at that time. Further identifying of the deteriorating demographic vicious circle is dwelled upon by J. Lanir (1990:31-32) who indirectly proposes a

revolution (Sheaffer, 1987:103).

Blasi (1980:vi), supports this line of reasoning from the point of view of inter-generational continuity. He sees it mirrored in the "revolutionary spirit" of the second generation. Ignoring the numerous "mini" crises which accompanied the kibbutz from its early days, one may, perhaps ascribe more significance to two crises both of which reflected political rather than organisational features of crisis. The first occurred in the early 1920s when ideological influences caused the kibbutzim to disengage from the "Labour Brigade" which stressed very large collectives whose pioneering tasks were to pave roads and simultaneously maintain a strict and all-encompassing communal spirit. The second major crisis arose from strictly political grounds. In 1951, the largest kibbutz federation was the "Ha'kibbutz Ha'Meuchad" with which approximately 70 percent of all kibbutzim were affiliated. A political split ensued within the Mapam party (United Workers Party) which left the more radical socialists (Mapam) catering for Ha'kibbutz Ha'arzi and Achdut Ha'avoda (Labour Union) furnishing a political umbrella for Hakibbutz Hameuchad. This rift saw the creation of three kibbutz movements or federations. The least radical of these was Hever Hakvutzot (The Association of Kibbutzim) affiliated with Israel's then largest party, Mapai (Land of Israel's Workers Party). Mapai members of Hakibbutz Hameuchad merged with Hever Hakvutzot to establish the largest kibbutz federation Ichud Hakvutzot Vehakibbutzim (The Union of Kibbutzim).

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situation where demographic depletion coincided with far-reaching transformations in the Israeli economy.

UNITED KIBBUTZ MOVEMENT - MAIN DEVELOPMENTAL ASPECTS IN THE 1980s

The Industrial and Economic Growth

The era discussed here relates to phase number four "the post industrialised kibbutz" described in detail in the chapter dealing with the kibbutz as an organisation. Aspects which have a direct bearing on the research question will be addressed. As several antecedents to the crisis are known to have occurred as early as the late 1960s, this study will not be restricted to the past decade but will, if the need arises, reflect upon earlier developments as well. It should be reiterated that unless otherwise mentioned, the survey of the general industrial and economic growth, accounts for the entire kibbutz movement. The reason for the generalisation stems from considerable similarities in the evolutionary process and the ability to infer subsequently from a wider perspective.

Two major developments characterise the kibbutz of the sixties. The first was a noticeable demographic increase of 14 percent from 1958 (83091 inhabitants) to 1970 (96500 inhabitants) or an increase of 20 percent in the total membership between 1962-67. Rosner (1982:5), notes the transformation of the kibbutz into a multi-generational

society. The growing demographic heterogeneity stimulated, along with other elements, various needs hitherto unrecognised and unclaimed. This era is marked by a steady growth in standards of living Sixth decile in the mid seventies in terms of consumption expenditures (Barkai, 1977), seventh and even eighth decile in the late 1980s, (Shmueli, 1989). The kibbutz intensified its interaction with Israeli society through an impressive enlargement of its economic base, (Barkai, 1977; Eisenstadt, 1989:415) and its relatively steady and disproportional political prowess (Shepher, 1977; Ben-David, 1979). The growing negative demographic entropy (Katz & Kahn, 1966; Orchan, 1979) as expressed by trading off absorption and emigration should also be noted.

The second developmental component was the massive industrialisation or "industrial revolution" (Leviathan: 1975:11) in the kibbutz which had both economic and social repercussions. By the early 1970s, there were 235 enterprises owned by 186 kibbutzim catering for nearly a third of the total non-services employment (Barkai,1977:210). Rosner (1982:4), mentioned that 80 percent of the 290 enterprises in 1978 were established from the early sixties onwards.

Table No. 12

YEAR	No. OF PLANTS	PERCENT CHANGE
_____	_____	_____

1956		75	1956-60	30.5%
1960		108	1960-72	82.4%
1972		197	1972-73	19.2%
1973		235	1973-78	23.4%
1978		290	1956-78	287%

As Barkai notes: (Op.cit.) "the conventional input and output measures cannot convey all the dimensions of the industrialization drive". He further notes that the massive transition into manufacturing caused a discrepancy between theory and practice in that the economic and primarily the social implications were hardly considered. Nor, may be added did the managerial ramifications. These outgrowths have, later, drawn a noticeable research interest as well as favoured attention, yet it should be stressed that a lag has always existed between substantial industrial growth and the availability of, for instance, adequate managerial competence. Other related dimensions of kibbutz life such as the necessity for introducing more adequate organisational structures, hired labour, may also be added to the volume of already awesome problems. The rapid growth in industrial output did not cause a decreased productivity in agriculture.

Agricultural output, grew considerably in per-capita productivity (Beth-Or, 1970; Rosner, 1982). During the 1960s and early 1970s, proportionately, industrial outputs appear to equal agriculture and even surpassed it toward the mid 1970s.

Shepher, (1977:89), noted several reasons for the rapid industrialisation:

- * The collective production structure enables greater elasticity in the allocation of workers.
- * Workers do not have to change their life-style, dwellings etc.
- * Upgrading skills and requisition of trades are flexible and encouraged by the community.
- * Existing infrastructure facilitates a swift transformation to industry.
- * The availability of manpower close to the kibbutz. (Rosner, Ibid).

Leviathan (1975:12-13), advanced additional reasons for the accentuation of industry:

- * Technological advancement in agricultural industries and the requirement for physical strength are less compatible with aging members.
- * Productive work is more highly regarded so women may be more adaptive to less physically taxing jobs in manufacturing industries.
- * Economic policies made agriculture less profitable.
- * Second & third generation kibbutzniks are more technologically oriented.

Purely economic incentives for a wide scale introduction of

manufacturing industries were discussed by Helman & Sounis (1977:222). Citing Barkai (Ibid), they argue that incentives lie in the markedly higher marginal output in manufacturing industries which was, during the 1960s, 60 percent higher than in agriculture. Furthermore, the marginal efficiency of industrial capital was also higher. These researchers found that from 1967-1974, 11.5 percent of days' work in agriculture were transferred to other branches and to manufacturing industry. Helman (1982b), proposed the following economic changes which he claims occurred during the era covered by this analysis:

- * A fatalistic approach arising from the precarious political and military situation in Israel, nurturing the "standard consumer individualism".
- * The termination of the industrialisation process. Signs of economic stagnation. Needs for a break-through into new production and service industries.
- * Pressures to raise standards of living, irrespective of disposable income and actual outputs.

Just a year later an official acknowledgement as to the inability of UKM to withstand the irresistible thrust towards raising standards of living, is provided by Plotzker & Ein-Dor (1983:5;18). Interviewing Shavit (then UKM's Fund Director General) he commented on the need to maintain financial stability: "...it's impossible to close Friday night and send workers home. Labour is a general operating

expense and so is standard of living, which is on the upswing. To stagnate standard of living amounts to reading from the Pentateuch in the Synagogue'. On downsizing it I dare not speak". The following major policy statements which were followed during this period:

- * The nature of loans. Grace was scrapped and most loans are CPI-adjusted or indexed to foreign currencies. The extent of credit lines shrunk.
- * Output-oriented consumer investments (contributing to increased outputs) turned to increase welfare. (enlargements of living quarters etc.).
- * The availability and increase of financial reserves enabled kibbutzim not to adjust financial reserves to actual uses.
- * The Israeli economy faced a grave crisis with annual inflation rates in excess of 100 percent as of 1979 (Graph No. 6)
- * A growing uncertainty, accelerating inflation, fiscal policies, interest rates, are all hindering the kibbutz's ability to assess outputs. Current reliance on economic income forecast, hinders rational decision making in investments.
- * Kibbutz economists focus on productive investments, outputs and finances, relinquishing consumption and welfare items to "social committees" (Secretariat, members, housing etc. consisting of members mostly unfamiliar with finances).

- * Unsatisfactory managerial standards.
- * Inappropriate planning (economic, social and integrative) capacity. Focus on short-term planning. The annual economic plan as a cornerstone for the entire kibbutz planning.

As indicated in previous chapters, the kibbutz contribution to the GNP far outweighs its proportional size in the overall Jewish population (around 3.4 percent in the early 1980s [Sheaffer, 1987:43]). In the early 1980s, noted Rosner (Ibid), 40 percent of the total agricultural produce and 6 percent of the total industrial output originated in the kibbutz movement. Whereas agricultural produce originated in the kibbutz movement remained around 40 percent towards the late 1980s', industrial output has grown to 9 percent of the total

¹ (Brod, 1990:129). This study does not doubt the exceptional dynamism characterising the kibbutz economy; moreover, it is argued that this could have been even more impressive had the kibbutz adopted certain rational policies as early as the 1970s. It is assumed that in 1989, approximately 9 percent of Israel's GNP was generated in the kibbutz movement, **despite** the overwhelming crisis.

Thus far, this study has dealt with conditions prevailing prior the "outbreak" of the crisis, trying to focus on a wide variety of antecedents which may be deductively ascribed to

¹ National accounts contain no official kibbutzim's data, Brod (Ibid) asserts that the calculation of these values is highly complex. The above percentages are estimates.

the gradual evolution of the crisis. Likewise, one can already identify a great deal of the intertwining effects of environmental jolts as they spot structurally vulnerable niches within the kibbutz and the ensuing organisational dysfunctions as mirrored by growing signs of incompatibilities.

ANTECEDENTS - THE OFFICIAL REASONING

A comprehensive background explaining the essence of the economic crisis in the UKM is provided by the Recovery Plan² which generally recounts the underlining roots of the crisis. Some of the reasons mentioned in this document correspond with the reasons described above, yet it would be instructive to try and confront the **official** reasoning with the academic **pre-crisis** explications. As most roots of the crisis seem to be inseparably intertwining economic, social and demographic factors, It is necessary to recount them from the point of view of their sphere of influence, namely, endogenously or exogenously-oriented. However, the demarcation or rather dichotomisation between internally and externally oriented causes is also fairly confused and partially overlapping. This problem has already been discussed in the theory chapter and here it is intended to face some of the less obvious qualitative distinctions.

² Published by UKM, January 1989, pp 2-4.

I. Endogenous Factors

A. **Industrialisation**; The transformation from agriculture to industry - under adverse macro economic conditions. A fast shift. Heavy borrowing and massive investments. A considerable percentage of ineffective investments.

Structural, behavioural and social problems emanating from the agriculturally-oriented economy.

B. **Management**; Inadequate managerial standards and

sufficient managerial infrastructure. **The Managerial**

probability Paradox" simplifies a medium-sized kibbutz is incapable of providing a sufficient number of managers to cater for all managerial positions without resorting to external managerial resources. Or, probability

axioms counter the traditional kibbutz assertion that it has the proportional managerial potential within its resources. **Monitoring, controlling and accountability** - is deficient and professionally lacking. A basic

managerial imperfection has been dwelled upon earlier though it would be essential to stress the relevant aspects here. The scalar principle is badly lacking in the kibbutz.

Owing to ambiguity pertaining to spans of control and spheres of responsibility, a reasonable assessment of one's managerial performance is practically improbable. The excessive spontaneity and certain

solidarity roles, (Etzioni, 1957a), also

undermine a rational evaluation of managerial

effectiveness. As the main source of authority lies within the General Assembly and as the totality of the interpersonal relationships is over-encompassing, "the spheres of responsibility of groups and singles are amorphous" (Levy, 1988:2). The situation is further aggravated by the dearth of "other rewards and authority" (Levy, Op.cit.). It is widely agreed that the various financial scandals in the early 1980s, exposed "not only the managerial unprofessionalism but the limits of control mechanisms and monitoring" (Levy, Op.cit.). Moreover, the lack of these mechanisms enabled primitive substitutes to spring up and spreads inefficiency, procrastination and a great deal of incremental and ineffective decision-making. A major managerial handicap pertains to the interwoven all-encompassing nature of kibbutz life. This element has been referred to earlier yet its awesome impact upon the complexity of the entire system is such that it permeates all managerial facets and creates a cyclical-dysfunctional interdependence. An additional impediment lies within the inherently-imposed and ideologically-compulsive managerial rotation. This issue was referred to by Helman (1985) and it appears to impede the essential managerial experience curve or learning-curve which states that the greater the experience acquired through "on-the-job training" the more effective is the managerial functioning.

C. highKintz Vocational Structure; There are disproportionately

high number of workers in service branches versus a markedly low number of income generators. Focusing on production rather than on marketing mainly in manufacturing industries. Inattentiveness to the propensity to shift to service industries (tourism) in Israel and focusing on productive industries (agriculture & manufacturing industries alike).

Social Processes; Lack of suitable social security programmes and lack of relevant legislative arrangements.

E. Familialism; Massive shift to familial accommodation for children, raising of dwelling standards by heavy short-term borrowing.

F. Absorption & Settlement; Self (movemental) financing of newly established kibbutzim. Partially self financing of absorption oriented housing. Shavit, interviewed by Plotzker et.al. advances a seemingly convincing reason for this policy "the Government slowly but surefootedly disengaged itself from being involved in all facets it had once been involved in. First and foremost, the new settlements. We invest a million dollars (US) from the movement's own money in excess of running expenditures. This applies also to settlements in the Golan Heights and the Jordan Valley". With around twenty new settlements and the incorporated manpower and the activities involved, "this costs a lot of money, the Government reduces its involvement so

the movements must mobilise more capital from its own sources". Supporting this line of reasoning was the Secretary General who, despite the looming crisis assures the UKM about the establishment of twenty settlements within the next 4-5 years". He acknowledged, however, the "enormous investment in man power and resources" and the fact that these "are not funnlled, as before by the institutions", i.e. Government & the Jewish Agency.

G. The Economic Organisational Rational Versus Commuality;

The intertwined community and business units disrupt business-like, business-oriented decision-making. On rather more practical grounds and as early as mid 1985, a candid acknowledgement of UKM economic "sins" were advanced officially by UKM Economic Division (Erela 1985:15): "we face an inadequate economic growth. We invest primarily in consumption, not really from our surplus. Interest is on the upturn due to the investments and due to the need to renew loans with more expensive ones. The situation obliges us to suspend off investments, to restore economic growth, to lower standard of living and to better utilise our means of production". In the chapter analyzing UKM policies, the discrepancy between the official recognition and the virtual operational goals reflected by UKM's economic policies, will be discussed at length.

II. Exogenous Factors

In general, one may observe external factors which can be

regarded as associated with the three aspects of Levine's problem depletion (1978). However, reality makes no clear distinction so that one may ascribe any of the governmental policy shifts as befitting Levine's model. It is quite obvious that a great deal of integration exists between the economic upheaval as expressed by the new politically-motivated economic climate as of May 1985. This economic deregulation appeared as a "problem depletion" that followed on an environmental entropy which prevailed in Israel at the time. The following arguments provide a partial explanation concerning the effect of exogenous factors on the kibbutzim decision-making process.

* The availability of bargain credit lines. The General Secretary noted that **"enormous extent, seemingly unlimited, of credit lines..."** (Sharoni & Ganor, 1988). The authors indicate the loss of moderation on the part of kibbutz treasurers and kibbutz federations. The entire kibbutz movement was sucked into a large-scale spiral of investments of which magnitude, surpassed the impact of a potential risk. There was unmindfulness on the part of the banks to adequately assess kibbutzim's debt-servicing capacity.

* Unlimited inter-kibbutz and kibbutz-federation guarantees. * Massive mobilisation of capital by UKM (later borrowed by most kibbutzim).

* The involvement of UKM in mobilising ostensibly cheap loans for the kibbutzim is best illustrated in the debts

owed by kibbutzim to the UKM. On 30 September 1981, out of the total debt owed by UKM's kibbutzim, approximately 30 to 35 percent was owed to UKM's financial agencies. On 28 November 1987, the proportion was 65 percent. These figures (Rosental, 1987) attest to the massive involvement of the movement in this process. According to the above source (Chief UKM Economist), UKM "identified this process as early as 1984, but the central system did not manage to halt the process and this supports the assumption that perhaps there are some difficult structural problems"

- * Financial manipulations by regional enterprises and kibbutz-affiliated procurement agencies.
- * Deficient managerial standards within UKM's financial agencies.
- * Financial "backup" for unregulated financial transactions by the banking system increased sense of false liquidity and motivated heavy borrowing and unjustified investments. This situation and hence the justification to get involved with the Tel Aviv Share Market and the so-called 'grey market' is explicated by Shavit (interviewed by Plotzker et.al.): "The dimensions of liquidity reserves which we need for the financial sustenance of the system are very large indeed", further: "..to perform in the best possible fashion yet to end up losing money due to the (poor) state of the agriculture in the country and the state of manufacturing industries in the world - and everything it entails. But in the bourse he won't (kibbutz treasurers, Z.S.) lose but

profit and cover up all losses incurred by his productive system". And: the only remaining sector in today's market is the financial sector, where we, as Kibbutz Movement, enjoy a high credibility, perhaps the highest in the Country, so a growing number of kibbutzim resort to this direction". A strictly economic reasoning is further advanced by him: "the Kibbutz movement appears on both sides of the banks balances, not only as credit consumers but as a very large depositor. In these circumstances there is no justification that someone will profit twice: when we deposit the money in the bank and also when he dictates the costs of credit which we use".

The overall exoneration for the kibbutz movement's massive involvement with the bourse and the grey market is provided by Marton³: "There is a guideline, one of whose tenets is to be flexible and adjust to realities. As this flexibility involves a renewed examination every now and again, we always stop and think to what extent we may undertake these actions and others - in accordance with the principles of our life" (Plotzker et.al.). There are several indications as to the role UKM played in an almost unrestrained development and growth triggered by the availability of sudden and easily accessible capital. Shavit (Plotzker, et.al.), whilst rejecting preoccupation with finances per se, appears intoxicated by the massive opportunities

³ Managing Director of Hakibbutz Hartzi's Fund.

generated by easily-accessible loans, discounts the possibility of an overwhelming crisis rather than an economic tide and the resulting prosperity.

"In this era we ought to be promoting production and push kibbutzim towards developments and investments. This matter shouldn't be stopped in spite of the fact that today it seems unrealistic. We are vigorously encouraging it, hoping that this era will elapse and then we shall be able to display new tools, with brand new and cheaply acquired sophisticated production systems. Today, whoever purchases a plant may do so in a considerably lower costs, much more if he does so in two-three years when the economy resurgences. There is a hazard involved but for this the movement exists". This declaration attests to the remarkable self-assuredness in terms of the movement astuteness and seeming economic fortitude. Some later studies (Brod, 1990:131), analyze the gradual economic complexity of the entire kibbutz movement, asserting that kibbutzim began to get financially entangled as early as 1978. Brod explicitly ascribes both kibbutzim and the banks' exaggerated risk-taking to the fact that these parties relied on governmental bailout: "Both kibbutzim and the banks knew that they will not be 'allowed to collapse', so that the Government will be obliged to bear the excess debt during complications. An intolerable situation occurred where at a constitutional risk-taking in which banks could lend (to kibbutzim) without virtually risking the survivability of the parties involved, in case

kibbutzim will not be in a position to meet debt payment on schedule". Immediately following the collapse of the Tel Aviv Bourse, when the extent of the total UKM's loss was made clear (200 million US \$ of monies invested in banks shares), UKM's caucus convened to assess the damage and draft future moves. At that stage, there was still a confidence in the movement's economic policies. UKM's Secretary General, justifying financial activities argued: **"we adapted a policy of central liquidity in order to ensure an uninterrupted production in the kibbutzim. In order to provide answers for essential and indispensable investments"** This 'centrally-located' liquidity (i.e. UKM's financial agencies) enabled the fulfilment of caucus' resolutions" (Morav, 1983:3). Regardless of the clear evidence of an impending crisis, Shavit (Morav, Ibid) assuages concerns about liquidity **"asserting explicitly that there is no reason to worry"**. He further stresses the need to accept movemental instructions as a precondition for assistance. In later policy analyses the official reasoning as expressed by policy statements will be examined. However the above statement appears to mirror the most flagrant expression of a policy later proved erroneous if not fatal.

It is argued that the prevalent business climate reflected reassured confidence: **"feasibility and sensitivity studies did not stress parameters linked with changes of economic policies such as worsening of credit terms, depreciation of**

the US \$ and drastic reduction of direct and indirect assistance rendered by kibbutz federations" (Sheaffer, 1987:46). On 13 December, 1988, UKM's CEO declared that (Chizik 1988:25) a large number of the investments have not only been fruitless but caused operational losses. Different opinions regarding the targets of the massive investments state that "on each dollar earmarked for megalomania in the productive sector, another was allotted for improving standards of living in the kibbutzim. Consequently, profits ensued from neither this nor that" (Ganor, 1988:16, citing Y. Gadish⁴). Significant and implicating factors were reflected by massive deposits of money in both bank shares and various "Grey Market" channels. With inflation rates of up to 420 percent per-annum, no bank deposit programmes would bear dividends surmounting the inflationary spiral. Moreover, investing in bank shares was supposed to have accumulated higher interests, in fact, that was the case with the semi-official 'grey market. Peleg (1984:2 interviewed by Ein-Dor) rationalises the obsessive preoccupation with finances in the "anti production policies" of the Likud Government as well as with the need to retain the value of the money. Furthermore, he advocated the kibbutz movement's (Hakibbutz Ha'artzi) role in governing these transactions so as "to enable kibbutzim to live in the climate of the past" and: "to deposit any wee bit of cash in shares".

⁴Formerly Chief Budgets Officer, Ministry of Finance.

Owing to the dwindling sources of credit line: "the kibbutz federations turned into financing consultants" , mobilising capital at 15 to 16 percent rather than 21 percent as offered by the commercial banks. Peleg, a leading Kibbutz Artzi economist, ignores the fact that the "grey market" was known as only a partially solid financial institution (Ein Dor 1984b). Peleg, being Kibbutz Artzi Secretary General, supported the entry of kibbutz movements to free money markets transactions with the following statements: "When the Government does not fulfil its responsibility of financing investments and providing working capital, a situation arises where any economic entity is pushed towards the free capital market. When the banks are suffocated by the Government, the bourse remains the largest component. Noteworthy is the fact that involvement in the bourse is not, necessarily speculative" (Plotzker, 1983). Marton (Plotzker, et.al.) justifies his predecessor's actions. He describes his financial activities as "bold", namely borrowing very large sums of money to "create the movement's financial reserve". One of the incentives was "turned-on foreign currency credit taps, the banks offered and the movements and the kibbutzim took". He, however cautioned as follows: "currently there is excess liquidity, our concern is to ensure that these surpluses will not mislead us into thinking that our economic situation is sound. In reality, the economic situation deteriorates. The apprehension exists that financial soundness will delude and prompt erroneous decision-making".

Notwithstanding his cautious attitude, the implementation of financial policies in the early 1980s proved rather haphazard. The UKM's Secretary General notes that **"these are not speculative games in the bourse but an attempt to retain a short-term value of funds, in order to ensure it, our activities involved grey market transactions"** (Ein-Dor, 1985a). It is assumed (Kislev, 1987;6) that kibbutzim lost approximately 200 million \$ US with the collapse of the Tel Aviv Stock Exchange in October 1983. A later disclosure (Lipshitz, 1990:10) argues that the UKM had a previous knowledge as to the expected crash. However, the UKM decided not to sell shares so as **"to demonstrate national responsibility and prevent the collapse of banks"** (Lipshitz, Ibid). A large number of kibbutz-governed regional enterprises as well as regional procurement agencies deposited hundreds of millions of dollars in both financial channels. In general, UKM's finance chiefs acknowledged (Kislev, ibid), that three reasons were behind that policy:

- * Massive investments in both production and consumption.
- * The decline in agricultural profitability.
- * The upheaval in credit line terms.

A new economic policy in 1985 was introduced by the Treasury in order to curb the inflationary spiral. This resulted in a substantial increase in interest rates of up to 80 percent per-annum in real terms. In total, UKM paid

annual interest*:

Table No. 13

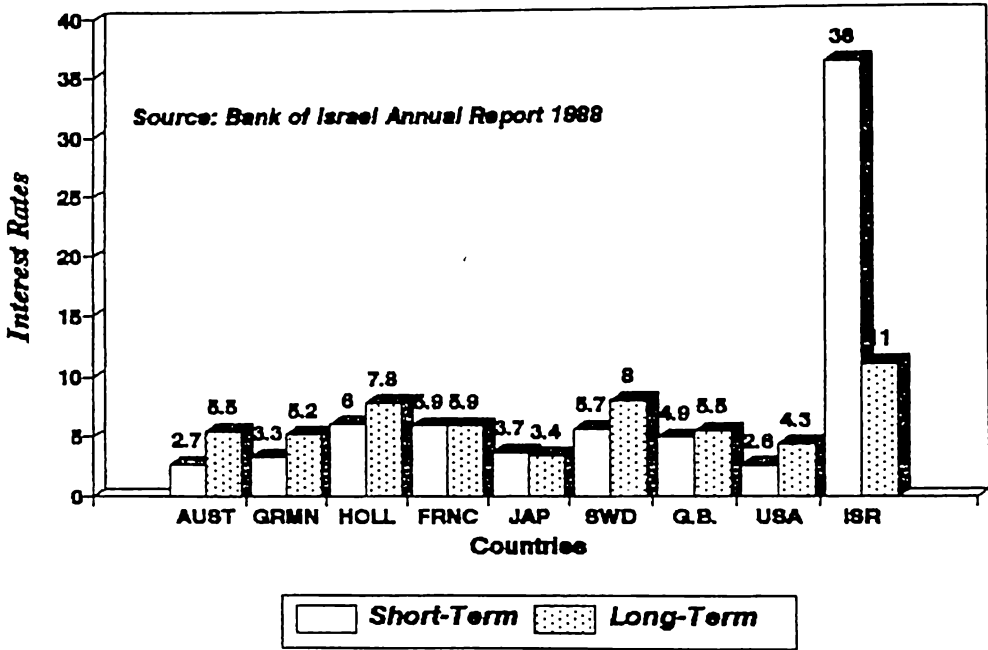
YEAR	INTEREST PAID (ANNUAL AVERAGE)**	COMMERCIAL DEBIT INTEREST RATE
1983	19	12 %
1984	45	88 %
1985	157	89 %
1986	120	53 %
1987		35 %
1988	300	

* In Million US \$ (adjusted Jan. 1987)

** BANK OF ISRAEL ANNUAL REPORT, 1988

The net real interest rate rose from 5.5 percent on average between 1983-4 to 9 percent in 1988. 1985 earmarked the highest interest rates. Interest rates paid on long-term loans in UKM's kibbutzim between October 1984 to October

*Short & Long-Term Interest Rates(Debit)
A Comparative Display: August 1987*



Graphs 7 & 8 Combined

1985 were in the vicinity of 23.4 percent. Despite a gradual decrease in interest paid on short-term loans (1986 - 22 percent; 1987 - 18 percent; 1988 - 13 percent), the real average interest paid on kibbutzim's financial assets was a mere 4.5 percent (Brod, 1990:157). Indeed, The Bank of Israel Annual Report 1987:117, noted that: **"the noticeable increase in financial costs has negatively affected profitability in all economic sectors but banking"**.

The graphs (No. 7 & 8) display the exceptionally high cost of capital in August 1987 in Israel as compared with OECD countries. The first displays short-term rates of interest rates paid on loans and the other, rates of interest paid on long-term loans.

The economic policy merely exposed structural economic weaknesses. However, even in the early eighties owing to monetary fluctuations and the ensuing squeeze on credit lines, kibbutzim tended to ensure financial leverages by resorting to the free credit market. Owing to the high rate of inflation as well as the availability of large amounts of borrowed funds, kibbutzim were steered into a situation where it was essential to retain the value of their capital. This necessity is assumed to have led to the above financial transactions. One is not unmindful of the fact that these financial transactions were a function of the decision making process. Nevertheless, it reflects an undiscerning attitude in terms of potential reaction to the

economic task environment.

An instructive aggregated economic evidence reflecting the rapid monetary fluctuations on the one hand and the general economic conditions in Israel as reflected by the decision -making procedures within UKM kibbutzim, is provided by the following balance sheet table. This vividly illustrates how an entire productive sector in Israel and-one of the most dynamic, at that-responds to environmental jolts (Meyer, 1982). The table summarises⁵ UKM's economic activities between 1982-87⁶. (The balance sheet reflects the situation on 31 December 1987)

Table No. 14

LIABILITIES		ASSETS	
Investments	1,100	Internal Source	488
in production		Allowances for	
Investments		financing investments	165
in consumption	640		
Inventory			
increase	20		
TOTAL	1,760		653

⁵ Rosental, G., A Lecture held at UKM's Planning Forum, Granot Regional Enterprises, 28/XI/1987.

⁶ Millions of US \$ adjusted to November 1987 index.

BALANCE **-1,107 (Net interest bearing debt)**

**A COMPARISON - BIBEAULT'S (1982) FINDINGS VERSUS THE UKM'S ALLEGED
ECONOMIC REASONS FOR THE CRISIS**

Bibeault's principal reasons for corporate decline constitute a relevant and instructive basis for comparison with UKM's official reasoning for the crisis as reflected by the quantitative demonstration in the Recovery Plan (January 1989). Not being unaware of the semantic differences between large American corporations and a quasi corporative loosely-structured roof-organisation such as the UKM, it should be noted that the theoretical as well as the empirical circumstances seem nevertheless to be suitable for this comparison. The main differences lie within the quantitative exhibition itself. The UKM's argumentation is meticulously detailed and seeks to expound and itemise the major components of aggregated net UKM debt as of 31 December 88 (Total debt [Gross debt minus financial assets] generated by 176 kibbutzim and the affiliated regional enterprises). Bibeault provides a quantitative manifestation quoted as a percentage of a gross division between externally-oriented causes for corporate decline and endogenously-oriented ones. Due to the differences in the degree of detail this study will merely compare the total externally-oriented and internally-oriented causes in percents:

1. UKM Internally-Incurred Debt (Recovery Plan, 1989:28)

I. Ineffective investments which will not contribute to the operational surplus. Carried out in the business sector.

These account for 12 percent of the total debt.

II. The volume of working capital increased during 1984-8.

This inflated UKM debt and accounts for 16 percent of the total debt. These investments will, probably bear fruits in the future.

III. Growth in the consumption capital predestined essentially for absorption, settlements and enlargements of members dwellings; these explain 27 percent of the total debt. Overall, the above account for 55 percent of the debt.

2. UKM Externally-triggered Debt (Recovery Plan, 1989:28)

I. Accumulated interest: 36 percent of the total debt.

II. The impact of environmental conditions including governmental policy 41 percent of the total debt. The exogenously-incurred debts amount to 77 percent of the total debt.

The authors of the Recovery Plan note (P.28) that the endogenous and the exogenous factors affected the debt from opposing directions: thus, the total exceeds 100 percent. Bibeault's findings are referred to in the theory chapter

and they differ, in addition to other dissimilarities, chiefly in their managerially-oriented approach. Bibeault attributes about 70 percent to internal dysfunctioning. These include: internally-generated problems within management control; 52 percent and internal problems triggered by external factors - 15 percent. Reasons ascribed to the environment include: external problems beyond management control: 8 percent. These external problems are dubbed by him as "constraints". Bibeault noted that these are, **"...political, economic, or stock price considerations prevent decisive action"** and: **"external conditions that prevent reaction even when management senses action is required and has made the correct decision"**). He asserts that, indeed, only these 8 percent are the sole cause for decline. The-rest 24 percent -are fairly equivocal as they indicate the combined effect of external and internal reasons or the **"real balance of external and internal factors"**. Bibeault does not mention why these were included in the external category. In all, the UKM's dichotomisation conspicuously "favours" the exogenous factors, whereas Bibeault clearly endorses the internal ones.

True, the circumstances differ markedly and so the pronounced objectives of the two presentations. The UKM's plan is a recovery plan submitted to the Treasury for the sake of rescuing as much financial assistance (or bailing-out) as possible, stressing primarily the Government's direct involvement in implicating the kibbutzim. Bibeault's study,

notwithstanding, serves as an unbiased and autonomously researched demonstration of causes for decline in American corporations. Sheaffer's (1987), study indicates that over 60 percent of the variables are defined as exogenous in explaining the UKM's debt (longitudinally for 1983/4/5/6). This lends more credibility to the overall assumption that, indeed, the crisis has largely been caused by external forces. However, that does not settle the great deal of overlapping between the two sets of variables nor does it establish whether external forces preceded internal ones nor any other sequential precedence. Surely, theory may not easily be settled by these discrepancies. Moreover, the contrast should further synthesise more universally-accepted tenets which may facilitate comprehension between the heavily empirical nature of these studies and the evolving body of knowledge within the framework of Organisational Decline. Another meaningful conclusion may be the need to bridge the eclectic disposition of the preoccupation with the complex and disciplinarily-intertwined area of organisational crisis and decline.

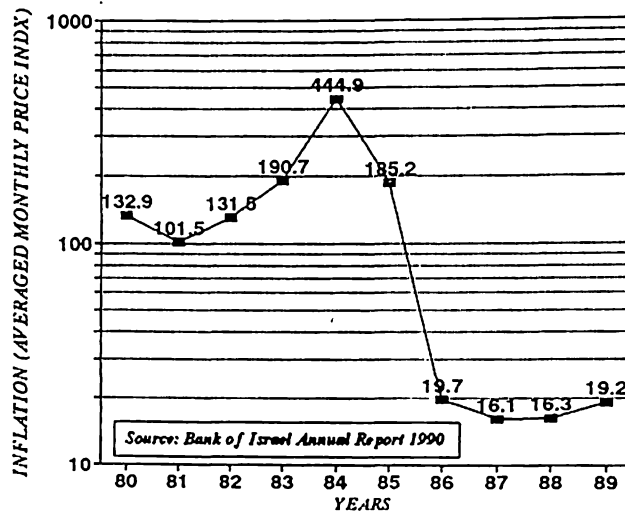
RELEVANT CRISIS STUDIES: A SUMMARY

Two studies assessed the relative impact of endogenous and exogenous factors upon the evolution of the crisis in UKM kibbutzim. The two studies differ quite markedly in their research emphasis though they thoroughly epitomise the crisis by employing the same dependent variable. Sheaffer

(1987) proposed a macro-statistical model in which he investigated, using pooled regression analysis, a relatively large number of variables and their proportional effect on the net interest-bearing debt in 100 kibbutzim between 1983-6. Sheaffer employed the debt as a dependent variable but hypothesised that independent variables other than economic ones will have affected the accumulation of debt. In general, Sheaffer's independent variables included economic (endogenous and exogenous), organisational (mainly gross vocational structure and various investments reflecting, among the rest, decision-making patterns and organisational age), ideological and demographic/organisational factors. Sheaffer managed to explain 41 percent of the variance in the model, bearing in mind that a step-wise regression model would have deleted chiefly the non-economic variables leaving as best predictors the exogenous variables. Indeed such variables as the cost of capital, net profit before depreciation and 1986 as dummy variable symbolising the sky-rocketing interest rates from mid 1985 onward, catered for most of the explained variance.

The Recovery Plan of 1989 used an economic analytical tool and is focusing almost exclusively on the economic scene. Subsequently, it is a far more in-depth analysis that managed to quantitatively evaluate endogenous and exogenous factors affecting also the net interest-bearing debt in all UKM kibbutzim. As indicated, the Recovery Plan refers to

**ANNUAL RATE OF INFLATION
ISRAEL 1980 - 1989**



strictly economic endogenous and exogenous factors. Generally speaking, the authors⁷ conclude that 77 percent in the growth in debt is explained by external factors: the governmental policy and "complicating environmental conditions". The distinction between the two is not entirely clear. However, when talking about government policy, the following variables appear to be salient:

- * Accelerated rate of inflation between 1978-85.
- * The freezing of currency conversion rates.

The underlying explanation for the overwhelming impact of the exogenous factors may be summed up as follows. Under normal circumstances, "the production sector is said to achieve a normative dividend on its assets, corresponding with the rate of interest in the economy in addition to a minimal risk premium. Though the government is not supposed to endorse a policy which will ensure such dividend for either a firm or an industry in the economy, it is its responsibility to bring about conditions which will secure these dividends in the long run". Whereas most of the production sector in Israel obtained a negative dividend on the invested capital, the services sector reaped profits higher than the normative dividend. Provided standards of management in both sectors are similar, it would be plausible to relate the differences in dividends to governmental

⁷ Mr. G. Rosenthal, Chief UKM Economist and Professor Y. Kroll of the Hebrew University's Racanati School of Business Administration.

policies and its impact upon environmental conditions"

(Recovery Plan:27-28). The above rationalisation is further exacerbated by the fact that the dividends on production capital in UKM kibbutzim exceed the corresponding rate of the entire productive sector in Israel (1988). The difference expresses the element of relative economic efficiency in UKM kibbutzim during the crisis (1984/5/6/7/8/).

The endogenous factors, in accordance with the above plan:

- * Inefficient investments in the productive sector of the UKM kibbutzim (amount to approximately 12 percent of total UKM's debt in late 1988).
- * During the crisis (1980-1988) the UKM's working capital increased total debt and explained around 16 percent of the total debt. It is assumed, however, that these investments will bear fruit in the future.
- * The increase of consumer capital for absorption, settlements and building living quarters for children in the parents dwellings accounts for approximately 27 percent of the total UKM's debt at the end of 1988.

The Recovery Plan, despite its major significance as an essential economic analysis, does not deal with a noticeable number of variables other than economic. Also, it seems to ignore the massive regulating and implicating role played by the UKM in terms of its the policies during and prior to the crisis. Notwithstanding, this one is is

unmindful of the fact that the Recovery Plan was aimed primarily at winning economic concessions from the Government and as such it appears to be serving its purpose.

A SUMMARY: THE ECONOMIC SCENE AS REFLECTED BY THE UKM AGGREGATED DATA

The objective of this chapter is to try and analyse the evolution of the various crisis stages using vital economic indices which, unlike profuse verbal rationalisations, are accurate and brief. Whereas all other demonstrations are equally essential for an unbiased exposition and interpretation of the multi-dimensional facets of the current crisis, deemed it is necessary to avail a structured and succinct passage leading into the demographic scene. The economic indicators shown here are used by the kibbutzim and the UKM in the annual Marathons⁸ which, in fact, constitute the economic balance of the past year along with a detailed economic programme and forecast for

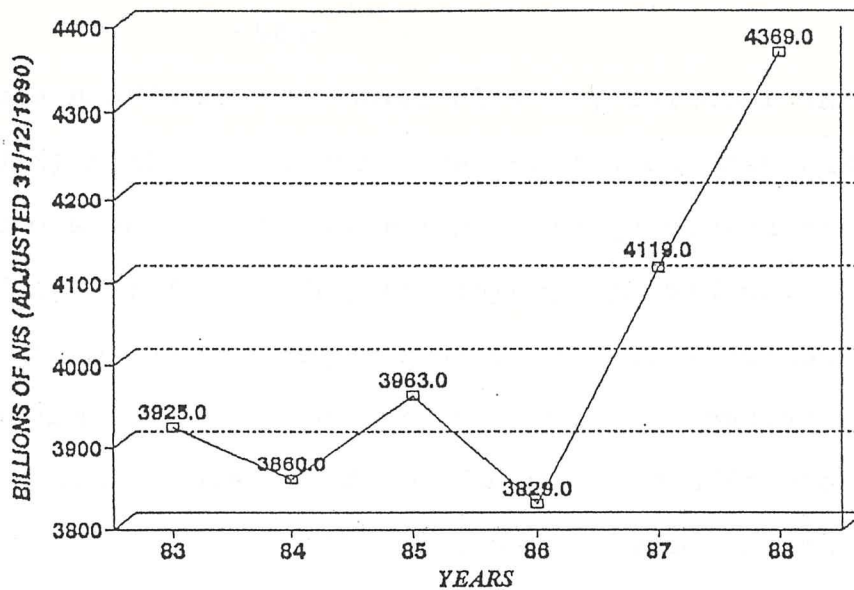
⁸The reasons for this uncommon name are historical in nature. Until 1988 UKM affiliated kibbutzim were obliged to submit a detailed economic forecast based chiefly on previous year's economic results. The programme is predicated upon a structured questionnaire detailing most economic activities. The Marathon's summative data resembles a balance sheet although it was not accepted as the firm's official trial balance or balance sheet. Its major planning objective is to lay before the kibbutz's general assembly detailed economic outlines for ratification. The marathon must receive UKM tacit approval during a conference in which the participants are UKM representatives as well as the kibbutz's elected administration. These conferences lasted long hours of tedious deliberations, hence the name 'Marathon'.

the incoming year. In fact, The Marathons enable one to analyze the break-even point of the firm (kibbutz). This is determined by viewing the extent of the economic activities of the kibbutz (sales, outputs etc.) in which income precisely covers overall expenditures (general operating expenses and variable expenses i.e. raw materials and labour)⁹. Analysis of the break-even point provides the linkage between profitability and the extent of the economic activity, the general operating and variable expenses and the price for a unit of product (Yakir & Veigart, 1982).

Until 1988, Marathons were, practically, trial balances which aimed at establishing whether accounts are generally balanced off. They also provided a general picture of the various economic activities of the kibbutz. This was not the final balance sheet which includes the deduction of depreciation off assets. Therefore it was used, mainly, for internal and UKM's assessment. However, as of 1988, depreciation of approximately 5 percent of the assets has been made obligatory and has, ever since, been included in the Marathons even though the Marathons are not used as the formal loss & profit statement of kibbutzim. In the following graphs, all economic indicators are quoted in NIS adjusted to 31 December 1988¹⁰.

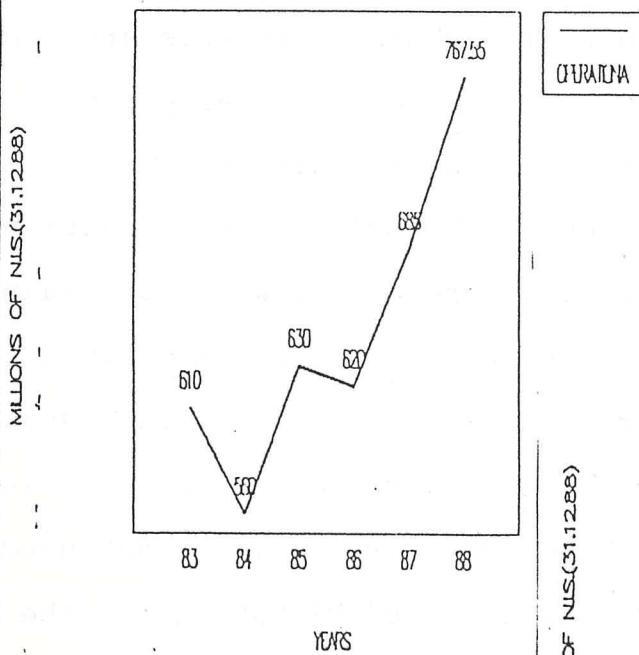
⁹This is the break-even point where income is balanced off by expenditures and profit is zero.

AGGREGATED TURNOVER
UKM: 1983-1988



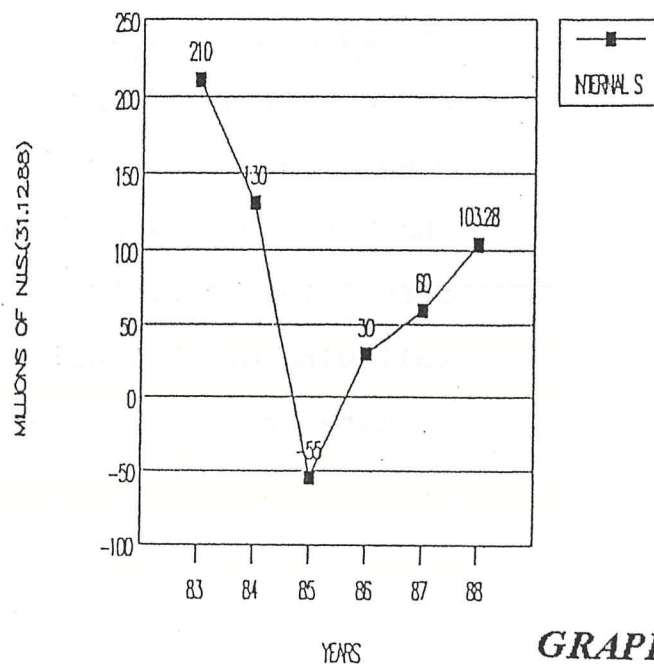
GRAPH 9

AGGREGATED OPERATIONAL SURPLUS
OF UKM KIBBUTZIM 1983-88



GRAPH 10

AGGREGATED INTERNAL SOURCE
OF UKM KIBBUTZIM 1983-88



GRAPH 11

*** Aggregated Turnover (Graph No. 9)**

This indicator expresses the gross economic activity of UKM kibbutzim. It is noted that despite the crisis there was an almost uninterrupted growth in sales other than a stagnation between 1985-6 which, in most other indicators constitute a negative turning point. The average yearly increase in turnover was 5.176 %, with the largest increase of 10.71 % between 1986-7. In all, between 1983-88 there was an increase of 23.4 % in real terms.

*** Aggregated Operational Surplus (Graph No. 10)**

This indicator accounts for total sales (-) general operating expenses. This index is more refined than turnover thus, more indicative of the economic performance. A seasaw pattern is clearly visible until 1986 from which point the average annual increase was 11.265 percent. with an accelerated trend of growth (10.48 percent 1986-7 and 12.05 percent between 1987-8). The precipitous slump between 1983-4 is attributed to the collapse of the share market in 1983 and the ensuing losses incurred by investors.

*** Internal Source (Graph No. 11)**

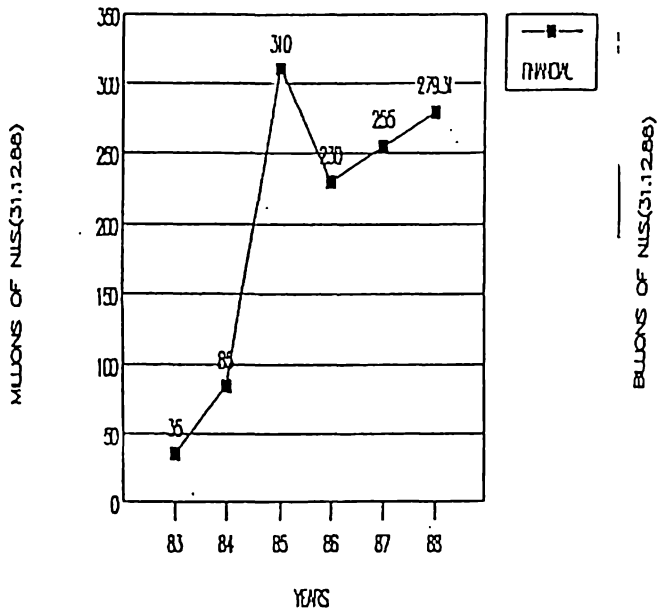
This index accounts for "near profit". This is profit

¹⁰One US dollar was worth 17.5 new Israeli Shekels.

made up of the following components: operational surplus (-) financing expenses (-) income tax (-) total expenses incurred by consumption. Internal source plunged precipitously from 210 million NIS in 1983 to minus 55 million NIS in 1985. From that year onward internal

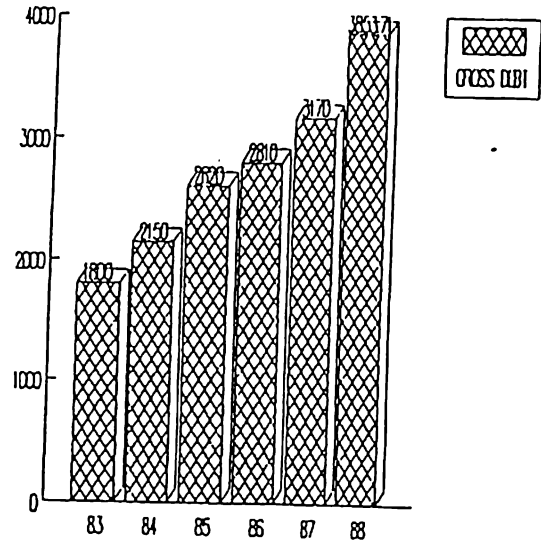
AGGREGATED FINANCIAL EXPENDITURES

OF UKM KIBBUTZIM 1983-88



GROSS DEBT

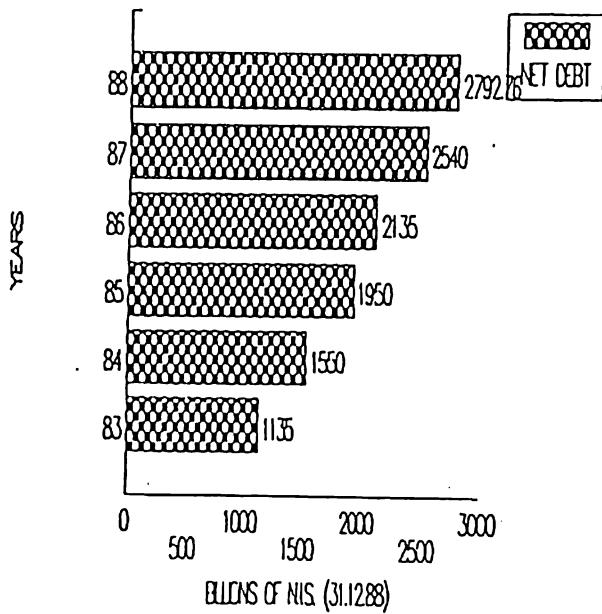
UKM 1983-88



GRAPH 12 d1

NET DEBT

UKM 1983-88



GRAPH 14

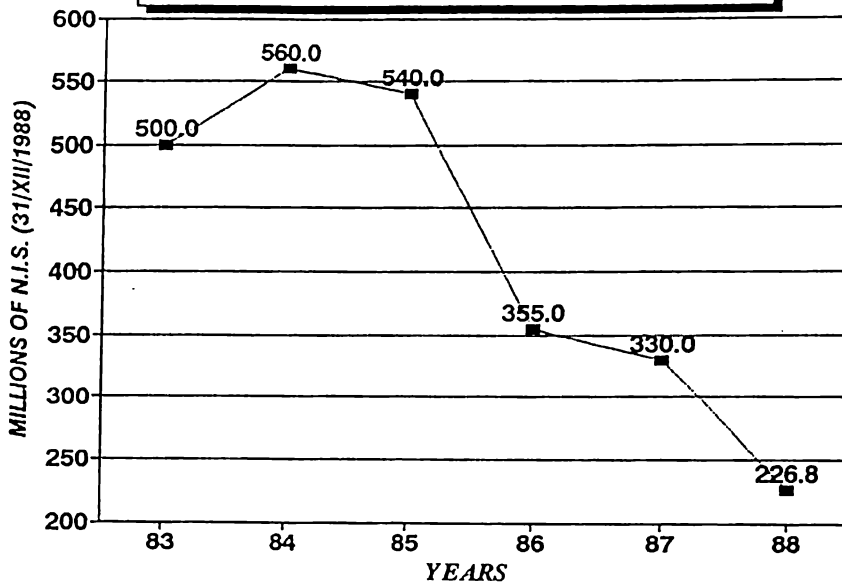
source has climbed steadily though the Recovery Plan notes that in 1988 only twenty two kibbutzim ended up with a **positive** internal source. Naturally, these established kibbutzim accounted for the aggregated positiveness of this index and bearing in mind that only 12.5 percent of the kibbutzim virtually sustain the aggregated internal source (above zero mark), the situation may hardly be described as indicating a turnaround. (as of the end of 1988). Noteworthy is the sheer upswing, though, between 1985-1988 of 188 percent.

* **Financing Expenses (Graph No. 12)** Usually include payments incurred by debts + commissions (-) returns incurred by financial assets. The curve demonstrates a sky-rocketing upswing in these expenses primarily between 1984-5: 785.7 % (!). The steep rise is explained by the "astronomical" interest rates in 1985 which, on the average amounted to 85 % in real terms.

* **Gross Debt (Graph No. 13)** The total debt owed (including financial assets (deposits for superannuation and other short-term deposits). The average annual increase is fairly gradual 16.47 % with the largest increase between 1984-5: 21.86 %.

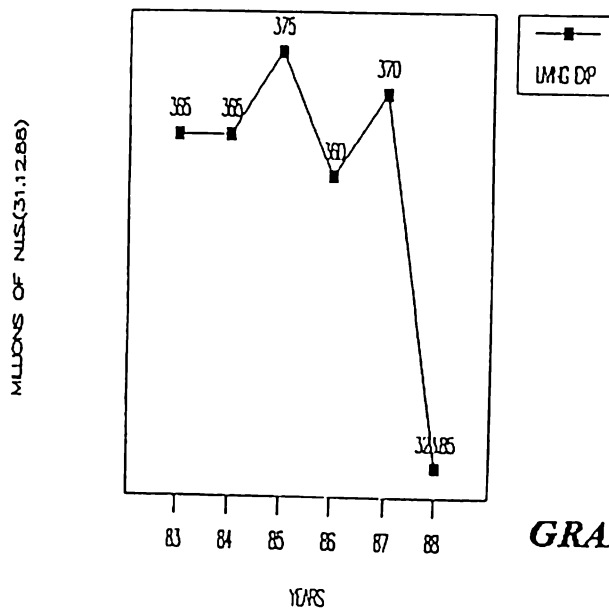
* **Net Debt (Graph No. 14)** Net debt is a more sensitive economic index which is the result of subtracting financial assets from gross debt. It is, therefore, an index which reflects the debt in real terms. The yearly trend reflects a gradual increase of 20.77 percent on the average. The rise between 1983-8 was 146 percent which,

**TOTAL INVESTMENTS - UKM 1983-1988
PRODUCTION AND CONSUMPTION**



GRAPH 15

**AGGREGATED LIVING EXPENDITURES
OF UKM KIBBU'IZIM 1983-88**



GRAPH 16

when compared with the active side of the balance sheet (internal source) provides an unrelenting picture of the grim economic situation.

Two other indices, aggregated living expenses and investments, reflect the worsening economic situation though it is quite noticeable that the two showed no signs of recession before 1984 despite the prevailing crisis atmosphere in that year. Total investments (production and consumption alike) fell (Graph No. 15) from a peak of 560 million NIS in 1984 to 226.8 million NIS in 1988 namely -54.64 %. Living expenses constitute a manipulative component in the kibbutz annual budget. The decline of (Graph No. 16) -13.64 % between 1985-88, mirrors the most 'curtailable' budgetary item.

As theory advises us, the first item to be downsized as a result of an impending crisis or a one that exists already or a lingering organisational decline, would be the one that is the easiest and least costly in terms of implementing a frame-bending policy. This is a typically employed incremental approach which has done less in terms of resorting to: **"painful, discontinuous, system-wide shifts"** (Tushman et.al. p.29). It involved not only the most accessible budgetary item but also the reshuffling through simultaneous shifts in power, structure and controls. Empirical research has shown (Helman et.al.) that in 1987, kibbutz members were **"aware of the situation and know the economic problems of their kibbutz"** (Ibid p.31).

Further, a statistically significant association ($r = .66$) was found between the objective economic classification as determined by UKM Economic Division and members' replies. The authors found that "the guideline in most kibbutzim was to curtail a number of items considered welfare-oriented or extravagant. A general proclivity was found to suspend overseas trips, to reduce annual vacation, to cut back cash allowances and to defer part of investments in consumption".

Indeed, irrespective of a kibbutz's known proclivity for ascetism (Talmon, 1970), kibbutzniks, it appears, are equally liable to hit in the purse. However, under conditions of organisational decline and economic austerity, a large number of kibbutzim (The Recovery Plan, 1989) resorting to consume the lions' share of long-term deposits aimed at maintaining global super-annuation securities along with other financial assets. This was carried out in order to stave off the steep upswing in interest rates and resulting mounting debts. For the first time ever, kibbutzniks became distrustful of their long-term social security arrangements. Consequently, these legal breaches of member's rights have been rectified somewhat by

¹¹This manual is comprised of most items considered restructuring "The Cooperative Societies Amendments". This document is still regarded to be the sole document that both members and the kibbutzim must abide by in court, arbitration etc. The document is constantly under revision.

Even though Levine's proposition (1978:317) "...to maintain order and capacity when undergoing decline, organizations need long-term contracts with clauses that make pensions non-portable if broken at the employee's discretion", applies to not-for-profit organisations, it describes a prevalent conduct of managements under economic duress. The kibbutz has not, despite its unique voluntary and inclusive nature, behaved very differently. Moreover, kibbutzniks have had far less interest, let alone awareness of how their social security arrangements are administered and how kibbutz savings are being handled. This deficiency may be explained by the cut-off between members functioning as kibbutz members and the conduct of their financial and other "existence" matters. One of the known advantages of kibbutz life has been the severance of members from the day to day hassles pertaining to their sustenance. Awareness of these blemishes has been outlandishly raised lately, yet the replenishment of kibbutzim's financial reserves may take quite a while and in the meantime the kibbutz continues to endure a severe demographic haemorrhage.

THE DEMOGRAPHIC SCENE

General

Many kibbutzim became demographically heterogeneous and inter-generational. Owing to a steady economic growth, increasing financial reserves (Helman, 1982b:398) and

increased economic interaction with the environment, standards of living improved considerably. This trend continued almost uninterruptedly until mid 1984 when, for the first time, awareness of the looming crisis seemed to have pervaded most of UKM kibbutzim. The most visible indication of this comprehension was the marginal drop in living expenditures as reflected by the macro picture. Until 1985 there was a steady rise in this parameter when in 1986 the figure dropped from 375 million NIS (1985) (adjusted to 31/12/87) to 360 million in 1986. The other negative "knee" in the curve relates to a sudden increase in the number of members leaving UKM from 1685 in 1985 to 2354 in 1986. The two figures, along with others, reflect also two significant points of inflection from which one can securely perceive the general situation as an all-encompassing predicament or simply put, crisis.

Demographic analysis of UKM's population is essential primarily because of the increased susceptibility of this organisational facet to both endogenous processes and the ever increasing exposure to environmental influences. Not until the extent and the all-encompassing nature of the latest crisis became apparent, researchers and laymen alike tended to assess the general state of a kibbutz, employing either of the two traditional criteria; the state of the economy and the 'social situation'. Quite naturally, the economic situation, based on quantifiable gauges, seems fairly effortlessly classified. However, the social fabric

of a given kibbutz is not only more intricate but it entails a great deal of qualitative criteria which, at times, hardly lend themselves to a simple operationalisation. Subsequently, they retain a fair amount of empirically-inaccessible details. As the aim of this thesis is not to embark on a sociological study, nor to pretend to use rigorous sociological methodology, strictly social measures will not be included in this analysis. This analysis will portray general demographic trends which will, at this stage, converge on aggregates of various UKM demographic data for the years 1978-1989. To a large extent the statistical study of available raw data are provided chiefly by the UKM's Department of Information & Statistics.

Noteworthy is the fact that some of the analyses henceforth will only cater for the years 1982-89 since the UKM came into being only in 1980 and data prior to 1982 is sketchy and unreliable. Nevertheless, most data pertaining to absorption and emigration, combine statistics of both formerly Ichud and Meuchad kibbutzim. The focus will be on three major longitudinal demographic attributes (source of the kibbutz population, age groupings, level of education) as reflected by two trends which, combined, constitute a demographic balance. These are: absorption and emigration trends.

A skeletal model detailing the objectives of the discussion is provided for additional simplification:

TREND	DEMOGRAPHIC ATTRIBUTE		
ABSORPTION	BY SOURCE	BY EDUCATIONAL LEVEL	BY AGE
EMIGRATION	BY SOURCE	BY EDUCATIONAL LEVEL	BY AGE

It should also be pointed out that this demographic analysis is intended not only for investigating purely population trends and characteristics within UKM but also for illustrating the mutuality between various trends and both the organisational decline and crisis. In general, it is assumed that organisational decline processes have a direct bearing upon demographic stability, demographic make-up, demographic size and other qualitative aspects of the UKM population. It is argued that the deteriorating economic situation from 1984 onwards, has not only affected elements of demographic size but has accelerated a qualitative demographic haemorrhage. This, is an organisational phenomenon which is dwelled upon quite extensively in the relevant literature but has not, as yet, been supported empirically. This part will employ no statistical models for the substantiation of hypotheses which are part and follow-up of the research questions. However, in order to support or refute some earlier suppositions to statistical methodology other than the ordinary graphical displays and descriptive statistics will be used. All of the above will, necessarily, reflect the aggregated picture.

The Kibbutz Population: Main Characteristics

Several studies, (Leviathan, 1984:72; Beth-Or 1984:1), indicate that the kibbutz population reflects, generally speaking, a great deal of stability. Leviathan relates to the alleged stable composition of kibbutz population, asserting decisively that: "turnover and emigration rates are very low, especially for individuals over 30 years of age". Beth-Or was more reserved, dwelling on the transitory nature of the same population. Irrespective of the different emphasis, approximately a quarter of the population is transient, composed mainly of various youth groups from both Israel and overseas, hired labourers etc. However significant and intriguing this formation may be, it has no theoretical bearing associating it with either social or economic instability.

Table No. 15*

YEAR	PERMANENT POPULATION	TRANSIENT POPULATION	PERCENT TRANSIENT	TOTAL POP.	% ANNUAL CHANGE
=					
1980	62467	11909	16.02%	74376	(Permanent)
1981	64531	12371	16.08%	76902	3.39% -> 81-
2 1982	66437	12769	16.12%	79206	3.40% ->

Table No. 15*

YEAR	PERMANENT POPULATION	TRANSIENT POPULATION	PERCENT TRANSIENT	TOTAL POP.	% ANNUAL CHANGE
1980	62467	11909	16.02%	74376	(Permanent)
1981	64531	12371	16.08%	76902	3.39%→ 81-2
1982	66437	12769	16.12%	79206	3.40%→ 82-3
1983	68185	13716	16.74%	81901	2.55%→ 83-4
1984	70589	13401	15.95%	83990	2.48%→ 84-5
1985	72820	13257	15.40%	86077	-0.86%→ 85-6
1986	73194	12135	14.22%	85329	-1.44%→ 86-7
1987	72439	11640	13.84%	84007	-1.65%→ 87-8
1988	73841	8777	10.62%	82618	-1.73%→ 88-9
1989	70811	10376	12.78%	81187	-0.25%→89-90
1990	72450	8253	11.70%	80982	0.05%→90-91
1991	69548	8408	12 10%	81028	-5.58%→85-91 -5.58%→85-91

30 June 1990:

* Source: UKM Department of Information & Statistics
Annual Reports.

From 31 December 85 to 30 June 89 a decrease of 4.24 percent
in the total population.

The following demographic characteristics seemed to be
salient in the kibbutz movement until the mid 1970s

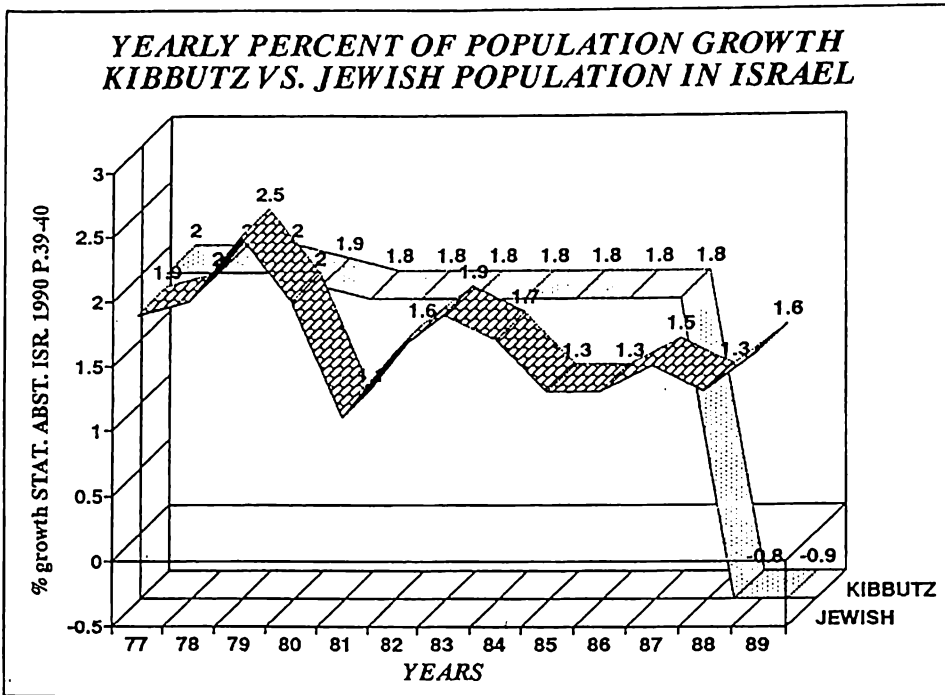
(Shepher, 1977):

- * A normal gender structure.
- * Stable population.
- * A relatively young population. Meron (1988:11), notes that between 1983-87, the median kibbutz population decreased from 25.7 to 25.6 percent. Indeed it is noted that age bracket 15-24 accounted for 19.1 percent of the total kibbutz population as opposed to the Jewish population 16.2 percent. The median kibbutz age was in 1987 25.6 vs. Jewish median 27.8.
- * High marriage ratio.
- * Birth ratios higher than the average Israeli populations'.¹²¹³ As to births rates, the decrease as of 1985 indicates a reduction in the net fertility rate which appears to be linked with the growing exodus from the kibbutz.

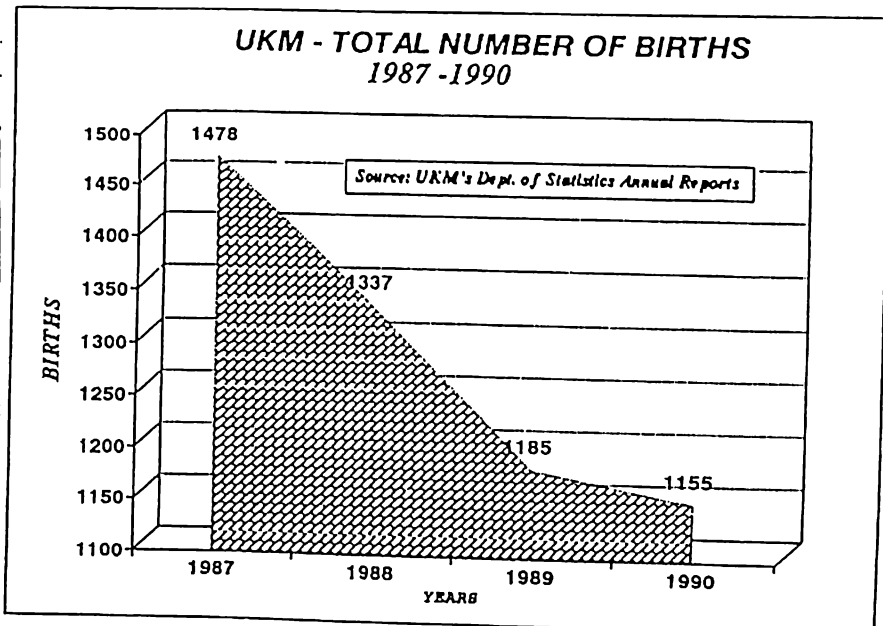
Table No. 16

¹²A relatively high natural growth.

¹³The general fertility rate is per 1000 women aged 15-49. The total fertility rate represents the average number of children a woman may bear during her lifetime. They are obtained by summing up specific birth rates by age of mother in the surveyed year. (**Statistical Abstract of Israel, 1990, No. 41, Central Bureau of Statistics:23**)



GRAPH 18



GRAPH 19

NUMBER OF BIRTHS IN¹⁴
THE KIBBUTZ MOVEMENT

1981		2545		81-82		1.49%
1982		2583		82-83		4.76%
1983		2706		83-84		2.10%
1984		2763		84-85		7.67%
1985		2975		85-86		-3.02%
1986		2885		86-87		-10.53%
1987		2581		87-88		-7.82%
1988		2379		88-89		-9.03%
1989		2164		85-89		-27.26%

* High natural growth.

Shepher's finding seems to be persisting through 1985.

Meron (Ibid) quoting Israel's Statistical Abstracts provides data which indicate both higher kibbutz natural growth as compared with the Jewish's and a stagnation in this parameter as of 1980.

Graph No. 18

The following graph depicts a fairly steady decrease in the total number of births in UKM kibbutzim in the total number of births in UKM kibbutzim between 1987 -1990.

Graph No. 19

¹⁴Source: **Statistical Abstracts of Israel** for corresponding years (vital statistics tables) 1980/1/2/3/4/5/6/7/8/90.

Meron¹⁵ provides no reasons for the consistent decline in birth rates yet it is evident that as age groups 22- 35 constitute the bulk of leavers, the absolute number of couples in the fertility age is on a downturn hence, less births.

Sources of UKM Population

In general, the UKM population is composed of six major sources. These will be discussed in the following paragraphs:

1. Kibbutz-Born Members

Kibbutz born members are the demographic mainstay of the adult population and make-up just over one third of the total adult population (35 percent in Mid 1989). As the kibbutz became an inter-generational society from the mid 1960s, the other sources of demographic growth dwindled and showed a steady trend from the mid 1950s. The kibbutz-born component grew gradually and steadily and stabilised around the 30 percent bracket of the total adult population. Shapira (1987) noted a number of characteristics other than the multi-generational nature of the kibbutz. The end to European immigration following the Holocaust and the cessa-

¹⁵Meron, S., UKM POPULATION, Yad Tabenkin, 20/6/91, Mimeo, (In Hebrew).

tion of Israeli groups originated in the Palmach¹⁶ following the War of Liberation. This led, as indicated, to a demographic stagnation between the early 1950s to the mid 1960s. In all, in 1988 35 percent of the total population comprised of kibbutz-born members whereas in 1989 the figure was 36.3 percent of the total. Furthermore, the older the kibbutz the higher is the kibbutz-born component.

Table No. 17

KIBBUTZ EST. BETWEEN	% KIBBUTZ BORN (of total adult pop.) ¹⁷
1910-35	29.8
1936-49	53.1
1950-66	10.4
1967-89	6.7

2. Israeli Absorption

This group accounts for 23 percent of the total adult population in mid 1989 and is made up of adults who joined kibbutzim by way of direct absorption or marriage.

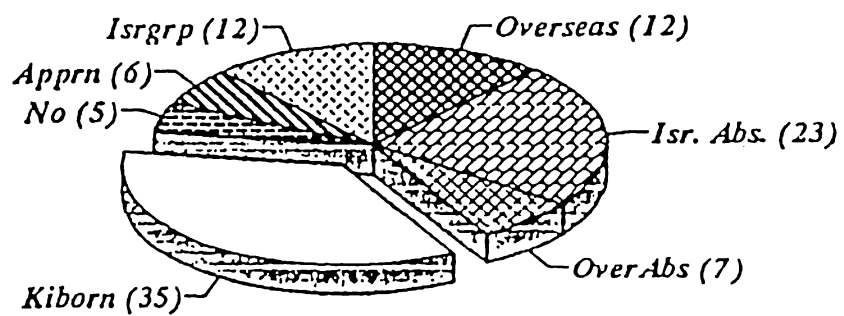
3. Overseas groups

The group is comprised of graduates of Zionist youth movements in the Diaspora who joined kibbutzim primarily

¹⁶Palmach Hebrew for 'Crack Companies'. These outfits constituted the mainstay of the provisional military prior to the establishment of the Israeli Defence Forces.

¹⁷Source: UKM Department of Information & Statistics' annual reports

*Percent of Population Subgroups
Of The Total UKM Pop. Mid 1989*



Source: UKM's Dept. of Statistics Quarterly releases

GRAPH 20

until the War of Independence but also with smaller numbers thereafter.

4. Israeli Groups

The group consists of graduates of Israeli youth movements affiliated to the UKM. Almost all young kibbutzim and most of those established from 1949 onwards.

5. "Trainees"

This segment of adult UKM population (6%) is comprised of people who were educated in kibbutzim as students of organised Youth Aliyah groups. The following pie graph depicts UKM's adult population according to source in 1988.

Graph No. 20

It is readily comprehensible that most studies conducted prior to the crisis reflect and expound upon demographic processes which, largely, indicate both stability and growth. According to the statistics provided here, a gradual slow in the growth trend in the total population as of 1983 is noted. Between 1982-3 there was an increase of 3.4 percent in population and the growth trend, despite a moderate decrease, is still on the upswing. The growth trend continues, though a slower pace, until 1985 when for the first time an absolute decrease of .86 percent is observed. The absolute negative trend persists gradually through June 1989 with data for mid year only. Noteworthy are the actual figures depicting an evident "knee" in the overall population curve 73194 in 1986 down to 73498 in

June 1989. Based on previous observations, it is quite apparent that a certain occurrence flattened the curve causing a **down-hill** trend as of 1986. It should be borne in mind that a decrease in the overall population does not necessarily indicate, holding all other parameters constant, a significant or an all-embracing decline. In order for this trend to be further validated one ought to have a more in-depth inspection of other demographic segments. Generally speaking though, a contraction trend may indicate some instability. Moreover, a decline in transient population may demonstrate either a decline in the attractiveness of the kibbutz for overseas as well as Israeli groups and singles or an attempt to become more cost-effective in terms of reducing "maintenance days" and curtailing superfluous labour inputs. Manpower overflow typifies the kibbutz's attempts to compensate for problems arising from imbalanced work schedule (Merry, 1988). A sketchy inference from the above trends is expressed by Elad (1988) who points out that: **"the real surprise lies, perhaps, in the relatively reduced rate of population loss"**. Elad, however, fails to discern inner propensities for which the overall decline is but a mere "cover up".

The Demographic "Hard Core"

While fluctuations in the overall population do, partially, signify a decline or growth trends and the fact that there has been a moderate decrease in the UKM population does

imply a certain disquiet. One has to aim at the more permanent demographic segment in order to more accurately distinguish a down-hill trend.

As far as the kibbutz population is concerned, the hard core is made up of the members community. To become a member one must first undergo a temporary "guestship" so as to allow for a mutual "get to know you" duration of approximately three months. He/she then must undergo a period of candidacy which, lasts about a year. Membership being purely voluntary, those opting for this unique and socially demanding climate, have more than the ordinary attachment and organisational commitment required in other "total organisations" (Niv, 1980). Leviathan et.al. (1977) dwelled on commitment and adherence to kibbutz ideology and their impact on retention from and attraction to the kibbutz among kibbutz-born members.

Since the period relevant to our discussion revolves around 1984-9, the dynamic composition of adult age groups between

1985-88 has been analyzed (Table No. 18)

YEAR	21-	31-39	40-	50-	61+	TOTAL
	24		49	59		

1985	6632	10578	7113	4115	7580	40821
1986	6442	10644	7609	4310	8722	42298
1987	6007	10285	8181	4390	9056	42340
1988	5640	9867	7275	4539	9296	40857

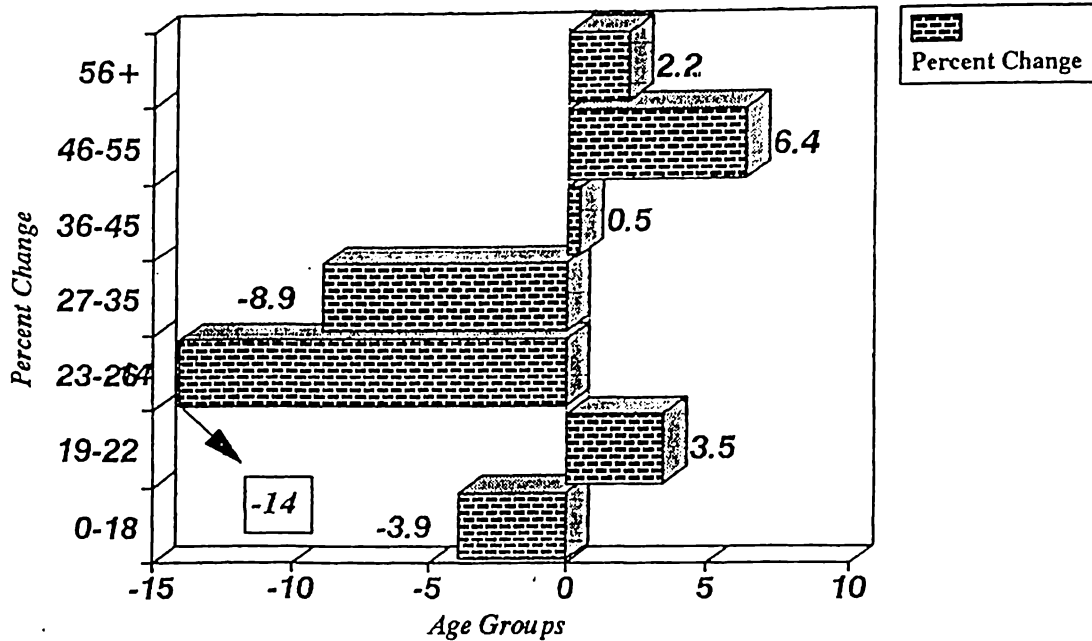
The following salient trends are noted:

- * An increase in the older age group (61+) (18 to 23 percent of total adult population).
- * A relatively moderate decrease in age group 31-39 (26 to 24 percent).
- * A decrease in 25-30 age group, (17 to 14 percent).
- * A decrease in 21-24 age group, (13 to 10 percent).

Turning to rates of annual change of adult age groups between 1985-88, the following facts seem to surface:

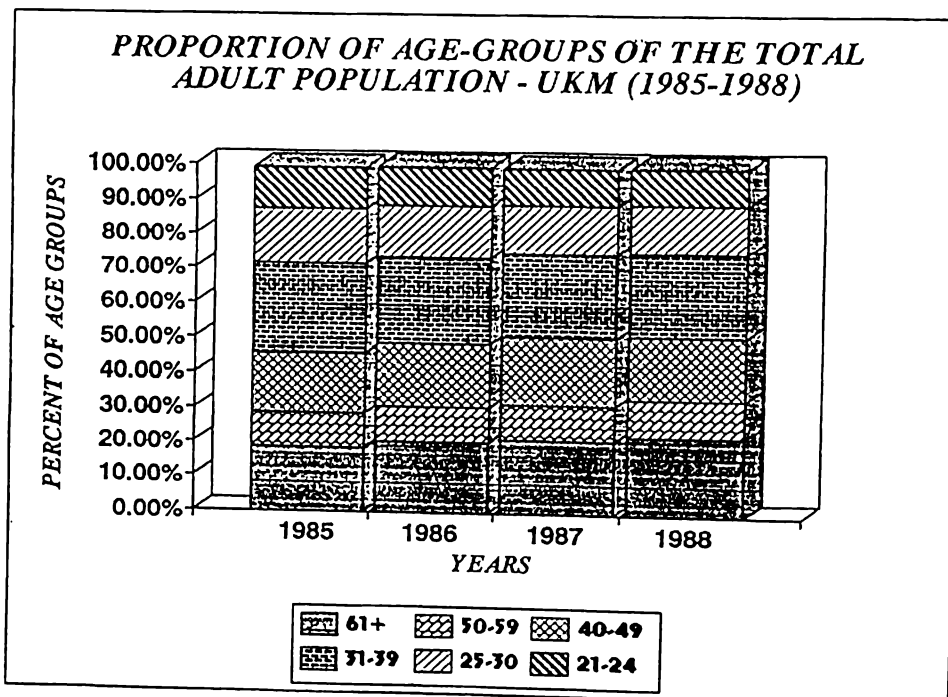
- * Age group 61+; an increase of 15 percent between 1985-6.
- * Age group 61+; an increase of 22.63 percent between 1985-88
- * Age group 21-24; a decrease of 5.07 percent between 1985-6.
- * Age group 25-30; an decrease of 14.95 between 1985-88.
- * Age group 40-49; a decrease of 11.07 percent between 1987- 88.
- * Age group 31-39; a decrease of 4.06 percent between 1987-8.
- * Age group 31-39; a decrease of 6.72 percent between 1985-

*Rate of Change: UKM Age Groups
31 December 1987 To 30 June 1989*



Source: UKM Dept. of Statistics, Quarterly Releases

GRAPH 21



GRAPH 22

8.

- * Age group 21-24; a decrease of 4.02 percent between 1987-88.

Graph No. 21

Based on later data, the distribution of a different division of age groups between 31 December 87 and 30 June 89 will be analyzed.

- * A decrease in age group 0-18. (3.9 percent).
- * A steady 36-45 age group.
- * A decrease of over a thousand males and females aged 27-35. (8.9).
- * A steady decrease of 23-26 age group. (14 percent).
- * A slight increase of 46-55 age group. (6.4 percent).
- * Further increase in age group 56+ (2.2 percent).

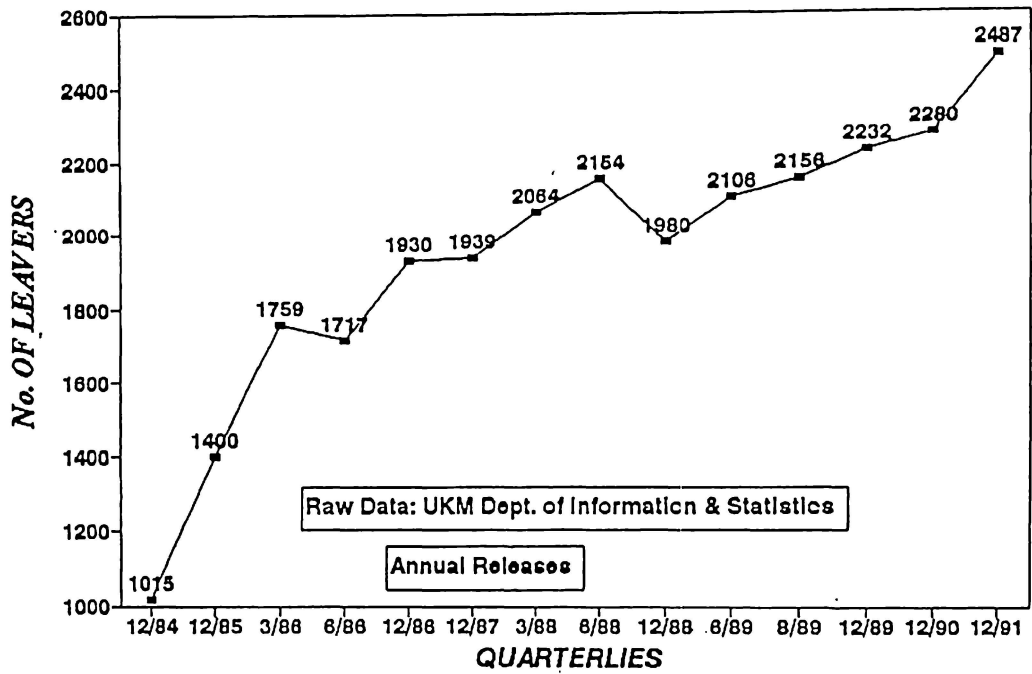
Graph No. 21

To sum up, a decrease is noted in the younger age groups and an increase in the older ones. This finding is already a step further from the basic down-hill indications vis a vis the entire population.

THE LEAVE OF ABSENCE SYNDROME

Leave of absence has become a widespread practice amongst kibbutz-born and other youngsters chiefly following their compulsory service in the IDF. Generally speaking, there

**TOTAL No. OF MEMBERS & CANDIDATES
ON LONG LEAVE OF ABSENCE**



GRAPH 23

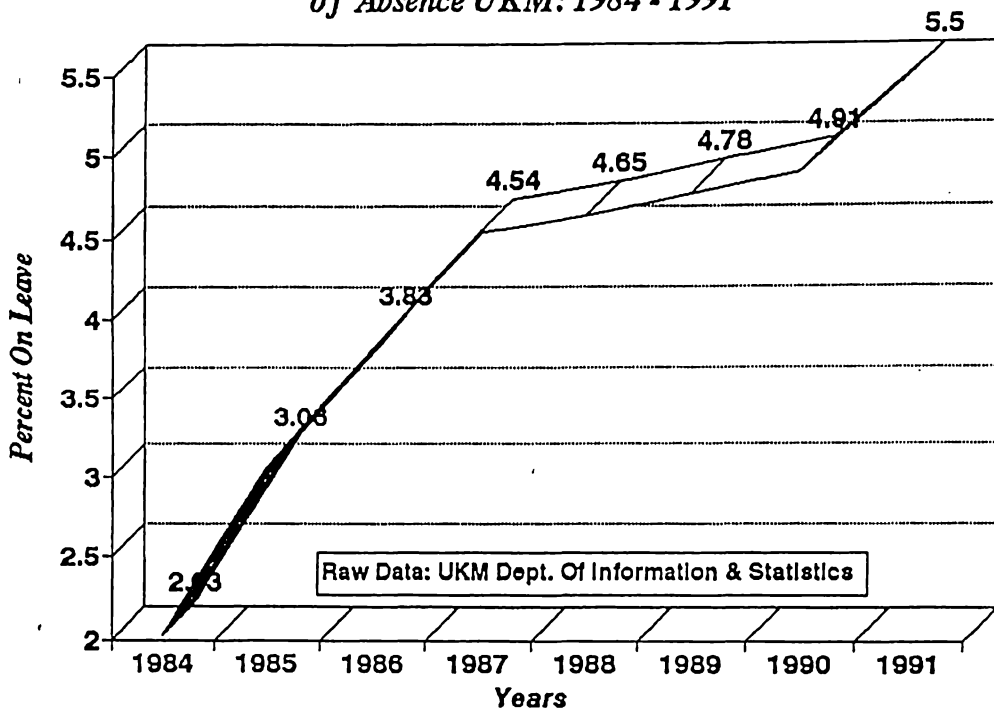
are various arrangements according to which these youngsters take a year or more of leave. Membership is not rescinded throughout the leave. No studies have been ,so far, conducted to investigate the phenomenon but the following assumptions seem to reflect the prevailing norms:

- * Most of the absentees are kibbutz-born members following their military service.
- * Leave of absence lasts a year or more.
- * The main reasons appear to be linked with the lengthy service in the military, the eagerness "to see the world" the eagerness to experience different life styles prior to "settling in", to be "in" and others. Israel geopolitical isolation should be noted here.
- * Leave of Absence and exodus from the kibbutz are closely associated.
- * There have been growing indications, over the last few years as to the permeation of this phenomenon into older age groups which include members within the 22-30 age group. Moreover, leave of absence may recur primarily amongst the younger absentees. The subsequent graphs depict various facts pertinent to the leave of absence:

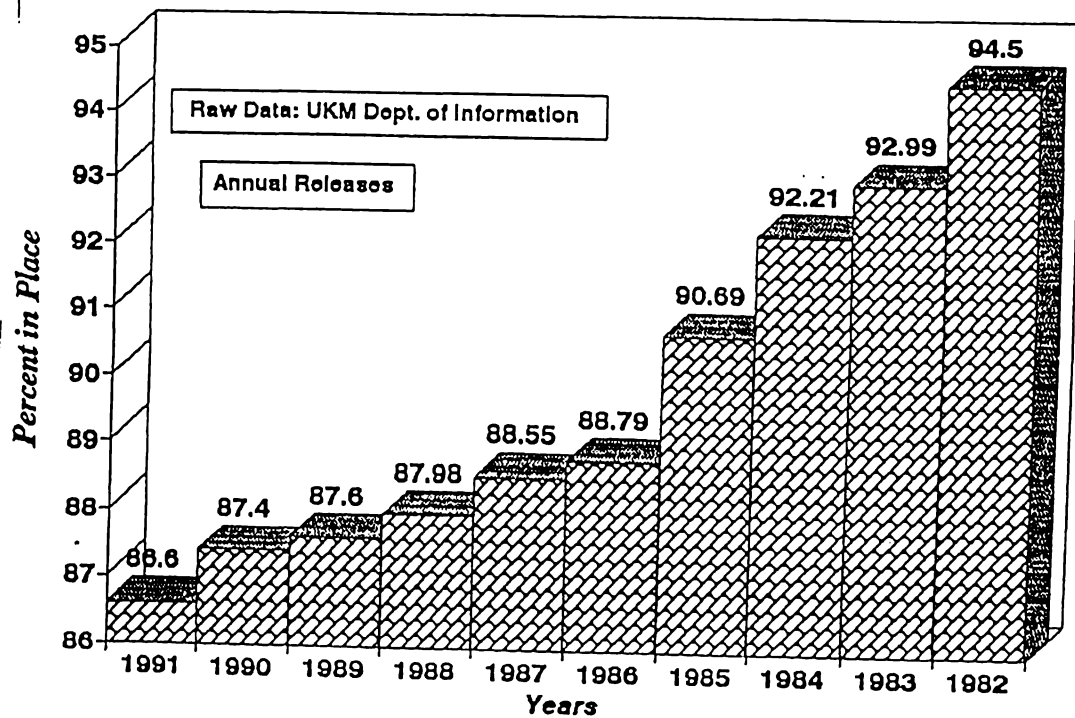
Graph No. 23, displays the total number of members on long leave of absence in different annual quarters from 31 December 83 to 31 December 89. Overall, there was an increase of 120 percent between the two dates whereas the change in members and candidates population between the two

GRAPH 24

Percent Members & Candidates on Leave of Absence UKM: 1984 - 1991



% of Members & Candidates in-Place of Total Mem. & Cand. UKM 1982-1991



GRAPH 25

dates was a mere 1.75 percent (42065 to 42801).

Graph No. 24 displays the percentage of members on leave of the total population of UKM members. The increase is rather noticeable, from 2.32 in 1984 to 4.5 percent for the nine months of 1989.

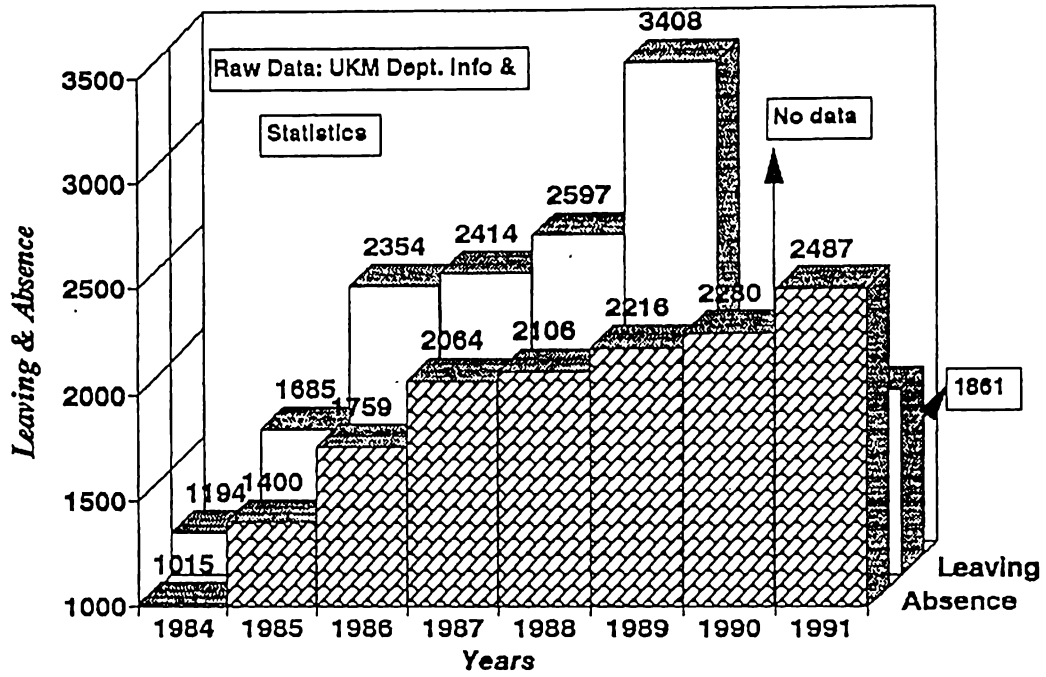
The following graph (**No. 25**) displays the decreasing number of members and candidates in place from 1982 to 1988. This figure is essential mainly in terms of the actual number of permanent members who:

- * are not in the compulsory service.
- * are not on long leave of absence.
- * are not on any overseas assignments.

Of the three categories only the second is numerically significant. The number of kibbutz-born and others serving in the military is basically constant other than a slight annual increase. The third category is also numerically insignificant. The importance of this specific measure lies in its being the actual demographic hard core. Mostly however, the measure used to denote the total members and candidates, relates not to members and candidates in place.

Intuitively, one may interpret the substantial decrease from 1982 (94.5 percent) to 1988 (88 percent) as reflecting

*Total No. on Long Leave of Absence
Versus Leavers: UKM 1984 - 1991*



GRAPH 26

Leviathan et.al.'s attrition vs. attraction phenomenon. On the one hand there is an increasingly growing number of members on leave of absence, yet this pattern does not account for a total exit. At this stage the indication is there and further investigation is required in order to ascribe the growing number of absentees to the evolving crisis.

It would be instructive to discover whether there is a similar tendency between the actual leavers and the absentees. In 1984 there were 2209 leavers and absentees of whom 46 percent were absentees and the rest leavers. In 1988, 44.8 percent were on leave and the rest leavers.

Graph No. 26 exhibits both absolute number of leavers and the number of those on long leave of absence. This graph sums up the part dealing with the "absentees" through linkage to the more general part dealing with members leaving the kibbutz.

An intermediate and partial conclusion reflects a population which gradually depreciates in terms of:

- * An absolute and gradual depletion in the entire population.
- * Partial evidences as to a gradual decrease in younger adult age groups.
- * Partial evidences as to the relative increase in older age groups (55+).
- * a steady increase in the number of members on long leave

of absence.

EXODUS - SYMPTOMS

1. Definitions

The term 'exodus' entails a number of connotations, some of which are incompatible with the precise meaning attributed to exodus or leaving the kibbutz in this study. From a linguistic point of view, there appears to be a large number of synonymous words such as to resettle, abandon, leave, migrate, move and relocate. None of these seem to encompass and accurately translate the Hebrew word "Aziva" which, literally means departing from or permanently leaving.

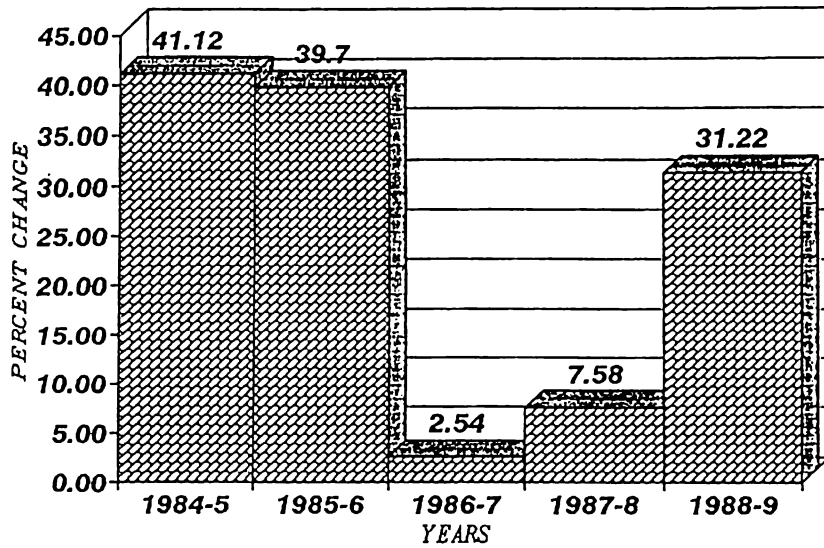
Moreover, the kibbutz organisational culture attributes a different meaning to the social and perceptual connotations which are more heavily laden with emotional subtleties. Being a relatively intimate community, the act of Aziva manifested and imbued profound emotional consequences such as desertion, escape or defection from the collective enterprise which involves more than a mundane organisational membership or social belonging. This was the case primarily until the substantial increase in the rate of Aziva from 1983 onwards. Based on current moods as mirrored by haphazard documentation in the kibbutz's voluminous literature (Bashan, 1989; Gavron, 1989), it seems as if, of late, Aziva's aftermath leaves fewer harsh

feelings and sense of being deserted on the part of the remaining ones. This, however needs to be appropriately studied and is, largely, a matter for sociologists as well as psychologists to deal with. In this study the term "leavers" will be used for those leaving the kibbutz. Interchangeably, the term exodus or emigration will be used to denote the phenomenon at large. Necessary reference will be applied whenever the discussion will revolve around real emigration, namely, leaving the kibbutz and Israel.

Other than Leviathan et.al., few studies focused on Aziva. Theirs is a specific and in-depth analysis of the reasons for attrition of kibbutz-born members. They, basically bear upon psychological theories of attraction-rejection or pull-push formulae for staying or leaving. They found that the major factor differentiating kibbutzim facing low and high attrition rates has to do with the kibbutz being an ideologically imbued community. Within the kibbutz the main factors determining the rate of attrition stem from satisfaction or dissatisfaction of various needs. It is argued that the reason for the very few studies dealing with Aziva are:

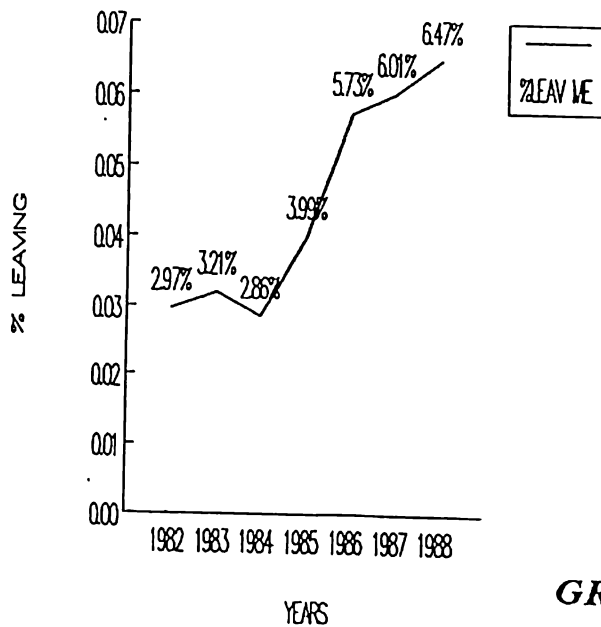
- * the rarity and confidentiality of relevant data.
- * the special sensitivity attributed to the topic.
- * emigration being relatively steady until 1983. i.e., the annual rates were not uncharacteristic of a normal demographic balance.

RATE OF ANNUAL CHANGE
LEAVING MEMBERS & CANDIDATES



GRAPH 27

RATE OF ANNUAL EMIGRATION OF
MEMBERS & CANDIDATES IN PLACE 1982-88



GRAPH 28

This study will not seek to explore the underlying sociopsychological reasons for the increased attrition but will focus on the macro level in an attempt to diagnose and measure the interrelatedness between the economic predicaments and kibbutz negative demographic trends. A similar study was conducted by Sheaffer (1989), who investigated the macro picture as reflected by the dynamic and reciprocal nature of the interrelation between a set of economic and demographic variables. Sheaffer found a partially causal linkage between the deteriorating economic situation and the increased demographic attrition in 160 UKM kibbutzim. Other significant predictors of an accelerated Aziva are emigration in t-1 and the liability of newness. That is, the younger the kibbutz the more likely it is to demonstrate increased demographic attrition, and subsequently a self-imposing vicious circle involving further worsening of economic conditions and rapidly dwindling human resources. The graph showing the absolute number of leavers speaks for itself. It is noted, however, that the trend was rather even until 1984 when the curve took a steep turn and refracted sharply. The essential distinction between members and candidates in place and the total number of that category as reflected by rates of annual emigration is provided in **graphs 27 and 28** respectively.

The first graph involves the annual rate of emigration calculated from the total members and candidates. The

second rate was calculated from members and candidates in place, i.e., the figure is more "refined" as it excludes those categories which do not, virtually, live and work on the kibbutz. As expected, the pattern is almost identical with the point of refraction inflection being between 1984-5.

The rates shown are somewhat "crude" and reflect a general volume. An interesting graphical display shows the rate of annual change of Aziva. Whereas between 1983-4 there was an actual decline in the number of leavers, the annual rate shot up to just over 33 percent between 1984-5 and increased by 58 percent between 1985-6. Again a severe jolt between 1984-86 and then a more steady pattern with only a minor change between 1987-8 (5.6 percent) is identified.

DEMOGRAPHIC ATTRITION BY ECONOMIC CLASSIFICATION OF KIBBUTZIM

1. General: Definitions & Criteria

Late in 1985, the severity of the economic situation became obvious to UKM economic decision makers following the economic results reflected by the annual economic Marathons. Consequently a decision was made to subdivide the kibbutzim in accordance with various economic indices. At that stage, only passing attention was ascribed to the concrete impact of the economic collapse upon social and

demographic factors. Subsequently, economic performance parameters¹⁸ were employed as a basis for the new economic classification of all UKM kibbutzim. In principle, this economic categorisation was undertaken for the following reasons:

- * Assortment of kibbutzim based on a more accurate criteria for the allocation of movemental financial assistance.
- * Facilitation of centrally-regulated economic consultancy by way of assigning economic consultants based not only on a regional-geographic footing but also on the actual economic performance of kibbutzim¹⁹.
- * Instituting more distinct criteria for a possible governmental bail-out.

The economic criteria for the subdivision of UKM kibbutzim were:

Annual Recovery Capacity = Total Kibbutz's Outputs deductible by:

1. *Productive inputs*
2. *Interest for working capital*
3. *Income tax instalments*
4. *Current consumption*
5. *Consumption & productive*

¹⁸The economic results of 1985 were used as basic classification criteria.

amortisation

Additional criteria were the General Recovery Capacity; (present value of annual recovery capacity) and Equity; (economic i.e. owners capital including: various funds, allowances, shares capital and undistributed profits) General recovery capacity deducted by debt which is not serving recovery capital.

The actual formula for calculating recovery capacity, based on the above:

RC = operational surplus (-) income-tax (-) maintenance expenditures (-) annual interest (-) depreciation (x) 9.83 {capital recovery coefficient for 20 years, 8 percent interest}. Quite naturally a kibbutz can demonstrate a **surplus** of recovery capacity but if interest payments exceed operational surplus, then, obviously, we speak of a **negative recovery capacity**. For example, in 1986 124 kibbutzim had a negative recovery capacity (71 percent of UKM kibbutzim). The actual subdivision of UKM into economic sub-groups took place in early 1986. The economic performance as reflected by the Marathon results for 1985, demonstrates a widening gap between economically distressed kibbutzim and the more affluent ones.

The economic classification created the following categories:

¹⁹The UKM provided kibbutzim with a close consultancy or coaching undertaken by experienced economists. This consultancy operation was based on a geographical dispersion of the kibbutzim irrespective of the actual economic performance of the 'consulted' kibbutz.

Young kibbutzim; These are approximately 30 kibbutzim mostly established from the mid 1960s onwards. These kibbutzim were classified in accordance with their age rather than their economic performance since they were entitled to Jewish Agency's economic assistance. Young kibbutzim enjoy a comprehensive economic assistance until such time that they become economically independent. These settlements are established as a common venture by three organisations:

1. **UKM;** the settling body which caters for the training of settlers, provides close economic, organisational and social consultancy by way of assigning experienced and skilled kibbutz 'guides'. Moreover, young kibbutzim are being individually looked after by an established kibbutz whose task is to 'accompany' the young kibbutz until such time as the 'newly born' manages to function (socially, economically and organisationally) independently. It should be pointed out, though, that the above tasks are conducted on a voluntary basis insofar as the UKM goes. Its formal responsibility though, lies in ensuring the settlement of the kibbutz by the designated group once the governmental decision is made to establish a settlement and affiliate it, organisationally, with the UKM. The overall responsibility for virtually establishing the kibbutz is both governmental and that of the Jewish Agency (The World Zionist Organisation). The UKM's self-assumed responsibilities may be summarised as follows:

- * Training of the settling nucleolus through youth movement, prior and during settlement the period.
- * Provision of close professional guidance.
- * Economic (financial) assistance.
- * Provision of manpower by way of additional groups and kibbutz-born youngsters following their compulsory national service.

2. **The Jewish Agency;** provides the master plan, the physical layout, initial construction, professional guidance and implementation of economic, architectural, land uses, land reclamation etc. It provides also a closely-monitored annual budget for approximately five years. Most of the initial investments, though rendered in 'grace' and in particularly favourable terms, have to be 'recovered' eventually. The economic implication of this liability depends largely on the monetary circumstances and the economic & organisational performance of the settlers. Subsequently, most young kibbutzim are deep in debt for many years to come.

3. **The Government;** Government's responsibility is legislative and executive. Any settlement requires a governmental approval through a resolution passed by the Ministerial Committee for Settlement Matters. Its decisions are made in accordance with the National Settlement Master Plan. The Government provides part of the housing budget (through the Ministry of Housing) and caters for lands which are invariably under the jurisdiction of Israel's Lands

Administration (a governmental authority). The government caters also for all expenditures incurred by security.

*** The "19" Group**

The group was the worst hit by the crisis and was defined as "Distress Group Number One". The epithet is derived from the mere fact that from 1986 onwards, nineteen kibbutzim were categorised in this group. It should be pointed out that initially there were 25 kibbutzim in this group (early 1986), six of which had later been classified as distress group No. 2 along with 30 others. As we have previously noticed, its economic performance and the ensuing 'aggregated' severity as expressed by the combined economic indices, places this group in a fairly precarious position where:

1. The kibbutz becomes almost entirely economically-dependent.
2. Regional procurement agencies provide no credit lines and supply goods for cash only.
3. Rigorous enforcement of banking regulations vis a vis current financial transactions which include the abrogation of grace, a provision of radically-reduced and costly credit lines, almost total cessation of any short or long-term loans (an insolvent kibbutz may hardly find an underwriter or guarantors anyway).
4. Lien; as all lands, properties and other possessions are

liened by banks. This provision has never been practically executed. Banks and other lending agencies became more aware of this statutory provision and may ask for court injunctions if kibbutz's cheque bounces or if it fails to recover a short term loan.

5. It loses its autonomous decision-making capacity by way of having to partially subordinate its central decision making authorities other than the general assembly to UKM's appointed "supervisors" whose task is to ensure the effective day-to-day economic functioning. Nominated committees (comprised, chiefly of UKM functionaries) oversee books, accountancy procedures and attend economic and financial committee meetings. The "19" was defined as a "risk" group which requires a specific movemental assistance by way of making available distinctive guidance through adhoc teams composed of an economist, social and organisational consultants. For the most hard-hit kibbutzim an additional high-ranking UKM functionary was assigned to lead the team. (UKM's CEO, Head of the Economic Division or Head of the Social Educational and Cultural Division). As the Recovery Plan indicates (1989:18), the crisis awareness was more acute in this group hence extensive and harsh measures were taken in order to minimise all investments.

*** The '36' Group**

This group is defined as distress group No. 2. In general, this group, comprised of 36 kibbutzim, differs from the "19" in most economic indices which reflects a relatively improved economic performance. Although the overall situation was not defined as "risky", the down-hill trend was definitely observed as early as 1985. These kibbutzim lost no autonomy in their decision-making process yet were held under close scrutiny by the UKM with a growing awareness of either worsening or improvement in their economic performance.

*** The Intermediate Group**

In-so-far as economic indicators are concerned, there seem to be a notable similarity between the "36" and the Intermediate kibbutzim. The main differences lie in the greater uniformity in terms of the variance amongst the Intermediate kibbutzim. The "36" depicted greater variance in these indices (The Recovery Plan, Ibid.). In general, noted Sheaffer (1989c), there is similarity in exodus patterns between the "36" and the Intermediate category except for a somewhat higher annual rates in the "36". Unlike the differences insofar as the economic indices are concerned, when it comes to Aziva, the opposite trend is observed. True, when dealing with the average rate of leavers per kibbutz the average in the Intermediate is lower than in the "36" but the polarisation between the stable and

unstable population is unmistakable within the Intermediate group. This is reflected by extreme standard deviation scores within the Intermediate group. The very fact that this group was diagnosed in accordance with relative similarity and uniformity in economic parameters, does not create crisis awareness since it has not been singled out as a distress grouping.

*** The Established Group**

Unlike all other categories, this group accumulated no debts to speak of as of Dec. 31 1988. This group numbered 40 kibbutzim, 35 of whom ended 1985/6/7 in the black. The situation worsened, somewhat, as in 1988 only 30 were classified as profitable (The Recovery Plan, 1989:17). Accordingly, this group enjoyed considerably more generous terms from the banks. On average, these kibbutzim paid 8.2 percent on short-term borrowed capital as opposed to the "19" which could mobilise capital for an average 10.1 percent. Indeed, Sheaffer noted, (1989d) that this group demonstrated the lowest emigration rates in the UKM. Subsequently and on the face of it, it is observed that the economically sounder the category, the lower are the Aziva rates.

In retrospect, the Recovery Plan stresses that the above categorisation appeared erroneous as later economic analyses revealed that apart from the young kibbutzim, a

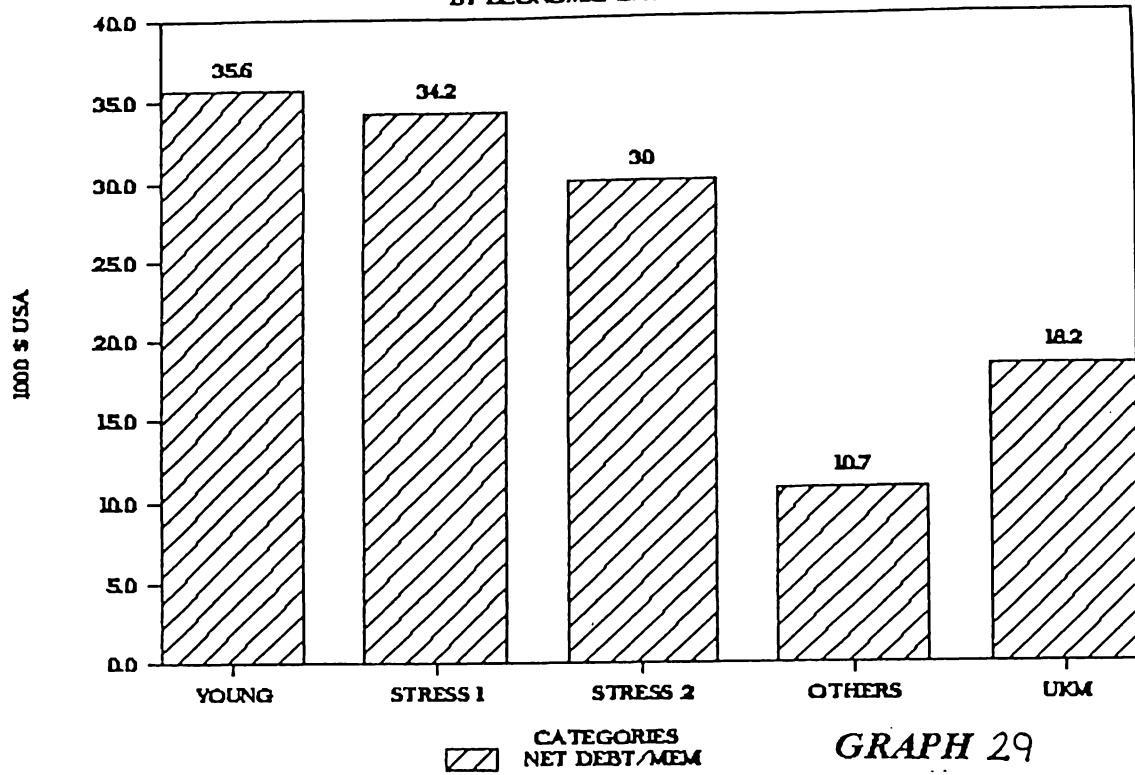
group displaying extraordinarily high debts and about 10 exceptionally lucrative kibbutzim, most kibbutzim were characterised by fairly similar economic performances. The basic difference amongst kibbutzim has to do with the levels of both debt and financial assets during 1984/5/6/7.

These variations illustrate both the liquidity stress and the cost of capital. The mere economic insight is but a partial demonstration of a single dimension of the crisis. Traditional economic partition especially in order to expose dynamic patterns of the crisis as mirrored by various predictors will be looked at as well.

The following graphical displays provide an insight into the economic situation at the end of 1985. The economic parameters indicate the substantial differences between categories. There are five assorted groupings each of which reflects a distinctive economic condition. This early classification corresponds in the following form to the traditional categorisation:

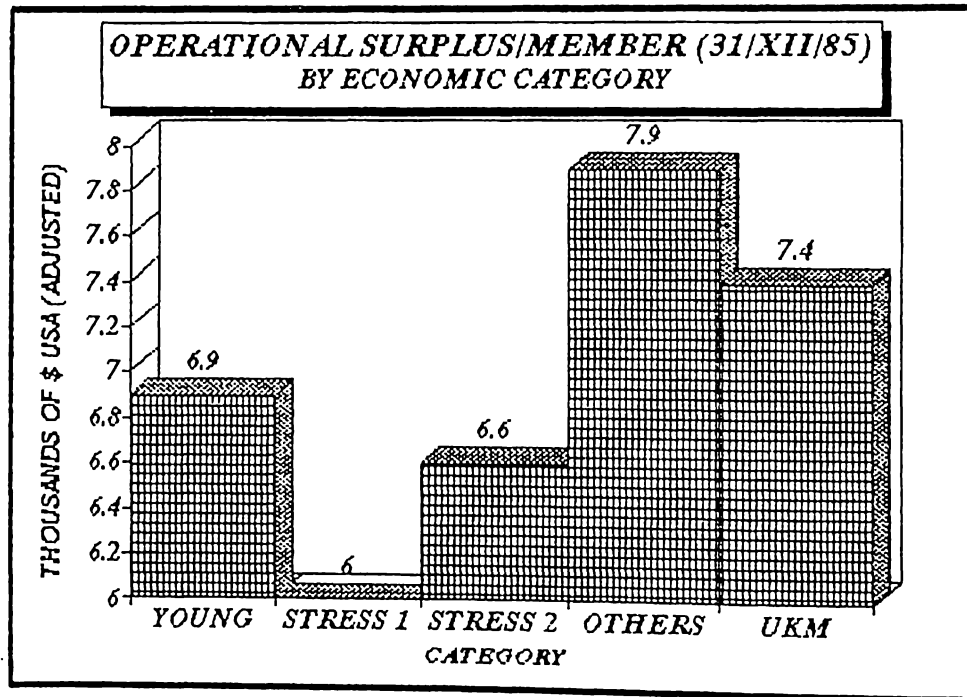
- * Young - Young Kibbutzim
- * Distress Group 1 - "19"
- * Distress Group 2 - "36"
- * Others - Established, subdivided into "Established" and "Intermediate")
- * UKM - Average parameter for the entire UKM

NET DEBT/MEMBER UKM 31/XII/85
BY ECONOMIC CATEGORIES



GRAPH 29

OPERATIONAL SURPLUS/MEMBER (31/XII/85)
BY ECONOMIC CATEGORY



GRAPH 30

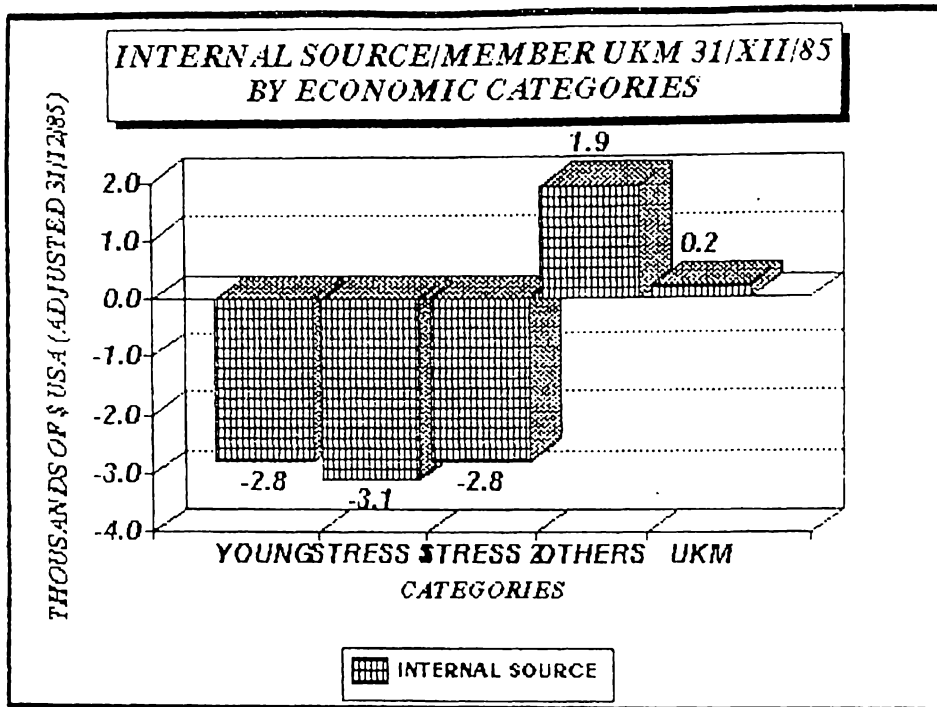
A useful and more indicative demonstration of economic parameters corresponding with the economic grouping seems to be the ratio: economic parameter/number of members & candidates in each category.

Graph No. 29 displays Net Debt/Members & Candidates. The figures are self explanatory. The burdensome debt characterising young kibbutzim was incurred by the massive investments in setting up the entire infrastructure.

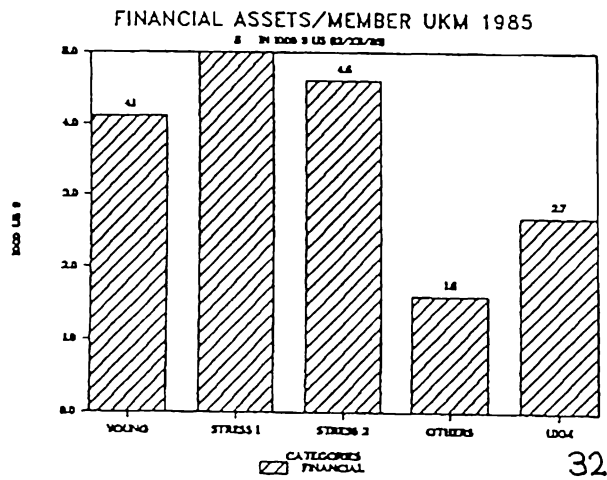
Graph No. 30 depicts Operational Surplus/Members & Candidates; Operational surplus is an important indicator of kibbutz's economic dynamism and partially its economic effectiveness. It is the amount left after subtracting income from expenditures. Again the relatively high surplus in the young kibbutzim is attributable to the small number of members and the comparatively large economic base and not to any economic efficiency.

Graph No. 31 refers to Internal Source/Members & Candidates. Internal Source (surplus after financial expenditure, income tax, expenditures incurred by consumption) is basically net profit before depreciation expenditures (usually calculated as 5 % of all kibbutz assets). Bearing in mind the substantial financial expenditures (debt service), the negative internal source does not seem to be inexplicable.

Graph No. 32 refers to Financial Assets/members & Candidates. Although many of the distressed kibbutzim are old enough to accumulate assets, the economic slump drained

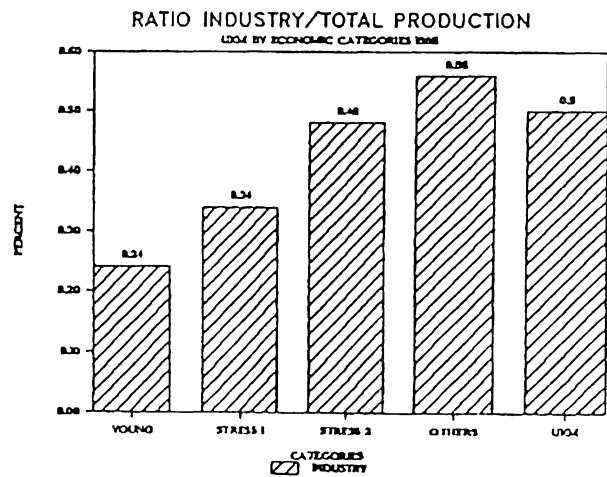


GRAPH 31



32

GRAPH 33



most of them, essentially for debt service.

Graph No. 33 refers to The Ratio Industry/Total Production Outputs. Naturally, the higher the proportion the more industrialised the kibbutz is. In 1985 a considerable number of industrial investments had yet to have their impact on the accumulated debt, chiefly because of the later implementation of the new economic plan (May-June 1985) with the sharp increase in the cost of capital, conversion rates and squeeze on credit lines. It is suggested that the degree of industrialisation in a given kibbutz (determined mainly by the proportion: industrial turnover/total turnover) is indicative of its economic soundness. Further to the general explanations it should be borne in mind that from 1984-1988 approximately a billion NIS (adjusted June 1988), were invested in UKM industries of which 400 million NIS account for investments which exceed depreciation costs. Part of these investments were proved inefficient and the Recovery Plan (1989:11) notes that: "... the contribution of manufacturing industries for the solution of the crisis will be evaluated in their future growth as a result of the fruition of past investments".

THE DYNAMISM OF DECLINE: DEMOGRAPHY OF THE DISTRESS GROUPS

1984 signified the last "normal" year prior to the crisis. It has been observed, however, that as of 1980 the, kibbutz population has generally stagnated and the dynamic demo-

graphic growth that typified earlier years discontinued. Although it is not the intention of this study to investigate the underlying reasons, It is suggested that, as a whole, kibbutzim gradually demonstrated imperceptible undercurrents which had later been triggered by massive exogenous jolts. In all, an organisation possessing a vital environmental awareness through integrative boundary spanning capacity commensurate with an organic internal structure, is likely to cope better with the seemingly unpredictable nature of its task environment.

Retrospectively, the kibbutz may have engrossed and accumulated a great deal of organisational inertia evidenced by its reproductive structural character and correspondingly by its sheer demographic size and the ensuing differentiation. In the following chapter, a concise demographic analysis of theUKM's economic groupings will reflect these tendencies of demographic decline.

The following table portrays general demographic trends relating to the demographic "hard core":

Table No. 19

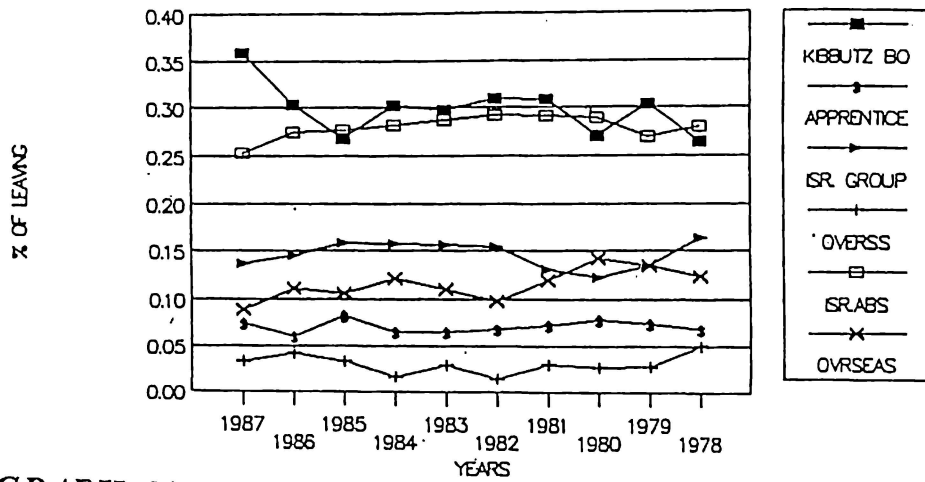
TOTAL NUMBER OF (Members) LEAVERS BY ECONOMIC CATEGORIES*

1983 - 1988

YEAR "19" "36" INTER. ESTABL. YOUNG UKM

1983	168	280	278	347	232	1305
1984	74	267	263	326	264	1194

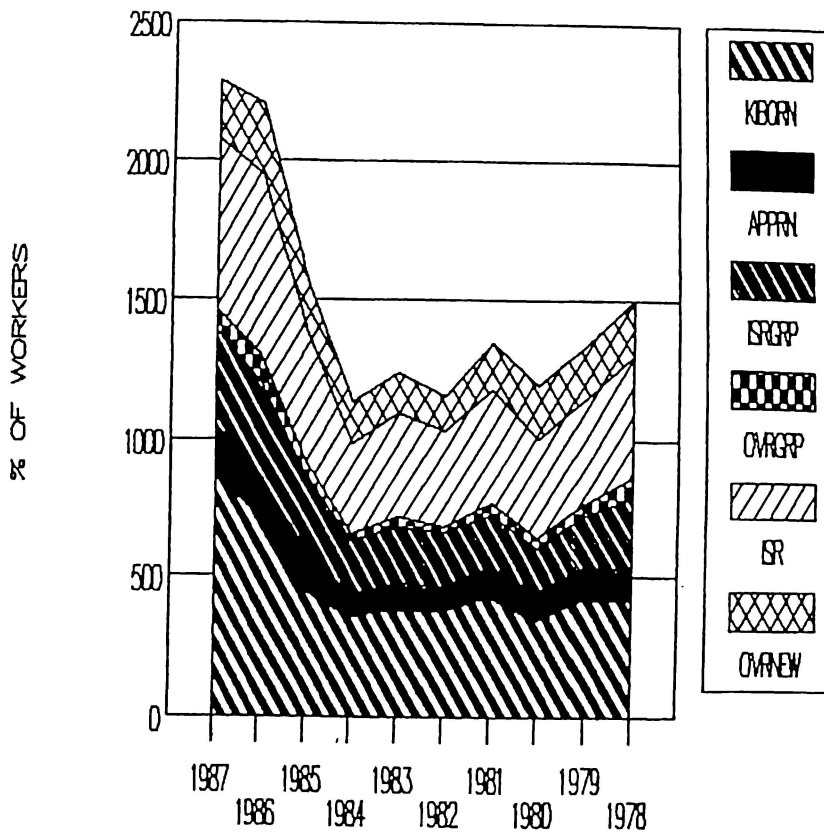
% LEAVING UKM ACCORDING SOURCE



GRAPH 34

LEAVING UKM ACCORDING TO SOURCE

1978-1987



GRAPH 35

1985	151	303	350	453	425	1685
1986	207	315	476	625	731	2354
1987	222	498	469	538	687	2414
1988	350	559	581	628	479	2597

CATEG ORY	19"	36"	INT	EST	YNG	UKM
Nkibbutz	19	36	41	40	39	176

As to the average number of leavers per kibbutz by economic category, the main features (graphs No. 34 and 35) are as follows:

- * 1983 and 1984 were fairly similar with a slight decrease in the number of leavers from 1983 to 1984.
- * The point of refraction in the graph occurred between 1984-1985 where a sharp increase in the average number of leavers occurred (60.6, 13.4, 33, 39 and 61 % retrospectively).
- * Between 1985-6 an additional upsurge is evident, most conspicuously of which are the Intermediate category (36 %), the Established group (39 %) and chiefly in the young kibbutzim (72 %).
- * 1986 and 1987 are strikingly similar in their respective figures with a noticeable exception, the "36" category where an upswing of 58 % is recorded. Moreover, the

established, Intermediate and Young categories recorded a diminishing number of leavers (-14, -1.5 and -6 % respectively).

* All groups recorded a rise in the average number of leavers per kibbutz with the exclusion of the "19" group where an increase of nearly 60 % was registered (12.2, 24, 16.7 and 30.3 % respectively).

* It might be instructive to note the rates of change in the number of leavers by economic categories between 1984 and 1988. The most prominent is the substantial increase in the most "distressed" category, 272 % and in a descending order: Intermediate: 121, "36": 109, the Established: 92 and the young kibbutzim: 81 % respectively. In the entire UKM, the rate was 117.5 %.

AZIVA: A MACRO ANALYSIS BY SOURCE, EDUCATION AND AGE

General

No relevant literature concerning Aziva on a macro scale has been published thus far. Sheaffer (1989) analyzed in a special analytical study, various statistical models in which he sought to explain causes for emigration and absorption on a macro level. Relevant findings show that:

* In general, a bad economic situation (a high ratio turn over/net debt [financial assets deducted]) negatively

affects emigration, i.e. the higher the ratio the higher is aziva ratio in t-1.

* A high emigration rate in t-1 will increase emigration in the following year.

* The more candidates being absorbed in previous year (1986), the more may be expected in the next year.

* The higher the rate of absorption (absorbees/members) in a given kibbutz in year t-1, the higher the same rate is in the succeeding year.

This study reflects the situation in 1986 and 1987. The statistical models account for the entire UKM population. It will be instructive to relate these findings to the current analysis of descriptive statistics. This will be equally relevant when longitudinal statistical models will be constructed and ran for inferential purposes.

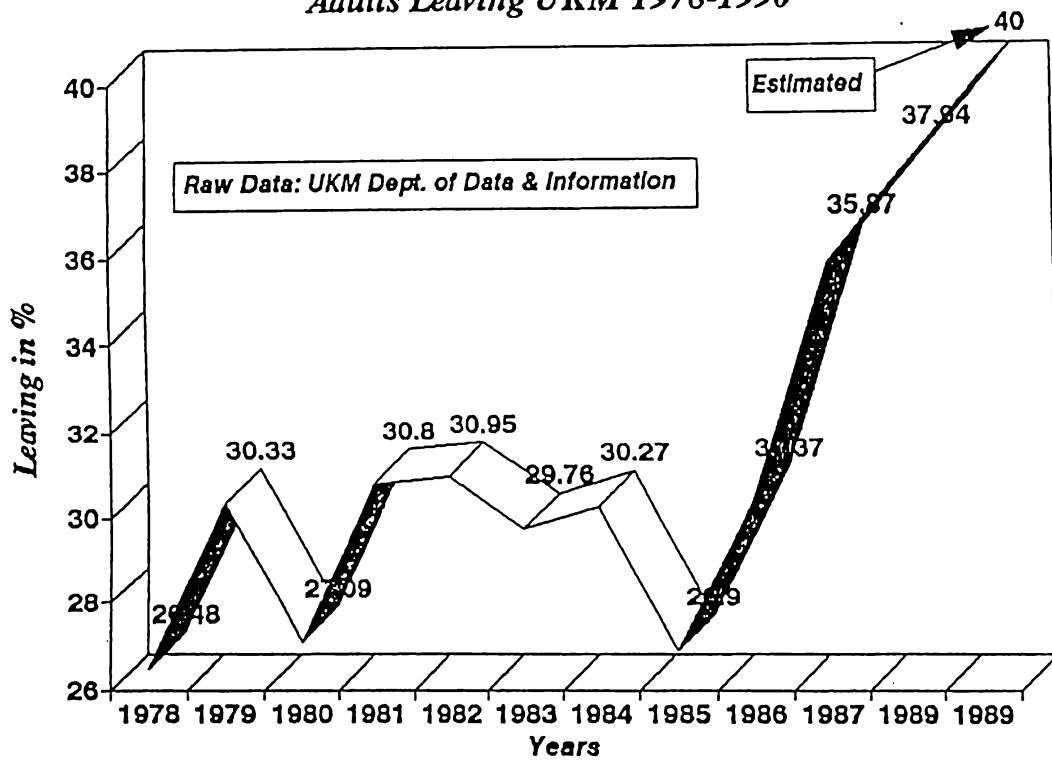
*** Leaving By Source**

As mentioned earlier in this chapter, the UKM's population is, technically, subdivided into seven different sources. This subgrouping reflects the main components. In the seventh segment is made up of approximately 6 percent of people whose source is either hard to define or poses identification problems. As to ranking the numerical size of these segments in terms of their exodus patterns, it appears as if these were kept over eleven years (1978-88). In a descending yearly averaged order 526 were Kibbutz-born, 459 were Israelis, 240 were Israeli groups, 187 were New Immigrants, 118 were Trainees and 54 were Overseas groups. No irregularities may be traced in terms of the relative

1987 1985 1983 1981 1979
 1986 1984 1982 1980 1978
 YEARS

GRAPH 36

*Percent of Kibbutz-Born of f Total
 Adults Leaving UKM 1978-1990*



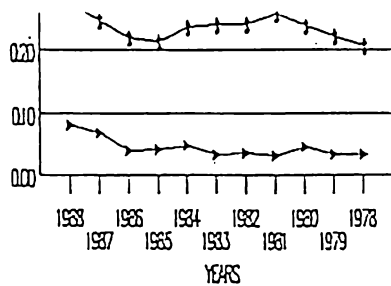
GRAPH 37

size of each grouping within the total, i.e. the leaving patterns size wise are proportional to the relative size of each group. Although one may not be able to weigh each group qualitatively, there seems to be a unanimous agreement as to the overriding role the kibbutz-born component played since the mid 1970s. Graph No. 36 provides a general quantitative picture as to the temporal pattern of emigration of each source of UKM population.

It is quite evident that invariably, all groups display an increase, though differential, in leaving rates. Indeed as one may better discern in Graph No. 37 the sole deviation from the even pattern of Aziva is a fairly steep upswing in the kibbutz-born trajectory. This graph displays percentages rather than absolute quantities hence the clearer observation. As to kibbutz-born leaving kibbutzim, Graph No. 38 displays a rather worrisome picture where kibbutz-born's share in the overall exodus is on a gradual upswing. In 1988, 38 percent of leavers were kibbutz-born as compared with 35 percent of their share in the adult population. Also, 1986 earmarks a point where the pattern altered with a notable stray as of 1987 onwards.

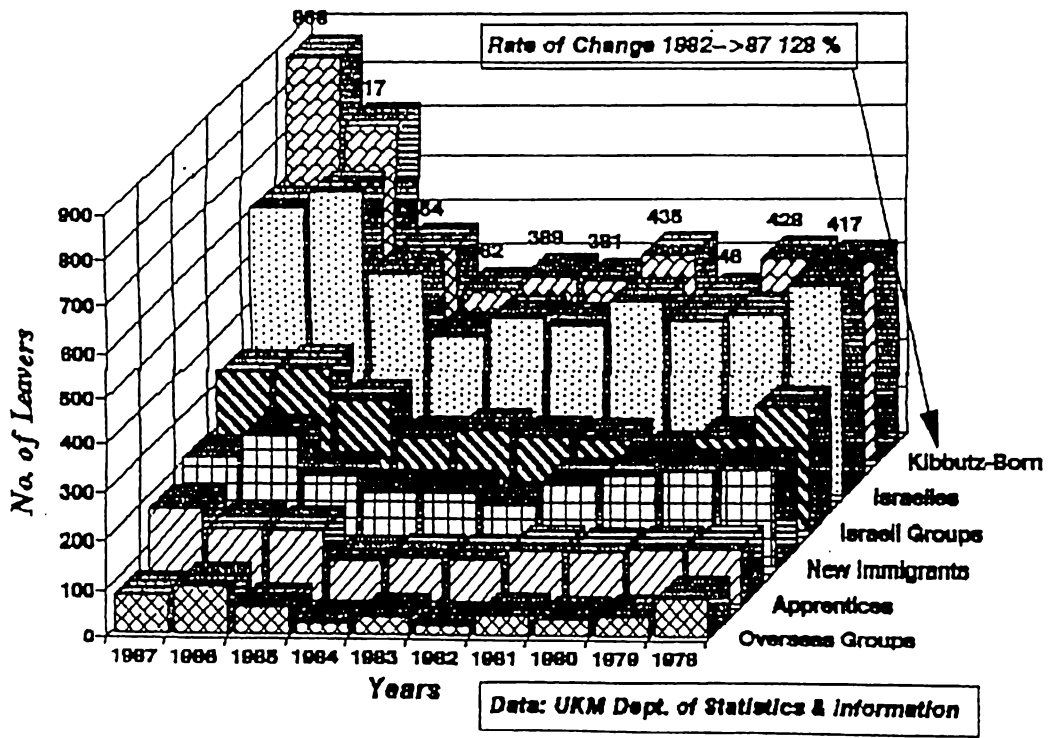
The salient features of leaving by source are as follows:

- * In general, an even, similar and down-turn pattern of emigration in all sub groups until 1984.
- * A noticeable upsurge in emigration for all "sources" as



GRAPH 40

**LEAVING UKM ACCORDING TO SOURCE
1978-1987**



maintained a steady and gradual rise until 1986. The upswing in leavers from this age group is probably the most ominous in terms of its potential as it possesses not only skills and know-how but essential communal wisdom and managerial skills. This age group depicts a considerable increase in sheer numbers of leavers and unlike the even increase in Aziva demonstrated by the other age groups, the loss of these people is particularly hard to replace.

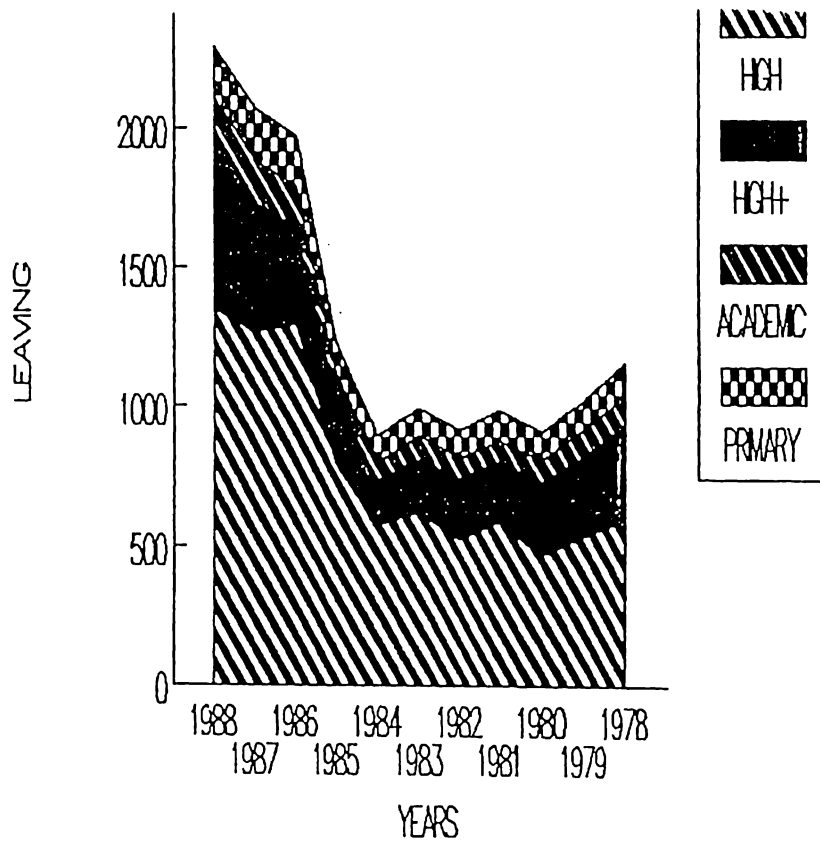
* Age group 41-50 is proportionately equally troubling in the increase in rate of leavers (75 % rise between 1986-7 and 122.5 % increase between 1986-8). However, numerically the increase is less formidable as the case is with age group 31-40. This age group is characterised by the same makings as its predecessor.

Graph No. 40 shows the percentage of each of the critical age groups off the total leaving. Noteworthy is the decline of 22-30 as compared with the upsurge in both 31-40 and 41-50 age groups. When the average adult age is on the increase and specifically when the organisation faces a severe multi-dimensional crisis, one is automatically inclined to attribute the non-natural aging to the effects of brain drain. The loss of large sections of the younger age groups undermines natural demographic processes (a decrease in net reproduction rates), impedes a well balanced work force, increases expenditures incurred by social security for the aged and diminishes economic potential. It gravely lessens social potential and worse,

it is liable to discourage potential candidates from joining the kibbutz.

*** Leaving By Level of Education**

Exodus of the more educated segments of society during a crisis is probably the most useful predictor of the brain drain phenomenon. It is assumed that a significant statistical association exists between the age of leavers, its source (primarily in the case of the kibbutz) and mainly its scholastic level and make-up. It seems to be less arguable that the primary predictor as to the severity of the phenomenon is the dwindling rate of highly educated. Most writers indicate that the educated and the skilled are more marketable, thus, are more likely to vacate the 'sinking ship' and find jobs elsewhere. Helman (1990), claims without actually substantiating his assumptions that "kibbutz lost thousands of members, who had to vacate not because they negated principles of equality and collectivity. They were fine members, candidates for all central positions, belonging to the leading elite, their only 'sin' was that they preferred mathematics or literature and history over dairy farming and orchards, or a manufacturing industry. The severe economic crisis has suddenly exposed the fact that their departure is economically unjustified. The agricultural-industrial infrastructure proves to be insufficient". Helman went on to say that increased investment in human capital, will not



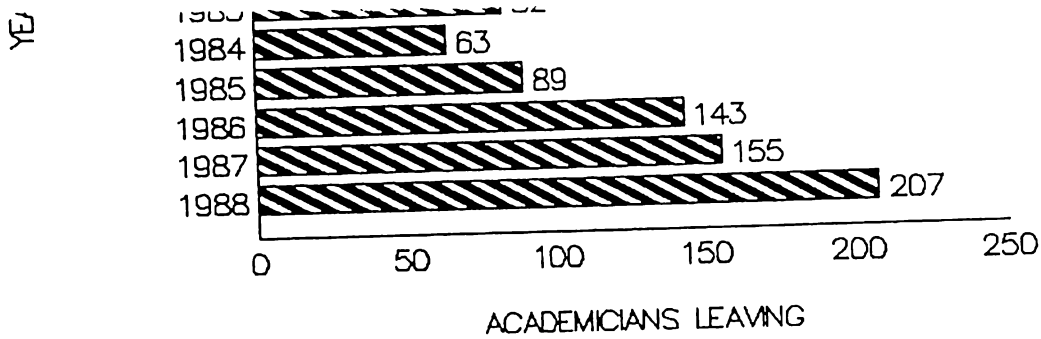
GRAPH 41

The table shows the actual division of the UKM population according to educational levels in late 1988 and provides a useful comparison with the emigration in educational cross-section in 1988.

Graph No 44

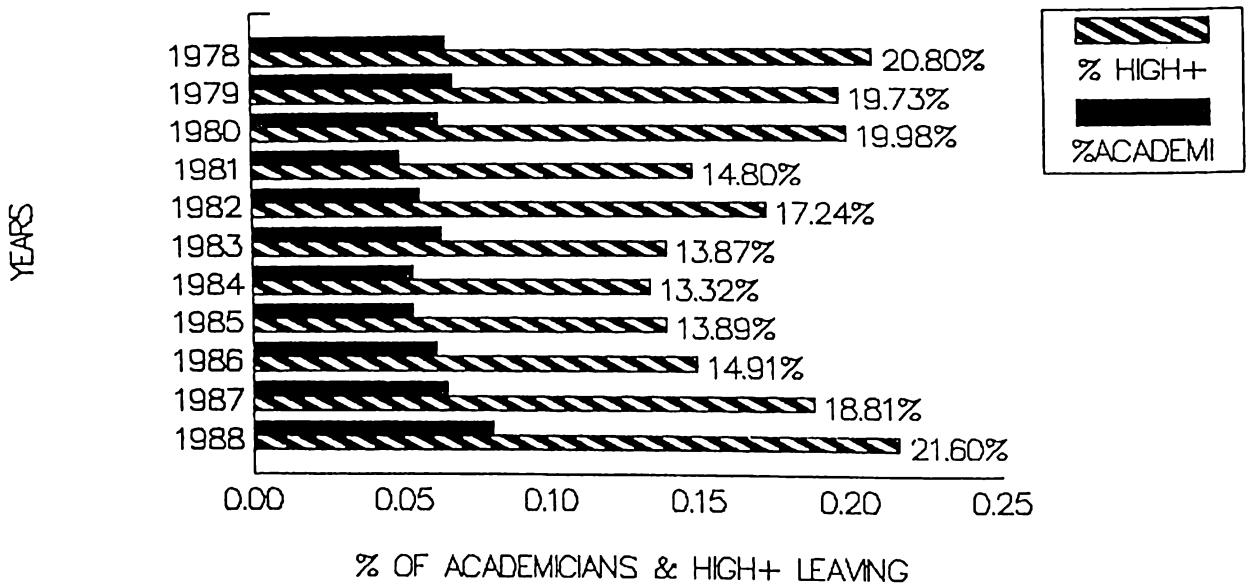
The general picture in terms of yearly fluctuations corresponds with both the leaving according to age and according to source. From 1984 onwards there is a notable upsurge in emigration in all educational levels. Main trends in this cross-section are as follows:

- * A steady increase in the number of primary school graduates. Due to the negligible number of members with elementary education, the absolute figures are small.
- * The category displaying the most significant absolute increase concerns high school graduates with 62.5 % increase from 1985-6, and almost 70 % from 1985-8. This category accounts for the majority of the members population and the upswing is compatible with the increase, during the same years, in the number of kibbutz-born leaving and age group 22-30.
- * A relatively steady increase in the number of members with post-high school education (marked [column 3] High+). This category includes a wide variety of post high school education (teacher colleges, paramedics, technicians, practical engineers, various long



GRAPH 42

PERCENT OF ACADEMICIANS & HIGH+ OF TOTAL LEAVING UKM 1978-1988



GRAPH 43

professional courses, long vocational training etc.)

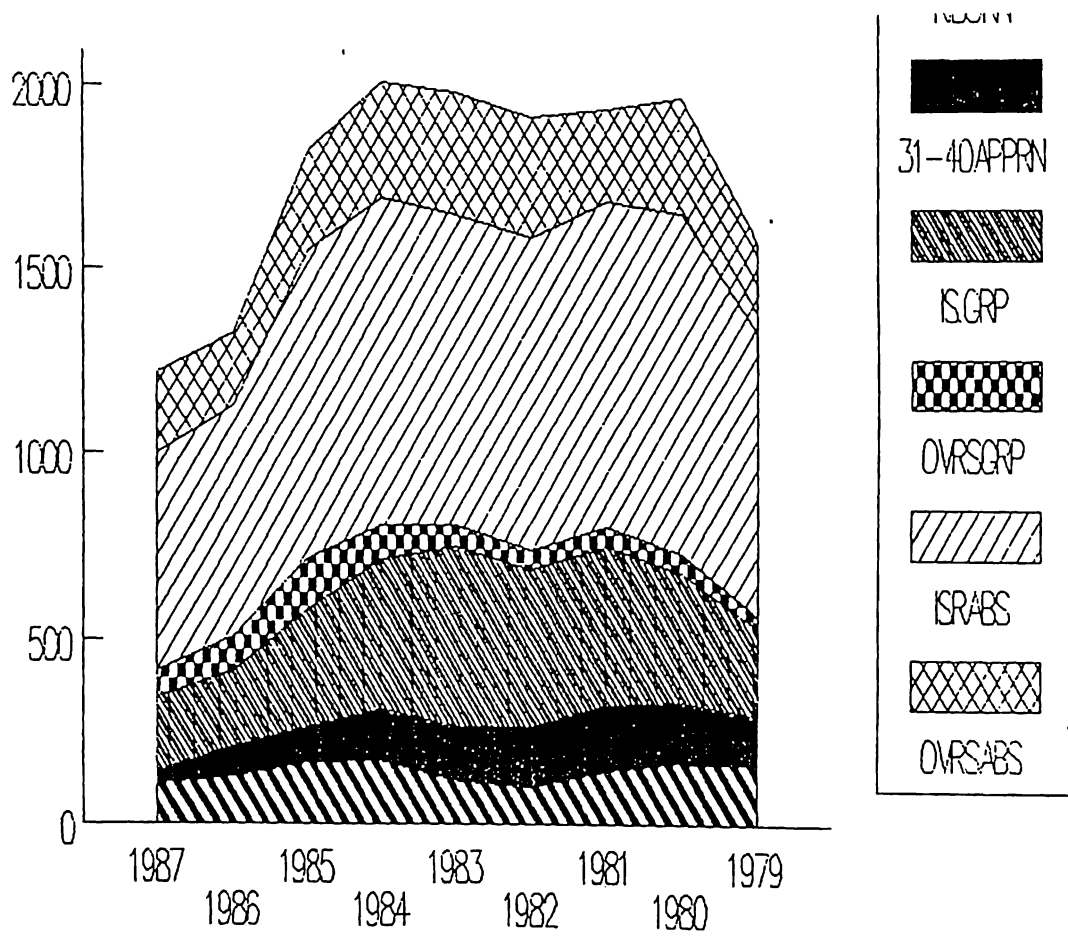
Graph No. 41

As to academicians, the picture is equally disturbing with a 60.7 percent increase from 1985-6, 33.5 % increase from 1987-8 and from 1985-8: 132.6 %. To emphasise emigration of the upper educational crust, it is appropriate to include a graphical display of the percentage of leaving academicians and leaving members with post-high school education.

Graph No. 42

ABSORPTION: A MACRO ANALYSIS BY SOURCE, EDUCATION AND AGE

Absorption of the population in all population cross-sections was an essential part of kibbutz policy and practice since its inception. Whereas sources of growth have changed from mainly overseas European groups until the late 1940s, to largely Israeli graduates of youth movements during the 1950s and 1960s, kibbutz-born have become the primary source of growth in the 1970s and 1980s. Ironically, kibbutz-born being the flesh and blood of kibbutz are those who tend to increased retention and there is some valid evidence as to their diminishing tendency to return to the kibbutz following years of leave of absence. It is a desirable situation for absorption to both replenish or offset emigration and, in fact, surpass it numerically. However, it is quite obvious that reality strays markedly from aspirations as we may observe in graph No. 43. Of the



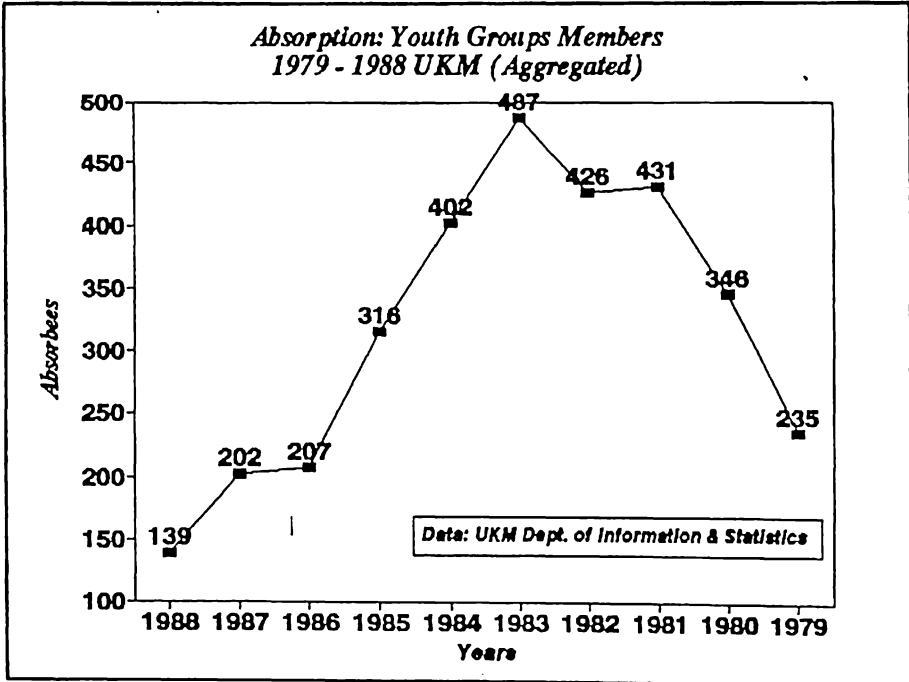
GRAPH 44

ten years for which comparative demographic data exists, this desirable situation persisted until 1985 when for the first time, following six successive years of absorption surpassing emigration, absorption plunged and emigration shot up. As indicated before, emigration rose by 117 % between 1984-88. Absorption, however, decreased during those four years by 51 percent. Noteworthy is the fact that, indeed, the increase in emigration was far sharper than the gradual, arithmetical decline in absorption. Intermediate and general conclusions, based on the above findings alone, attest to the severity of the crisis and simply put, it may be observed that the more the crisis persists and intensifies, the less attractive kibbutz life style is for its younger, highly-educated and kibbutz-reared segment and for potential joiners.

*** ABSORPTION BY SOURCE**

Graph No. 44

Quantitatively, the most significant absorption segment are Israelis. They are, mostly, referred to the kibbutzim by the UKM Absorption Committee. The task of this committee is to woo, interview, screen and assign potential candidates to various kibbutzim. This segment accounted for (ten year average [1979-1988]) over 40 percent of the candidates, when, in fact, its proportional weight relative to other groups has been steadily on the upswing (48 % in 1979, 38 % in 1984, 42 % in 1985, 44 % in 1986, 46 percent in 1987 and 48 % in 1988). A possible explanation for the gradual



GRAPH 45

increase lies, perhaps, in the worsening of the economic situation in Israel and the minimal acquaintance of these people with the kibbutz way of life and specifically their unawareness of the magnitude of the current crisis.

45

In interesting trend is detected within the group: "Israeli Groups". These are graduates of kibbutz-affiliated youth movements whose National Service is carried out in the Nachal (Pioneering Fighting Youth) which is an integral fighting brigade of the IDF. These youngsters have been voluntarily exposed to kibbutz ideology throughout their childhood and youth whilst they were active members of youth movements. This absorption segment is the most heavily supported by kibbutz federations by way of manpower, financial resources and indirect expenditures. These expenses are incurred by the youth spending lengthy periods in the kibbutzim during their extra curricular activities in the youth movements. UKM allocated millions of dollars each year for these purposes irrespective of the increasingly poor results as demonstrated by the negligible numbers staying on kibbutzim following their military service. The approximate figure is 2 to 4 5 after at least two years on kibbutz. The size of youth movements classes affiliated with UKM prior to the National Service is about 800-1000 annually). Consequently, expectations always ran high for improved absorption rates. The absorption failure in so far as this segment in concerned, the futile adherence to related policies (partial financing of youth

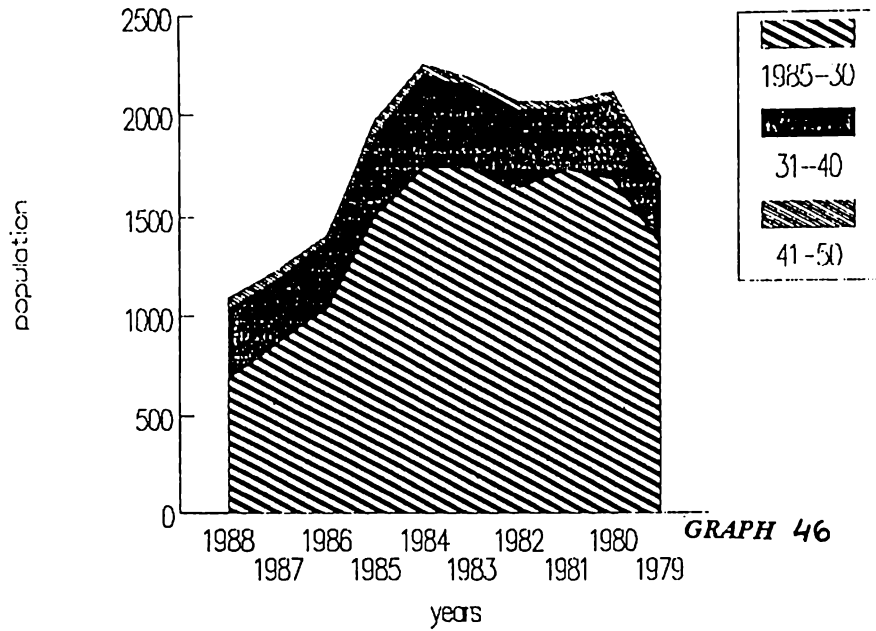
movements etc.) despite the abysmal results, epitomises the environmental blindness. This appears to be true both in terms of individual kibbutzim and their largely fruitless investments in manpower and other resources and primarily UKM as reflected by the attachment to ineffectual and irrelevant policies.

A similar trend is depicted by absorption of new immigrants who, as families and individuals are directed to kibbutzim by the Jewish Agency. However, no significant material investment is involved in their absorption whereas absorption of Diaspora Zionist youth movements graduates entails a large number of kibbutz emissaries dispatched overseas every other year. They are partially financed by the Jewish Agency. The second category amounts to only 7.6 % in 1988 of all absorbees, albeit that this category of candidates is, essentially, on the upswing (2.5 % of the total in 1980, 7 percent in 1987 and nearly 8 % in 1988). The rate of absorption of immigrants may reflect trends of Aliyah in general and may not necessarily indicate any realisation or miscomprehension of the crisis situation. To sum up, the main points seem salient in this absorption cross-section:

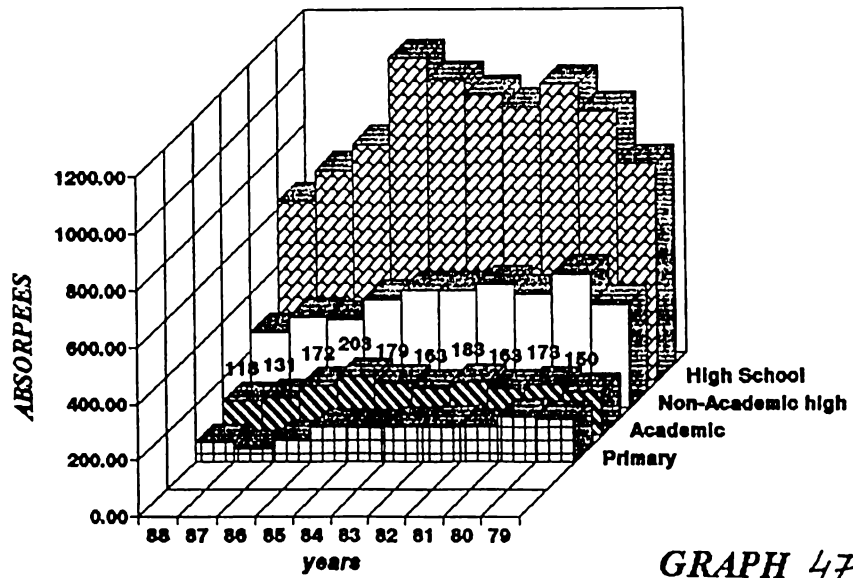
- * A minor decline in the number of kibbutz-born as absorbees.
- * A significant decline in the number of Israeli applicants (56 % from 1983-88).
- * A considerable decline in the number of new immigrants

ANNUAL ABSORPTION BY AGE

UKM 1979--1988



ANNUAL ABSORPTION BY MAIN EDUCATIONAL LEVELS



(78 % from 1983-88)

* A notable decline in Israeli groups as applicants for absorption (71.45 % from 1983-88).

* ABSORPTION BY AGE

Graph No. 46

Two main age groups: -30 and 31-40 will be referred to in this cross-section. Other age groups hardly join kibbutzim because absorption policy recommend ages between 21-40:

* Major decline is identified in the critical 22-30 age group largely corresponding with the age groups of Israeli

graduates of youth movements, new immigrants, Israelis joining through UKM's Absorption Committee reference (50 % from 1984-88).

* Age group 31-40, a drop of nearly 54 % from 1980 to 1987.

* ABSORPTION BY EDUCATION

Graph No. 47

As with emigration according to main educational levels, and due to the noticeably wider coverage of this brain-drain cross-section, it would seem appropriate to more extensively focus on absorption by educational levels. The following table portrays absorption by main educational levels between 1979-88:

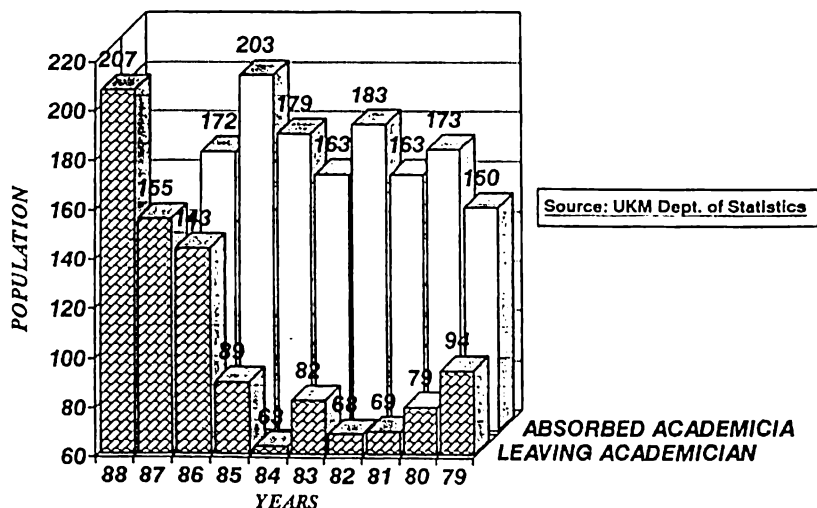
Table No. 21

YEAR	ACDM IC	HIGH ER	HIGH Schl	PRI- MARY
1979	150	363	756	151
1980	173	466	938	161
1981	163	397	1034	122
1982	183	432	952	136
1983	163	408	996	132
1984	179	408	1047	120
1985	203	379	1123	122
1986	172	309	826	79
1987	131	317	732	46
1988	118	266	626	69

Salient features in this absorption cross-section are as follows:

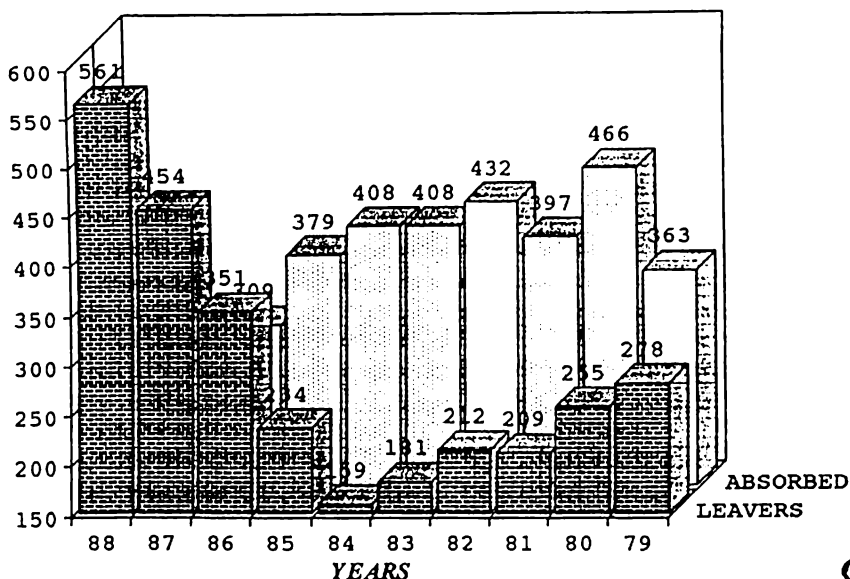
- * A gradual decrease in the absorption of academics, 41 % from 1985-88.
- * A gradual decrease in the absorption of people with non academic higher education: 38.4 % from 1982-88.
- * A steady decline in the absorption of people with high school education: 41.6 % from 1985-88.

**ABSORPTION VS EMIGRATION-academicians
-UKM 1979-88**



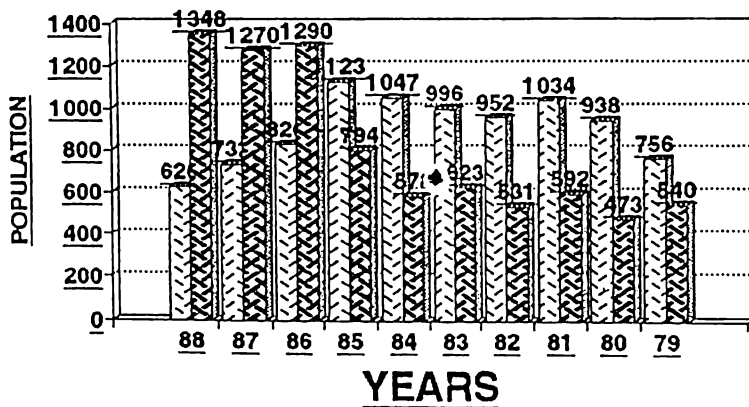
GRAPH 48

**ABSORBED VERSUS LEAVING
NON-ACADEMIC HIGHER EDUCATION UKM 79-88**



GRAPH 49

**ABSORPTION VS EMIGRATION-HIGH SCHOOL
GRADS-UKM 1979-88**



ABSORBED HIGH SCHOOL LEAVING HIGH SCHOOL

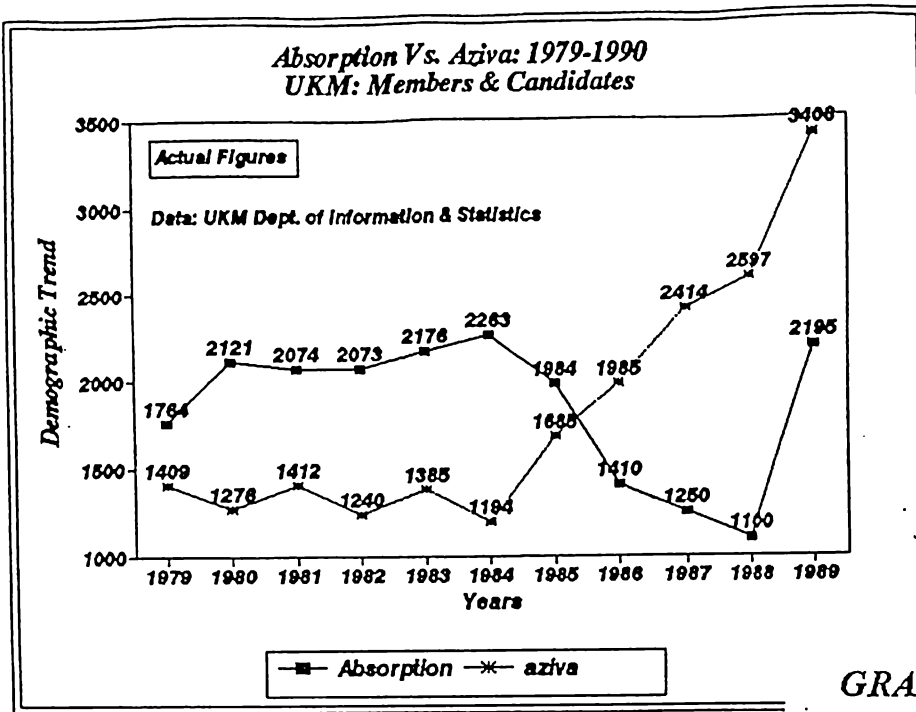
GRAPH 50

- * An unsteady yearly decrease in the absorption of people with primary education: 57 % between 1982-88.

It appears rather safe to hypothesise that the more the highly and intermediately educated leave the kibbutz the less appealing the kibbutz is for potential candidates with similar qualifications. The picture seems equally disturbing when we compare leavers with absorbees employing various academic specialisations as criteria. Graph No. 48 demonstrates the reflective picture in a very distinct way. 1984 is the turning point for leaving academicians whereas 1985 denotes the turning point for absorbed academicians. 1984 is also the turning point for members holding higher non-academic degrees in both the leaving and absorption cross-sections (Graph No 49) and high school graduates Graph No. 50, 1984 for leavers and 1985 for absorbees.

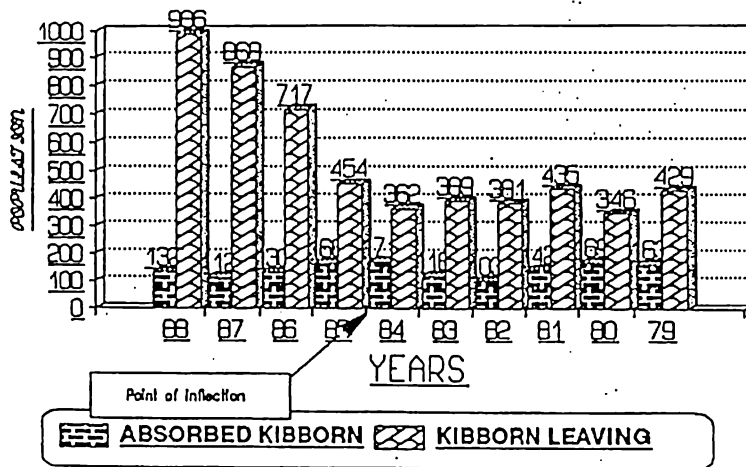
EMIGRATION VERSUS ABSORPTION: A LONGITUDINAL ANALYSIS OF DESCRIPTIVE STATISTICS

It would be enlightening to summarise the demographic trends referred to in this chapter by combined graphical displays concurrently exhibiting the two opposing or complimentary trends. The displays depict the macro picture, i.e. no distinction will be made between various kibbutz sub-groupings. The macro analysis will coincide with the later statistical analyses, most of which will reflect the global picture.

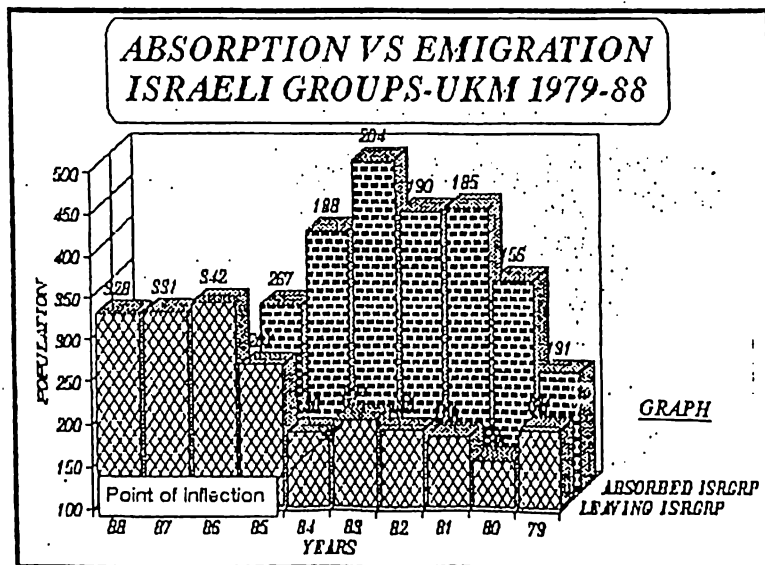


GRAPH 51

ABSORPTION VS EMIGRATION-KIBBUTZ BORN -UKM 1979-88



GRAPH 52



GRAPH

Even glancingly it is rather obvious that 1985 earmarked the pointed turn in both the absorption and Aziva curves. Drastic increase in the number of leavers is observed as of 1985, and contrast a sharp decline in the number of candidates absorbed in UKM kibbutzim.

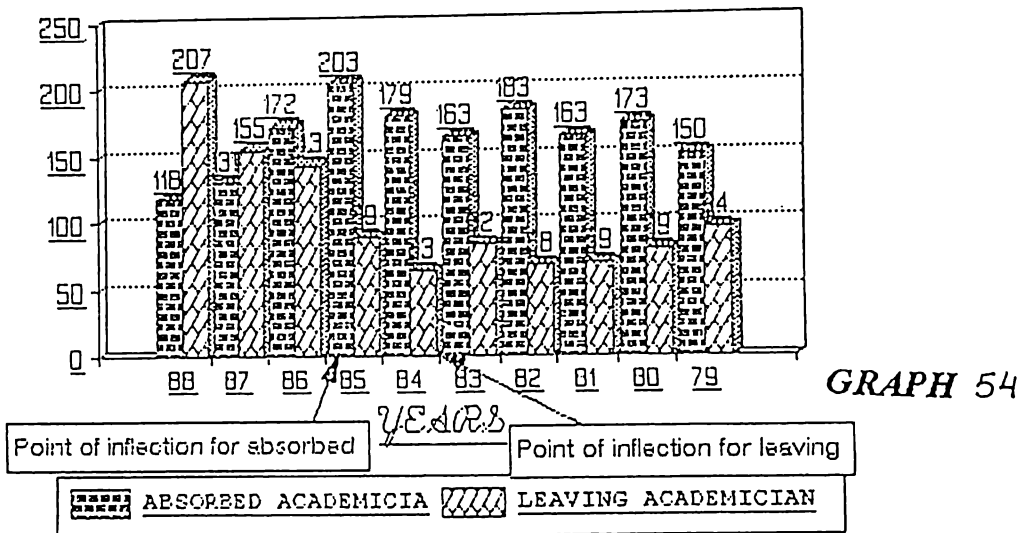
1. Absorption vs. Emigration According to Source.

I. Kibbutz born; this graph No. 52 is somewhat misleading because the number of absorbed kibbutz born candidates, though on the decline, reflects only partially the actual figure. The reason is that there is no unanimous absorption policy for this category; some become members prior to the compulsory service some upon demobilisation from the IDF. Notwithstanding, the negative turning point corresponds with the general trend: 1985 for both Aziva and the partially accurate absorption figures.

II. Israelis; the turning point is 1984 and the shift seem to be more conspicuous in the absorption, probably due to the decline in the attractiveness of the kibbutz. Also, in 1984, the realisation of the general national trends of decline (Dror, 1988) had not yet taken root in the Israeli society, hence, the rate of unemployment was manageable (5.9 % [1984] of the labour force²⁰) people with more

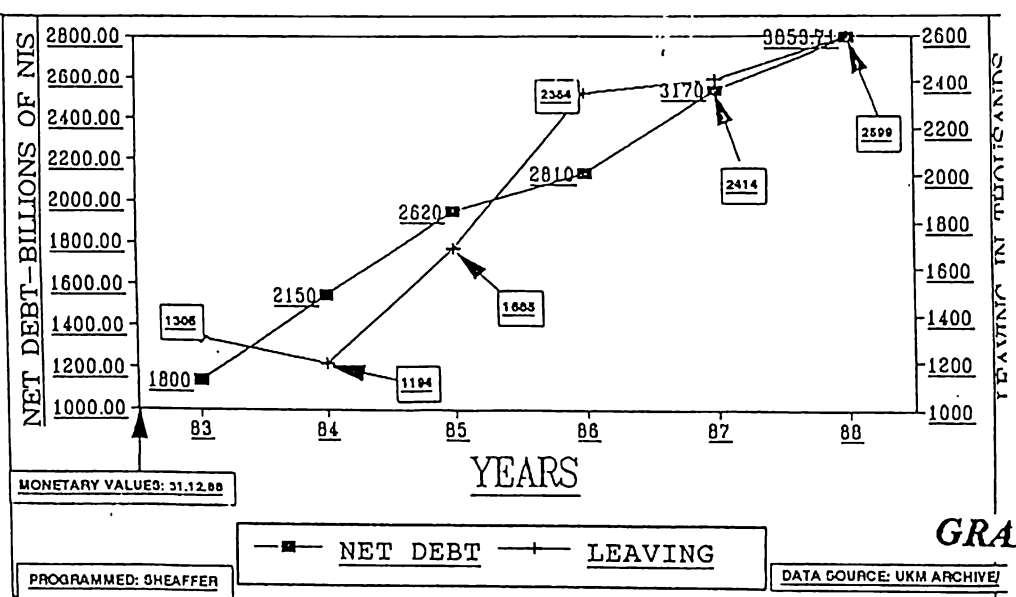
²⁰STATISTICAL ABSTRACT OF ISRAEL, 1985, No. 36, tables 12.36-43.

ABSORPTION VS EMIGRATION-academics
-UKM 1979-88



GRAPH 54

AGGREGATED NET DEBT VS LEAVING
(MEMBERS & CANDIDATES) UKM 1983-88



GRAPH 55

choices, consequently less demand for the "kibbutz haven".

III. Israeli groups; turning point in 1983 for both Aziva and absorption.

IV. Newcomers; see above.

Absorption vs. emigration: Educational level.

The interesting ingredients and those specifically accounting for the occurrence of brain-drain, are the academicians. This assertion is a tentative one and may not be valid for all variables of the phenomenon. Graph No. 54 provides a somewhat different picture in that the absorption bars descend as of 1985 whereas the Aziva bars have been on the upswing since 1984.

A COMBINED GRAPHICAL DISPLAY OF DEMOGRAPHIC AND ECONOMIC TRENDS

An adequate illustration of the above demo-economic analyses would be the combined graphical demonstration of major trends both economic and demographic. Graph No. 55 portrays the concurrent growth in the number of leavers and the aggregated net debt from 1983-88. The trends are similar and automatically call for an operationalisation of the variables involved. The situation changes somewhat when one compares the number of leavers with the fluctuating curve depicting the alternating level of aggregated internal source (organisational munificence). The irregularity of this trend lends itself, like all other

predictors, to a more in-depth statistical analysis. Helman et.al. illustrate in their important study, the inseparable interrelatedness between the economic and the social situation in the kibbutz: "In the kibbutz, it is impossible to isolate the economic factor, if viewed not in conjunction with kibbutz's social tissue; a crisis in one domain will cause a crisis response in the other realm. When the economic system is hindered all other spheres of life in the kibbutz will be affected" (Helman et.al. 1988:40).

CONCLUSIONS

This extensive chapter has served as a pivotal linkage between the various theoretical introductions and the statistical analyses. The models will concurrently bear upon the theoretical background and partially, on later developments chronicled here. Critical discussion of the evolutionary stages of the current crisis from the economic, demographic and organisational angles has taken place in this chapter.

As the crisis is, naturally, of a sequential and evolutionary character, one has to resort to a quasi historical survey as well. A qualitative analysis has revealed that the current kibbutz crisis, unlike previous omnidimensional ones is a multi-dimensional, multi-component and spiralling. in nature. An instructive contrary view was

advanced by UKM Secretary General²¹ whose conception of the crisis reflects omni-dimensionality: "... **this is not a basic crisis of the kibbutz**" and in the same document: "**the financial-economic crisis engulfing the kibbutz movement since 1985 is one of the severest to have ever ever occurred**". True, he does acknowledge the severity of the crisis and equally blames endogenous factors yet the interpretation of the crisis in its entirety attests to the insufficient perceptions of the magnitude, the extent and the depth of the lingering predicament.

Partly, his meditations of the crisis are mirrored by UKM's policies which not until late 1987 fully realised the multi-dimensional nature of the crisis. This study of crises is eclectic, hence, entails facets studied by various disciplines. The scope has been reduced intentionally and dealt with three facets: the economic, demographic and organisational. Logically, the parts of the chapter analyzing "Kibbutz Organisation" concurrently complements the thematic progression in this chapter illustrating kibbutz aspects of organisational decline and crisis.

Light has been shed upon the unheeded early-warning - signals and a relatively wide coverage of the antecedents trying to emphasise valid points made by a handful of

²¹Yadlin, A., **A working Paper for the Ideological Council**, UKM Secretariat, June 1989 , Mimeo, (in Hebrew).

economists and other theorists has been given. The portrayal of unheeded forewarning seems to conform with the theoretical elucidations as well as the practical anecdotes described by theorists from both the not-for-profit domain and the business realm. The endogenous perpetrators as well as the exogenous stimuli has been discussed at length. This, of course, within both the individual kibbutz and the UKM framework. Again, there appears to be no dearth of adequate validations of theoretical presumptions from the wider range of OT. The ensuing testimony concerning the crisis has been discussed along two trajectories, the economic and the demographic. Ample confirmations of the crisis-induced economic duress are adduced mainly by way of analyzing graphical displays of yearly decline in economic performance. Some foreboding demographic trends have been depicted. These trends are based on descriptive statistics and illustrate growing rates of Aziva. Worse, they clearly manifest the magnitude of the exodus of the younger, the more highly educated and the indigenous component (kibbutz-born).

Equally disturbing is the precipitous decline in the attractiveness of the kibbutz for potential candidates which coincides with the upsurge in Aziva. It would be appropriate to try and summarise or, rather, encapsulate the crisis along both theoretical and empirical lines. The current kibbutz crisis may be defined as having multi-dimensional, multi-component and multi-strata characteris-

tics. As such, the various aspects tend to reinforce one another so that the crisis is progressively worsened through the inescapable intervention of many forces. This situation resembles Lanir's (1990) "conceptual crisis" though he merely classified crises according to the degree of gravity as perceived by organisational members. In accordance with Lanir's classification of crises this is the gravest, that is, involves the organisational members' befuddled "conceptual anchor".

Theoretically, differentiating between *crisis strata* and *crisis domains*:

Table No. 22

STRATA	Organisational	Organisational	Turbulent task
DOMAINS	MEMBERS	SYSTEMS	ENVIRONMENT
ECONOMIC			
SOCIAL			
ORGANISATION			
RELEVANCE			

This simple model allows a typology of crises along two dimensions where each categorisation may be attributed to both dimensions. For example, a crisis within the "relevance" domain falling within the stratum or level "organisational", meaning: a crisis of relevance within the organisational tier. An attempt to apply this type to the kibbutz scene, would reveal the actual current situation where the entire kibbutz system is involved in a crisis of relevance i.e. an inconsistency between the declared and outdated kibbutz goals and the way in which the kibbutz views these objectives. Alternatively, an economic crisis (the domain axis) and the environment stratum means, simply, instability or fluctuations within, say, the monetary system.

With respect to both the theoretical framework (organisation-environment relationships), defying the necessity of instituting boundary spanning capacity and perpetuating organisational inertia, Ron²² elucidates as follows:

"...Despite the fact that an economic upheaval occurred in the country in which the economy advanced from nominal economics into real economics, in such a way as credit for investments became adjusted in addition to a drastic increase in the real interest rates relative to rates used in the 1960's and 1970's, most of the kibbutzim have not changed their economic behaviour, and have not read the

²²Ron, A., **Information Bulletin No. 1**, UKM Economic Division, Oct. 1987:1.

slogan on the wall. Moreover, during that time, most kibbutzim proceeded in undertaking huge investments, without resorting to rigorous inspection or cost-benefit analyses, when investments were, generally, accompanied by a fascinating picture of prosperity and success, illusioned by the fallacy that no credit restriction exists in kibbutz economy".

This illuminating acknowledgment by UKM's economic czar attests to the gravity of the current crisis. Moreover it matches the fundamentals of relevant theories. Ron (Ibid) is aware of the multi-dimensionality of the crisis: "...we overlook verity if we claim that all that is happening to our kibbutzim is a mere economic crisis" as early as October 1987. In the primaries prior to the elections of UKM Secretary General, the four candidates aired their views a about the definition of the crisis²³.

Zur who was later elected, conclude: "The crisis is structural, ideological, cultural & economic". Indeed he subtly castigates his predecessors: "...the singular thing about it is that it engages the kibbutz movement without an agreed-upon leadership" Yadlin²⁴ argued that: "this is an economic crisis" and that "a large number of kibbutzim are not engaged in the crisis". Whether or not this statement

²³FOUR ANSWERS FOR EACH QUESTION, a circular distributed amongst UKM's Caucus members prior to the election of UKM Secretary General, 2 June 1989, (Mimeo).

²⁴Yadlin, A., notes submitted to the weekly meeting of UKM Secretariat, March 1989, (Mimeo).

authenticates environmental blindness one cannot tell at this stage. However, several months beforehand the UKM Spokesman²⁵ issued a warning in the wake of mass privatisation of Israeli banks, : "The kibbutz movements, in my opinion, lag behind badly in both reading the map and in response. This time it's really menacing".

This rather astonishing exclamation at a pinnacle of the crisis made by the UKM's Secretary General, attests to a managerial disengagement from actuality and raises doubts concerning managerial capacity to initiate appropriate policies.

²⁵An article prepared by Leshem, S., for publication in KIBBUTZ, "Israel - A South American Model ? (Or the Upheaval in the Banks), 9 October 1988, (Mimeo).

PART TWO: POLICY

CHAPTER TEN:

**EVALUATION OF PUBLIC POLICY: THE UNITED KIBBUTZ MOVEMENT
- 1980-1990**

"Pioneering should be viewed neither through possessions, nor in spearheadedness. We Jews have always preceded any social movement, any revolution. What we badly lack is the fortitude to retain these occupations, to attach ourselves to the place, to the earth. To fight the compelling roving urge accompanying us for generations. We have to stay here !"

Tankhum, circa 1915 at Deganya General Assembly.

General

A general convention regarding policy analyses has it that comprehension of public policy does not, necessarily, require either a theoretical treaty or a model. Therefore, Doron, (1986:83) proposes "analytical methods for public policy analyses are not theories or postulated models but practical mechanism employed for the comprehension of that policy aspect or another".

Indeed this study aims at dwelling on normative, rational or cost-benefit policy analyses but, also qualitatively evaluating UKM policies which are inseparably linked with the evolutionary process of the current crisis.

In general, the process of public policy evaluation is aimed

primarily at determining whether or not the proclaimed organisational objectives have been achieved. If we were to suppose that a certain policy has been established so that the organisation might attain a given aim, we ought then to find

out; whether:

* Whether the process by which the policies drafted attained the stated organisational goals. This is the aspect of **policy making**.

* The objectives for which these policies existed, and obtained. This is the aspect of **policy formulation**.

In short, policy evaluation is aimed at assisting policy makers in establishing whether their objectives have been achieved and whether policy goals are commensurate with organisational means allotted for the attainment of these goals. Nachmias (1980) and Doron (1986), relate to the two different approaches in evaluation research. The first type, called **Policy Process Evaluation**, assesses whether the policies are carried out efficiently. The degree of correspondence between the invested inputs and the observed outputs will be evaluated in this chapter.

Industry

ensuing influences. One of the stated aims of this thesis is to evaluate and measure the impact of UKM's economic, political and social policies upon the current crisis. Hence, only peripheral reference will be made to assess the policy process since, it is only marginally relevant to implied repercussions as expressed by the declining kibbutzim. The evaluation of UKM's policy process involves queries such as the quantitative assessment of policy inputs invested throughout the years. The nextstage entails the evaluation of the **resulting outputs**. However, it is true that, at times, the borderline between the assessment of policy impact and policy process is rather obscure. Indeed, there are areas where the process does have a more immediate impact upon organisational processes of decline and the evolution of crisis.

Finding out just which are these policies will largely depend on the evaluation itself, so that we may not, at this stage, establish what facets of UKM policies have had a more observed influence. In addition to the above remarks, essentially the thesis is conceptually based on theories for whose validation the evaluation of policy impact and policy process are merely instrumental and not an expansion or a point of departure.

Therefore, it is suggested that the evaluation of public policy (impact and process), is technical rather than critical and theoretical in nature. Indeed, the statistical/econometric

methodologies used to evaluate policies will be employed in the methodology chapter.

THEORETICAL HIGHLIGHTS

Doron (1986:83-117), distinguished four different dimensions according to which policies may be analyzed:

* **The Normative Dimension;** Policy outputs and performances will be assessed in accordance with the theoretical framework or the analyst's value-system. That is, the empirical reality is viewed through a given set of yardsticks and values, formulated mainly by models and theories. Accordingly, a set of norms will serve as the basis for a decision of whether to accept the policy or reject it. Discussion and policy recommendations will bear upon value-oriented arguments.

* **The Descriptive Dimension;** policy analysts employing the descriptive dimension, relate to "what is actually happening?". Simply put, the analyst will focus on the background and the various factors that led to the prevailing policy.

* **The Evaluative Dimension;** this type of policy analysis relates to two major questions: the policy process and the subsequent results. This may involve both normative and descriptive factors. Whenever policy evaluation is conducted in light of certain **values** or norms, the emphasis will be normative. When, however, the evaluation is carried out in the

light of certain **facts**, the analytical focus will be descriptive.

* **The Prescription Dimension**; Doron asserts that public policy analysis resembles the process of clinical know-how. At times, problems arise that require a policy response. For these situations prescriptions for solutions are provided.

In terms of **validity**, Doron proposes the following logical sentences (Ibid p. 86):

Normative Sentence : B must be obtained, therefore let's do A.

Descriptive Sentence: A occurs, followed by B.

Evaluative Sentence: Doing A will enable the attainment of B.

Prescription Sentence: In order to cause B to happen, do A.

As validity does not suffice, policy sentences therefore should be examined contextually and substantially. It is suggested that instead of **A, Organic Structure** and instead of **B, Organisational Durability** is used.

Normative Sentence : In order to have a viable organisation,
it would be advisable to adapt an
organic structure.

Descriptive Sentence: Introduction of an organic structure
has resulted in a durable
organisation.

Evaluative Sentence: By adopting an organic structure it is

possible to strengthen organisational viability.

Prescription Sentence: In order to achieve improved organisational survivability, it is deemed necessary to adopt an organic structure.

Policy research, seeks to provide solutions for fundamental dilemmas and consequently to reinforce major organisational programmes. In so far as policy makers are concerned, policy research is said to stress basic differences in the domain of policy formulation. To sum up, policy evaluation is "research that retrieves systematic information about the cost and impact of policy outcomes for the purposes of altering or refining the policy to better accomplish its goal" (Ill Chou & Henry, 1980:461).

UKM POLICIES - DEFINITIONS AND DISCUSSION

General

The aim of this chapter is define UKM's policies from an organisational viewpoint. Employing the term "organisational" means that it is assumed that these policies stand for kibbutz's organisational goals rather than the UKM's

organisation per-se. Indeed, the UKM deserves a different study which will clarify internal-organisational structure as well as other issues which, may have some effect on the affiliated kibbutzim. Therefore, the UKM as an umbrella organisation and its internal organisational arrangements and policies will be analyzed.

The policies formulated by this organisation serve as the declared goals for the affiliated kibbutzim. Assumptions claiming the existence of an association between these policies, the evolution of the current crisis and its persistent exacerbation throughout the years will be analyzed. The discussion will cover, the period from 1980 to 1990. There seems to be a need to dwell briefly on the interrelation between policies and organisational goals. Organisational goals are **"an abstraction distilled from the desires of members and pressures from the environment and the internal system"** (Hall, 1972:82).

Organisations have multiple goals as different groups of people maintain legitimate claims on the organisation. (Jackson, Morgan & Paolillo, 1986:30). These multiple goals may be classified hierarchically as follows:

- * **Domain Goals;** broadly stated objectives which identify the general type of activity within which the organisation elects to operate.
- * **Output Goals** are made up of the specific turnout offered

by the organisation and identify the characteristics which differentiate the organisation in terms of its unique products, services etc.

- * **System Goals;** are the objectives which contribute to organisational survival.
- * **Derived Goals;** Organisational clout or power which is not aimed at achieving greater outputs or system goals but are commensurate with "the major societal contribution of the organisation" (Jackson et.al.).

All the above are goals which are basically an expression of the specific angle one is taking when evaluating or analyzing the organisation. Kast & Rosenzweig (1985:187), argued that organisations have specific goals at each administrative level or subsystem. These characterise complex organisations.

* **The Strategic Level;** the relationships the organisation maintains with its environment. Goals at this level are broad and provide ample leeway and flexibility in the means for their attainment.

* **The coordinative Level;** The translation of the broader goals formulated at the strategic level into specific operational goals. The primary objective of this subsystem is aimed at coordinating activities between levels and between functions.

* **The Operating Subsystem;** Involves the actual task

performance. At this level goals are **highly detailed, specific, short-term, and quantifiable.**

Having the organisational interpretation in mind, it is fairly obvious that we are concerned with the **domain goals** at the **strategic level**. Hence, the policies which are evaluated, state domain goals formulated by UKM's upper echelons or its "strategic level". Most other goals at the various levels are of lesser significance to our discussion except for the economic policies, which reflect the output and the system goals at the operating subsystem. The derived goals occupy no insignificant place and will be dealt with primarily from the point of view of eliminating UKM's organisational slack for alleged outdated and irrelevant derived goals.

THE UKM ORGANISATIONAL GOALS IN THE 1980s

Kibbutz goals, in general, may be evaluated in accordance with a specific disciplinary point of departure. Kibbutz goals, deal not merely with the organisationally hierarchical stratum, but the legislative, ideological-philosophical and the political strata. Each of these approaches may have a similar ranking of goals.

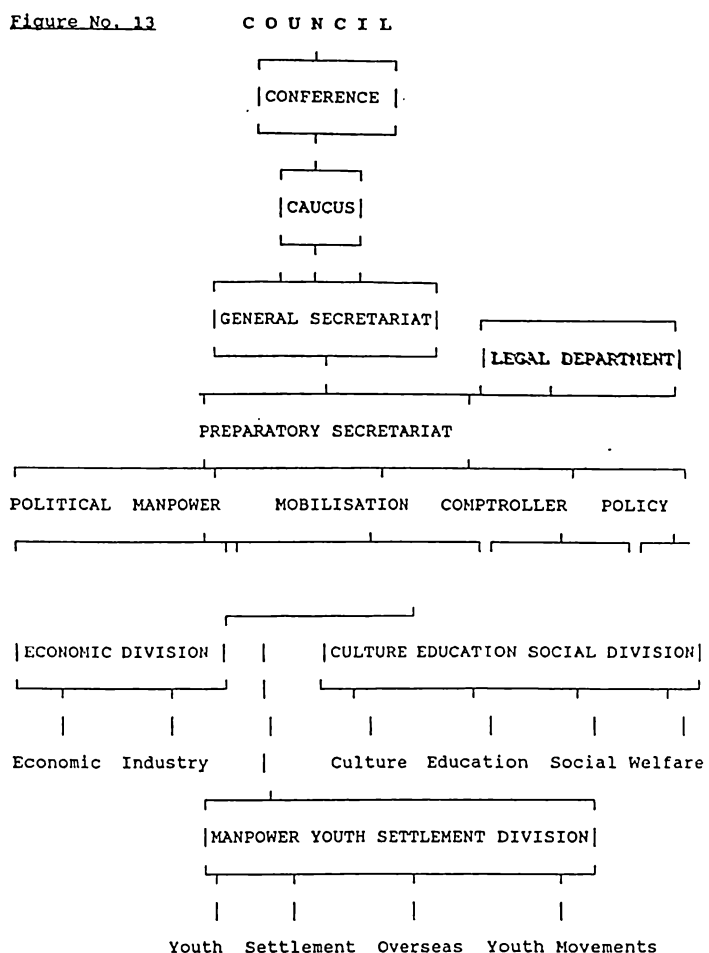
A useful way in which to dwell upon the UKM goals would be to try and survey several bibliographical basic sources such as:

- * UKM Council resolutions
- * UKM Conferences resolutions
- * UKM Caucuses resolutions ("Parliament")
- * UKM Preparatory Secretariat ("Cabinet")
- * UKM General Secretariat ("Government")
- * UKM Economic Division resolutions
- * UKM Economic Committee resolutions
- * Other resolutions endorsed by various appointed committees.

A two-way table scaling and layering organisational goals by organisational levels will be set out.

UKM's organisational structure chart for this purpose would be as follows:

Figure No. 13



Youth Settlement Overseas Youth Movements

Both Council and Conference are made up of representatives from the affiliated kibbutzim. Each kibbutz is allocated representation according to its relative size. "Council is the Movement's highest authority, it is authorised to decide in any matter within the scope of the movement's goals and authorities, short of the following issues: changing the name

of the association, changing its rules, the dissolution of the association, its merger or transforming it into a company"¹. Conference convenes every two to three years. Caucus is also allocated seats according to the same key and is summoned every month. The General Secretariat is composed of elected members and appointed members who participate ex-officio (committee chairpersons, divisions heads, the General Secretary, Internal Secretary (CEO and Comptrollers). Its duties include general management and representation. All other committees and functions are manned by appointed incumbent members.

Table No. 23

ADMINISTRATIVE

LEVEL ^

O R G A N I S A T I O N G O A L S

	DOMAIN	OUTPUT	SYSTEM	DERIVED
STRATEGIC	Council & Conference	<i>Economic Management Secretariat</i>	Government	Council & Conference

¹ Regulation No. 11a of the UKM Regulations, A Central Collective Association LTD.

COORDINATIVE		<i>Caucus Secretariat</i>	Banks Jewish- Agency	Secretariat & Caucus
OPERATING	Legal Dept.	Economic, Settlement etc.	KIBBUTZIM	Political Regional Integration

The table may be explained along its horizontal and lateral dimensions. The actual cell contains the organisational function as expressed by its hierarchical position within the enclosed structure. Both Council and the Conference, for instance, set out organisational goals at the strategic level (the interface between UKM and its task environment) and their resolutions are of the domain nature, namely, broadly phrased objectives such as: "UKM will establish ten kibbutzim in peripheral regions within the next five years" or: "UKM kibbutzim will adhere to the stated principals of the Labour Movement".

At the coordinative subsystem, however, these broadly stated goals, formulated by the Conference and Caucus, are then being translated into specific operational goals. For example, the resolutions regarding settlements are first discussed by the Secretariat at the strategic level and then passed on to the Preparatory Secretariat and the Economic Committee at the coordinative level for further deliberation and specification. These same output goals will, then be transferred to the

economic committee at the operating level but still under output goals. The coordinate "coordinative level" by "output goals" containing the General Secretariat and the Economic Division, will budget, set out manpower policy and "coaching" strategies for the proposed new settlements. At the operating level and output goals cell, highly specified objectives will be set out for the new settlements such as land allocation, water and production quotas, planning, coordinating and supervising the actual establishing process.

The above are but skeletal illustrations as the table itself which, in practice, is markedly more complex. The proposed table may, however, assist in comprehending the hierarchy of policy formulation and, in fact, the means-end chain which is based on organisational differentiation according to units rather than personal functions. The evaluation and analysis of public policy may be conducted without resorting to this specific organisational theory interface. Nevertheless, contextually, it is necessary to allow for a basic linkage, albeit rather theoretical, so as not to lose the organisational theoretical point of departure.

Definitions

A recent definition of UKM states: "An organisation, linking affiliated member kibbutzim with a national system of autonomous collective communities who take it upon themselves to conform by fundamental tenets and common goals. The creation of the organisation, by definition, forms a movement which is beyond a mere association of member kibbutzim" (Perry, 1989:8). As indicated, UKM is an amalgamation of two kibbutz federations each of which existed for over six decades and so have brought a considerable ideological dowry and movemental norms. Despite these minor style differences, the basic kibbutz tenets are almost identical. Succinctly, UKM's roles may be defined as:

- * Development of the Movement's ideological framework.
- * Formulation of strategy and its implementation in the areas of the economy, social issues, settlement, absorption etc.
- * Representation of the affiliated kibbutzim in state authorities, the Federation of Trade Unions (Histadrut) and overseas national organisations (Jewish Agency).
- * UKM's Secretariat is in charge of carrying out the various roles, and implementing the movement's resolutions in accordance with decisions passed by the conference and caucus.

* The activation of movemental services by way of utilising economies of scale and accumulated skills. General movemental "directives" mutual assistance and mutual (inter-kibbutz) guarantees.

The above is said to be achieved through²:

I. **Authority** over its members and settlements in carrying out the responsibility to the movement's tasks as decided upon by its elected institutions, maintaining basic tenets and mutual assistance among kibbutzim.

II. **Assistance** in developing economy, society and the moral, cultural and educational creation.

III. **Mutual guarantees** in order to obtain authority and assistance. The amount of mutual guarantees is a function of property and capital owned by kibbutzim and will determine and affect the extent of movemental tasks and assistance.

IV. **Autonomy**; for (affiliated) kibbutzim in management, creativity and experiment: educational, social, cultural and economic within the framework of principles set out, knowingly, by the entire movement and its elected institutions.

V. **Struggle**; for the attainment of its national goals and its

² The principles of Platform, 21-23 June 1979 (enacted by the inaugurating convention).

independent political and ideological way. This should be carried out through an on-going endeavour to search for allies amongst labourers, the inteligentsia and the entire nation.

Social and Economic Policy ³

- * UKM maintains links between economic and social policies.
- * The revitalisation of economic growth is a primary solution to the current crisis.
- * This should be based upon the existing production system through renewing capital investments chiefly in productive and export-oriented industries.
- * This procedure enforces a transformation in the vocational structure by shifting workers from services to production.
- * Increased productivity is paramount in staving off inflation and enhancing economic recovery. Reduction of public spending should be implemented through prioritising socio-economic goals and reducing standard of living, primarily among the well to do kibbutzim. This should be enforced progressively by ensuring an infrastructure of social services based on mutual assistance.
- * Automatic indexing of wages must be discontinued. Financial assets should be levied ⁴.

³First UKM Conference, 1985 (Shefayim).

⁴This clause like some others is aimed at Israel at large.

* UKM Conference supports the Federation of Trade Unions and its arbitrary policies. Taxation must be equally sustained by hired workers and the well-to-do strata.

* Consumption-oriented investments must be severely curtailed in accordance with the general economic situation.

The Settlement Policy can be summarised in the following manner:

* UKM demands governmental assistance for confrontation-line kibbutzim⁵.

* UKM will enhance educational efforts in order to further encourage readiness to assume command positions in the IDF.

* UKM encourages peace initiatives.

* UKM demands that the Government will perpetuate its "No New Settlements" policy in Judea & Samaria.

* UKM calls for beefing up settlements in security zones according to the Allon Plan⁶.

* UKM will establish its settlements in the Golan Heights, Galilee, Jordan Valley and Northern Dead Sea, the Yattir

⁵Kibbutzim situated along Israel's international borders.

⁶ The Allon Plan is named after the late Yigal Allon, a kibbutz member who held various Government portfolios and was the leading architect in formulating a security plan. This plan calls for the holding on to the entire Jordan Valley by maintainig a combined military and settlement presence in a security belt of approximately 10-15 kilometers along the Jordan River. This Plan negates the establishment of Israeli settlements in heavily populated Arab regions in Judea and Samaria.

District, Negev and the Arava.

The **Social Policy** can be summarised in this manner:

- * UKM denounces chauvinistic extremism.
- * UKM reproaches religious enforcement and attempts to infringe upon individual liberties.
- * UKM admonishes attempts to violate laws and disavowal of state sovereignty. Calls for the independence of legal system .
- * UKM calls for furthering educational aspects of democratic tolerance, human rights and liberty. Respect for other people and champions a policy of compromise and agreement.

The UKM's **General Public Issues** can be summed up as follows:

- * UKM's Conference calls for a more active participation in the public, political and social struggles in Israel.
- * UKM's authority in directing its envoys in various public systems ought to be further stressed.
- * UKM will intensify political and ideological education in its midst.
- * UKM will strive to strengthen Labour⁷ through endeavours in effectuating its ideology and politics.
- * UKM will strive to increase cooperation with other

⁷ The Israeli Labour Party

factions of the Labour Movement.

- * UKM acknowledges all Jewish persuasions.
- * UKM calls for Aliyah the build-up of kibbutz, the State of Israel and struggle throughout the Jewish People.

CURRENT UKM POLICIES - DRAFTED BY THE PREPARATORY SECRETARIAT⁸

Augmented version predicated on Conference policy planks (July 1985), was drafted by UKM Preparatory Secretariat in March 1989. This policy statement summarises the major ideological tenets and specifies, in broad terms, the operational objectives. This essential document may be considered as an intermediary stage, in terms of goals hierarchy, between the domain goals as formulated by conference and output goals as drafted by caucus. Surely, to an extent this stratification hardly conforms with theory since administratively, the Secretariat is hierarchically beneath both Caucus and the Conference. Moreover, the Secretariat is said to issue output goals rather than serve as intermediary.

This inconsistency is only theoretical as reality is very frequently subject to swift alterations that require prompt administrative response. The discrepancy is alluded to in an internal register submitted by the Secretary General to the committee preparing UKM Council, (Perry & Hare'el 1988:3): it

⁸ UKM Preparatory Secretariat, March 1989.

reads as follows: "In the past, kibbutz performed in much harder situations but it had a far clearer 'aim-function', hence it could withstand impediments and adjust itself, in time, to internally and externally required changes. Lately, the pace of environmental changes has been accelerated, generating a substantial gap in the process of adjustment. The vacuum requires a prompt stabilisation and intensified action for the revitalisation of ideological concepts, life patterns and the structure of the kibbutz system, in order to position them in accordance with requisites of current and anticipated reality.

In the midst of confusion which accompanies a crisis and a process of change, there is vital importance for the demarcation of tenets which will be the cornerstone for the renewed ideological concept".

The following points are a concise version of UKM's main policy tenets which have been stated by Perry et.al:

- * Mutual guarantees amongst member kibbutzim which maintain and accept the principles of the kibbutz and the Movement.
- * An intensive participation in the national responsibility and the national and social creation within the state and the Jewish people.
- * Maintaining a perpetual process of settlement and

population growth, absorption of members and kibbutz-born, joining the kibbutz and accepting its principals.

- * Building growing collective communities, new and established alike, and participating in exploring similar collective life styles, as a viable socialist alternative.
- * The initiation and conduct of renewals and changes in all spheres of life for the advancement of kibbutz in the changing the environment and a persisting renewal of its ideological concepts.

DISCUSSION

It is quite apparent that many of the goals aimed at UKM's stance in the economic and social arena, as well as most other policy aspects, are of the type defined as "derived". Heavy business management emphasis is placed on goals defined as "derived", (Jeckson, et.al.). The current context is not markedly different. Various chapters have explicated the kibbutz's inherited tendency to volunteer to national tasks. The above policy tenets echo these tendencies in the sense that they express UKM's opinion concerning national issues rather than internal kibbutz affairs. It is estimated that ten percent (over a period of 6-7 years, 1980-7) of UKM annual budget was earmarked to activities other than those directly linked with kibbutz issues (youth movements, political, cultural and social activities). The outward orientation has

been essential in many organisational respects, most significant of which is the ubiquitous perception of task environments. The main argument regarding these activities pertains to two schools of thought. The first favours the cessation of any activities deemed irrelevant to the very existence of UKM kibbutzim and adjustment of UKM allocation of resources to strict budgetary curtailments. The other advancement advocates the progression of such activities in order for UKM to maintain an uninterrupted rapport with any potentially supportive avenue in the environment (the Labour party, trade unions, development towns, youth movements and the Israeli public at large).

Traditionally, UKM tends to devote a considerable (agenda) time to discuss intangible national issues.

The above policy statements were drawn in July 1985, therefore they are largely influenced by the effect of events of the time (the invasion of Lebanon, The New Economic Policy, socio-ethnic and religious unrest, The Palestinian problem, etc.). The lingering preoccupation with "great national issues", though not inherently irrelevant to the kibbutz scene, reflects also the traditional roles the kibbutz has played in the national ethos of the state of Israel. Throughout the current crisis there have been calls for "lowering the fence" (Levy, 1988), namely, greater interchange of ideas, economic ties and political cooperation with the environment. In fact,

however, the strategic level should indeed deal with the delineation of doctrines elaborating domain issues. These are, largely, the keynotes within which the organisation elects to be involved. In order not to excessively impinge upon the thrust of organisational goals, a single subject will be briefly followed through the hierarchy of both organisational goals and the corresponding administrative levels.

Policy statement number six in the set of conference decisions delineating UKM's settlement strategy, specifies the regions earmarked for future establishment of kibbutzim.

The following discussion follows a stage in both the administrative level and the hierarchy of goals.

1. Caucus relates to this decision as part of the coordinative level and delineates specific policy statements to identify relevant settlement characteristics. These include; scope, time-range, availability of funds, coaching capacity, rudimentary allocation of human resources, greater geographical specificity in terms of site and location, general timetable etc.

Consequently, Caucus's resolutions are passed on to the operating administrative level i.e. the settlement, economic, social committees, all of which focus on specific issues.

Within the hierarchy of organisational goals these committees still formulate specific policy reports (output goals) but

these are already involved in virtual task-performance outlining short-term coaching objectives within the operating subsystem.

For example, Social Committee, details special social counselling for newly-established kibbutzim. The Manpower Division lists the specific length of time each group stays in the new kibbutz site and the allocation of groups to newly-established kibbutzim ^{9 10 11}

AN INTRODUCTION TO IMPACT & PROCESS EVALUATION: A QUALITATIVE: ANALYSIS OF UKM ECONOMIC POLICIES 1982-1988.

In general, UKM's economic policy is specified by the operating subsystem which, for the purposes of the current discussion, will be embodied by UKM's Economic and Industry Committees and coordinated by the Economic Division. The actual policy is designated in the annual economic marathons. It is almost axiomatic that in terms of the organisational chain of command, caucus sets forth the general framework and delineates economic policy on broad lines. Its resolutions are then discussed and interpreted economically by the Economic

3 UKM Manpower Minutes 8\I\1989

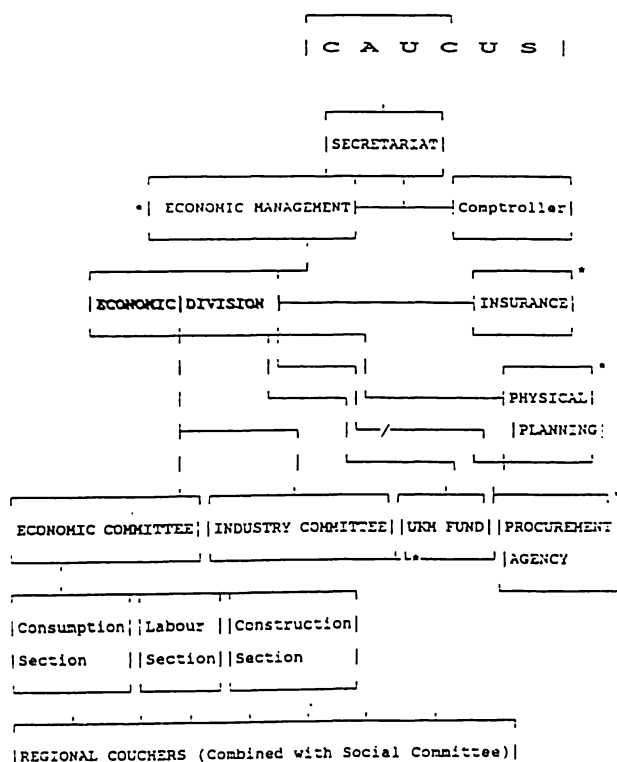
9

2. Movemental Coaching, A stenogramme, UKM, Social Committee, 7\VII\1988.

¹¹. Policy Plan, UKM Caucus, Arava, 21-22\IV\1982.

Division which along with the subordinated Economic and Industrial Committees and coordinated with the "UKM Fund", issue a detailed booklet constituting the next financial year's planner and the past years unofficial balance sheet. The following is an organisational chart depicting UKM's economic activities.

Figure No. 14a



The methodology will systematically and chronologically survey and assess various sources all of which originated in the UKM albeit not necessarily at the same administrative level. Noteworthy is the fact that not until 1987, the annual economic planning accounted for the Hebrew calendar year, namely, September to September. However, in order to simplify the Gregorian calendar will be used. The analysis will include norms for economic behaviour predicated upon the economic performance of the preceding year (macro - UKM) and certain presumptions for the macro economic situation for the ensuing year¹².

1983

- * Exhaustion of ways to increase productivity within the framework of existing means of production.
- * Development of the economy in accordance with the demographic growth.
- * Based on long distance considerations, emphasis should be placed on export oriented industries.
- * Investments must be funnelled into increased productivity rather than improved work (welfare of labourers, i.e. air-conditioned shop floors, air-conditioned tractors, etc.) conditions.

¹² The analysis is based on the annual Marathons unless otherwise mentioned.

* Investments plan will be spread throughout the year and will be examined in light of cash-flow and the implementation of the economic plan.

* Note should be taken of the increase of the kibbutz's debt. An optimal situation is when capital recovery will not surpass operational surplus. Renewal of productive equipment will not exceed 8 percent of the kibbutz output.

* Maintenance expanses will be commensurate with the norms set forth by the Economic Committee.

UKM Caucus¹³ summing up 1982 in terms of economic performance partially reflected similar views though a number of discrepancies are apparent. It should be borne in mind that this caucus preceded the formulation of the above quoted marathon. In as much as a marginal awareness as to the worsening economic situation is expressed by the resolutions "Government policy expressed by staving off growth and development, encouragement dubious economic activities and the inflationary spiral, foils kibbutz profitability and the agricultural sector in the main". Perhaps the most prominent misunderstanding of the repercussions of unrestrained economic expansion ("the fixation with growth") is communicated by the resolution: "Caucus notes that most of the kibbutzim have intelligibly expanded their economic base...This process along

¹³ Resolutions of UKM Caucus in economic matters, Efal 22-23\IX\1982.

with regional development and movemental mutual assistance enabled the orderly economic functioning of the kibbutzim".

Caucus will see to it that the movement "will assist in the mobilisation of resources for the financing of the agreed upon programme, the resources will be mobilised from the establishing bodies, Government, and internal resources". However anxious to expand, the movement "Voices concern due to the increased economic disparity amongst kibbutzim".

Surely, no financially unstable kibbutz has adequate resources to both cope with expansion and, on the other hand, to close the economic gap (Helman et.al.). Additional incongruity is brought about by the concern expressed at "the way some kibbutzim have been active in the money market". The drive for expansion which was encouraged by the movement, will have, quite naturally, led to a greater reliance on loans offered by the sharks of the grey market. Awareness of extended kibbutz involvement in the grey market prompted UKM to summon Caucus for a special session fully devoted to financial policy¹⁴. Major principles guiding kibbutzim's financial behaviour in the money market are as follows:

* UKM economic activities will focus on the productive economy. "The movement does not consider capital as a profit-oriented industry and a range of activity in its own merits,

¹⁴ UKM Caucus resolutions 21\III\1983, UKM, Economic Division, March 22 1983.

opposes the usage of capital through speculation". However, "the high rate of inflation, fluctuating credit rates and dearth in directed credit for developing the productive economy, obligates UKM to take measures to mobilise capital and maintain liquidity, avoiding jolts and to funnel capital so as to retain the economic value of movement and kibbutz assets".

- * Kibbutz investments in the money market solely through movemental channels.
- * Financial activities will be subject to public auditing (UKM), by elected committees (nominated by kibbutz assemblies and within the movement framework, by Caucus).
- * Kibbutzim and kibbutz-related agencies will refrain from taking financial risks in order to obtain greater return on capital.
- * The Comptroller office will be bolstered and his authority widened.
- * Financial information is mandatory between kibbutzim and the movement.
- * UKM will strive for the standardisation of the financial system.
- * UKM Secretariat will exhaust all measures with kibbutzim sidetracking from the above principals.

In general, 1982 economic performance was similar to 1981. Consequently and as a result of the deteriorating economic situation at large, and the ensuing extended activities in the grey market, UKM policy emphasis for 1983 focused on:

- a. Stricter auditing, detailed financial reports, improved financial coordination.
- b. Financial activities funnelled through approved movemental channels.
- c. Continuation of economic expansion. careful attention to investments goals.

1984

The dictated economic norms set forth for 1984 were, literally, identical to those for 1983, with the exception of one item¹⁵:

*** The economic data - the inflation and the cost of capital, as well as laws and official regulations, oblige us to improve auditing".**

In fact, the general deterioration of the economic environment resulted in stagnation, despite improved economic performance in terms of crops and other measures. What virtually declined

¹⁵ Planning Economic Activities for 1984, UKM Economic Committee.

was the margins of profit owing to rates of exchange, inflation, the cost of capital etc. Extension of service industries such as tourism may have been the most striking breakthrough. In terms of investments, **despite** the steadily deteriorating macro-economic conditions, these increased by 12 percent (500 to 560 million NIS [adjusted to 31\XII\88]). A final note in the 1984 marathons draws attention to **"the combination of the expansion of investments volume, their characteristics and the remarkable increase in the cost of capital, all of which require specific thoughtfulness"**. Further to the above, UKM economic architects correctly anticipated hardships in the financial system both in terms of the availability and the cost of capital.

Despite the abbreviated nature of the actual policy emphases for 1984, awareness of the looming crisis was conspicuously apparent predominantly within UKM's economic quarters. Late in 1983¹⁶, UKM issued a subdued acknowledgement following the collapse of the Tel Aviv Stock Exchange: **"The economic situation in Israel reached a crisis dimension and compels us to be appropriately arrayed and to adjust our activities to the changing data"**. This document details a number of essential emphases, supplementing the September issue of the annual marathon:

¹⁶ Regulations for Economic-Social Behaviour - 1984 Plan, UKM Economic Committee, 5\XII\1983.

1. Kibbutz Economy

- * Special emphasis on export oriented industries.
- * With the skyrocketing inflation, credit lines are being substantially curtailed, hence, kibbutzim are to reduce credit extended to customers.
- * A reduction of services is paramount as is the increase in production.

2. Investments in consumption and welfare

- * A substantial decrease in living expenses is paramount.
- * A project of changing to housing children in parents' dwellings will not commence in 1984.
- * A two-stage investment plan in consumption is declared where no more than 2/3 of the earmarked volume to be implemented until mid-year and rest will be discussed following mid-year's trial balance.
- * Construction for absorption of candidates gets priority (a potential economic growth).
- * All construction sites will be freezed.

2. Financing and finances

- * Any capital investment should be discussed with UKM Fund.
- * A non renewal of loans expected in the external system as

well as in UKM Fund. Only 50 percent of the volume of defrayed loans will be renewed. Hence, net debt should be reduced.

- * UKM Fund will be restricted in its capacity to convert external debts by increasing debit to the Fund.

3. The Movement level

- * Overall kibbutzim indebtedness to the Fund will be restricted.
- * UKM budget will be frozen (1983 level).
- * Research & development will be stepped up.

To sum up, policy planning for 1984, for the first time, acknowledges the existence of an **economic** crisis. Consequently, various **economic** measures were taken in order to stave off the crisis. For the first time, however unconsciously, an attempt is being made to prevent an accelerated spiralling decline by restricting indebtedness to the central system, i.e. UKM Fund. It is assumed that the Fund's indebtedness to the external banking system prompted a swift procedural action aimed at confining kibbutzim's reliance on this financially unstable institution. Crisis conception though existent, is mono-dimensional and reflects solely on the economic domain as if incremental economic rectifications, accentuated efficiency and

financial/managerial prudence will remedy the yet to be recognised snow-ball effect of the crisis.

1985

As widely dwelled upon in the chapter "crisis", 1985 earmarked a landmark in the evolution of the crisis. In September 1985, a grim official recognition of the extent of the crisis was communicated at UKM's Caucus. In terms of economic growth, there was complete stagnation between 1984-5 as shown by the following economic indicators:

- * A decrease of -3.57 percent in investments (560 to 540 million NIS).
- * Operational surplus rose by 12.5 percent (560 to 630 million NIS).
- * Net Debt increased by nearly 22 percent (1550 to 1950 million NIS).

There seems to have been a repetition of various policy emphases¹⁷ from past years. However, the focus is placed on the following economic areas:

- * Heavy reductions are recommended in production for

¹⁷ UKM's Economic Committee, Instructions for Economic Planning for 1985, August 1984.

inventories due to the cost of capital and the growing economic uncertainty.

* Improved cost accounting for the facilitation of production feasibility with special reference to input-output relationships.

* New investments stipulated by economic justification and their utilisation exclusively by internal labour.

* A curtailment of 5-7 percent in maintenance costs.

Investments

* For the first time a request for specification of loans sources.

Financial Policy

* Acute liquidity problem requires an optimal planning of cashflow and strongly worded advice to be cautiously planned mobilisation of capital.

* Deposit options; "the character of the deposits will be adjusted to the type of planned utilisation".

* "It is recommended to utilise actuary surpluses generated in savings accounts and superannuation savings and transfer them to different deposit plans".

Long Range Planning

For the first time a detailed policy statement advising kibbutzim to plan for 3-5 years ahead. The plan includes:

- * Income-expenses, operational surplus.
- * Debt and financial assets.
- * Active Passive.
- * Repayment of loans

Essentially, the conspicuous and unprecedented alterations in formulating economic policy are the long range planning and the detailed financial instructions. The historical guidelines as to the transference of social security deposits into unspecified investments also constitute a major policy shift. Before reflecting upon each of the above strictures, a need arises to elaborate on the precarious economic situation during 1985. UKM Spokesman (Leshem, 1985:1) announced: **"An essential and fateful issue is our economic standing in light of the deteriorating economic situation in the land... We are reaching the red line of planned and rational functioning capacity, and only through full cooperation we shall be able to cope with the situation and efficiently activate the mutual guarantees"**.

Characteristically, due to the imminent crisis, the proclivity to excessive centralisation of authority is paramount.

The Economic Committee became the sole decision maker in all

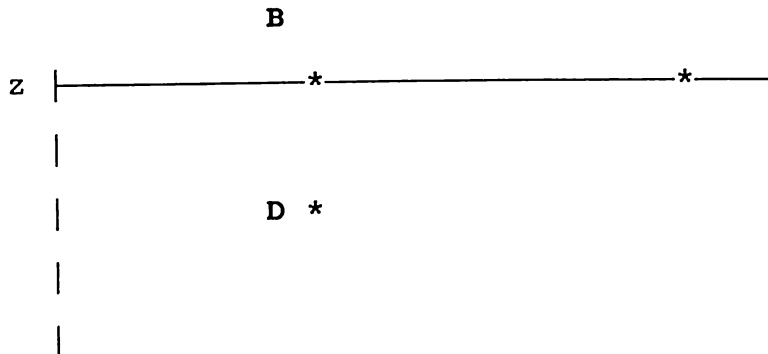
matters pertaining to investments. Stringent financial safeguards, across-the-board cuts and upwardly-converging decision-making procedures became the order of the day. Owing to the one-sided realisation of the crisis, the Economic Division became the indispensable and highly formalised axis of the entire UKM organisational structure. In November 1985 the UKM Spokesman declared "an emergency economic situation" (Leshem, 1985a:1): "The main issue on UKM and the kibbutzim's agenda is how to cope with the economic crisis we happened to be entangled in with the rest of the productive sector in Israel, as a result of the Government's economic policy. The extent of the problem is such that without a swift change in the Government's credit policy - and a governmental assistance of spreading out the accumulating and stressing debt, no (Economic Committee) indispensable recommendations will suffice. This is a stressful time in the history of the kibbutz movement, an era where many truths, principles and values will be challenged...".

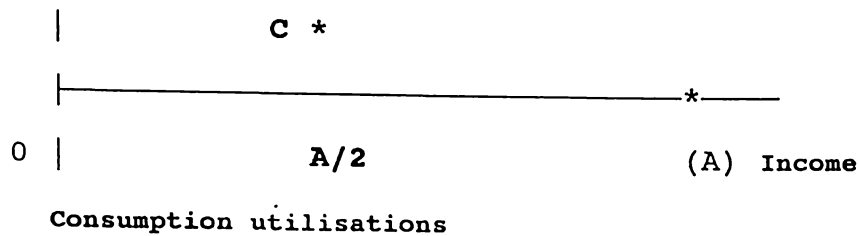
Barkai (1977, chapters 6-7) and Helman, (1982), discussed kibbutz economic planning practices. In general, the plan is based on an active-passive chart, usually prepared by a kibbutz accountant based on past year expenditures. The economic coordinator then assesses expenses for the incoming year. This method was predicated (Helman, Ibid) on the following assumptions:

- * Steady and distinct upturn in kibbutz outputs.
- * Consistent and manifest increase in standards of living.
- * Generation of surpluses from internal sources.
- * The ability of the "system" (the movements, in the main) to mobilise capital from public and business sources.

These rather steady economic conditions or placid environment enabled short-term planning and also, capacitated kibbutzim to continue to live beyond their economic means. Helman proposed a comprehensive long range economic planning model which, if followed, could have possibly moved the kibbutz movement to a less perilous situation just three years later. In essence, **"the proposed model strives to generate a linkage between income and the level of consumer utilisation"** (Helman, Ibid)", it integrates the "social management" with the planning process. Investments are assessed according to their cost, and the model integrates other junior office holders in the process, hence substantiates the scalar principle. Helman, in fact, anticipated several scenarios as displayed in the graph:

Figure No.9 .





* As indicated, (see, Kibbutz Organisation) a decrease in income (A to A/2) changes no consumption patterns, hence, consumer utilisation remains at level Z.

* Helman's accurate anticipation of the impending crisis due to drastic reduction in capital sources, accumulated debts and plummeting income is represented by a drop from B to C.

"A panic, a drastic 'assault' to posthastily balance-off the system by a total decrease of expenses, this would have undermined society, a complete frustration, brain-drain through exodus of the young and the capable ones and undermining the entire social-economic system".

Helman predicted that staying in B will result in "default, lack of motivation to escape crisis and a hazard of extinction". Moreover, moving to C would "irreparably ravage the social tissue", but moving to D (Helman's model) would ensure linkage between income and consumption and results in but "a 'moderate' plunge". He goes on to say that "members of the economic establishment invest 'enormous' time and energy in marginal issues...Resort to superficial outlook in many areas. All office holders (due to the participative democratic

principle) are being rotated frequently and this factor also undermines activities aimed at long-range planning".

The theoretical expansion has been essential so as to furnish a more focused view regarding the laggardly realisation on the part of UKM of the inadequacy of a mere short range planning and the clarity and appropriateness of Helman's unheeded-to model.

As to the transference of pension and other social security deposits into "different" savings trajectories, few studies have been conducted, thus far, into the subject of the undermining of members' faith and confidence in the relatively socially and economically secured life style of the kibbutz. Palgi, Am-Ad & Sharir (1989), conducted a comprehensive survey analyzing, among other issues, the degree of credibility as to the future of the kibbutz as perceived by a random sample of kibbutzniks (N=661, UKM 110, Kibbutz Artzi 55 kibbutzim, respectively). The results indicate that 2/3 of the interviewees have faith in the future of their kibbutz but only one half believe in the general future of the kibbutz. **"Apparently, the explanation may be that kibbutzniks have more faith in factors over which they have greater control"** (Ibid). Furthermore, faith in the future of the kibbutz movement is more strongly associated with confidence in its leadership. Hence, it is assumed, in broader terms, that undermining social security may have been part of the reasons for a

possible decline in the general faith of kibbutzniks in both their leadership and the future of the kibbutz. A few informative and comprehensive articles have been published in which apprehension about old-age social security is salient. Kedem (1990:2-3;150) alludes to the growing awareness of the shrinking resources and subsequently, as a last resort, utilising superannuation funds to meet interest payment. Peleg (interviewed by Halevy, 1990:3) asserts that: "What happened that the issue is cropping up now ? The basic change is the undermining of security in the very existence of the kibbutz, and then a solution is sought afterwards for social security in case it (kibbutz) will collapse".

1986¹⁸

The escalation of the crisis between 1985-6 is conspicuous. All economic predictors indicate a downhill propensity:

Operational Surplus	- 1.58 %
Financial Expenses	-25.8 %
Investments	-34.26 %
Net Debt	9.48 %

An increase of 39.7 percent in the number of leavers (members

¹⁸ All Monetary values are quoted in New Israeli Shekels adjusted to 31 December 1988, unless otherwise specified.

& candidates only). The extent as well as the snowball effect of the crisis started to take effect and UKM policy makers became considerably more attuned to its massive proportions. The above economic indicators brought about the following trends¹⁹:

- * A slow growth
- * A decline in the profitability of the economy

For the first time the Economic Committee issued "A general action plan"²⁰. The major and immediate objectives of which are:

- * A radical decrease in the volume of investments.
- * Encouragement of approved growth plans.
- * Staving off the growth of net-debt.

Moreover, due to the aggravation, the Economic Committee had become closely involved in various kibbutzim to the extent that 4the day to day management was assumed by UKM-appointed couchers.

Policy statement for 1986 includes the following salient points:

¹⁹ Economic Committee Resolution Propositions For An Action Sireny Plan in 1986 (Adapted by UKM Caucus, Netzer August 1985) Mimeo.

²⁰ Economic Committee, Action Plan for The Economic Committee 1986.

- * Mobilisation of appropriate credit lines.
- * The drafting of a recovery plan for the worst hit kibbutzim.
- * A concrete definition of the production potential in each kibbutz.
- * Enhanced coordination for the intensification of inter-kibbutz procurements of goods and services.
- * Allotment of an appropriate number of members for higher education in agriculture, industry, economics and management.
- * Freezing of maintenance expenditures.

An interesting and encouraging aspect of any of the annual policies, thus far, is the specific emphasis placed on a long-range facet embodied in the recommendation to invest in human-capital. Various authors (Helman, 1985 and 1986) alluded to the haphazard nature of investments in human capital and the ensuing insignificant results between the inputs in specific higher education and economic performance. Indeed, no indications exist as to the implementation of this policy statement. In fact, a decrease is apparent in the **total** number of members sent to universities primarily since 1985.

Conventionally, investments determine, by and large, the anticipated economic growth. It is rather obvious that the depletion as well as the rarity and cost of capital as of 1984, markedly hampered investments in kibbutzim. Hence, an assessment of the effectiveness of this policy would be

methodologically highly complex yet intuitively not hard to trace. A decrease of 59.5 percent in investments is recorded for UKM kibbutzim. UKM's policy for 1986 allows for no more than 5 percent (of the total production in a given kibbutz) renewal of productive equipment. Expansion of production capacity will be approved only following a rigorous feasibility study with UKM actively participating in the process.

Finances and Capital

As net-debt nearly doubled between 1983-1986 (an increase of 88.1 percent, from 1135 to 2135 billion NIS), amplified during the second half of 1985 by 135 percent²¹ interest per-annum (debit), the Economic Committee declared that: "The possibilities of recycling the debt and its cost, turned into a pivotal factor in both economic considerations and in the decision-making process in the kibbutzim". Government's pseudo-liberal policies discriminated against the productive sectors of the Israeli economy, and underrated agriculture in the main²². 1985-6 saw a stagnating GDP per-capita and: "The productive economy in Israel turned into a hostage, subject to various finances. It has become worthwhile to speculate in the

²¹ Bank of Israel, ANNUAL REPORT 1986.

²² Leshem, S., "To Play in The New Rules of the Game, TAKAMON, No. 17, June 1986:1.

share market. These rules of game affected us as well and pose a real threat to the Jewish state"²³. The exceptionally high interest rate eroded any chance for economic growth and subjugated the business sector along with the kibbutzim, to a ballooning debt.²⁴ Owing to the seriousness of the situation and the fact that the worst-hit kibbutzim had gradually lost autonomy in their decision-making process, the Economic Committee suggested as follows:

* An enforcement of close scrutiny on the part of the economic couchers regarding any diversions from financial activities in the kibbutzim.

* A financial committee will be set up. Its task will be to formulate a financial policy and to strictly monitor its articles.

* No substantial financial transaction will be carried out without previous consultation and coordination with UKM Fund.

The intra-UKM organisational upheaval alluded to earlier is clearly outlined by various structural measures within the Economic Committee such as increasing the number of couchers and the submission of appeals from kibbutzim to the committee.

²³ Leshem, S., "Internal endeavour and External Struggle", TAKAMON, No. 20, December 1986:1.

²⁴ Leshem, Ibid.

The repercussions of the grave economic situation did not go unnoticed by the Social Committee which, following a lengthy periods of indecision voiced naive apprehensions such as: "The economic marathons and the economic reappraisal ought to be conducted with a minimal social damage. Whereafter, the Social Committee views itself as an active participant in the process of improving the economic situation and sees its task as assisting kibbutzim to determine the social objectives in the current economic actuality²⁵"

To sum up, 1986 signifies, in many ways, the full thrust of the crisis. Its impact becomes apparent in all organisational facets, from the stringent allotment of the annual budget, through across-the-board manpower cuts to the upwardly convergence of powers. The typical inter-organisational imbalance between the relative prominence of the Economic Division and the deferentiality of most other departments also attest to the grave situation. UKM, in a somewhat impromptu fashion, started to behave organisationally along the lines of crisis management as of mid 1986. In the autumn of 1986²⁶, UKM for the first time applied for a partial governmental bail-out. Distress groups were earmarked as subject to individual treatment by the UKM, the banks and the Government.

²⁵ Leshem, S., (ed.), TAKAMON, UKM's Newsletter, No. 13, January 1986:5)

²⁶ TAKAMON, No. 17, October-November 1986:6.

The 4suggested recovery plan consisted of a six million US \$ levy imposed upon the wealthy kibbutzim and the involuntary lowering of interest rate to 3%.

1987

The Economic Committee's²⁷ policy statements for 1987 are characterised by two major features, size and details. As the crisis intensified, the propensity to formalise (as well as other typical administrative responses) becomes apparent in a number of ways, most salient of which was, on the one hand, the proliferation of detailed policy statements and on the other, the intra-organisational centralisation of power.

Investments Policy

Additional aggravation in the crisis is evident. Financing expenses rose by 10.87 percent between 1986-7 and the net debt volume grew by 19 percent between the respective years.

- * **Major goal:** a non-growth of debt.
- * **Basis for investments:** internal source and allowances.
- * **Investments in new projects** will be subject to economic criteria, technological and legal aspects.

²⁷ UKM Economic Committee, RECOMMENDATIONS FOR ECONOMIC POLICIES IN THE UKM FOR 1987.

- * Recycling the debt - a major decision-making input. Any capital-oriented transactions should be coordinated with UKM Fund.
- * No financial sources for assistance will be provided other than for young kibbutzim.

Indeed a reduction of -7.04 percent (from 355 to 330 million NIS) in the volume of investments between 1986-7 and of -36.11 percent between 1986-8 is observed. New facets are mainly the enhancement to prominence of the technological and legal aspects of feasibility studies. Whereas no explanations of these facets are provided, the awareness as to the negative potential of loosely worded commercial and chiefly financial contracts, grew markedly. This was specifically due to the scarcity and cost of reasonably acceptable development loans. The urge to expand and, on the other hand to obtain reasonably inexpensive working capital, prompted kibbutzim to financial sources other than the banks. The technological aspect has, probably, to do with opting for technological solutions that might have a cost-effective potential.

Industry

- * Improvement of marketing, overcoming the traditionally production-oriented economy.
- * Follow-up of the crystallisation of long-range RD and

marketing conceptions.

Labour Force

"The Economic Committee views the handling of the labour force with supreme importance, aiming at the maximal utilisation of the workforce in the kibbutz in production, services towards a substantial increase of income"²⁸ The work force being, allegedly, the most malleable economic input, was for a considerable length of time, regarded as a "self-evident" factor. Namely, an economic component which irrespective of cost (maintenance or sustenance) may be liberally utilised in all sections of kibbutz. The allocation of manpower was determined according to real or fallacious demand.

It is assumed that as a result of non-existent linkage between income and the actual economic contribution, as reflected by labour, the kibbutz regarded its workforce as a relatively elastic economic component which may unjustifiably enhance non bread-winning sectors. As a result of these liberal and unorthodox strategies, services have become disproportionately overblown and some agricultural branches and manufacturing-industries over-staffed. Merry (1989), alludes to this practice arguing that owing to relative munificence in the

²⁸ Ibid

unprofessional labour force, many alleged "bottle necks" are bypassed or resolved by assigning superfluous workers. It is, however, fairly apparent that there is a growing polarisation between specific and much sought-after skills and the unprofessional jobs. Hence the need is for professionals rather than unskilled workers (Gavish, 1988). The net result of the strictly economic assessment of the real-value added of labour on the one hand and of spontaneous-solidarity interrelationship, on the other hand, have instituted a labour force that is both organisationally and economically imbalanced.

In as much as labour is still highly regarded, and the kibbutz may certainly be defined as an industrious society, the actual work tended to be economically undervalued. As already stated, when no association exists between income and actual consumption and whilst the very existence of the organisation is not contingent upon its economic outputs, various discrepancies occur. One of these inconsistencies is the bizarre ratio between breadwinners and services in the kibbutz. Though no linkage has been detected, thus far, between the ratio services/production and the aggravation of the crisis. Nor is this association likely to be particularly significant when compared with the effect of exogenous predictors. Yet, logically, an industrious community would, first and foremost, be assessed, not by the number of its

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¹ Ibid

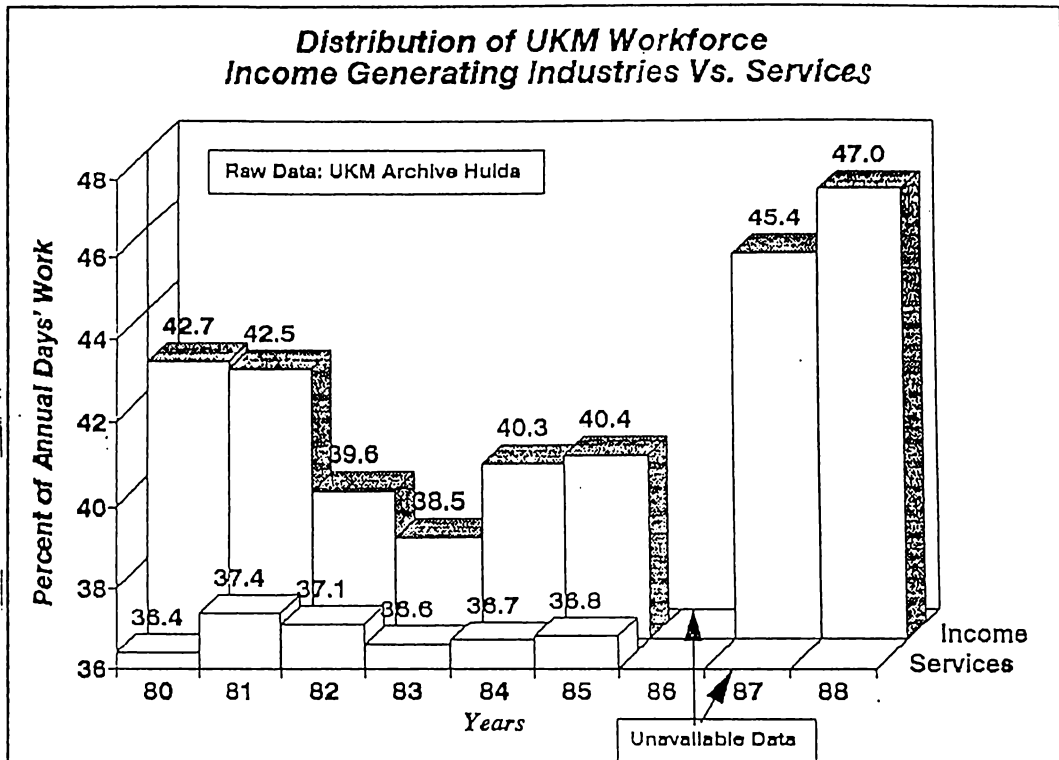
bread-winning sectors. As a result of these liberal and unorthodox strategies, services have become disproportionately overblown and some agricultural branches and manufacturing-industries over-staffed. Merry (1989), alludes to this practice arguing that owing to relative munificence in the unprofessional labour force, many alleged "bottle necks" are bypassed or resolved by assigning superfluous workers. It is, however, fairly apparent that there is a growing polarisation between specific and much sought-after skills and the unprofessional jobs. Hence the need is for professionals rather than unskilled workers (Gavish, 1988). The net result of the strictly economic assessment of the real-value added of labour on the one hand and of spontaneous-solidarity interrelationship, on the other hand, have instituted a labour force that is both organisationally and economically imbalanced.

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between the ratio services/production and the aggravation of the crisis. Nor is this association likely to be particularly significant when compared with the effect of exogenous predictors. Yet, logically, an industrious community would, first and foremost, be assessed, not by the number of its service workers but by the number of bread winners. Dar (1989:6) claims to have found the reasons "*why the system has collapsed*". Dar argues that the answer lies "**primarily within the low ratio of income generators**". He claims that in the kibbutz, 20 percent of the members or 30 percent of the workforce generate most of the community's income. He paints a picture of hazardous organisation with a dangerously small number of income-generating families.

Indeed, Shmueli (1989), dwelled on a major discrepancy where the consumption in kibbutzim equals the seventh or eighth quartiles. The production per family, however is far below that quartile². Dar links with the dearth of internal sources the and economic inefficiency of kibbutz families. Indeed, a comparison between the percentage of labour force in the kibbutz with the corresponding figure in other sectors of the Israeli society yields some bewildering results. The kibbutz workforce amounts to 83.7 percent of the total adult

² The ratio in Israel in 1989 was in excess of 1.5 bread winners per family whereas in the kibbutz the ratio was > 1.



GRAPH 59

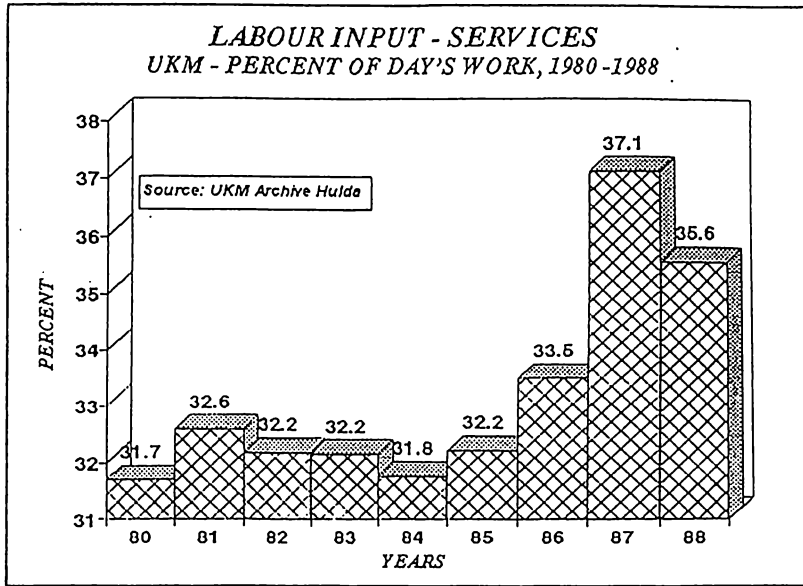
population, as opposed to a mere 52 percent in the total Israeli population³. This ratio may, indeed be considered as an "index of industriousness". However, the discrepancy lies in the virtual distinction between the bread winners and services which illustrates the mere proclivity to work rather than any economic index denoting productivity.

For the first time in 1987, detailed labour norms were attached to the Economic Committee's annual policy statements. It is assumed that the economic impact of the crisis guided the policy makers into an awareness of the economic value of labour and so provided a revised policy.

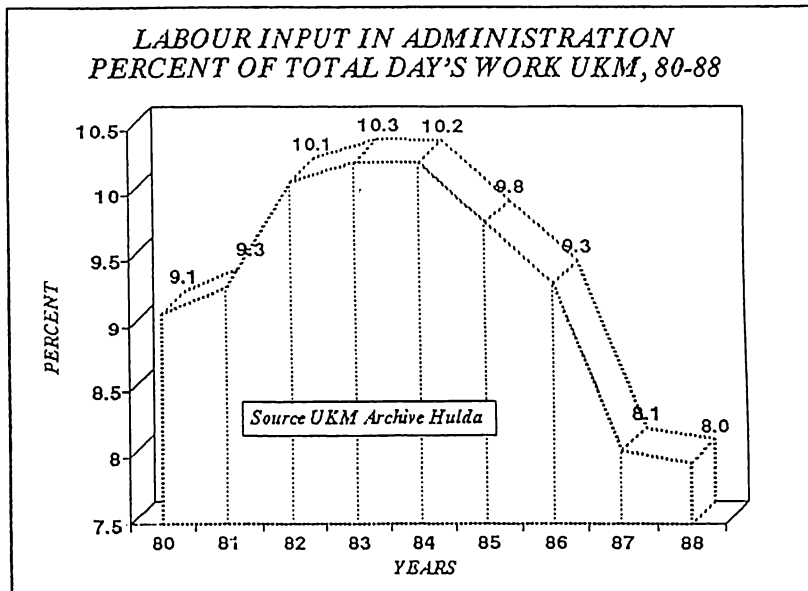
It would be instructive to focus on the longitudinal division between the work force in income generating industries and services. **Graph No. 59** depicts the two trends over an eight-year span. Of interest is the curve showing a decline between 1980 to 1983 in the number of breadwinners as opposed to the gradual growth during the same years in the percentage of members employed in services. Intuitively, we may conclude that the crisis has prompted two major trends: a gradual decrease in the number of workers in services and a piecemeal increase in income-generating capacity as of 1984.

Whether or not the above trends were affected by UKM policies

³Statistical Abstract of Israel, 1990 table 12.2, p.326.



GRAPH 60



GRAPH 61

will, hopefully, be determined by the statistical models. Note that graph No. 60 displays the longitudinal⁴ services component is, basically on the upswing though does not reflect the general picture. Graph No. 61 portrays the general distribution of service branches. The evident fact seems to be the increase in child-care services and labour force in administration.

Manufacturing industries account for the majority of labourers in income-generating branches and reflect also the massive industrialisation of the early-mid 1980's. One of the direct repercussions of the preoccupation with labour was the formation of a UKM adhoc team whose task was to reshuffle employment structure towards "increasing economic output of the labour force in the kibbutzim⁵". UKM has never been short of sets of rules, regulations and procedures. In 1983⁶ a detailed set of rules was issued reflecting labour norms, organisation, entitlements etc. Despite the growing evidence as to the looming crisis, the handbook devotes not a single

⁴ General services include: food catering, sewing & laundry, gardening, administration etc.

⁵Increasing economic Output of labour force in the Kibbutzim - Changes in the employment structure; Changes in the Organisation of work; Directions for Development, A report Submitted to UKM Secretariat by the Ad-hoc Team, September 1989.

⁶ UKM Social & Economic Committees "Set of Rules For Labour - Resolutions Concerning Labour, March 1983.

item to the acuteness of the situation. On the contrary, it recommends a considerable number of alleviations, shortening of work hours, and increase in various exemptions from work duties. The guidebook along with trivial annual notes pertaining to labour norms were the sole labour policy instruments until the 1987 Marathon.

In as much as the awareness of the marginal impact of the alleged increased productivity became evident since the mid 1980's, UKM took a somewhat incremental approach towards the formulation of a more updated labour patterns. The adhoc team produced a number of policy statements which were concurrently adopted by kibbutzim in an effort to boost income and slim down overstaffed services. The main policy statements are:

- * Increasing the number of income generating days' work to < 1.2 - 1.15 breadwinners per family.
- * Maximisation of the economies of scale.
- * Transforming as many services as possible into income generating industries.
- * Setting up kibbutz human resources, management & development schemes.
- * Attributing **cost** for any labour. Instituting cost accounting for all kibbutz industries, income generating & services alike.
- * A substantial increase in external jobs.

The end of 1987 saw the first in a series of Information Communiques issued by the Economic Division⁷. Ron (Ibid) argued: "We ignore reality if we claim that what is happening around us is but an economic crisis... All the kibbutzim approach the end of a dream, a dream which only lately they have allowed to let go, despite the fact that the data were exposed with the utmost gravity". He further alludes to the fact that overcoming the crisis will be extremely difficult and will occasion a radical upheaval in kibbutzim's social and economic behaviour. Moreover, he argued that "We are at a crossroad struggling together for the continuation of the existence of the movement". As of October 1987 the primary guidelines of UKM economic policy as follows:

- * An inseparable link between income and expenses.
Investments should not exceed internal source.
- * The UKM will not be involved in any financial transactions.
- * UKM will no longer mobilise extensive credit lines and shall not be a source for credit for the kibbutzim.
- * The crisis in the kibbutz constitutes a national problem.

1988

⁷ Ron. A., INFORMATION NOTE No. 1, The Economic Division, October 1987.

number of critical

norms. The main highlights are:

- * Kibbutz's demographic growth should be in-par with its existing sources of income.
- * Intensification of production through efficiency & development.
- * Labour is to be planned in accordance with movemental

¹¹ Ron. A., **Information Communiqué**' No. 10, The Economic Division, April 1989:2.

¹²UKM Secretariat, A Common Agreement between the Movement and the Kibbutz for the Establishment of Kibbutz Social & Economic Behaviour, 18\I\1987, (mimeo)

norms.

- * Maintenance expenses will be lower than movement's norms and adjusted to the kibbutz's economic capacity.
- * Additional credit lines will be allowed only if they will not increase the debt and provided they are approved by the movement.
- * Information system:
 - # Balance sheets submitted in time.
 - # Cost accounting & control - industries & maintenance expanses.
 - # Periodic labour reports
 - # Current cashflow
 - # Regular economic-financial reports to the public
- * Decision-making; monitoring decision-making through reports and watching the effectuation of decisions.
- * Education; Increasing the ratio children/nurses
- * Higher education; 70 percent of students will be studying towards fulfilling essential functions in the kibbutz.
- * Postponement of "leave of absence".
- * Hired labour to be eliminated.

The detailed convention was indeed signed by most of the afflicted kibbutzim though it had later become obvious that this commitment was more of a ritual than an instrumental policy tool.

1989

"Action Plan" for 1989 constitutes a global policy statement formulated by sub-committees each of which drafted a different facet of the economic policy¹³. In many respects, the structured formulation of policies is a step forward towards a systematic delineation of policy.

Industry & Tourism

A main policy statement involves synergism between large and successful plants and kibbutzim in need of industrialisation or remodelling an existing plant. The following points highlight the principal policy guidelines:

- * A new legal system is pursued in which the kibbutz will be dissociated from the inevitable contingency in either success or failure of its affiliated manufacturing industry.
- * Failing industries will be diagnosed with a view of closing them down with minimum economic damage to the kibbutz.
- * Hard-hit plants will be "intimately" accompanied by professional consultants.
- * The Industry Department will be involved in any decision-making process entailing investments.

¹³Economic Committee, "ECONOMIC COMMITTEE POLICY AND ACTIVITY PLANS FOR 1989", UKM, December 1988.

Agriculture

Main policy features include:

- * Adjusting agriculture to changes in the domestic & international markets.
- * Emphasis on agriculture with high returns for a unit of land & water.
- * An intelligible utilisation of know-how, management and equipment through synergism amongst kibbutzim.

Labour

Labour policies may be summarised as follows:

- * A 10 percent increase of days' work.
- * Altering the ratio of bread winners per family, from .8 to 1.1 breadwinners per family. This tips the balance services\income generation industries to 55 percent income-generators versus 45 percent of the workforce in services.

Finances

Financial guidelines are:

- * **"The profit criterion should become the major measurement tool for the assessment of economic results".**
- * Internal Source may not be used as a yardstick for economic operations.

In general, the main thrust of the crisis management

activities in 1989 revolved around the recovery plan which was submitted to the Treasury in March of that year. The effectuation of the "rescue plan" is contingent upon a full cooperation of the kibbutzim although its tripartite obligatory nature (UKM, the Government and the banks) has, thus far, proved to be complex and is entailing a great deal of bureaucratic procrastination. The implementation of the recovery plan constitutes a new policy venture, hence will not be discussed here. Manifestly, UKM, as of 1989, ceased to partially bankroll needy kibbutzim. UKM begun to focus its externally orientated organisational activities on representing kibbutzim in a wide variety of ventures, for the implementation of which a "solid and well orchestrated" front is necessary¹⁴.

A major structural change pertaining to the execution of policies and the recovery plan generally was¹⁵ the amalgamation of the social and the economic counselling (couchers). This alteration constitutes a new organisational concept, reflecting a more holistic-organic approach. No longer does the organisational differentiation correspond to a rigid structural imperative. Though not explicitly, this

¹⁴ Ron, A., "The Movement Taxation and the Special Taxation", Information Communique' No. 8, The Economic Division, October 1988.

¹⁵Ron, A., Information Communique' No. 10, The Economic Division, April 1989:4.

mirrors also a pragmatic administrative strategy¹⁶. Moreover, the growing task-environmental uncertainty ought to be inseparably intertwined with organisational concepts stressing both flexible-integrative responses and MBO¹⁷-oriented managerial techniques.

CONCLUDING REMARKS

This chapter has raised several important points. On the one hand it integrates the extensive crisis facets with an essential theoretical basis (policy analysis) and on the other, it serves as a vital link between the major evaluation research theories and the forthcoming statistical models. In general, the "descriptive dimension" is used. This approach provides answers as to what happened throughout the period, denoting the antecedents of the crisis and its sequel.

This research strategy leads us to the **prevailing policies** which, in turn, affected certain components of the current crisis. To that end, this analytical strategy is but a practical mechanism employed for the comprehension of UKM policies and is not a postulated theoretical model. Organisational activities and chiefly the strategic

¹⁶Synna, S., **MOVEMENT COUCHING**, A memoranda, Social Committee, 7 December 1988, (Mimeo).

¹⁷Sheaffer, Z., **An Integrative Organisational Structure - Proposition**, A Programme Memoranda, Unit For Policy & Strategy Planning, UKM, December 1988.

administrative level, focusing on domain and derived outputs have been analyzed.

However, extensive coverage of most output organisational goals (the annual "marathons") at the coordinative administrative level have also been analyzed (UKM's Economic Committee). To a very great extent, this chapter has dwelled upon the **process evaluation** which seeks to qualitatively assess the degree of efficiency between the prescribed (economic, in the main) policies, and the observed economic and organisational outputs as reflected by various aggregated economic outputs. To that end, chapter nine "Crisis" serves as a structural facilitator as it seeks to systematically discover and outline the economic and demographic picture. A qualitative analysis reveals that as the crisis intensifies, policy statements become more detailed, all-embracing and specific. This tendency is widely discussed in theories of organisational decline which reflect upon heightened formalisation under organisational downsizing. Ample evidences of the upwardly convergence of administrative powers (1986 onwards) have been found within the Economic Division which coincides with the grim confirmations as to the deteriorating economic situation.

The 1983 & 1984 marathons are fairly similar, containing some indistinguishable paragraphs, some of which can be found in later years. Aptly, the ominous accumulation of bad debts

illustrates the gravity of the crisis. The intensification of the crisis can be illustrated in policy statements from 1983 onwards as follows:

1983: **"The growth of debt should be attended to".**

1984: **"UKM Fund will be restricted in converting kibbutzim's external debts". "Debtness to the Fund will be restricted".**

1985: Heavier restrictions on loans, investments and cashflow become a pressing problem.

1986: Debts incurred by kibbutzim to be discussed with "external factors" (Government, Jewish Agency), recycling of the debt, self-monitoring of kibbutz financial transactions which are to be fully coordinated with the UKM Fund.

1987: *"Main goal: shoring off debts !"*

In both 1988 and 1989 the major problems revolved around the wider repercussions of the mounting debt. Accurate prescriptions were created as to how to debt servicing overshadowed most other policy statements. Noteworthy has been the inevitable self-explanatory hypothesis; the larger the debt the more proliferated are pertinent policy statements. This instance is instructive also in two other aspects:

* **Incrementality**; rather than confronting the issue head-on

once early (warning) signals as to the unmanageability of the debt were detected, applicable (and inapplicable) guidelines, were added on, incrementally corresponding with the mounting debt.

*** Ignoring early warning signals.** The UKM is not an operational economic concern and has gradually become a roof organisation loosely associating the affiliating kibbutzim. It appears to have fatally failed in instituting acutely needed boundary spanning capacity. Floundering in this elemental organisational component prior to and throughout the environmental turbulences resulted in a weakened ability to deal astutely with the changing circumstances. Faulty environmental perception led to a chain reaction of incremental and insufficient policies which, in retrospect, do not seem to have assisted the affiliated kibbutzim in any major way.

UKM budgetary priorities¹⁸ unveil a conspicuous focus on partially outdated and inconsistent organisational priorities earmarking considerable sums of money for budgetary items which seem to be irrelevant for an organisation having to face up to a looming multi-dimensional crisis. To some extent, these priorities reflect not only outmoded domain goals but

¹⁸UKM ANNUAL BUDGET PROPOSITIONS for 1983/4/5/6/7/7/9, submitted to Caucus approval.

mirror a partial managerial disengagement from the fast changing environmental circumstances. In as much as UKM policy makers are duly elected office-holders, the degree of satisfaction as expressed by a random sample of 54 kibbutzim from various committees, most of whom may hardly be regarded as organisationally essential for crisis management, reveal (Sheaffer & Shapira, 1988) very low scores. These findings partially validate our suppositions regarding the abovementioned processes.

CHAPTER ELEVEN**RESEARCH METHODS****GENERAL INTRODUCTION**

The construction of the research questions which form the basis for this thesis requires a statistical methodology accentuating causality. The study in part seeks to establish interrelatedness between various external-environmental phenomena and internal-organisational mechanisms, reflected primarily in demographic, organisational and economic changes.

An appropriate technique for examining causality is time-lagged regression in which dynamic processes are expounded and inferred upon. Whilst the study deals with a **population** of organisations, thus encompassing a macro organisational research framework, it also reflects an attempt to infer from a wider perspective. Most quantitative organisational researches tend to focus on the micro level, i.e. an in-depth analysis of intra-organisational processes. By contrast, the present research focuses on general evolutionary organisational trends rather than a particular organisational phenomenon.

As this thesis encompasses the organisational population in its entirety, it aims to quantify general trends invoking decline and crisis with this being isolated and subsequently accurately measured. The research employs a variety of statistical methods, some of which are -414-commonplace, deserving no particular elaboration here.

Several methods, will be dealt with in detail below (such as Correspondence Analysis, Pooled Regression Analysis and Multiple Discriminant Analysis) as their use in organisational research is unusual and unique. Issues of major importance in this thesis are the establishment of causality coupled with the research endeavour, to quantitatively detail longitudinal organisational dynamics. The chapter dealing with this topic in detail, delineates a number of methodological problems attributable to organisational research, derived in part from relevant literature, in particular;

- * Quantification of organisational processes.
- * The scarcity of quantitative data in declining organisations.
- * Graphical display and analysis of time-series depicting chiefly demographic processes.

The concurrent use of cross sectioned and longitudinal data to form robust but causal statistical models is discussed at length highlighting some unique problems. This research is exploratory in nature. Hence the formulation of hypotheses will be a result of the development of a model. Each model and the attendant hypotheses will be dealt with as individual chapters in the thesis. Models of pooled regression and multiple discriminant analysis will be presented. The general statement of the relationship to be tested expressed in each hypotheses is derived from the

research questions mentioned in the introductory chapter. The specification of variables - definitions, sources, manipulations and ratios-will be presented in an appendix (s) rather than in the body of the report. When, however, hypotheses are expendable (e.g. MCA, CA, and MDA models), the reader should refer to the general research questions mentioned in the introductory chapter.

This present chapter will highlight two of the three major statistical methodologies used:

- * pooled regressions
- * multiple correspondence analysis.

As the use of these methodologies is new to the empirical consideration of organisational decline and crisis, additional explications will follow the actual models.

This chapter includes no theoretical overview of multiple discriminant analysis. Rather, the theoretical-technical elaborations of this technique are attached to the first MDA model. Hence, for MDA is predicated on the temporal design of the unprocessed data files. These MDA models will be the first application of this technique for the exploration of organisational decline and crisis.

LITERATURE SURVEY

As organisational decline has only recently emerged from OT as a discipline in itself, there is little empirical data

to support its study to date. The main issue to be addressed in this sub-discipline is therefore how to address and solve the immediate problem of an organisation in crisis, rather than to focus on a rigorous and systematic study of the historic development of the concepts and sub-discipline. In essence what is required is development of research techniques and results which are of use to support the crisis-ridden organisation whose very existence is threatened. This research is initiated by special analytical studies motivated by organisations at risk and carried out by external agents.

As far back as 1980, Whetten (1980a:347), commented on the diversity of literature on organisational decline but noted the scarcity of empirical research. He described those treatises as "**armchair analyses**", excelling in prescriptive guidelines and reviews of case studies. In an encompassing essay, Whetten (1980b:577), ascribed this imbalance to the "**preoccupation with growth**". He cautioned that a global era of retrenchment will emerge, thus, the emphasis in organisational research will, inevitably, be shifted to the declining phases of firms. Whetten advanced the concept of improvement of **conceptual clarity** of organisational decline—a task which appears to have prevailed through 1989. At the same time Weitzel & Jonsson (1989:91-92), indicated the need for: "**an acceptable conceptual framework that fits the present knowledge of expansion**". They believed that the dearth in applicable data amenable for

empirical studies of organisational decline was evident and hence various predictors for decline ought to be identified so as to provide "a testable framework for diagnosing the ability of the organization to respond appropriately to internal and external pressures". Temporal or developmental aspects of organisations drew a relatively large number of authors, most of whom focused on dynamic evolutionary processes on a micro basis (Cameron & Whetten 1981; Miller & Friesen, 1980; Tushman & Romanelli, 1985, Sing et al, 1986; Adizes, 1988 and others).

Freeman & Hannan (1975) emphasised the importance of the population of organisation, drawing heavily on organisational life cycle analogy in which the organisational dynamics are basically a metamorphic process linked with life cycles (Whetten, 1987). However extensive and important the linkage between population, ecology and organisational life cycles may be, there has been relatively little empirical validation of the theory of organisational decline and demise.

Recognition of the need to stress the dynamics of decline to determine causality and better understand the processes of decline in populations of organisations have prompted a number of important breakthroughs. A major problem in examining organisational decline has been the use of models designed to focus on cross-sectioned models. These led to the conclusion that decline is but an aberration from the

'normal' pattern of organisational growth. By contrast, Freeman & Hannan (1975), advanced essential and empirically robust arguments that effects of growth and decline differ markedly **over time**. Thereby refuting earlier assumptions regarding the symmetry in growth and decline methodologically predicated upon cross sectioned models. The difficulties in drawing inferences because of the lack of longitudinal data, should make us wary about the rigourness of their deductions. For example, Khandwalla (1977:170), was sceptic about whether "**crisis generates certain organizational responses or vice versa**". The cause and effect dilemma is common when considering organisational crisis and decline.

Argenti (1976) raised this inevitable argument with regard to multi-stage processes in the differential evolution of declining firms, but without an attempt at quantitative analysis. The arguments contrasting omni-dimensionality in the evolution of organisational crisis were extensively advanced by De Greene (1982) and Masuch (1985) who discussed action loops and vicious circles. Masuch relied heavily on the total negation of any singularity in social systems. He argued that organisational activities primarily during decline, entail a chain reaction called vicious circles chiefly affecting incrementally developing organizations. Masuch's thesis has a bearing on both vicious circularity over time and the concurrent occurrence of organisational multi-dimensionality.

Internal processes of firms in decline or the "downward spiral" was investigated by Hambrick & D'Aveni (1988). Using Logit¹, followed by an univariate analysis (STD & means for t-5....t-1), they showed longitudinal processes of decline in defaulting American corporations. Their failure patterns reflected a downward spiral stressing various essential stages of decline analysed from the origins of disadvantage (pre t-10) to the death struggle (t-2 to t). D'Aveni (PhD thesis 1989), investigates longitudinal patterns of decline. He recognised sudden, gradual and lingering decline patterns, each of which mirror different viability and subsistence levels on a longitudinal scale. D'Aveni classified clusters of declining firms in accordance with the initial declining patterns. He constructed a score² to assess the timing and nature of strategic and managerial consequences of organisational decline. D'Aveni's model supported essential assumptions apropos with the theory such as differential decline and threat-rigidity, as shown by managerial imbalances (efficiency, centralisation, strategic paralysis). He did not, however, relate to questions about

¹**Multiple Logistical Regression** for each year to assess the independent and combined effects of the variables on failure.

²D scores constructed from firm's equity over debt and managerial aspects of decline (prestige). He called it **Internal Resource Munificence**. D'Aveni argues that each of these variables contributes to the overall internal munificence of a firm (Ibid, 588). Employing discriminant analysis, he claimed to have been able to distill an index that maximises the ability to predict failure.

environmental factors that ensnare declining and postdecline firms in the path to organisational demise. Nor did he assess pre-decline temporal environmental perpetrators to decline. His analyses were a cornerstone in the research of organisational decline, enabling later researchers to use his models to estimate other decline catalysts, and organisational responses to crisis and decline.

Research in Social Sciences, in general, is characterised by

development of synchronic data whereas the interpretation of this data is mostly diachronic (Galtung, 1970). Most, empirical studies in organisational decline and OT are cross-sectional whilst underlying theories, specifically in organisational crisis and decline are necessarily dynamic. Kimberly (1976:323-332) assessed the various advantages of longitudinal research. He drew heavily on accumulated effects of organisational processes. Because many of his content-based inferences are generalisable, they are of a considerable importance to any longitudinal study.

MAJOR RESEARCH ADVANTAGES OF LONGITUDINALITY³

1. Causality

Causal hypotheses employing cross-sectional data cannot

³Based on Kimberly, 1976.

determine precedence, leading to the common error of not rejecting an incorrect hypothesis. For instance, it can be hypothesised that A causes B when in fact, B may be causing A. Hence the major advantage of a longitudinal model is that temporal precedence can be established.

2. Process Orientation

Research questions in OT are generally process oriented as opposed to static orientation. The temporal dimension is explicitly described in organisational indices such as performance or decline. A longitudinal procedure minimises the risk of making incorrect inferences as it refers to temporal organisational processes. Hence, it interprets from a sample **over time** and not from a particular point in time. By contrast, cross-sectional models refer to a given point in time, whilst seeking to interpret results which are inevitably dynamic.

3. The Inclusion of Textual Constraints into Organisational Research Designs

Sensitivity for the subject may only be improved if the effects of contextual constraints are taken into account. Whilst Kimberly (Ibid) provides no specific example, it is suggested that a longitudinal design can improve understanding of the dynamic nature of datasets by

employing statistical procedures other than cross-sectional ones. Hence many exogenous- temporal variables can be included within a bounded theoretical framework on the one hand and the statistical constraints on the other.

5. Enhancement of the Effectiveness of Strategies for Organisational Intervention

Understanding organisational processes facilitate OD techniques, identification of contextual constraints and improve dynamic models for the understanding of growth, decline and change. Kimberly (Ibid, 337) suggests that **"Longitudinal organizational research consists of those techniques, methodologies and activities which permit the observation, description and/or classification of organizational phenomena in such a way that process can be identified and empirically documented"**.

This statement gives insight into the various advantages of longitudinal techniques. This data format is only partially used in this study of the crisis, moreover it st dealt with here in some detail because it is useful for confirming the essential intrinsic processual evolutionary stages as well as the ability to partly discern between cause and effect. The following paragraphs present some theoretical aspects of the statistical methodology highlighting relevant time-series procedures. Additionally, a brief introduction to correspondence analysis is given as CA and MCA are employed where hypotheses may not be derived. Two other statistical

methods are used, multiple discriminant analysis (MDA) and factor analysis.

Discriminant analyses is extensively used but as this is a common statistical procedure, only general theoretical references accompany the actual research models. Factor analysis is discussed in the relevant chapter dealing with organisational goals and their realisation by] kibbutz members.

POOLING CROSS SECTIONS OF TIME-SERIES

Parts of this thesis deal with the combined effect of space and time (Stimson, 1985), i.e. concurrently analysing dimensions of time **and** space. The study of organisational crisis entails an inspection of dynamic processes in the pre-crisis era, through crisis impact and into the post-crisis period. Consequently, the present investigation encompasses the actual study of early warning signals and focuses on the crisis and various decline processes. In particular, the period immediately following the crisis impact is considered but also simultaneous concurrent occurrence of various stages attributed to organisational crisis are dealt with.

The same part of the study analyses and evaluates effects of UKM policies upon the emerging crisis and whether these policies aggravated or alleviated the crisis. The models

include annual measurements supplemented with time dimensions for different units. In this context Stimson (Ibid) noted that research designs where data are pooled and **"gathered across both units and time points can be extraordinarily robust"**. With regard to causality, Brunner and Liepelt (1972), argued that the usage of time-series analysis indicates a model where a causal process is built-in **within** the longitudinal data. In cross-sectional models, observed covariation is assumed to be generated by unobserved causal processes which operated prior to the collection of the data. Stimson (Ibid) and Sayer (1989), alleged that the causal result of a cross-sectional analysis along with the process in a longitudinal analysis appear as covariations. The combination of time-series and cross-section variables creates a problem in the model specification. Namely, the disturbance term will result partially from the effect of omitted independent variables (Pyndick & Rubinfeld, 1978:201). Furthermore, in a pooled design the disturbance term is likely to contain time-series or cross-sectional disturbances and/or a combination of both. Therefore, Pyndick & Rubinfeld suggested several alternative schemes by which the data might be pooled:

1. The combination of cross-section and time-series data and then an OLS⁴ procedure on the entire data set.
2. The recognition that omitted variables may lead to changing cross-section and time-series intercepts

⁴Ordinary Least Squares

which follows a covariance-analysis where dummy variables are added to the model to allow for these changing intercepts.

3. A technique by which the efficiency of the first least-squares estimation process is improved by accounting for the existence of cross-section and time-series disturbances (the error component pooling procedure).
4. A set of techniques accounting for the fact that the error term may be correlated **over time and over cross-section units.**

Hence, in the case of the following two variable model:

$$Y_{it} = X_{it} + \beta X_{it} + E_{it}$$

where $t = 1, 2, \dots, N$ N =number of cross section units (individuals)

$t = 1, 2, \dots, T$ T =number of time periods

When all classical error terms assumptions⁵ no correlation

⁵The error term is of a considerable importance to any time-series or pooled models. The reason for its inclusion in the equation stems from the following considerations:

1. The recognition that some explanatory variables are not included in the model.
2. The collection and measurement of data, i.e., the possibility of an error in the above procedures.
3. "there is a basic and unpredictable element of randomness in human responses which can be adequately characterised only by the inclusion of a random variable term" (Johnstone, 1971:11).

Ostrom (1978:12), argues that these factors are summarised by the error term, and that their effects are basically random and small.

with X , no autocorrelation, no heteroscedasticity⁶ hold, then it is possible to estimate, using OLS, separate cross-section regressions and each regression involving N observations. For time period $t=1$, the cross-section regression would be:

$$Y_{i1} = \alpha + \beta X_{i1} + E_{i1} \quad i = 1, 2, \dots, N$$

There will be a total of T such equations. The N time-series regressions with T observations in each. However, if both α and β are constant over time and over cross-section units, more efficient parameter estimates may be obtained when all the data are combined so that one large pooled regression is run with NT observations. In most basic pooling techniques, there will be (NT) minus 2 degrees of freedom. An estimation of the two parameters uses up two degrees of freedom.

Least Squares with Dummy Variables

Mayor & Pearl (1984), recommended beginning the discussion of pooled designs with Ordinary Least Squares (OLS). The assumptions underlying this statistical approach epitomise problems arising from the combination of space and time or

⁶Heteroscedasticity occurs when the points delineating the various observations in a regression will fan out from the regression line, as the value of X increased (Lewis-Beck, 1980:28).

time-series and cross-sectional designs. Stimson notes (1985) that OLS takes no account of the pooled structure of the data where each year is treated independently and not as a set of related observations.

Covariance Model ⁷

The OLS procedure has an inherent difficulty since the assumption of constant intercept and slope may be unreasonable in a pooled model. In the OLS procedure dummy variables are introduced which enable the intercept term to change over time and to vary over cross-sectional units. If the slopes change as well, each separate cross-section regression would entail a separate model, as a result of which, pooling would be inappropriate. The covariance model including the dummy variables: the expression is given by:

$$Y_{it} = a + \beta X_{it} + \sum_{j=2}^N \gamma_j Z_{itj} + \sum_{j=2}^T \delta_j W_{itj} + E_{it}$$

where **Z** **W** are cross-sectional unit and time series dummies, respectively. The decision to add dummy variables can be made on the basis of the following test statistics:

The addition of (N-1)+(T-1) dummy variables to the model requires the omission of the remaining ones, otherwise

⁷This paragraph is based on Pindyck & Rubinfeld (1983:203-206).

their addition would yield a perfect collinearity amongst the independent variables (Rubinfeld & Pyndick p.204). Choices of method used when pooling data, i.e. with OLS or OLS with dummy variables will not be discussed here since the covariance model⁸ is used in this study.

Distributed Lags

Models entailing pooled data require acceptance that time elapses between processes (Sayer, 1989). This involves the impact of the explanatory variables and the response of the dependent variable. In dealing with time series models, a large number of time lags are involved. For example, a substantial period of time elapses between the economic decision making process, and the change embodied in the dependent policy variable. Hence, provided the process is **long enough**, lagged independent variables will be included in the model. However, it is assumed that the inclusion of time lags into the regression equation presumes no immediate response from the dependent variable following a decrease or increase in the explanatory variables.

Ostrom (1978:45) argued that it is implausible "**to specify the exact amount of time it takes X_t to affect Y_t . If there is no compelling reason for assuming a given response time, we may wish to allow it to spread over several successive**

⁸For a wider perspective refer to Pyndick & Rubinfeld Ibid and Sayer, (1989).

time periods instead". An instance is a production function where the aggregate consumption C_t is a function of aggregate labour, lagged one quarter $Y_{t-0.25}$. This quarter period lag allows the time involved in the production response to be altered in the labour input. The model's lag structure depends largely on how many time units are included in the data. In our case, if the production function used annual data then it might be reasonable to omit the lag in the labour variable as the period of measurement is markedly longer than the hypothesised response time. **The entire impact of the dependent variable occurs in only one time period (t-1).**

Pyndick et.al. note "the fact that the impact of a variable can be distributed over a number of time periods is the basis for the distributed lag model, in which a series of lagged explanatory variables accounts for the time adjustment process". In this present data, a number of pooled models in which the impact of exogenous explanatory variables may not be felt immediately following their actual introduction (as economic measures imposed by the external agencies) are displayed.

It should be emphasised that these lagged independent variables have a differential effect over each observation in the model. Hence, they are hypothesised to bear a certain general impact upon endogenous variables yet the pooled model itself does not account for the individual

impact on either groupings of kibbutzim or individual ones. For that purpose, a different methodology is employed¹. When the number of lags is small, as it is the case with the present models (T-6)....(T), the equation can be estimated by partially resorting to OLS regression. When however there are many terms, several problems arise. The estimation of a lengthy lag structure uses up many degrees of freedom (which are in short supply in time-series models and when a large number of independent variables are used in the model, a situation may occur where the presence of multicollinearity leads to inaccurate estimation (and a false statistical inference). This situation occurs when the X variable is very highly correlated. Simply put, variable observed at time T is closely associated with that observed at T-1, T-2 and so forth.

MODELS PRESENTED IN THIS THESIS

My data formats present certain problems. The 'pseudo' time-series are not long enough to employ ordinary econometric procedures tests for the presence of serial correlation. For example, the Durbin-Watson test which calculates the residuals from the OLS regression procedure. However, these tests are essential when a considerable number of time lags are estimated and analyzed. Because of data collection constraints data accounting for T-6 to T, (variables from years 1983 to 1988) are used.

The covariance regression models accounts for the time dimension (years) without treating the space dimension (observations), due to the relative shortness of the series. Several problems with a 'proper' representation of the exogenous variables are, therefore expected as they possess a relatively small amount of variation (a limited number of time points). They 'act' in a differential fashion on each observation within the same year but still have equal intrinsic value.

As the series is relatively short, there is unlikely to be sufficient annual variation. In the following paragraph therefore the three procedures employed to address both the problem of 'floating' the exogenous variables and regaining additional degrees of freedom is discussed.

Procedure A

This procedure ignores the longitudinality in the data by processing the data as if no temporal sequence is involved. Hence, the computer is 'forced' to process each observation six times irrespective of any 'dynamism' which characterises any time-series short or long. In this case $N = 136$ observations (kibbutzim) times six = 816 observations. The procedure involves the multiple regression equation:

$$Y' = A + B_1X_1 + B_2X_2 + \dots + B_kX_k$$

Where:

Y' represents the observed value of Y

A intercept

B regression coefficients

Procedure B

This procedure creates dummy variables to account for the six year span (1983-1988). It involves the addition of dummy variables (W) to allow for changing time-series intercepts. It enables some assessment of the various dynamic features possessed by the temporal data. The procedure separates the entire data set into a recursive sequence. In this, each year represents an independent (dummy) variable whose individual impact upon the dependent variable assessed through its significance level (the β 's are artificially 'inflated' due to autocorrelated error terms from different points in time). Consequently, any inferences must be drawn with caution. The dummies (years), as explanatory variables reflect the effect of omitted variables over time. It can be inferred that when error terms associated with observations in T-6 carry over into T-3, the overestimation in succeeding years will increase accordingly.

The transformation⁹ of the years into dummy variables is carried out by programming a set of 'IF' sentences which systematically nullify each year by defaulting all other years: eg

```
compute y83=0.  
if (year eq 83) y83=1.  
compute y84=0.  
if (year eq 84) y84=1.
```

This procedure uses the option 'origin' (SPSSpc) which suppresses the constant.

Procedure C

Procedure 3 differs from 2 only in an additional combination operationalising only one (year) variable. This in turn, accounts for all six years. This procedure requires a smaller loss of degrees of freedom. The operationalisation of the variable 'year' requires, in addition to the strategy described in the previous

⁹ The data is set in the following way:

```
1 83 12 34 56 78 90  
2 84 .....  
3 85 .....  
4 86 .....  
5 87 .....  
6 88 .....
```

Where: 1 to 6 indicate the observation code number from 1 to 6 followed by the relevant year followed by the actual variables.

procedure, the recoding of 'year' as follows (in SPSSpc 'recode' command terms):

```
recode year (83=1).....(88=6)
compute y83=0.
if (year eq 83) y83=1.
compute y84=0.
if (year eq 84) y84=1.
```

This technique yields a single variable 'year' which is normally highly significant although it is entirely ineffectual for inferential purposes involving the acceptance or rejection of hypotheses.

CORRESPONDENCE ANALYSIS: AN OVERVIEW

Correspondence analysis (Moran, Engelman, Stephen, Fitzgerald, 1988) is an exploratory multivariate technique used for the conversion of frequency tables data into a graphic display where rows and columns are displayed as points. The method enables a comparison of columns or rows proportions in either a two-way table or a (multiple way) in a Burt table (Multiple Correspondence Analysis). Only the methodology and its immediate applications for the social sciences and organisational research will be dealt with here.

The method decomposes the CHI² measure of statistical

association into components in much the same way as principal component analysis does for continuous data. Each row and column is represented by a point in a Euclidean space determined from cell frequencies. The common practice for most statistical analyses is to postulate a formal hypothesis which is contingent upon some theoretical concepts, the parameters are then estimated and consequently either reject the null hypothesis or accept it.

The methodology used in the present research is known as exploratory data-analysis accompanied by graphical displays (Gower & Digby, 1980). This graphical-multivariate analysis is used to identify any regular patterns contained in the data. Set of data are displayed in histograms or any other graphical display which adequately demonstrate the researched phenomenon. Conversely, the data may also be shown in a simple two-way contingency table.

In this context, Greenacre (1984:3) suggested that when a number of issues or variables are displayed separately, this summary may be totally inadequate in revealing the interesting patterns of which may be revealed when these variables are 'crossed' (Greenacre, 1984:3). Furthermore, where a large number of observations are used **"such patterns of association might be difficult to detect amongst a huge number of possible tables, and other means of describing such data are needed"** (Greenacre, Ibid).

Multi-way tables are often unwieldy and difficult to interpret but this can be solved using correspondence analysis which transforms the data in these tables into legible perceptual maps. This method enables the crossing of continuous with categorical variables. It can also be applied to small samples.

Correspondence analysis contains two major outputs:

- * A graphical display illustrating a multiple projection of planes (dimensions) where each point stands for the weighted position of the column. The profile of the set of variables across the set of the other variable in the same contingency table.

- * The second is the row profiles giving rows across the "opposing" set of variables.

The Manova enables a study of the combined effect of nominal variables and interval variables to be carried out. However, this programme is not appropriate to derive inferences on the statistical association between dichotomous and continuous data.

By contrast, correspondence analysis allows for both graphical and numerical analysis of interrelatedness between any set (s) of dichotomous variables and continuous ones. In general, where statistical linkage needs to be established between a dichotomous variable and a continuous one, correspondence analysis (CA) is the appropriate one.

Whereas multiple correspondence analysis is applicable when dealing with one or more dichotomous variables crossed with a number of continuous variables¹⁰ (MCA).

Correspondence analysis graphically identifies a smaller number of coordinates projected onto a plane (s). These coordinates are so computed that each successive coordinate axis accounts for a decreasing portion of the total association between the rows and columns as in the chi-square statistics. The first coordinate accounts for the majority of the total association and so forth in a descending order. These coordinates are similar to the principal components in factor analysis. The difference is that the principal component analysis partitions the total variance whereas CA partitions or decomposes the total Chi-square.

If the first two coordinates account usually for the major proportion of the statistical association, then this can be used rather than the original row percentages as depicted in the original table.

This technique allows most of the information to be displayed in one or two dimensional plot (Moran, et. al.). Hence, CA enables the following statistical features as

¹⁰A Burt table is a partitioned symmetric matrix containing all pairs of crosstabulations among a set of categorical variables. Each diagonal partition is a diagonal matrix containing marginal frequencies (a crosstabulation of a variable with itself). A contingency table is one with an off diagonal partition (i.e., the number of vertical cells unequal the number horizontal cells).

expressed by the graphical display:

1. A statistical association between continuous and categorical variables as displayed by the clustering pattern of these variables in the Euclidean space. (The plot can be perceived as two different overlaid plots, one for each categorical variable). This implies that a concentrated cluster of data points indicates a strong relationship between rows and columns. However, this result alone is not conclusive and further indications are needed to reach a satisfactory conclusion.
2. The relative strength of the degree of association (between rows and columns) is assessed by comparing the relative distance of each point from the origin (Centroid or 0.00). In other words, the goodness of fit (between the different distributions) is determined by the similarity of the angles measured from the centroid. The vectors drawn from the centroid (0.00) to each point in the quadrant is the most valid way to interpret closeness of fit between categorical and continuous variables (projected as points) Therefore, distances between category points have meaning yet distances between category points from different variables do not. A point's distance from the centroid (origin) constitutes an estimated indication of how far away it is (in terms of Chi-square distance) from the overall marginal row profile (within the raw contingency or Burt table).

The distance between points in the display are approximate Chi-square distances between individual row profiles (Moran et. al.:638).

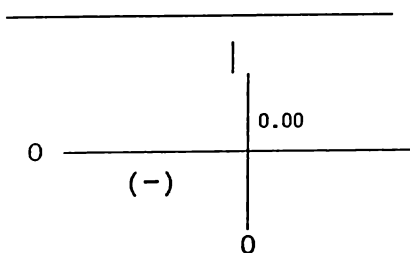
3. Likewise, the farther the point is from the centroid, the more correlated are the two variables.

(contingent upon a similar distance of the two variables (from the centroid)).

4. The direction (- or +) of the displayed association is determined by the sign attached. This is set by the location of the plotted point on the axis within the quadrant¹¹.

The numerical output containing various features, part of which are directly related to the analysis of the graphical display are used for additional assessment. Although the graphical display may be interpreted without resorting to the numerical tables, these can accurately authenticate the display which may be rather esoteric at times. The decomposition of the Chi-square statistic yields one table that is indispensable for an accurate interpretation of the plot. This table, (observed minus expected values) provides a precise quantitative indication which categorical variable is more dominant when 'crossed' with a continuous one. In the table, a value which is large relative to

11



others in the same column or row indicates a similarity in the vectors or angles measured from the centroid, between a discrete (or nominal) and continuous variable. Subsequently, it implies a greater statistical association between the two variables.

Another essential table is the proportional contribution of each coordinate to the total Chi-square statistic making the "crossing" point of the continuous and the categorical variables. These tables are used and interpreted in the demographic and organisational correspondence analyses¹².

¹²For a detailed description of CA outputs see: Chapter 1 of 1989 SAS release, the Corresp Procedure, pp 1-48.

1. Discriminant analysis.

PART FOUR - STATISTICAL MODELS: ANALYSIS AND DISCUSSION

CHAPTER TWELVE

ORGANISATIONAL GOALS AND POLICIES: THE INCONGRUITY BETWEEN DECLARED KIBBUTZ OBJECTIVES AND THEIR REALISATION BY KIBBUTZIM: A FACTORIAL ANALYSIS

GENERAL

Two major aspects of organisational decline are addressed in this thesis. The first in the Policy chapter deals with the theoretical issues of organisational goals and is discussed as a prelude to an in-depth qualitative analysis of UKM policies. The second addresses a typical organisational dilemma which appears to accompany organisations in crisis: a crisis of meaninglessness or relevance.

Lanir (1990), qualitatively analysed the widening discrepancy between kibbutz-stated goals and their perception by members of young kibbutzim at the height of the recent crisis. From this he found that, in fact, the multi-dimensional crisis is one of meaninglessness. He postulated an unbridgeable gap between fundamental kibbutz goals which have become irrelevant and outdated and the perception of these principles by grass-root kibbutzniks.

This discrepancy is best manifested in mass Aziva and in profound sense of insecurity. This is attributed to the

"systems" which epitomises these 'lofty' ideals having -443-consistently failed to provide adequate remedies to increasing structural predicaments. Hence, it became apparent that UKM needed to radically alter those goals and very ideals which were previously believed to provide a general sense of direction within individual kibbutzim.

Dunbar et. al. proposed that ideological constraints during crisis only serve the superiors' interests. This would appear to be an overestimation of the present kibbutz situation. It seems that outdated domain goals have persistently perpetuated these discrepancies.

BACKGROUND

To shed light on the question of investigation of the present gap between declared organisational kibbutz goals and the perceived objectives by organisational members, a 'poll' was carried out at the 1990 UKM annual conference. It became clear¹ that the severity of recent intra-organisational reactions to the recent crisis required that kibbutzim be consulted to maintain conformity with the public weal. In an attempt to address these matters by focusing the discussion of the convention on these matters which delegates perceived to be of paramount importance and concern, the organisers composed the requirements of the delegates prior to setting the committee programme.

¹UKM Political Department chaired by the late Y. Schuster.

SETTING AND METHODOLOGY

In order to maximise the response, a questionnaire designed by the Political Department² was distributed to kibbutz delegates³.

The content of the questionnaire is pre-determined by the senior management of the UKM and hence there was minimal input by the rank and file of the kibbutzim or any professional ad-hoc committees. Similarly, the contents

²Amongst the Political Department's tasks: planning, preparation and organising conventions.

APPENDIX No.

³To the Delegate:

The Ideological
Conference - Steering
committee
July 7 1989

It is our intention to determine an agenda for the forthcoming convention at this council meeting. In order to do so we would ask you to scale six of the following subjects according to order of importance.

THE SUBJECT

1. Community & economy, separation or maintaining the existing framework.
2. Labour & motivation: expansion of bread earning capacity.
3. Younger generation and its integration in the kibbutz.
4. Common consumption - kibbutz responsibility and member's autonomy.
5. The central movement system.
6. Inter-kibbutz collectivity - new models.
7. Mutual guarantees amongst kibbutzim.
8. Changes and kibbutz fundamentals.
9. The kibbutz as a task orientated society.
10. The kibbutz and the political system in Israel.
11. Security & foreign policy.
12. Kibbutz involvement in the Israeli society.
13. Social security & retirement.
14. Income emanating from private property and the dilemma of inequality.
15. Improving the organisational structure of the kibbutz.
16. The unification of kibbutz federations.

were not discussed at the UKM Planning Forum⁴.

The planning Forum was a monthly UKM colloquium comprising of both full-time UKM officers and other kibbutz members. (sociologists, organisation consultants, architects, regional planners, economists and philosophers). The Forum existed for approximately two years (1988-1990) as a boundary spanning brain-trust. Major issues on its agenda primarily closely attached to either crisis management or medium-range planning. The main impetus for the inception of the Forum stemmed from acute need in a professional, unprejudiced arena that could engage itself in unbounded deliberations pertaining to any matter arising from the crisis. However, owing to shortsightedness on the part of UKM major decision-making bodies, very few issues discussed at the Forum were actually translated into concrete action. This attitude also explains the unceremonious dissolution of that Forum.

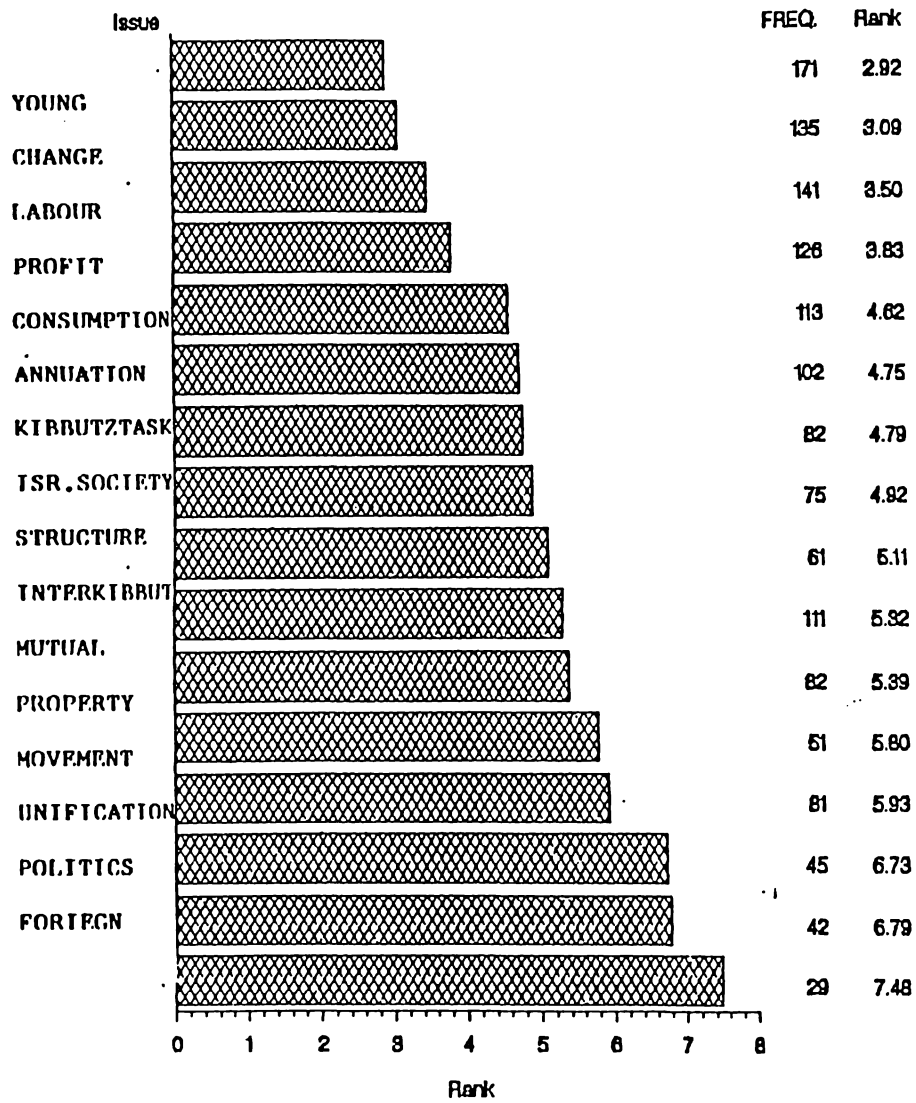
Delegates to the conferenc were, however, advised to add subjects on the bottom of the questionnaire. Of the questionnaire distributed amongst approximately 250 Council delegates, 171 (68 %) were completed and returned.

FINDINGS AND ANALYSIS

⁴The Planning Forum was a monthly UKM colloquium comprising of both full-time UKM officers and other kibbutz members. (sociologists, organisation consultants, architects, regional planners, economists and philosophers). The forum existed for approximately two years (1988-1990) and as a boundary spanning brain-trust. Major issues on its agenda were primarily closely attached to either crisis management or medium-range planning. The main impetus for the inception of the forum stemmed from acute need in professional, unprejudiced arena that could engage itself in unbounded deliberations pertaining to any matter arising from the crisis. However, owing to shortsightedness on the part of UKM major decision-making bodies, very few issues discussed at the forum were actually translated into concrete action. This attitude also explains the unceremonious dissolution of that forum.

TABLE 24

Mean Rank Importance of Congress Issues



A SASpc rotated bar chart has been prepared to depicts mean rank importance of convention issues as scaled by the delegates. It should be noted that the smaller the frequency (convention subject) score the higher it was ranked by the delegates. This indicates that more importance was attributed to it as a preferred topic for the forthcoming convention.

The findings conformed the discord between proclaimed kibbutz policies as reflected by UKM's and kibbutz's members current agenda's. For clarity of presentation of the topic, a glossary of terms is attached in appendix No.

The following analysis includes both an explanation of the specific item and the importance of its ordering by delegates. The analysis is presented in the order of importance determined in the bar chart.

Pearson correlations are used to detect statistical associations supporting or refuting the suppositions. Factor analysis is used to logically aggregate variables into theoretically explicable factors.

Analysis of the Rotated Bar-Chart

a. The first ranked topic is: **"The young generation and its Integration in the kibbutz"**. (mean=2.92, N=171) this high ranking can be attributed to awareness of the centrality of younger generations to the future of kibbutz, given the

massive Aziva amongst the 22-35 age brackets.

b. Second ranked (mean=3.09, N=135) is: **"Changes and basic fundamentals of the kibbutz"**. This is attributed to the overwhelming urge for basic structural changes in the kibbutz. This may also be directly related to the impact of the crisis generating a growing awareness, of the critical need to restructure.

C. Ranked third (mean=3.5, N=141) is: **"Labour & motivation - expansion of bread-winning capacity"** Throughout the crisis, particularly in 1985 when the enormity of the crisis was acknowledged by the kibbutzim and UKM, different impromptu solutions were proposed for immediate remedies. In this context although increasing income generation capacity instead of the overblown and largely redundant services would have partially improved cash-flow, altering the production/services ratio would have only provided marginal alleviation of the crisis itself.

c. The variable ranked fourth was: **"Community & economy: unification or separation - profit centres"**.

In reality the statement addresses two subjects. The first is the growing concern over public liability in a system where the whole community is inseparably interwoven with the business sector. This leads to a situation where business decisions-making is pervaded by social-communal considerations.

The second issue is derived from the first in that wealth generation (profit and loss) is centred in, and derived from a 'healthy' social-economic fabric of the community.

In other words, the wealth generating activities such as agriculture, industrial-manufacturing, tourism and some services are provided by the kibbutz hence if the kibbutz is not socially and economically sound, it cannot provide the services and goods which dispense wealth for businesses. The high ranking (mean=3.83, N=126), attests to the growing awareness of the need to restructure and introduce organisational change.

e. "Communal consumption: kibbutz responsibility and members' autonomy". (mean=4.62, N=113). Consumption patterns have been researched and discussed by various authors from the early 1970s. Consumption in the kibbutz has become considerably more problematic since kibbutzim started to realise that "there are no free lunches". Centrally-budgeted consumption either infringes upon individual tastes and or creates noticeable waste. This then becomes a growing burden on an unstable and vulnerable kibbutz economy. Because of increasing individualism coupled with the impacts of the crisis, most kibbutzim need to redesign the present socio-economic pattern which is ill-adapted to rapidly changing circumstances.

f. Ranked sixth is: "Social security for the aged" (Mean=4.75, N=102). Owing to mounting debts, many kibbutzim have realised financial assets, some of which were old-age funds. Although at present no kibbutz can legally be placed into receivership, there has been growing concern over the social security of members who worked in the kibbutz for

many years and whose social security⁵ has now become non-existent. Despite a considerable squeeze on cash-flow, many kibbutzim sought to ameliorate the situation by depositing funds in various "closed" accounts.

With the exception of the middle ranked "improving kibbutz organisational structure" and "inter-kibbutz cooperation", (mean=5.11, N=61 and mean=5.32, N=111) respectively, all other topics were "downgraded" by the respondents. It is interesting to note that the subjects traditionally addressed and exhaustively argued at most kibbutz conventions, were ignored by the respondents in the questionnaire. This indicates substantial schism between issues deemed essential by UKM and the kibbutzim. Frequency tables and the ranking of means may not, in themselves, provide a firm confirmation of outstanding phenomena. They, however, do furnish a forecast for the future in a more sophisticated analysis.

The present analysis demonstrates a distinct gap between two sets of variables, each of which is ascribed to an opposing organisational objective.

Partial Correlations

In order to statistically substantiate this gap, a Pearson correlation matrix is provided. Opposing signs would be

⁵In the form of funds incurred by monthly installments of superannuation which were deposited in various long-range deposits by the kibbutz.

Initial Factor Method: Principal Components

TABLE 25

Partial Correlations Controlling all other Variables

	A1	A2	A3	A4	A5	A6	A7	A8	
A1	1.00000	0.09873	-0.04652	0.03749	-0.11469	-0.03627	-0.01850	-0.11510	COMMUNITY & ECONOMY - LOSS & PROFIT
A2	0.09873	1.00000	0.03790	0.04719	-0.06414	0.10732	-0.10635	-0.01554	LABOUR & MOTIVATION
A3	-0.04652	0.03790	1.00000	0.09281	0.01726	0.03780	-0.07605	0.05783	INTEGRATION OF YOUNG GENERATION
A4	0.03749	0.04719	0.09281	1.00000	0.06509	-0.02716	-0.01213	0.02369	CONSUMPTION
A5	-0.11469	-0.06414	0.01726	0.06509	1.00000	-0.00474	0.16313	-0.16783	CENTRAL MOVEMENT SYSTEM
A6	-0.03627	0.10732	0.03780	-0.02716	-0.00474	1.00000	-0.00400	-0.13416	INTER-KIBBUZ COOP. NFM MODELS
A7	-0.01850	-0.10635	-0.07605	-0.01213	0.16313	-0.00400	1.00000	0.13120	MUTUAL CHARANTERS
A8	-0.11510	-0.01554	0.05783	0.02369	-0.16783	-0.13416	0.13120	1.00000	CHANGE & FUNDAMENTALS
A9	-0.10436	0.22018	-0.09796	-0.08454	0.00503	-0.03001	-0.01036	0.09540	TASK ORIENTED KIBBUZ
A10	-0.14170	-0.01011	0.10837	-0.11753	0.09412	-0.06508	0.10998	-0.21431	KIBBUZ & POLITICS
A11	-0.08621	-0.10123	-0.16351	0.04104	-0.01034	0.02880	-0.13575	0.06358	FORTEIGN & SECURITY POLICY
A12	-0.04619	-0.09974	0.03054	-0.17518	-0.06009	0.00337	-0.03379	0.11143	KIBBUZ VS. ISRAELI SOCIETY
A13	-0.15233	0.03546	0.10450	0.04099	0.21904	-0.05018	0.14947	-0.06075	SOCIAL SECURITY
A14	-0.04984	-0.03241	-0.04949	0.11137	-0.09565	-0.03317	-0.03775	0.04077	PRIVATE PROPERTY-INEQUALITY
A15	0.02116	-0.06510	-0.07334	0.07003	0.06750	0.05636	-0.12606	0.05295	ORGANISATIONAL STRUCTURE
A16	0.04055	0.02287	-0.03556	-0.07745	0.03900	0.07289	-0.00054	0.04387	UNIFICATION OF MOVEMENTS

	A9	A10	A11	A12	A13	A14	A15	A16	
A1	-0.10436	-0.14170	-0.08621	-0.04619	-0.15233	-0.04984	0.02116	0.04055	COMMUNITY & ECONOMY - LOSS & PROFIT
A2	-0.22018	-0.01011	-0.10123	-0.09974	0.03546	-0.03241	-0.06510	0.02287	LABOUR & MOTIVATION
A3	-0.09796	0.10837	-0.16351	0.03054	0.10450	-0.04949	-0.07334	-0.03556	INTEGRATION OF YOUNG GENERATION
A4	-0.08454	-0.11753	0.04104	-0.17518	0.04099	0.11137	0.07003	-0.07745	CONSUMPTION
A5	0.00503	0.09412	-0.01034	-0.06009	-0.21904	-0.09565	0.06750	0.03900	CENTRAL MOVEMENT SYSTEM
A6	-0.03001	-0.06508	0.02880	0.00337	-0.05018	-0.03317	0.05636	0.07289	INTER-KIBBUZ COOP. NFM MODELS
A7	-0.01036	0.10998	-0.13575	-0.03379	0.14947	-0.03775	-0.12606	-0.00054	MUTUAL CHARANTERS
A8	0.09540	-0.21431	0.06358	0.11143	-0.06075	0.04077	0.05295	0.04387	CHANGE & FUNDAMENTALS
A9	1.00000	-0.21096	-0.05264	0.12272	0.04760	0.01106	-0.03450	-0.05728	TASK ORIENTED KIBBUZ
A10	-0.21096	1.00000	0.08179	0.12911	-0.09778	0.10480	-0.05230	0.09834	KIBBUZ & POLITICS
A11	-0.05264	0.08179	1.00000	0.08402	0.05421	-0.00575	-0.11637	0.11850	FORTEIGN & SECURITY POLICY
A12	0.12272	0.12911	0.08402	1.00000	-0.09264	-0.04866	-0.02690	0.06513	KIBBUZ VS. ISRAELI SOCIETY
A13	0.04760	-0.09778	0.05421	-0.09264	1.00000	0.00498	0.08004	0.00168	SOCIAL SECURITY
A14	0.01106	0.10480	-0.00575	-0.04866	0.00498	1.00000	0.09200	0.07969	PRIVATE PROPERTY-INEQUALITY
A15	-0.03450	-0.05230	-0.11637	-0.02690	0.08004	0.09200	1.00000	0.09904	ORGANISATIONAL STRUCTURE
A16	-0.05728	0.09834	0.11850	0.06513	0.00168	0.07969	0.09904	1.00000	UNIFICATION OF MOVEMENTS

Kaiser's Measure of Sampling Adequacy: Over-all MSA = 0.59126825

A1	A2	A3	A4	A5	A6	A7	A8
0.671729	0.716031	0.418520	0.691959	0.483597	0.562226	0.458496	0.428884

A9	A10	A11	A12	A13	A14	A15	A16
0.703524	0.626017	0.514210	0.721968	0.410657	0.472122	0.485859	0.531246

Prior Communality Estimates: ONE

Eigenvalues of the Correlation Matrix: Total = 16 Average = 1

	1	2	3	4	5	6	7	8
Eigenvalue	2.234178	1.423009	1.333081	1.208504	1.123327	1.030789	1.009255	0.965945
Difference	0.811169	0.089928	0.124577	0.085177	0.092538	0.021334	0.043310	0.015338
Proportion	0.1396	0.0889	0.0833	0.0753	0.0702	0.0644	0.0631	0.0604
Cumulative	0.1396	0.2286	0.3119	0.3874	0.4576	0.5221	0.5851	0.6455

expected whenever a "radical" variable is crossed with a "traditional". Due to the relatively large sample (171 respondents), any coefficient $<.14$ is statistically significant ($p=.05$).

1. Community & economy, profit centres - Israel's political system & kibbutz, $r=-.14$
2. Social security - profit centres, $r=-.15$
3. Labour & motivation - kibbutz as a task oriented society, $r=-.22$
4. Young generation - foreign security & social issues, $r=-.16$
5. Consumption, kibbutz responsibility - member autonomy - kibbutz & Israeli society, $r=-.175$
6. Central kibbutz system - Changes and kibbutz fundamentals, $r=-.17$
7. Central kibbutz system - Social security in old age, $r=-.22$
8. Central kibbutz system - inter-kibbutz mutual guarantees, $r=.16$
9. inter-kibbutz mutual guarantees - Social security in old age, $r=.15$
10. Changes and kibbutz fundamentals - kibbutz & Israel's political system, $r=-.21$
11. Kibbutz & Israel's political system - kibbutz as task oriented society, $r=.21$

DISCUSSION..

The correlation coefficients indicate relatively low statistical associations. However low these associations are, the statistically significant values portray a dichotomy between the two sets of issues; those preferred by kibbutzim delegates the those representing a traditional approach. The results of the inverted significant correlations suggest that the more respondents favour "radical" issues, the less they view "traditional" ones as reflecting their requirements for the agenda for the convention. Although it is overly presumptuous to interpret a totally dichotomous situation, the deeper the objective examination the greater the appearance of a growing cleavage between members' requirements and ideological constraints mirrored in outdated perceptions.

Consideration of Hall's (1972:82) definition of organisational goals as generalities exacted from the desires of members and pressures from the environment and the internal system, adds weight to the discussion. It could be argued that respondents' preferences merely reflect general issues for a convention agenda. However in reality, since the respondents were kibbutz delegates their preferences can be said to represent kibbutz members' views on topics of importance and significance meriting discussion at the "legislative" branch level. Prior to 1988 proposed "traditional" agendas embodied strategic goals. As of 1988, however, a growing awareness of the need for the introduction of measured structural changes permeated the

UKM's decision-making bodies. An obvious gap has existed between the input of broad poorly defined domain goals and their translation into specific output goals.

A partial consequence of this is conceptual delay. This is so because of the challenge of the traditional 'fundamental' precepts of the kibbutz. This caused a corresponding costly time lag leading to a loss of essential population (brain-drain) coupled with inefficiencies derived from structural and infrastructural inconsistencies. All of these factors compounded to reinforce the occurrence and effects of the crisis.

STATED VERSUS PERCEIVED ORGANISATIONAL GOALS - FACTOR ANALYSIS

General

A refined statistical methodology is used in the present study to more coherently distinguish between sets of variables. The most common way in which to dichotomise between the two sets of goals (e.g. favoured agenda subjects) is by forcing variables into theoretically acceptable and mathematically separable factors. This technique is applied but no attempt is made to seek causality or to regress variables to explain the phenomenon. Because of the large number of variables being considered, it is necessary to 'constrict' them into

several 'manageable' and thematically-separable factors. Since a more-rigorous initial assessment of the data suggested some underlying regularity indicated by the inter-correlations, factor analysis is used to test the hypotheses.

The model is expressed as follows (Kim, 1975:471-2):

$$Z_j = a_{j1}F_1 + a_{j2}F_2 + \dots + a_{jm}F_m + d_jU_j \quad j=1, 2, \dots, n$$

where: Z_j = variable j in standardised form

F_i = hypothetical factors

U_j = unique⁶ factor for variable j

a_{ij} = standardised multiple-regression coefficient of variable j on factor i (factor loading).

d_j = standardised regression coefficient of variable j on unique factor j .

The following correlations are presumed to exist among the hypothesised variables:

$$r(F_i \cdot U_j) = 0 \quad i=1, 2, \dots, n; j=1, 2, \dots, n; \text{ and } i \text{ is not equal to } j.$$

$$r(U_j \cdot U_k) = 0 \quad j \text{ is not equal to } k$$

The factor U_j is said to be orthogonal to all other common

⁶Unique means the part of the variable that is influenced by the idiosyncratic determinants (of other variables in the model). Common means the part that is influenced by shared determinants. Subsequently, the unique part of the variable contributes nothing to relationships among variables. The observed correlations should be the result of correlated variables sharing some of the common determinants (Kim Ibid).

factors and to the unique factors associated with other variables. It follows that the unique part of a variable is unrelated to any other variable or to that portion of itself which is due to the common factor. Hence, if any correlation exists between the two variables j & k, it is assumed to be due to the common factors. The classical factor analysis then provides, inferred factors owing to the initial presumption suggesting some underlying regularity in the data.

Further analysis of the outputs is achieved by examining the pattern matrix in which each of the coefficients within the matrix, constitutes the direct contribution of a given factor to the variance of the corresponding variable. An alternative output structure matrix analysis consisting of correlation coefficients which is not utilised since the pattern matrix more clearly delineates the grouping or clustering of variables than the structure matrix.

Table No. 25

ROTATED FACTOR PATTERN*

FAC1	FAC2	FAC3	FAC4	FAC5	FAC6	FAC7	VARIABLE NAME**
A7	.8115	.0457	.0007	-.036	.0446	-.026	-.075 MUTUALGUR
A5	.3068	.6995	-.014	.0889	-.159	-.108	-.087 POLITICAL
A10	-.095	.5430	-.073	.0051	.2857	.3758	.0736 KIB & POLIT
A8	.1666	-.640	-.213	.1849	-.016	.2548	-.054 CHANGES KIB
A6	.0301	.0934	.7181	.0531	.0921	.0591	.0037 NEW MODELS
A16	.039	.0271	.5123	.4320	-.011	.2666	.2449 UNIF. KIB.
A2	-.2291	-.092	.3909	-.178	.5969	-.282	-.118 LABOUR &

A15	.0307	-.066	.1184	.7683	-.098	-.052	-.237	KIB ORGANIS
A14	-.320	.1063	-.294	.5424	.2234	-.167	.1594	INEQUALITY
A3	-.250	.0560	.0773	-.132	.6243	.0512	-.497	YOUNG GEN.
A13	.317	-.352	.1217	.0142	.5852	-.153	-.208	PROFIT CNTR
A12	-.142	-.112	.015	-.017	.0122	.7601	-.010	KIB&ISRAEL
A9	.0854	.0651	-.338	.0747	.1019	.4816	-.005	KIB TASK ORI
A4	-.0765	.0748	-.234	.1435	.1107	-.713	.0594	CONSUMPTION
A11	-.106	-.006	.0428	-.125	.0174	-.018	.8589	SOCIAL

* Factor loadings rounded

** For an unabridged list of subjects see footnote No. 2

The matrix delineates patterned factors. The coefficients within the matrix constitute standardized loading scores. Usually, these factor loadings correspond with the BETA scores in the regression equation since they are standardized. A factor loading $> (+, -) .6$ is considered to be a high loading score, hence, the variable matches the factor. A situation where variables are loaded strongly on one factor is not highly loaded on other factors is desirable. This enables a clear-cut distinction amongst factors. The factors can be viewed as an intermediate level bridging the theoratised and empirical modes embodied by the data or the manipulative variables. The analysis can be defined as inferential, employing a rotated oblique-factor matrices.

The initial sixteen variables are 'compacted' into seven factors, each of which are named and weighted to establish

whether the factor is legitimate. Factor's legitimacy is determined by establishing whether its usage contributes more than the inclusion in the analysis of the 'raw' variables.

Eigen-value is an index enabling establishment of the legitimacy of a defined factor: If eigen-value > 1 the factor is legitimate, as it contributes more than the raw variables making it up⁷.

In the rotated factor pattern, all shaded loadings scores indicate the variables that are strongly loaded on the factor. Whenever loading score $> (+ \text{ or } -) 0.6$ the variable matches the actor. As indicated, it would be desirable to arrive at a situation where the defined factors will reflect a certain theoretical phenomenon.

Factor1: "Mutual Guarantees"; includes but one variable: "mutual guarantees amongst kibbutzim". It is assumed that towards the end of 1989, mutual guarantees with all its intra and inter-kibbutz contexts, was the "hottest issue". This is supported by the wealth of literature in kibbutz related journals. The apparent reason for the topic's exclusiveness can be ascribed to the relatively unparalleled significance ascribed to it.

Factor2: "Traditional kibbutz interests"; includes central movemental system (.69957), "kibbutz & Israel's political

⁷Mevorach, B., *Factor-Analysis, Notes for Research Methods, The Public Policy Programme, Tel Aviv University, ND (Hebrew)*.

system" (.543) and: "changes & basic kibbutz fundamentals" (-.6405). The negative sign attached to the third variable indicates the inverted statistical linkage with most of the variables defined as 'traditional'. In this context, although mathematically it fits the factor, the inverted association suggests a thematic contrast.

Factor3: "Unification & Inter-Kibbutz Alliance". Two variables, "Inter kibbutz cooperation and new models" (.71815) and: "unification of kibbutz federations" (.51232) seem to form this factor. Although a third factor is also singularly loaded on this factor, its loading score is too low to significantly indicate any relevance. However, this seemingly odd connection lends itself to further elaboration. It is assumed that most respondents saw "*labour and motivation...*" as a general subject associated with the entire kibbutz federation, otherwise the concurrence of the two variables is unusual. Initially, the second half of this variable '*expansion of bread-winning capacity*' implies a "radical" issue as traditionally, kibbutzim viewed employment outside of the kibbutz as an oddity. This assumption has been radically changed due to the crisis and on the average < 10 percent work outside the kibbutz.

Factor4: "Structure & Inequality" ; features the variables "improving kibbutz organisational structure" (.76834) and

"private property and the problem of inequality" (.54239). The coincidence of these variables is seemingly unusual but can be associated with the lack of an appropriate organisational answer for the bewildering issue of private property. This then focuses on an intrinsic dilemma of the kibbutz:

- * The coexistence of private property
- * The tenet negating members of the kibbutz having substantial material holdings.

Ideological obtuseness and the requirement for members' conformity has presented introduction of workable organisational solutions to this problem. In turn, it can be postulated that the existing organisational mechanisms - semi-formal legally binding rules, and ineffective arbitrations - have only partially ameliorated individuals' plight.

Factor5: "Demographic". There are also thematically-contrasting variables with "*community & economy: unification or separation - profit centres*", (-.55411) with a minus sign, indicating an inverted statistical association with the factor. The other two are: '*integration of the young generation*' (.58476) and '*social security in old age*' and (.59127). A possible explanation for the "demographic" factor is: The current young generation in the kibbutz constitutes the best social security for the its superannuants. Once the young

generation leaves the kibbutz, its parents' social security, though legally partly binding, erodes. Pensioned members' social security is therefore dependent upon a demographically intergenerational organisation. Whilst this is a subjective assertion it is supported by the fact that coexistence of members and their offspring in reality underpins the older members' security even though their security is supposedly guaranteed by the infrastructure in the form of state social security. The negativity of 'community & economy', is explained by the structural separation of the two major components of the kibbutz being liable to risk this social security, primarily in the case of the superannuants.

It should be noted that no legal or organisational mechanisms have been developed for this radical proposal. The respondents may have expressed their fears and in no way the coincidental "factorial" form reflects any concrete situation.

Factor6: "Kibbutz". This factor is characterised by two "traditional" subjects; "The kibbutz & the Israeli society" (.76008) and "The kibbutz as task oriented society" (.48166). The variable "Consumption - kibbutz responsibility & member's autonomy" is a negative factor indicating an inverted statistical association with the factor (-.71344). This subject has previously been defined as "radical" contextually contrasting previous "traditional" variables. This contradiction however, can

be explained by a greater tendency towards increasing individualism.

Since the kibbutz is a task-oriented society⁸ it implies the needs of the individual members are subordinated by the collective's aims, needs and priorities. The variable 'consumption - kibbutz responsibility' and 'member's autonomy' therefore poses an inherent contradiction between the overriding collective kibbutz responsibility and the intensifying proclivity amongst kibbutz members for increasing individualism.

Factor7: "Policy" "Foreign security and social issues" (.8589).

Table No. 26

Eigenvalues (Variance explained by each factor ignoring other factors)

FACTOR1	FACTOR2	FACTOR3	FACTOR4	FACTOR5	FACTOR6	FACTOR7
1.275105	1.449464	1.385514	1.22508	1.228618	1.985977	1.348509

Table No. 26

Final Communalities Estimates⁹

⁸Kibbutz as a task-oriented society is considered to be amongst the eight kibbutz fundamentals (Shepher, 1976).

⁹The total variance of a factor accounted for by the combination of all common factors. The value indicates the amount of variance of a given variable shared by at least another variable in the set. The communality reflects the proportion of the unique variance of a variable: $1 - h_{2j}$

A1	A2	A3	A4	A5	A6	A7	A8
.4969	.4564	.6905	.5246	.6347	.5083	.6751	.5571
A9	A10	A11	A12	A13	A14	A15	A16
.5507	.4743	.6134	.7337	.5542	.6604	.5749	.6573

CONCLUSIONS

The aim of this chapter has been to substantiate certain causes for organisational decline. The relevant published literature provides no quantitative attempt to substantiate any of the theories or the qualitative-diagnostic studies (Lanir, 1990; Merry, 1990). By contrast, the present study provides a quantitative reference although the statistical methodology allows no causal inference. The technique employed quantitatively dichotomises the perceptual cleavage between:

- * traditional kibbutz constructs as envisaged by UKM's decision-making bodies and
- * the wants of 'common' kibbutz members as mirrored by their preferences for agenda issues.

It is demonstrated that the kibbutz does not differ from the common organisational conduct in this measurement. The disparity between traditional and perception by "common" kibbutz members is also attributable to administrators of retrenching organisations being less 'determined' when it

comes to critically evaluating institutionalised practices and belief systems (Whetten, 1981:85).

A basic assumption of this thesis is that a great deal of dissatisfaction and disillusionment existed prior to the emergence of tangible symptoms of organisational crisis. This is supported by Helman (et. al.) who found overwhelming evidence of dissatisfaction in their study. Although they did not address the question of acceptance or rejection of organisational goals, their findings indirectly suggest disapproval of basic tenets by a large sample of kibbutz members. Further evidence of the diminishing credibility in kibbutz federations leadership (Sharir et. al.) suggest, that the embodiment of kibbutz principles by "superiors" is further deteriorating. In a recent study Palgy & Sharir, (1991) presented some convincing confirmations of kibbutzniks' stances towards resolutions passed at various forums. In UKM kibbutzim only a third thought that conferences reflect kibbutz members' views. However, only 11 percent responded that these resolutions noticeably reflect **their own** views. Conceptually, these results are in line with the present findings and the notion of the growing disparity between stated organisational goals and the way the in which grass-root kibbutzniks interpret them.

In a recent Kibbutz Artzi Council meeting devoted to issues of organisation and management, a delegate aptly asserted

that: "...there is a big gap between what is being said here and what actually occurs in the kibbutzim. Do not dissociate this council from real life !" (Bashan, 1991:2). It can be suggested that at some stage throughout the current lingering crisis, certain kibbutz principles must be altered since the reality of the situation does not lend itself to a 'constructed' organisational change. This identifies a fundamental precept in organisation - environment relationship. The required outcome occurs when the organisation has the internal ability to modify its task-environment by precipitating fortuitous modifications within its task-environment.

It is commonly understood that pervasive and therefore commonly held entrenched organisational beliefs affect the insight and perspectives of subordinates and superiors alike.

Moreover, "they affect decision-making procedures and mould organizational arrangements and provisions so that there is a possibility of vicious, self-reinforcing circles" (Masuch, 1985:388). In order for the kibbutz to minimise the effect and the establishment of such vicious circles, it will be necessary to revamp major portions of its obsolete and ineffective organisational goals.

CHAPTER THIRTEEN

BRAIN DRAIN: TIME SERIES ANALYSES

GENERAL

In previous chapters, the problem of brain-drain has been referred to. This is the tendency of the qualified, talented and skilled people to leave an organisation in crisis or throughout a lingering organisational decline. Various authors (Hirshman, 1970; Becker, 1975; Whetten, 1980; Greenhalgh, 1983; Masuch, 1985; Weitzel & Jonsson, 1989; Robbins, 1989) in a wide range of OT-related disciplines have indicated that with decline, the most able, more qualified and experienced, hence potentially marketable staff, are predisposed to opt for greener pastures. Moreover, Campbell (1969), argued that the very survival of the afflicted organisation is contingent upon a wide range of internal variation in terms of its human capital. In evaluating recent effects of the crisis upon UKM kibbutzim, in some basic statistical analyses a substantial number of brain-drain characteristics are manifested in the macro demographic picture. As such, it will be shown that the UKM is increasingly depicting aging signs. The younger generations are consistently reluctant to stay, hence the proportion of the middle-aged and aged in the overall population grows markedly. Correspondingly, Aziva appears to be on the upswing amongst academicians

with a noticeable increase amongst -466-technologists, engineers etc. A leading kibbutz economist laments: "lately, the pace of Aziva has increased, of special concern is the exit of the good ones, the qualified who were supposed to lead" (Helman, 1990).

The kibbutz is a unique organisation which ascribes greater significance to the source of its population. Since the early 1970s, kibbutz-born members have become the primary segment of the kibbutz population. The crisis induced an increasingly large proportion of kibbutz-born members and candidates to leave. If one was to portray an archetype of a kibbutz leaver, three demographic factors are hypothesised to synthesise a dominant pattern: age, education and source. In order to correctly characterise this pattern and validate this basic hypothesis, a statistical methodology is required. An analysis in which a longitudinal evolution is graphically displayed, lending itself to a relatively accurate statistical inferences is the most appropriate.

The following chapters will demonstrate, employing correspondence analysis (CA), a temporal sequence where the factors of age, education and source are graphically displayed and quantitatively analysed.

MULTIDIMENSIONAL TIME SERIES - A CORRESPONDENCE ANALYSIS OF UKM

DEMOGRAPHIC TRENDS¹

CHANGE IN AGE GROUPS PATTERNS: 1985-1988

A phenomenon characteristic of a declining organisation is the gradual or sometime sudden aging of its population. This occurrence constitutes one of the ingredients of the brain-drain. Though a depletion of younger adult age groups does not necessarily indicate an immediate dwindling of the intellectual capacity of a declining organisation, it certainly undermines both life expectancy and the socio-economic potential of the inflicted organisation. In a previous chapter, a trend was identified where the exodus amongst younger age groups in UKM kibbutzim has been increasing through 1990. The statistical analyses used to identify the trend was rudimentary procedures such as descriptive statistics and plain graphical and diagrammatical displays. The trends are apparent but no evidence is provided as to the dynamics of **temporal alterations** as expressed by the changing dominant ingredients of the diagnosed population.

For a convenient running of CA, a contingency table depicting six UKM age groups was formulated.

Table No. 29

Contingency Table: Age Groups

¹Source of data: UKM Department of Information and Statistics.

21-24 25-30 31-39 40-49 50-59 60+ **TOTAL**
YEAR

4803	6632	10578	7113	4115	7580	40821	1985
4571	6442	10644	7609	4310	8722	42298	1986
4421	6007	10285	8181	4390	9056	42340	1987
4243	5640	9867	7275	4536	9296	40875	1988

The frequency table contains members & candidates in UKM kibbutzim.² It would be expected that if the hypothesis is correct, the dominant age group will tend to increase age with time. Indeed, this CA validates the assumptions and hypotheses.

Table No. 30 Contribution to the Total Chi-Square Statistic

AGE GROUP	1985	1986	1987	1988	SUM
21-24	7.38	.014	1.474	1.85	10.718
25-30	12.152	.883	3.016	7.144	23.195
31-39	4.08	.325	1.349	2.007	7.762
40-49	2.7	.131	7.484	.599	10.915
50-59	1.122	.554	.039	4.064	5.778

²Source: UKM Department of Information & Statistics.

Age Groups by Years

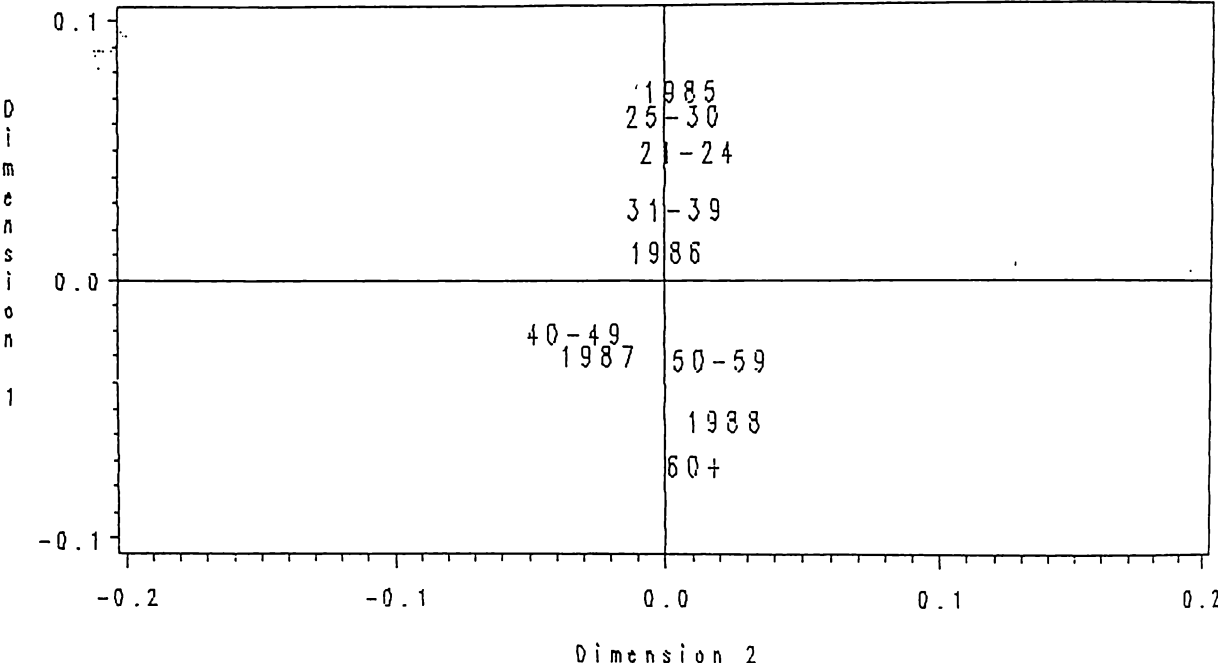


FIGURE 11

60+	23.312	.219	1.436	16.666	41.633
SUM	50.745	2.126	14.799	32.33	100.00

The graphical display is a projection of the contingency table onto an invisible multidimensional plane. The categorical variables are the years around which we view the clustering age groups (the continuous variables). The following patterns are observed:

In 1985, age groups whose "contribution" to that year or to the total Chi-square of 1985, were: 60+, 25-30 and 21-24. It is quite noticeable that all three points for the above age groups are relatively adjacent in terms of the similarity of their respective vectors from the centroid. Surely, a similarity in angles implies no relevance in terms of statistical association between the year (a discrete variable) and the different age groups (continuous variables). To find out the relative statistical strength between a continuous and a dichotomous variable it is necessary to gauge the relative distance of these variables from the origin (point 0.00). Although the 60+ age-group contributes more to the total Chi-square for 1985 (23.312), that the 12.152 of the 25 to 30 age group, it lies opposite to 1985 (in the bottom right-hand quadrant of the plot) whereas 25-30 is both distant enough from the origin and is situated very close to 1985.

Point 1986 lies in close proximity to the 31-39 age-group indicating both similarity in the angles measured from the origin and in terms of the distance from the centroid. As time passes, there is an overwhelming similarity in the angles gauged from the origin towards 1987 and the 40-49 age group. Indeed, the contribution of that age group to the summed Chi-square of 1987 is greater (7.484) than the relative contribution of all other age groups.

Quite distinctive is age-group 60+ which is close to the point demarcating 1988, both in terms of distance from the origin and the vector. Indeed, the relative contribution of that age group to the summed Chi-square of 1988 is markedly greater than that of all other age groups (16.666).

One of the striking indications of the aging trend of the UKM population is the positioning farthest from the origin as compared with all other active points, suggesting the largest inertia. The table of contributions to the total Chi-square shows that 41.6 percent of the total Chi-square statistic is contributed by 60+ age -group. Hence, the nearer the active point is to the centroid the less it contributes to the total Chi-square.

CA outputs include row and column profiles given in percentages. The following table depicts the row profiles. The table shows percantages (rounded) of age groups relative to the years.

Table No. 31

Row Profiles: Age Groups

AGE

GROUP 1985 1986 1987 1988

21-24	26.3	25.5	24.51	23.53
25-30	26.83	26.1	24.3	22.82
31-39	25.6	25.7	24.86	23.85
40-49	23.6	25.3	27.1	24.2
50-59	23.7	24.8	25.3	26.2
60+	21.87	25.2	26.2	26.83

Row profiles are essential as one can observe a decrease or increase of a certain age-group over the time. The results show that younger age groups decreased, older age groups increased, particularly the 60+'s. (from 21.87 percent in 1985 to 26.82 percent of the total population in 1988). It must be stressed, however, that this result only provides a partial validation to the basic assumption.

An analysis of the inertia and the Chi Square decomposition enables an assessment of the relative importance of the two axes using the eigenvalues (principal inertias).

Singular Principal Chi Percents

Values	Inertias ³	Squares	
.04785	.00229	380.832	88.15%
.01671	.00028	46.423	10.74%
.00537	.00003	4.793	1.11%
	-----	-----	(Degrees of Freedom = 15)
	.0026	432.047	

The principal inertias and their percentages .00229 (88.15 percent) and .00028 (10.74 percent) respectively. This implies interpretation is that:

- a. The plot is almost omnidirectional.
- b. The two directional CA containing 98.89 percent (plus 1.11 percent of inexplicable content) of the total inertia is an almost exact display of the profiles, there is minimal loss of information due to the graphical transformation.
- c. The contributions of the different points (made up of the age groups) to the vertical axis are high leaving very little contribution of the dichotomous variables (Years) to the horizontal axis. Moreover, the contrast between a younger age group (25-30) to the eldest (60+) is considerable.

³Squared Eigenvalues.

CA OF EXODUS BY EDUCATIONAL LEVEL 1978 -1988

A useful methodology to quantitatively authenticate the existence of brain drain is a CA using the years 1978-1987 as discrete variables relative to nine levels of education. The population to be investigated encompasses all members and candidates leaving UKM kibbutzim, subdivided according to the nine educational levels⁴. As CA outputs consist of a large number of entries, only the contributions to the total Chi-square will be discussed. The row profiles table provides initial indication of the increase over years of the number of leaving academicians and those with non-academic higher education (mainly vocational, teachers, nurses, technicians, practical engineers etc.). However, the rates of exodus between different educational levels and different academic degrees is differential. For example, Aziva amongst BSc. holders and engineers almost quadrupled whereas between different disciplines with the degree BA the increase is negligible.

**Table No. 32 Contribution to the Total Chi-Square
Statistic**

(ROUNDED PERCENTAGES)

LEVEL	1978	1979	1980	1981	1982	1983
--------------	-------------	-------------	-------------	-------------	-------------	-------------

⁴Source: UKM Department of Information and Statistics.

PRIMARY	.49	.007	.231	.87	.201	.006
HIGH	6.915	4.46	5.02	.002	.242	.778
HIGH+	11.38	7.31	8.64	.105	.427	3.143
BSc.	.37	.966	.354	.013	.62	.548
ENG.	1.48	.053	.302	.184	.084	.03
BA (SOC)	.985	.2	0.00	.018	.81	.087
BA (HUM)	2	1.22	1.84	.457	.413	.27
BEd.	.731	.015	.417	.006	.005	.033
SUM	24.38	14.23	16.95	1.654	2.803	4.894

LEVEL 1984 1985 1986 1987

PRIMARY	.002	.46	.501	.507
HIGH	1.78	2.06	5.005	.203
HIGH+	3.66	2.61	8.22	.002
BSc.	.035	.917	.101	.643
Eng.	.341	.119	.644	2.09
BA (SOC.)	.05	.104	.01	1.36
BA (HUM.)	.91	.007	.94	.484
BEd.	1.06	.001	.005	.405
SUM	7.84	6.276	15.42	5.7

The trend for contributions to the total Chi-square

Leaving by Education

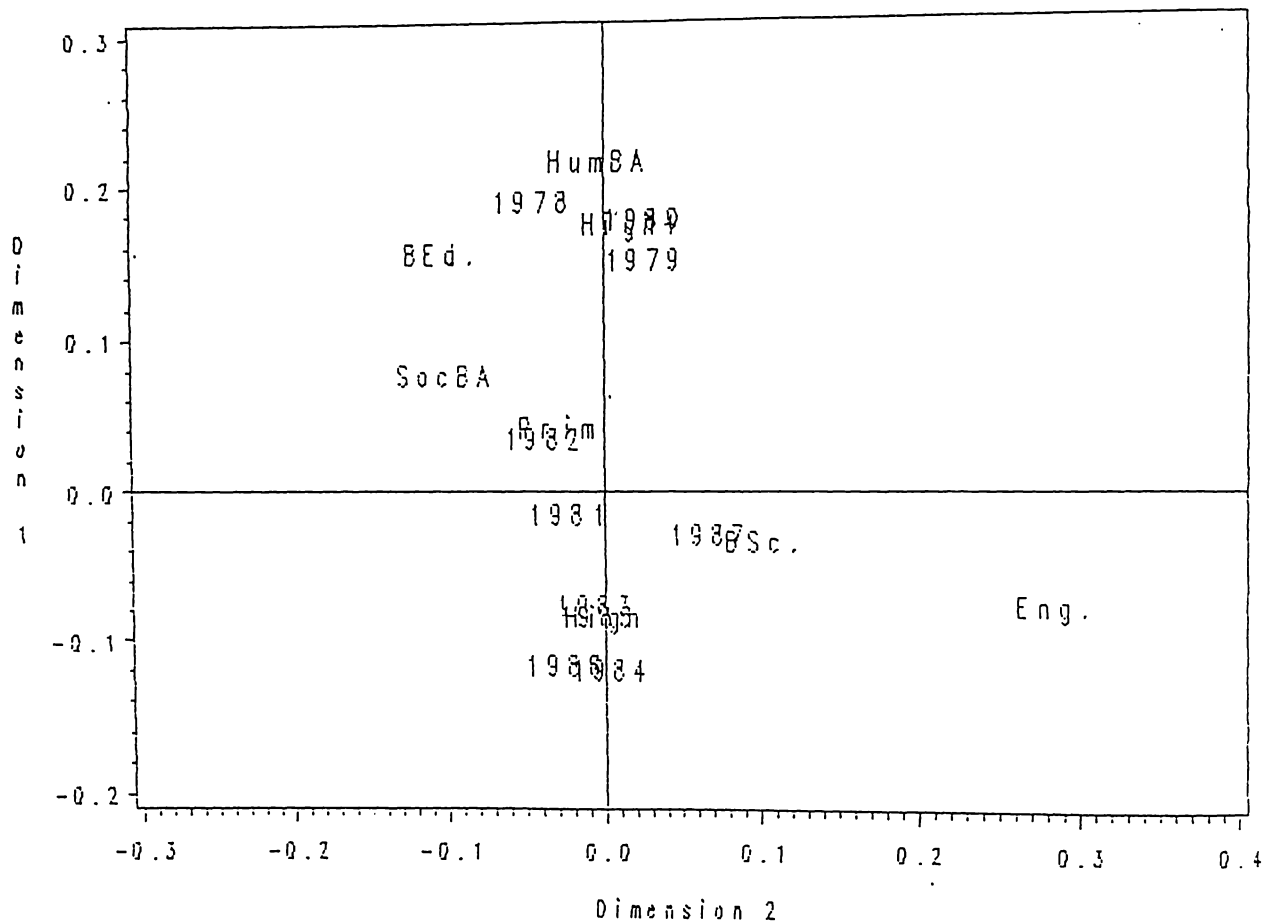


FIGURE 12

statistic is a gradual trend of a very gradual increase in contributions of chiefly non academics with higher education, suggesting a quantitatively large grouping made up of this educational class. The longitudinal dynamics of Aziva amongst educational categories other than academicians is of small relevance to the overall thesis topic. A brief analysis of the temporal sequence is instructive.

1982 will be the turning point because that year shows no indication of the following crisis.

a. In 1982, holders of BA soc. predominate emigration. Both the quadrant positioning and the close similarity in the angles of the point's dimensions as measured from the origin indicate a relatively stronger statistical association between the two points. Indeed, BA soc. contributes more than any other category to the total Chi-square statistics (.81).

b. 1983 is characterised by members with non-academic higher education. "higher+" contributes markedly more than any other category to the total Chi-square statistic of that year. Both points perfectly coincide, suggesting almost equal vectors measured from the centroid.

c. 1984 marks an upsurge in the number of BEd.'s. Though the overall contribution of that category is the lowest, suggesting a low absolute number, proportionally BEd.

constitutes the most visible increase.

d. The graphical display suggests that there is no statistically significant increase in the number of academicians leaving over 1985 and 1986. The row data demonstrate a noticeable increase. The explanation for the relative "concealment" of the academic categories stems from their proportionately low absolute number. Indeed this is a general and slow increase in the contribution of academic categories to the Chi-square statistic.

Descriptive statistics demonstrated a noticeable upsurge in Aziva amongst BSc's and engineers chiefly in 1986, 1987 and 1988. Presuming that these people are more marketable, it is inferred that with the intensification of the crisis in 1986, they, proportionally, left more than any other educational class. Indeed, the graphical display (bottom right -hand side quadrant) shows a striking similarity in the angles between the dimensions of each educational level. The locations of these points coincide with the direction from the origin of the point symbolising 1987, suggesting a statistical association between 1987 and the Aziva of BSc.'s and engineers.

Inertia and Chi-Square Decomposition

Singular Values	Principal Inertias	Chi Squares	Percents
.11139	.01241	150.113	80.74%

.03168	.00131	15.834	8.52%
.02693	.00073	8.773	4.72%
.023	.00053	6.399	3.44%
.01479	.00022	2.646	1.42%
.01239	.00015	1.856	1.00%
.00499	.00002	.302	.16%
-----	-----	(Degrees of Freedom = 63)	
.01537		185.923	

The principal inertias and their percentages, indicate a two -dimensional CA in which these two dimensions contain 89.26 of the total inertia. This result confirms that the graphical display appropriately demonstrates the profiles. The first dimension is almost exclusively determined by the years axis (vertical). It should be reiterated that the first dimension correctly reflects the years. The ordering of the years mirrors the shift over time of the UKM leavers in accordance with the educational classifications. The second axis separates BSc.'s and Engineers from the other educational classes suggesting a substantial "exclusiveness" of these categories. This finding enhances my assumption about both the marketability of these professions and their proclivity to leave upon crisis.

From the point of view of the steady loss of human-capital, Helman (1990) noted: **"The kibbutz lost thousands of members not due to their objection to principles of equality and collectivity. They were distinguished members, part of the**

leading elite, their sole sin was their preference of mathematics or literature and history over dairy farming and orchards, or a manufacturing plant. The grave economic crisis has suddenly exposed the fact that their exodus was economically unjustified". *The agro-industrial infrastructure was proved defecient*". In other words an economic and social vocational structure could prevent, at least partially, this mass exodus of the "best" and the "brightest.

AZIVA BY SOURCE: A CA ANALYSIS 1978 - 1988

Emigration by source is defined as exodus of kibbutz members by the organisational affiliation of the leavers. As previously indicated, a kibbutz population consists of a number of distinct groupings, classified in accordance with their source of joining the kibbutz. The traditional categorisation of these groups in the UKM depends upon their relative frequency in the overall population. The contingency table shows the number of leavers from each category between 1978 - 1988. More information concerning the different groupings is provided in the chapter 'Kibbutz Organisation'.

Table No. 33

Contingency Table: Population Source

YEAR	KIBBUTZ BORN	ISRAELI GROUP	OVER. GROUP	ABSORPT NON-ORG.	ABSORPT NON-ORG.	APP ⁵
				ISRAELIS	IMMIG	
1988	986	328	94	651	251	176
1987	868	331	80	613	215	181
1986	717	342	97	648	262	141
1985	454	267	56	467	179	139
1984	362	188	20	337	145	78
1983	389	204	38	375	144	85
1982	381	190	18	359	120	84
1981	435	185	43	411	169	102
1980	346	156	35	369	181	100
1979	428	191	40	380	191	105
1978	417	258	78	441	195	108

As in the previous analyses, discrete variables are years, whereas the continuous ones the members' categories according to their organisational source. The aim of this analysis is to identify which categories of population-source cluster in the vicinity of the eleven years.

Kibbutz adult population consists of four major ingredients; kibbutz-born members, graduates of Israeli

⁵Apprentices are graduates of youth groups, aged 14-18. Educated in the kibbutz until their mobilisation to the IDF. This is a relatively small category which was prominent primarily during the mass-immigration years of the 1950 but also prior to Statehood. The percentage of leavers from amongst this members category reflects their relative size in the population 5 to 8 percent.

Contributions to the Total Chi-Square Statistic

	KIBRN	ISGRP	OVR	ISRAB	OVRAB	APPENT	Sum
y88	25.654	3.986	0.766	7.406	6.350	0.565	48.726
y87	14.405	0.108	0.011	4.303	11.495	0.535	30.857
y86	0.497	0.878	5.648	0.040	0.002	3.587	10.652
y85	8.615	5.920	0.077	0.314	0.186	4.125	19.237
y84	0.589	2.788	9.286	0.185	0.948	0.524	14.321
y83	1.276	2.679	0.511	0.643	0.032	0.613	5.754
y82	0.027	2.429	11.941	1.631	1.959	0.662	18.048
y81	0.413	0.870	0.259	0.938	0.605	0.015	3.100
y80	6.294	2.033	0.880	1.556	11.684	1.377	23.825
y79	0.312	33.909	0.230	0.715	12.612	1.394	49.172
y78	13.571	6.371	13.355	0.055	1.794	0.154	35.299
Sum	75.654	61.970	42.963	17.784	47.668	12.951	258.991

Table 34

groups (NAHAL⁶). Israelis categorised as non-organised i.e. absorbed as singles or families directly by the kibbutz or through the UKM's Department of Absorption and 'non-organised' ex-immigrants, i.e. those who immigrated on a private basis. These groups are quantitatively the largest and hence deserve most attention. Special attention will be given, however, to the 'Kibbutz-born' because of the following reasons:

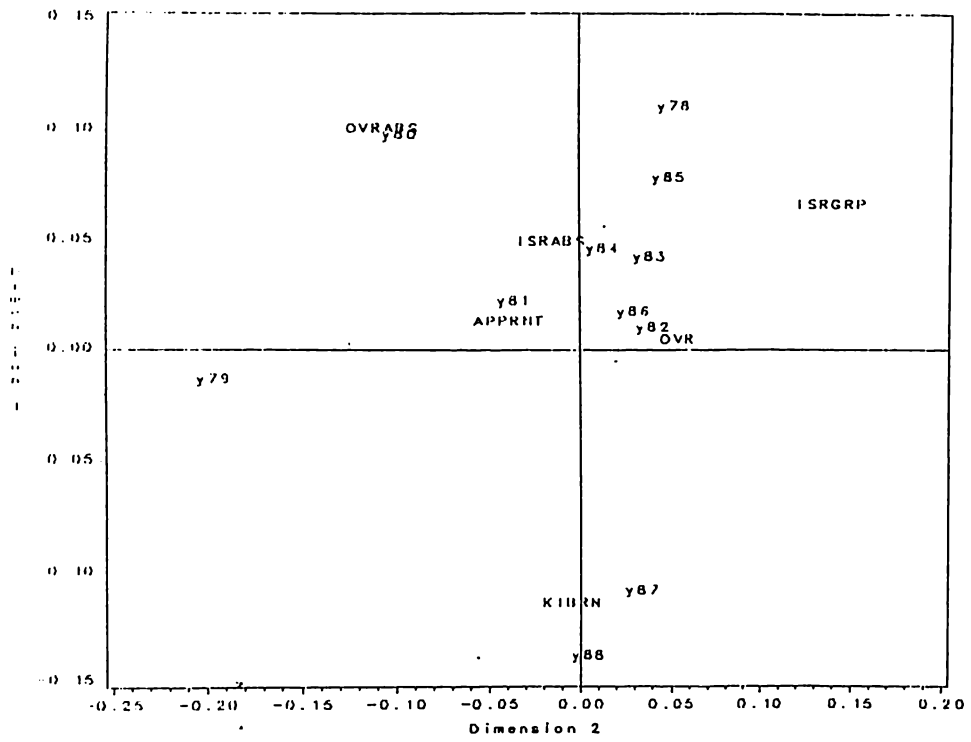
- a. Over 50 percent of the adult population are kibbutz-born.
- b. In terms of investment in human capital, the kibbutz places high premium in this population group. It constitutes the most essential demographic reserve for an uninterrupted progression from generation to generation.
- c. The kibbutz-born category have acquired skills and education to be socialised for kibbutz life more than any other category.
- d. Most kibbutz-born members leave the kibbutz in their twenties but as the crisis intensified, different exiting patterns entailing older age groups, started to take shape.

Table No. 34 Contribution to the Total Chi-Square Statistic

A number of temporal trends are apparent. Kibbutz-born contribute most to the 1987 and 1988 sum of Chi-Square statistic (11.45 and 5.562 respectively) indicating the

⁶Hebrew for the Israeli Defence Forces' Fighting Pioneering Youth Regiment.

Figure 13a
Leaving by Years By Source



largest weighted contribution. The differences between these categories and the others in terms of their contribution is significant particularly in 1988.

In most other rubrics the relative contribution of the various source categories to the discrete variables does not reflect the overall graphical display. This is because the display is a transformation of the **entire** data, thus the clustering is not determined by the situation in a single year.

Interpretation of the Graphical Display⁷

Unlike the previous displays, the longitudinal characterisation of groups leaving according to source is less distinct. This shows regular leaving patterns amongst the various groups in 1978, 1985, and 1979.

Moreover, the discrete variables are not arrayed in any logical sequence, again suggesting some quantitative similarity amongst the groups throughout the years.

Moving clock-wise, the upper left-hand quadrant contains two distinct groups.

⁷Glossary for the Graphical Display: (Clock-wise)
Overabs - 'non-organised' ex immigrants.
Apprnt - Apprentices. Youth groups educated in the kibbutz.
Isrgrp - Israeli groups
Ovr - Overseas organised groups.
Kibrn - Kibbutz-born

- a. The ex-overseas immigrants variable almost overlaps the 1980 point, indicating a very strong statistical association between the discrete (year) and the continuous variables due to the similar vectors drawn from the centroid to the two points. The points are relatively distant from the centroid suggesting a strong statistical association.
- b. 'Non-organised' Israelis dominate UKM's leavers in 1984. The two points are in a close proximity, therefore, their vectors are similar though the statistical association is not particularly strong as evidenced by the relatively low inertia shown by the closeness to the origin.
- c. Most significant is the dominance of leaving kibbutz-born members in both 1987 and 1988. Kibbutz-born leavers have a distinct and strong statistical association with both 1987 and 1988. The points are distant from the origin suggesting an exceptionally strong linkage due to the large inertia. Also, the ~~to~~ bottom quadrants contain but a single cluster indicating the irregularly large pattern of Aziva amongst kibbutz-born in the two consecutive years.

Indeed, Aziva amongst kibbutz-born increased by 21 percent between 1986-87 and 37.5 percent between 1986-88. No other category has such a rate between those years. This demonstrates that as the crisis deepens, more kibbutz-born

members and non members opt to 'leave the sinking ship'. The acuteness of the situation is reflected by over half of the classes leaving their kibbutz.

In fact, the large number of kibbutz-born leaving in 1987 and 1988 is not irregular in terms of their proportional representation in UKM population⁸, 35 percent in 1988 and 36.3 percent in 1989 or 35 percent of the entire adult UKM population in 1989. However, the CA analysis indicates that in these two years the proportional 'contribution' of kibbutz-born members to Aziva was irregularly high, proportionally exceeding all other categories.

Inertia and Chi-Square Decomposition

Singular Values	Principal Inertias	Chi Squares	Percents
.08358	.00698	121.102	46.76%
.06717	.00451	78.225	30.2%
.0509	.00259	44.924	17.35%
.02619	.00069	11.891	4.59%
.01282	.00016	2.849	1.1%
	-----	-----	
	0.01494	258.991	(Degrees of Freedom = 50)

⁸ UKM Department of Statistics and Information's Annual Report 1989.

The principal inertias and their percentages .00698 and .00451 with 46.76 and 30.2 percent respectively. The plot is two-dimensional. The two directional CA containing 76.96 percent (plus 23.04 percent of incomprehensible content) of the total inertia is an adequate display of the profiles, there is a considerable loss of information due to the graphical transformation. The contributions of the different points (consisting of the source groups) to the vertical axis are higher than of that contributed to the horizontal axis. The discrete variables, however, contribute chiefly to the vertical axis with only two years plotting conspicuously towards the horizontal axis (1980 and mainly 1979).

CONCLUSIONS

The three CA's presented in this chapter have a number of aims:

- a. To statistically validate an assumption with regard to "brain-drain", based on theories of organisational decline and crisis.
- b. Students of organisational decline and crisis have, to date, made no published attempt to quantitatively substantiate various presumptions and theoretical treatises of the phenomenon despite the fact that it characterises mainly organisations in decline.
- c. The methodology used, is not common in either

management studies with the exception of Hoffman & Franke, (1986) or in organisational change, Niv & Sheaffer, (1991). This is despite the various advantages as an exploratory descriptive multivariate statistical method.

CA and MCA possess the following methodological advantages:

1. quantification of multivariate categorical data.
 2. graphical displays of the data structure.
 3. CA requires no rigorous measurements.
 4. CA is an original way in which to statistically 'cross' discrete and continuous variables.
- d. This technique quantitatively supports postulations regarding the process of brain-drain in UKM kibbutzim during the crisis. Though not pivotal to the main research questions of this thesis, the confirmations lend further evidence to the gravity of the crisis and exemplifies a typical longitudinal decline.
- e. Qualitative typification of brain-drain during the current crisis shows the frequent leaver in 1987-1988 to be a young kibbutz-born (24-31) person with high-school or higher education. In order to further substantiate this finding a different methodology is needed where the combined and the proportional 'contribution' to Aziva can be assessed.

In support of general theories of brain-drain in organisations and populations, some quantitative-temporal evidences demonstrating the effect is advanced.

A general lesson is available to an organisation which is willing to confront this phenomenon; **"Unless the inducements offered to each stakeholder compare favourably with inducements offered by other organizations, the survival of organization is at risk"** (Griessinger, 1990:479). Starbuck (1965), suggested that declining organisations are less likely to offer such incentives as job security, higher executive salaries, prestige and power. These assumptions have not been examined specifically here. Nor is there any recent empirical data regarding these factors as deterrents to new members. However, it may be assumed that no such inducements are available in declining kibbutzim. Furthermore, Mittleberg & Lev-Ari (1991b:51) studying the impact of kibbutz education on emigrating kibbutz-born members concluded: **"...it seems as if the expressly ambitious, both in the professional domain and the economic sphere, have left the kibbutz or they constitute a potential to leave it. The kibbutz does not, apparently, form a community where these ambitions and needs (social mobility) can be fulfilled"**. In reality, the more marketable professionals in the kibbutz can not expect either a combination of the above stimuli or any single inducement as mentioned by Starbuck et.al. It can, therefore, cautiously be assumed

that the lack of these incentives along with an equivocal future may be the reasons for the accelerated brain-drain from UKM kibbutzim.

Aside from the fact that a declining organisation is less likely to provide stimuli for its more marketable members, thus, risking a snow-ball effect of Aziva during decline, the organisation is clearly loosing ground from the environmental point of view. In this respect, the population ecology orientation (Campbell, 1969; Hannan & Freeman, 1984 and others), seems to be correct, highlighting the key element of internal human variation.

There have been dramatic changes in environmental conditions in Israel over the last fifteen years. These conditions engender immense uncertainties and ambiguities in politics, the economy, demography, and society. It appears logical to infer that as the result of these changes: **"the organisation with the broadest pool of internal variety is most likely to be selected to occupy the emerging niche"** (Whetten, 1981:88). The literature on organisational decline is studded with remarks regarding the phenomenon of brain-drain in both crisis-affected and declining organisations. Whilst this is a universally accepted axiom, empirically, little has been done other than some rudimentary statistics and various qualitative propositions.

The intent of this chapter has been to contribute to

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supporting the general conjecture and in particular proving
basic presumptions of the thesis concerning the on-going
process of brain-drain in UKM kibbutzim.

CHAPTER FOURTEEN

MANAGERIAL/ADMINISTRATIVE

RESPONSE TO DECLINE:

THE CASE OF THE KIBBUTZ (A CA)

GENERAL

Managerial responses to decline are extensively described using different theoretical models in the literature. Burgoyne (1975) suggested three major categories of managerial response: avoidance, defence mechanism and learning. Miles, Snow and Pfeffer (1974) delineated a comprehensive continuum:

Generating	Reacting	Defending	preventing
(Proactive)	(Reactive)	(Reactive)	(Proactive)
Positive<----Attitude Towards Change----->Negative			

This continuum can be used to give a simple but accurate definition of managerial response to crisis. The response is not an isolated managerial activity but is almost invariably interrelated with the acute necessity to radically reconstruct the stricken organisation. Merton (1957) and Whetten (1980) identified a word for the bureaucratic adherence to rules and procedures rather than applying the aims for which these rules were originally designed. Furniss (1974), Smart & Vertinsky (1977), Starbuck, Greve & Hedberg (1978), DeGreene (1982) proposed special decision-making units aimed at addressing all

matters relevant to crisis. DeGreene, however, gave more emphasis to boundary spanning units whose major task was prevention of organisation crises.

Cyert & March (1963), followed by Wildavsky (1964) and Levine (1975), concentrated on incremental responses identifying "more of the same" approach caused by a natural human propensity not to opt for alternatives drastically different from the present reality. Both Toynbee (1947) and Tuchman (1984) attributed basic reactions of nations and societies to any external threat as retrenchment to traditional norms and values.

In terms of the innovative or conservative nature of organisational response to crisis, two opposing viewpoints have been identified. Wilson (1972), Glassberg (1978) and Weitzel & Jonsson (1989;97) stress organisational regeneration process following a major crisis. Smart & Vertinsky (1977), and Whetten (1979) postulate a conservative managerial reaction to an overwhelming crisis due, largely, to inaction induced by apprehension and fear of failure.

D'Aveni (1989:580), separated "Postdecline firms" which differ from non declining firms by being "**paralyzed strategically**". The reaction to this is characterised primarily by downsizing and the upwardly convergence of powers. These actions were

identified as important contributors to the paralysis of the declining firms. A number of researchers have proposed a responsive change triggered by crisis. (Benis and Slater, 1968; Landou, 1973; Hedberg, Nystrom and Starbuck, 1976; Stew, 1977; Weick 1977; Starbuck, Greve & Hedberg, 1978; Robey (1982). They advocate the "Self Designing Organisation" attitude underlying organic characterisations and an innovative approach. Merry & Brown (1986:11) surveyed various characteristics regarding breakdown of leadership in the wake of an organisational crisis. They gave a descriptive diagnostic approach covering a wide range of inabilities, shortcomings and other proofs of managerial dysfunctioning whilst the organisation is caught in a "crisis management mode". Most prominent of these organisational pathologies is the neurotic style of "extinguishing fires" in lieu of allotting adequate time to plan for the future. This is reflected in the lack of long-term goals, lack of strategic planning, no scenario of future development, and mixed prioritisation of objectives.

One of the aims of this study is to quantitatively characterise kibbutz administrative-managerial responses to a multi-dimensional organisational crisis. Other than occasional references highlighting in retrospect, kibbutz managerial incompetence as a perpetrator to the crisis, only Niv & Sheaffer, (1991) seem to have published relevant material. Merry (1988), described the emergence of a potentially capable kibbutz

leadership as a result of an acute need for change. However, Sheaffer (1987), using the annual increase in debt as a measure could find no significant association between the proportion of university-trained managers and the emergence of the crisis. This lack of relevant literature is surprising since the kibbutz is one of the most comprehensively researched modern societies in all disciplines.

METHODOLOGY

As a "pulse feeling" procedure linked with crisis management policy, a structured questionnaire was distributed amongst UKM kibbutzim in April 1989. The primary aim of these questionnaires was to generate data allowing the identification of clusters associated with patterns of administrative response to the multi-dimensional crisis. There were five general questions, each related to different, patterns of organisational/administrative response to crisis (See Appendix No. 1). For the sake of objectivity as well as accuracy, the questionnaire was filled in by the kibbutz's Secretary General whose familiarity with updated kibbutz procedures and involvement in crisis-related occurrences was most conducive to the research purposes. The kibbutzim did not have to identify themselves.

The data derived from this survey can be displayed in a number

of ways. The simplest is a graphic presentation of the common statistical distribution. Moreover, this presents problems in displaying the statistical association between nominal and sequential variables. This is getting complicated when a multi-variable analysis involving a categorical variable is concerned. The most appropriate method converts two-way table frequencies into a graphic display in which table row and column proportions are presented as points. Statistically, the method (CA) decomposes the Chi Square measure of association for the table into components in a manner similar to that of Principal Component Analysis for continuous data¹.

The procedure decomposes the Chi-Square Statistic for a Burt Table (Multi Correspondence Analysis) and a Contingency Table for a two-way correspondence analysis. The CA coordinates are parallel to the principal components in factor analysis (Principal Component Analysis) which divides the total variance in lieu of the total Chi Square. Each column and row is displayed by a point in a Euclidian space determined by cell frequencies. The decomposition of the Chi-square for the contingency table produces a large number of outputs. The relevant analyses are the marginal contribution to the total Chi-Square statistic and the observed minus expected values. The two measures are 'synonomous' providing an estimation of the degree of statistical association between the row variables and

¹Spring 1988 Release of **BMDP** Communications.

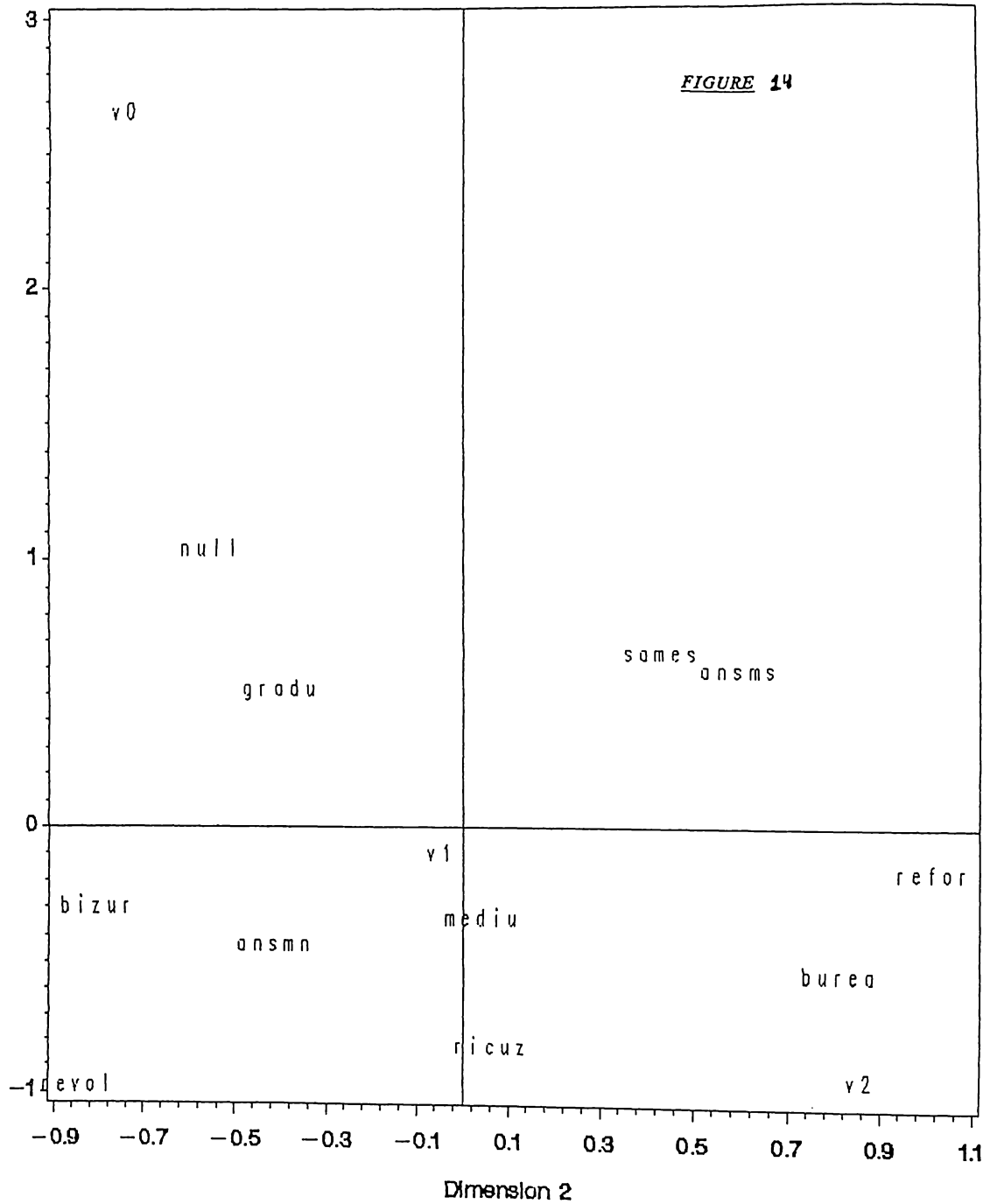
the column variables. The above analysis is valid only for data contained in a contingency table. Usually, however, CA provides the best summaries of data by way of a graphical display (Greenacre 1983;3). Thus, the way the graphical description is interpreted is very important.

DISCUSSION

Completed questionnaires were received from 51 kibbutzim on a random basis. Fifteen answers were formed out of 22. This was due to some missing values. The research objective was to characterise stressed administrative behaviours in both declining and neurotic organisations. This followed the general assumption that: the kibbutz's administrative system responds in much the same way as other voluntary and "total" organisations under similar duress. The results demonstrate that the kibbutz as a ideologically motivated system, defends its integrity during the initial phases of the crisis. This defense mechanism emanates from the leadership priviously known to have been intoxicated by alleged economic successes during the 1970s and early to mid 1980s. This leadership had to provide solutions to mounting economic and social problems which pushed most kibbutzim into structural limbo.

This answer was a piecemeal-incremental approach aimed at resolving problems of a quantum nature. These included solutions

Managerial Reaction Patterns to Crisis



such as:

- * proposing efficiency rather than effectiveness.
- * attending to a superficial/peripheral level of change rather than tackling fundamental structural issues.
- * enacting procedural amendments rather than probing basic tenets.
- * avoidance of rephrasing obsolete organisational goals.

At the macro level, i.e. the kibbutz federations, the leadership beguiled itself by doggedly adhering to founding principles and inadequate objectives. This phenomenon was identified by Levine's (1978) as "Problem Depletion". This is described as the unwillingness to concede that many of the founding aims are invalid in the current circumstances. The incongruence between declared organisational goals and their perception by kibbutz members is addressed in a separate chapter. However it is appropriate to stress the subject as it is clearly demonstrated in the overall administrative response to crisis.

Four distinct patterns of administrative response are identified.

Pattern No. 1 "**STABILITY.**" Major characteristics:

- a. four to six persons fonctionnaires strengthen administrative overhead.
- b. The organisational authority structure has not been changed

as a result of the crisis.

- c. Kibbutz management appears to be able to provide answers for most of the crisis-induced problems.
- d. The kibbutz prefers only a gradual change in several dimensions.

The pattern is defined as "Stability" since most organisational constructs remain solid. This pattern depicts a moderate reaction embodied in a significant increase in administrative overhead.

Since participating kibbutzim were allowed anonymity it is not possible to identify individual kibbutzim according to their economic-organisational-social performance. Therefore it can be assumed that this pattern represents the more well-to-do kibbutzim which invariably have multi-generational and socially established communities. There is a group of kibbutzim that no longer "deny" the crisis while not yet fully "acknowledging" it (Fink, Beak, Taddeo; 1972). It should, however, be borne in mind that "stability" in this context reflects Whetten's definition, "Decline as Stagnation" (1980:346-347). Whetten's seemingly "negative" phrasing was later supported empirically (Cameron; Whetten; Kim 1987).

Pattern No. 2: "**AUTHORITATIVE.**" Major characteristics:

- a. One to three additional persons reinforcing kibbutz administration.

- b. A distinct tendency towards an upwardly convergence of authorities within the kibbutz's top level committees (Secretariat, and Economic Affairs).

There are numerous indications of the mechanistic-dysfunctioning of the kibbutz's organisational structure (Sheaffer 1987; Levy 1988; Merry 1989). It is presumed that this pattern includes kibbutzim characterised by excessive bureaucracy.

Pattern No. 3: "NEUROTIC".

Kets De Vries and Miller (1984;17) defined a neurotic organisation as: **"troubled firms whose symptoms and dysfunctions combine to form an integrated syndrome of pathology."** Merry and Brown (1986:18) proposed: **"Neurotic organizational behaviour is repetitive patterns of pathologic, seemingly unchangeable organisational behaviour, involving a false representation of reality."** The major characteristics of this pattern are:

- a. The forming of two to four ad-hoc teams or committees;
- b. The assumption of a "muddling through" approach in all matters pertaining to the introduction of change following the crisis.
- c. The ability to provide answers for only a portion of the crisis-induced problems. For instance, when vicious circles drive the kibbutz towards a dead-end, it resorts to an indispensable comprehensive bail-out.

The results suggest that most UKM kibbutzim are currently characterised by neurotic organisational behaviour. The above characterisation is a mere summary of a large number of indications justifying this definition. Indeed, out of 176 kibbutzim, approximately forty may be classified as "declining" Merry and Brown (1986:18), suggested that declining organisations would demonstrate the following characteristics: failure of self-image; a low energy climate; breakdown of communication; disagreement on goals, values and norms; organisational dysfunctioning; deteriorating conditions; difficulty in changing these norms. Although these pathologies are not tested empirically here, they seem to correctly mirror the situation in declining kibbutzim.

The "neurotic" pattern amongst kibbutzim specifically fits Merry and Brown's proposition. They argue that due to the behaviour of a neurotic organisation, organisational variables are "beyond their range of stability for a significant period" (Ibid). This has been demonstrated in various longitudinal analyses substantiating this proposition and categorisation (Sheaffer 1989a; Sheaffer 1989b; Sheaffer and Shapira 1989). The main impact of the crisis chiefly affects the demographic makeup of the affected kibbutz. It is identified with brain-drain, aging, repetitive signals of a growing stress, blurred and irrelevant organisational myths and ideology, a widening schizm between a member's conception of kibbutz's objectives and the declared derivated values, norms

and codes of behaviour.

D'Aveni (1989), whose longitudinal study analyzes in depth consequences of decline, provides a convincing statistical association between inadequately staffed top management teams and organisational paralysis amongst **postdeclining** firms. His hypothesis reflects the situation in business firms only. By contrast, the present investigation deals with "Total Organisations" and hence contributes to the generalisability of this phenomenon.

Pattern No. 4: **"CHANGE-ORIENTED."**

This pattern, accommodating only one organisational feature, is least crystallised. This is because the few kibbutzim classified as "Change-Oriented," tend to opt for a relatively revolutionary transformation in most spheres of life.

CHARACTERISATION OF RELEVANT INGREDIENTS OF THE MULTIPLE

CORRESPONDENCE ANALYSIS (MCA): FURTHER INTERPRETATION OF THE PLOT.

Division of the total association measured by Chi-Square/n for all dimensions (Table 1) is the total inertia (Distance squared x mass). The inertia for each dimension is the Principal Inertia or **eigenvalues**. The values in the table show the various administrative responses to crisis which are summarised in a decreasing order by nine dimensions. The CA may also provide an

estimation of the association amongst the different categories. The plot is interpreted by assessing the vectors drawn from the centroid (0.00) to each point represented in the plot by letters. For instance, the point "Null" in the upper right-hand quadrant representing an increase of < 4 people in the kibbutz's administrative overhead, is close to the point "Sames" ("No change in authority structure") in the same quadrant. This juxtaposition, along with the two other points ; "Gradu" and "Ansms," reflects a multiple association among these four variables. The closer the cluster is to the centroid, the less statistically significant is the association in relation to other clusters. It must be stressed that no distances should be measured amongst different category variables (points plotted on the Euclidian space). In other words, in order to assess association between different variables it is necessary to measure the angle between the two in relation to the centroid. The more acute the angle, the stronger the association. Accordingly, the "Neurotic" pattern as mirrored by the relevant cluster, appears least meaningful in terms of the relative statistical association. However, since the angles measured between the different points within the cluster are comparatively acute, the pattern is distinguishable.

CONCLUDING REMARKS

The accepted procedure is to determine a model where parameters

estimated and hypotheses tested. Gower & Digby (1980) contend that this is the ideal case and that "much groundwork is required before a model or a hypothesis can be formulated." However, exploratory data-analysis may be best employed using various graphical displays of two-dimensional properties. However, when dealing with multi-variate analysis, graphical presentation allows for multi-dimensional spaces to be explored and exhibited to reveal the uniqueness of the pattern contained in the data. This methodological approach is new and therefore preliminary. It predicates, however, that graphical characterisation lends itself to further modeling and analyses in order to substantiate a possible hypothesis.

Four distinct administrative responses to crisis have been identified: "Stable", "Authoritative", "Neurotic", "Change-Oriented". Even though the kibbutz is a pioneer commune, (Niv;1980) not a 'simple' organisation, its administrative reaction to crisis falls within a common and normal range. No patterns stray, in its basic form, from the expected response to an adverse organisational situation. Further study is needed to characterise each of the above patterns particularly to develop a comprehensive substantiation technique for predicting the above patterns. This will require the usage of a wide variety of economic as well as organisational and social variables.

The present findings indicate kibbutzim as organisations are governed by managers whose decisions reflect upon the entire kibbutz. The findings of this model are preliminary and require further investigation to establish the association of each mode of managerial response to a measured level of organisational decline. There are, however, some indications that kibbutzim depicting neurotic and authoritarian managerial modes are more severely implicated. Present participative observation coupled with a number of journalistic publications, give evidence to the effect that the more severely crisis-impacted kibbutzim tend to be characterised by increased 'authoritarianism' and display of neurotic symptoms. Indeed, the two modes are organisationally 'boxed-in' at a dead-end. For example they tend to concentrate powers in the hands of few, adopt a muddle-through approach in terms of organisational change.

CHAPTER FIFTEEN
SYMPTOMS OF ORGANISATIONAL
DYSFUNCTION: EXCESSIVE
MANAGERIAL CONCENTRATION
OF ADMINISTRATIVE POWERS

Introduction

The upwardly convergence of powers is a symptom of organisational pathology following a crisis or in the wake of an overwhelming threat. This symptom is displayed by the funneling of authorities towards the peak of the organisational hierarchy. Subsequently, the number of decision makers is reduced and powers of the lower organisational levels are cut down. The two basic organisational forms, (the organic and mechanistic) will respond in opposite ways to crisis. The diversified and decentralised organisation dissolves weak links towards the top and strengthens intra-unit couplings, whilst the rigidly structured organisation enhances links to the top.

In this respect, Harmann, Hall & Mansfield (1971), concluded empirically that following or during organisational crisis managers tend to constrict communication networks and **reduce the number of participants in the decision making process.**

Kibbutz administrative response to crisis in terms of the

-504-assumed level of authoritative power is not as clearly dichotomised. In order to better understand how kibbutz managements centralises authorities, it is useful to refer to the model developed by Fink, Beak & Taddeo, (1971). They observed several phases of organisational response following a crisis impact. The 'Shock Phase' features a paralysed leadership followed by a phase of "Defensive Retreat" characterised by autocratic decision-making. It can be inferred from this that the autocratic leadership style, in particular, is conducive to centralisation of powers.

The kibbutz has always been characterised by an increased tendency to upwardly converge authorities. Indeed few managers in the intermediate levels of the various committees, economic branches and services with the exception of manufacturing industries, possess any real powers. Although the kibbutz is a typical form of a participative democracy (Rosner, 1980), and all members may participate in the decision-making process (Rosner & Nenni, 1990), this democratic pattern has become ritualistic and unforceful by the decrease of the number of participants in general assemblies.

The pseudo-anarchical leadership style (Shepher, 1976) and reproductive nature of the kibbutz organisation, (Levy, 1989) and the lack in material rewards for members, creates an

organisational climate where authority has no benefits¹ and hence, is not much sought after.

As a result of fuzzy definitions of administrative roles within intermediate levels, authority and responsibility seldom coincide. Such a situation where the scalar principal malfunctions is not conducive to the assumption of mid-level positions within the organisation. Consequently, the tendency is to transfer authority upwardly.

Golomb (1966), noted that far too many unresolved issues land on the economic coordinator's desk. This tendency to assume excessive powers rather than delegating tasks and powers, results in distracting office holders from concentrating on key matters where their involvement is crucial.

It is a tenet of the present thesis that excessive concentration of authorities in the kibbutz is a commonplace phenomenon. This dysfunction intensified particularly during the shock and acknowledgement phases of the current crisis as in other organisations. Paradoxically, an organisation base on tenets of equality, collective participation and direct democracy, is typified by an involuntary upward convergence of power. The term involuntary here has identified the process in

¹No benefits in the material sense (Tiger & Shepher, 1975; Shepher, 1977).

which irrespective of the central office holders' personal penchants (managerial styles; either authoritarian or democratic modes), the process of shifting power upwards is an intrinsic structural feature.

The crisis seems to have exacerbated this pathological condition (Merry & Brown, 1986) that managerial qualities have been diluted (brain-drain) at the height of the crisis and not vice versa. The aim of the model presented in this chapter is to graphically display how authorities (as reflected by the number of committees attended by four central position holders in the kibbutz) are clustered around the elected officers. In itself, the graphic display and the quantitative analysis is only partial evidence of the organisational disfunction known as centralisation of powers during crisis. However, it is essential to provide even a fractional confirmation despite the inferential constraints of the statistical methodology.

EPITOMISATION OF THE PROCESS

The crisis marked an enhancement of the centralisation of the power phenomenon. During the pre-shock 'defensive retreat' phases of the crisis (Fink et. al. 1971), a typical autocratic mode of management prevailed in hard-hit kibbutzim. As a result of sudden depletion of organisational slack the following elements can be identified:

- * A noticeable shrinkage in cash-flow
- * Mounting short-term debts
- * Curtailments of credit lines and
- * The end of movemental bailing-out wizardries based on existing credit lines.

Most decisions and expenditures were made solely by the Economic Coordinator. This person usually chaired the Economic Committee and occasionally sought either the Council or the General Assembly's rubber stamps. Although recognition of this practice is not supported by any quantitative or empirical measurements, qualitative² analyses substantiated the tendency. In line with Fink et. al.'s (1971) model, this tendency subsided somewhat towards the next 'acknowledgement' phase. To some extent, this practice was recommended by the UKM's Institute of Organisational Counseling as a temporary remedial policy in kibbutzim facing acute crisis in 1988 and 1989.

In extreme cases (Dlomy, 1991), where the organisational structure imposed on community and business caused an organisational paralysis, a triumvirate autocratically ran the day to day affairs of the kibbutz. It, therefore, seems

²A systematic reading of a sizable number of UKM newsletters by the writer, in 1988 and 1989, reveals that this tendency was prevalent primarily amongst the most hard hit kibbutzim but not infrequent even amongst the more economically sound ones.

reasonable to conclude that the crisis bolstered existing centralisation of powers strictly regulating decisions about expenditures.

METHODOLOGY

A measure of the level of central office holders' participation in the kibbutz committees gives an indication of upward convergence. To assess top managerial echelon's involvement in kibbutz affairs, kibbutz secretary generals had to document which committees had central position holders as ex-officio members. These were:³:

1. Secretary General (s)
2. Treasurer
3. Economic Coordinator
4. Managing Director(s) of the Kibbutz's manufacturing industry(s).

The following is a contingency table depicting the number of officers participating in the kibbutz committees of the total

³Kibbutz officers may include other positions such as 'Coordinator of Consumption Services', 'Social Secretary', 'Chief of Industrial Enterprises' and others. Generally speaking, the larger, the older and more differentiated the kibbutz, more full-time officers are likely to man the administration. The four listed positions are found in any kibbutz of size, age or organisational differentiation.

TABLE 35

COMMI T TEE	ECONOM IC. COORD.	INDUS TRY MNGR	SECRE TARY	TREASU RER
ABSOR PTION	0	1	13	0
NEWSL ETTER	1	0	2	0
ECONO MIC	21	18	17	20
CONSU MPTION	0	1	12	4
CONST RUCTI ON	20	3	13	7
CULTU RE	0	0	2	0
EDUCA TION	0	0	9	0
HIGHE R EDUC.	8	0	16	0
HEALT H	0	0	12	0

COMMI T TEE	ECONOM IC. COORD.	INDUS TRY MNGR	SECRE TARY	TREASU RER
FINAN CE	46	25	18	49
MEMBE RS	0	3	36	0
ECONO MIC AFFAI RS	84	53	41	80
MANPO WER	33	3	40	1
SECRA TARIA T	84	10	84	80
LABOU R	47	5	16	0

respondents (N=84 kibbutzim):

Contingency Table

0

The table demonstrates that highly scored committees are those where central office holders tend to be represented.

It is postulated that there exists an excessive ex-officio participation of officers in different committees. These committees should have been delegated more responsibilities and powers. Active participation of part of the central office holders, partially curb committees' independent stances. It also extends officers' span of control, creates a heavy workload (Golomb, 1966; Levi, 1988) and consequently consolidates powers within the two most highly regarded institutions i.e. the Secretariat and Economic Affairs Committee.

Part of this structural dysfunction can be attributed to the traditionally-ambiguous tasks of the committees. Consequently, officers whose tasks are relatively well-defined (Secretary General, Economic Coordinator, Treasurer) are more inclined to effectuate the scalar principle.

Commensurate with the relatively indistinct definition of organisational positions, committees' responsibilities are varied and many. Power, however, is relatively limited. This situation generates overriding decision powers within the important committees. It is intended to find the relative

quantitative contribution of CPH to the committees and to obtain a visual display of this contribution. For that purpose a CA is used where the categorical variables are the four CPH whilst the continuous variables are represented by participation scores of CPH in the committees. The CA provides a unique picture which is affected by the noticeable participation scores of the Secretary Generals and the economic coordinators in the the Secretariat and the economic committees. These high scores overshadow other results.

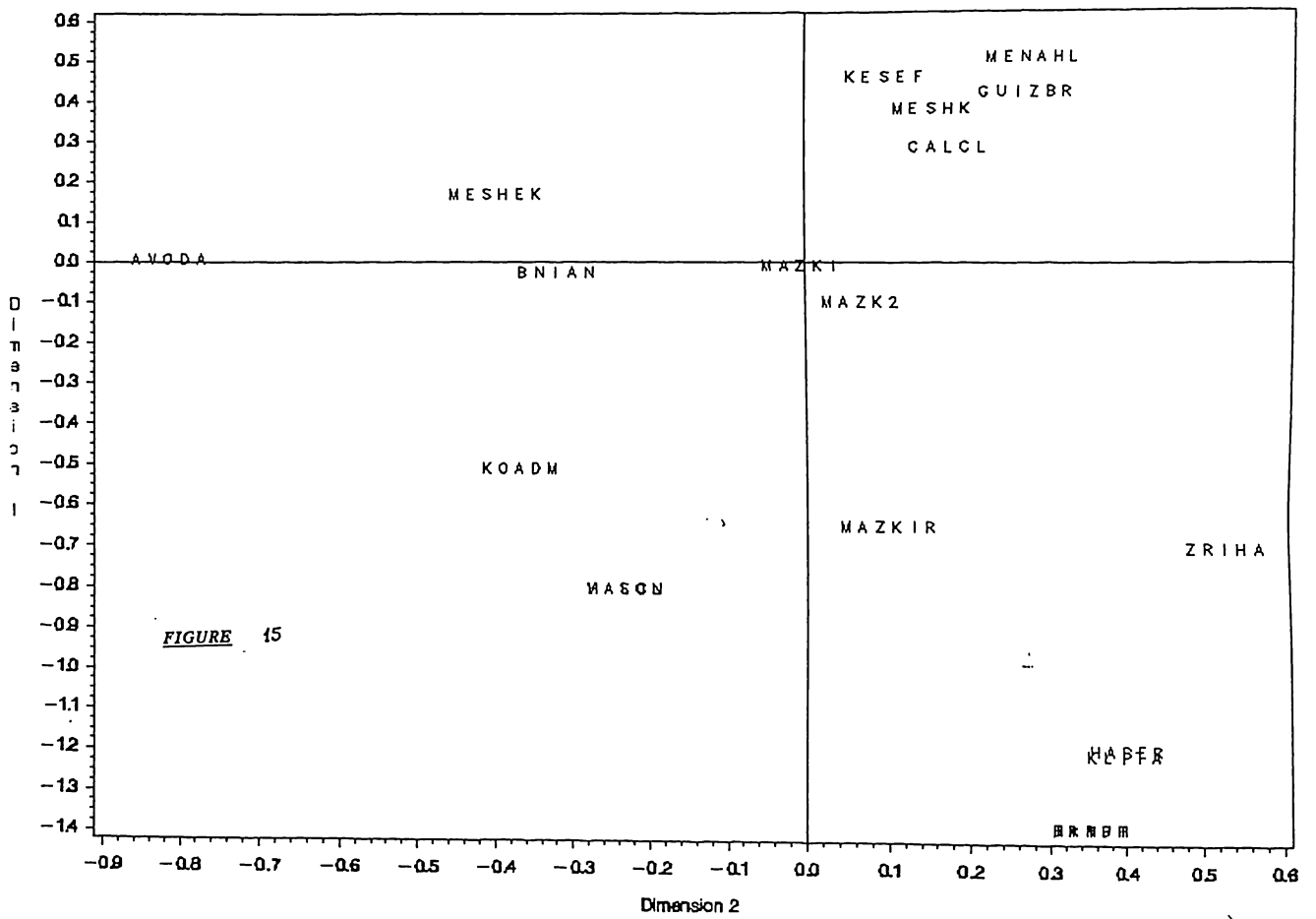
Observed Minus Expected Values

The table demonstrates an overriding presence of secretary generals in 'social' committees whilst economic coordinators and treasurers are very highly represented in economic and man-power committees. This trend is not entirely consistent because high participation of secretaries is evident also in 'non social' Finance and Economic Affairs committees. This trend, however, is not consistent in so far as economic coordinators are concerned. They are far less represented in 'non economic' committees. Minus signs (in the graphical display) indicate a 'negative' participation or rather, no participation in a committee as opposed to high positive values signifying high participation scores.

Contribution to the Total Chi-Square

Figure 15

Correspondence Analysis of Central Roles by Comittees



Contributions to the total Chi-Square statistics reflects important tendencies. For example, participation of Treasurers in the Manpower Committee is negligible (one out of N=84). However, Treasurers' relative contribution to the total Chisquare is higher than any other officer (4.404). This finding is not surprising since, in extreme cases such as the above, high contribution scores reflect also the **extreme opposite**. That means, a minimal contribution to the total Chi square.

Managers of manufacturing industries' score only ten out of N=84 in the Secretariats whilst they contribute 3.765 to the total Chi-Square. The reason for the inconsistencies arises from the proportionate contribution to the standard deviation and the variance in terms of participation. An extreme situation occurs where there is a very high participation of certain officers in certain committees as opposed to an exceptionally small participation of others in these committees. This trend is not invariable but it affects the overall picture as best demonstrated in the graphic display.

ANALYSIS OF THE GRAPHICAL DISPLAY⁴

⁴Glossary for the Graphical Display
(Clock-wise, beginning at the upper left hand quadrant)

Econ.Coo - Economic Coordinator
Ksaff - Financial Committee

The graphical display demonstrates three distinct clusters of committees (continuous data) in the vicinity of three categorical variables (central office holders).

1. Managers and Treasurers

Managers and Treasurers are similar in their ex-officio committee involvement. The respective relative horizontal distance (upper-right-hand-side quadrant) between the three variables (economic, financial and secretariat committees) is small, suggesting a thematic closeness with respect to the categorical variables. The closeness between categorical variables (officers) and the committees indicates that the vectors drawn from the origin (0.00) to each point are close. Hence, a strong statistical association exists between each of the plotted categories and the respective committee. This is an interesting case where the thematic closeness amongst the

Manager - Manufacturing Industry Manager
Treas. - Treasurer
Meshek - Economic Committee
Calcal - Economic Affairs Committee (A committee with an advisory status, usually manned by all economic decision makers plus economists and ex position holders).
Sec - Secretariat
Sec. Gral - Secretary General
Consum - Consumption Committee
Member - Members Committee
Abs. - Absorption Committee
Mnpower - Human Resources Committee
Contr. - Construction and Housing Committee
Work - Labour Affairs Committee

three different officers coincides with their respective participation.

Preceding clock-wise, the Secretary General has the widest range of ex-officio formal activities. This is depicted in the contingency table. Nevertheless, these characterisations are better demonstrated graphically in the bottom right-hand corner of the display. Most socially oriented committees are closely plotted, implying an exceptionally thematic resemblance. This closeness is based on the points depicted in approximately the same direction from the centroid. The closeness, however, is such that the committee names are printed on top of one another. (members, absorption, health, education and higher education). The Secretaries are also highly represented in such committees as economic, economic affairs, labour and manpower. The Economic and Economic Affairs Committees are both plotted on the upper-right-hand quadrant (marked by a plus sign). This demonstration suggests an inverted statistical association. The sign indicates that the data possess information that supports the contradiction between secretaries and involvement in economically-oriented committees.

A strong statistical association exists between the Secretaries and the Social Committees. This is evidenced by the similarity in the direction of the vectors drawn from the

origin to each of the above points.

2. Secretariat

As the three main office holders (Economic Coordinator, Treasurer and Secretary) are almost invariably members of the Secretariat, there is but a negligible variance vis a vis their participation. Consequently, the partial contribution of the secretariat to the inertia for the column points is the lowest in both dimensions (dimension1 = 0.000333, and dimension2 = 0.001596). Intuitively, the lower the contribution to the inertia for the column points in both dimensions, the closer is the point to the centroid (0.00).

4. Economic Coordinator

The point marking this officer in the display has some unique characteristics. Aside from labour, construction and housing, no other committees are situated near the Economic Coordinator point. However, this officer is equally represented in all economic committees. The reason for the diluted cluster and the relative distance from the economic committees may be attributed to the similar representation of economic coordinators in these categories.

Analysis of Inertia and Chi-Square Decomposition

Singular Values	Principal Inertias	Chi Squares	Percents
.1477	.123788	246.921	68.24%
.2812	.07906	82.064	22.68%
.17787	.03164	32.841	9.08%
	-----	-----	
	.34858	361.826	(Degrees of Freedom = 42)

The principle inertias and their percentages .23788 (68.24 percent), .07906 (22.68 percent) and .03164 (9.08 percent).

The interpretations are as follows:

1. The plot is, basically, two-dimensional as evidenced by the fact that two directional CA contain 90.92 percent of the inertia with a relatively large inexplicable content (9.08 percent).
2. The two directional CA reflects around 90 percent of the profiles. Hence, there is approximately ten percent of lost information owing to the graphical transformation of the raw data.
3. The contribution of the committees (continuous data) to both vertical and horizontal axis is largely regular and the contribution of the discrete variables to the horizontal axis is considerably greater than to the vertical one.

CONCLUSIONS

The model is aimed to graphically display the propensity within organisations in crisis, to upwardly converge decision power. This situation leaves intermediate managerial levels with limited authority. The current model is only a cross-sectional 'photograph' of a one-time situation (1988). There is no reference to the situation before or after 1988.

It is postulated that the tendency towards an upwardly convergence of power increased during the 'shock' phase of the crisis (1985 and 1986). This situation, however, persisted thereafter with a reduced intensity. No substantial evidence is available in recent kibbutz literature nor does any empirical study refer to this mode of managerial response in crisis. This structural dysfunction is not new in the organisational crisis scene. There is ample evidence referring to unsatisfactory managerial standards (Helman 1982b) and also to the insufficiency of the managerial infrastructure (The 1989 Recovery Plan). These deficiencies are known to have existed prior to the crisis. In hard-hit kibbutzim (classified as 'The Nineteen Group'), highly powerful ad-hoc administrative committees were set up consisting of UKM-nominated officers along with a small group of kibbutz officers.

These committees had a veto power over any decision regarding expenditures. They authoritatively governed economic activity. Dlumy (1991), portrays the absolute decisional powers accredited to a 'triumvirate' in one of UKM's worst-hit kibbutzim. This and other indications are only partial evidence yet it provides some proof regarding the well-documented organisational dysfunction.

CHAPTER SIXTEEN

**ORGANISATIONAL DEMOGRAPHIC DEPLETION: A QUANTITATIVE MACRO
ANALYSIS: CRISIS MODEL No. 1**

General

A general demographic depletion is largely, attributed to the downturn process experienced by declining organisations. It is expected that a declining organisation will gradually or abruptly, contingent on the gravity and intensity of the crisis shock, lose its most precious asset: qualified human capital. Leaving an organisation in general is a widely documented aspect of organisational behaviour. Lewin (1951) argued that pull and push forces affecting organisational members are relative. It means that members' affinity to their organisation and the balance between the two will be kept so long as the alternative organisations' appeal does not supersede attractions within the original organisation. However, should relocation to alternative organisations involve serious hardships, exiting the original organisation will be halted.

Lewin argued also that the intensity of the pull force is contingent upon the congruity between members expectations and reality as perceived by these members. This argument is supported by Maslow (1954) and Porter & Steer (1973). They

supposed that the rate of demographic depletion decreases in accordance with the general satisfaction from membership. The aspect of commitment to the mainly voluntary organisation is elaborated on by Kanter (1974). She contends that highly committed members possess a considerable sense of belongingness to the group. This commitment is likely to dissuade members from leaving. Organisational members will be committed as long as their moral, emotional and instrumental needs are satisfied. These needs involve rewards granted by the community, the degree of the individual identification with the group norms and personal ties within the community.

Cohen (1979) alleged that the kibbutz was evolving into a union in which members affinity is predicated on the fulfilment of their instrumental-beneficial needs. Kibbutz members' considerations regarding their desire to stay or to leave are directly related to their standard of living, self fulfilment and material rewards. Satisfaction scores (Helman, Glick & Goldemberg, 1988) during organisational decline plummet markedly. The phenomenon of exiting organisational members following a multi-dimensional crisis and during a prolonged decline accompanies any organisation. This unfortunate event is dealt with from a brain-drain perspective.

It is rather obvious, therefore, that the loss of organisational slack in the form of human resources (Meyer, 1982; Hambrick et al.) gravely curtails organisational

buffers against environmental jolts. The depletion of organisational munificence in the form of financial slack, and the depletion of human capital is one of the most serious risks faced by organisations. The hazard for the organisation's survival becomes more acute when during decline the organisation loses both essential buffers i.e. human resources and financial slack. Usually, owing to the complexity of a major crisis, the loss of human resources coincides with, precedes or follows a sudden or gradual economic slump. Both Greenhalgh (1983) and Masuch (1985), argued that organisational decline is followed by organisational 'contraction' consisting of a coincidental and accelerated loss of three elements: slack capital resources, slack human resources and slack liquid resources. The loss of human resources erodes work-force quality. Brain-drain incurs an atmosphere of mediocrity. Consequently the general deterioration impedes the absorption of qualified labour force. The phenomenon is endemic in most organisations and is widely discussed in studies dealing with the outgrowth of crises. The consequent depletion of essential human resources drew empirical researches particularly analyses of demographic trend (Zamutto & Cameron, 1985; Jick & Murray, 1982; Whetten, 1980; Hircshhorn, 1983). The exodus of talented organisation members creates a substantial obstacle obstructing effective turnaround. It is noted that (Levine, 1979; Greenhalgh, *ibid*; Weitzel & Jonsson, 1989) the severe difficulties in reversing the trend which endanger, the

very existence of the affected organisation. The following model will longitudinally and quantitatively examine macro reasons for the exit of kibbutz members as a result of the current crisis. The exodus or Aziva amongst kibbutz members has been traditionally considered to be a major deterrent for an uninterrupted development of both the community and its business sector.

Unlike other organisations catering for only a single life circle, (i.e. occupation, religious affiliation, health, trade unions etc.) the kibbutz is an all-encompassing entity where members are engaged, willingly and involuntarily in all facets of life. Hence, personal involvement and commitment is expected to be considerably higher. An exit of a kibbutz member, therefore, entails additional aspects and is more emotionally-laden than in other organisational forms. Traditionally¹, an exit of a kibbutz member was not a formal cessation of organisational membership but a departure from a more fundamental collective conviction, a betrayal in a shared composite faith, leaving fellow 'comrades to life' behind. The phenomenon is known to have been prevalent in kibbutzim at all times. Mostly, kibbutzim who ceased to exist did so primarily owing to recurrent waves of Aziva characterised and led by the more capable members (Shepher, 1977; Ben-Horin, 1981). To date, no published empirical studies, other than Helman (et al), analyzed direct effects of a

¹For a detailed qualitative analysis see chapter 'Crisis' and the relevant parts dealing with Aziva.

deteriorating economic situation on the organisation's macro-demographic make-up.

THE STATISTICAL MODEL²

The current model seeks to show general causes for Aziva predicated on macro datasets reflecting the situation in eighty percent of UKM kibbutzim (N = 136) during six years of crisis. The availability of longitudinal data with the years (T-6 to T-1) entered as dummy variables, makes it possible to study the causal dynamics across multiple cases when the potential cause for Aziva may be attributed to different points in time and different cases. Valid causal inferences are therefore possible (in so far as the research design is concerned, i.e. integratively analyzing time and space within the same statistical framework) though not devoid of statistical problems³. Explanatory variables will, consist of exogenous and endogenous trends. The exogenous variables are said to reflect potential task-environmental effects upon demographic depletion. Therefore, they are likely to exhibit a variety of external effects. These external catalysts are theorised to be linked with the 'explained' axis, i.e. the down-turn demographic trend. The independent-exogenous variables are of economic and social character mirroring a potentially

²For an extensive explanation regarding the variables in this model, refer to Appendix '**Variables**'.

³For further elaboration see chapter '**Research Methods**'.

influential trends within the kibbutz's task-environment. These include tendencies prevailing in Israel which are longitudinally analogous to the crisis sequence within UKM kibbutzim.

Endogenous variables will include explanatory measures reflecting temporal trends within the kibbutz. These will be used to hypothesise the affect on the evolution and the extent of demographic depletion.

'Neutral' (independent) dummy variables denote the six consecutive years, 1983 to 1988 (T-6...T-1). A certain year is expected to have a statistically significant effect on organisational demographic depletion. This means that a specific eventuality corresponding with the year should have, directly or indirectly caused an Aziva. Alternatively, yearly occurrences tend to have an accumulative effect which are predisposed to create substantial statistical problems.

The Dependent Variable

The dependent variable is embodied by the 'number of leaving members and candidates divided by the total number of members and candidates' ratio. This ratio provides a fairly accurate index, demonstrating a level of social\demographic stability within a given kibbutz at a given point in time. As previously postulated, a substantial depletion in the organisation's demographic

mainstay, is likely to be a sensitive manifestation of the way it reacts to a prevalent crisis or a continuous state of a comprehensive decline. The demographic depletion has been extensively referred to using content analyses. The general trends pertaining to Aziva, as revealed by the descriptive statistics, are categorical, indicating a considerable yearly upsurge in the number of members and candidates leaving UKM kibbutzim. These findings require an in-depth and inferential statistical examination about the economic and organisational catalysts.

THE HYPOTHESES

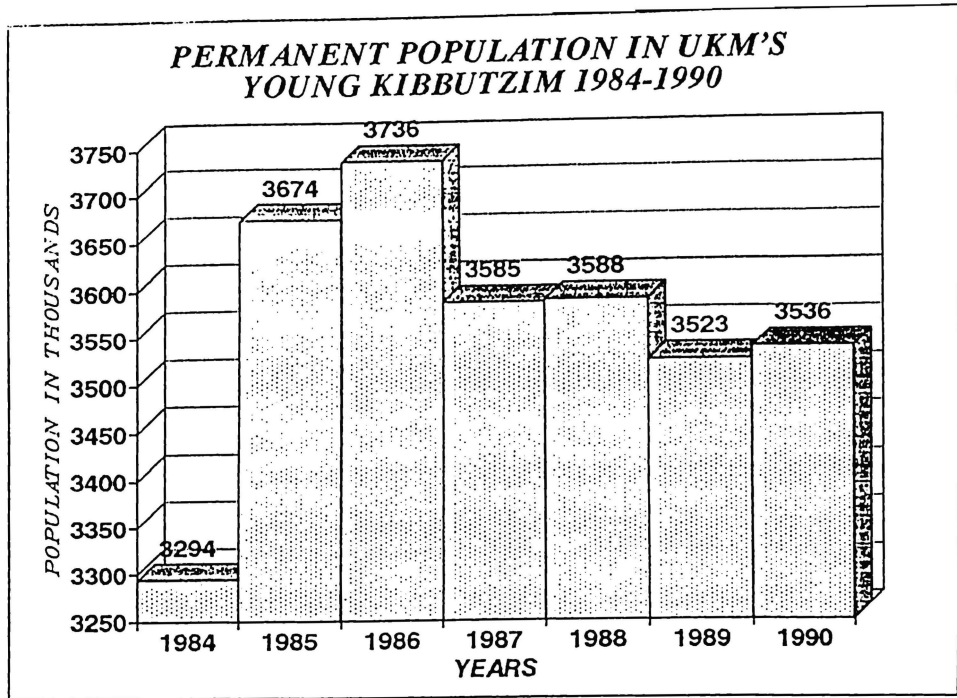
Hypothesis 1

There will be a positive statistical association between the kibbutz's liability of newness, liability of smallness (Freeman & Hannan, 1975) and demographic depletion as reflected by the 'exiting members and candidates/total number of members and candidates in a given year's ratio. Alternatively, the younger the kibbutz the higher is the rate of Aziva.

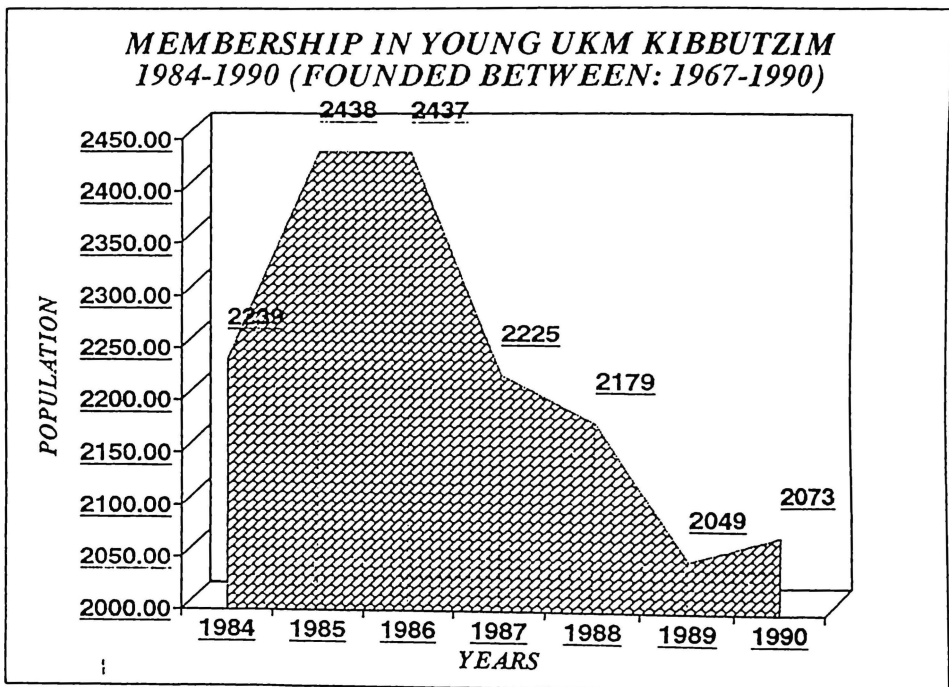
Theoretical and empirical studies regarding liability of newness, (Stinchcomb, 1965; Carrol and Delacroix, 1982; Freeman, Carrol & Hannan, 1983; Carrol, 1983, 1987; Sing Tucker & House, 1986; Hannan & Freeman, 1989), focus on the limited capacity of younger organisations to withstand

environmental buffets and the genuine inverse interrelatedness between organisational age and death (Bruderl & Schussler, 1990:531). These studies and Hannan & Freeman (1989) in particular, suggest a close linkage between young-age, organisational smallness and organisational death rates. Of the four main reasons suggested by Hannan & Freeman, (1989:69) as perpetrators for organisational death, the multiple interactions between environmental shocks and internal processes are the most effective causes for a potential demise of a kibbutz. This elucidation is aimed at amplifying an apparent causal sequence: **Differential absorption of environmental shocks-->liability of newness and smallness-->accelerated death rate.**

In fact, these studies do not elaborate on internal organisational processes and discuss the issue from the point of view of organisational ecology. The only theoretical support for an apparent validation of the hypothesis (based on the above references) stems from the fact that a suggestive line is drawn between the hypothesised enhanced rates of Aziva in young kibbutzim (> 20 years old) and a potential demise of a kibbutz. Aziva in young kibbutzim is a cyclical process and in general the transient kibbutz population is noticeably larger than the less impermanent members-population. Sheaffer (1988) and a research team at the Settlement Research Centre (1989), found exceptionally high rates of Aziva in young UKM



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kibbutzim. No comparative studies with established kibbutzim have been conducted but descriptive statistics seem to validate⁴ a far greater rate of Aziva in younger kibbutzim. The inability on the part of young kibbutzim (and the UKM as a settling body) to establish a stable community is an endemic problem linked with recurrent, unresolved and ever-worsening aspects of the current crisis. The following two graphs illustrate the down-turn trend with a clear 'bend' from 1986 onwards, earmarking the gravity of the crisis.

Graph No. 62 & 63

The issue has drawn a significant number of journalistic references primarily within the framework of the two main kibbutz federations. The issue persistently occupies the kibbutz's public agenda. For example, Bar Yosef, (1991a,1991b), described the massive instability in young kibbutzim owing mainly to mass exits of members and candidates.

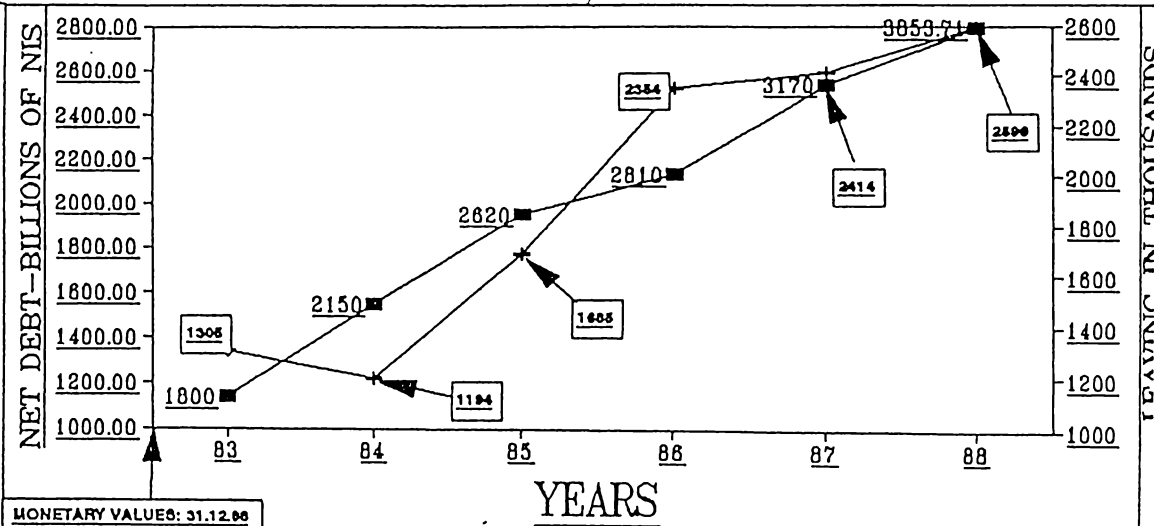
Hypothesis 2

The heavier is current organisational liability ('net debt/members & candidates' ratio) the more accelerated will be the organisational demographic depletion.

Though not specifically alluded to in the literature, it

⁴Various programme memoranda issued by the author in 1988 and 1989 at UKM's Unit for Policy Planning.

AGGREGATED NET DEBT VS LEAVING (MEMBERS & CANDIDATES) UKM 1983-88



MONETARY VALUES: 31.12.88

NET DEBT
 LEAVING

PROGRAMMED: 8HEAFFER

DATA SOURCE: UKM ARCHIVE

can be hypothesised that an indirect linkage exists between depleting economic buffers and increased exodus of organisational members. It would be reasonable to expect a set of intervening variables between the actual depletion of organisational slack (increased debtness to money-lending agencies, shrinking financial assets, shortage in working capital, the spiralling cost of credit) and mass exit of organisational members. These may include decreased services or a stagnating standard of living. However significant these predictors may be, the current model is aimed at showing a general picture rather focusing on a specific organisational facet.

Sheaffer, (1989b)⁵ has shown a statistically (positive) significant linkage between the economic situation in T-2 and the Aziva ratio in T-1 in a multiple regression model. Although his model represents only two years, the dataset encompasses almost the entire UKM population of kibbutzim (N = 169). Hence, the results constitute a robust basis for the this hypothesis.

Hypothesis 3

Higher sustenance allowance per-capita will decrease the organisational demographic depletion ratio.

⁵In a Programme Memoranda submitted to UKM Secretariat in 1988, a Pearson correlation coefficient of $r = .41$ was found between the net-debt/turnover ratio and the rate of Aziva in the worst hit category of kibbutzim (N = 19).

Normally, the allocation of material incentives to organisation members is not considered to be a unique topic of organisational decline. Levine (1979), suggested that in a state of organisational crisis, the allotment of incentives in addition to and other than wages, tends to drastically dwindle. Consequently, the more innovative and skilled employees will tend to leave. No published studies have, thus far, examined the extent to which maintenance allocations affect Aziva ratio. However, Helman et. al, (p. 40), found a **"...clear and consistent linkage between the economic situation (based on external and objective judgment) and all spheres of satisfaction"**. In particular, any curtailments which directly affect domains of personal consumption are likely to drastically reduce satisfaction scores.

Standard of living as an overrriding catalyst for members to stay is also discussed by Mittleberg & Lev-Ary (1991a). They quote a number of studies, some of which (Cohen, 1979) focus on the kibbutz as a case study where standard of living along with other incentives determine whether or not a marketable member will stay. Dror ⁶ argues that the single most important incentive for kibbutz members to remain is the kibbutz's ability to successfully compete with other segments of the Israeli society by increasing motivation. Qualified and marketable members will stay

⁶A Lecture given by Professor Yehezkel Dror of the Hebrew University at a UKM General Secretaries Convention, Neve Ilan, 26/1/89.

provided the kibbutz will manage to increase standards of living along with additional psychological satisfactions. All the above, notes Dror, will become even rarer as the crisis intensifies. Recent literature accentuates the linkage between higher economic inducements and demographic stability. It is argued that "...unless the inducements offered to each stakeholder compare favourably with inducements offered by other organizations, the survival of the organization is at risk" (Griesinger, 1990:479).

Hypothesis 4

Improved kibbutz performance (internal source) will decrease organisational demographic depletion.

In 1986 kibbutzim were sub-grouped into five categories according to a pure economic measure⁷ which, at the time, best reflected their actual economic performance. The measure was in use until 1988 and proved fairly accurate. Its major drawback was that no demographic measure was incorporated, therefore it mirrored an economic situation only. It became obvious that the better economically performing kibbutzim were less inflicted with Aziva. This

⁷The economic measure is named after its initiator, Mr. Gad Rozenhal of UKM Economic Division. The measure is a simple formula consisting of:
Internal source/member (5a)
Net-Debt/member (3b)
Net-debt/turnover (2c)
hence:
Gadi Measure = 5a + 3b + 2c

observation suggests a potentially inverted statistical association between the two measures. Much like the previous hypothesis, economic performance has a direct bearing upon one's standard of living, general social security and other considerations which can affect the decision to leave or to stay.

Hypothesis 5

Organisational attractiveness (operationalised by the 'number of candidates absorbed divided by the total number of members and candidates' ratio) will be positively correlated with demographic depletion in the kibbutz.

Traditionally, kibbutzim faced by massive exodus will inevitably make efforts to increase absorption to replenish 'vacancies' created by leaving members. To a great extent this is a circular process similar to Masuch's (1985) vicious circles. In fact, exodus from kibbutzim always served as a most effective catalyst for an intensive absorption. The chicken or the egg question is not irrelevant here since no one knows when each process began as well as when did the other terminated. In this hypothesis, however, it is argued that increased absorption will prompt more members to leave. Previous studies established a statistically significant association between the two variables (Verdsheim & Sheaffer, 1989; Sheaffer, 1989). The first showed that the greater the Aziva in T-2

the greater is the absorption in T-1. Albeit the second demonstrated that the greater the absorption is in T-2 the greater are absorption ratios in T-1.

Hypothesis 6

Smaller (members population) kibbutzim will tend to have higher Aziva ratio.

The total number of members and candidates is Operationalised. Since a relatively strong positive relationship exists between the kibbutz size (population-wise) and age, i.e. young kibbutzim have invariably few members (Shepher, 1977; Sheaffer, 1987), most arguments adduced in hypothesis 1 hold for this hypothesis as well. Young and small kibbutzim suffer from an acutely high human turnover with entire groups leaving upon their demobilisation from the IDF and only approximately two to four percent remain more than a year following their discharge from national service.

Hypothesis 7

Negative (national) immigration balance⁸ will be inversely related to Aziva ratio in kibbutzim.

⁸Immigration Balance; arrivals and departures by category of visa. For further details see appendix 'Variables'.

It is hypothesised that increased emigration during the mid to late 1980s had a negative effect on Aziva ratio in kibbutzim. Chizik (1987), followed by Mittleberg & Zamir (1990), found similar rates of emigration between kibbutz-born and other Israelis. Kibbutzim are part and parcel of the nation but are relatively subject to extra dosage of imported influences by a constant exposure to overseas 'Volunteers'⁹. It is, therefore postulated that the growing rates of emigration from Israel have a general effect on rates of Aziva.

Emigration rates as reflected by the immigration balance may not be directly associated with or affecting Aziva ratios from kibbutzim. Such direct linkage is not mentioned in the relevant literature. Nonetheless, a logical sequence between the increasingly high number of successful kibbutz-born emigrants and the plausible effect on potential young kibbutz emigrants is assumed to exist. (Mittleberg & Lev-Ary, 1991a:23)¹⁰.

⁹Young overseas transitory workers who come to get acquainted with kibbutz life-style. They work and live alongside kibbutz members and stay for a short duration of time. The expression 'Volunteers' was coined during the 1967 War when thousands of youngsters showed their support for Israel by staying a period of time in kibbutzim as temporary farm-hands.

¹⁰Age distribution amongst kibbutz-born emigrants, and 'general' leavers (those left the kibbutz to localities other than kibbutzim). (Mittleberg & Lev-Ary, 1991:23)

Age Group	49-40	39-30	29-20
Emigrants	11%	57%	32%
General' Leavers	14%	70%	16%

Hypothesis 8

High unemployment rates tend to reduce rate of Aziva.

Though not documented in previous studies, it is assumed that a growing rate of unemployment will dissuade potential leavers. It seems obvious that amongst the various considerations prior to Aziva, the decision to leave is contingent markedly upon the labour market. As sustenance is the primary consideration, it seems reasonable that a potential leaver would secure a job. Since this thesis deals with the macro aspects of the crisis it is appropriate to include the two variables in the same equation as they both measure general and consistent trends. A steady upswing in the annual rate of unemployment is recorded, from 4.5 percent of the workforce in 1983 to 6.4 in 1988. Aziva, however, demonstrates a somewhat different picture in terms of the up-turn trend (see **graph No. 64**). It is noted that from 1986 onwards, Aziva is moderately on the upswing whereas national joblessness rate decreases between 1986-7.

Hypothesis 9

The more distant we get from T-6, the years (temporal sequence) will tend to have a negative effect on Aziva.

In general, arguments for this hypothesis are more statistical than conceptual. It is noticeable that since the data are specified in a temporal order the likelihood

of autocorrelation increases. In this case it means means that the regression coefficients are liable to reflect preceding years' accumulative effect on the successive year rather than showing how much of the total variance is accounted for by the independent variables (Ostrom, 1978:12-30). The objective, should be, therefore, to avoid a situation where disturbances at one point in time will correlate with any other disturbances (T+1...T+N). In other words, a noticeable serial correlation of errors must be avoided. This holds true for all inferences predicated on either time-series or pooled regression models. In this case, it will be argued that an artificial impact of dummy atheoretical variables (Stimson, 1985:922) on a quantitative phenomenon as if a point in time can affect a real event. The hypothesised effect, therefore, is an imaginary one created not by A exerting influence over B but by a statistical manipulation. This manipulation means that in order to better characterise an impact in one point in time, one successively default all 'participating years'. This is done to artificially isolate one year. Since a control is required for temporal (years) rather than spatial disturbances (observations), it becomes difficult to model either dimension of the phenomenon by apportioning much of its systematic variation to the atheoretical dummy's which collinear with independent variables.

General

816 cases are written to the uncompressed active file.

This procedure was completed at 13:15:13
recode year(83=1)(84=2)(85=3)(86=4)(87=5)(88=6).
compute y83=0.
if (year eq 83) y83=1.
compute y84=0.
if (year eq 84) y84=1. **TABLE 35a**
compute y85=0.
if (year eq 85) y85=1.
compute y86=0.
if (year eq 86) y86=1.
compute y87=0.
if (year eq 87) y87=1.
compute y88=0.
if (year eq 88) y88=1.
regression descriptives=defaults/variables=int mem maint unempl propabs
The raw data or transformation pass is proceeding
816 cases are written to the uncompressed active file.
fnd dbtrn emigbal year, propoz/sta=r cha coeff outs ses f/origin/dep=
propoz/met=enter year int mem maint unempl propabs fnd dbtrn emigbal.

* * * * MULTIPLE REGRESSION THROUGH THE ORIGIN * * * *

Listwise Deletion of Missing Data

Coefficients have been calculated through the Origin.

* * * * MULTIPLE REGRESSION THROUGH THE ORIGIN * * * *

Equation Number 1 Dependent Variable.. PROPOZ

Beginning Block Number 1. Method: Enter
YEAR INT MEM MAINT UNEMFL PROPABS FND DBTRN
EMIGBAL

Variable(s) Entered on Step Number

1.. YEAR
2.. EMIGBAL
3.. INT
4.. PROPABS
5.. MEM
6.. DBTRN
7.. MAINT
8.. FND
9.. UNEMFL

Multiple R .77184
R Square .59573 R Square Change .59573
Adjusted R Square .59122 F Change 131.96898
Standard Error 6.94205 Signif F Change .0000

F = 131.96898 Signif F = .0000

----- Variables in the Equation -----

Variable	B	SE B	Beta	SE Beta	F	Sig F
YEAR	1.44348	.21959	.51798	.07880	43.212	.0000
EMIGBAL	-6.40262E-06	1.30436E-05	-.01137	.02316	.241	.6237
INT	5.015541E-03	.02668	4.9776E-03	.02648	.035	.8510
PROPABS	.43682	.02962	.45217	.03067	217.413	.0000
MEM	-1.78570E-03	1.87948E-03	-.04500	.04736	.903	.3423
DBTRN	1.01352	.32143	.12837	.04071	9.942	.0017
MAINT	.04863	.06919	.03370	.04795	.494	.4824
FND	.03701	.01362	.17259	.06353	7.381	.0067
UNEMFL	-.60911	.19360	-.34624	.11005	9.899	.0017

It is assumed that the directions of the statistical associations as demonstrated in the hypotheses will remain identical for the multi-variable equations.

THE FINDINGS

The final model of the multiple regression yielded a multiple correlation; $R^2 = .59$ (Sig.model = .0000). The individual regression coefficient for each independent variable denotes more accurately the differential explanatory power of each variable. In order to make valid comparisons amongst the different effects (B's) they are transformed into β coefficients which show in standard deviation terms, a refined version of the variables' coefficients. It should be emphasised that these coefficients express no absolute effect of each individual variable on Aziva rate but merely the relative influence whilst all other variables remain constant.

Hypothesis 1'

(Year of Foundation "FND")

The hypothesis is supported (Sig F = .0067). Theory of liability of newness and smallness in the kibbutz is partially supported. Though no direct causality is manifested, there is a circumstantial and logical process in which young kibbutzim continuously lose members and candidates. Their economic basis is acutely deficient and subsequently they cease to exist. Bar Yosef (1991b)

indicated that five UKM kibbutzim were liquidated between 1986-1991. Other young kibbutzim maintain an organisationally-devitalising process in which the human factor change-over is such that the 'kibbutz experience curve' constantly resembles a near horizontal line.

The UKM has not been unaware of the grave situation in young kibbutzim. Early in 1989 an official document¹¹ asserted that: "...mass Azivot in young kibbutzim, a sense of social and economic insecurity, the best are leaving, distrust of the 'system' (UKM), no professionals, a negative immigration balance...". Whereas young kibbutzim could rely on endless and safe sources of assistance¹², prior to the crisis, these shrunk consistently throughout the crisis. (i.e. from 1984 onwards). The exodus of members and candidates and the liability of newness are inseparably interwoven and eventually lead to organisational death. The differential absorption capacity of environmental buffets within UKM kibbutzim is clearly illustrated by the evident divide between young and established kibbutzim.

Hypothesis 2'

(Net Debt\Turnover "DBRTRN")

The hypothesis is supported (Sig F = .0017). The finding provides an additional evidence of the inherent inseparability between the general economic situation (net-

¹¹Minutes issued taken at meeting No. 10, UKM Man-power Department, 8 March 1989.

¹²UKM, Jewish Agency and affiliated Funds.

debt) and its demographic stability. The finding is further validated owing to the robustness of the pooled regression model which reflects a sequential longitudinal dynamism. Therefore, it can be confidently deducted that a causal process exists where critical economic complications, cause an increased exodus of members and candidates. The finding partially refutes earlier declarations and assumptions concerning the singularity of an 'economic crisis'. It also refutes the notion reflected in UKM official circulars (until 1986-7) describing the crisis as solely economic. The finding supports also Levi & Merry's (1986) descriptions of a multi-component, multi-dimensionality crises. The finding clearly illustrates the postulation that the kibbutz is a system rather than a common organisation. This is reflected by the mutuality between the social and the economic domain.

Hypothesis 3'

(Standard of Living "MAINT")

The hypothesis is rejected. The statistical association between maintenance allocation per capita and organisational depletion ratio is found to be insignificant (Sig F = .4824). The direction of this insignificant association is however negative confirming the right hypothesised statistical **direction**.

Hypothesis 4'

The hypothesis is refuted (Sig F = .8510).

Hypothesis 5'

(Organisational Attractivity "PROPABS")

The hypothesis is supported (Sig F = .0000). The circular process in which demographic depletion generates a perpetuum mobile 'interfered' by recurrent absorption of new candidates is evident. There are a number of interpretations for this process:

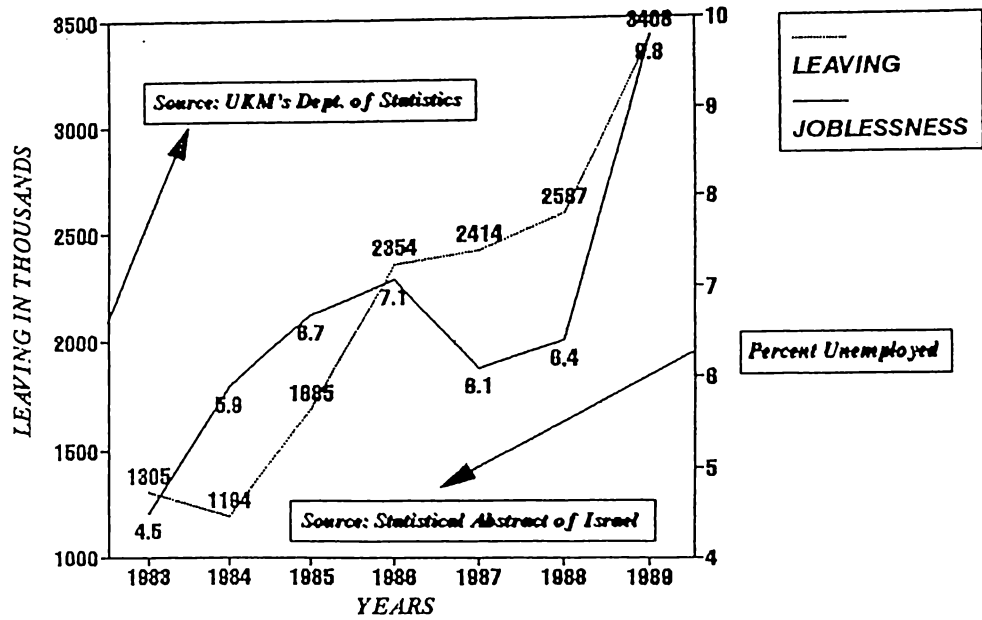
a. To argue that an expedited absorption induces growing rates of Aziva would be technically true. Nevertheless, further evidence is needed in order to determine that if more people are absorbed, 'old timers' will, as a result, leave. A more reasonable argument is that a considerable number of absorbed candidates in T-2,T-3,T-4,T-5, T-6 tended to leave in T-1 or in any other combination. Hence, the absorption process appears to be flawed rather than arguing that new arrivals precipitates Aziva.

b. Kibbutzim usually affected by higher rates of Aziva will, inevitably, resort to absorption in order to reach a reasonable demographic balance.

Both explications practically coincide. These arguments were raised following the distribution of the 1989 Social Marathon (Verdsheim & Sheaffer, 1989). In this study, five year absorption data were analysed.

Hypothesis 6'

**MEMBERS LEAVING UKM KIBBUTZIM 1983-88
VERSUS RATE OF UNEMPLOYMENT**



64a

The hypothesis is rejected (Sig F = .3423). See arguments in hypothesis 3' pertaining to the direction of the insignificant statistical association.

Hypothesis 7'

The hypothesis is rejected (Sig F = .6237).

Hypothesis 8'

(Annual Rate of Unemployment "UNEMPL")

The hypothesis is supported. Lower rates of unemployment have a notable and significant impact on higher rates of Aziva (Sig F = .0017). An alternative explanation would be that higher unemployment rates deter potential leavers. Inasmuch as the finding is conclusive and corresponds with our hypothesis, both indices have an (see **Graph No. 64**) upwardly trend. A decrease in unemployment between 1986-7 accompany

a reduced Aziva between 1986-88. Generally, descriptive statistics proves to be a useful demonstrative tool but it is unsatisfactory for inferential purposes regarding a causal interrelatedness. It is argued that as the crisis intensifies more members would have opted for Aziva had employment possibilities been more inviting. In 1989, over 3000 members and candidates left the UKM **despite** the fact that unemployment was < 10 % of the total labour force in Israel.

TABLE 35

regression descriptives=defaults/variables=int mem maint unempl propabs
 The raw data or transformation pass is proceeding
 816 cases are written to the uncompressed active file.
 fnd dbtrn emigbal, propoz/sta=r cha coeff outs ses/dep=
 propoz/met=enter int mem maint unempl propabs fnd dbtrn emigbal.

***** MULTIPLE REGRESSION *****

Listwise Deletion of Missing Data

***** MULTIPLE REGRESSION *****

Equation Number 1 Dependent Variable.. PROPOZ

Beginning Block Number 1. Method: Enter
 INT MEM MAINT UNEMPL PROPABS FND DBTRN EMIGBAL

Variable(s) Entered on Step Number

- 1.. EMIGBAL
- 2.. FND
- 3.. INT
- 4.. MAINT
- 5.. PROPABS
- 6.. MEM
- 7.. DBTRN
- 8.. UNEMPL

Multiple R .52627
 R Square .27696 R Square Change .27696
 Adjusted R Square .26978 F Change 38.59136
 Standard Error 7.11348 Signif F Change .0000

F = 38.59136 Signif F = .0000

----- Variables in the Equation -----

Variable	B	SE B	Beta	SE Beta	T	Sig T
EMIGBAL	-1.61989E-05	1.51235E-05	-.03722	.03475	-1.071	.2844
FND	.04053	.01473	.09610	.03493	2.751	.0061
INT	.02261	.02768	.02878	.03523	.817	.4142
MAINT	.27675	.06133	.16058	.03559	4.512	.0000
PROPABS	.39725	.02984	.42390	.03184	13.314	.0000
MEM	-9.35906E-04	1.99087E-03	-.01631	.03470	-.470	.6384
DBTRN	1.45001	.32253	.16214	.03607	4.496	.0000
UNEMPL	.61338	.41332	.06060	.04083	1.484	.1382
(Constant)	-4.33878	2.60445			-1.666	.0961

End Block Number 1 All requested variables entered.

Hypothesis 9'

(Years 1986/87/88)

The hypothesis is supported. Years 1986, 1987, 1988 were found to have a significant negative effect in terms of organisational demographic depletion.

Y88 ; Sig F = .0001

Y87 ; Sig F = .0118

Y86 ; Sig F = .0128

It should be noted that this hypothesis is related to the covariance model and not to the main model where temporal sequence (T-6 to T) is technically reduced to a single dummy variable denoted by 'year'. The main model yields an exceptionally high significance level for the variable 'year' with an equally high β score ($\beta = .51798$) accounting for approximately half of the explained variance in the model. Furthermore, when the years as dummies are dropped altogether (see model No. 3)¹³ all independent variables could not explain 72 percent of the variance ($R^2 = .277$). Though this statistical procedure is methodologically correct, the existing natural autoregression¹⁴ must not be overlooked. Unlike regression analysis of time-series

¹³No tests for serial correlation and heteroscedasticity such as Durbin-Watson procedure are applicable in the current models owing to the shortness of the annual series. For further details see: Pyndyck & Rubinfeld (1976:106-116) and Ostrom (1978:31-35).

¹⁴Autoregression is intrinsic in any regression of time-series and pooled regression models.

(RATS) inferences can be drawn owing to previous assumption regarding the degree of inherent serial correlation even in short time-series. The inclusion, exclusion or 'reducing' temporal sequence into 'one' year (as shown in the three models) is aimed at 'admitting' the existence of autocorrelation rather than conceal the fact that errors associated with observations in a given point of time carry over into the future.

Moreover, it is acknowledged that any time-lagged regression carry over the cumulative effects of omitted variables in the model as reflected by the high degrees of correlation over time. Hence, the autoregression 'compensates' for the exclusion of other potential predictors. As indicated in the preliminary arguments to hypothesis No. 9, any meaning attached to a possible effect of a given year on the dependent variable is only statistical even though these effects may conceptually be utterly sensible as seems to be the case here.

The grouping of these three years can be observed primarily in the relative similarity in terms of the number of leavers per-annum and the annual change.

From 1986 to 1988, Aziva patterns in terms of total numbers stabilised with rates of annual change ranging between 9.4 percent (1985-86), 19 percent (1986-87) and 9.96 percent (1987-88). The mean annual ratios (number of leavers/total number of members & candidates) (N =136):

1986 - 6.62

1987 - 8.29

1988 - 6.45

as opposed to:

1983 - 5.92

1984 - 6.1

1985 - 5.9

Apparently, the significant yearly increase in leavers from 1986 onwards has an overriding statistical impact.

DISCUSSION

Prior tests of a similar model showed that only two exogenous variables can be incorporated into the multiple regression equation. The fact that only the National rate of unemployment affects Aziva could mean that reasons for the decision to leave are, largely, endogenous. However, there may be intervening variables which could 'bridge' between other highly important environmental variables and Aziva ratios in kibbutzim. The exodus is influenced primarily by internal factors which stem from reasons directly associated with the crisis.

However factual these explications appear to be, only a research design focusing on the micro kibbutz level is

likely to more accurately expose the causes, many of which ostensibly digress from our theoretical framework. This finding sustains earlier assumptions concerning the severity of the current crisis and also that the crisis was dormant and was engendered by external factors in a very intensive way. The fact that internally-induced mechanisms conclusively override exogenous factors is likely to be attributed to certain centrifugal forces generated, largely, by a massive internal discontentment. Aziva is more likely to be affected by a sense of hopelessness stemming from a vicious circle of recurring 'mini' crises which epitomise most other symptoms of organisational decline (Merry & Brown, 1986).

No research design has the capacity to include **all** potentially influencing variables and it is postulated that this study has excluded independent variables as well. The supported hypotheses highlight several important aspects. The propensity in young kibbutzim to lose members is significantly higher than in the established ones. This finding partially supports the theory of liability of newness and smallness. It has not been the intention to establish the existence, within UKM, of the entire process of liability of newness and smallness. The intention has been to reflect upon an important catalyst to this process, i.e. the loss of an essential organisational buffer; human resources. Further research is required to fully comprehend the mechanisms that eventually lead to the demise of

kibbutzim. Even without embarking on an elaborate research design, it appears pretty obvious that liability of newness exists within the UKM framework although the absolute number of 'deceased' kibbutzim is small.

The crisis is a lingering one and there are a consistent number of debt-generating kibbutzim (Ein-Dar, 1991:14-16). These kibbutzim should be, economically and legally, placed under receivership. However, the sheer costs (Brod, 1990:161-162), and complications are such that this option is ruled out¹⁵. The reoccurring problem of frustrated absorption of candidates resembles a vicious circle. This is a perpetual process in which members leave the kibbutz, the organisation needs to speed up absorption. In turn, this prompts the kibbutz absorption committee to double efforts in wooing potential candidates. Candidates arrive but a fair number are not suitable for membership. The 'misfits' leave, further baffling the system. Initially, the skilled, the professionals, the talented managers, and other mobile individuals (Merry & Brown, 1986:53) gradually exit the kibbutz.

¹⁵Brod (1991) notes that the issue of defaulting kibbutzim is politically unfeasible and technically extremely difficult. Brod argues that should fifty kibbutzim were to be placed under receivership and provided each owes ten million US \$, the direct costs of writing off debts (including remunerations for the members) could reach a billion dollars US. Brod asserts that, in reality, the real costs are liable to significantly surpass the above sum. It is, therefore, a mission impossible in the current political circumstances. That is because the parties concerned are not likely to preempt a chain-reaction where banks would be drawn into a state of insolvency.

Absorption committee, now partially comprised of ex-candidates exhausts its repertoire of enticing potential candidates. At a certain stage, following self evaluation, members in their mid 30's to mid 40's, decide that this is their 'last chance' and leave. This act induces organisationally-neurotic responses such as 'how to stop the flood'. A fresh committee closely supervised by the secretariat discusses some innovative strategies and around comes the circle.

This situation is a '**suboptimal state of affairs**' (Masuch, 1985:18), in which organisational members have long since shared frustrated (organisational) objectives. The absorption versus Aziva syndrome closely resembles this state of affairs where it is hard to establish what event preceded the other. In 'normal' times this would have been possible but during a prolonged decline the process becomes a repetitive pattern of maladaptive organisational behaviour. The kibbutz fails to perceive that it is boxed-in in a dead-end loop. This is a negatively self-feeding, self-reinforcing (Turner, 1976:388) negatively circulating mechanisms whose sole remedy is by transforming a more basic conceptual level. This applies to the kibbutz's outdated irrelevant and ineffective organisational goals.

Not until such time that the misconception of 'filling-in the gaps' is altered, in accordance with a new frame of organisational reference, Aziva will be reduced and

absorption be increased. Another finding illustrates the overwhelming impact of the economic situation, as exemplified by the net-debt/members & candidates ratio on kibbutz demography. The finding determines unequivocally that financially-strifed kibbutzim are far more prone to demographic depletion. Hence, they risk the two essential buffers against ever-turbulent task-environment. This finding suggests also that the supposition pertaining to the exclusivity of kibbutz economy as a separate entity is null and void. The social-demographic domain is intrinsically intertwined with any economic facet and the intensity of possible interactions between the two has been amplified markedly owing to the multi-dimensionality of the crisis. Prior to the current crisis, the kibbutz could dissociate (Helman et al) its consumption patterns from its actual economic performance. There was no linkage between the level of consumption and the kibbutz income-generating capacity.

The current circumstances, however, make this economic inconsistency almost impossible. This issue is incorporated into the current discussion owing to the inherent hazards to the demographic integrity incurred by the considerable number of economically deteriorating kibbutzim. These kibbutzim maintained relatively high consumption levels whilst their revenues have shown a consistent propensity to decline. Wesson (1963), observed the enervation of voluntary communes owing to economic stagnation which was

followed by a radical cutback of standard of living. This, eventually, was coupled with mass exodus of the more 'marketable' members. In comparison, economically unstable kibbutzim are characterised by far greater rates of Aziva. Wesson and Helman's arguments are used in an ambiguous fashion since the current model indicates no significant linkage between sustenance levels and Aziva ratios. However, the worsening of the economic performance, in general, as shown in high debt/member ratios has been found to be a useful predictor to an increased demographic depletion. Moreover, as the kibbutz liability owing to mounting debts is steadily rising, kibbutzim inevitably reduce their standard of living. They are forced to serve debts not only as a futile attempt to regain their erstwhile positions (Bibeault, 1982:13), but because of sheer lenders insistence. The subsequent results, as confirmed in this model, are inevitable higher Aziva ratios.

CHAPTER SEVENTEEN**ENDOGENOUS AND EXOGENOUS FACTORS AFFECTING ORGANISATIONAL
CRISIS: CRISIS MODEL 2****General**

Recent literature provides no inclusive quantitative measure embodying organisational crisis. Mostly, quantitative indicators for organisational crises benefit a single organisational facet but fail to encompass the crisis phenomenon in its entirety. Organisational crisis and decline cannot be thematically and formally exhausted by focusing on a singular aspect since this frustrates the very essence of its multi-dimensionality (Levi & Merry, 1986). However true this assertion may seem to be, a single standpoint (social, economic, managerial or legal) of an organisational crisis can be referred to as a single dependent variable as a research axis.

Most published empirical and quantitative studies, refer to organisational decline (Humbrick & D'Aveni, 1988; D'Aveni, 1989) or demise (Sutton, 1987; Bruderl & Schussler, 1990) focusing on a single component. They refer to a gradual or sudden depletion of organisational munificence. Economic or financial aspects of organisations in either a state of growth or decline reflect their general situation. These facets can be relatively easily measured and fairly accurately inferred upon. Several authors, attended to the economic -550-organisational crisis (Townsend, 1971;

Argenti, 1976; Bibeault, 1982 DeGreene, 1982; Altman, 1982, 1988) suggesting a number of effective economic indices in which to assess the extent and gravity of the crisis. These writers refer to organisational crisis as business, legal or managerial **failure**. In this quantitative model, endogenous as well as exogenous causes for the lingering crisis afflicting the majority of the kibbutzim will be identified.

As indicated previously, the financial burden incurred by mounting debts have, belatedly, drawn the attention of both the kibbutzim and the UKM to inherent and rapidly intensifying organisational dysfunctions. These were kept in a dormant state owing to structural inertia (Hannan & Freeman, 1984) nurtured by favourable environmental circumstances. Gardner (1965) refers to this organisational quiescence in the following manner: "**most ailing organizations have developed a functional blindness to their own defects. They are not suffering because they cannot solve their problems but because they cannot see their problems**". All the above leads to an interesting yet highly controversial issue regarding the source of ostensible causes for crises. Literature abounds with instances where either source was the chief catalyst for organisational crises. Few, however, sorted and quantified the principal reasons. Bibeault (1982:25) attributes 52 percent of the reasons to "**internally generated problems within management control**", and only 35 percent of

externally induced problems of which 8 percent are considered as constraints beyond the organisation's control¹.

The 1989 Recovery Plan ascribes 77 percent of the causes to exogenous factors and only the remainder to endogenous ones. Quite naturally, the authors² regard the exogenous factors as constraints. They quantified³ the total UKM debt by calculating which elements ensued the Government's 1985 new economic plan and which may be attributed to badly managed 'ineffective' or 'futile investments'. Sheaffer (1987), found a similar division between the two sources with an overwhelming impact of a typical exogenous constraint (cost of capital) on the evolution of the crisis. In general, the proposed model is predicated on the wider realm of the contingency approach albeit that the main research thrust is aimed at the intra-organisational domain. The theoretical basis for the current model extends primarily into the area of business organisations. This generates a problem since the kibbutz is neither purely business-oriented nor a purely not-for-profit organisation nor can it be arbitrarily partitioned between the two facets. However, the level of comparison makes analogies (with relevant literature) possible chiefly when a single

¹Bibeault (1982:23) defines constraint as: "**those external conditions that prevent reaction even when management senses action is required and has made the correct decision**" as opposed to external changes which 'can be worked around'.

²Professor Y. Kroll of the Racanati School of Business Administration at the Hebrew University's and Mr. G. of the UKM's Economic Division.

³For more in-depth content analysis, see Chapter 'Crisis'.

interface such as the economic is concerned.

The Statistical Model

Three statistical procedures, involving various multiple regression techniques, will be employed with the same argumentations described in the demographic depletion model.

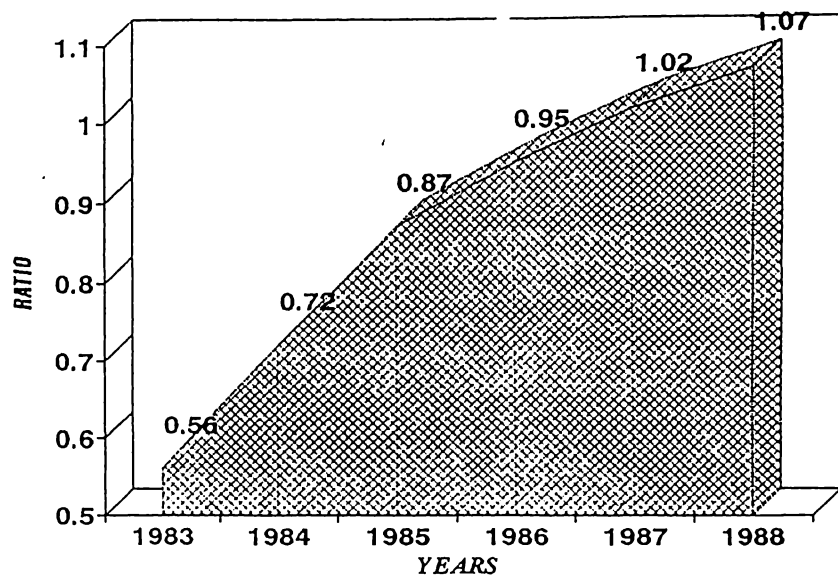
General causes for the financial implication as reflected by the accrued net-debt, will be identified. The longitudinal dataset reflects the situation in $N = 136$ kibbutzim in six years, 1983 - 1988 (or $136 \times 6 = 816$ 'cases'). In addition to the data-base, an additional one involving data limited to a sample of 89 kibbutzim from the same years, will be used.

The reason for using two separate files for the same purposes arise from the limited availability of certain data concerning the division between productivity levels and labour inputs in services. The simultaneous reliance on two separate but equally formatted files for the same inferential purposes is methodologically legitimate⁴.

This data format enables more affirmative inferences owing to the possibility of arranging a set of regressions pooled across time. Apparent causes for the accumulation of debt (or, the intensification of the crisis) may be attributed

⁴Same data base, same formal format, same longitudinal sequence and large enough samples.

**THE RATIO NET-DEBT/TURNOVER/MEMBERS
FOR UKM (n=138) 1983 - 1988**



to different points in time (T-6 to T). This technique will be made available owing to the operationalisation of the variable 'year' into either one variable denoted 'year' or six consecutive dummy variables each representing a year (1983-1988)⁵. Exogenous effects will be illustrated by a number of economic variables hypothesised to reflect significant changes within the economic task-environment. Likewise, political (exogenous) variables are hypothesised to have influenced the level of debt in much the same fashion.

Three procedures will be used although only one for inferential purposes (where the variables indicating years are operationalised into one dummy variable) with a possible reference to a model where years will be operationalised into six dummies. One model will be run where years are precluded altogether from the regression equation by including the constant term ⁶ to assess the 'net' explanatory power of the model 'clear' of longitudinality (years as dummies with a statistically legitimate serial correlation).

The Dependent Variable

⁵For additional and in-depth methodological explanations, see chapter 'Methods'.

⁶The SPSSpc, 1990 Release 4, the non-origin option.

The dependent variable is represented by the 'net-debt⁷/turnover divided by the total number of members and candidates' ratio ,henceforth, ND/TRNVR (**Graph No.65**). Previous attempts in running net-debt individually as a dependent variable yielded a larger quantity of explained variance in the model. Pearson's correlation coefficients are also indicating higher correlation coefficients between net-debt and other explanatory variables in the multiple regression equation. However, net-debt/members & candidates is conceptually less specific, indicating no proportional measure regarding the kibbutz's entire economic activity. This ratio expresses wider economic scope and also organisational size. This enables a more accurate classification of kibbutzim in accordance with their overall economic performance. This essential index provides a sensitive economic gauge facilitating the scaling of kibbutzim according to their economic viability. This situation is illustrated by the debt as a component within the overall economic activity.

Until 1988, the kibbutzim which exceeded the ratio '1' were considered to be economically unstable. Hence, for each NIS representing economic activity (expenses and revenues) of the kibbutz, it owed another NIS to banks. In wealthy kibbutzim, however, the debt component was a far smaller proportion. This ratio in itself, has never been overriding or sufficient in order to fully assess the absolute

⁷Net-debt = total debt (-) financial assets [long + short term deposits].

economic vitality of a given kibbutz. Such crucial economic indicators as the kibbutz's income generating potential, the demographic make-up, the amount of financial slack etc. are almost equally important. However, the operationalisation of this variable is proportional to the size of the adult population of the kibbutz so that an additional aspect demography is provided as well as the proportion itself. It is believed that the ratio is not only an indicator allowing an accurate insight into the kibbutz's economic strength, but it also provides a gauge with which to adequately evaluate the extent of the economic activity and ,indirectly, the kibbutz's decision-making.

THE HYPOTHESES⁸

Hypothesis 1

⁸Glossary for the independent variables in the different procedures.

Int; Performance/members & candidates (internal-source)
 Propabs; Organisational Attractivity (absorption ratio)
 Propoz; Organisational demographic Depletion (Aziva)
 Totinv; Investments/members & Candidates (in production and consumption)

Kibbutzim characterised by high levels of organisational munificence (internal source) have less debts.

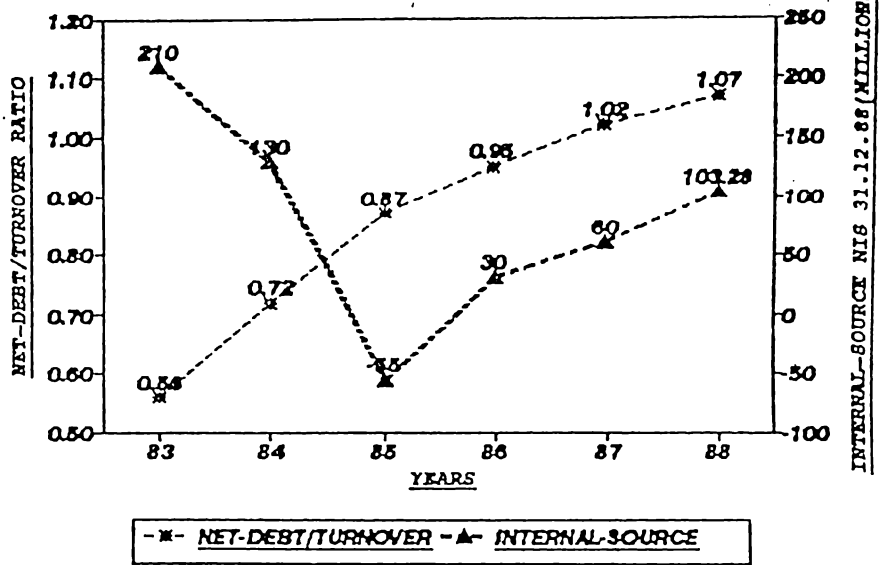
Kibbutzim heavily burdened with debts can improve their economic performance over time, gradually increase their revenues and subsequently their internal source. High profitability intuitively implies lower reliance on borrowing. Hence, less debts since they will be predisposed to allocate a larger proportion of their profits for investments.

If the kibbutz is traditionally economically-efficient it will, necessarily be 'in the black' but there are kibbutzim which owing to changing environmental circumstances coupled with decisive structural modifications, manage to gradually reduce debts following successive years of improved revenues.

The other direction is also apparent in a larger proportion of the kibbutzim which gradually or suddenly have had to serve debts thus have markedly reduced financial slack. The hypothesis is aimed at probing precarious economic circumstances where debts are at high levels but profitability fluctuates.

Hypothesis 2

**DEBT/TRNVR VERSUS INTERNAL-SOURCE
UKM 1983 - 1988**



Increased demographic depletion (as expressed by the ratio number of leavers/total number of members & candidates) augments the ratio ND/TRNVR.

As indicated in the previous model (demographic depletion) a positive and significant statistical association is hypothesised between the two ratios. Though, initially, it was the deteriorating economic situation that induced an escalation in the organisational demographic depletion, as the crisis intensified, a self-reinforcing vicious circle evolved where cause and effect blurred. It is, therefore, assumed that whilst the kibbutz is entangled in this dead-end scenario, the initial effect (increased Aziva) turns into a partial cause for a worsening economic situation as demonstrated by the ND/TRNVR ratio. Logically, the depletion of the 'best and brightest' demographic ingredient, the kibbutz will face a severe shortage in managerial competence. Moreover, its experience curve will shorten. It must recruit skilled workforce. Skills may be available but kibbutz socialisation takes time, on-the-job-training is costly and lengthy and debt service continues).

In a hypothetical situation everyone would be voluntarily mobilised and the kibbutz could reap the fruits of skilfulness, innovativeness, creativity and high morale. However, the opposite situation occurs. Various

satisfaction measures (Helman, Glick & Goldemberg, 1988⁹) and public opinion polls (Palgi & Sharir, 1991) indicate that kibbutz members are increasingly dissatisfied (socially, economically, work ethic-wise, and regarding institutional functioning).

Hypothesis 3

Improved organisational attractivity (expressed by the ratio of absorbed candidates/total number of members & candidates) will decrease the ND/TRNVR ratio.

An inverted statistical association between a successful absorption campaign and a reduction in the kibbutz's

⁹ A random sample (reported by Sharir, Ibid) of 760 interviewees (end of March 1991), shows that 47 % assess the economic situation in their kibbutz to be 'not good', 47 % estimate that the social situation is only 'fair or medium', 45 % give the same rating to institutional functioning and 44 % estimate that work ethic in their kibbutzim is 'fair or medium'. Increased absorption can indicate an acute organisational

crisis.

* Absorption is acutely needed in order to fill-in unmanned jobs or replace costly hired labour.

The rate with which debts inflate outpaces the absorption process which, if fully successful, requires up to five

years. In order to fully support this supposition it is required to assess the **direct** financial benefits accrued by the addition of newcomers. Consequently, a longer time-series is required to encompass this absorption period.

Hypothesis 4

Extensive investments will substantially increase debts in the short run.

As comprehensively elaborated in the chapter 'Crisis', most kibbutzim borrowed heavily in the early to mid 1980s' when the attractiveness of bargain capital outweighed managerial prudence¹⁰. The authors of the 1989 Recovery Plan claim that over 200 million NIS, or 12 percent of the debt (adjusted to 31/12/88) were investments in non-profitable enterprises and have subsequently inflated kibbutzim's net-debt without any prospects of ever recovering these sums. Massive investments in manufacturing industries in the 1960s' and early to mid 1970s' (Barkai, 1977) were economically justifiable and were guaranteed by a favourable political environment. A noticeable percentage of the investments prior to the crisis did not coincide with the changing economic climate as of the late 1970s'. The 'investment' variable includes both 'productive' and consumption oriented investments. Helman (1982b) forecasted

¹⁰For example., market-research, cost-benefit analyses, exhaustive strategic plans, human resource management, long-range planning, accountability, etc.

the economic calamity and warned against the large and thoughtless investments. Many of these investments were aimed at improving the standard of living regardless of the meagre disposable income and the actual outputs.

Hypothesis 5.

The larger the kibbutz (population-members), the less likely it is to accumulate debts.

Since population (the variable accounting for the number of members & candidates) constitutes an important organisational variable, it is expected to have a relatively strong multicollinearity with other independent variables. Unlike earlier findings (Sheaffer, 1987) where an inverted statistical association was found between net-debt and the overall population, it is argued, that a longer time-series may reflect a different picture owing to the liability of newness.

As explained and determined in the organisational-demographic-depletion model, a positive linkage exists between the exodus of members and the kibbutz's age. Since Aziva and debt are closely interrelated ($r=.57$) and the liability of newness and smallness is a function of both Aziva and dentness, I anticipate that population and debtness will be inversely associated. Moreover, in previous studies (Sheaffer, 1988) the dataset included the years 1983-1986 during which time most of the small and,

largely young kibbutzim had yet to accrue heavy debts. The current data accounts for the 'post-crunch' years as well, i.e. 1986/7/8. In those years the impact of 1984/5 high interest rates begun to substantially affect debt levels.

Hypothesis 6.

Higher living expenditures will increase debt.

Living expenses are not derived from consumption-oriented investments, aimed at raising standard of living. Many studies (Helman, 1976; Helman & Kroll, 1977 and others) found that these expenses are neither determined by kibbutz's disposable income nor by its level of debt. Furthermore, Helman & Glick, (1989), found that kibbutzim characterised by exceptionally high debts, allocate more for living expenditures. It is not inconceivable to postulate that heedless appropriations aimed at uncontrollably increasing standard of living be characterised as a 'promiscuous' economic behaviour. This conduct afforded lavish living expenses which eventually accrued heavy debts. This hypothesis is aimed at trying to support the traditional kibbutz assertion linking high standards of living with the deterioration of the economy.

Hypothesis 7.

The younger the kibbutz is, the more likely it is to

accumulate high debts.

Young kibbutzim, like other young firms accrue high debts which are related primarily to basic investments. A considerable part of these investments are the responsibility of the settling body, the Jewish Agency, and are non-indemnifiable. Beginning in 1986, a growing part of these preliminary stakes had to be reimbursed by the kibbutz. Incorporated with this handicap, younger kibbutzim lack managerial and professional skills, hence are subject to typical liabilities of newness and smallness. They have also experienced frequent population fluctuations and general instability (Bar-Yosef, 1991a, 1991b; The Rehovot Institute of Settlement Research, 1989).

The general rule concerning the probability of accruing wealth **over time** holds true also in the case of kibbutzim. As indicated, demographic organisational size, is relatively highly correlated with most organisational phenomenon. Hence, population is closely associated with organisational age ($r = .73$, averaged over N-6 to N) therefore explications to hypothesis No. 5 apply here as well.

Hypothesis 8.

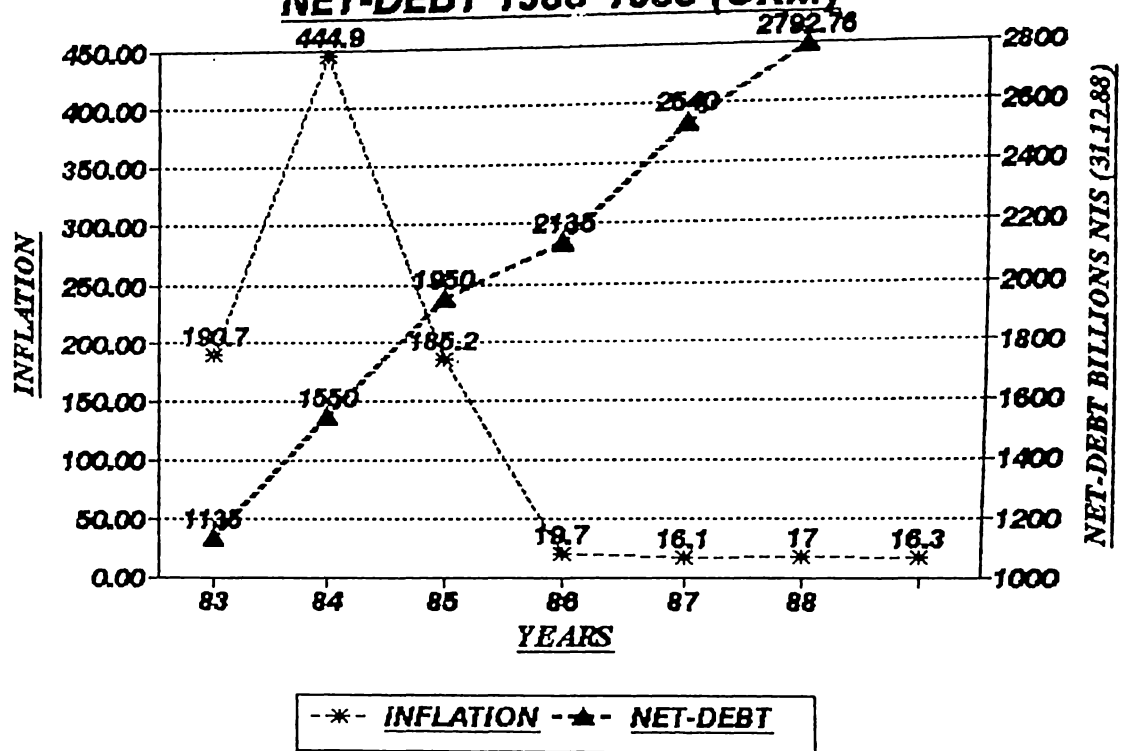
The lower the annual rate of inflation, the higher is the ND/TRNVR ratio.

During the hyper-inflation years (1983-1985), debts and income grew parallel. From 1985 onwards, foreign currency-adjusted incomes largely stagnated owing to the depreciation in the NIS. Yet debts swelled because they were mostly adjusted to either the US dollar or to European currencies¹¹. These years were characterised by excessive financial activity on the part of the kibbutzim which stressed large-scale financial speculations and even imprudent transactions. These speculative transactions were later vindicated as legitimate to maintain the value of periodic surpluses generated by real economic activity. However, most surpluses incurred by extravagant investments in working capital and not by a well-balanced economic activity. To finance this capital kibbutzim borrowed long-term loans in ordinary market interest rates. Pretentiously, kibbutzim overestimated their ability to reap long-term dividends on financial capital in excess of the banks' interest and bank shares dividends.

In the meantime, profits incurred by real economic activities plummeted, expenses rose sharply whilst liquidity surpluses associated with inadequate management increased complacency. In addition to intra-kibbutz economic shortcomings, regional enterprises, managed largely by kibbutzim, expanded uncontrollably and further inflated existing potential losses.

¹¹Interview with Mr. Y. Ben-Israel 6/8/91. Mr. Ben Israel was in charge of UKM agriculture section, associated with UKM's Economic Committee between 1985-1990.

ANNUAL RATE OF INFLATION VERSUS NET-DEBT 1983-1988 (UKM)



intolerably expensive. **Graph No. 67** demonstrates the two trends.

Beginning in 1985 debts rose sharply whilst inflation rate was heavily reduced. The literature dealing with business failures (Altman, 1982; Altman, 1988; Argenti, 1976; Platt, 1985) emphasises inflation as a double-edged sword concerning in overall effect on the rate of business failures. Altman (1982:89) for instance, argues that consistent and sizeable price level increases have an overall debilitating effects on firms. However, in the short run, high rate of inflation increases firms' propensity to survive. Consistent increases in the CPI is, therefore inversely correlated with failure rates. **"Poorly managed companies may be kept afloat for a longer period of time during unanticipated price increases since these firms tend to be highly leveraged and are able to repay their debts with cheaper money"** (Altman, Ibid).

The similarity between Altman's propositions and the situation in most UKM's kibbutzim during the early 1980s is remarkable.

Hypothesis 9.

Higher interest rates (cost of debt capital) considerably increase accumulated debts.

Interest rates are highly interrelated with the hypotheses

involving the explanatory variables, 'investments' and 'inflation'. The variable 'Interest'¹⁴ is ascribed to broad adverserial environmental factors which were erroneously perceived by the kibbutzim. The operationalisation involves the general provisional business tariff (averaged monthly rates) for commercial banks transactions. Therefore, they reflect interest rates on credit lines and loans as well. As there were different interest rates levied on various loans taken between 1983-1988, the official rate as determined by the Ministry of Finance is used.

In general, the net real interest rose from 5.5 between 1983-84 to approximately nine percent in 1988. In 1985 alone the average rate on long-term debts in the UKM (October 1984 to September 1985) was 23.4 percent. However, in certain cases actual rates on long-term debt or renewed debts (debt financed by 'bridging' loans) reached a staggering 50 percent in real terms. Additionally, the short-term business credit market between 1986-88 (real annual interest) reached 60 percent. The average interest paid by kibbutzim on short-term debts:

1986 - 22 %
1987 - 18 %
1988 - 13 %

By contrast, real average interest rates (creditory) paid

¹⁴For further explanations see Appendix 'Variables'.

on kibbutzim's financial assets was only 4.5 percent. Excess real interest (in excess of 5.25 percent average interest on kibbutzim's debts in 1982-1984) inflated their total debt at the end of 1988 by approximately one billion NIS.

Hypothesis 10.

Likud economic policy (operationalised as 'Finance Ministers') tends to endorse economic policies adversely affecting UKM aggregated debts.

The exogenous variable 'National Economic Policy' is dichotomously coded into

0 = Likud Finance Ministers

1 = A Labour-Alignment Finance Minister

It is commonly held that Likud's economic policies, as illustrated by their successive Finance Ministers, have had an exceptionally negative effect on the kibbutzim's economic performance. It is believed that the crisis is not solely politically-induced and that endogenous factors played a substantial role as well. However, as Likud policies embodied the major catalyst for the economic embroilment it is appropriate to quantitatively validate the general impact of politics on the state of kibbutz economy. The general theory (Grey, 1980; Beck, 1982; Hibbs,

1977, Mevorach, 1985) asserts a greater effect of policies and ideological preferences on economics on the national level. The extent of the entire kibbutz movement's debt amounts to 12 percent of Israel's GNP in 1988 (Brod, 1990).

Although the debt is not singularly exogenously-induced, it is assumed that no Labour dominated Government would allow such exceptional implications. The following citation adequately portrays the situation: "The slighting of this field by economists may be attributed to an underlying belief that political, social and psychological determinants are 'negligible components in the system' which are incapable of elucidating economic phenomena in a significant way. The omission of political variables constitutes, we assert, a deficient approach for examining macroeconomic processes" (Sheaffer & Mevorach, 1988:449)

Hypothesis 11.

High productivity rates induce debts to decrease.

The operationalisation of productivity rates includes two factors; total number of days' work regarded as income generating, divided by the total annual number of days' work.

The resulting proportion demonstrates the extent of which a given kibbutz is considered to be 'productive' as opposed to a kibbutz where services (days' work registered as

various non-productive services) exceed production. The argument seems trivial; if more income is generated, the likelihood of reducing debts is greater. Although it applies to a small consumption unit such as a family, a complex enterprise such as kibbutz is far more affected by intervening factors. Dar (1989) is the leading advocate of the equation; non-productivity = heavy debts. He contended that excessive and bloated services far exceeded income generating capacity. Consequently, kibbutzim generated insufficient income that engendered the crisis. Dar, asserts Shmueli (1989), predicates his arguments on interminable pontifications on the part of both kibbutz and UKM's economists, advocating an extension of income-generating capacity.

The annual planning document issued by UKM (Marathons) recommends that as of 1983 use of the 'hackneyed' phrases such as:

- * **"exhausting a way in which to deepen productivity"**
(1983 Plan).
- * **"Intensification of production - concentrate efforts within existing means of production"** (1984 Plan),
- * **"exhausting kibbutz manpower aiming at increasing incomes"** (1986 Plan),
- * **Reducing services, (1987 Plan)**
- * **Increasing work-hours in production, (1987 Plan)**
- * **Emphasis on third shifts, (1987 Plan)**
- * **An annual discussion aimed at improving labour efficiency (1987 Plan)**

```

recode year (83=1)(84=2)(85=3)(86=4)(87=5)(88=6).
compute y83=0.
if (year eq 83) y83=1.
compute y84=0.
if (year eq 84) y84=1.
compute y85=0.
if (year eq 85) y85=1.
compute y86=0.
if (year eq 86) y86=1.
compute y87=0.
if (year eq 87) y87=1.
compute y88=0.
if (year eq 88) y88=1.
regression descriptives=defaults/variables=mem maint propabs fnd propoz
The raw data or transformation pass is proceeding
816 cases are written to the uncompressed active file.
dbtrn inf totinv int warpeac intrst dollar mnstr year /sta=r cha coeff outs
ses f/origin/dep=dbtrn/method=enter mem maint propabs fnd propoz totinv
inf int mnstr year intrst.

```

TABLE
37

* * * * MULTIPLE REGRESSION THROUGH THE ORIGIN * * * *

```

Equation Number 1      Dependent Variable..  DBTRN
.
Beginning Block Number 1. Method: Enter
MEM      MAINT      PROPABS  FND      PROPOZ    TOTINV    INF      INT
MNSTR    YEAR      INTRST

```

```

Variable(s) Entered on Step Number
1..  YEAR
2..  INT
3..  INF
4..  PROPABS
5..  MNSTR
6..  PROPOZ
7..  TOTINV
8..  MEM
9..  MAINT
10.. FND
11.. INTRST

```

```

Multiple R          .84603
R Square           .71576
Adjusted R Square   .71187
Standard Error      .73817
R Square Change     .71576
F Change           184.05550
Signif F Change     .0000

```

F = 184.05550 Signif F = .0000

----- Variables in the Equation -----

Variable	B	SE B	Beta	SE Beta	F	Sig F
YEAR	.22910	.02532	.64908	.07173	81.885	.0000
INT	-.04186	2.98852E-03	-.32800	.02342	196.185	.0000
INF	-2.13812E-03	1.14533E-03	-.32884	.17615	3.485	.0623
PROPABS	-7.24935E-03	3.66306E-03	-.05925	.02994	3.917	.0482
MNSTR	-.15665	.10161	-.04653	.03018	2.377	.1236
PROPOZ	9.799937E-03	3.76168E-03	.07737	.02970	6.787	.0094
TOTINV	.01560	2.48069E-03	.19980	.03177	39.540	.0000
MEM	-5.81168E-04	1.97935E-04	-.11563	.03938	8.621	.0034
MAINT	-.01654	7.84269E-03	-.09050	.04292	4.446	.0353
FND	4.323436E-03	1.46422E-03	.15919	.05391	8.719	.0032
INTRST	.07277	.03382	.43381	.20163	4.629	.0317

End Block Number 1 All requested variables entered.

*** Structural alterations in labour (1987 Plan).**

Hypothesis 12.

An overstuffed service sector in the kibbutz will destabilise it economically.

The services sector constitutes a reciprocity of income-generated capacity. Hence, it reflects, in general, a reduced number of per-capita labourers in breadwinning branches. Labour policies advocated, continuously, either a reduction in the services sector or the transformation of services into income-generating industries. It is believed that the relatively low income per family in the kibbutz arises from overstaffed non-income generating industries.

THE FINDINGS

Analysis of the Model's results

This model relies on two 'statistical designs' which are basically separate models using different statistical procedures. The main model produces a multiple correlation $R^2 = .715$ ($\text{Sig}_{\text{model}} = .0000$) or 28.5 percent of the variance is unaccounted for by the eleven independent variables. The 'variables in the equation' list, indicate that nine variables are significant in the F significance test. One

```

set screen=off.
DATA LIST FREE/
kibcod year trnvr edel int finass netdebt totinv maint inf unempl
warpeac amass elect propoz propabs fnd mem agr ind extjob adm pool
srvc sabt dollar debit credit mnstr intrst.

```

BEGIN DATA

534 cases are written to the uncompressed active file.

```

compute dbtrn=netdebt/trnvr.
compute prod=agr+ind+extjob.
recode year (83=1)(84=2)(85=3)(86=4)(87=5)(88=6).
compute y83=0.
if (year eq 83) y83=1.
compute y84=0.
if (year eq 84) y84=1.
compute y85=0.
if (year eq 85) y85=1.
compute y86=0.
if (year eq 86) y86=1.
compute y87=0.
if (year eq 87) y87=1.
compute y88=0.
if (year eq 88) y88=1.

```

TABLE
38

```

reg descriptives=defaults/variables=int totinv maint inf propoz prod
The raw data or transformation pass is proceeding

```

534 cases are written to the uncompressed active file.

```

warpeac dollar mnstr intrst propabs fnd mem srvc dbtrn year elect
/statistics=r cha coeff outs ses f/origin/dependent=dbtrn/method=enter
mnstr propabs propoz totinv mem fnd year prod srvc maint intrst.

```

MNSTR	PROPABS	PROPOZ	TOTINV	MEM	FND	YEAR	FROD
SRVCE	MAINT	INTRST					

Variable(s) Entered on Step Number

```

1.. YEAR
2.. INTRST
3.. PROPABS
4.. MNSTR
5.. TOTINV
6.. PROPOZ
7.. MEM
8.. MAINT
9.. FND
10.. SRVCE
11.. FROD

```

Multiple R	.82533			
R Square	.68116	R Square Change	.68116	
Adjusted R Square	.67446	F Change	101.57544	
Standard Error	.71891	Signif F Change	.0000	

F = 101.57544 Signif F = .0000

----- Variables in the Equation -----

Variable	B	SE B	Beta	SE Beta	F	Sig F
YEAR	.16133	.04332	.49863	.13390	13.868	.0002
INTRST	.01032	9.34645E-03	.06723	.06091	1.218	.2702
PROPABS	-.01027	4.53138E-03	-.08339	.03679	5.138	.0238
MNSTR	-.29595	.11546	-.09589	.03741	6.570	.0107
TOTINV	-8.29625E-03	2.92347E-03	-.10262	.03616	8.053	.0047
PROPOZ	.01311	4.53840E-03	.10719	.03710	8.346	.0040
MEM	-9.19748E-04	2.37848E-04	-.22087	.05712	14.953	.0001
MAINT	.01601	.01134	.09212	.06526	1.993	.1586
FND	.01080	2.50660E-03	.38897	.09027	18.567	.0000
SRVCE	-4.88623E-03	4.41905E-03	-.13285	.12015	1.223	.2694
FROD	6.921739E-03	4.00634E-03	.23200	.13428	2.985	.0846

```

----
Y87      .000      .000      -.000      1.000      .000
Y88      .000      .000      .000      .000      1.000

```

*** MULTIPLE REGRESSION THROUGH THE ORIGIN ***

Equation Number 1 Dependent Variable.. DBTRN

```

Beginning Block Number 1. Method: Enter
MEM      MAINT  PROPABS  FND      PROPOZ   TOTINV   INF      INT
MNSTR    INSTR  Y83      Y84      Y85      Y86      Y87      Y88

```

Variable(s) Entered on Step Number

```

1..  Y88
2..  Y87
3..  Y86
4..  Y85
5..  Y84
6..  Y83
7..  INT
8..  PROPABS
9..  PROPOZ
10.. TOTINV
11.. MEM
12.. MAINT
13.. FND

```

TABLE
39

```

Multiple R          .84651
R Square           .71659
Adjusted R Square  .71199
Standard Error     .73802
R Square Change    .71659
F Change          155.98296
Signif F Change    .0000

```

F = 155.98296 Signif F = .0000

----- Variables in the Equation -----

Variable	B	SE B	Beta	SE Beta	F	Sig F
Y88	1.29641	.14171	.38509	.04209	83.697	.0000
Y87	1.28501	.14308	.38171	.04250	80.658	.0000
Y86	1.12273	.13869	.33350	.04120	65.533	.0000
Y85	.92495	.12827	.27475	.03810	51.994	.0000
Y84	.70568	.12235	.20885	.03621	33.265	.0000
Y83	.56409	.12193	.16756	.03622	21.404	.0000
INT	-.04205	3.00518E-03	-.32951	.02355	195.814	.0000
PROPABS	-7.34348E-03	3.66302E-03	-.06002	.02994	4.019	.0453
PROPOZ	9.563417E-03	3.76479E-03	.07551	.02972	6.453	.0113
TOTINV	.01539	2.48416E-03	.19713	.03182	38.386	.0000
MEM	-6.69582E-04	2.06214E-04	-.13322	.04103	10.543	.0012
MAINT	-.01689	7.89782E-03	-.09243	.04322	4.574	.0328
FND	3.633721E-03	1.53599E-03	.13379	.05656	5.597	.0182

*** MULTIPLE REGRESSION THROUGH THE ORIGIN ***

Equation Number 1 Dependent Variable.. DBTRN

----- Variables not in the Equation -----

Variable	Beta In	Partial	Min Toler	F	Sig F
INF	-1.00000	-1.00000	-2.206E-15	.	.
INTRST	.09569	.00000	1.0184E-15	.000	1.0000
MNSTR	.19258	.00000	2.2204E-16	.000	1.0000

End Block Number 1 Tolerance = 1.00E-04 Limits reached.

(Inflation) is nearly significant and one is statistically insignificant (National Economic Policy). Displayed here are three additional printouts which will be addressed as 'procedures' throughout the analysis.

Printout No. 2 involves the same statistical procedure as used in the main model, the procedure is based on a smaller number of observations ($N = 89$) because a limited availability of data concerning labour indices, two of which are entered here ('Productivity' and 'Services'). Procedure 2 yielded a multiple regression coefficient $R^2 = .68$ (Sig F Change = .000).

The third printout concerns a procedure whereby years are operationalised as separate dummy variables, each of which represents a 'year'. This procedure yields a relatively high autocorrelation of the error term (and high standardised B scores as well as high significance levels. R^2 in this procedure = .716, Sig. F Change = .0000.

The fourth printout presents a model in which years are not entered into the multiple regression equation at all. The procedure uses SPSSpc's option 'non-origin'. Therefore, the regression equation consists of a constant term. As expected this procedure produces a far lower R^2 (= .37) attesting to the relatively high serial autoregression induced by longitudinality though a legitimate amount in this case. The main model where years are 'suppressed' into

```

INCLUDE 'timeseri'.
set screen=off.
data list free/
kibcod year trnvr odef int finass netdebt totinv maint inf unempl
warpeac amass elect propoz propabs fnd mem gnp cpiusa emigbal intrst
dollar dbtrn dbtodf intass intrn odftr mnstr credit.
begin data.

```

816 cases are written to the uncompressed active file.

This procedure was completed at 9:09:24

```

compute y83=0.
if (year eq 83) y83=1.
compute y84=0.
if (year eq 84) y84=1.
compute y85=0.
if (year eq 85) y85=1.
compute y86=0.
if (year eq 86) y86=1.
compute y87=0.
if (year eq 87) y87=1.
compute y88=0.
if (year eq 88) y88=1.
regression descriptives=defaults/variables=mem maint propabs fnd

```

The raw data or transformation pass is proceeding

816 cases are written to the uncompressed active file.

```

propoz dbtrn inf totinv int warpeac intrst dollar mnstr/sta=r cha coeff
outs ses/dep=dbtrn/method=enter mem maint propabs fnd propoz totinv inf
int mnstr intrst.

```

*** MULTIPLE REGRESSION ***

Variable(s) Entered on Step Number

```

1.. MNSTR
2.. MEM
3.. INT
4.. PROPOZ
5.. MAINT
6.. FND
7.. PROPABS
8.. TOTINV
9.. INF
10.. INTRST

```

TABLE
40

```

Multiple R          .60684
R Square           .36826          R Square Change    .36826
Adjusted R Square  .36040          F Change           46.86693
Standard Error     .74446          Signif F Change    .0000

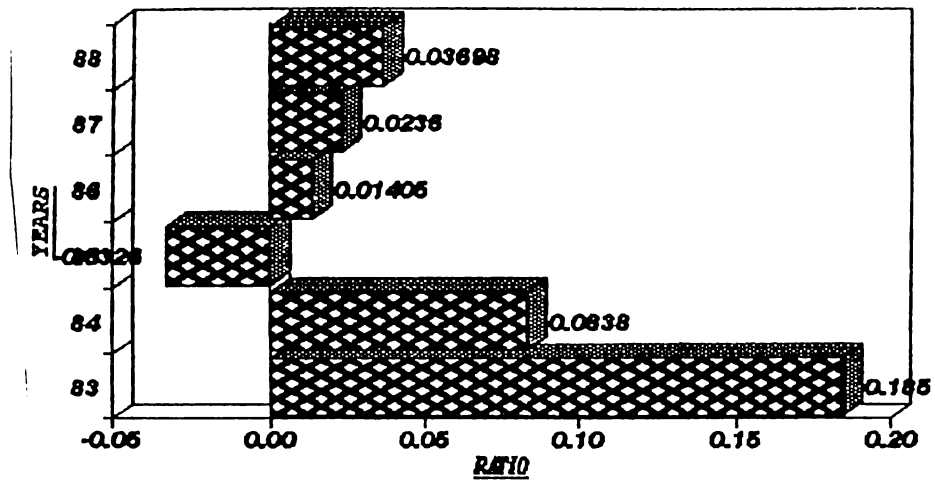
```

F = 46.86693 Signif F = .0000

----- Variables in the Equation -----

Variable	B	SE B	Beta	SE Beta	T	Sig T
MNSTR	-.07658	.10014	-.03069	.04013	-.765	.4446
MEM	-6.26844E-04	2.07707E-04	-.09772	.03238	-3.018	.0026
INT	-.04296	3.01067E-03	-.48891	.03426	-14.269	.0000
PROPOZ	.01021	3.79361E-03	.09134	.03393	2.692	.0072
MAINT	-6.75403E-03	7.50207E-03	-.03505	.03893	-.900	.3682
FND	3.823103E-03	1.54759E-03	.08107	.03282	2.470	.0137
PROPABS	-8.89798E-03	3.67447E-03	-.08481	.03506	-2.419	.0158
TOTINV	.01524	2.50497E-03	.21486	.03531	6.085	.0000
INF	4.035428E-03	1.38081E-03	.66699	.22822	2.923	.0036
INTRST	-.15532	.04326	-.88708	.24705	-3.591	.0003
(Constant)	1.31233	.16034			8.185	.0000

INTERNAL-SOURCE/NET-DEBT RATIO
UKM 1983 - 1988



one explanatory variable is a legitimate statistical procedure acknowledging the existence of serial correlation yet it compensates for it by a specific operationalisation of 'years'.

Hypothesis 1'

(Organisational Performance "INT")

The hypothesis is supported, (Sig F = .0000). There is an inverted, strong and significant statistical association between the level of organisational performance and ND/TRNVR. The following **graph (No. 68)** indicates the relative worsening in the proportion 'internal-source/net-debt' between 1983-85 and relative improvement between 1985-88.

Clearly, the higher the proportion the more efficient is the economic system as evidenced by higher levels of internal source (denominator). Despite the gradual improvement, over 60 percent of the aggregated internal-source is accounted for by no more than twenty wealthy kibbutzim so the recovery is partial, relative and somewhat misleading.

Hypothesis 2'

(Organisational Demographic Depletion "PROPOZ")

The hypothesis is supported, (Sig F = .0094), Higher rates of Aziva induce more debts. This finding determines the existence within UKM of a self-augmenting vicious circle which involve the two critical organisational components;

human capital and financial slack. Although it is believed that economic deterioration as of the early 1980s has sparked off the exodus of marketable members, the process, cannot dichotomised into cause and effect.

The 'contribution' of a relatively inert organisational structure, coupled with indistinct and impertinent organisational goals and plummeting morale, have all been conducive in producing increasingly hostile environmental buffets. A longitudinal data-base further 'dynamises' the process and unless variables are technically operationalised into, net-debt⁸³, internal-source⁸⁴, financial assets⁸⁵ etc. to gauge the net sequential temporal effect, the mechanisms resembles a perpetuum-mobile.

Hypothesis 3'

(Organisational Attractivity "PROPABS")

The hypothesis is supported, (Sig F = .0482). There is an inverted association between the kibbutz's economic situation and its organisational attractivity. The finding is explained by several factors. The absorption, primarily in large and established kibbutzim is not necessarily ideologically-motivated but by an acute need in skilful human capital. It also includes reasons such as: replacement of costly hired labour and a fast economic growth ¹⁵.

¹⁵An interview with Mr. Y. Ben Israel, formerly (1985-89) in charge of the agricultural portfolio at UKM's Economic Committee 7 August 1991.

Hypothesis 4'

(Investments "TOTINV")

The hypothesis is supported (Sig F = .0000). There is a strong, positive and highly significant linkage between ND/TRNVR and investments. The finding is not surprising and similar results concerning productive investments are demonstrated in Sheaffer's 1987 study.

The impetuous and irresponsible approach on the part of decision makers in both UKM and within most of its affiliated kibbutzim is evident. As early as the fall of 1982, the UKM¹⁶ advises: **"New ways should be sought to extend production within the framework of existing means of production...kibbutzim should concentrate in investments aimed at extending production"**. It is also suggested that investments in productive equipment will not exceed 8 percent of the kibbutz's income. 1983 marked a turning point in kibbutzim's insatiable urge for economic growth, Pearlmutter¹⁷ advised: **"On the agenda today is the question of increasing economic growth whilst slowing-down standard of living. Obviously, strengthening production system will demand heavy investments in both financial and human capital in order to cope with the special needs of organising production and marketing"** (Ein-Dor, 1983:2).

¹⁶Planning of Economic Activity 1983, an annual guidebook issued by UKM Economic Committee.

¹⁷UKM Joint Secretary General, 1982-1985.

Recommendations for 1984¹⁸ are, essentially, identical to the previous years' despite a considerable deterioration of the economy (a decrease of 38 percent in UKM's aggregated internal-source). Guidelines for 1985 are far more detailed: **"investments in production should be endorsed but stipulated by their economic merits. Investments must not exceed 5 percent of last year's turnover. No investments in consumption unless internal-source reaches 10 percent of the total income. Investments in housing will be strictly supervised by UKM Economic committee but need not be discontinued"**.

Despite certain restrictions, the economy regressed further with a reduction of 142 percent in internal-source and a rise of 22 percent in net-debt. The fast deterioration between 1985 - 1986, required a more dictatorial approach on the part of economic policy planners. The 1986 Planning Scheme demanded a sharp reduction in investments and an orthodox adjustment of kibbutz's investment plan to a pre-stated UKM administered policy. As of 1986 with the unprecedented decline of most vital economic indices (an increase of 265 percent in aggregated financial expenses [debt-service] between 1984 - 1985; an increase of 26 percent in net-debt), for the first time some autonomy in decision-making was expropriated from economically unstable kibbutzim.

Guidelines for 1986 requested a decrease of 50 percent in investments: **"The economic committee's investments policy**

¹⁸Planning of Economic Activity, 1984:2-3.

will be contingent upon sheer necessity. The basis for the extent of investments will be internal-source and allowances. Investments in new projects will be rigorously assessed and endorsed by extremely strict economic criteria through close reference to technological and legal aspects and the general level of risk they entail..."¹⁹.

Planning investment policy for 1988 was less restrictive²⁰. Since the UKM, at that time remained without financial leverages, (UKM Fund) it was far less influential. Consequently, it no longer assumed an operational responsibility over decision-making pertaining to investments in its affiliated kibbutzim.

Brod (1990:153) noted that in many cases the sole criterion for investing in consumption projects was the availability of low-interest loans. Sherman (1980) and Brod (Ibid) mention a number of reasons for the massive investments drive:

- a. Kibbutzim were apprehensive lest Likud will, eventually squeeze credit lines.
- b. Unrelenting pressure exerted by kibbutzim for fast development and maintenance of relatively high standards of living - equalising amongst kibbutzim - (Helman & Glick, 1989).

¹⁹Planning of Economic Activity, UKM Economic Committee, 1987:2)

²⁰Planning Economic Activity for 1988, UKM Economic Committee.

c. The false awareness that the era of cheap credit is about to end, hence those unwilling to borrow will be left behind.

Ha'aretz summed up this era of uncontrollable borrowing (Ganor, 1988:16): "In the recent past, kibbutz treasurers could mobilise credit extremely easily and the kibbutz movement was engaged in a vast spin of investments totalling one billion \$ US between 1982 - 1984".

Hypothesis 5'

(Organisational Size "MEM")

The hypothesis is supported (Sig F = .0034). Larger kibbutzim are less likely to accrue massive debts. The finding indirectly supports the liability of newness theory. The result was, in fact, anticipated taking into consideration the Pearson correlation coefficients between variable members & candidates and other conceptually-related variables:

* 'members' with 'demographic depletion' $r = -.168$ (P = .000),

* 'members' with 'net-debt' $r = -.197$ (P = .000),

* 'members' with 'organisational age' $r = -.48$ (P = .000).

Hypothesis 6'

(Standard of Living "MAINT")

The hypothesis' statistical **direction** is rejected (Sig F = .0353). There is an inverted statistical association between the two ratios. Hence, as opposed to the hypothesis' direction, generous living expenditures will **improve** the economic situation (a reduction in the ND/TRNVR ratio).

The finding is interesting in many ways. It does not refute earlier findings regarding the lack of any linkage between standard of living and the kibbutz's economic state. What it does disprove of is the interminable discourse on the part of economists on both UKM and kibbutz level to reduce living standards.

A close examination of many of authentic documents, circulars, official UKM guidelines and policy statements attests to the unfounded assertion advocating a drastic reduction in living expenses to effectively stave-off mounting debts. As a conditional reflex following crisis impact, organisations will slash (Levine, 1978; Whetten, 1980 and others) the most accessible and least protected budgetary items (bonuses, salaries, labourers' welfare, redundancies etc.). The incremental approach (Wildavsky, 1969) is clearly exemplified on the kibbutz scene. The first cutbacks pertain the most essential organisational asset; human resources. This is done irrespective of the long-term effects and notwithstanding the duration of the crisis. It also defies actual economic benefits incurred by this slapdash and managerially manipulative approach.

An effective policy tool is the Planning of Economic Activity issued annually by UKM Economic Division. This confirms a rigorous content analysis²¹ in which a recurrent clause advocating aspects regarding standard of living budgetary cuts.

Helman's consistent (1974; 1976 [with Y. Kroll]; 1982a; 1983; 1987) crusade upholding the essentiality of living standards corresponding with disposable income is both conceptually coherent and economically sensible. Its interpretation, however, by 'practical' kibbutz economists is erroneous. The present finding can be explicated as a negation of the traditional concept requesting the reduction of consumption patterns.

A controversial yet consistent reasoning advocated by Glick²² suggests that the kibbutz is an enterprise and members should be referred to as salaried workers. When economic conditions worsen, an entrepreneur will hardly lower his (her) standard of living unless completely insolvent. Employees', salaries will be curtailed or worse, they will be made redundant. In an economically unstable kibbutz the reflexive response is to curtail members' standard of living. This policy resembles common capitalist enterprises practice albeit that standard of living in the kibbutz is only marginally a function of

²¹The annual issues; 1982; 1983; 1984; 1985; 1986; 1987; 1988; 1989 (courtesy UKM Archives in Hulda)

²²An interview with Mr. Y. Glick, Senior Research Fellow at the Haifa University's Kibbutz Research Centre, 9 August 1991.

entrepreneurship. Kibbutz debt, in part, is an outgrowth of an entrepreneurial approach.

Hypothesis 7'

(Organisational Age "FND")

The hypothesis is supported (Sig F = .0032), Young kibbutzim are more likely to accumulate debts. The independent variable 'kibbutz age' is set (in the data format) in a descending order. Hence the eldest kibbutz is coded 13 (1913) and the youngest 86 (1986). Following several years of 'grace' accorded by the settling agencies, the young organisation must cope with mounting debts incurred by heavy initial investments as well as a host of 'childhood liabilities'. Young kibbutzim demonstrate a dismal economic picture where almost all economic indices are on the downturn. The situation worsened considerably (see discussion in the Organisational Demographic Depletion Model) between 1985-1990. A thorough content analysis of UKM Settlement Committee reflects ²³ a mood of gloom and doom with plummeting organisational results.

Net-Debt per member grew steadily from < 25000 US \$ in 1985 to 27850 in 1986 to nearly twice as much in 1989. Turnover per member, generally remained constant between 1985-1987 and operational surplus/member was also on the downturn.²⁴

When negative economic trends are associated with general

²³Minutes taken in 1988 and 1989.

²⁴Shraga Y., The Young Kibbutzim, A Report Submitted by UKM Settlement Committee, P.19, (N.D., approximately end of 1987)

demographic decline, loss of conviction and obfuscated organisational goals, the results are a deteriorating liability of newness. The process leads to organisational demise. Indeed, a fair number of young kibbutzim are periodically resuscitated by transient groups and UKM consultants. Others are on a verge of extinction and five settlements disintegrated since 1984.

Hypothesis 8'

(Consumer Price Index "INF")

The hypothesis is not supported (Sig F = .0623). This significance is above $<.0500$, hence rigorous statistice requires that the hypothesis be refuted. This would not have been the case had we opted for the $F = .1$ level. It is assumed that inflation is inversely correlated with any relation linked with the debt. Indeed, the partial correlations validate this postulation:

- * Net-debt/turnover: $r = -.29$ (P = .000),
- * Net-debt/members: $r = -.427$ (P = .000)
- * Turnover/members, $r = -.187$ (P = .000).

The β coefficients in the multiple regression equation do not express the absolute effect of each explanatory variable over the dependent variable but its relative effect whilst all other remain 'constant'. Therefore, it is presumed that such variables as 'Interest rate' may have overshadowed inflation's impact. This is a problem of the

equation specification and although no inadmissible multicollinearity exists between 'Interest' and 'Inflation', the conceptual link between the two is obvious (Melicher & Hearth, 1988).

A univariate regression structure would accredit each of these predictors a higher explanatory power. The meaningless aberration from the 'sacred' .05 significance level indicates that the finding supports the literature. Indeed, the thesis does not deal with business failure per se. Notwithstanding, the embodiment of a negative organisational propensity, be it business failure, massive short-term debts or insolvency precludes no robust factor such as inflation.

Hypothesis 9'

(Interest Rate "INTRST")

The hypothesis is supported (Sig F = .0317). High interest rates are positively correlated with high levels of net-debt. The finding exemplifies how a hostile environment buffets an unprepared organisation. Also, cost of capital is one of the most important catalysts for a prolonged organisational crisis specifically following an environmental change such as the 1985 economic deregulation. The literature, nonetheless, views (Altman, 1982:86; Rose, Andrews & Giroux, 1982; Melicher & Hearth, 1988; Altman, 1988b) business failure as **inversely** correlated with interest rates. The discrepancy can be explained in a number of ways.

The dependent variable in business failure studies illustrates liquidation of firms (winding up). In the present model the 'explained axis' is the debt component relative to the firm's turnover. Though many of the kibbutzim may be regarded as legally insolvent none has been wound up by a court order or otherwise. Altman, (1982) argues that tight money conditions encourages 'credit rationing' which hits smaller firms and younger firms. Hence, the general rate of business failures increases. Therefore, the inverse association between business failures and the cost of capital or interest rates has been established. The finding **does not** refute the above hypothesis. The inconsistency stems, apparently, from different definitions of the dependent variable.

A large number of articles highlight the 'murderous' interest of 1984 and 1985, reflecting the existing ambiguity concerning the justification of such skyrocketing rates. Sela (1989), for example, argues that the roots of this issue lie in erroneous policies endorsed by the Bank of Israel which automatically adjusted interest rates to CPI, forcing borrowers to recycle debts. He asserted that only drug cartels are capable of repaying interest payments such as those requested by Israeli banks.

In retrospect, notes Plassner²⁵ (1991), businesses could borrow foreign currency for longer periods to finance

²⁵Deputy Chancellor of the Bank of Israel during Aridor's term in office as Finance Minister.

short-term needs yet these transactions involved a considerable risk. The risk stemmed from the fact that in inflationary conditions such as in 1983-4, nominal depreciations could take place intermittently. These transactions could invoke a depreciation precisely when loans were due, thus turn them into an exceptionally dear ones.

In the last quarter of 1985, the Israeli Shekel was drastically depreciated (64 percent) whereas inflation reached 54 percent. From the point of view of foreign currency borrowers (mainly kibbutzim) that meant a depreciation of 5.8 percent in real terms. This is a semi-official post-factum exoneration. It does, however describe the occurrences from the monetary policy makers stand point. Officially, the Bank of Israel acknowledged its macroeconomic errors regarding the high interest rates alleging that the **'high interest rates on the credits in NIS, during two years were not a negligible cause for the growing number of firms in crisis'**²⁶. As a result of this policy, UKM paid around 300 million NIS in interest on its bad debt. Living expenditures in 1988 reached about half a billion NIS whilst the entire UKM output was 900 million NIS.

This leaves only 100 million NIS for investments and payments on principal (Ganor, 1988). Clearly, this situation calls for massive bail-out schemes. The 1985 Bank of Israel Report acquiesced that, in fact: **"the overall**

²⁶Bank of Israel Report, 1985, chapter A:9)

burden of interest payments to the banking system in 1985 reached 7 percent of GNP, 5 percent in 1984 and only one percent in 1983" Leshem²⁷, (1987:3) argued that this policy resulted in a redistribution of the national income, from the borrowers and the productive sector to the financial sector.

Monetary measures can be labelled as 'constraints', i.e. they cause organisational crises in the sense that "organizations cannot control them" (Starbuck, Greve & Hedberg, 1980:122). However, faulty perception of these environmental constraints is not, necessarily inescapable and, alternatively can be remedied if precipitating endogenous flaws²⁸ are not too deeply-rooted.

Hypothesis 10'

(National Economic Policy "MNSTR")

The hypothesis is supported (Sig F = .0107). See procedure No. 2, regression equation containing additional explanatory variables ('National Economic Policy', 'Productivity' and 'Services' N = 89). The finding supports traditional argument on the part of the kibbutzim concerning the negative economic effects of Likud policies.

²⁷Leshem, S., **Bruno The Chancellor of Usury**, an Unpublished Essay, 22 August 1987 (in Hebrew). Leshem, an economist, was UKM Spokesman between 1984-1989 and is currently the UKM's Head of the Economic Committee.

²⁸For example, ideological constraints, inert structure, lack of boundary spanning capacity, or more generally; organisational atrophy (Levine, 1978).

Since the results show that this factor was not singled out as the sole catalyst. It can be regarded as embodying other exogenous variables. Likud economic policy has proved doubly detrimental to kibbutzim. As of 1977 typical Laissez fair policies were introduced by the late S. Ehrlich²⁹ which led to the era of ostensibly cheap credit and speculative investments in the early 1980s.

This liberal approach resulted in the hyper inflation of 1982/3/4/5 and eventually the collapse of the Tel Aviv Stock Exchange late in 1983. The economic situation had gradually gone out of control. Consequently, the Government introduced the "**Stabilisation of the Economy Scheme**" of May 1985. This programme drastically lowered the inflation and dramatically raised interest rates.

Hypothesis 11'

(Productivity "PROD")

The hypothesis is refuted (Sig F = .0846). See procedure No. 2, regression equation containing additional explanatory variables ('National Economic Policy', 'Productivity' and 'Services' N = 89). The rejection is an important finding in itself, refuting a deeply entrenched concept asserting a strong linkage between 'hard labour' (i.e. high productivity) and the chances of reducing debts incurred by imprudent investment policies. It is postulated that a highly differentiated kibbutz (laterally and

²⁹Mr. S. Erlich a liberal was the first Likud Finance Minister in the first Begin Government which took over following the May 1977 political changeover.

horizontally) with a multi-generational community can be financially implicated. This kibbutz can reduce debts only peripherally by increasing productivity.

The above supposition is reasonable, provided the crisis is a prolonged one. The kibbutz's demographic structure is steadily impaired by continuous exodus whilst annual absorption rates 'just' replenish unremitting Aziva. No income is capable of simultaneously servicing debts, appropriate funds for investments and reasonably sustaining the community. This description reflects the situation in most UKM kibbutzim despite improved economic results³⁰. Accordingly it is presumed that productivity as measured in the current model may only marginally reduce debts.

Hypothesis 12'

(Services "SRVCE")

The hypothesis is rejected (Sig F = .2694). See procedure No. 2, regression equation containing additional explanatory variables ('National Economic Policy', 'Productivity' and 'Services' N = 89).

DISCUSSION

An intriguing issue in organisational crisis is the operationalisation of crisis for statistical purposes.

³⁰Turnover increased between 1983 - 1988 by 28.39 % with an annual average increase of 5.17 %. Operational surplus increased by 28.82 % an annual average increase of 5.04 %.

Indeed, crisis is a multi-faceted phenomena entailing demographic, economic, cultural, and other organisational aspects, none of which can conceptually and proportionately manifest interrelated and equally significant factors. In this thesis, two measures are employed, each of which symbolises crisis from a different yet complementary viewpoint. In fact, net-debt/turnover divided by members and candidates comprises of three organisational elements; **economic** (debt and turnover, **social/demographic** (members and candidates), **size** (organisational turnover). The three ingredients are synthesised into a three-faceted proportion, hence, the comparative dimension is also satisfied. Though by all means partial, this ratio appears to be a legitimate indicator for crisis. In accordance with the findings, and as initially postulated, the crisis was induced by endogenous factors, generally termed as '*Organisational atrophy*'³¹ and exogenous catalysts.

The aim of this model is to identify the two sets of reasons for the crisis and to assess the proportional weight of each variable. As the results indicate, the exogenous variables are particularly economic. These

³¹ Levine advances such dysfunctions as: 'Differentiation without integration, role confusion, decentralised authority with vague responsibility, too many inappropriate rules, weak oversight, stifled dissent and upward communication, rationalization of performance failure by "blaming the victim", lack of self-evaluating and self-correcting capacity, high turnover, suspicion of outsiders and obsolescence caused by routine adherence to past methods & technologies in the face of changing problems' (1978:319).

variables are not, conceptually, mutually-exclusive yet statistically no noticeable multicollinearity is detected. It can be concluded that both inflation and interest rates are contingent on 'national economic policy'. Nevertheless, the dichotomous political variable accounts for policies which far exceed two individual factors since it more inclusively reflects the political milieu. Moreover, exogenous variables other than economic ones may have indirectly affected the crisis.

With respect to the endogenous variables the variable 'Investments' symbolises intra-kibbutz decision-making process and the extent of which UKM was effective in either encouraging 'productive' investments and later shoring off the investment drive. As such, it also embodies the kibbutz's organisational and economic behaviours. Consequently, the negative impact of this variable over ND/TRNVR ratio is twofold. On the one hand a large part of these investments could not have, as yet, bear fruit. On the other, the precipitously rising interest rates made these indiscriminate ventures extremely costly in terms of sheer financial burden. Eventually, they undermined the kibbutz's demographic infrastructure and exposed its vulnerability in terms of its capacity to successfully grapple with the unremittingly turbulent task-environment. A rapidly deteriorating economy exposes a host of dormant structural deficiencies. These surfaced as a result of the recurrent environmental jolts. The finding pertaining to

the inverted association between living expenditures and ND/TRNVR is proof of one of the kibbutz's deeply entrenched fallacies connoting a reasonable standard of living with faulty entrepreneurial gambles. Helman et al, found that in prosperous kibbutzim, labour is **far less** emphasised in terms of the current 'productivity' measure than in economically unstable ones.

It can be concluded that the kibbutz munificence is first and foremost a function of its age. Helman et.al's finding connotes well with the theory of the liability of newness and smallness which is also supported in this study. Young kibbutzim are less likely to sustain environmental fluctuations. Hence, they are noticeably less resilient in adjusting structurally to the environment. Young kibbutzim have gained low levels of legitimacy from their task-environment. This is distinctly demonstrated in unsuccessful interaction between environmentally-generated jolts and inadequate internal processes. The theory of institutional links (Baum & Oliver, 1991) has been partially supported too. The UKM has played a significant role in alleviating environmental threats. It is, therefore postulated that affiliation with the UKM has served as an essential shock absorber by enhancing environmental legitimacy, increased stability, psychosocial assistance and access to financial resources (DiMaggio, 1988; Oliver, 1991; Baum et.al.). The dissolution hazards grow markedly during an era earmarked by an acute necessity for fast structural transformations. Larger kibbutzim amplify their

capacity to withstand ongoing environmental changes (Hannan & Freeman, 1983) whereas the smaller and younger ones have narrower margins for lapses since they are less likely to make operational adjustments in response to frequent environmental alterations.

The findings indicate that organisational age and size behave equally haphazardly as perpetrators to a worsening crisis as illustrated by the ratio ND/TRNVR. In terms of prescribed UKM policies, the finding concerning the non-existent impact of either the level of productiveness or the labour inputs symbolised by the services sector, refutes a long-held misconception associating 'productive labour' with organisational munificence. In normal circumstances hard-work should increase welfare. The drive to enhance productiveness is supposedly a moral booster or a demonstrative act aimed at assuaging bailing-out agencies. Unremitting organisational demographic depletion is found to adversely affect the kibbutz's economic base. This finding implies the existence of spiralling processes (Masuch, 1985:18) comprised of contracting circles³². These points can be summed up as follows:

- * Deteriorating economy
- * Low morale
- * Deteriorating work-ethic
- * Discrepancy in perceiving kibbutz goals

³²Given not necessarily in a certain order.

- * Low self-esteem
- * Increased Aziva
- * Increased absorption of new candidates

Masuch (1985:30), argues that: "Once set in motion, a decrease in one variable will cause similar decreases in other variables. Once the critical threshold is crossed, nothing can stop contracting circles. They are bound to a self-terminating dynamic". This model supports and validates OT theories such as environment-organisation relationships. Also within the framework of organisational crisis and decline it supports concepts of liability of newness and vicious circles in organisations.

CHAPTER EIGHTEEN**ADMINISTRATIVE RATIO****General**

There are several reasons for the inclusion of this statistical model. In general, it is intended to validate fundamental hypotheses pertaining to a conspicuous organisational response to a lingering state of decline. This issue attracted a number of leading scholars (Blau, 1970, 1971, 1972; Hendershot & James, 1972; Freeman & Hannan, 1975, 1978; Salancik, 1978; Ford, 1980). It would be interesting to apply these theories to the kibbutz scene. Some organisational dysfunctions appear to have been part of the kibbutz irrespective of the current crisis. It is also reiterated that these dysfunctions are the result of a prolonged organisational inertia which resulted in growing signs of structural reproducibility.

The kibbutz is subject to strong inertial forces. However, it requires some firm substantiations. The kibbutz demonstrates a strong proclivity to enhance its structure regardless of operational needs. In this respect, the situation in the kibbutz lends support to Hannan & Freeman's (1984:154) assumption suggesting that organisations attain reproducibility of their structure -598- by institutionalising and standardising their routines.

Moreover, it would be considerably more complicated to introduce a structural change in **organisations based on moral commitment** which tend to perpetuate their routines, irrespective of the changing environment. Reproducibility insinuates an increase in complexity. Hence, for instance, an increase in administrative intensity. It has been suggested that a pattern of increased structural intensity is demonstrated by kibbutzim which have been severely affected by the crisis (see chapter: Managerial Responses to Crisis). The current model will examine the extent of which endogenous (organisational and economic) variables influenced administrative overhead between 1983-1988.

THE DEPENDENT VARIABLE¹

Administrative intensity can be measured in a number of ways. It is possible to show in the kibbutz how the administrative overhead or the supportive component is affected by internal variables. One way in which to cope with the definition regarding administration and/or management is to incorporate **all** those involved with administrative affairs in the kibbutz. However, this would mean the incorporation of a very large number of people owing to the highly differentiated nature of the -599-kibbutz. Furthermore, a kibbutz member can assume a

¹All data concerning labour are based on the annual labour report enclosed to the Marathons courtesy of UKM Archive in Khulda.

number of administrative positions (Etzioni, 1957; Shepher, 1977). A different option would be to separate the main divisions within the kibbutz into the labour segment, committees, general administration and management (central office- holders). Since this study deals, analyzes and reflects upon the entire organisation, an appropriate way to identify the supportive element would be to aim at the general administration. The term 'general administration' means all those organisational members engaged ex-officio in administrative matters concerning the **entire** kibbutz.

This category, then, includes central position holders (with the exception of industrial managers, service managers or any other partisan administration), kibbutz accountancy (including all different specialisations) and all other administrators engaged part or full-time in the kibbutz administration. The literature makes no distinction between administrators per-se and managers. However, the supportive element includes only administrators and theory does not indicate whether they include the upper echelons of the structural hierarchy.

The dependent variable specifies no absolute numbers of administrators relative to the direct component i.e. the productive and service sectors. Rather, **the total number of days' work in administration in a given year as a percentage of the total number of days' work at the same year.** This proportion accurately reflects the labour input

allotted to administration during the year. Hence, it constitutes a legitimate measure proportional to labour inputs in other kibbutz segments. The statistical methodology employed in this model is a pooled regression analysis where the years are entered as dummy variables². The model reflects the situation in N=137 UKM kibbutzim between 1983-1988.

THE HYPOTHESES³

The following are a set of hypotheses specifying the postulated nature of the statistical association between the dependent variable, administrative over-head, and the explanatory variables entering the pooled regression equation.

Hypothesis 1

The higher the ratio 'Aziva of members & candidates/total number of members & candidates', the higher is the administrative intensity as reflected by a proportionately high administrative overhead.

It is believed that since the Aziva ratio is a sensitive

²For a comprehensive explanation of this statistical technique see chapter "Methodology".

³For a more in-depth explanations of variables please refer to the variables table.

measure for the crisis, an increase in this proportion will cause an increase in the structural intensity of a kibbutz (administrative over-head). This hypothesis is partially supported by Hannan & Freeman (1975) and it was also proposed by Ford (1980), who claimed that during decline the number of administrative personnel tends to increase.

Hypothesis 2

An increase operational surplus/member ratio (partially indicating economic efficiency) will cause a decrease in administrative over-head.

As opposed to indicators denoting decline, a growing operational surplus signifies a situation where the organisation may be identified as partly recovering. Consequently, the kibbutz is capable of increasing organisational munificence. Obviously, a mere increase in this economic indicator is no proof of a turnaround but often, a steady increase in operational surplus is a reliable antecedent to an early and gradual recovery.

Therefore, it is hypothesised that following a steady economic recovery, administrative over-head will either decline or will remain constant over time. The literature provides some useful examples (Freeman & Hannan, 1975). They contended that during growth, the supportive component will increase less than during decline. In the current model, a steady increase in operational surplus, marks a general organisational growth. contingent upon other

organisational indices as well.

Hypothesis 3

An increase in the net-debt/member ratio will enhance administrative over-head.

Kibbutz's (net) debt is considered a sensitive indicators of the crisis. In numerous cases the mounting debts incurred a noticeable mobilisation of accountants and other financial experts which temporarily reinforced the kibbutz's administrative over-head. Administrative assignments seemingly increase during a prolonged crisis. During crisis and largely during a lingering one, the kibbutz has to attend to the routine managerial tasks and in addition it must handle extra administrative duties. These include handling the recovery-plan and assignments imposed by banks the UKM and other agencies.

Hypothesis 4

A larger kibbutz (population) will tend to have a reduced administrative over-head.

The principle of economies of scale affects the size of the the administrative over-head. A more populous kibbutz is more differentiated laterally and horizontally. Hence, additional administrative functions must be carried out.

Proportionately, however, this kibbutz will have a smaller administrative over-head since the basic administrative and managerial functions are staffed at any given size. For example, a kibbutz with 250 members will have the same number of administrators as a kibbutz with 450 members.

Hypothesis 5

The younger the kibbutz the larger (proportionately) is its administrative over-head.

Much like the previous hypothesis and because a young kibbutz is invariably small it is expected that proportionately it will have a large administrative over-head. Although a young kibbutz is less differentiated, and it is not inter-generational, it must maintain the basic managerial functions and administrative duties.

Hypothesis 6

Labour inputs in kibbutz's services sectors are inversely associated with its administrative over-head.

The services in the kibbutz are not originally, meant to generate income. Therefore, they can be regarded as indirectly representing the 'direct component' (Freeman & Hannan, 1975). The direct component of organisations is the element for which the organisation exists in the first

place. The current trend is (Niv & Sheaffer, 1991) to convert as many services as possible into income generating industries. Therefore, the definition is equivocal. Originally, services are the 'supportive component' or: **"those persons engaged in activities which contribute indirectly to the attainment of organizational goals"** (Freeman & Hannan, 1975:219).

Services are aimed at assisting the kibbutz not only in its capacity as income-generating entity but as a system with additional tasks (social, educational, political).

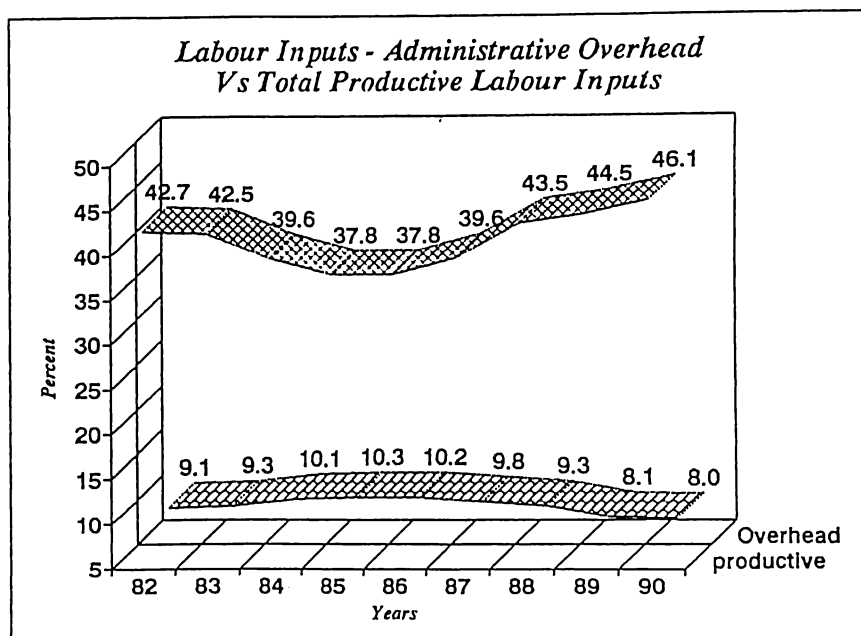
Hypothesis 7

The production sector of the kibbutz will be inversely associated with its administrative over-head.

The production sector in the kibbutz generally corresponds with the 'direct component'. However, income-generating industries in the kibbutz cannot be likened to the teaching force in Freeman & Hannan's study (1975). Unlike other organisations, the kibbutz does not dismiss members irrespective of the state of decline. Kibbutz members are inseparably integrated with both the commune and the business sector and as such are share holders. Hence, no economic fluctuations affecting profitability, can force the kibbutz to make even latently-unemployed members

redundant. Plans to transform much of the workforce into income-generating occupations⁴ is believed to have been induced by the current crisis. Freeman & Hannan (Ibid), Ford (1980), Akers & Campbell (1970) argued that during organisational decline the administrative component increases as opposed to a shrinking direct component. The situation in the kibbutz, however, is less obvious. Analysis of the aggregated relevant data for the entire UKM (170 organisations) distinctly points to an upsurge in both the administrative component and the days' work in production. However intriguing **graph No. 69** is, it is still hypothesised that an inverted statistical association exists between the two variables. A substitution exists between the two elements since almost invariably administration **and** services are regarded as one structural element. Productive industries, however, are conceptually and practically considered as essential for the kibbutz's well being. The kibbutz always seeks to increase production but, traditionally, members had been transferred from one sector to the other according to changing demands. These included, services by rotation, old age, considerations of higher education, on-the-job-training, social problems, personal tendencies and other non-economic considerations.

⁴INCREASING ECONOMIC OUTPUT OF THE WORK-FORCE IN THE KIBBUTZIM: CHANGES IN THE VOCATIONAL STRUCTURE; CHANGES IN LABOUR ORGANISATION; DEVELOPMENT TRENDS, Recommendations and a Report submitted to the UKM Secretariat, September 1989 (in Hebrew).



GRAPH 69

A general hypothesis concerning years as 'explanatory' variables:

It is expected that all years (as dummy variables) will 'behave' similarly in terms of a particular temporal effect upon administrative over-head. No drastic alterations in the yearly means of administrative over-head are recorded. Therefore, no specific year is likely to have an irregular effect. The results show that all years are statistically highly significant in explaining administrative over-head. In order to compensate for a possible high serial correlation, hence potentially misleading inferences, the dummy variables have been so operationalised that one recoded variable will account for the entire sequence (T-6 to T). Dummies are used to adjust for important missing information in the model. In the current model however, the dummy variables are constructed to obtain the longitudinal effect **without** risking autoregression. Much care is required whenever inferences are drawn.

Pyndick & Rubenfeld (1982:205) argued that: "**...in doing so a substantial portion of the error variation may be explained without the analyst's obtaining any useful knowledge of the model**". The dummy coefficients in this model are, conceptually, inexplicable. There is no theoretical explanation concerning the statistically significant dummy variables other than that there is a very high cumulative serial impact. A six cross-sectional model

* * * * MULTIPLE REGRESSION THROUGH THE ORIGIN * * * *

Equation Number 1 Dependent Variable.. ADM

Beginning Block Number 1. Method: Enter
 NETDEBT MEM ODEF PROD FND PROPOZ SRVCE Y83
 Y84 Y85 Y86 Y87 Y88

Variable(s) Entered on Step Number

- 1.. Y88
- 2.. Y87
- 3.. Y86
- 4.. Y85
- 5.. Y84
- 6.. Y83
- 7.. PROPOZ
- 8.. ODEF
- 9.. NETDEBT
- 10.. MEM
- 11.. FND
- 12.. SRVCE
- 13.. PROD

TABLE
41

Multiple R .93574
 R Square .87561 R Square Change .87561
 Adjusted R Square .87251 F Change 282.11433
 Standard Error 3.57919 Signif F Change .0000

F = 282.11433 Signif F = .0000

----- Variables in the Equation -----

Variable	B	SE B	Beta	SE Beta	F	Sig F
Y88	15.12415	2.06412	.61596	.08407	53.687	.0000
Y87	15.17420	2.06825	.61800	.08423	53.828	.0000
Y86	15.75097	1.99058	.64149	.08107	62.612	.0000
Y85	15.51788	1.87752	.63200	.07647	68.312	.0000
Y84	15.66615	1.83329	.63803	.07466	73.023	.0000
Y83	15.70331	1.84318	.63955	.07507	72.585	.0000
PROPOZ	-6.95806E-03	.02124	-7.150E-03	.02183	.107	.7434
ODEF	6.927997E-03	.01414	.01117	.02279	.240	.6243
NETDEBT	-3.89928E-03	4.38771E-03	-.02395	.02695	.790	.3746
MEM	1.457169E-03	1.26008E-03	.04398	.03804	1.337	.2480
FND	.05176	.01414	.23432	.06403	13.394	.0003
SRVCE	-.10576	.02954	-.36145	.10097	12.815	.0004
PROD	-.12347	.02522	-.52019	.10627	23.960	.0000

End Block Number 1 All requested variables entered.

could be demonstrated, in which the separate impact of the same independent variables would be tested (at a given point in time). This could, however, drastically narrow the model's inferential power as the reference is to one point in time. Therefore, cumulative effect or the dynamic nature inherent in the longitudinal data cannot be examined. The model using the above procedure (**Procedure No II, See Appendix No. 3**) is run for demonstrative-statistical purposes only. Hence, to show how much of the explained variance is accounted for by the dummy variables. In order to reflect the 'net' impact of the explanatory variables years will be omitted altogether from a demonstrative model using a procedure in which the constant term is not suppressed (non-origin) (**Procedure III, See Appendix No. 4**).

General

It is assumed that the directions of statistical associations as demonstrated in the hypotheses will remain identical for the multi-variable equations.

The Findings

The final model of the multiple pooled regression yields a multiple correlation $R^2 = .87$ (**Sig. model = .0000**). Hence, thirteen percent of the dependent variable's variance is

Text View: C:\spss\work\spss.lis Col 0 2,433 Bytes
 * * * * MULTIPLE REGRESSION * * * *

29:

Listwise Deletion of Missing Data

Equation Number 1 Dependent Variable.. ADM

Beginning Block Number 1. Method: Enter

Variable(s) Entered on Step Number

- 1.. SRVCE
- 2.. MEM
- 3.. ODEF
- 4.. PROPOZ
- 5.. PROD
- 6.. NETDEBT
- 7.. FND

TABLE
42

Multiple R .37734
 R Square .14238
 Adjusted R Square .13097
 1Help 2Unwrap 3 4Hex 5 6 7Search 8Viewer 9 10Quit

Text View: C:\spss\work\spss.lis Col 0 2,433 Bytes 48:
 Standard Error 3.56737

Analysis of Variance

	DF	Sum of Squares	Mean Square
Regression	7	1111.32870	158.76124
Residual	526	6693.94090	12.72612

F = 12.47522 Signif F = .0000

----- Variables in the Equation -----

Variable	B	SE B	Beta	T	Sig T
SRVCE	-.11460	.02756	-.17727	-4.158	.0000
MEM	1.376090E-03	1.25081E-03	.05590	1.100	.2718
ODEF	.01412	.01273	.04652	1.109	.2678
PROPOZ	-.01185	.02067	-.02462	-.573	.5668
PROD	-.13025	.02315	-.25045	-5.626	.0000
NETDEBT	-5.41339E-03	3.89123E-03	-.06363	-1.391	.1648
FND	.05178	.01409	.18357	3.674	.0003
(Constant)	16.11261	1.70656		9.442	.0000

1Help 2Unwrap 3 4Hex 5 6 7Search 8Viewer 9 10Quit

not accounted for by the contribution of the 13 explanatory variables (including the years as dummy variables). The individual regression coefficients for each independent variable denote the differential explanatory power of each variable in a more exact fashion. In order to compare amongst the different affects (b's), they are converted into Beta coefficients which show, in standard deviation terms, the concrete coefficients of each variable. It should be emphasised that these coefficients do not express the absolute effect of each variable on the administrative over-head, but only the relative influence whilst all other variables remain constant.

Analysis of the Model Results

Analysis of the findings indicate that only three explanatory variables are defined as statistically significant in the F significance test. In general, supported hypotheses will be extensively dwelt upon. The refuted hypotheses will only be generally commented on.

Hypothesis 1'

The hypothesis is not supported (Sig F = .7434). There could be a number of reasons for the insignificant results. The most important of which seems to be that although Aziva ratio is a sensitive indicator for the intensity of the

crisis this ratio lacks a **direct** effect. A path analysis could demonstrate different results by using 'confounding' variables. Also, a different definition operational conceptualisation of crisis could yield the hypothesised results.

Hypothesis 2'

The hypothesis is rejected. There is no statistical linkage between kibbutz's operational surplus and its administrative over-head over the six year period. The level of F significance is .6243.

Hypothesis 3'

The hypothesis is rejected (Sig. F = .3746). Even though the Net debt/member ratio is a valid indicator for the crisis (Sheaffer, 1987)⁵ the variable may require further refining in order to yield a significant statistical association.

Hypothesis 4'

The hypothesis is rejected (Sig. F = .248). The size of a kibbutz, population wise, has no effect on its administrative over-head. Apparently the increase in the administrative component is proportional to the kibbutz's

⁵Sheaffer & Shapira, 1989.

size and there is no decrease in the number of administrators owing economies of scale. The finding, though contradictory to the hypothesis, is not entirely surprising since a more populous kibbutz is invariably more differentiated. Hence, requiring a proportionately ramified organisational structure with a larger administration.

Hypothesis 5'

The hypothesis is supported (Sig. $F = .0003$). The finding is somewhat puzzling. It seems to contradict the assumption regarding economising in administrative over-head owing to size. Since the kibbutz's age is positively correlated with size ($r = .73$) it is sensible to expect that the two parameters will have a similar statistical association with administrative over-head. However, this does not seem to be the case when the two independent variables are entered into a multiple regression equation. Consequently, a younger kibbutz tends to have a proportionately larger administrative over-head or alternatively, there is causal effect between kibbutz's age and the the amount of labour input relative to other kibbutz industries. A reasonable explanation for this finding is the necessity to nominate office-holders as well as other administrators to maintain all duties emanating from basic organisational needs irrespective of organisational age and size.

In young kibbutzim, most administrative positions are carried out as part-time jobs. This allows for the

remaining time to used for either services or breadwinning jobs.

Hypothesis 6'

The hypothesis is supported (Sig. $F = .0004$) indicating an inverted causal statistical association between the extent of labour inputs in the kibbutz services and its administrative over-head. A small services segment will, generally, increase administrative over-head. A plausible explanation holds that it is postulated that an economically-efficient kibbutz will have a large income-generating segment and a relatively small services section. These kibbutzim are highly differentiated, laterally and horizontally thus requiring a relatively large supportive component (administration). However, the kibbutz administration is regarded as services (other than central office-holders). Therefore, administration could be a substitution, in terms of potential human resources, for other elements **within** the services segment.

Hypothesis 7'

The hypothesis is supported (Sig. $F = .0000$). The finding lends support to a major theoretical tenet which was also supported by Freeman & Hannan (1975). It was also theoretically developed by Akers & Campbell (1970) and Ford, (1980). They found that during decline the

administrative component increases whilst the direct component contracts.

In the current model, the direct component is symbolised by the productive element of the kibbutz and the supportive component is represented by the kibbutz administration. The finding manifests a causal relationships between the two variables. Any decrease in the income generating capacity incurs a growth in its administrative over-head. A dynamic interrelatedness is demonstrated during years of undisputed decline. However, further evidence is required to show that as Freeman & Hannan (ibid) report, the contrary dynamics occurs during growth.

A recurring theme in UKM's economic policies advocates the downsizing of overstuffed and unproductive kibbutz services. On the other hand, it was repeatedly recommended that income generating capacity be augmented. A detailed UKM's economic plan ⁶ for 1988, highlights the essential measures to be taken in order to minimise losses and consequently the crisis' negative repercussion. The recommendations include:

- a. Reduction of manpower in services.
- b. Increasing work-hours (in both production and services).
- c. An extensive effort to increase the kibbutz

⁶ UKM "Planning Economic Activity", (for 1988), Economic Committee, August 1987. (guidelines for economic planning.

breadwinning capacity. (mobility from services to productive industries and external jobs).

Similar recommendations appear in earlier versions of the annual planning kit. Surely, UKM's planners had no notion of this expected inverted ratio and it seems likely that curtailing administrative over-head was not regarded as an isolated policy variable.

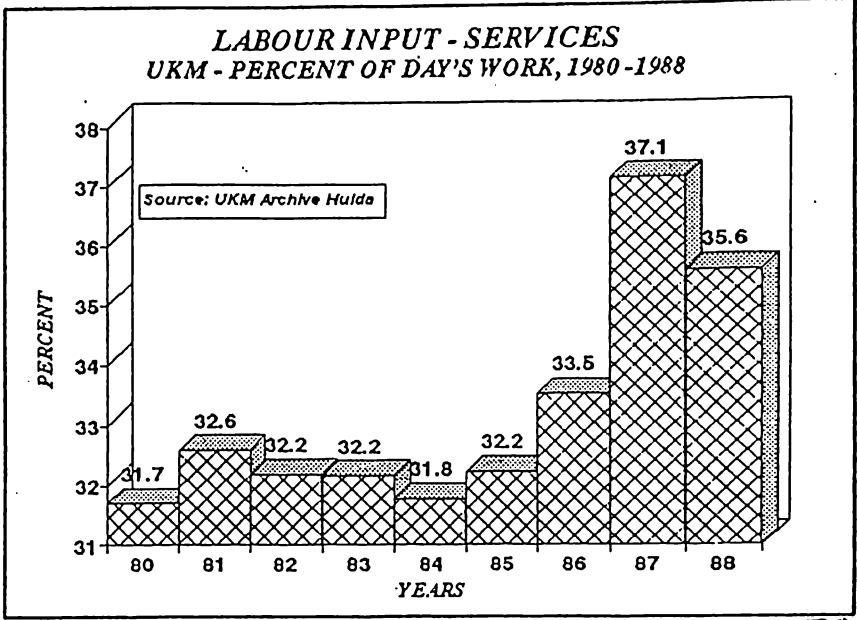
DISCUSSION

Despite methodological constraints a relatively small number of supported hypotheses, the model possesses important advantages. One of the research's aims is to establish the extent of which the literature dealing with organisational decline and crisis is relevant to the kibbutz. Whilst each organisation is a distinctive entity bearing singular structural features, the kibbutz incorporates characteristics of both a business and not-for-profit-organisation. It is also obvious that the common operational definitions for the analytical subjects in the current model, (i.e. the direct and the supportive components) are distinct in most organisations. These elements, however, are ambiguous by definition in the kibbutz. For instance, the supportive segment is rather equivocal since it accommodates for both the kibbutz administration and services conforming the theoretical concepts. However in practice, there is a clear distinction

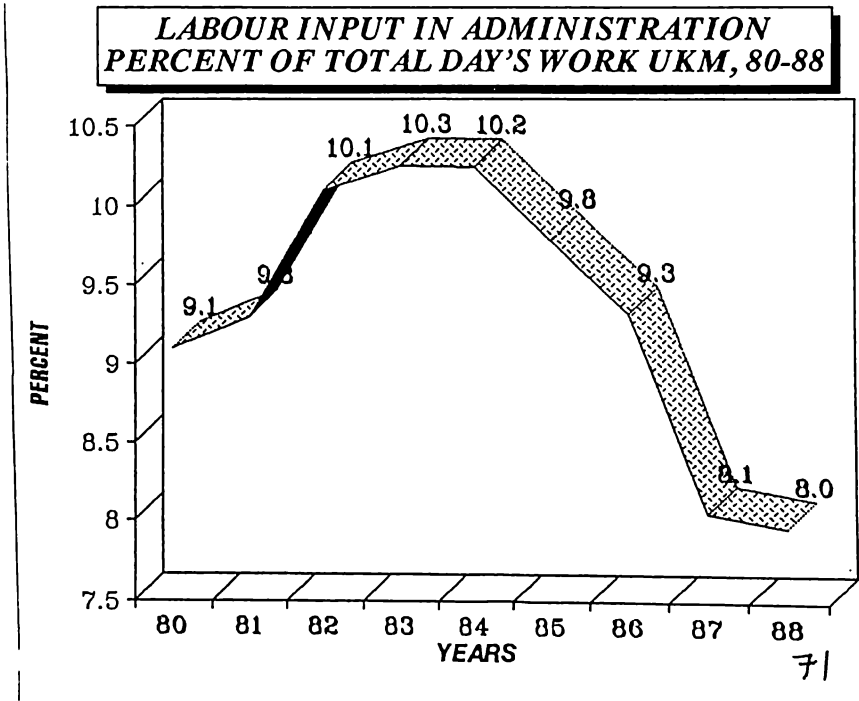
between the kibbutz services (children houses, kitchen, dining-hall, laundry, sewing rooms, gardening etc.) and administration. Although it is regarded as an indirect assistance to the governance of the kibbutz it is audited separately. To an extent, this ambiguity requires manipulations to reconcile with both theory and the empirical situation.

Notwithstanding, the direct component is certainly universal in nature and requires no 'fine tuning'. Descriptive statistics, in UKM kibbutzim, demonstrate that there was a **decrease** in the administrative component. This finding does not support Tsouderos' (1955) conclusions. He and Ford (1980) argued that the number of administrative personnel increased more during decline than during growth. It is indisputable that the period between 1983-1988 reflects organisational decline. Therefore one cannot dispute the coincidental occurrence of the crisis with the diminishing administrative overhead. The question is why most organisations tend to reinforce administration during decline whilst the kibbutz demonstrate the contrary. A few plausible answers seem to be in place.

* The supportive component both conceptually and numerically, conjoins administration with other services. As administration is viewed as a service, it was, apparently subject to gradual but persistent curtailments



70



71

Therefore, the decrease in administration as a sub-branch of services should reflect, an overall reduction in services as advocated by UKM economic policies from 1985 onwards. However, the following graphs (No. 70 & 71) indicate that, in fact, there was an **increase** in services until 1987 (32.17 percent of the total days' work in 1983 and 37.14 percent in 1987). Hence, administrative positions were **nominally** downsized.

* The different registration of days' work as a result of a more stringent audition of labour inputs would be another explanation. The inverted association between the administrative over-head and the kibbutz's direct component partially supports the theory. Nevertheless, the administrative over-head decreased whilst the direct component was on the upswing. The theory, however suggests the contrary. The discrepancy can be explained by the nature of the multiple regression where 'simple' descriptive statistics scores do not, necessarily, reflect the proportional explanatory power of the various coefficients in a multiple regression equation.

Ford's (1980:595) assertion regarding the growing intensity of structure during decline as opposed to a general decrease in organisational size could not be supported in the current model. The current model did not test coalition politics (Williamson, 1963; Hannan & Freeman, 1978 and Ford, 1980) with regards to

administrative overhead. Coalition politics increase bargaining over resources during crisis. Consequently a stable or growing administrative component emerges despite an overall decline. Although not tested in this model, the issue is apropos with the structural intensity in general. Therefore, an independent study to test the existence of this phenomenon in the kibbutz is required.

Because of the unique nature of the kibbutz an increase or decrease of the supportive component (including administration) is linked more closely with stringent economic pressures but not exclusively economic considerations. No kibbutz administrators or those occupied in various services will bargain to preserve their jobs at least not in the trade union style. Consequently, increasing or decreasing administrative overhead may be attributed to such considerations as age, professional mobility **and** the general state of kibbutz economy. Of lesser importance is the finding pertaining to the proportionately large administrative over-head in young UKM kibbutzim. This finding is applicable to the kibbutz scene though it is fairly obvious and is partially related to Freeman & Hannan's study (1975). They argued that, essential supportive functions must exist irrespective of the organisation's size. In this respect, the kibbutz's organisational uniqueness is impertinent.

Some conceptual difficulties arise owing to the lack of either theoretical or empirical studies concerning administrative overhead in the kibbutz. The current model contributed to the introduction of the theoretical subject into the kibbutz organisational arena. It is suggested that several topics will be studied further to gain more insight into this dilemma. In addition, specific investigation of the following theoretical treatises within the kibbutz organisational scene is required:

- * Structural hysteresis, comparative analysis of the supportive component during decline and growth.
- * The impact of crisis on the administrative component in declining as opposed to stable kibbutzim.

CHAPTER NINETEEN**PREDICTING ORGANISATIONAL CRISIS: ORGANISATIONAL
-DEMOGRAPHIC-DEPLETION****GENERAL**

This model seeks to identify distinctive variables for the best classification of kibbutzim and best predictors of their behaviour in the area of Aziva¹. The aim of the model is to predict and examine empirically the characteristics of ODD in 1988 using a variety of organisational, economic and demographic ratios and variables. An attempt is made to generate a reliable ODD model employing economic, organisational and demographic ratios as predictive variables in an MDA model. Altman's (1988) discriminant model is particularly relevant to this study because various ratios are introduced as having predictive power in a multivariate context. More specifically, the aforementioned research objectives raises the following questions:

1. Which lagged ratios are most characteristic when evaluating the demographic depletion of a given kibbutz ?
2. How will the ratios, selected for the analysis, be

¹This MDA model is methodologically elaborated. It is employed also as a theoretical statistical overview for the following MDA models in the thesis.

weighed ?

3. Will laggedness or temporally-denoted variables be ~~more~~ important than cross-sectional ones in characterising ODD in time T (symbolising the organisational crisis in 1988) ?
4. Which year (denoting discriminating ratios and variables) will have an overriding effect, in its aggregated predictive power, on ODD in year T ?

In order for this thesis to exhaust and encompass many facets of organisational-crisis, the need arises to establish a theoretical-discriminate model which will facilitate a coherent estimation of exodus of kibbutz members in accordance with a set of relevant predictors. Theoretically, any set of relevant variables or predictors could be employed to generate thematically-defined categories of kibbutzim. In this case, the ratio, '**Number of leavers divided by the total Number of members & candidates in 1988**' (henceforth, abbreviated to ODD88 - Organisational Demographic Depletion 1988, stands for the grouping variable according to which kibbutzim are ordinally classified into mutually exclusive categories. The Aziva ratio will be used as well. These categories are then further 'fine-tuned' by employing a set of predictors which more accurately discriminate amongst the groups. It is attempted to construct a practical methodology whereby groups of kibbutzim are typified in accordance with variables possessing the theoretical capacity to predict

patterns of Aziva. The method may be applied whenever an accurate classification of kibbutzim is required. The classification is predicated on a maximal number of criteria rather than assorting kibbutzim according to a single criterion or a compounded indicator.

Categorising kibbutzim using a compounded index is mostly economically-oriented. Hence, it reflects a single organisational facet. However, because kibbutzim constitute intricate multi-faceted systems, they should be classified in accordance with at least two major aspects. These include:

- * Demographic depletion
- * Accumulation of debts.

This aim can only be partly fulfilled by using a simple mathematical index owing to problems regarding standardisation. For example, if one wishes to classify kibbutzim according to administrative, economic and demographic indicators, a mathematical combination of the above is either too complex or meaningless. Since standardisation is built into the statistical procedure, the inclusion of any combination of theoretically-sensible predictors is not only feasible but necessary to obtain a maximum correctly-classified groups.

THE STATISTICAL PROCEDURE

The data format is constructed with $N = 89$ kibbutzim \times six years. Therefore, it constitutes a quasi time-series. The model, however, are so coded that the usage of a variable from a specific year is statistically feasible. For instance, Aziva ratio may be retrieved for individual years T-6 to T. The format is useful primarily when a variable from a specific year is required for the estimation of the impact on a variable from a different year.

The objective is to reveal the **dynamics** of the crisis. It is , therefore, essential to weigh the **differential-temporal-prediction-power** of variables determined as theoretically appropriate as grouping variables. For example, provided the variable 'organisational munificence 1985' passes tolerance entrance level and the same variable from year 1986 is removed owing to unsatisfactory tolerance level, it can be inferred that the linear combination is such that 1985 is a better predictor. Hence, it is more useful for discrimination purposes. By using a wide variety of thematically-identical but temporally- different variables, it is possible to determine, contingent upon entry and removal criterion, which variable from which year is better predicting the researched phenomenon².

The statistical procedure (discriminant analysis) is

²Alternatively, these data format would be used in multiple regression analyses where groups are not discriminated but 'explain' the dependent variable by determining how much of the overall variance is accounted for by a given variable from a specific year.

divided into two major parts. The first is a linear combination which best separates groups of observations within the given data-set. A preset variable is determined as the grouping one which then has to aggregate cases (observations) by recoding frequencies into as many groups as technically and or conceptually required. The second stage discriminates the already categorised groups according to a list of variables which best predict group membership. These must be theoretically relevant. Consequently, the researcher has to have theoretical criteria for the inclusion of seemingly, 'explanatory' variables. The entry of variables can be forced or step-wised. In the current model, the underlying theories are not strong enough to accurately designate the list of discriminating variables. Subsequently, the available data provide variables which can be argued to possess adequate discriminatory power. Moreover, this study is exploratory. Therefore, the need arises to display practical discriminating variables. In these circumstances all 'suspected' variables are entered. However, it is postulated that some will be redundant. Hence, their unique contribution to the discrimination of the groups will be insufficient. The redundant variables may be eliminated from the analysis by a stepwise procedure in which the predictor that adds the most discrimination remains.

The selection procedure continues until all contributing variables have been selected and those with insufficient

increment are dropped. The overriding default statistical criteria for entry or removal of variables called 'controls', include a number of optional thresholds. For example, **tolerance**, according which all variables are tested against a pre-set level (0 to 1). The tolerance of variables in the analysis at any step is the proportion of its within-groups variance not accounted for by other variables in the equation.

Accordingly, the minimum tolerance of a variable is the smallest tolerance any variable in the analysis would have if the variable in question was included³. In addition, the order in which variables are considered for either removal or entry into the analysis can be controlled by a step-wise method. In this model, the specification used is the Wilks' lambda where the variable which minimises the overall Wilks' lambda is selected.

A lambda grows towards its maximum value (1.0) it denotes progressively less discrimination, hence, when lambda = 1.0, the groups' centroids earmarking the level of discrimination, are identical or totally overlapping (the groups are not differentiated). As the analysis progresses, more relevant methodological clarifications will be advanced.

THE MODEL

³SPSSx User's Guide P. 698.

1. Grouping

The file containing the data includes 89 cases (kibbutzim). The cases are to be subdivided into a reasonable number of groups by employing the first classification criterion; **ODD88 ratio**. The groups are separated into three mutually-exclusive groups. The first denotes a low ODD88 ratio (0.21 to 4.71) the middle group's ODD88's ranges between 4.76 and 8.9 and in the third the ratio exceeds 8.93. Accordingly, the first group is characterised by the lowest rate of Aziva and the third is a distress group identified by the highest rate.

2. Discriminating Variables⁴

The basic assumptions underlying the selection of discriminating variables are:

- a. The extent of which these variables discriminate
- b. What characteristics (embodied in the variables) are the most powerful discriminators.

Klecka (1980:11) indicated that when a research situation delineates the nominally-created groups as dependent on the discriminating variables, the circumstances are analogous to a multiple regression. The difference is that discriminant analysis treats the grouping ('dependent') variable as measured at the **nominal** (discrete) level. It is

⁴For further general information concerning the variables refer to Appendix '**Variables**'.

not, however, intended to 'explain' the grouping variable. Rather, to characterise and predict the researched phenomenon (ODD88) with discriminating variables possessing an intrinsic conceptual capacity to exclusively determine classification.

The variables selected for this purpose may be subdivided into demographic, organisational and economic elements. The data base was operationalised into year-denoted variables for the sake to simultaneously sort the variables-years possessing the most discriminating power. Consequently, this statistical manipulation enables one to determine variables which are **longitudinally** more significant in terms of secluding the impact of the crisis as reflected by this variables' prediction of the grouping phenomenon, ODD88.

1. Demographic variables: ODD85, ODD86, organisational attractivity 1986.
2. Economic variables: ND/TRNVR88, ND/TRNVR86, Performance 1986, investments 1987, Operational surplus 1987.
Maintenance 1985 (living expenditures)⁵.
3. Organisational variables: Services 1985;1986;1987;1988
Idleness 1985;1986;1987.

Previous attempts were made by running the procedure in an

⁵All economic variables are per member & candidate.

trial and error fashion. These runs precluded a large number of variables owing to removal subject to large lambdas. The underlying rationale for the selection of these variables will be discussed briefly in the following paragraph.

The intention is to find the best discriminating variables for groups defined by ODD88. It is presumed that these are predicated upon certain theories. An inverted significant association between economic measures delineating crisis and demographic variables denoting depletion has already been established. Hence, the worst off economically is the kibbutz, the more likely it is to be demographically depleted. Therefore, the inclusion of T-2, ND/TRNVR seems reasonable both theoretically and in terms of time-laggedness. Organisational performance (internal source) constitutes an indicator of the kibbutz's economic performance and is said to be inversely associated with the rate of Aziva. In this case, it is assumed that it possesses a considerable discriminatory power. Consequently, it can predict the 'allocation' of cases into the recoded groups. Investment is a policy variable which can determine cases into groups. This is due to the general economic situation incurred by heavy borrowing immediately following the investment. This variable accounts for both productive and standard of living-related investments.

Whilst investments in consumption are aimed at raising

standards of living, investments aimed at extending economic activity do not bear immediate fruits. Owing to the precipitous increase in interest rates, most loans became prohibitively expensive. This, in turn, affected demographic stability. Operational surplus is indicative of economic dynamism since it incorporates expansion-related ingredients (total income) and revenues (labour inputs included).

Concerning the demographic variables, ODD86 and organisational attractivity 1986, it is postulated that 1986 is a crucial turning point. This is because most crisis-related indices took a downturn trend as of that year. Absorption and Aziva rates in T-2 and T-1 have been found to be fairly strongly and positively correlated with ODD88. The so-called organisational variables, i.e., services (labour inputs in service sectors) and idleness (days of rest owing to illness, motherhood, sabbath, holidays) are related to ODD88 in a different way. Idleness is fairly significantly correlated with ODD88:

in T-3, $r = -.26$ ($P = .013$)

in T-2, $r = -.22$ ($P = .035$)

in T-1, $r = -.23$ ($P = .027$)

The Pearson correlation coefficients indicate that kibbutzim characterised by a relatively high number of annual days of rest will tend to be less affected by demographic depletion. It is, therefore, postulated that

this organisational measure will have a relatively high discriminating power over categories delineated by ODD88. The variable 'services' is, largely, associated with the level of organisational differentiation in the kibbutz. As such, it may either affect or be linearly linked with organisational phenomena implying size. Because organisational demographic depletion is less characteristic of large and established kibbutzim, it can be deduced that services could have a plausible discriminating power and will be useful in classifying groups initially categorised by ODD88.

Kibbutz age (year of foundation) is associated with a large number of phenomena. This organisational variable is traditionally used for 'crude' classification of kibbutzim. The UKM Annual Demographic Release's sole categorisation tool is kibbutz age. Statistical theories concerning discriminant analysis make no mention of the potential effect of time-laggedness (associated with discriminating variables) over the grouped phenomenon. However, it is hypothesised that discriminating variables featuring past occurrences will more intelligibly reflect a potential separation amongst categories. Time laggedness is important here since quantitative delineation of categories is sought. Moreover, the initial grouping is a result of recoding a typical crisis index in T while the discriminating variables symbolise phenomenon that took effect during the crisis' climax.

This procedure was completed at 11:05:35
 recode propoz6 (0.21 thru 4.71=1) (4.76 thru 8.9=2) (8.93 thru hi=3).
 dscriminant /groups=propoz6(1,3) /var propoz4 maint3 dbtrn4 int4
 89 cases are written to the uncompressed active file.
 dbtrn6 odef5 totinv5 propoz3 propabs4 sapt3 sapt4 sapt5 srvc3 srvc4
 srvc5 srvc6 fnd6 /met wilks /sta 1 13 15 10.

TABLE
43

----- DISCRIMINANT ANALYSIS -----

On groups defined by PROPOZ6

89 (unweighted) cases were processed.
 0 of these were excluded from the analysis.
 89 (unweighted) cases will be used in the analysis.

Number of Cases by Group

PROPOZ6	Number of Cases		Label
	Unweighted	Weighted	
1	35	35.0	
2	27	27.0	
3	27	27.0	
Total	89	89.0	

Group means:

PROPOZ6	PROPOZ4	MAINT3	DBTRN4	INT4
1	4.71943	3.93629	.77381	1.13943
2	5.75519	3.22444	1.27494	-.61741
3	10.88111	6.75407	1.37005	-.05296
Total	6.90292	4.57517	1.10672	.24472

PROPOZ6	DBTRN6	ODEF5	TOTINV5	PROPOZ3
1	.93661	1.92057	10.29143	4.80914
2	1.29813	1.74222	10.33704	3.73074
3	1.52223	1.68333	13.78519	7.87963

THE FINDINGS**1. Group Means**

89 cases are separated by the recoded ODD88 into three groups:

Group 1; 35, Group 2; 27, Group 3; 27 cases.

The summary table displays eleven variables entered by the stepwise procedure (six economic, two demographic and four organisational). As an initial explanatory measure, a close look at the group means reveals the following picture:

Preliminary categorisation is into three groups scaled by the gravity of demographic depletion. Consequently, the means associated with the ND/TRNVR (T-2 and T) variables show that the groups are set in accordance with the level of debt/turnover per member. Hence, high scores of the ratio fit into the third group which is most gravely affected by Aziva. Intuitively, a positive statistical association between the two most indicative measures of crisis is manifested. Concerning living expenditures (maintenance), group three denotes the highest scores i.e. the most distressed groups in terms of Aziva are characterised by the highest allocation of means for living standards.

Performance means show that the groups most severely hit by Aziva are the poorest economic performers. The worst-off

group, Aziva-wise is characterised by the highest investment per members & candidates implying the inverse economic impact of heavy borrowing.

Operational surplus is a gross economic measure indicating that the worst-off the group is Aziva-wise, the more it is characterised by a negative economic dynamics.

The organisational variables display a general trend (idleness-wise) where the worst-off the group is Aziva-wise the more it is characterised by a high number of days-off specifically in T-1.

Services. In T-1 the trend implies a stronger services sector as the group tends to be characterised by more Aziva (T-1). However, contrary to T-1, services in T gradually decrease as the group is more severely affected by Aziva.

Organisational age means shows that the relatively young kibbutzim are classified as suffering from the highest rates of Aziva (mean = 1948). The least affected by Aziva are the oldest kibbutzim established around 1939. The preliminary of the means as a discrimination device should be noted. Any explanation here will be valid only if the variable concerned will satisfy the tolerance level for inclusion in the advanced stages of the analysis.

2. Summary Table

The summary table includes the following features:

* Inclusion order

- * Lambdas
- * significance levels.

Noteworthy is the relative contribution of each variable to the overall discrimination. Consequently, if a variable contributes more to the total discrimination it will have an entry precedence. For example, the residual discrimination in lambda terms between the first to enter (ODD86) and the second entry (maintenance in T-3) is 0.06589 whilst the difference between the one before last (services in T) and the last (ODD85) is only 0.01289.

The discrimination residuals are given in a descending order. It is meaningless to derive any more functions although this is mathematically feasible. However, conceptually, discriminating power decreases. Hence, prediction power tapers off to the extent that the entry of more discriminating variables will have a diminishing output effect or: "...the remaining information about group differences may not be worth pursuing" Klecka (1980:39).

No overriding logic exists with regards to the contextual classification of the variables' entry order. It should be noted, however, that explicitly, Aziva is an organisational phenomenon which is contingent on an equally-concurrent delineating power of thematically **different** factors.

3. Canonical Discriminant Functions

These functions are a linear combination of the discriminant variables with the following mathematical form (Klecka *ibid*):

$$f_{km} = u_0 + u_1X_{1km} + u_2X_{2km} + \dots + u_pX_{pkm}$$

Where f_{km} = the value of the canonical discriminant function for case m in group k ;

X_{ikm} = the value on discriminating variable X_i for the case m in group k ;

u_i = coefficients which produce the desired characteristics in the function.

The coefficients (u 's) for the first function are so derived that they discriminate between the means in the function as much as possible. Likewise, the coefficients in the second function are aimed at deriving maximum differences between group means under the condition that no correlation will ensue between the values on function 1 and those on function 2.

The canonical discriminant functions indicate that 76.46 percent of the variance in the model is accounted for by the first function with the remaining 'explained' by the second. Indeed, the first function's Chi Square⁶ is considerably higher (75.081) hence more significant ($P = .0000$) than the second ($P = .0222$). The significance level

⁶In fact, these are lambdas' significance converted into an approximation of the chi-square distribution.

Symbols used in territorial map

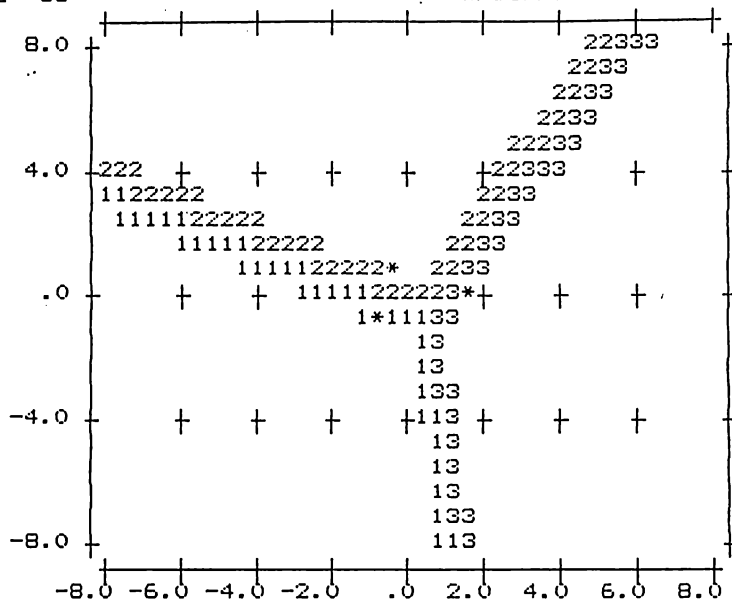
Symbol	Group	Label
1	1	
2	2	
3	3	
*		Group Centroids

FIGURE 16

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SPSS/PC+

8/26/91



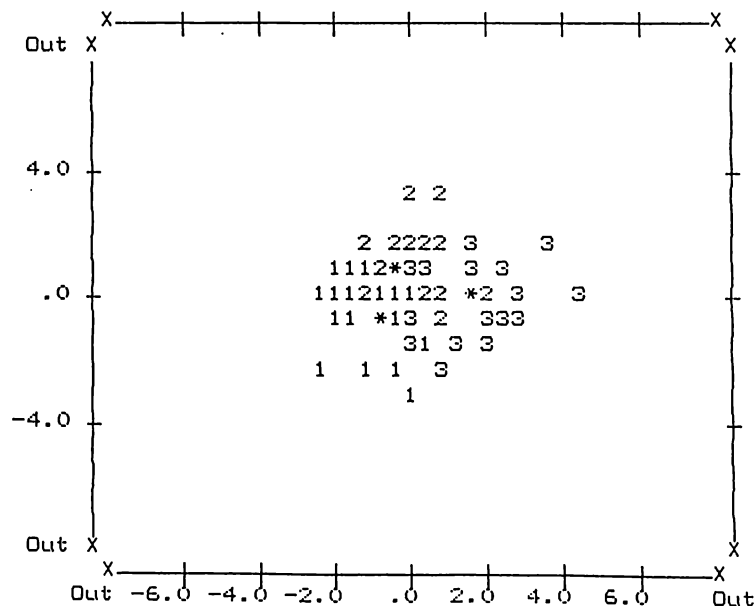
Territorial Map

* indicates a group centroid

Across: Function 1
Down: Function 2

Symbols used in Plots

Symbol	Group	Label
1	1	
2	2	
3	3	
*		Group Centroids



All-groups Scatterplot

* indicates a group centroid

Across: Function 1
Down: Function 2

of .0000 indicates a large chi-square this size only one out of 10000 samples when there were virtually no differences between the centroids. This improbable event puts the current models on the safe side in presuming that the model's results were derived from a well differentiated population of kibbutzim as evidenced by the discriminated groups.

The computer proceeds with the derivation of additional functions until such time where all residual discrimination have been exhausted. In this case, an additional function was derived indicating further information pertaining to group differences ($\text{Sig}_{2\text{nd func.}} = .0222$). Practically, this means that an additional dimension is essential. This dimension will confidently add more difference amongst the three groups. Computing the function's coefficients is essential whenever cases are discussed **within** the discriminated groups. However, this is not the case here since this model has a macro approach. This precludes any micro discussion as the objective is to characterise groups in accordance with a crisis index rather than epitomise single cases for an in-depth singular analysis.

The Spatial Interpretation of the Graphic Display

In order to gain a better understanding of the discrimination procedure, the discriminating variables are projected as axes defining a p-dimensional space. Each

kibbutz (data case) is represented by a point defined by coordinates which are each kibbutz's value on each of the discriminating variables. Since the three groups delineated by the recoded ODD88, differ in their behaviour with respect to the discriminating variables, each group may be viewed as a cluster of points concentrated in a certain part of the display. Since no group is discretely isolated, a degree of overlapping exists though there is a clear distinction amongst the respective territories.

To depict both the distinct territories and the dispersion of kibbutzim within their respective groups, two plots are provided. A scatterplot and a territorial map. The centroids, are an imaginary mid-points whose coordinates are the groups' means on each of the variables entered into the analysis. The centroid provides a the typical positioning of each of three groups. Hence, additional and essential understanding regarding the territorial differences. The graphic display provides a compact multivariate picture. The net 'impact' of all variables is graphically synthesised onto an Euclidean plane. The axes are located or crossed at the origin, the point at which each axis equals zero or the point where the total set of data cases has its mean on each of the axes.

If more than two groups are included they are so located that they furnish maximum separation amongst the groups contingent on the constraint that they will be

perpendicularly positioned relative to the first axis within the imaginary space. The canonical discriminant functions are evaluated at group means to provide the asterics-denoted groups' centroid determining the distinct positioning of each group on both the territorial map and the all-groups scatterplot. The territorial map outlines the general territory of each group and it can be superimposed onto the scatterplot to identify misclassified cases. It also provides an outline of the distinct territory occupied by each group. An examination of the scatterplot reveals that the groups are fairly distinctive. The centroids are well separated although there is a degree of overlapping of cases primarily between the first (1's) and the second (2's) groups. Outliers characterise mainly the third (central right-hand side of the scatterplot) and the first groups (lower left-hand quadrant). Generally, however, there are a few outliers and the groups are fairly well distinct of each other. It can be concluded that the discriminating variables have 'done the job' by producing three distinct groups along the lines of the ODD88.

Standardised Coefficients

Standardised coefficients make it possible to assess the relative contribution of each variable to determining scores on both functions. The larger the magnitude, the greater is the variable's contribution irrespective of the

sign. Standardisation is required since there is no need in the **absolute** contribution of each variable to determine the discriminant score but the **relative** one⁷. The list reports the following information:

for function 1, in a descending order: ND/TRNV86, performance 1984, operational surplus 1987, and ODD86 make the greatest contribution.

for function 2, in a descending order: ND/TRNV86, ND/TRNV88, performance 1986.

Structure Coefficients

These coefficients define the similarity between the discriminant function and the individual variable. The range of magnitude of the coefficients is + 1.0 to - 1.0. If the coefficient nears either of the two scores it possesses about the same information as the entire function. When, however, the variable nears zero, there is little in common with the function. Klecka (Ibid, 31) argued that it is possible to name the function on the

⁷As the raw data are not converted into a standard form, the unstandardised coefficients are standardized using the following transformation (Klecka, P.29):

$$c_i = \frac{\sqrt{w_{ii}}}{n - g}$$

where

w_{ii} = the sum of squares for variable i

n = total No. of cases

g = No. of groups

Classification Results -

TABLE 43

Actual Group	No. of Cases	Predicted Group Membership		
		1	2	3
Group 1	35	29 82.9%	5 14.3%	1 2.9%
Group 2	27	6 22.2%	17 63.0%	4 14.8%
Group 3	27	4 14.8%	3 11.1%	20 74.1%

Percent of "grouped" cases correctly classified: 74.16%

Classification Processing Summary

89 Cases were processed.
 0 Cases were excluded for missing or out-of-range group codes.
 0 Cases had at least one missing discriminating variable.
 89 Cases were used for printed output.

basis of the variables carrying the highest coefficients. The name should reflect the phenomenon represented by the 'leading' variables. In the current model, function one is identified as: **'Social and Organisational-Oriented Crisis Determinants'** after the variables ODD86, organisational attractiveness 1986, living expenditures 1985 and the kibbutz's age. Function two is labelled: **'Crisis Outgrowths'** symbolising ND/TRNVR86 and ODD85.

Classification

Of the two purposes of discriminant analysis, i.e. interpretation and classification, the second is a procedure by which either the canonical discriminant functions or the discriminating variables are employed to predict the group to which a case it is most likely to belong. In this case, the first option is used. However, it is required to find the proportion of cases correctly classified into the artificially-recoded categories that indicate the accuracy of the procedure and reaffirms the degree of category separation. The classification results indicate a relatively high degree of separation amongst the groups. The first group, the least affected by Aziva with nearly 83 percent of the cases, is the most correctly classified, trailed by the third 74.1 and the second 63 percent respectively. The overall percent of grouped cases accurately classified is 74.16. Hence, 66 cases. This measure is the most important intuitive gauge of

discrimination. Since three groups are identified, the prior probability of each group is programmed to be .33333 (or the expected percentage of correct classification) provided that the assignment of cases to groups was random. For instance, 74.16 of the kibbutzim are classified into the third group. The magnitude of this percentage relative to the expected percentage of correct classifications should be analysed. Calculating the statistic Tau⁸, the result is .622 which means that the classification predicated upon the discriminating variables made 62 percent fewer errors than would be expected by random assignment. This measure is, in fact, the amount of gained 'profit' derived from correct classification. Profit amounts for the first group; .756 and the second group .45.

It can be concluded that Tau's above the expected (.33) are a noticeable improvement since it is expected that only 33 percent of the cases are correct by chance. The overall

8

$$\text{TAU} = \frac{N_c - \sum_{i=1}^g p_i n_i}{N - \sum_{i=1}^g p_i n_i}$$

where N_c = No. of cases correctly classified
 p_i = prior probability of group membership

Simply put:

$$\frac{\% \text{ classified} - \text{expected \% of correctly classified cases}}{100 - \text{expected}}$$

percentage of grouped cases correctly classified: 74.16 percent or 66 kibbutzim.

DISCUSSION

As previously indicated, the aim of most discriminant analyses is twofold. A classification of cases into well-defined categories by deriving discriminant functions which synthesise group attributes. This is done to identify the category into which a case will most likely fit (a thematical resemblance). The second purpose is to study the ways in which categories vary or the ability to discriminate amongst (or between) groups on the basis of presupposed attributes. Some of these attributes will, eventually, surface as the most powerful discriminators. The two purposes coincide and the researcher is engaged in both research directions since the procedure itself requires that the two purposes will be addressed.

The current research objective has been to characterise the most robust discriminators which are referred to as 'kibbutz crisis attributes'. The research approach advocates the usage of discriminating properties (variables) which denote more than one point in time. Therefore, discriminatory variables have been so operationalised as to reflect the effect of time-laggedness. It has been established that various crisis attributes (economic, organisational and social-

demographic) in T-3 to T possess a considerable discrimination power. Obviously, the statistical procedure makes no such distinction unless, indeed, variables denoted as representing past years are more characteristic or carry more discrimination power. The results indicate that the variables possessing more discrimination power, are indeed those from T-3, T-2 and T-1.

The relative importance of the discriminating variables may be evaluated in a number of ways. The standardised canonical discriminant function coefficients provides a solid evidence to that effect. **The relative weight of each variable is not assessed**, as it is the case with multiple regressions. Rather, their **relative discrimination power** is evaluated.

The standardised canonical discriminant coefficients on function 1 are all ,temporally, from T-2 and T-1. For example, ND/TRNVR86 has the highest score, indicating the mutuality between the level of debt and the rate of demographic depletion. The same applies to performance 1986, operational surplus 1987 and ODD86. It is therefore evident that these economic indicators along with demographic depletion in T-2, are essential moulders of groups which have been initially determined by a crucial crisis indicator.

In the second function, debt levels (ND/TRNVR86 & 88) are the most significant delineators of the second dimension.

The discriminating ratios used in this model, prove, to be reasonable predictors and explanators of crisis indices. These scores constitute another indication of the **temporal** properties of the crisis which was particularly forceful towards the end of 1985. Indeed, most economic and demographic trends are characterised by a sharp turn (a 'knee') in the curves which graphically demonstrate the process. It should be borne in mind that this model is highly theoretical and it figuratively illustrates a phenomenon which could also be **explained** using a different statistical method.

Analogous to factor-analysis (the structure matrix), if the coefficients denoting the association between the functions and the discriminating variables contain most of the information, the entire function may be labelled after the phenomenon they concurrently represent.

The two dimensions constructing the classified groups:

*** Socially-Oriented Crisis Determinants.**

It exhausts three conspicuous kibbutz (social) characteristics. Aziva (ODD) and absorption (organisational attractivity) are both closely interrelated, illustrating the vicious circle⁹ which the two processes simultaneously

⁹These relationships are extensively dwelled upon in the chapters dealing with the relevant multiple regression models and can be referred to for further understanding of the underlying theories. Chapter 'Crisis' being an essential content-analysis is also pertinent with the

generate.

Living expenditures in 1985 have a common impact with absorption and Aziva in 1986 because a downturn is detected in this measure beginning in 1986¹⁰.

It is likely that decreased allocations for maintenance in T caused accelerated rates of Aziva in T+1 and, in turn, expedited absorption. The common impact of the three variables had later profiled distress groups delineated by ODD88. The second dimension labelled '**crisis outgrowths**', consists of the two most prominent crisis indicators, ODD85, ND/TRNVR86 and organisational age. The two measures indicate a bend in the curve since the annual rate of change in the aggregated UKM net-debt between 1986 and 1987 (19 percent), exceeds rates between other years on the sequence 1983 - 1988.

The same applies to Aziva where the annual rate of change between 1985 and 1986 was 40 percent, marking the steepest annual increase on the same temporal sequence. The variable 'idleness 1986' is almost equally essential at least concerning the mathematical adjustment to function number two. It is argued that the level of idleness in a given kibbutz is, largely a function of two variables, size and age. Older kibbutzim will, necessarily demonstrate a higher

topic discussed here.

¹⁰365 million NIS in 1984, 375 million in 1985 dropped to 360 in 1986 and 324 in 1988 (aggregated UKM figures, N = 170) NIS value adjusted to 31 December 1988).

rate of unworked days owing to greater demographic differentiation. (more elderly people and young mothers). The relative proximity of the first two variables and 'idleness' could be a mere mathematical chance. However, it seems reasonable that Aziva in 1985 and the ratio debt/turnover in T-2 and the idleness ratio in T-2 are interrelated in their capacity to discriminate amongst kibbutz categories. This is because of intrinsic and inexplicable properties. For example, a more rigorous registration of days' work as a result of the crisis, increased Aziva amongst younger age groups resulted in a larger proportion of elderly members who work less. Hence, the number of days' work regarded as 'idleness' increase.

Appendix: Long Range Predictive Accuracy

The previous model, featuring ND/TRNVR as the 'dependent' variable in the MDA, suits some of Altman's (1988) thematical contexts. The main difference is that the current model addresses organisational decline and Altman's predicts business failure. It appears appropriate, however to attempt a similar model in which ODD in T will be predicted. The discriminating or predicting variables appear in the main model but in the current one, **each year denotes the same ratios and variables to identify the year possessing the most powerful predictive power.** The ratios in the model are:

* Living expenditures

- * ND/TRNVR
- * Organisational munificence
- * Operational surplus
- * Investments
- * Organisational attractivity,
- * Idleness
- * Services.

The variables are: organisational age and members & candidates.

Table No. 44

SIX YEAR PREDICTIVE ACCURACY OF THE MDA MODEL

(N = 89, FOR ALL YEARS)

YEAR PRIOR TO CRISIS	HITS	MISSES	PERCENT GROUP CASES CORRECTLY CLASSIFIED
----------------------------	------	--------	--

T-5	47	42	52.8
T-4	49	40	55
T-3	48	41	46
T-2	52	37	58.4
T-1	57	32	64
T	43	46	48

An important finding is the inconsistency in predicting ODD in 1988. It is noticeable that 1986's and 1987's ratios respectively are the best predictors of Aziva in 1988. The relatively high aggregated impact of 1986 and 1987 can be attributed to the concurrence of the so-called 'knee' in all crisis-related curves. Interesting is the low forecasting capacity of the discriminating variables constructing 1985. A plausible explanation is that 1985 marks the 'Shock' phase (Fink, Beak & Taddeo, 1972). Hence, the cumulative effect of crisis predictors did not suffice to accurately characterise or predict the exodus of members and candidates in 1988. In order to evaluate the same predictive power that characterises the relative magnitude of the third group (< 9 average of leavers per kibbutz in 1988) i.e. the most distressed in terms of ODD, the following table is added;

Table No. 45

**SIX YEAR PREDICTIVE ACCURACY OF THE MDA MODEL
(GROUP '3' - 8.93 LEAVERS THROUGH HIGH)
(N = 27, FOR ALL YEARS)**

YEAR PRIOR	HITS	MISSES	% GROUP
TO			CASES
CRISIS			CORRECTLY CLASSIFIED

T-5	13	14	48
-----	----	----	----

T-4	15	12	56
T-3	17	10	63
T-2	18	9	66.7
T-1	16	11	59
T	15	12	55.

The pattern is different when Aziva is predicted for the most distressed group rather than the entire population of cases. With the exception of 1983 all discriminant models are statistically reliable. The predictive power of Aziva in T is noticeable particularly in 1986 and 1987. Both years are crucial on the crisis sequence in term of their overall impact on ODD in T. **It can be concluded that a group of kibbutzim classified as ranking highest in crisis-related demographic haemorrhage, the 'proximity' to the shock phase (1985) is greater than for the entire population of kibbutzim.**

The group's size (N = 29) is indicative of the magnitude of these results.

CHAPTER TWENTY**PREDICTING ORGANISATIONAL CRISIS: MULTIPLE****DISCRIMINANT MODEL No. 2****General**

The model seeks to sort a set of variables to graphically classify kibbutz groupings according to the level of financial distress. It also seeks to predict kibbutz functioning in light of the financial difficulties. The issue has been previously dealt with by employing a different methodological approach (pooled regression analysis) which seeks to observe **causality** in terms of; 'who caused the crisis, how and why?'. Unlike multiple regression procedures, multiple discriminant analysis is a technique employed to predict in circumstances where the dependent (grouping) variable is dichotomous.

In this model, the 'dependent' variable is exemplified by the simple transformation of ND/TRNVR into three mutually-exclusive and ordinally-ranked 'distress groups'. The proposed model resembles Altman's (1988) in its usage of ratios for prediction purposes. However, Altman used purely economic/financial ratios as predictors of corporate bankruptcy. This model seeks to identify the best predictors of crisis in 1988 by using demographic, organisational, financial and economic predictors. The MDA models also seeks to interpret initial categorisation by clarifying the order in which the discriminating variables are set in different components of the analysis. It also

appraises their relative magnitude as contributors to the total discrimination.

The classifying axis is an essential and sensitive crisis ratio; 'Net-debt/turnover/total number of members and candidates in 1988' henceforth: 'ND/TRNVR'. The ratio, thus, is comprised of two essential elements: **organisational size** as exemplified by the kibbutz's turnover and the level of **financial liability; net-debt**¹. For purposes of proportional comparison amongst observations, this ratio is divided by the total number of members and candidates in the corresponding year.

THE STATISTICAL PROCEDURE

MDA is used. Discriminating variables are used to indicate specific years on the crisis sequence - 1983 to 1988. The rationale for this usage of a quasi-longitudinal design is the need to reflect on the dynamics of the crisis, although this can be only partially accomplished by specifying discriminating variables indicating time-laggedness.

The underlying assumption is that variables from past years (T-3 to T-1) have, a relatively higher prediction power, hence, discriminating potential. Discriminating variables will be entered through a step-wise procedure. Wilks'

¹Further explanations regarding this measure may be referred to Appendix '**Variables**', as well as to the multiple regression model where this measure is used as a dependent variable.

TABLE 46

recode dbtrn6 (0.19 thru 0.69=1) (0.7 thru 1.45=2) (1.48 thru hi=3).
 dscriminant /groups=dbtrn6(1,3) /var propoz3 propoz4 propoz5 fnd6
 89 cases are written to the uncompressed active file.
 int5 int4 int6 maint5 maint3 totinv4 totinv6 mem4 mem5 finass5 cdef6
 agr5 agr4 agr3 prod5 prod6 /met wilks /opt 4 /sta 14 13 15 10

----- DISCRIMINANT ANALYSIS -----

On groups defined by DBTRN6

89 (unweighted) cases were processed.
 7 of these were excluded from the analysis.
 7 had missing or out-of-range group codes.
 82 (unweighted) cases will be used in the analysis.

Number of Cases by Group

DBTRN6	Number of Cases		Label
	Unweighted	Weighted	
1	26	26.0	
2	28	28.0	
3	28	28.0	
Total	82	82.0	

Pooled Within-Groups Correlation Matrix

	PROPOZ3	PROPOZ4	PROPOZ5	FND6	INT5	INT4	INT6
PROPOZ3	1.00000						
PROPOZ4	.32583	1.00000					
PROPOZ5	.55255	.40431	1.00000				
FND6	.05947	.09214	.15310	1.00000			
INT5	.00860	-.17884	-.13158	-.04543	1.00000		
INT4	-.08788	-.18492	-.00957	.09282	.39913	1.00000	
INT6	-.07285	.05408	.11384	-.06728	.54614	.47873	1.00000
MAINT5	.06264	.12917	.04899	.26030	.10341	.21155	.02010
MAINT3	.17807	.25034	.39973	.04587	.03008	-.03310	-.03942
TOTINV4	.10528	.06864	-.01051	-.00033	.27420	.17741	.21398

lambda is the specification for entry or removal of discriminating variables.

THE MODEL

1. Grouping

The initial classification criterion is the ratio ND/TRNVR88 recoded into three distinct and mutually exclusive groups. The conventional threshold separating between economically successful and unstable kibbutzim is net-debt/turnover ratio = 1.0 (kibbutz < 1 = successful; kibbutz > 1 = unstable).

However, the grouping ratio is a compounded proportion where relativity is obtained also by dividing the debt by turnover and by the total number of members. Despite this relatively complex ratio, the higher the proportion, the more unstable is the kibbutz. Consequently, the three expected groups are classified in an ascending order where the first is the soundest and the third is the worst off. The ND/TRNVR ranges for the three groups are determined as follows:

Group 1 = .19 to .69

Group 2 = .7 to 1.45

Group 3 = 1.48 through high.

2. Discriminating Variables

The postulated research question is; which variables will best discriminate amongst kibbutz categories initially subdivided by ND/TRNVR in 1988. In other words, which variables will best predict the level of kibbutz financial liability. The discriminating variables may be classified into three major groups:

1. **Organisational;** organisational age, organisational size (total No. of members & candidates) productiveness in 1987 and 1988, agriculture 1985/86/87.
2. **Social-demographic;** ODD in 1985/86/87, living expenditures in 1985/1987.
- 3 **Economic;** performance in 1985/86/87, organisational slack in 1987, operational surplus in 1988, investments 1986 and 1988.

The reasons for the selection of the above variables are:

1. **Organisational variables;** both organisational size and age are strongly correlated with most other organisational variables. Results in other models indicate that kibbutz size is inversely related to debt and positively associated with turnover. In regards to age, most large kibbutzim are relatively old. Hence, the direction of statistical association is largely similar. It is assumed that productiveness² is related to the kibbutz debt in an indirect fashion probably through an intervening variable;

²This compounded ratio is the arithmetic addition of days' work in agriculture, manufacturing industries and external jobs.

age.

Young kibbutzim are more 'productive' in the sense that their population is characterised by fewer elderly members. Therefore it requires less services and most able-bodied are engaged in so-called productive occupations. Agriculture is associated with the less industrial kibbutzim. These kibbutzim are only modestly established, generate fewer revenues but accumulate fewer debts (small-scale investments).

2. Economic Variables; performance and organisational slack (kibbutz's financial assets) are said to be inversely associated with debt. Operational surplus is only partially a measure of success reflecting mainly economic dynamism. It could be associated with debt in either direction. Investments in T-2 and T are major 'explanators' of massive debts.

3. Social-Demographic Variables; ODD in T-3, T-2, T-1 are known to have negatively affected the level of debt. Standard of living is a measure, (associated with consumption patterns) which may have a reasonable effect on kibbutzim grouped by ND/TRNVR primarily owing to the size component of this ratio (economies of scale).

THE FINDINGS

1. Group Means

89 kibbutzim are grouped by the recoded ratio ND/TRNVR88 into three categories:

Group 1; 26 cases

Group 2; 28 cases

Group 3; 28 cases

Group means are an essential analytical tool owing to the initial classification of observations in accordance with their means. This provides a visual insight into the preliminary classification since it reveals the basic logic behind the separation process.

The list provides all variables' means irrespective of whether the variables are or are not entered into the analysis. Nevertheless, only variables which passed the entry criteria and appear on the final summary table will be addressed. Twelve variables are included in the analysis.

Economic Variables

The variables embodying performance in T-3, T-2 and T-1 demonstrate a precise categorisation of the groups that fit the classification by debt. The groups recording the worst performance, rank third and those depicting best performance rank first. Investments; in T and T-2 the group ranked third has the highest mean of 14350 NIS per member and the groups ranked second have the lowest investment per

member. Organisational slack is ranked in an irregular way where kibbutzim with the least amount of financial assets are ranked second and not, as expected, third. Operational surplus averages in 1988 are assorted in a descending order. The groups least impacted by debts have highest surpluses whilst the group ranked third have the lowest per-capita surplus.

Organisational Variables

Averages for organisational size in T-2 and T-1 (members & candidates) indicate that smaller kibbutzim are assigned to the third group, thus, the most affected by debts. This validates the liability of newness. It is apparent that both in 1985 and 1986, kibbutzim characterised by the highest percentage of members occupied in agriculture are also those classified as impacted by the heaviest per-capita debts. However, the compounded variable, 'productiveness' in T-1 denotes lowest averages of productivity in the group ranked second in terms of its ND/TRNVR88 and **highest** in the group worst affected by debts. This finding attests to the non-linkage between high productiveness and kibbutz's economic situation. In 1988, the least 'productive' group is the second, in terms of its debts.

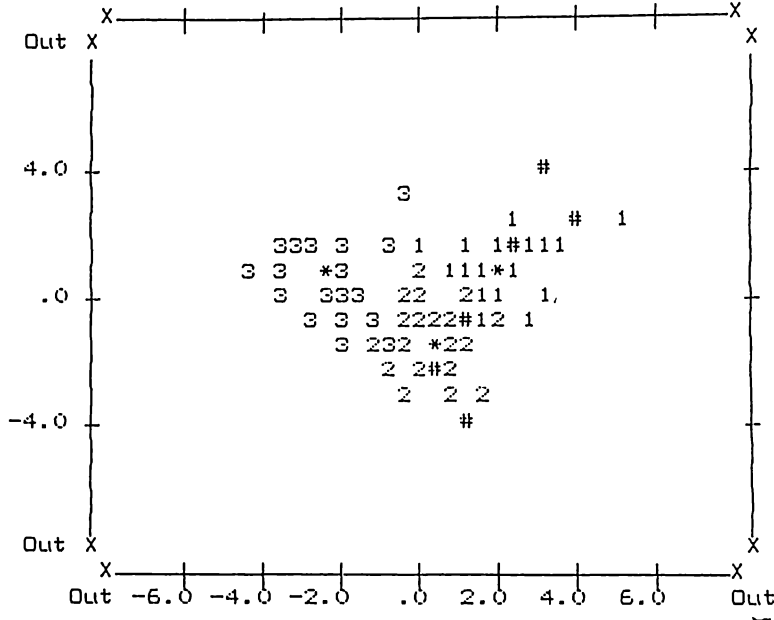
The variables which are highly divergent in terms of their grouped means are more likely to become good predictors and

Symbols used in Plots

Symbol	Group	Label
1	1	
2	2	
3	3	
#		All Ungrouped Cases
*		Group Centroids

FIGURE
17

9/18/91



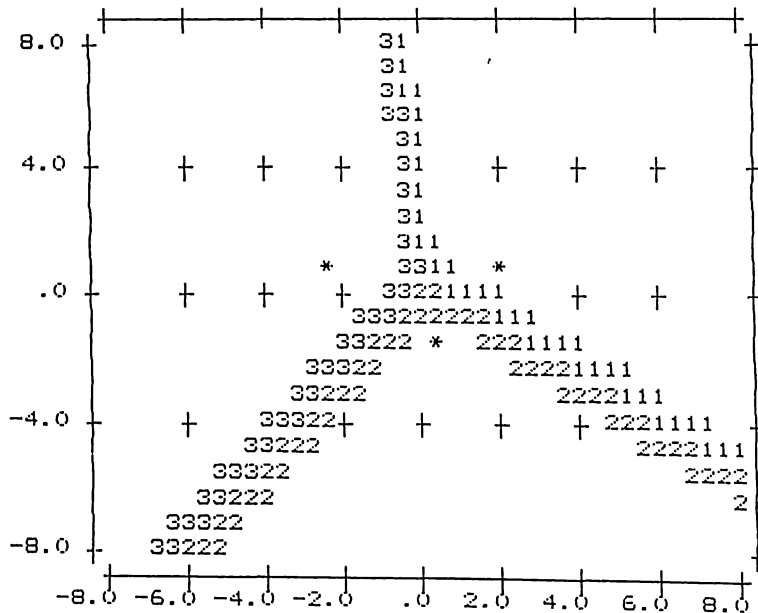
All-groups Scatterplot

* indicates a group centroid

Across: Function 1
Down: Function 2

Symbols used in territorial map

Symbol	Group	Label
1	1	
2	2	
3	3	
*		Group Centroids



Territorial Map

* indicates a group centroid

Across: Function 1
Down: Function 2

possess more discrimination power.

2. Summary Table

The summary table includes the sixteen variables included in the analysis by virtue of their effective residual discrimination as given in Wilk's lambda terms. The variable possessing the most prediction power is performance in T-1 and the least powerful in discrimination, is productiveness in T.

3. Canonical Discriminant Functions

The two functions' results indicate that 75.41 percent of the model's variance is accounted for by the first function and the remaining 24.59 percent by the second. The Chisquares are highly significant indicating that the model's results were derived from a **markedly different** groups of kibbutzim as confirmed by the well classified groups.

4. Spatial Interpretation of the Graphical Display

The scatterplot reflects an excellent separation amongst the three groups. The groups are very distinct in their relative situation with almost no intrusion of cases from one territory to another. The centroids, delineating the separation, are well apart from each other. Superimposition

of the territorial map onto the scatterplot reveals very few outlying cases. Several cases from group 1 stick out on the upper right hand quadrant where most of the ungrouped cases are located. The third group has a few outliers, most conspicuously in the upper left-hand quadrant. Clearly, group 2 is the most compact as evidenced not only by the spatial closeness but by an exceptionally highly-predicted group membership of nearly 93 percent of the cases.

The distinctness of the projected categories demonstrates the concise graphical synthesis. It also illustrates relatively large number of discriminating variables, superbly predicting group membership. Hence, a most useful classification tool. Despite the convincing results, 7.8 percent of the kibbutzim are ungrouped implying that they possess a distinctly large number of unaccounted for properties which disqualify them for this classification.

Standardised Canonical Discriminant Function Coefficients

The relative contribution of each variable to determining scores on the two derived functions and consequently to the two dimensional scatterplot is as follows:

For function 1; (in a descending order) organisational size in T-1, organisational size in T-2, employed in agriculture in T-3, performance in T-1, employed in agriculture in T-5

Classification Results -

TABLE 47

Actual Group		No. of Cases	Predicted Group Membership		
			1	2	3
Group	1	26	25 96.2%	1 3.8%	0 .0%
Group	2	28	2 7.1%	26 92.9%	0 .0%
Group	3	28	1 3.6%	2 7.1%	25 89.3%
Ungrouped Cases		7	4 57.1%	3 42.9%	0 .0%

Percent of "grouped" cases correctly classified: 92.68%

Classification Processing Summary

89 Cases were processed.

0 Cases were excluded for missing or out-of-range group codes.

0 Cases had at least one missing discriminating variable.

89 Cases were used for printed output.

and productiveness in T-1.

For function 2; (in a descending order) organisational size in T-2, organisational size in T-1, employed in agriculture in T-1, employed in agriculture in T-2, living expenditures in T-1.

Structure Coefficients

The structure matrix contains correlation coefficients which determine the similarity between individual variables and the discriminant function. The coefficients' magnitude ranges between + 1.0 and - 1.0. The functions are named according to the variables with the highest coefficients in each function. The name mirrors an aggregated phenomenon derived by the combined highest scored variables. Accordingly, function 1 is labelled: "**Human and Economic Performance Crisis Determinants**" after variables: performance in T-3, T-2, T-1 and organisational size in T-2 and T-1. The second function is titled: "**Living Standards, Slack and Risk-Taking**" after the variables: Maintenance in T-1 and T-3, organisational slack in T-1 and investments in T.

Classification

Classification results indicate a high degree of separation amongst the three groups. Group 1, the least affected by

debts. Debt is proportionately small in the overall economic activity, contains in excess of 92 percent of the cases. The second group though, is the most correctly classified with 93 of the cases. The overall percent of grouped kibbutzim correctly classified is 92.68 percent or 82 kibbutzim. Prior probability of each group is 0.3333, judging the relative magnitude of groups' percentages in the classification results' table, (using the Tau statistic):

Group 1 = .8969

Group 2 = .9075

Group 3 = .8530

The results indicate that the classification predicated upon the discriminating variables made 90, 90.75 and 85.3 percent respectively fewer errors than would be expected by random assignment. All the Taus' are far above the expected (.3333) indicating a consequential improvement since it is preliminarily expected only 33 percent of the kibbutzim to be correctly classified by chance.

DISCUSSION

The main objective of this analysis has been to interpret classification of kibbutz categories in accordance with their level of bad debts. Hence, what are the underlying reasons for the discriminating variables to possess a

stronger discrimination power. As preliminary steps, two statistical procedures have been applied. The first, reformatting a longitudinal dataset into an ordinary one where variables are year-denoted. The purpose of using this procedure is to identify the best way in which variables at times T-3 to T will be so isolated that their individual-temporal classifying effect will be made available for assessment.

The second step involved numerous runs of the programme in a step-wise mode to screen the variables possessing most discrimination power. The results indicate that the ND/TRNVR88 ratio is best characterised by the following major variables-related attributes:

1. Twelve out of sixteen discriminating variables are lagged. Therefore, they are not from different points in time as the grouping variable. Subsequently, only four are cross-sectional in the sense that they contribute to the total model's discrimination by representing phenomena which are longitudinally concurrent with the grouping variable.
2. Thematically, the discriminating variables in the analysis are categorised into three main groups: economic, organisational and demographic. Of the sixteen variables in the analysis, seven are defined as economic, two as demographic and the remaining are organisational reflecting labour differentiation in the kibbutz.

3. Five discriminating variables (performance, investments organisational size, living expenditures and agriculture) denote 1985 and 1986. They attest to the considerable delineation impact these years had on a major crisis indicator. The relative importance of the discriminating variables is analyzed by evaluating their relative discrimination power. The standardised canonical discriminant coefficients on function 1 are chiefly organisational (organisational size in T-1 and t-2) followed by performance in T-1 and agriculture in T-3. The coefficients possessing most discrimination weight on function 2 denote primarily organisational variables (organisational size in T-1 and T-2) followed by agriculture in T-1 and T-2 and living expenditures in T-1.

Of equal importance are the pooled-within-groups correlations between the functions and the discriminating variables. The first function is labelled '**Human and Economic Performance Crisis Determinants**'. This name concisely embodies the information contained by the five highest correlations. A reasonable interpretation of this combination is the linkage between human and economic factors as inevitably complimenting each other in terminating the crisis. Human factors in conjunction with economic performance eventually determine the degree of economic complexion as represented by bad debt in the overall economic activity.

The second function: **Living Standards, Slack and Risk-Taking**, is interpreted as corresponding with the three groups so that two salient groups of kibbutzim are reflected. The first, (Group one) is characterised by a low ND/TRNVR ratio in T. This group can afford a relatively high standard of living. The group has a high level of organisational slack which is, the basis for its wide margins for risk-taking as reflected by 'investments'. Kibbutzim classified in this group, however, refrained from lavish investments in T-2, T-3 and T, unlike those classified in the lower category. However, owing to the relative affluence, the group is characterised by heavier investments in T as required for future economic growth. The bottom line in so far as this group is concerned is its freedom of economic action as well as a relatively low rate of Aziva in T-1 (6.4 as opposed to the worst-hit, the second group with a rate of 11.4).

As function one's centroid indicates, the most distressed group (Group three) is situated mainly in the negative parts of the graphic display. It is not incidental that this group is characterised by kibbutzim whose performance (relative to ND/TRNVR in T) is dismal. As time goes by, these kibbutzim can ill-afford to designate any funds for investments owing to heavy and mostly unfruitful investments until T-2 and a total depletion of organisational slack. However, kibbutzim classified in this group are limited in their capacity to further reduce

standards of living because of sociological reasons. A threshold exists, below which standard of living can not be further curtailed **despite** the dire economic state (Helman, 1982a and Glick³). A kibbutz classified in this category has a limit of reducing its standard of living, it cannot mobilise funds for investments and is devoid of any capacity to be financially manipulative owing to total depletion of its organisational slack. This category's internal options are almost totally thwarted. Hence, it follows a vicious circle trajectory which can only be remedied by institutional bail-out or an external dictatorial intervention (Dunphy & Stace, 1988).

Appendix: Long Range Predictive Accuracy

The question arises of how to determine the overall effectiveness of a number of discriminant models for a certain period preceding 1988. Theorists of organisational decline and demise have addressed aspects of forecasting organisational demise or business failure (Freeman, Carrol & Hannan, 1983; Sutton, 1987; Hambrick & D'Aveni, 1988; Hannan & Freeman, 1988; Altman, 1982; D'Aveni, 1989) using statistical and mathematical models other than multiple discriminant analysis. Economists (Argenti, 1976; Altman, 1971, 1983; Bibeault, 1982; Rose et.al; Melicher & Hearth, 1988) employed particularly a methodology involving time-

³Mr. J. Glick (Senior Research Fellow, Kibbutz Research Centre, Haifa University) in an interview, 17 December 1991.

series analyses and other mathematical models for the prediction of business failure. The underlying assumption in any application of forecasting models is that failure tendencies are exhibited a number of years prior to bankruptcy. Altman, (1988) gathered data for thirty three firms from T-5 to T (year of bankruptcy), however his sample dropped off steadily owing to shorter than five years firm's longevity. Following Beaver, (1966) and Altman, (ibid) both of which predicted business failure employing MDA, a similar approach is used in a temporal prediction of organisational crisis. For the comparative analysis the same ratios and variables representing the corresponding years are used, as predictors for ND/TRNVR in year T (1988). These include: ODD, organisational munificence, living expenditures, organisational slack, operational surplus, labour force in agriculture and productiveness, organisational age, total number of members and candidates. The 'dependent' or the grouping variable remains the same for each predicted year; ND/TRNVR in 1988. Unlike the main model where sixteen variables entered the analysis including organisational munificence from both T-3 and T-2, the five models are cross-sectional. Although 1988 symbolises the crisis the same ratio from previous years could be used as well.

The results from the five models are as follows:

Table No. 40

Five Year Predictive Accuracy of the MDA⁴ Model

Year Prior to Crisis	Hits	Misses	% of Grouped Cases Correctly Classified	Ncases
T-4	52	37	58.54	89
T-3	54	35	61	89
T-2	68	21	76.83	89
T-1	76	13	85.37	89
T (1988)	72	17	80.49	89

The results indicate that the accuracy of the model falls off consistently the further one gets from T-1 (1987). In Altman's model the results indicate that following the third, the model (Op.Cit.:80) becomes unreliable in its respective predictive power. The current models, however, are invariably reliable as shown in the fourth column. Discriminating variables in T-4 still possess a fair amount of predictive power in terms of characterising the crisis in T.

It should be borne in mind that unlike Altman, the current model does not predict failure but evaluate the relative-illustrative predictive power of year-denoted ratios of the intensity of the crisis. Since 1988 is visualised as the

⁴MDA stands for Multiple Discriminant Analysis. Any discriminant model with more than two recoded groups is 'multiple'.

illustrative predictive power of year-denoted ratios of the intensity of the crisis. Since 1988 is visualised as the climax of the crisis, it is evident that ratios and variables denoting T-1 (1987), epitomise the highest aggregated impact on the characterisation of the crisis.

An important implication of the models is that discriminant models lose their predictive power consistently the further one gets from the predicted occurrence. An essential conclusion pertains to the sample composition. The current macro approach uses large and highly generalisable samples. However, for specific purposes such as differentiating amongst organisations in accordance with their distinctive structural properties, subgrouping seems to be a preferable research strategy. It should be emphasised that individual ratios designating years other than T-1 which demonstrated high discriminating or predictive power, are not inconsistent with the aforementioned results. This is because in the previous model it was not aimed at showing the aggregated impact of a designated year. There are a number of convincing elements regarding the singular design of the model that possess some benefits in the application of longitudinality in MDA:

1. Multiple discriminant models in this thesis are the first to attempt prediction of crisis conditions employing a variety of lagged ratios.
2. Although Altman's model (1988) utilises the similar

statistical technique, his predictors are purely economic and financial aimed at forecasting corporate demise.

The current model, however, employs organisational, economic, financial and demographic predictors. In this respect the current research design supports Miller's (1977) general supposition regarding of the need to reflect any organisational phenomenon using the 'Gestalt' frame of organisational reference. This approach advocates the usage of as many relevant predictors as possible to fully characterise the researched phenomenon.

3. Therefore, from the theoretical point of view the current model is relevant mainly to organisational crisis. Since Altman's (1988) model concerns business failures, few contextual analogies and generalisations can be made.

The following table lists differences and similarities between Altman's 1988 study and the current model. The comparison does not include results from the temporal predictive models:

Table No. 49

Discriminant

Characteristic	 Altman	 Sheaffer
-----------------------	-----------------	-------------------

Data-Base	N = 66	N = 89
Longitudinality	(1945-65)	(1983-88)
No. of initially grouped categories	2	3
Original No. of predictors	22	20
No. of predictors in the analysis	5	16
Application of longitudinal design	programme ran for each year individually	predictors as years; temporaly denoted variable ⁵
Correctness of group membership	< 90 %	< 90 %
Use of ratios as predictors	100 %	87.5 %

⁵Enclosed the SASpc programme transforming a longitudinally arrayed format into temporally-denoted variables (courtesy Mr. Y. Vulech, senior SAS consultant-programmer, 108 Derech Hatayassim, Tel Aviv, Israel).

Richness of thematical characterisation of organisational phenomenon	only economic variables	economic organisational demographic
Parsimony	high	medium

SAS

```

data _null_
file 't2.dat' lrecl=78;
set a.t1_6;
ARRAY AA admra.INTRA
DBTRNRA TRNVRA ODEFRATE TOTINVRA MAINTRA PROPOZRA
      PROFABRA MEMRATE AGRATE INDRATE EXTJOBRA ADMRATE POALRATE
      SVCERA SBTRATE ODTRNRA;
ARRAY BB ADM6 INT6
DBTRN6 TRNV6 ODEF6 TOTINV6 MAINT6 PROPOZ6
      PROFAB6 MEM6 AGR6 IND6 EXTJOB6 ADM6 POAL6
      SRVCE6 SBT6 ODTRN6;
ARRAY CC ADM1 INT1
      DBTRN1 TRNV1 ODEF1 TOTINV1 MAINT1 PROPOZ1
      PROFAB1 MEM1 AGR1 IND1 EXTJOB1 ADM1 POAL1
      SRVCE1 SBT1 ODTRN1;
DO OVER AA;
AA=BB/CC*100;
END;
put
DBTRN1 DBTRN2 DBTRN3 DBTRN4 DBTRN5 DBTRN6
DOLLAR1 DOLLAR2 DOLLAR3 DOLLAR4 DOLLAR5 DOLLAR6
int1 int2 int3 int4 int5 int6
ADM1 ADM2 ADM3 ADM4 ADM5 ADM6
EXTJOB1 EXTJOB2 EXTJOB3 EXTJOB4 EXTJOB5 EXTJOB6
AGR1 AGR2 AGR3 AGR4 AGR5 AGR6
INF1 INF2 INF3 INF4 INF5 INF6
FND1 FND2 FND3 FND4 FND5 FND6
FINASS1 FINASS2 FINASS3 FINASS4 FINASS5 FINASS6
MAINT1 MAINT2 MAINT3 MAINT4 MAINT5 MAINT6
MEM1 MEM2 MEM3 MEM4 MEM5 MEM6
NETDEBT1 NETDEBT2 NETDEBT3 NETDEBT4 NETDEBT5 NETDEBT6
ODEF1 ODEF2 ODEF3 ODEF4 ODEF5 ODEF6
ODTRN1 ODTRN2 ODTRN3 ODTRN4 ODTRN5 ODTRN6
POAL1 POAL2 POAL3 POAL4 POAL5 POAL6
PROD1 PROD2 PROD3 PROD4 PROD5 PROD6
PROFABS1 PROFABS2 PROFABS3 PROFABS4 PROFABS5 PROFABS6
PROPOZ1 PROPOZ2 PROPOZ3 PROPOZ4 PROPOZ5 PROPOZ6
SABT1 SABT2 SABT3 SABT4 SABT5 SABT6
SRVCE1 SRVCE2 SRVCE3 SRVCE4 SRVCE5 SRVCE6
TOTINV1 TOTINV2 TOTINV3 TOTINV4 TOTINV5 TOTINV6
TRNV1 TRNV2 TRNV3 TRNV4 TRNV5 TRNV6
UNEMPL1 UNEMPL2 UNEMPL3 UNEMPL4 UNEMPL5 UNEMPL6
WARPEAC1 WARPEAC2 WARPEAC3 WARPEAC4 WARPEAC5 WARPEAC6
DBTRNRA TRNVRA ODEFRATE TOTINVRA MAINTRA PROPOZRA
      PROFABRA MEMRATE AGRATE INDRATE EXTJOBRA ADMRATE POALRATE
      SVCERA SBTRATE ODTRNRA
      ADMRA INTRA ;
RUN;

```

CHAPTER TWENTY ONE

**ORGANISATIONAL MOBILISATION CAPACITY FOLLOWING A
CRISIS IMPACT: AN MDA**

GENERAL INTRODUCTION

The model seeks to characterise a set of organisational, economic and social-demographic variables which best discriminate amongst groups categorised by an organisational variable 'external jobs'. The variable 'External Jobs' illustrates a comprehensive organisational process which has been considerably enhanced as a result of dwindling viable sustenance sources. Manufacturing industries, agriculture and tourism have, traditionally been the kibbutz's main sources of income. Whilst the massive industrialisation drive subsided towards the early 1980's, and with agricultural branches gradually losing ground, two new potentially promising sources of income have emerged on the kibbutz scene. The first involves a growing number of kibbutz members who seek external employment and the second concerns the transformation of kibbutz services into income-generating enterprises¹.

The lingering crisis has prompted the introduction of a number of significant changes within the labour framework:

¹This transformation means a process by which various kibbutz services such as day-care units, food-catering, leasing of concert-halls, laundry, ironing etc. become profit centres or in kibbutz jargon 'Productive Industries'. Hence they are transformed into income-generating ventures. The process has been in full swing since 1988. It was also a recurrent theme in UKM economic policy.

1. Stringent 'labour accountancy' as advocated by annual UKM policy statements², exposed an overstaffed service sector. It also identified hidden unemployment in the, so called, 'productive branches' i.e. manufacturing industries and agriculture.

2. As a result of the overstaffed service sector, coupled with social structural problems, in 1987 the kibbutz featured only .8 to 1.0 breadwinners per family as opposed to the national average of 1.4 percent³ in 1987.

3. Minimising the gap between income and expenditures, requires a noticeable increase in income generating capacity (Shmueli, 1989; Dar, 1989).

4. Expansion of sources through massive investment in human capital (Helman, 1987a) requires, amongst other things, a

²In 1986, UKM's Economic Department specified guidelines regarding the effect of institutionalising new labour policies. For instance, the 1986 Planning Guidelines advises:

1. The tendency towards increasing income requires more efficient labour force.
2. Annual programmes detailing labour inputs.
3. Labour-efficient educational system.
4. Rigorous registration of labour inputs.
5. An annual discussion in labour-related issues
6. Organisational reference to structural change in the labour force.

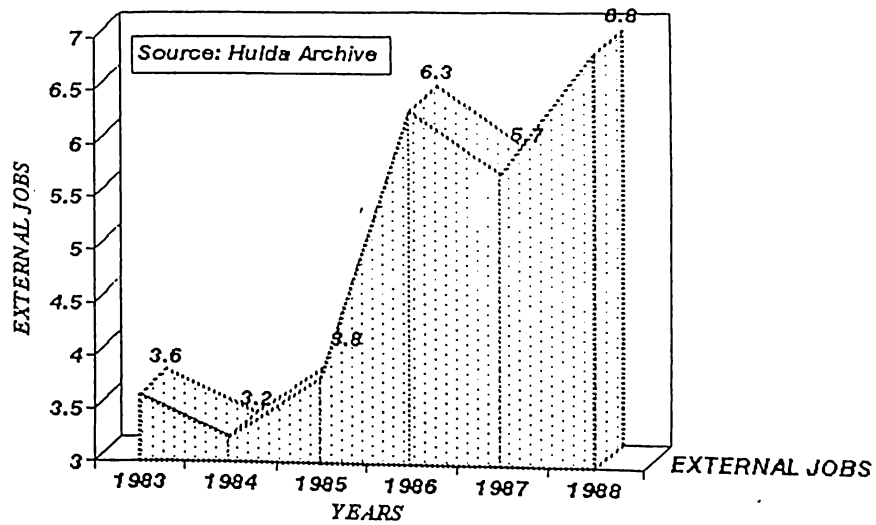
³**Labour and sustenance - is a Structural Change Necessary in the Kibbutz ?**, a flier distributed amongst kibbutz secretaries - Kibbutz Secretaries Meeting, Tel Yitzchak, 4 September 1989. Following the introduction of the Recovery Plan and the ratification of its content by UKM Caucus (16 March 1989) a team was set up to examine "**Increasing Economic Output of Kibbutzim Labour Force**" (September 1989). This team established that based on UKM economic results in 1987, only 44 percent of the total days' work can be regarded as income-generating. Hence only .87 income generators per family whilst the minimum required was < 1.4.

change of attitude towards capitalising on personnel potentials by recommending that members will have a free choice in their occupations. This approach supports a policy whereby members will be allowed to opt for external jobs befitting their skills, inclinations and experience.

Until the turn of the decade most external jobs were restricted to teaching, management positions in movement and regional enterprises, Histadrut Labour Federation etc. The change of attitude stems partly from the understanding of natural tendencies of individual choice hence a more reasonable utilisation of economic potential, and mainly from the sheer need in cash-flow that external jobs incur. External jobs in the current kibbutz context are inseparably linked with impressive endeavour in various recovery programmes. The initiative stemmed from UKM understanding that any effective turnaround must include a radical change of the division of labour. Kibbutzim however, perceived the need in further diversification of income-generating sources, through the sheer necessity to sustain a highly differentiated organisation and a multi-generational community.

These material needs coincide with growing tendencies, amongst kibbutz members, towards individualisation of the relatively rigid collective framework. UKM dictated that kibbutzim reliant on external assistance, (classified in distress categories) would divert human resources to

**EMPLOYED IN EXTERNAL JOBS AS PERCENT
OF THE TOTAL WORK-FORCE (UKM 83-88)**



income-generating branches, sell services and encourage members to secure external jobs⁴. The Recovery Plan argues that during the recovery period (1989 - 1992), eight percent of the workforce will have been diverted to income-generating activities including a variety of external jobs⁵. Statistics demonstrate that whilst in 1983 about 3.6 percent of the work-force was employed in jobs outside of the kibbutz, in 1988 the figure rose to nearly 7 percent⁶. (see graph No. 72).

The gradual increase in external jobs corresponds with the upturn in various crisis indicators. In order to validate a potential linkage between crisis indicators and external jobs the following Pearson correlations are used:

- * Net-debt/turnover per member and candidate (ND/TRNVR).
- * Organisational demographic depletion - ODD and the ratio external jobs in 1985, 1986, 1987 and 1988.

⁴UKM Economic Division, Information Bulletin No. 9, January 1989:4

⁵Decision proposals related to the Recovery Plan, A circular distributed amongst delegates of UKM Caucus, Efal, 16 March 1989.

⁶The figure denotes averaged data reflecting the proportion of the total number of days' work in external jobs divided by the total number of actual day's work in productive industries and services. The unprocessed data: courtesy of UKM Archive at Hulda based on annual unprocessed work statistics.

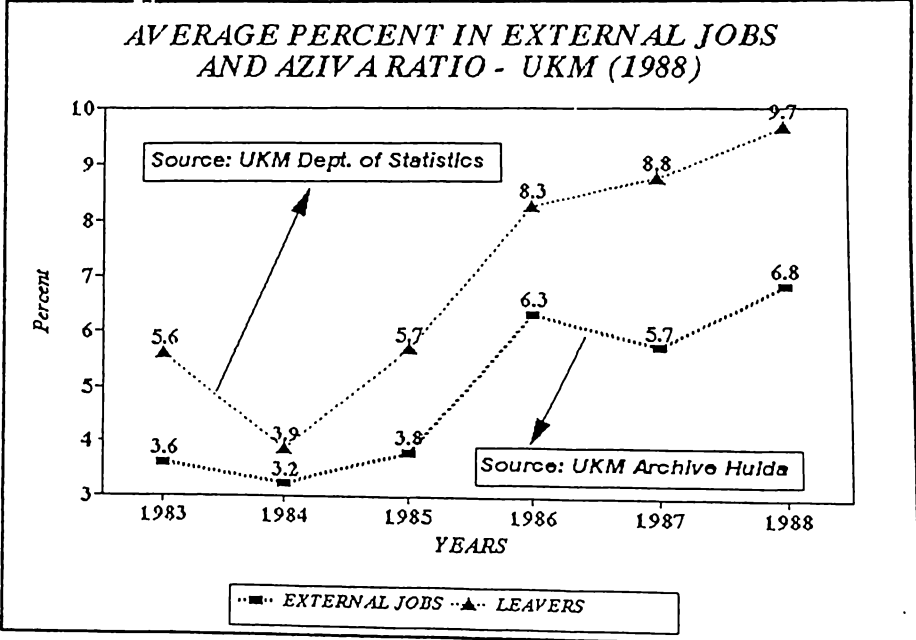


TABLE No. 50

PEARSON CORRELATION COEFFICIENTS BETWEEN ODD AND UKM MEMBERS EMPLOYED
IN EXTERNAL JOBS (N = 89 KIBBUTZIM)

	ODD85	ODD86	ODD87	ODD88
EX.JOB 85	-.07	.083	-.005	-.027
EX.JOB 86	-.08	.-03	.33**	.257**
EX.JOB 87	-.07	.-09	-.015	.042
EX.JOB 88	-.00	.-02	.04	.04

N = 89 1-tailed Sig. * - .01 ** - .001

The results indicate that there was a positive and significant association between the proportion of externally employed in 1986 and Aziva ratios in both 1987 and 1988 (See graph No. 73). It can be inferred that the gravity of the crisis is indirectly related to the tendency

to look for external jobs. This is not an **unequivocal** indication of a success of UKM policies vis a vis changing of kibbutz labour patterns nor is it a **definite** indication that the worsening financial situation prompted an increased rate of externally-employed members. A plausible explanation for this linkage can be attributed to the fair number of those employed outside the kibbutz in 1986. They were amongst those who left primarily in 1987 but in 1988 as well. No statistically significant correlations are found by crossing the year-denoted ND/TRNVR with the year-denoted external jobs.

It is intended to characterise external jobs as a post-impact mobilisation. The characterisation is effectuated by recoding the variable 'External Jobs in 1988' into several discrete groups. These are later further 'fine tuned' using additional discriminating variables.

THE STATISTICAL PROCEDURE⁷

Like previous MDA models, the basic file is formatted like a quasi time-series where each variable stands concurrently for the variable and the specific year. This format provides a separation of variables so that both their content and the specific temporal (yearly) effect can be

⁷Additional reference regarding discriminant analysis is attached to the first discriminant model (Organisational Demographic Depletion)

assessed and compared with the same variable representing other years which we assume to possess discriminatory power.

The Model

1. Grouping

The 89 cases (kibbutzim) are subdivided into three, mutually exclusive, groups recoding the grouping variable 'External Jobs in 1988'. The groups are set in an ascending order where the first denotes a frequency range of .25 to 4.8 percent, the second 5 to 7.1 percent and the third: 7.15 through the highest percent of externally employed.

2. Discriminating Variables⁸

The basic presumptions determining the selection of discriminating variables are related to the extent of which they possess enough discriminating power. This should enable (contingent upon a reasonable theoretical grounds) the characterisation of groups derived by the variable 'external jobs in 1988', in light of the lingering crisis. The variables selected for the discrimination procedure can be subdivided as follows:

⁸For a comprehensive definition of the discriminating variables refer to Appendix No. 'Variables'.

Economic⁹: turnover (1985/86/87/88), organisational slack (1988), investments (1983/84/85/86/87/88), operational surplus (1985/86/87/88), organisational munificence (1985/86/87/88).

Organisational: year of foundation (organisational age), employed in agriculture (1985/86/87/88), employed in productive industries (productiveness 1985/86/87/88), organisational size (members & candidates 1985/86/87/88), services in 1988.

Social - Demographic: living expenditures (1985/86/87/88), organisational attractivity (1985/86/87/88), ODD (1985/86/87/88).

An attempt is made to clarify the temporal effect of the variables. Hence, the number of discriminating variables is relatively large and would require, in different circumstances, a preliminary usage of factor analysis. The theoretical basis concerning external jobs in the context of an organisational crisis is negligible. It is, therefore, postulated, that this case will conform with turn-around presumptions related to **organisational change**. Turnaround strategies involve a host of organisational activities, none of which corresponds precisely with external jobs as an important organisational mobilisation factor. It is, therefore seems reasonable to suppose that:

a. External jobs are aimed at alleviating immediate cash-

⁹All economic variable are proportional to the total number of members and candidates in the corresponding years.

flow predicaments emanating from a severe and rapid depletion of organisational slack.

b. Since the availability of sufficient income-generating jobs is reduced owing to internally-induced efficiency in productive industries, a fair number of members are designated for jobs outside the kibbutz.

c. The crisis has exposed an overstaffed service sector whose efficiency has been under rigorous scrutiny by both the kibbutz and the administration¹⁰ dealing with the recovery plan.

The extent and availability of bailing-out schemes¹¹ are partially dependent on the kibbutz's own internally-induced efficiency measures which pertain to the overstaffed service sector. The grouping variable, i.e. External Jobs, signifies a post-impact mobilisation endeavour. It is expected that economically prosperous kibbutzim will be less inclined to engage a large proportion of its workforce in external jobs. This is due to their sound economic infrastructure which is less susceptible to environmental buffets. However, external jobs in T-1, T-2, T-3 are fairly strongly correlated, indicating also that this employment pattern is largely traditional and only partially

¹⁰Following the submission of the "Recovery Plan" a supervisory administration was set up by the Treasury so as to manage the allocation of credit lines, writing-off debts and postponing impending interest payments.

¹¹a. Ron, A., The Economic Division, **Information Bulletin No. 9, January 1989** (internal).
b. UKM Secretariat, **Four Year Action Plan**, (internally-circulated mimeo) May 1989.

associated with the crisis:

Table No. 5 - I
Pearson Correlation Coefficients - External Jobs 1985 - 1988.

	EXTJOB85	EXTJOB86	EXTJOB87	EXTJOB88
EXTJOB85	1.000	.345**	.416**	.324**
EXTJOB86	.345**	1.000	.417**	.437**
EXTJOB87	.416**	.416**	1.000	.741**
EXTJOB88	.324**	.437**	.741**	1.000

1-tailed Sig: * - .01 ** - .001 (N of cases: 89)

Noteworthy is the exceptionally high correlation coefficient ($r = .74$) between external jobs in 1987 and 1988 which implies the cumulative effect of the crisis towards the end of the measured period. Concerning the organisational variables, it is assumed that size and age as well as the overall productive occupation patterns (productiveness and agriculture) should have a fair amount of impact on groupings derived from external jobs in 1988. Size and age are largely traditional in their respective influence. Large and established kibbutzim are, basically, more inflexible in their labour patterns owing to allegedly higher amount of organisational inertia. The agricultural

TABLE 52

89 cases are written to the uncompressed active file.
 maint6 prod6 propabs6 srvice6 int6 odef6 propoz6 prod4 prod3 prod5
 int5 mem5 mem4 mem3 extjob3 extjob4 extjob5 int4 int3 odef5 odef4
 odef3 propoz5 propoz4 propoz3 agr6 agr4 agr5 propabs3 propabs5
 propabs6 agr3 totinv1 totinv2 totinv3 totinv4 totinv5 totinv6 maint5
 trnvr3 trnvr4 trnvr5 maint4 maint3 /met wilks /opt 4 /sta 13 15 10 4.

Since ANALYSIS= was omitted for the first analysis all variables on the VARIABLES= list will be entered at level 1.

- - - - - D I S C R I M I N A N T A N A L Y S I S - - - - -

On groups defined by EXTJOB6

89 (unweighted) cases were processed.
 0 of these were excluded from the analysis.
 89 (unweighted) cases will be used in the analysis.

Number of Cases by Group

EXTJOB6	Number of Cases		Label
	Unweighted	Weighted	
1	28	28.0	
2	31	31.0	
3	30	30.0	
Total	89	89.0	

Pooled Within-Groups Correlation Matrix

	TRNVR6	MEM6	FINASS6	FND6	MAINT6	PROD6	PROPABS6
TRNVR6	1.00000						
MEM6	.05500	1.00000					
FINASS6	.35067	.08311	1.00000				
FND6	-.17827	-.59585	-.12123	1.00000			

component in UKM work-force¹²

Graph No. 74 is clearly decending (as opposed to manufacturing industries).

Therefore, it should affect the extent of redundant manpower and consequently the availability and the actual number of members employed externally in 1988. 'Productiveness' (see **graph No. 75**) accommodates all income generating industries including externally employed¹³. Discrimination power attributed to services in 1988 should be relatively strong and inverted. This is because, supposedly, those 'dismissed' from an overstaffed service sector face two options: other productive industries or external jobs. Within the social-demographic group of variables, living standards is, by definition, an essential component in delineating groups primarily if the initially grouped categories correspond with classification predicated on a measure of organisational decline.

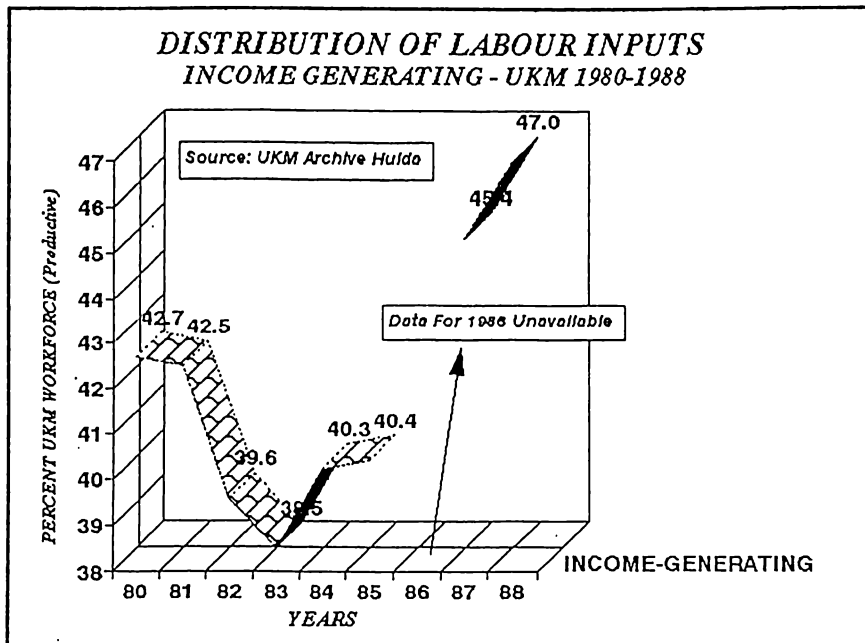
THE FINDINGS

Enclosed discriminant printout No. 3

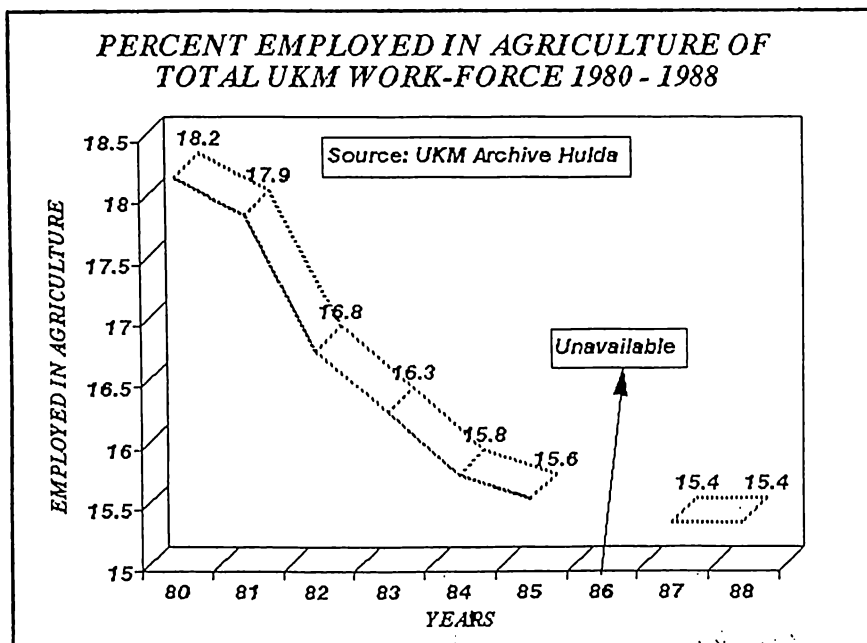
1. Group Means

¹²Data, courtesy of UKM Archive at Hulda.

¹³No multicollinearity detected.



74



75

Eighty nine kibbutzim are divided by the recoded 'external jobs in 1988' into three frequency groups. Group 1, 28 kibbutzim, Group 2, 31 kibbutzim and Group 3, 30 kibbutzim.

Fourteen variables entered the analysis. Each variable's mean in the respective groups provides some useful information for the ensuing steps of the analysis. The interpretation of the group means enables one to establish whether the initial grouping corresponds with differential rates of Aziva. Of the fourteen variables, three are economic, twelve are organisational and one social/demographic (this definition is arbitrary, suiting analytical purposes).

Organisational slack demonstrates that the group characterised by the highest percentage of externally employed has the highest amount of financial assets in 1988.

Organisational munificence; the third group has the least amount of internal sources in T-3.

Investments in T-2 and T-6 characterise the groups in an ascending order, the first group invested the least amount in 1983 and the third invested the highest amount.

ODD in T-1; the highest rates of Aziva characterise the second group whilst the first group is characterised by the lowest Aziva ratio.

The youngest kibbutzim (mean = 1946) characterise the third group.

Organisational size (members & candidates in 1985 and 1986); an ascending order is apparent where the largest kibbutzim (mean = 296) have proportionally the highest number of members employed outside of the kibbutz.

Productiveness, the third group is characterised in T-3, T-2, and T-1 by the highest component of income-generating capacity. Differences between the second and the first groups, from the point of view of productiveness, are inconsequential. The third group is the most 'agricultural' (T-1 and T) though differences among the three groups are insignificant.

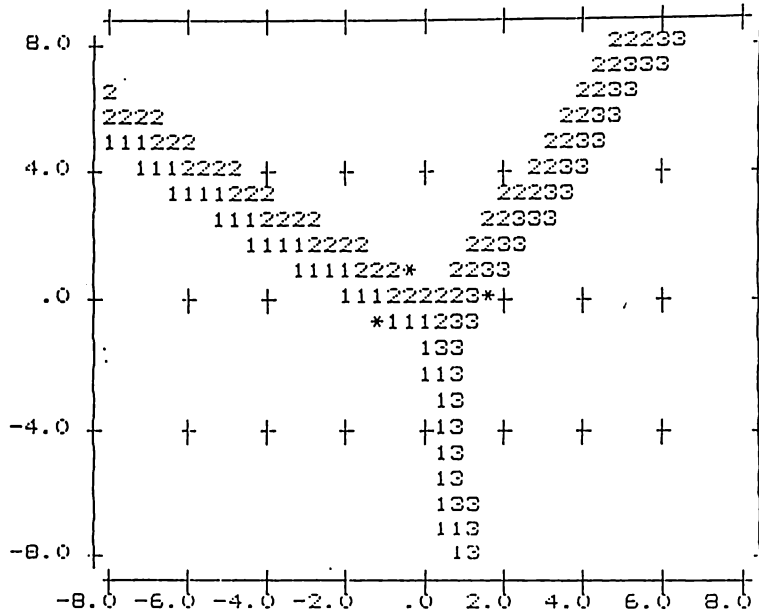
2. Summary Table

Fourteen variables entered the analysis. The variables agriculture in T-1 and productiveness in T-1 are removed owing to low residuals in their respective lambda. External jobs in T-1 (Wilks' Lambda = .67138), followed by productiveness in T, external jobs in T-2, productiveness in T-1, agriculture in T and productiveness in T-2, contribute, relative to rest, more to the total discrimination amongst the groups. Further down the list, the residual discrimination in lambda terms decreases sharply, indicating that most of the information about group dissimilarity is possessed by distinctly work-oriented variables between 1986 and 1988. It also implies that the remaining information held by the economic, social-demographic and some organisational variables is far

Symbols used in territorial map

Symbol	Group	Label
1	1	
2	2	
3	3	
*		Group Centroids

FIGURE 10



Territorial Map

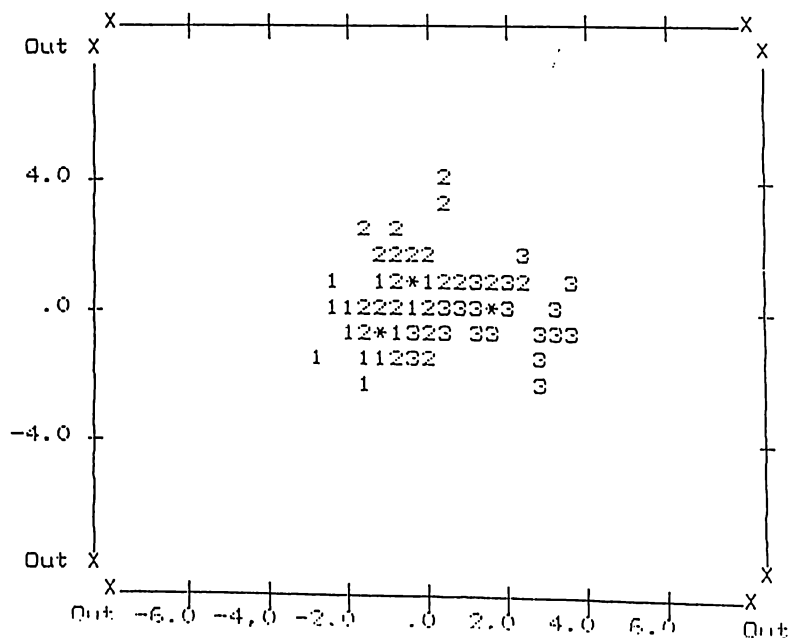
* indicates a group centroid

Across: Function 1
Down: Function 2

Symbols used in Plots

Symbol	Group	Label
1	1	
2	2	
3	3	
*		Group Centroids

FIGURE 11



All-groups Scatterplot

* indicates a group centroid

Across: Function 1
Down: Function 2

less significant in the overall classification of the groups. Consequently, the situation in the labour scene is more conclusive in delineating groups initially categorised by external jobs in 1988.

3. Canonical Discriminant Functions

The canonical discriminant functions indicate that 80.28 percent of the variance is accounted for by the first function with the remaining 19.72 percent by the second function. Subsequently, The first function's Chisquare (95.37, Sig. = .0000) is noticeably higher than the second's (24.198, Sig. = .0294).

4. The spatial Interpretation of the Graphical Displays

The scatterplot demonstrates a fairly compact distinction among the three groups. This apparent contrast is further clarified when the numerical differences amongst the three group centroid are examined (see inserted printout). Group three is the most spread-out with a distinct sub-group of cases 'pulling' the entire group towards the bottom right-hand quadrant. Group two has a sub-group of outliers projecting towards the middle upper half of the display. Group one is the most compact of the three. It has a smaller number of digits. There is a great deal of overlapping due to a relatively more successful discrimination of the group and classification of cases.

5. Standardised Coefficients

The standardised coefficients facilitate the evaluation of the relative contribution of each variable to determining scores on the two functions. This is regardless of the sign. The variables' relative contribution provide the following information (in a descending order):

For function one: Organisational size in T-2, organisational size in T-3, external jobs in T-2, productiveness in T and external jobs in T-1.

For function two: Organisational size in T-2, organisational size in T-3, ODD in T-1, services in T, organisational age.

6. Structure coefficients

Structure coefficients specify the similarity between the individual variable and the discriminant function. The range of magnitude is measured between + 1.0 and - 1.0. If variable's magnitude approaches 1 it contains almost as much information as the entire function and vice versa. The two functions are labelled after the 'leading' variables, i.e. those represented by the highest correlation coefficients.

Accordingly, function one is named: '**labour and social determinants of organisational mobilisation**'. Function two is labelled: '**kibbutz as a multi-faceted organisation**'. In

Classification Results - TABLE 53

Actual Group	No. of Cases	Predicted Group Membership		
		1	2	3
Group 1	28	24 85.7%	4 14.3%	0 .0%
Group 2	31	7 22.6%	20 64.5%	4 12.9%
Group 3	30	2 6.7%	5 16.7%	23 76.7%

Percent of "grouped" cases correctly classified: 75.28%

Classification Processing Summary

- 89 Cases were processed.
- 0 Cases were excluded for missing or out-of-range group codes.
- 0 Cases had at least one missing discriminating variable.
- 89 Cases were used for printed output.

the second function the variables featuring most prominently represent every major kibbutz aspect. No distinct aspects are collectively manifested, accordingly the function may not be labelled after any distinctive phenomenon.

7. Classification

Classification is a procedure by which an indication to the accuracy of cases' belongingness is obtained as well as a reaffirmation of the degree of group separation. Classification results indicate a reasonable degree of segregation amongst the three groups. Group 1 (lowest number of externally employed) has nearly 86 percent of the cases, Group 2 a mere 64.5 percent of the cases and Group 3 nearly 77 percent of the kibbutzim correctly classified. Since grouping variables' frequencies are recoded into three categories, the initial probability of each group is .3333 (the expected percentage of correct classification). The percentage of predicted group membership is judged relative to the prior probability. Hence, calculating the statistic Tau or the amount of 'profit' derived from correct classification:

for **Group 1** ; 79.8 %

for **Group 2** ; 47.7 %

for **Group 3** ; 66.2 %

For Group 1 it can be said that the classification based on the discriminating variables, made nearly 80 percent fewer mistakes than would be expected by a random assignment. These figures, (chiefly for the first and second groups), are a noticeable improvement, in terms of correct classification, since it is initially expected that only 33 percent of the classification of kibbutzim to be correct by chance. The overall percent of grouped kibbutzim correctly classified is 75.28. Hence, of the 89 kibbutzim about 75 percent (67 cases) are classified into one of the three groups which is a good classification result.

DISCUSSION

The model's major aim has been to classify kibbutzim into relatively well defined groups. The variable selected for this purpose symbolises a post-impact organisational mobilisation aimed at alleviating intra-organisational predicaments. The increase in the number of members employed outside of the kibbutz is only a single ingredient in the overall endeavour to stabilise the kibbutz's economic situation. It also reflects on the restructuring of the relatively inefficient labour organisation. The trend towards increasing externally-incurred income-flow is an essential yet partial component of a comprehensive turnaround strategy. The turnaround strategy is tailored

individually¹⁴ for each kibbutz in accordance with a large number of economic and demographic factors. It is revolving primarily around the Recovery Plan endorsed by UKM in February 1989¹⁵.

The second objective of this analysis involves an interpretation of the discrimination. It looks at why certain attributes discriminate amongst the initially-categorised groups. The results indicate that the best discriminators are labour-oriented organisational variables, most notably external jobs in T-1, T-2 and productiveness in T, T-1 and T-2. Social-demographic as well as economic variables are secondary in their delineation power. A conclusive evidence shows that External jobs as an organisational mobilisation factor, is related to past labour patterns as embodied by productiveness and external jobs in past years. It is only marginally associated with either economic or social elements.

These conclusions are particularly based on variables' entry precedence as reflected by their respective Wilks' Lambdas. The variables possessing more discrimination power denote mainly one to two years prior to the introduction of

¹⁴ a. Ron, A., **UKM Economic Division Bulletin No. 9**, January, 1989.
b. Ron, A., **Four year Action Plan 1989 -1992**, A mimeo, UKM Economic Division, May 1989.

¹⁵Minutes of UKM Caucus, Efal, 16 March 1989.

external jobs in 1988. The relative advantage of employing a statistical methodology incorporating lagged variables in a discriminant analysis is well established. If a need arises to explain regressions or interpret discrimination, a dependence on previous occurrences is both more effective and logical. However, this is not axiomatic in the case of discriminant analysis where the main purpose involves a reflection of a certain phenomenon so that the delineating attributes can be from the same point in time.

The current model demonstrates that, given the specific crisis-circumstances, lagged variables are more effective in their discrimination power. With regard to the relative discrimination power contributed by variables to each of the dimensions, the standardised canonical discriminant function coefficients indicate that organisational size in both T-3 and T-2 as well as external jobs in T-2 productiveness in T are the most crucial delineators. The second dimension is characterised primarily by the same organisational-size variables. These results manifest that organisational size is an essential 'discriminator' just as much as it is a useful explanatory variable for a large number of organisational phenomena.

With regard to functions' labels, it should be noted that **'labour and Social Determinants of Organisational Mobilisation'** illustrates the social-organisational face of post-impact mobilisation effort. Whereas the conjunction of living expenditures (in T-3 and T-2) with productiveness

and external jobs may be regarded as a mere mathematical chance, the concurrent appearance bears thematic, hence theoretical semblance. Kibbutzim can be classified in accordance with living standards which, in fact, depend on deeply-rooted social practices rather than economic grounds. Since the groups have been initially categorised on the lines of a typical labour-organisational variable and because the crisis aftermath may not be disregarded, the temporal effect as illustrated by laggedness, the co-appearance of these variables seems comprehensible. In the second function, no distinct characterisation appears to be evident, indicating the complexity and multi-faceted nature of the kibbutz as reflected by the combination of variables representing many facets.

CHAPTER TWENTY TWO**CONSERVATISM AND ORGANISATIONAL RESISTANCE TO CHANGE: A QUANTITATIVE-GRAPHICAL ANALYSIS OF KIBBUTZ'S PERCEIVED PRIORITIES FOR HANDLING OF ORGANISATIONAL CHANGE IN THE AFTERMATH OF A CRISIS IMPACT.****INTRODUCTION**

As indicated in previous chapters, organisations response to decline and crisis in a wide variety of ways. The intensity of organisational response and the nature of its pathologies vary in accordance with the duration, depth and breadth of either the decline process or a single occurrence of organisational crisis. Of the various attributes of organisational behaviour ascribed to decline and crisis, conservatism, turf protection and the rebuffal of innovative alternatives are generally attributed to the inherent resistance to change and are amongst the conspicuous responses. To an extent and primarily immediately following crisis impact, many organisations are characterised by an acute curtailment of innovative drive. Typically, this deficiency is demonstrated by a lack of experimentation, risk aversion and a sceptic approach apropos critically required organisational revampment (Cameron et al, 1987). Most of the above assumptions are reported by voluminous literature pertinent to organisational change. This discussion will be restricted to the net effect of conservative "follow the well -683-trodden path" dysfunction in the aftermath of

organisational crisis. The chief reason for the abbreviated reference pertains to the relative marginality of this OT-related discipline to the chief theoretical aspects of the research design.

Whetten, (1981:84) has pointed out that most of the above "natural responses" to crisis or rapid decline-related stress are more likely to be a symptom of administrative behaviour. Administrators' actions focus on combating stressful manifestations rather than addressing fundamental duress-related predicaments. Organisations, therefore, will avoid uncertain alternatives, many of which possess the capacity for subsequent generation of apprehension and frustration. Preliminary research results, notably findings emanating from the two multiple pooled-regression models (demographic depletion and the financial crisis) indicate that external pressures have invoked a number of endogenous dysfunctions some of which seem to have prompted a muted desire to change.

These exogenous catalysts included the 1985 deregulation of the economy and some politically and socially related changes within kibbutz's task-environment. It is also apparent that the kibbutz has responded incompetently to early warning signals and consequently did not resort to acutely-needed internal restructuring so as to maintain its viability in the fast changing environment. The assumptions vis a vis change will be tested in the following CA model

which will enable inferences to be made concerning the scale of perceived changes. It is argued that a transformational (Levy & Merry, 1986) change is required. This is because measures ought to be taken differently in order for the kibbutz to continue to exist (Goodstein & Burke, 1991:7).

THE SETTING

Integrated with crisis management practices employed by the UKM in early 1989, a comprehensive structured questionnaire¹ was distributed amongst all UKM kibbutzim. An ad-hoc team² assessed a wide variety of relevant topics, many of which were considered to be conventional kibbutz matters, such as health, welfare, cultural affairs and education. Since the distribution of the questionnaire was not a random occurrence but coincided with the overwhelming impact of the crisis, a measured number of "radical" issues known to have pervaded UKM kibbutzim, were included as well. The balance between mundane and radical issues was determined by both systematic interviews with kibbutz Secretary Generals and reviews of kibbutzim's newsletters and other internally circulated publications.

¹The 1988 Social Marathon. The material included in the questionnaire reflects the situation in UKM kibbutzim.

²The team was made up of members of the Social Committee, organisational consultants and UKM's Unit for Policy Planning.

In fact, the main purpose of this examination was to try and assess the extent to which the so-called 'radical' issues fair with the traditional ones in terms of institutional attention. In order to obtain more even-handed and accurate results, similar questionnaires had to be distributed to grass-root kibbutzniks, albeit that Secretary Generals have far deeper insight and in-depth knowledge as to how far these issues have permeated the kibbutz system. Twenty issues were included in the questionnaire. On average, sixty three kibbutzim responded to each topic. In all, eighty four kibbutzim responded, roughly 50 percent of UKM kibbutzim³.

The following is a table depicting the various issues and the degree of preference associated with treating these topics in the kibbutz. The figures are given in percentages indicating the degree of importance ascribed to each topic by a four-rank scale (very high to low preference):

TABLE 54

TOPIC	VERY HIGH PREFER.	HIGH PREFER	SOME PREFER.	LOW PREFER.	N
MANPOWER & LABOUR*	46.7	45.3	8	0	75

³Sheaffer & Verdsheim, **Partial Evaluations from the Social Marathons**, UKM Social Committee & the Unit For Policy Planning, an unpublished internally distributed special analytical study, UKM, Tel Aviv September 1989.

YOUTH EDUCATION*	17	52	28	3	71
PRIVATE PROPERTY*	2	11	20	67	55
HIGHER EDUCATION*	11.4	50	33	6	70
PRIVATE CONSUMPTIO N*	13	25.5	36.4	25.5	55
ORG. STRUCTURE#	17	37	32	15	60
GENERAL EDUCATION*	18.3	63.4	17	1.4	71
INFANTS*	14.5	52	26	7	69
SYSTEM CHANGE#	26	34.5	27.6	12	58
CONSTRUCTI ON*	15.5	20.7	41	22.4	58
ABSORPTION *	19	40	27.4	14	73
GENERAL DEVELOPMEN T#	51	28	18.3	3	71

CULTURAL AFFAIRS*	9	46.3	37.3	7.5	57
WELFARE*	17.5	38	39.7	5	63
KIBBUTZ RESIDENTS*	2	27	52.5	18.6	59
CHANGES IN CONSUMPTION PATTERNS#	21	52.5	22.4	4	76
HEALTH*	17	39	35.6	8.5	59
PROFIT CENTRES#	22.2	26	24	28	54
INCOME GENERATING SERVICES#	22.2	39	28	11	54
MBO#	11.5	15.4	34.6	38.5	52

4
 Certain clarifications are required for the inexperienced reader regarding some of the above topics. As indicated, most of the common subjects correspond with the existence of a designated committee, namely, issues falling within the committees' jurisdiction.

1. All matters pertaining to manpower and labour-->Labour and Manpower committees.

2. Youth Education-->Education Committee.

3. Private property-->the growing tendency amongst members to resort to financial sources other than the annual kibbutz allowance. The trend grossly strays from the principle of equality-->Secretary & Members Committee.

4. Higher education-->Higher education committee.

* Items marked * are topics routinely on the kibbutz

-
5. Private consumption, an offshoot of item 3.
 6. Organisational structure, considered to be a "radical" issue.
 7. General Education-->Education Committee.
 8. Infants-->Education Committee.
 9. System change, A radical system change of a quantum nature. The issue has been raised frequently primarily by organisational consultants.
 10. Construction, a mundane topic--> Housing, Physical Planning & Economic Affairs Committees.
 11. Absorption-->Absorption Committees.
 12. General development, development of new industries, agricultural and manufacturing alike.
 13. Cultural affairs-->Cultural Affairs Committee.
 14. Welfare, gerontology, rehabilitation etc. Dealt with by either members or hired professional personnel-->structurally covered by the Health and Old-Age Committees.
 15. Kibbutz residents, unlike kibbutz members and other temporary population there is a growing tendency to accommodate various people most of whom are directly or indirectly occupied by the kibbutz on a "residential basis", namely residence & maintenance on a contractual basis.
 16. Alterations in budgeting and consumption patterns, the issue has been prevalent on kibbutzim for quite awhile. Currently the tendency is towards maximum individuation, i.e. a growing number of consumption items are given to the discretion of members. The items are added (in accordance with a pre-set "norm") to annual allowances (in the form of "inclusive yearly personal budgets") and are no longer available to free consumption.
 17. Health-->Health Committee.
 18. Profit Centres, A radical concept aimed at turning kibbutz industries (and services) into enclosed profit & loss centres with but a faint links of accountability to the overall "system". The concept entails a radical divergence from the centrally monitored branches. The trend encourages maximum freedom in the day to day conduct of all matters pertaining to the profit centre including accountancy, budgeting, human resources etc.
 19. Income generating services, The concept entails turning of kibbutz services into bread earning enterprises. The main reason behind this trend is the disproportionately large and divergent kibbutz services which overshadow income generating industries in terms of superfluous manning concealing imperceptible unemployment and an inefficient allocation of manpower.
 20. MBO, Lately a more rational task-oriented management has been suggested aimed chiefly at General Secretaries whose functions has been rather fuzzy embodying more ideology and social work than proper CEO tasks.

agenda.

Items marked # are viewed as radical in the kibbutz scene.

METHODOLOGY

It is assumed that kibbutzim will be typified by a conservative response to decline and crisis (Levy, 1988; Niv & Sheaffer, 1991). The kibbutzim will display a great deal of basic structural stability though the degree of reproducibility (Hannan & Freeman, 1984) is considered to be fairly high. The topics were divided into mundane (the ordinary-routine issues on the kibbutz's agenda) and radical ones (recently introduced into a noticeable position within the kibbutz's list of priorities. These priorities are believed to have arisen as a result of the depletion of orthodox organisational measures, it is understood that despite the overwhelming impact of the current crisis and very much due to inertial organisational pressures the kibbutz is still preoccupied with the preservation of the existing if obsolete system. The table in itself, reveals that the items perceived as deserving preferential treatment are under the "high preference" rubric. A closer look divulges that the items scoring highly under this category are almost invariably 'mundane'.

A methodology deemed suitable for a comprehensive and relatively accurate statistical inference is CA. In this case, the four-level preferential options: **Very High**

Preference, High Preference, Some Preference and Low Preference will stand for the categorical-nominal variables whereas the listed issues representing the perceived relative importance of items known to be on kibbutzim's agenda represent the continuous data. It is argued that despite the overwhelming impact of the current crisis and in spite of the fact that radical issues infiltrated kibbutz it is still very much muddling through indispensable organisational reconstruction.

FINDINGS

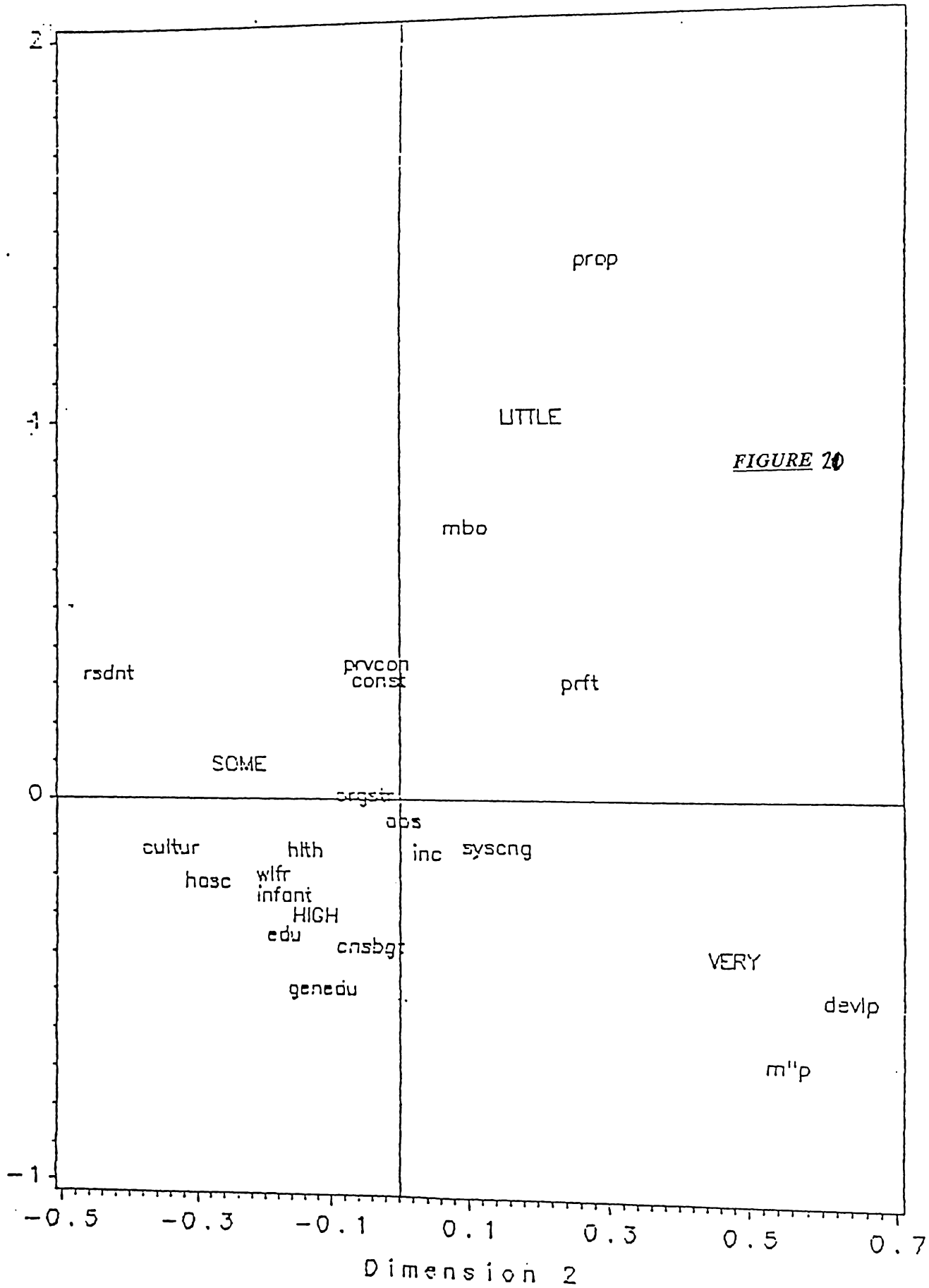
The first output to be analyzed depicts the contributions to the total Chi-Square statistic.

TABLE 55

ITEM	VERY HIGH PREFERENCE	HIGH PREF.	SOME PREF.	LOW PREF.	SUM
MANPOWER					
& LABOUR*	6.687	0.29	2.475	2.361	11.812
YOUTH					
EDUCATION*	0.024	0.954	0.011	1.504	2.492
PRIVATE					
PROPERTY*	2.366	2.915	0.477	29.090	34.847

EDUCATION	0.457	0.697	0.065	0.847	2.066
PRIVATE					
CONSUMPTION	0.28	0.587	0.255	1.194	2.316
ORGANISATION.					
STRUCTURE#	0.029	0.001	0.029	0.000	0.059
GENERAL					
EDUCATION*	0.001	2.958	0.834	1.939	5.733
INFANTS*	0.142	0.983	0.057	0.651	1.834
SYSTEM					
CHANGE#	0.454	0.029	0.018	0.088	0.59
CONSTRUCTION*	0.082	1.134	0.746	0.621	2.582
ABSORPTION*	0.001	0.033	0.024	0.009	0.066
GENERAL					
DEVELOPMENT#	8.839	0.361	0.674	1.51	11.384
CULTURAL					
AFFAIRS*	0.798	0.361	0.335	0.581	2.075
WELFARE*	0.012	0.003	0.566	1.043	1.625
KIBBUTZ					

Dimension 1



RESIDENTS*	2.360	0.43	2.833	0.153	5.774
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**CHANGES IN
CONSUMPTION**

PATTERNS#	0.049	1.003	0.257	1.252	2.562
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HEALTH*	0.024	0.015	0.206	0.434	0.679
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PROFIT

CENTRES#	0.104	0.532	0.161	1.837	2.633
-----------------	-------	-------	-------	-------	-------

INCOME

GENERATING

SERVICES#	0.104	0.015	0.011	0.161	0.291
------------------	-------	-------	-------	-------	-------

MBO#	0.438	2.014	0.146	5.981	8.58
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SUM	23.251	15.315	10.180	51.254	100.000
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Analysis of the Graphical Display⁵

5

GLOSSARY FOR THE GRAPHICAL DISPLAY

1. m"p; Man power & labour
2. edu; Youth education
3. prop; Private property and external (private-financial) sources
4. hasc; Higher education
5. prvcon; Private consumption
6. orgstr; Organisational structure
7. genedu; General education
8. infant; Infants
9. syscng; System change
- 10.const; Construction

The graphical display reveals some rather apparent transformation of the above table. The categorical variables (**VERY** high, **HIGH**, **SOME** and **LITTLE** preferences respectively) are marked in capital letters and are situated fairly distinctly across the two dimensions, one in each quadrant.

Very High Preference

There are two variables both of whose vectors are very similar (as measured from the origin 0.00). Indeed, both variables

"General Development" and "Manpower & Labour" are the highest contributors to the total Chi-Square statistic of the categorical variable "Very High Preference", 8.839 and 6.687 respectively. In fact, this finding is seemingly contradictory in the sense that Manpower is a mundane item whereas General Development is a radical one. A more in-depth examination would yield the assumption that General Development may have had double meanings. On the one hand the kibbutz has routinely introduced development schemes (new manufacturing industries changing of children housing

-
- 11.abs; Absorption
 - 12.devlp; General development
 - 13.cultur; Cultural affairs
 - 14.wlfr; Welfare
 - 15.rsdt; Non members kibbutz residents
 - 16.cnsbgt; Changes in consumption patterns
 - 17.hlth; Health
 - 18.prft; Loss & profit Centres
 - 19.inc; Income generating services
 - 20.mbo; Management by Objectives

practices, etc.), on the other, it may be construed as signalling a change-oriented development. It is quite likely that the questionnaire failed to indicate the real meaning, namely, that it virtually meant to indicate crisis-induced developments. A possible explanation to this small but very distinct cluster is that any significant economic development, largely as of the end of the 1980s onwards, hinges increasingly upon a more rational and constructive handling of the kibbutz human resources. In retrospect, the awareness as to the acute need for a reasonable strategy concerning human resources (individuation, adequate personal assessments, the institution of human resources committee, external counseling, systematic training etc.) fast became the call of the day chiefly as of 1990.

Little Preference

Two items are distinctively perceived as befitting low preference, Private Property and and Management By Objectives. Both score highly as contributors to the total Chi-Square statistic of the categorical variable "little" (29.09 and 5.981 respectively). Their angles relative to the location of point "little" as measured from the origin is very similar yet the exceptionally high score depicted by "prop" is attributed to the very high inertia suggesting a very high statistical association with "Little". Conceptually, a reasonable explanation as to the high

statistical association between the two respective variables and category "Little" would be two-fold.

Discussions concerning the issue of private property were an incessant kibbutz preoccupation, resembling the "tail chased by the puppy" syndrome. This subject is apparently a hackneyed stuff in so far as kibbutzim are concerned. This is despite ceaseless and fruitless pressures imposed by kibbutz federations to uproot the 'deviation'. Moreover, it is quite possible that this aversion on the part of the kibbutzim reflects their tolerant approach toward the seemingly inexcusable deviation from a sacred kibbutz fundamental. Conversely, MBO has yet to have a conspicuous inroad into kibbutz managerial concepts, thus still perceived as of lesser importance.

Some Preference

Items perceived as accredited Some Preference as adequate subjects for the kibbutz agenda, are relatively numbered. Residents in the Kibbutz contributes 2.832 to the total Chi-Square and Manpower & Labour 2.475 respectively. However, whereas "rsdnt" is situated in the very same quadrant as SOME depicting a similar angle from the origin, 'm"p' is situated in the opposing quadrant. Even though the vectors are similar, the location of the points suggests an inverted statistical association. The cluster is conceptually indistinctive. The graphical coexistence of

these variables may only suggest that the issue of residents in the kibbutz is perceived as having **some** preference as a seemingly subject for discussion. This statistical association bears no immediate theoretical relevance.

High Preference

Of the four variable clusters, the one bearing most relevance to the theory is HIGH. Earlier, it has been suggested that organisational dysfunctions tend to follow a crisis. This implies that conservatism characterises the kibbutz response. To accredit a high preference score to a subject means that the item is perceived to be high on the kibbutz agenda. Indeed Very High Preference cluster is noticed. Yet relatively few topics are perceived to score so highly. In other words, that cluster, though distinct, is fairly 'diluted'.

The HIGH cluster, situated at the bottom left-hand quadrant, caters for most continuous variables which are exclusively 'mundane' in nature. Despite the relatively low statistical association as demonstrated by both low inertia scores and fairly obtuse angles measured from the origin, the cluster is solid and very distinguishable. The mundane topics associated with HIGH are (in a descending order of contributions to the total Chi-Square statistic of HIGH): General Education (2.958), Construction (1.134), Changes in

budgeting and consumption patterns (1.003), Infants (0.983), Youth education (0.954) Higher education (0.697), Cultural affairs (0.361), Health (0.015) and Welfare (0.003). Indeed, Private property and MBO are both 'big' contributors to the Chi-Square yet situated far apart from the quadrant thus indicating a similar angle yet conceptually contradicting.

One may not escape the feeling that despite the multi-dimensional crisis and the evident necessity to introduce a quantum change, the kibbutz in late 1988 is illustrative of a conservative organisational approach of a doggedly self preserving system. Indeed, the cluster only lends some quantitative support to a portion of the theory of organisational decline and provides no clear-cut inferential validity to conservatism as an organisational dysfunction. Moreover, temporal quantitative evidence regarding the similar forms in previous years is lacking.

Inertia and Chi-Square Decomposition

Singular Values	Principal Inertias	Chi- Squares	Chi- Percents
.46637	.2175	435.428	69.2%
.26497	.07021	140.563	22.34%
.16307	.02659	53.238	8.46%
	-----	-----	

.3143 629.229 (**Degrees of Freedom = 57**)

The principal inertias and their percentages indicate a two-way dimensional CA where the two dimensions account for 91.54 percent of the total inertia. The graphical display depicts the profiles adequately. The 8.46 percent denotes an unaccounted for content so, in fact, the profiles' graphical display is fairly accurate. In other words, only a small portion of the information contained in the table was lost due to the graphical transformation.

Inertias for the column points (categorical variables)

TABLE 56

VERY	.23251
HIGH	.153153
SOME	.101795
LITTLE	.512542

These measures reflect the relative distance of each categorical variable from the centroid (0.00), The higher the inertia the more distanced the point is from the origin. The same output exists for the row points (the continuous data) yet as expected continuous data cluster

around categories. Therefore it is more essential to demonstrate inertias of the "pivotal" elements. Quite clearly, 'Little' possesses the highest inertia indicating the strongest statistical relationship in the entire model. The relationship is between the perception 'Little' with MBO and on with the mundane issue: private property.

DISCUSSION AND CONCLUSIONS

This CA model has been used in order to quantitatively validate an organisational attribute known to have existed in declining organisations and those striving to survive following an organisational crisis. The results suggest that, in general, most UKM kibbutzim demonstrate a distinct measure of organisational conservatism. This conservative approach is empirically explained by the perceived-relative-importance attributed to a list of mundane and radical issues. This is only one face of the overall assumed dysfunctional response to the crisis.

Instructive is Fink, Beak & Taddeo's (1971:23) explanation of the Defensive Retreat phase following Shock. They suggested that this phase is typified by a mobilisation of forces to reduce threat. These actions are not aimed at the resolution of the crisis. **The central purpose of behavior during Defensive Retreat is maintenance of the system in order to guarantee its survival**". By heavily resorting to the human/psychological reactions to similar occurrences,

they justify it as **"very necessary and functional"** enabling an interim delay in long-range organisational plans **"for the sake of keeping the organization intact"**. As crisis conditions still prevail, an empirical establishment of the correct stage seems premature and largely inaccurate.

The above assumption is not questioned yet it is argued that the phase addressed in the current CA model is more advanced (on Fink et.al.s' ordinal scale). Moreover, maintaining traditional organisational structures and practices appear to have lingered even when the end of 1991 is looming near. Though the indication is fairly vividly displayed, a longitudinal sequence integrated in a different research design seems to be imperative in order to further verify the persisting organisational strategy of 'preserving the system'.

A conservative approach does not necessarily suggest either a business or community failure or both. Examples of economically and socially sound kibbutzim where conservative organisational attitude prevails are abundant. Hannan & Freeman's hypothesis (1984:151) suggests that: **"organizational structures are subject to strong inertial forces which is not the same as claiming that organization never change..."**. This suggestion corresponds fairly with current the kibbutz organisational scene. The kibbutz epitomises the supposition that organisations respond incrementally to the occurrence of threats and opportunities in their task-environment. The relative

difficulty in introducing radical changes (embodied in the non mundane issues), suggests that the kibbutz is characterised by comparatively high inertial pressures (Hannan & Freeman, Ibid).

The swiftness with which new approaches diffuse and take hold in the kibbutz is assumed to be slower than the rate at which environmental conditions change. Of the very large number of definitions of stalled organisational change, Tushman, Newman & Rumanelli's denotation (1986) adequately narrate the unique if not infrequent situation in the kibbutz. Tushman et. al. argued that in addition to fine-tuned alterations, minor environmental shifts will require some organisational response. These organisational changes will only take hold if they are within the "ten percent change", namely, if they do not "rock the boat" and are still compatible with prevailing structures and the wider domain of organisational culture. However, as these 'shifts' within the kibbutz's task-environment resembled jolts and despite the fact that the threat was recognised, the ensued response sustained conformity to the status quo.

An instructive evidence to this erroneous and fateful procrastination, following the publication of UKM's 1985 aggregated economic results asserts that: "...I was particularly flabbergasted by the complacency that still predominated in kibbutzim. Even in light of the announcement of the names of the kibbutzim classified in

distressed sub-groups. *The severity of the situation has yet to permeate members' perception. Many favoured an euphoria, deluding themselves that the 'Movement' and the affiliated kibbutzim are omnipotent and that the whole ado pertains to isolated economic failures and nothing else...Part of the contentment stemmed from the false awareness and the belief that kibbutzim's status as national spearheads for the fulfilment of national objectives and tasks, persists. We were oblivious to the fact that concurrently with the occurrence of changes within the economic environment, a radical transformation eventuated in the Israeli society which incorporated the political climate as well. Subsequently, the traditional position of the Kibbutz Movement had shifted and so had its relative weight within the Israeli society⁶"*

It is suggested that the research results timely reflect the aforementioned response albeit that the intensity, frequency and magnitude of the fluctuating economic environment had later required a frame-breaking quantum change. This second order (Levi & Merry, 1986) change was held off until the financial crunch coerced a belated and drastic action. More time is required in order to fully assess whether or not conservatism is an outgrowth of decline or a substantial catalyst for organisational demise within the domain of the current multi-dimensional crisis.

⁶Ron, A., **Information Bulletin No. 12**, UKM Economic Division, September, 1991.

However, the notion of stability associated with decline or "decline as stagnation" (Whetten, 1980:346-347) adequately reflect the situation in many kibbutzim.

These kibbutzim demonstrate a fairly inflexible organisational structure, occurrences of organisational change are incremental and conservatism largely prevails. It would be interesting to estimate the level of change as reflected by the findings in accordance with Merry's theory concerning 'economising in flexibility' (1988). The findings indicate that in 1988, most kibbutzim had yet to fully realise the extent and gravity of the crisis. Therefore, it is suggested that the minor and incrementally-applied changes benefit Merry's 'Pattern Improvement', i.e. a mere **"change of patterns constituting a basis of stability in the system over time"**. However, at that stage the extent of the required change was far greater, resembling even a paradigmatic change.

As a growing number of kibbutz-organisational ingredients got stuck or were 'boxed in', the minor change did not achieve the requested results, but environmental turbulence persisted invoking more structural deficiencies. This situation results in persisting and aggravating vicious circles (Masuch, 1985). The conclusion is that the application of change in the kibbutz during the current crisis is untimely and lags a few phases behind.

Subsequent studies regarding a possible association between perceived or actuated organisational changes and the classification of kibbutzim in accordance with the level of organisational decline⁷ appear to be vitally necessary. Getz (1991:9), found that the rate of change in UKM economically-wobbly kibbutzim is considerably more accelerated than in the wealthier ones. Recent findings (Rosner, Glick & Goldemberg, Forthcoming) indicate that the kibbutzim severely hit by ODD will be more forthcoming towards change and indeed, have been considerably more change-oriented than those demonstrating demographic stability⁸. An interesting general research question will be whether a propensity exists amongst organisationally-conservative kibbutzim to introduce changes as a result of a general organisational decline or following a multi-dimensional crisis. Alternatively, whether kibbutzim regarded as economically-viable tend to procrastinate changes owing to excess organisational slack and munificence or as a result of intrinsic inertia.

⁷As gauged, for instance by the ratio Net-Debt/Turnover per-capita or organisational demographic depletion.

⁸In a multiple regression analysis $R^2 = .61$, Aziva accounts for .30 of the total variance in the model (dependent variable: level of readiness to change)

SUMMARY AND CONCLUSIONS**Prologue**

This chapter will succinctly and systematically present the major research findings in light of the broadly-stated research questions underlying the thesis.

Any such analysis must be underpinned by certain pivotal considerations. Chapters outlining empirical models are inevitably so structured that they conspicuously manifest the findings. These findings either refute or support hypotheses, essentially derived from the initially-stated research questions. These chapters constitute the quintessence of the major research endeavour, hence furnish the entire thesis not only with a tier of congruous sequence but, primarily with the nucleus of the research.

Since these chapters have been written in a logical progression, a coherent synthesis of the main findings as narrated at each chapter's 'conclusions' paragraph, is made relatively effortlessly. However, conclusions ought to be drawn not only from seemingly intelligible statistical results but also from the systematic integration of various results, each of which is designed to support an independent ingredient of a rather eclectic and a relatively new theory. In fact, the mere systematic consolidation of research findings is worthless unless sensibly arising from both underlying theories and progressively manifesting an addition to the hitherto

uninvestigated portion of the previously-stated research goals.

The thesis consists of parts predicated upon content-analyses some of which may not be adequately comprehended without a direct referral to the aforementioned and advanced stages of the research. Some, however, may be addressed as partially independent synopses of essential aspects in the thesis such as the UKM policy. These analyses require an equally significant reference in this chapter. The eclectic nature of the research necessitated an ongoing and arduous job of constantly integrating loosely and concurrently tightly-related theoretical as well as empirical aspects forming the thesis in its entirety. To some extent, the final chapter must deal with a comprehensive critique and scholastic integration. This will be done with the aggregated findings with dominant theoretical treatises. The research has taken approximately three years.

The dynamic nature of organisational crisis at large and the current kibbutz crisis in particular, has ensured a continuous incorporation of allusions of current scientific publications as well as journalistic articles and reviews. These have, to a great extent, reflected not only the general crisis atmosphere but the evolutionary processes as well. Indeed, since the main preoccupation of this thesis is with a dynamic, hence, evolutionary organisational phenomenon, the constant flow of processed as well as

unprocessed statistical data and qualitative material have been dealt with.

Much like the eclectic nature of the underlying theories, the research encompasses many and varied aspects of organisational decline and crisis which seem to reflect essential structural ingredients of the kibbutz. In itself, the kibbutz is an all-encompassing, integrative and intricate organisational entity. It furnishes a unique insight into both intra and inter-organisational processes. This unique outlook was made available owing to the wealth and rarity of the longitudinal data base which reflects a multi-thematical, cross-section of a population of organisations.

The theoretical introduction includes a significant chapter in which various theories are reviewed from the kibbutz-organisation viewpoint. A large part of these studies reflect essential features of organisational theory which reiterate positivism in the sense that they, generally speaking, glamorise the advantageous disposition of the kibbutz as an organisation. That some of these scholars were intoxicated by the fixation of organisational growth hence were oblivious of potential downturn organisational propensities, may not be regarded as impairing either their scientific integrity nor will it question their strive towards ultimate research verity. As extensively referred to in the theoretical introductions, **most** students of OT

favoured organisational aspects of growth rather than aspects of organisational decline, crisis or demise. These phenomena began to characterise the organisational locus with an accelerated pace corresponding with an unprecedented environmental turbulence affecting structures, processes and eventually relevant scholarly attention.

Zammuto & Cameron (1985:224) argued that the dearth in theory and guidelines for managing decline and crisis has been rectified over the last fifteen years in light of the wide-spread dissolutions, business failures and the general retrenchment of not-for profit organisations. Indeed, the kibbutz organisational research mirrored conventional courses of study in OT. Etzioni (1957) advocated the application of Weberian structural rationales. He was followed by Golomb who doggedly criticised organisational dysfunctions though with no reference to the relatively few relevant theoretical studies. Shepher (1976) criticised governing-structural practices of the kibbutz but most other researchers covered a wide and not unimportant organisational spectrum. However, they entirely overlooked the impending signals of crisis.

Helman's prolific and requisite scientific interest evoked some academic attention although his perspicacious presence reflected chiefly his economic predilections. He may not, therefore, be regarded as concurrent with the emerging

treatises of organisational decline and crisis.

In all, the first unpublished study to reflect some relevant theories of decline and crisis is Sheaffer's MA project (1987) followed by Helman, Glick & Goldemberg's (1988) research which bears heavily upon pure sociological and economic theories. To date, only a handful of published studies addressing the kibbutz crisis are available in a form dealing with the prolific literature of organisational decline and crisis (Merry, 1990; Niv & Sheaffer, 1991). In this respect, this thesis intends to make some modest inroads into the introduction of organisational decline as its major theoretical grounds. The thesis is also attempting to empirically support constructs of these theories. The atypical nature of the kibbutz organisation, its integrative character and the concurrent functioning of both unique communal facets with genuine aspects of business have created an intense and worldwide academic interest.

The current crisis has, for the first time, blatantly unmasked the mostly irrelevant, outdated and incompatible structural features of the kibbutz. A recurrent theme throughout the thesis reiterates the cumbersome, inert, overly-complex, excessively-differentiated and highly reproducible organisational structure of the kibbutz. The structural deficiencies incorporated with an increasingly inter-generational and individually-oriented community, acted as a conducive crisis catalyst. In fact, this

research is not focused on a specific aspect of organisational decline and crisis, rather it studies a wide variety of related dysfunctions, an endeavour which, to an extent, concurs with the eclectic nature of OT. This choice has been partially the result of the availability of data, institutional accessibility as well as budgetary confines. However, as underlying research questions indicate, this research may be regarded as a fastidiously-designed scholastic venture into the hitherto uninvestigated aspects of a crucial occurrence in the annals of the kibbutz.

Owing to the relatively wide scope, a substantial theoretical basis was reflected upon. It partially relates to the empirical research although it also provides a structured and systematic theoretical reference to contiguous aspects as well. The thesis displays several research trajectories. Some appertain to endogenous and exogenous catalysts of organisational crisis, the rest relate to certain stages of organisational decline. An attempt to sum up the major findings derived from the empirical findings will result in a rather unequivocal conclusion. From the point of view of the theory, the kibbutz is engaged in a multi-dimensional and a lingering crisis. The crisis has had an onerous, extensive and persisting impact upon the current intra and inter-organisational kibbutz features and is incrementally altering most structural facets as well as deeply-entrenched collectivist perceptions. This general

conclusion leads us to the primary thrust of this chapter: a systematic review of the research's findings.

Review of Major Findings and Generalisations of the Research Results to the Theoretical Framework

The research courses may be divided as follows. Models consisting of external and internal causes for and characteristics of the crisis. These include two pooled regression analyses whose objective was to identify various causes for the crisis. Additionally, three MDA models were aimed at characterising the best discriminators for distress groupings. The second research direction entailed a number of models which largely, provide quantitative answers and characterisation of the aftermath of decline and crisis. These include the analysis of the following topics. Organisational goals and policies, the upwardly convergence of managerial powers, managerial responses to decline, administrative overheads, organisational conservatism and resistance from change.

The study of antecedents of crises requires a thorough emphasis on early warning signals. However, early warning signals are not quantitatively studied although they are extensively alluded to in the chapter addressing theoretical aspects of the kibbutz organisation as well as in the chronological and conjectural analysis of the crisis.

Antecedents involve ostensible endogenous and exogenous causes for crisis. The findings relating to these causes seem to conform with the theory and exhibit an interesting dynamic between external and internal catalysts. Two pooled regression models were constructed. The first sought to identify predictors for organisational demographic depletion and the other focused on independent variables hypothesised to have affected the accumulation of debt. Both dependent variables symbolised the crisis and the longitudinal format enabled a fairly accurate investigation of the **dynamics** of the crisis. It appears that demographic depletion is, first and foremost, endogenously-induced. Of the external variables embodying the task-environment only unemployment serves as a useful predictor primarily due to the immediacy of its effect on leavers. The findings adduce vital indications as to the validity of the theories of liability of newness and smallness.

Distinct confirmation of Masuch's (1985) vicious circles are evident as well as significant impact of the state on the economy on demographic haemorrhage. Further credence is rendered to a number of elementary theories within the wider framework of organisational decline. The theories are: organisation - environment relationships, the liability of newness and smallness and vicious circles. To an extent, general theories of quantitative political economy are also supported. Indications are that both the rate of inflation, the cost of capital and politics have a

differential effect on the severity of the crisis. Young and small kibbutzim are far less resilient in their structural adjustment to the environment. The two reconciling organisational liabilities behave equally haphazardly as catalysts of the crisis. The self-terminating effect of vicious circles is an inseparable feature of declining kibbutzim as evidenced by the mutually-destructive effects of increased organisational attractiveness (annual absorption rates) ensued by accelerated organisational demographic depletion. Aside from the partial support of prevalent theories, the two models sustain portions of earlier studies. Though in an entirely different format, This study has managed to underpin certain findings of the Recovery plan as well as bolster some of my own earlier findings, (Sheaffer, 1987).

The models are methodologically robust, reflecting the dynamic nature of the evolving crisis. Students of organisational decline lament the acute difficulty in obtaining longitudinal data. In this respect, the data base is almost exclusively temporal which, in turn provides the basis for the construction of longitudinal models. The resulting findings are, therefore statistically more valid, contributing to the substantiation of the hitherto partially supported treatises.

In general, theories of business failure focusing chiefly on predicting failure from financial ratios (Altman, 1971, 1982, ,1983, 1988; Argenti, 1976; Bibeault, 1982, Melicher

& Hearth, 1988 and others), are supported. In the main, the impact of exogenous variables (inflation, interest rates, general economic policies) and, in fact internal ratios' (investment per member, ND/TRNVR/member, organisational munificence/member, organisational slack/member etc.) are clearly effecting endogenous-organisational measures (ODD) and eventually facilitate the evolution of the firm's collapse. In this study, neither bankruptcies nor organisational death (Hambrick & D'Aveni, 1988) are extensively addressed, they are alluded to as the natural aftermath of decline. The detrimental blow of the economic deregulation is of major importance, and is shown to have had an overriding triggering impact upon intra as well as inter-kibbutz structures.

It is argued that the kibbutz organisational goals as expressed by the more abstract UKM's domain goals (the broadly stated policies) and their detailed interpretation into output, system and derived intents are currently at odds with the fast-changing interpretation of these abstract objectives, by grass-root kibbutzniks. The growing disparity between the outdated and mostly irrelevant domain and output goals and their conceptualisation by kibbutzniks has (Lanir, 1990; Merry, 1990) created a crisis of meaningfulness or relevance which appears to more acutely epitomise the current crisis or rather to either overshadow or outweigh other aspects of it. Although the validity of this far-reaching presumption has yet to be fully tested,

there seems to be ample evidence as to the magnitude and gravity of this organisational predicament.

This study indicates that a great deal of incongruity exists between stated and formal kibbutz goals and, indeed, their actual realisation by grass-root kibbutzniks. This perceptual cleavage between traditional tenets, as expressed by institutional preference and the favouring of radical issues by conference delegates attests to a widespread disillusionment and discontent amongst the majority of kibbutz members. To an extent, these findings furnish supplementary validity to Palgi & Sharir's (1991) conclusions regarding the general degree of discontent in light of the crisis. Further indirect credence is also accredited to Whetten's (1981) assertion pertaining to the reluctance on the part of retrenching organisations' administrators to reevaluate belief systems. In this respect, my study seems to be the first to quantitatively test aspects of the newly-termed crisis of meaningfulness.

Brain-drain is a consistent by-product of a lingering crisis. The literature is studded with essential allusions as to the frequency and propensity of the more marketable members to leave the buffeted organisation. Although ample unprocessed statistical evidence existed, no attempt has been made to quantitatively estimate the magnitude of this fatally-negative demographic phenomenon. Relying on a time-series-formatted data base, encompassing ten years series,

a new statistical methodology has been applied; correspondence and multiple correspondence analysis not hitherto known to have been employed in the disciplinary domain of organisational decline. The findings indicate a number of important demographic aspects. The UKM population is aging alarmingly and it loses significant numbers of young kibbutz-socialised educated adults. Over a span of ten years the UKM population appears to be demographically and qualitatively depreciated in terms of a consistent loss of vital technologists as well as other academicians.

The persisting demographic haemorrhage will, eventually, result in a substantial decrease of internal human variation in UKM kibbutzim. Consequently, kibbutzim with a broader pool of internal variety are likely to be more resilient to respond to the turbulent-task environment. As to the methodology, time-series are customarily analysed using specific multiple regressions techniques. It has been shown, given the special circumstances, that longitudinality can be applied in a fairly simple whilst sophisticated way. Moreover, cautious inferences can be drawn based on specific clustering of cases over a well-defined time-span. The findings advance evidence as to the severity of the crisis-aftermath as well as to the nature of a lingering organisational decline.

Managerial aspects in declining organisations drew researchers' attention primarily in various patterns of

managerial decision-making under stress and uncertainty. However, the organisation in its entirety can and mostly is affected by structural and behavioural aspects of management under severe, alternating and lingering stress. This supposition seems to be reinforced by the indrawn, intimate and structurally intertwining 'total' nature of the kibbutz. The findings of a CA model based on a relatively large sample of kibbutzim, indicate that despite unique organisational characteristics of the kibbutz and the atypical managerial attributes (enforced rotation, faulty scalar principal, emphasis on social acceptability rather than on professionalism etc.), the kibbutz management demonstrates 'standard' responses in the sense that the literature precludes none of the four managerial response modes extensively discussed in the relevant chapter as incompatible with either business or not-for-profit organisations. The CA model exhibits four distinct modes of reaction to crisis: stable, neurotic, authoritative and change-oriented. It is argued that the majority of UKM kibbutzim cluster around the neurotic and authoritative modes. This gives credence to the fact that the majority of UKM kibbutzim are engaged in a multi-dimensional and lingering crisis. Only an inconsequential minority of kibbutzim could be categorised as change-oriented in their managerial response to the impact of crisis. Also, kibbutzim clustered around the 'stable' mode were affluent in mid 1989, and were in a placid mode due to relative munificence incurred by relatively high levels of

organisational slack. The model's results support a general notion arguing that despite the uniqueness of the kibbutz as an organisation, current theories appear to be not only relevant to the special circumstances but the empirical results partially support primary theoretical propositions.

Of the main organisational dysfunctions during and following the current crisis, the upwardly convergence of authorities seems to typify kibbutz organisational hierarchy in a rather distinct fashion. There are a number of reasons for the salience of this structural imperfection. Despite the distinct epitomisation of this flawed managerial conduct during the current crisis, the proclivity to concentrate powers in the higher echelons of the organisational hierarchy has been an accompanying structural feature of the 'industrialised' kibbutz. This structural flaw seems to have intensified as a result of the crisis. The fuzzily defined roles of low and intermediate managerial levels, incorporated with an indistinct effectuation of the scalar principle and inattentiveness to aspects of professional management at large, have all but ensured a diluted delegation of authorities.

The enhancement of links at the uppermost managerial level is quantitatively assessed by a simple examination of the number of ex-officio memberships in most committees. The

findings indicate a particularly overburdened Secretary General. This dysfunction is attributable to committees inundated with partially resolved issues which as a result of the crisis, invoked supplemental complications and thus, facilitated the smooth acceleration of emerging vicious circles. Paradoxically, the kibbutz as predicated on tenets of direct democracy, exhibits structural dysfunctions characteristics of any firm or public organisation. The above findings constitute an additional illustration about the relatively unproblematic reliance on current theories despite the unique nature of the kibbutz.

Aspects of kibbutz management in crisis, entail the assessment of a rudimentary theoretical aspect pertaining to the fluctuations in administrative overheads during years of organisational decline. Theories connoting a rise in administrative overheads within declining organisations as well as empirical studies indicating an intensification in administrative intensity are partially supported in the findings. My measure of administrative overheads (labour input in administration) characterising structural intensity did not increase despite an overall demographic decline.

Ford's (1980) relevant propositions are not supported here. However, the main finding indicates that a decrease in the kibbutz's direct component (the productive sector) during years of decline results in an increase in the

administrative overheads. Freeman & Hannan's (1975) study is supported here though variables' definitions do not entirely correspond. A certain inconsistency should be addressed regarding a seemingly contradictory result. It has been earlier demonstrated that one of the crisis' repercussions is an increase in adhocracy, primarily in kibbutzim classified as neurotic and authoritative. This finding should not be associated with the absolute decrease in administrative overhead since the kibbutz administrative nature of adhocracy implies impermanency.

In general, descriptive statistics indicate a decrease in kibbutz's structural intensity, at least in so far as administrative overheads are concerned. This decrease was gradual and corresponded with the general state of organisational decline. This general conclusion seemingly refutes theory, yet a rigorous in-depth analysis has shown that, indeed, essential portions of the underlying theories are supported here.

The empirical part of the thesis is largely based on a macro research design thus dealt with a population of organisations, and in certain models over two thirds of the population were represented. The two major crisis models involve exogenous and endogenous predictors whose relative impact on the crisis was estimated by pooled regression models. The two models were supposed to have embodied organisational crisis from the economic and

organisational/demographic perspectives. The models assessed a dynamic process of decline employing a longitudinal design. The infrequent data design i.e. partial time-series proved to be advantageous as exemplified by the conclusive findings. The conceptual framework of the two models revolves around aspects of causes or catalysts for the overall downturn trend as well as organisation-environment relationships. To an extent, quantitative political economy is also highlighted by using econometric methodology involving the concurrent inclusion of exogenous and endogenous variables in a quasi time-series model.

The first model's findings involving ODD as a dependent variable, indicate a number of crucial elements, all of which support major theoretical constructs. ODD is caused, first and foremost by organisational atrophy, namely, it is a demonstration of a discontent propelled by a compounded agglomeration of organisational dysfunctions which tend to be negatively self-feeding and self-reinforcing, leading, eventually, to a community boxed-in in a dead-end loop. The lingering, unheeded and environmentally reinforced state of decline has brought about an critical exodus of human capital.

The traumatic loss of an indispensable organisational buffer is attributed causally to such processes as liability of newness and smallness, a perpetual mechanism of abortive absorption, a snowball effect of previous

exodus and a steady drop of organisational munificence as exemplified by mounting debts. The internally-induced catalysts for growing rates of Aziva, overshadow the impact of exogenous variables. It appears that the intensity of interrelatedness amongst the deteriorating state of kibbutz economy, the susceptibility of its communal cohesiveness and the acute demographic haemorrhage, override most potentially-negative externally-induced factors. Not unanticipated is the distinctiveness of unemployment as the single impetus (exogenous variable) affecting rates of ODD. However, it is not precluding the potential influence of additional and hitherto untested external factors. The inseparable linkage between the economic domain and the demographic/social sphere particularly during a lingering crisis is robustly supported too. Demographic depletion, constitutes a sensitive, effective and yet a mere supplementary gauge for the concurrent estimation of endogenous and exogenous impact upon the evolution of organisational crisis.

The second model featuring a tripartite, thematically compounded dependent variable (featuring economic, and organisational size divided by debt) augments the first model's findings. Externally oriented factors tend to have a more substantial impact upon the accumulation of debts than on ODD. Three classic economic environmental catalysts negatively affect the state of kibbutz economy. In the broader political sense, economic policies endorsed by the

Likud Governments have had a negative impact on the kibbutz movement throughout the crisis. The proposition suggesting that Likud economic strategies have adversely affected kibbutzim is, for the first time, granted a quantitative support.

The cost of capital is found to have a major impact on the mounting debt. This finding supports earlier indications (Sheaffer, 1987) regarding the positive statistical association between the two variables. Additional support is conferred on the liability of newness and smallness, again manifesting the vulnerability of younger and small UKM kibbutzim to adverse environmental fluctuations. Essentially, the findings concerning the inverted statistical association between living-expenditures (per capita) and the ND/TRNVR as well as the no-link between productivity and ND/TRNVR, deal a blow to the ingrained policy advocating a sharp reduction in living standards and increased productivity as efficient disentangling agents. These findings do not preclude the validation of structural revampment nor drastic efficiency measures. However, as the results demonstrate, these are but marginal propellants in the overall drive towards the desired turnaround. Negative spiralling processes seem to be engendered by both ND/TRNVR and ODD as independent variables. A reciprocity of negation exists between the two vital predictors.

It is concluded that the dormant social discontent along

with organisational pathologies were aggravated by the precipitous deterioration of the economic situation which performed as negative catalysts. Not insignificant is the result connoting the worsening of the economic situation with a decreased organisational attractivity. However, the usage of such statistical procedures as path-analyses is likely to further substantiate the precedence and the specificity of specific organisational, economic and demographic catalysts.

The unique nature of interrelatedness between the fast changing organisational structure and additional task-environmental catalysts deserve more academic attention. Scientifically puzzling is the persistent follow-up after current alterations in the environment's munificence as affecting various achilles points in the fast-changing kibbutz as a system. Equally baffling is the decrease in the kibbutz capacity to delineate its task environment. Whereas the kibbutz gradual retreat as a leading social elite has been addressed by sociologists, no OT related study to quantitatively assess this trend has, thus far, been embarked upon. The statistical methodology used in this thesis has capacitated an analysis based on the dynamic nature of the crisis. The margins of inferential error are reduced markedly by the application of several points in time and dummy variables. Though causality cannot be fully established, inferences has been made considerably safer by applying the more robust pooled regression design. Equally

substantive is the fact that the data base relates to an **entire population** of organisations demonstrating longitudinal rather than cross-sectional trends.

Three discriminant models were included, each of which reflects a classification of kibbutzim in accordance with a different organisational property. Broadly speaking, the models are constructed in accordance with Altman's (1988) discriminant model predicting corporate bankruptcy. Whilst Argenti, (1976), Bibeault, (1982) Altman, (1982, 1988) and Platt's (1985) studies concern corporate financial distress, bankruptcies and business failure from a business management angle, models used in this thesis sought to encompass a wider organisational framework.

The application of discriminant analysis, though not overly popular in OT-related studies, is deemed useful owing to a number of key reasons. The classification of kibbutzim into definitive sub-groups has been particularly essential prior to the current crisis. The traditional categorisation was based on organisational age primarily for statistical-registration purposes. Age as an inclusive organisational attribute encompasses most other vital properties. With the intensification of the crisis, economically-based subgroupings seemed to suffice both for allocation purposes and the handling of other institutionally-linked assistance. However, a classification predicated solely upon economic performance, precise as it may be, is omni-

dimensional, i.e. it incorporates only a compounded economic measure disregarding, at times, equally vital organisational facets.

The discriminant models advanced here furnish not only a multi-faceted classification but facilitate the assessment of the differential-temporal prediction power of a large number of discriminating variables. The three models are based on a unique data base facilitating numerous longitudinally-based statistical manipulations. A primary aim of a longitudinally-based statistical design lies in its capacity to fairly accurately estimate temporally-denoted variables' impact on the grouping variable. Hence, the quality of correct classification into sub-categories. In the first instance where the grouping variable was ODD in 1988, the most efficient discriminators were organisational, economic and demographic variables denoting T-3, T-2 and T-1.

The superiority of a method applying past occurrences as delineating current processes is incontrovertible. The two functions determining the graphical dimensions appropriately reflect both the time-lagged crisis dynamics and the multi-faceted context as mirrored by thematically-different discriminating variables.

The first dimension is characterised by Aziva ratio, organisational attractivity, living expenditures and organisational age, all of which designate the temporal

'knee' in any crisis-related curve. The second is the 'crisis outgrowth'. It aptly compounds debt and Aziva both of which mark the 'knee' years and characterise the two major crisis phenomena. The second model featuring ND/TRNVR as the grouping variable, generated a decisively distinct group membership (92 percent of the cases). Much like multiple regression results, whenever economic variables need either explanation or characterisation, they surface as far more coherent thus explicable or portrayable, than 'soft' variables constituting proxies for organisational, demographic or social features.

This model grants further support to the methodological advantage of applying a longitudinal research design. Of the sixteen variables shown on the summary list twelve are temporally-lagged, signifying the dynamic nature of the crisis. The first function outlining the scatterplot's first dimensions is, contextually named: **Human and Economic Crisis Determinants**, alluding to the strong linkage between human and economic features during the crisis. The second function labelled: **Living Standards, Slack and Risk-Taking** implies the traditional tripartite association amongst the level of risk-taking, organisational slack and standard of living. An essential component of MDA is the five and six year predictive accuracy of the model. Following Altman (1988) a model was synthesized making possible the assessment of the overall effectiveness of the discriminant model for a number of years prior to the designated year of the crisis (T or 1988).

Irrespective of the ratio embodying organisational crisis, it appears obvious that the closer one gets to the actual crisis the more accurate and characteristic are the predicting ratios and variables, hence their overall predictive power. The third discriminant model illustrates an overall endeavour to stabilise the kibbutz's detrimental economic plight by mobilising a quasi redundant work-force to take-on external jobs. The model, unlike its predecessors marks the initiation of a turnaround strategy. Provisional results indicate that the kibbutz's predisposition towards a proportional increase in external jobs is particularly evident in kibbutzim where viable sustenance sources dwindled rapidly. Another crucial finding pertains to the fact that the best predictors are labour-oriented organisational variables, notably those denoting T-1 and T-2. This finding indicates that the inclination towards higher proportion of external workers is chiefly related to intra-organisational labour patterns and dwindling resources in financially stretched kibbutzim.

An important finding relates to the diminishing discrimination power of economic and social variables. Since no cases were excluded from the analysis owing to certain 'irregularities' in their overall characterisation as exemplified by the discriminating variables, it is concluded that, some degree of uniformity exists in terms of intra-kibbutz mobilisation towards the turnaround phase.

This thesis only alludes to the turnaround aspects of the post-crisis phases. Needless to say, organisational revitalisation following a multi-/dimensional crisis is essential in the sense that the remaining organisational viability should be channelled towards recovery. Organisational change supplements the decline and crisis phases. However crucial this subject may be, constraints associate with the research design allowed me a mere allusion to the turnaround stages in the organisational life cycle.

As a passage to a possible follow-up, a model involving elements of organisational resistance to change was included. Expressively, this model concludes the main empirical body of the thesis since conceptually, this theory complements the initial phases of crisis and or decline. Authoritative views (Levy, 1988; Merry, 1990) suggest a fundamental, large-scale change (Goodstein & Burke, 1991) involving a quantum leap (Miller, 1982; Niv & Sheaffer, 1991) a total reorientation or a "frame bending" (Tushman, Newman & Rromanelli, 1986; Nadler & Tushman, 1988) strategy. The findings in this study's CA model demonstrate that since 1988, changes within UKM kibbutzim, entailed incremental conceptual¹ readjustments, and fine-

¹In the sense that a number of principles and norms have been gradually altered chiefly from 1988 onwards.

tuning or superficial structural alterations² Though not oblivious to the relatively early post-impact phase, the process involved modest, technical changes aimed at improving organisational performance or rather, economic efficiency and not a fundamental organisational change. Most kibbutzim demonstrated a fairly high degree of organisational conservatism or resistance to change. Most kibbutzim are also subject to strong inertial forces even though changes have occurred but in an incremental and haphazard fashion.

The findings reflect the perceived preference for change in various kibbutz areas entailing mundane and radical issues, all of which were viewed by a crisis-management team to be high on the agenda late in 1988. The results also show that kibbutzim tend to preserve the existing system as mirrored by a remarkably favourable attitude towards mundane topics as more highly endorsable than the radical ones.

Irrespective of these findings, it is argued that the more the kibbutz realises that its very survival is contingent upon cyclically-fluctuating environmental jolts (hence, a growing threat) the more it will facilitate endogenously-induced pressures to transformational change. Indications abound as to the gradually alternating face of the kibbutz. There appears to be no accurate measure to gauge the pace

²Such as the institutitalisation of kibbutz councils in kibbutzim other than the bigger ones. Committees specifically dealing with human resources also mark a conceptual change of heart.

of change nor any theoretically-applicable model enabling researchers to appraise a duration of either incremental or quantum change. Hence, one can only partially evaluate the initial time span, i.e. post-impact phase [1986/8] to the full implementation of the stalled Recovery Plan in 1991 and 1992, in terms of the magnitude of the prevailing organisational change.

Much like other organisations and corresponding the open-systems theory (Golomb & Katz, 1971), the kibbutz aspires to a homoeostatic mode of existence. The pre-1977 placid task-environment had intensified these tendencies by reinforcing organisational inertia to the extent that only an uncompromising external impetus could have initiated change. Owing to a noticeable emphasis on empirical research, the thesis can contribute to fill-in gaps in quantitative findings based on current theories. In this respect, the study renders findings relevant to both antecedents and consequences of decline and crisis.

Limitations of the Study and Implication for Further Research

A major drawback in this study lies in the eclectic nature of the empirical research. Corresponding with the endeavour to encompass many facets of both organisational decline and crisis, a need arose to test the validity of various theories in terms of their compatibility with the unique

organisational characteristics of the kibbutz. Data collection was so designed that a relatively large number of areas would be empirically examined. The specific requirements of various theoretical aspects pertaining to decline, crisis, organisation-environment relationships etc. have made a contextual synthesis exceptionally confining. Indeed, the problem of variations across sub-disciplines (public administration, business failure, organisational crisis or strategic management) have made integration for the sake of uniformity rather difficult. To that effect, Zammuto & Cameron (1985:225) contend that: *"the term organisational decline has become somewhat similar to that of schizophrenia, it describes a collection of symptoms rather than the etiology of the phenomenon"*.

The need to generate cogent inferences required a comprehensive application of longitudinally-based statistical procedures. This, despite the fact that temporal data which was available for certain models was either partial or unavailable for other models. However, certain aspects such as organisational response could only be operationalised by utilising processed questionnaires, none of which could be distributed successively in previous or following years due to severe financial constraints.

A useful and instructive way in which to address the inherent problem of crisis sequel-continuity could be tackled by employing models of path-analysis. This

procedure would require some data of a different nature specifically in so far as exogenous variables are concerned. The fact that the research did not focus on a specific area of organisational decline or crisis may be regarded as a liability chiefly in terms of the capacity to fully accomplish definitive results on the one hand and on the other, to probe the subject in a more methodical fashion.

As indicated in different parts of the thesis, declining organisations hardly lend themselves to academic research, let alone a systematic and all-encompassing one. This obstruction was not non-existent in the case of the UKM where most of the data originated. A conceptual handicap is the fact that no clear-cut separation has been made regarding crisis and decline in terms of general references within the thesis. The two phenomenon, though conceptually not far-apart, retain specific characteristics which, at times, either complement each other or can be referred to from a different disciplinary viewpoint. Indeed, at the stage of the review of theories the two phenomenon were addressed separately.

A soaring inadequacy seems to be the dearth in empirical treatment of the faulty perception of environmental occurrences. Early warning signals epitomised by a number of persistent whistle-blowers (Helman and Golomb) have been extensively addressed. This aspect, however, is of crucial

importance to organisational decline and the UKM scene makes possible adequate background for quantitative research largely predicated on Meyer's (1982) operationalisation procedures. Hambrick & D'Aveni's (1988) findings pertaining to the very substantial period of warning prior to the actual shock (Fink, Beak & Taddeo, 1972) are fully endorsed. Moreover, this study indicates that economic, demographic and organisational imperfections could be noticed in most kibbutzim very early in their increasingly momentous downward spiral.

Corresponding with the fact that this thesis deals with a population of organisations, it would be imperative to investigate the current crisis in light of organisational ecology. It appears fairly obvious that kibbutz's ecological niche³ (Boulding, 1978; Zammuto, 1982; Zammuto & Cameron, 1985) has evolved in contrast with its erstwhile structure. Nevertheless, actual theories (Hannan & Freeman, 1977; Boulding, 1978; Zammuto et.al. and others), call for fresh substantiation based upon the the unique kibbutz's scene.

The chapter dealing with the perceived importance attributed to change, addresses the need to extend change-

³Niche is the environmental habitat of a population of organisations described as a multi-dimensional volume in space and time demarcated by a set of physical, biological and social conditions that furnish resources for or place constraints on the performance of an organisational population (Zammuto, 1982).

oriented research either as a follow-up or as a distinct study. Since organisational change is currently in the making and as other aspects of the crisis have been attended to, models of organisational change merit empirical test in one of the Western world's most viable social laboratories.

The current crisis has evoked numerous dysfunctions encompassing every aspect of the kibbutz life. Integrating our findings with actual occurrences is a paramount task that can contribute to future research, highlighting specific organisational elements. In fact, the chapter addressing the chronological sequence of the crisis provides a comprehensive and detailed description of the antecedents, current situation and future consequences. The empirical study has substantiated essential parts, some of which are vividly illustrated in the content analysis. The following paragraphs will constitute an intellectual endeavour of summary through integration of major findings with actual occurrences.

The crisis engulfing UKM kibbutzim is a lingering, multi-dimensional multi-faceted and was for a considerable number of years in a quiescent state. The placid-randomised and mostly reassuring task-environment capacitated unprecedented economic affluence, demographic stability, social-institutional complacency and self-assuredness. On the other hand, the largely fictitious prosperity

suppressed and procrastinated organisational response to early warning signals, organisational inertia prevailed and structural reproducibility typified most kibbutzim.

The kibbutz became strongly wedded to the past. It had continuously failed in applying effective and self-evaluating mechanism in the form of administrative accountability, nor did it initiate effective human-resources evaluation and a reasonable rewarding system. The cumbersome and over-differentiated (Helman, 1982a) hierarchy, coupled with the intrinsic 'total communality' as well as the liability of a commune intertwined with business facets (Levy, 1988:2) had all but blurred ranges of responsibility of both (elected) groups and individual office-holders. This situation resulted in an almost non-existent scalar principal. The kibbutz has failed in instituting boundary spanning units. Hence, no environmental feedback has been systematically processed. The delayed and mostly incorrect interpretation ensued a haphazard economic growth entailing indiscriminate borrowing and slapdash investment policy. Not irrelevant to a continual environmental scanning is the prevalent short-term planning orientation. Hence, the shortage in either long/intermediate planning capacities or and both an integrative/strategic approach **despite** the highly intertwined nature of the system.

The aggregated impact of the abovementioned deficiencies triggered by an increasingly hostile and oscillating supra-system over a time-span of approximately eight years (mid

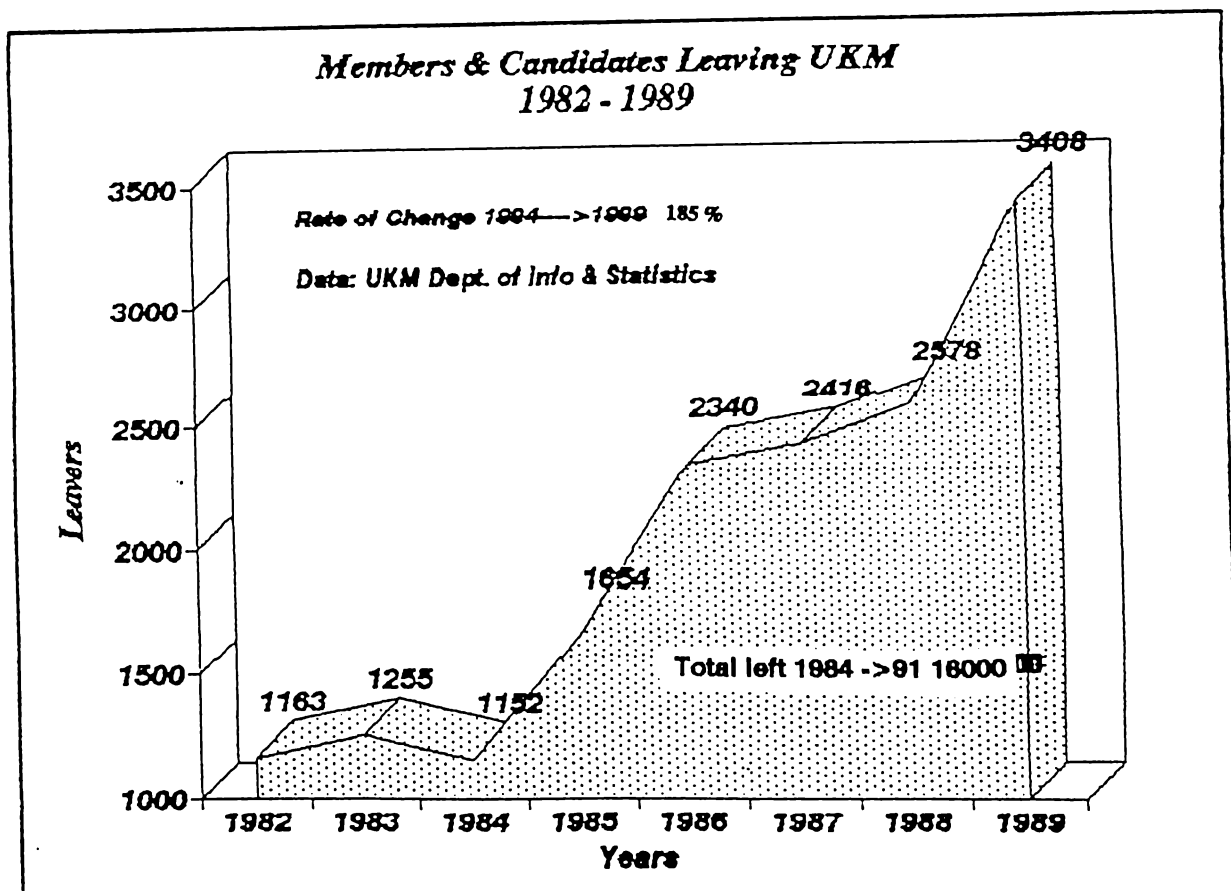
1970s to the early 1980s), resulted in a series of shocks incorporating the following (abbreviated) scenario:

Demography

Organisational Structure

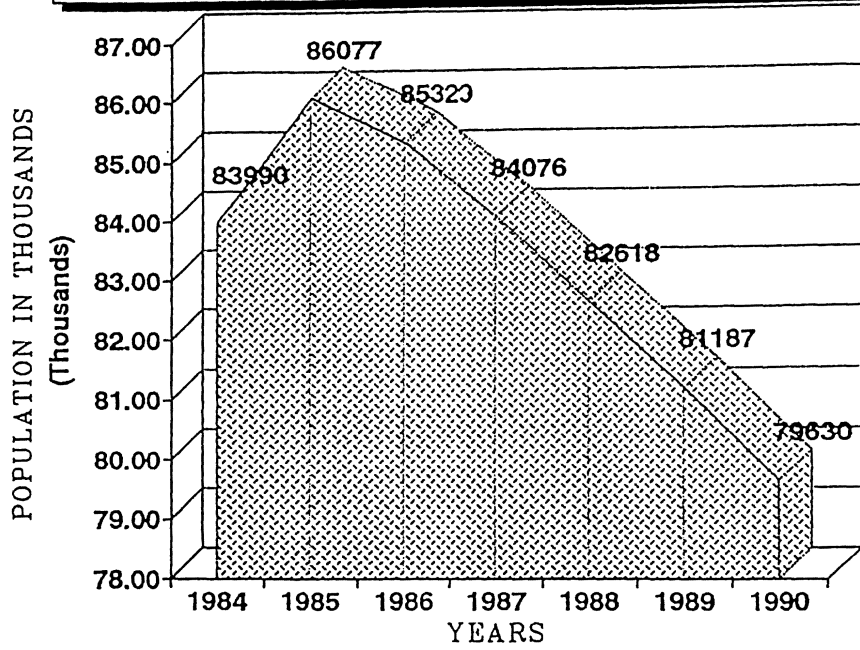
- | | |
|--|---|
| <ul style="list-style-type: none"> * Aging of population. * Brain-drain. * Thwarted absorption. * 'Snow-balled' exodus. * Decreased birth-rate. | <ul style="list-style-type: none"> * Upwardly convergence of powers. * Weakening of intermediate links. * Muzzlement of whistle-blowers. * Efficiency overshadows effectiveness * Conservatism. * Reduction of administrative overhead * Adhocracy. * Increased liability of newness & smallness. * No boundary spanning capacity. |
|--|---|

*Members & Candidates Leaving UKM
1982 - 1989*



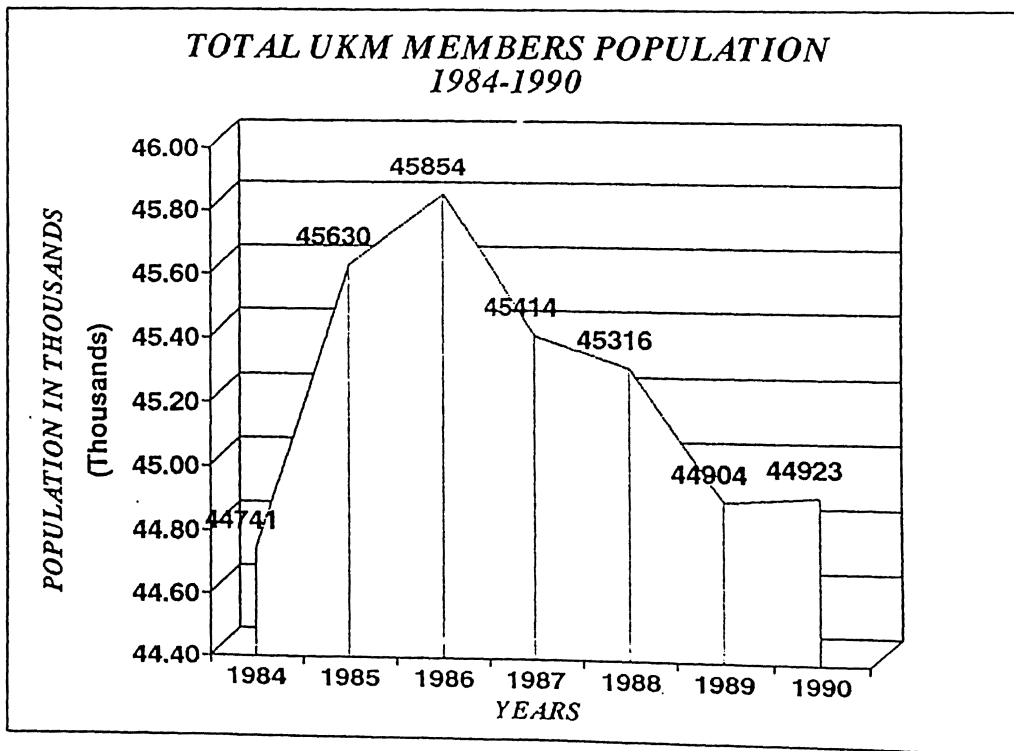
Graph No. 76

UKM - TOTAL POPULATION 1984-1990



GRAPH 77

**TOTAL UKM MEMBERS POPULATION
1984-1990**



GRAPH 78

focused on the shock since, with the crisis still dominating the kibbutz scene it would be difficult to accurately delimit the various stages.

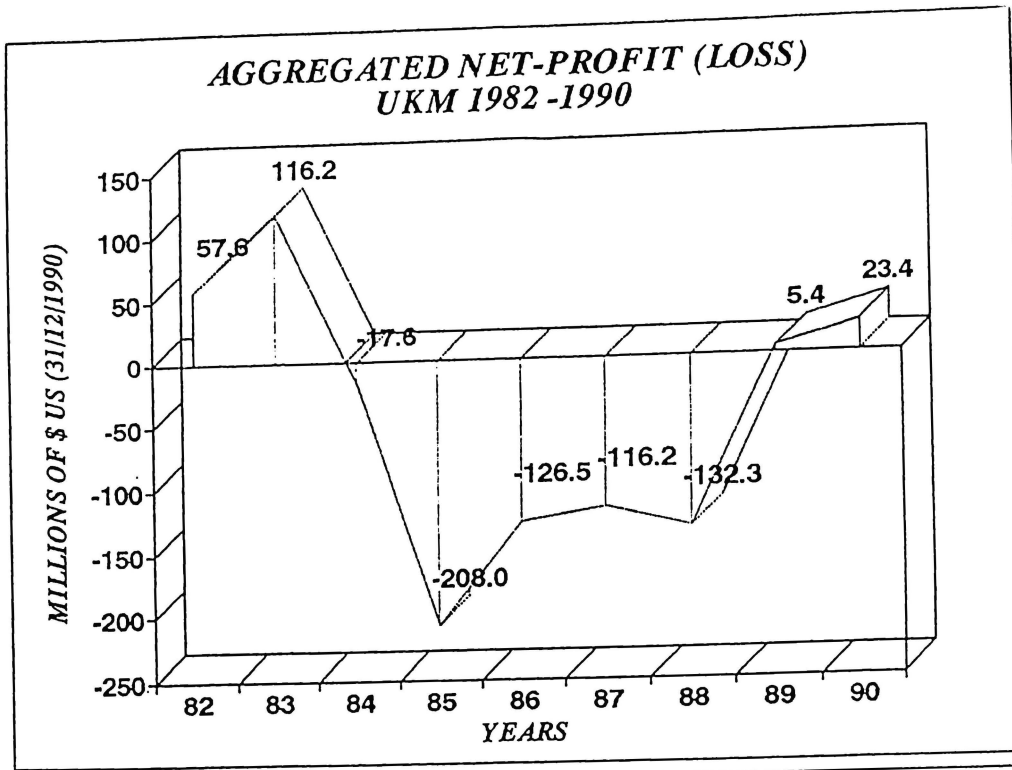
Concluding Remarks

Ample evidence exist regarding the viability of the kibbutz, its interminable reservoir of human capacities and a reasonable organisational openness and managerial acceptance of turnaround as an indispensable strategy. Despite unequivocal confirmations concerning the far-reaching consequences of the multi-dimensional and the lingering crisis, the UKM economy has shown dynamism and up-and-coming vitality. Truly, since 1985 more than a twelve thousand members and candidates left UKM inflicting the worst demographic haemorrhage in the eighty years history of the Kibbutz Movement.

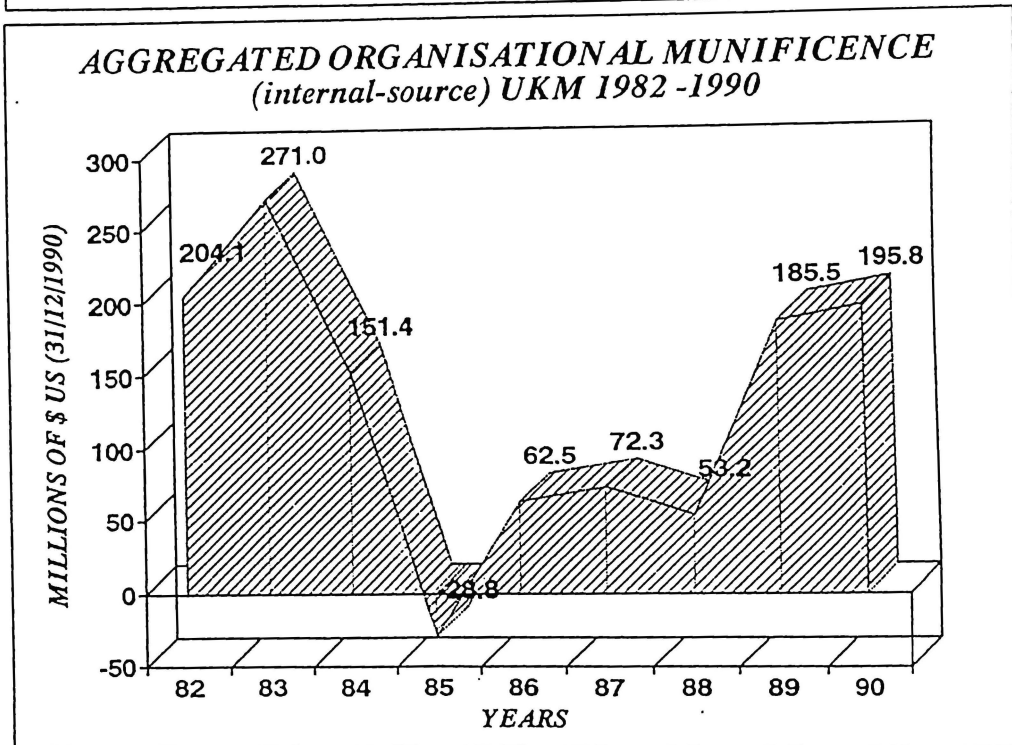
With a consistent figure of over 3000 leavers since 1989 of a total ^{MEMBERS} population of around 39000, one cannot escape the inevitable and harsh reality of a steadily and consistently shrinking population. Whether this study will be recorded as a foreboding presentation of doom-saying, one cannot tell. For a considerable length of time, however, the proliferous academic literature refrained from a piercing whilst constructive critique of the complex kibbutz organisation.

This approach reflected the predominant contentment which,

GRAPH 80

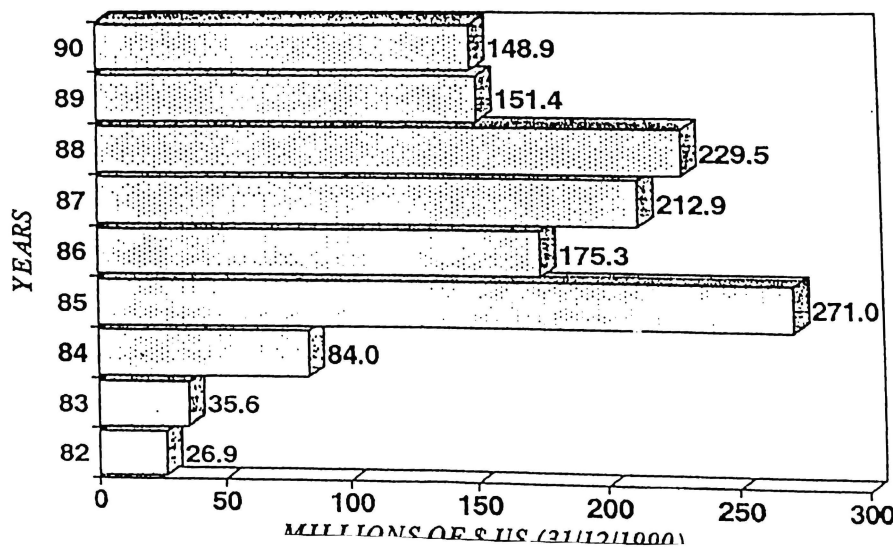


GRAPH 81



AGGREGATED DEBT SERVICE UKM 1982 - 1990

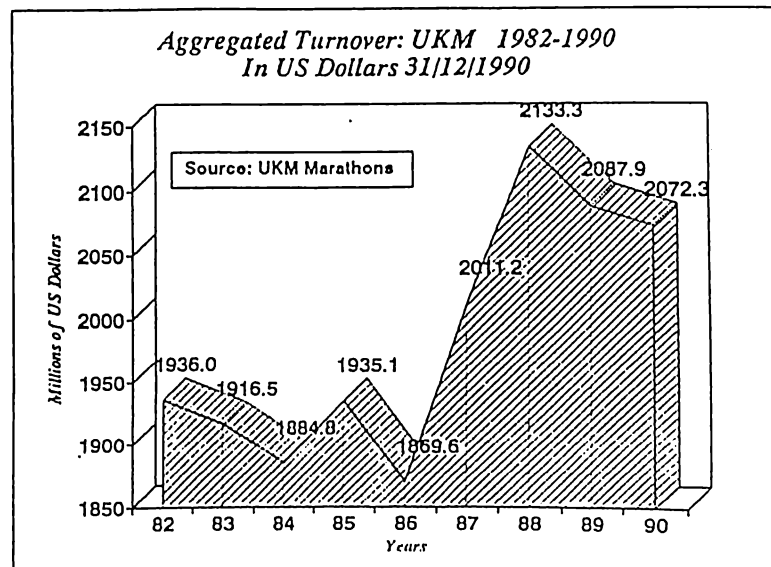
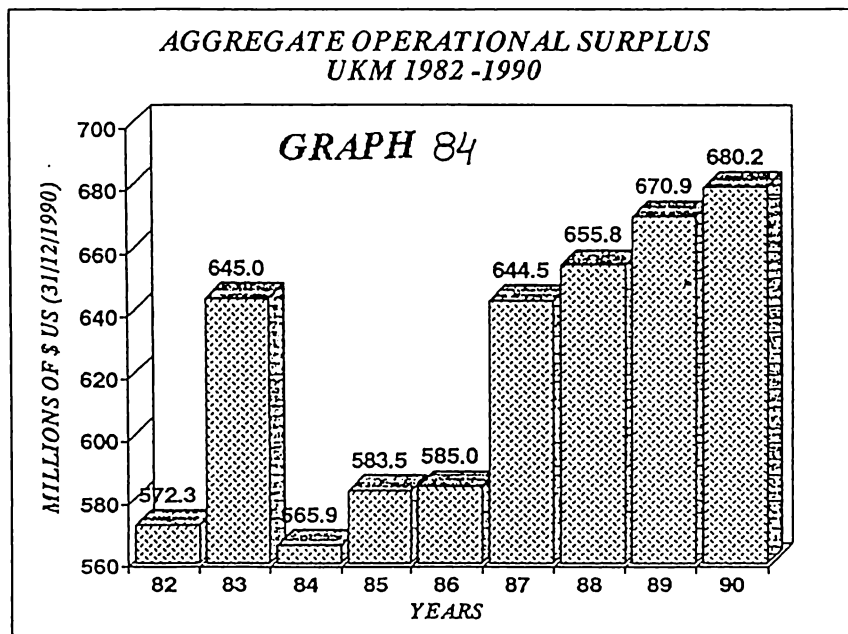
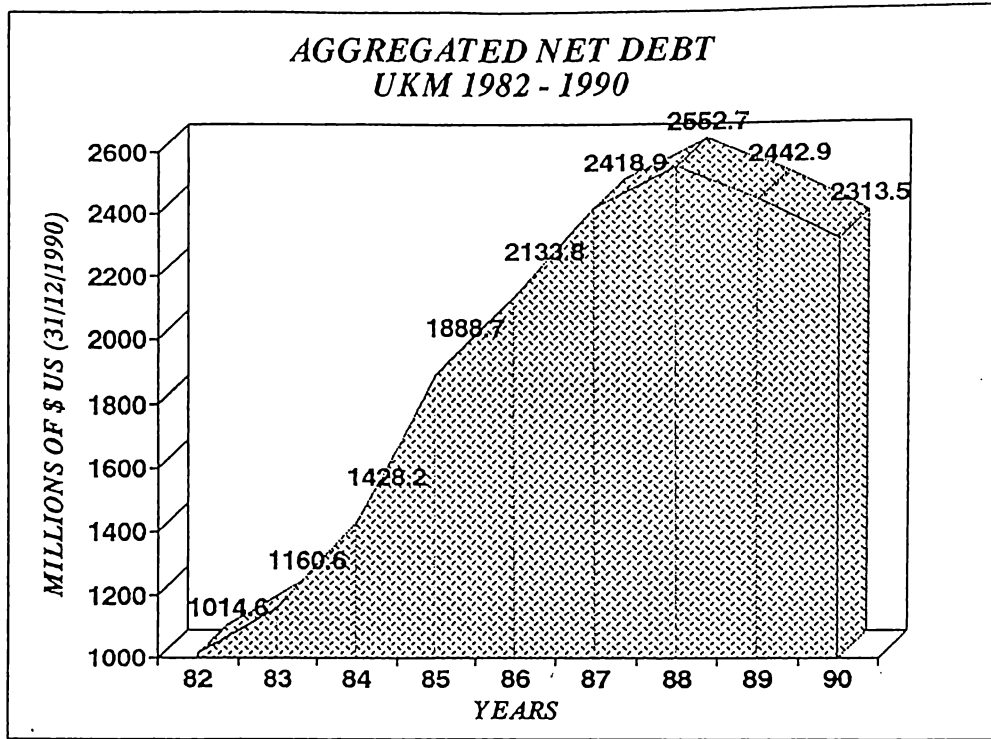
GRAPH 82



attested to the general and over-encompassing notions of everlasting growth and thriving communities incorporated with unequalled social progress and elitism. However misleading and hazardous any generalisation may be, it is argued that the dearth in organisational soul-searching attuned scholars and sociologists in the main to a legitimate yet one-sided research approach where dysfunctions were sidetracked. On the other hand, however, all positive and unique aspects have been addressed from many scholarly angles.

Whilst there seems to be little doubt about the unprecedented social, economic and national achievements attributed to the kibbutz, one can hardly escape the feeling that almost an entire generation of social scientists were, to a degree, intoxicated by the erstwhile glory. A critical study is inevitably controversial, all the more so if the research's stated aim is to unearth intrinsic imperfections in anticipation of synthesising the findings which expose a register of hitherto unstated organisational blemishes. As each end is necessarily calling for a renewed and vigorous outset, this tradition is followed here as well. A series of aggregated economic trends is provided some of which may herald a successful turnaround. The relatively positive economic trends must be viewed with a fair measure of caution since they reflect an aggregate picture which may be misleading. Moreover, any strategic overview is flawed unless reflecting the whole

GRAPH 83



GRAPH 85

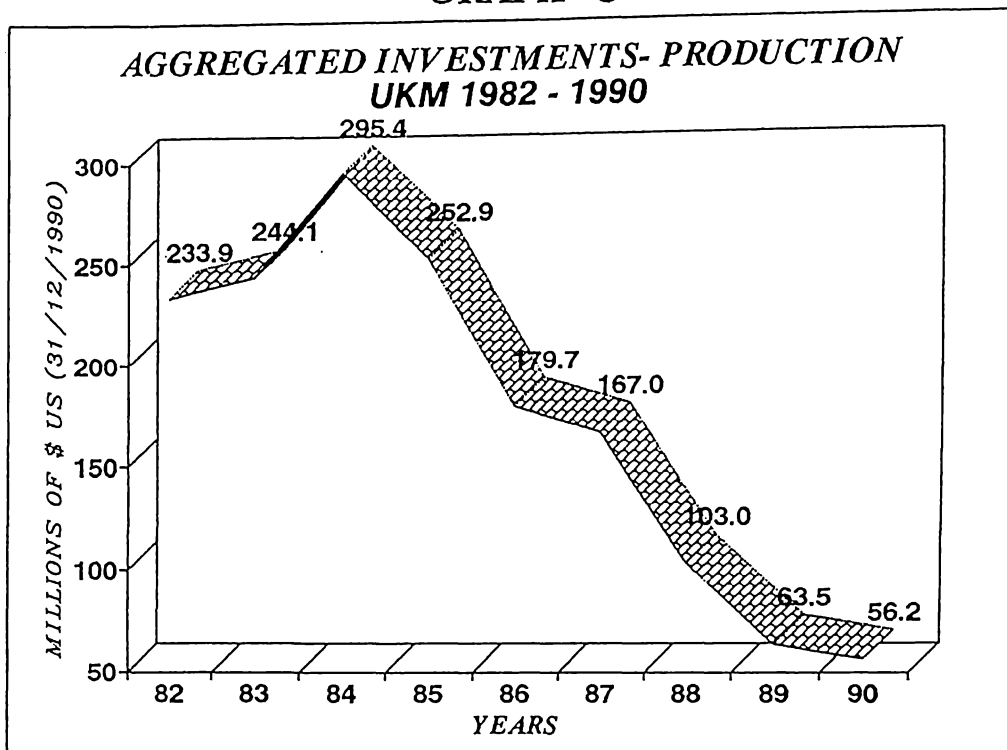
picture. As such, downturn demographic trends seem to be consistently persisting so that any affirmative economic figures accommodates but a fraction, however important, facet of the evolving turnaround.

The following are a number of leading economic indicators reflecting the situation at the end of 1990:

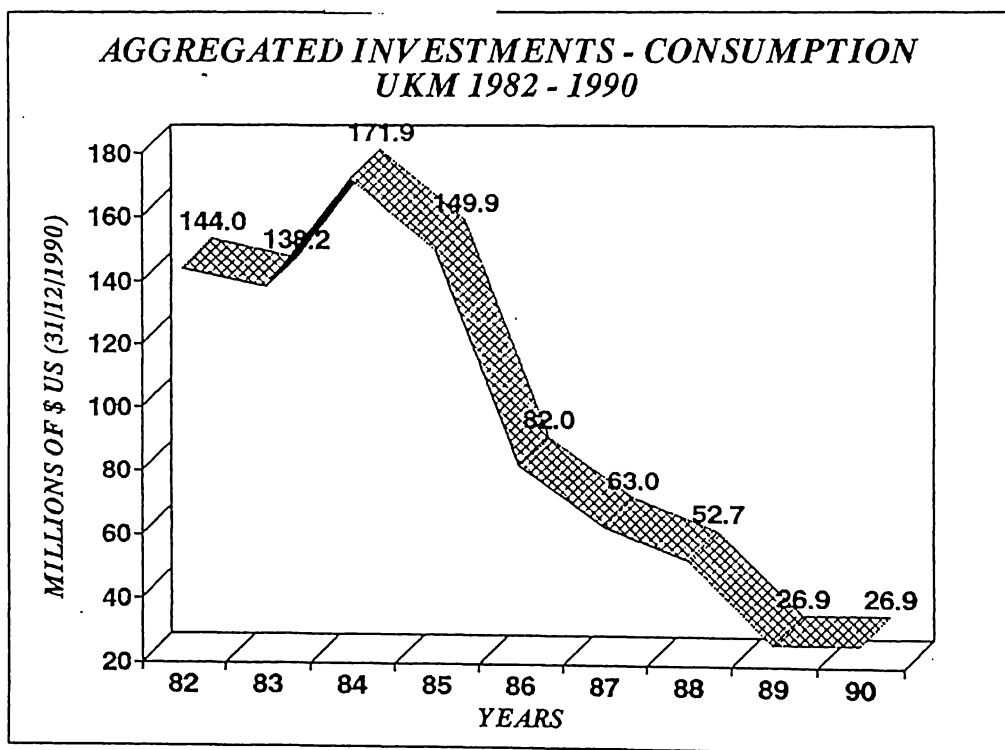
1. **Net Profit** a positive upturn of 789 percent from 1985-1990 (graph No. 80).
2. **Organisational Munificence** (internal source) an increase of 107 percent (1985-1990). (graph No. 81)
3. **Aggregated Debt Service** (financial expenses) a decrease of 82 percent (1985-1990). (graph No. 82)
4. **Aggregated Net-Debt**, a decrease of 9.37 percent (1988-1990). (graph No. 83)
5. **Aggregate Operational Surplus**, an increase of 20.4 percent (1984-1990). (graph No. 84)
6. **Aggregated Turnover**, an increase of 9.9 percent (1984-1990). (graph No. 85)

The worrisome economic trends involve a drastic decrease in investments in production which indicates an economic stagnation in the long run (a fall-off of 81 percent between 1984-1990) (Graph No. 86). A decrease in investments in consumption of 84.35 percent (1984-1990). This signifies a fall-off in standard of living which will continue to diminish organisational attractivity on the one hand and sustain demographic haemorrhage on the other

GRAPH 86



GRAPH 87



(Graph No. 87). Finally, it should be noted that corresponding with a decrease in debt-service is a noticeable decrease in organisational slack (financial assets) of 50.43 percent between 1983-1990.

Two recent developments are likely to assist in the turnaround endeavour. Firstly, kibbutzim have shown a measured success in absorbing skilled and young newcomers from the CIS. This essential intake of human capital amounts to a vital booster to the steadily depleting human resources over the last seven years. The second development heralds a considerable improvement between the kibbutz and its political environment owing to the recent political changeover.

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Minutes UKM Committee Meetings

These include typed and hand-written minutes of the following Committees: Economic Affairs, Preparatory Secretariat, General Secretariat, Settlement, and Industrial. The minutes reflect the situation in the UKM largely between 1981 to 1988 although minutes taken prior to 1980 and after 1988 are also used. The source for these documents is primarily UKM's Archives at Efal.

A great deal of use is made of a wide variety of internal memoranda which have not always been dated but owing to intimate acquaintance of the UKM scene these could be ascribed to concrete occurrences at specific times.

Internal Communique and Periodic Information Bulletins

These releases were issued on a monthly basis by the UKM's Economic Division. These vital source of inner information, reflect not only the situation but the prevalent managerial atmosphere chiefly between 1983 and 1989. These bulletins are referred to as Takamon.

Proceedings of UKM Caucuses

A systematic investigation of all Monthly Caucus Proceedings from 1980 to 1988 enabled a comprehensive support of a large number of postulations as well as an exhaustive factor in the content analyses. These Proceedings have been made available courtesy of the UKM Archive at Efal.

Proceedings of UKM's Conferences

All Conferences Proceedings (1980 Yifat), (1985 Shefayim), (1989 Revivim) have been employed as a major source for the qualitative policy evaluation. These Proceedings and preparatory leaflets have been conducive in the temporal policy analysis.

Special Analytical Studies and Programme Memoranda

These Working Papers were issued by the UKM's Unit for Policy and Strategy Planning. These mainly internal publications were issued between 1987 and early 1989 and covered a wide range of key policy issues (demography, economy, strategies,

evaluation studies). A comprehensive use has been made with both processed statistical data and the general conclusions.

Annual Economic Plans (Marathons)

Main UKM economic and financial policy statements are drawn from the Economic Marathons. These essential documents contain thematically itemised policy statements which have enabled a distinctive focus on variations of policy emphases and their temporal evolution. A complete analysis of all Marathon Releases has been made for the years 1982 to 1988. The Marathons were issued annually by the UKM Economic Committee.

Social Marathons

Two releases of demographic, social and organisational analyses were made covering the years 1987 and 1988. These papers were jointly published by the Social Committee and the Unit for Policy and Strategy Planning.

Publications of the UKM's Unit for Organisational Counselling

These publications have been extensively employed. Occasionally, these have been referred to in their unedited format. A number of the above unit's early analyses are also alluded to primarily pertaining to seventies.

Internal Kibbutz Publications

These primary source include periodical Newsletters of over a hundred UKM kibbutzim mainly between 1975 to 1988.

Kibbutz Woodville General Assembly Minutes

This source of data has been made available by Woodville's Archive and cover the period between 1960 to 1987.

In addition to the above, chapters of this study refer to a large number of undated authentic documents which were made available by the UKM Archives at Hulda and Efal. These documents, letters and unabridged policy statements cover a wide-range of topics, are confidential in nature and include hundreds of original documents covering the years 1980 to 1988.

Proceedings of public and closed-door lectures are referred to in the text as footnotes. Notes taken during interviews are referred to as interviews.

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APPENDIX No. 1
THE QUESTIONNAIRE

1. Note whether new committees or Ad-Hoc teams have been set up as a result of the crisis (in order to provide answers for the complex situation).
 - a. 5 teams
 - b. 4 teams
 - c. 3 teams
 - d. 1-2 teams
 - e. No teams were set up

2. Please specify whether, following the crisis, your kibbutz :
 - a. is concentrating more authorities within the most important committees.
 - b. delegating more authorities to other relevant committees.
 - c. has introduced no changes. Authorities have remained as before.

3. Provided it was up to you, would you rather have:
 - a. a transformational change in most spheres of life.
 - b. a gradual change in all spheres of life.
 - c. a gradual change in a number of aspects.
 - d. a "Muddling Through" approach.

4. Can your management (as a result of the crisis), provide answers:
 - a. to most problems arising in most aspects of kibbutz life.
 - b. for most of the problems in part of the system.
 - c. for a small number of problems.
 - d. Usually, the burden is such that we request help in most aspects of life

5. Have you increased your administrative overhead over the last 3 years. (Most kibbutzim have acknowledged the state of crisis roughly from 1985 onwards)
 - a. 5-6 positions
 - b. 3-4 "
 - c. 1-2 "
 - d. 1 "
 - e. No additional manpower for administration.
 - f. There has, in fact, been a decrease in managerial overhead.

APPENDIX No. 2
GLOSSARY FOR THE GRAPHICAL DISPLAY

Null : 4-6 additional fonctionnairs for administrative overhead.

Sames: No change in authority structure.

Ansms: Kibbutz capable of providing answers for only a few crisis induced problems.

Gradu: A gradual change in but a few areas.

Burea: 1-3 additional fonctionnairs for administrative overhead.

Ricuz: Concentration of authorities; directed to top level committees.

V1 : 3-4 additional Ad-Hoc teams or committees.

V2 : 1-3 "- "-

Mediu: 3-4 Additional fonctionnairs for administrative overhead.

Ansmn: Kibbutz is either incapable of providing answers for crisis-induced problems or capable of providing answers for only a small number of problems.

Revol: The kibbutz preferes a transformational change following the crisis.

APPENDIX No. 5
DATA SOURCES AND METHODS FOR DATA
OPERATIONALISATION

GENERAL

The following list provides a general background regarding the source and operationalisation of variables. The chief contributors of data are: UKM's Department of Information & Statistics, the annual economic Marathons and UKM Archives in Hulda and Efal.

I. ECONOMIC - TASK-ENVIRONMENTAL VARIABLES

1. TURNOVER

Source: Kibbutz annual marathons 1983-1988. All incomes generated by the kibbutz's (agriculture, manufacturing industries, external jobs) productive enterprises.

Operationalisation: The variable is divided by the total number of members & candidates for the calendary year. Income/members & candidates. Values for 1983-1987 adjusted to 31/XII/88.

2. OPERATIONAL SURPLUS

Source: Kibbutz annual marathons 1983-1988. The formulae is as follows: Total surplus incurred by agricultural industries [+] total surplus incurred by manufacturing industries (total manufacturing industrial revenues [-] total expenditures incurred by manufacturing industries) [+] other surplus (income generated by external jobs and others [-] general expenditures and miscellaneous).

Operationalisation: The variable is divided by the total number of members & candidates for the calendary year. operational surplus/members & candidates. Values for 1983-1987 adjusted: 31/XII/88.

3. FINANCIAL ASSETS (ORGANISATIONAL SLACK)

Source: Kibbutz annual marathons 1983-1988. Financial assets are comprised of long and short term deposits. There is a wide variety of short-term deposits such as foreign currency programmes, interest based on NIS and index-related (CPI) deposits. Long-term deposits include: superannuation, shares, saving accounts etc.

Operationalisation: The variable is divided by the total number of members & candidates for the calendary year. financial assets /members & candidates. Values for 1983-1987 adjusted: 31/XII/88.

4. NET DEBT

Source: Kibbutz annual marathons 1983-1988. Net debt is calculated by deducting financial assets (long [+] short-term deposits) from gross debt which is the total debtness (Long-term debt: CPI-adjusted loans, foreign currency adjusted loans, land-lease. Short-term debt: export financing, debts owed to UKM and other lending agencies.

Operationalisation: The variable is divided by the total number of members & candidates for the calendary year.

Net-debt/members & candidates. Values for 1983-1987 adjusted: 31/XII/88.

5. INVESTMENTS

Source: Kibbutz annual marathons 1983-1988. The variable is the addition of two major components: 1. **Investments in production** 2. **Investments in consumption**. Investments in production include: investments in agriculture [+] investments in manufacturing industries [+] investments in tourism. Investments in consumption include: housing [+] special projects (any investment in welfare; public & private) [+] miscellaneous.

Operationalisation: The variable is divided by the total number of members & candidates for the calendary year.

Investments/members & candidates. Values for 1983-1987 adjusted: 31/XII/88.

6. "MAINTENANCE"

Source: Kibbutz annual marathons 1983-1988. The variable illustrates the total annual cost of living per person residing in a given kibbutz.

Operationalisation: The variable is divided by the total number of members & candidates for the calendary year.

maintenance/members & candidates. Values for 1983-1987 adjusted: 31/XII/88.

7. INTERNAL SOURCE (PERFORMANCE)

Source: Kibbutz annual marathons 1983-1988. Profit before tax- return on total assets.

Operationalisation: The formulae: Surplus after financial expenses [total Operational Surplus (-) net financial expenses] (-) Income Tax (-) total Consumption Expenses [Maintenance (+) National Insurance]. The variable denotes Internal Source per member & candidate. Values for 1983-1987 adjusted: 31/XII/88.

8. NET DEBT/TURNOVER RATIO

Source: Kibbutz annual marathons 1983-1988.

Operationalisation: The ratio serves as a chief indicator for the intensity of the crisis as it portrays the total debtness as a percentage of the overall kibbutz economic activity. The measure is per member & candidate.

9. INTERNAL SOURCE/TURNOVER (MEASURE OF UNABSORBED SLACK)

Source: Kibbutz annual marathons 1983-1988.

Operationalisation: The ratio serves as an primary indicator for the kibbutz's ability to meet its short-term obligations. Hence, it is employed to assess the kibbutz's slack for meeting immediate resource needs. The ratio is per member & candidate.

10. OPERATIONAL SURPLUS/TURNOVER

Source: Kibbutz annual marathons 1983-1988.

Operationalisation: The ratio gauges the kibbutz's economic efficiency

II. DEMOGRAPHY - ORGANISATIONAL VARIABLES

1. POPULATION

Source: All variables denoting any UKM population sector are provided by the UKM's Department of Information & Statistics -Annual Demography Releases. These releases include raw distributions of UKM population according to relevant segments. All variables denoted "population" indicate the total number of kibbutz members & candidates registered by the Ministry of the Interior.

Operationalisation: For all models' purposes, the variable is used in its "raw" form and serves as denominator for all economic and some organisational variables to form an inductive comparative proportion.

2. ABSORPTION (Organisational Attraction)

Source: UKM's Department of Information & Statistics. The variable indicates the total number of adults absorbed by a given kibbutz in one calendary year (1983-1988).

Operationalisation: The variable is divided by the total

number of members & candidates of a given kibbutz for a corresponding year in order to create the ratio "number of absorbees/total number of members & candidates".

2. DEMOGRAPHIC DEPLETION - Organisational Demographic Depletion

Source: UKM's Department of Information & Statistics, annual releases as of 1982 until 1988. Unprocessed data: specially-designed PDP programme for data retrieval. The variable includes all members & candidates who left the kibbutz in a given calendary year (1983-1988). The variable includes no long-term and other forms of leaves of absence nor does it relate to departing residents.

Operationalization: The variable is divided by the total number of members & candidates of a given kibbutz for the corresponding year in order to create the ratio "number of leavers/total number of members & candidates" (ODD - Organisational Demographic Depletion).

III. EXOGENOUS ECONOMIC VARIABLES

2. AVERAGED MONTHLY INTEREST RATES

Source: Issued by the Ministry of Finance, Published by **Kheshev, Monthly, Prices Indices & Economic Information**, Table 7, P. 47, January 1991.

Operationalisation: Monthly rates of interest constitute provisional business tariff for commercial banks transactions. The monthly interest rates are a twelve months average.

3. GROSS NATIONAL PRODUCT (GNP)

Source: Statistical Abstract of Israel, 1990, Central Bureau of Statistics, Jerusalem, Table 12/a: P. 314.

Operationalisation: In millions of NIS adjusted: 31/XII/1990.

4. ANNUAL RATE OF UNEMPLOYMENT

Source: Economic Models, "Ha'Aretz Indices", Economic Supplement, **Ha'Aretz**, 28/VI/1989.

Operationalisation: Based on the monthly average of registered joblessness - 1983-1988.

5. ANNUAL RATE OF INFLATION

Source: "Capital", Ministry of Finance's Special Report, **Yediot Aharonot**, 16/I/1991.

Operationalisation: Annual rates are averaged monthly CPI.

IV. EXOGENOUS POLITICAL VARIABLES

1. IMMIGRATION BALANCE

Source: **Statistical Abstract of Israel**, Central Bureau of Statistics, No. 41, 1990, Jerusalem, Table 4.5, Arrivals & Departures by Category of Visa, p. 159.

Operationalisation: The balance between arrivals and departures constitutes the excess of either of the two categories. Whenever emigration exceeds intake of newcomers the sign is minus and vice versa.

2. WAR - PEACE

Source: Irrelevant.

Operationalisation: A dichotomous variable denoting peace and war in a nominal way. Hence when peace prevails the year accepts the value '0', when war prevails: '2'. Within the researched years, i.e. 1983 through to 1988, we observed two "peaceful" years (1985 & 1986), two, 1983/84, a war of attrition in Southern Lebanon with the active involvement of the Israeli Defence Forces (The "Lebanon War" or the aftermath of the Peace for Galilee Operation). The Palestinian Uprising (Intifada) broke out in December 1987 and continued on through 1988, therefore, these years are denoted '2' as well.

3. ELECTION YEAR

Source: Irrelevant.

Operationalisation: A dichotomous variable denoting election years and non-elections ones. Election year accepts the value '1' whereas a routine year accepts '0'.

4. MINISTER OF FINANCE

Source: Irrelevant.

Operationalisation: A dichotomous variable marking the partisan affiliation of the incumbent Minister of Finance.

1983/84/85/86/87 earmarked Likud Finance Ministership (Aridor, Cohen-Orgad, Modai, Nissim, Nissim). In 1988 Labour's Peres took over as Finance Minister. Likud F.M. accepts '0', Labour '1'.

V. GENERAL ENDOGENOUS VARIABLES

1. FOUNDATION YEAR

Source: UKM Department of Information & Statistics.

Operationalisation: Each observation is denoted with the corresponding year of foundation. The variable symbolises organisational age.

2. ACTUAL DAYS' WORK

Source: UKM's Archives at Hulda, based on annual Marathons.

Operationalisation: Total number of calendary days when work could or was undertaken (305 days) [+] services by rotation & "mobilisation days" [-] Holidays Sabbaths etc. The variable constitutes the denominator for most labour-related variables.

3. SABBATHS

Source: UKM's Archives at Khulda, based on annual Marathons.

Operationalisation: The variable indicates the total number of "unworked" days owing to Holidays, Sabbaths, illness, annual vocation, old age-related idleness etc. The variable is a ratio demonstrating the number of idle days in a calendary year. It is constructed from the division of sabbath days by the total number of days when work could, potentially, be undertaken (305 days; 360 [-] 55 sabbaths and holidays).

4. SERVICES

Source: UKM's Archives at Khulda, based on annual Marathons.

Operationalisation: The variable indicates the total number of inputted days' work in a given year in services. Practically, all days not directly marked for income-generation and holidays. The variable is a ratio comprised of services divided by actual days' work.

5. ADMINISTRATION

Source: UKM's Archives at Khulda, based on annual Marathons.

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Operationalisation: administrative/managerial overhead. The variable includes all full-time or part-time administrative related-jobs such as: accountancy, central position holders, various committees' chairmanship, secretarial positions etc. No administrative jobs within the framework of income generating industries are included. Administration is a ratio:
administration/actual days' work.

6. AGRICULTURE

Source: UKM's Archives at Khulda, based on annual Marathons.

Operationalisation: All day's work in agricultural industries divided by actual days' work.

7. MANUFACTURING INDUSTRIES

Source: UKM's Archives at Khulda, based on annual Marathons.

Operationalisation: All days' work in manufacturing industries divided by actual days' work.

8. EXTERNAL JOBS¹

Source: UKM's Archives at Khulda, based on annual Marathons.

Operationalisation: All days' work in external jobs divided by actual days' work. The variable embodies kibbutz ability to extend breadwinning capacity owing to imperceptible unemployment, decreasing profitability in agriculture and curtailed services.

9. PRODUCTIVENESS

Source: UKM's Archives at Khulda, based on annual Marathons.

Operationalisation: All days' work in income-generating jobs (agricultural industries [+] manufacturing industries [+] tourism [+] external jobs) divided by actual days' work. This ratio stands for the kibbutz's level of productivity and its ability to mobilise organisationally and economically in light of the deteriorating economy.

¹This category includes any income-generating job undertaken outside of the kibbutz (teaching at all levels, Government & Jewish Agency institutions, UKM etc.