

HOLDING GROUPS and THE ISRAELI ECONOMY

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ABSTRACT

The present thesis is concerned with the role played by several large holding corporations in broad developments of the Israeli economy. These developments reflect, to a large extent, the evolution of institutional arrangements among the large holding corporate groups and the Israeli Government. The significant role of these holding groups received little or no attention from Israeli macroeconomists.

This study presents previously unavailable time series of selected financial statistics for these holding groups. The data indicate that since the late 1960s, the size of these groups, relative to the overall size of the economy, grew rapidly. An econometric analysis shows that this relative growth is positively and strongly associated with the development of inflation, stagnation, the domestic debt, domestic military procurements and military exports. It suggests that government policy concerning these macroeconomic categories might be constrained by the interests of Israel's largest holding groups.

RÉSUMÉ

L'object de cette thèse est d'examiner le rôle joué par différentes larges corporations dans les développements macroéconomiques de l'économie israélienne. Ces développements reflètent, dans une grande mesure, l'évolution des arrangements institutionnels entre les larges groupes incorporés et le gouvernement israélien. Le rôle significatif de ces groupes n'a reçu qu'une attention minime, sinon inexistante, de la part des macroéconomistes israéliens.

Cette étude présente des séries chronologiques de données financières choisies sur ces corporations, series qui n'étaient pas disponibles auparavant. Les données indiquent que depuis la fin des années 60, l'ampleur de ces groupes, comparée à l'ampleur générale de l'économie, a rapidement évolué. Une analyse économétrique montre que cette croissance relative est positivement et fortement associée au développement de l'inflation, la stagnation, la dette domestique, des approvisionnements militaires et des exportations militaires. Ceci suggère que la politique du gouvernement à l'égard de ces catégories macroéconomiques, est peut-être contrainte par les intérêts des larges corporations israéliennes.

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INTRODUCTORY CHAPTER

In 1963, the consumer price index in the Israeli market rose by 5%. Twenty years later, between December 1982 and December of 1983, it rose by 191%. Real growth of over 11% in 1963 can be compared with a real GNP growth of 1.4% in 1983. While Israel's gross foreign debt was US\$1.4 billion by the end of 1963, this reached US\$29.3 billion by December 1983. The government's involvement is extensive. It buys some 40% of the country's gross national product and its budget is as large as the GNP. Israel's foreign trade is intensive: the sum of its exports and imports is about the size of the GNP, and the foreign trade deficit is 15% of the GNP. The country has been engaged in a military conflict with its neighbours for 37 years. It was involved in seven wars including wars of attrition, and its military expenditures over the 1963-1983 interval have amounted to 20-40% of the GNP.

A quick review of the latest three decades of economic literature dealing with the Israeli market would most probably prove macroeconomics to be the dominant approach. The "listing" in the previous paragraph contains most of the important items on the macroeconomist's agenda; for instance, in a 1983 symposium with several of Israel's prominent economists, Michael Bruno writes:

"Initially, I will widen the scope somewhat and try to situate the latest events within a historical perspective. It is convenient to analyse macroeconomic policy in terms of the main rates of substitution between growth (or employment), balance of payment and inflation" (Gronau et al. 1983, p. 843, trans.)

Evaluating the policy effects on the "substitution triangle", Bruno adds:

"... We have regressed [in the period of 1980-3] by US\$1 billion in the foreign currency reserves, with no positive change. Inflation has increased and the growth rate has fallen as well..." (*ibid*, 1983, trans., emphasis added).

Although not necessarily in agreement with Milton Friedman's particular theories, most of Israel's economists follow closely his scientific principles:

"The ultimate goal of positive science is the development of a theory or 'hypothesis' that yields valid and meaningful (i.e. not truistic) predictions about phenomena not yet observed" (Friedman, 1953, p. 7, emphasis added).

This is done by relating different, macroeconomic categories using mathematical or statistical functional relations (cf. Lipsey, 1966, p. 540). On the direction of the functional link between the government deficit and inflation, for instance, we can note from Asaf Rasin:

"... With the October 1983 policy collapse, inflation have been accelerated to a record yearly level of 486%. The change is not incidental. At that period, far reaching changes had taken place in the government budget deficit, those brought, among other things, the inflationary spiral" (Rasin, 1983, p. 835, trans.)

We can learn more on the Israeli inflation from David Levhari:

"...as far as inflation is concerned there is no doubt that the Bank of Israel has to have a central role. In all the countries where inflation has eased in recent years, it was done by an active monetary policy of appropriate absorption. Inflation is a nominal phenomenon of a relation between quantity of money and commodities" (Gronau *et al.*, p. 839, trans.)

Levhari suggests "a more aggressive policy by the Bank of Israel via bond issuance..." because "consumers view these assets only as a store of value" (*ibid*, emphasis added), and concludes:

"It is granted; that the proposed steps, accompanied by the reduction of public and private consumption via budgetary and wage policies, could improve after an intermediate period the state of the Israeli market, and maybe could renew its growth process by establishing a more stable framework for the active units" (*ibid*, p. 840, trans.)

Professor Bruno was concerned with government expenditures in general and the defence budget in particular:

"Has enough been done on the expenditure side? We are not familiar with all of the budget details, but there is a feeling that a very central part of it - security - has gone under no more than a lenient treatment.... The main problem of the market is the size of the public sector and what should have happen to it through the years..." (ibid, p.846, trans., emphasis added).

On a different issue - wages and unemployment - we could further learn from Bruno:

"...the current real wage is out of equilibrium, following the real appreciation [of the Shekel]... " (ibid, p. 844, trans.)

But,

"This does not imply the advance on account of cost-of-living payments in the coming month, should not be paid.... However, it is necessary to arrive to some kind of agreement which will bring a one time reduction in the real wage. This is a necessary condition to avoid unemployment in the present context, and this should be openly said" (ibid, p. 846, trans.)

Finally, we could read something about expectations, by Micha Michaely:

"Since what is expected to influence the propensity of people to increase the Dollar share in their financial assets, are expectations for devaluation, let us create opposite expectations, expectations for revaluation" (ibid, p. 842, trans., emphasis added).

All of these policy recommendations are explicitly or implicitly based on the existence of apparent functional relations between the relevant macroeconomic categories. Effectiveness of policy, ability to predict, or even the existence of the alleged functional relations might all be debated. What can hardly be debated is the discussion's complete estrangement from real life. The only named agent in the above quotations is the "government". All others seem to belong to a multitude of amorphous units, to an anonymous crowd: "we",

"consumers", "the Israeli market", "the active units", "people". It also seems Israel is a land of perfect competition.

Since the important relations are between the categories of national product (C, I, G, X, and M, using familiar notations), prices, exchange rates, and alike - relations between the "people" are of a minor interest only. Those are maybe appropriate to the realm of sociology or business administration. Otherwise, one could hardly understand why Israel has no national income accounts. The first and only attempt to estimate the distribution of wages, profits, rents, and interest was Krimer's work on the period of 1950-54 (Krimër, 1957).

In the course of their work, some economists have expressed concern over the lack of national income data. For instance, Patinkin (1965, ch. 3) in his discussion of "Saving", affirms the existence of negative domestic saving. The causal analysis however, becomes somewhat difficult:

"... We are still to discuss "corporate saving". It is an important source of capital formation in most developed markets. Unfortunately, there are no available figures of these savings in Israel" (p. 94, trans.)

Baruch Nadel, an economic journalist writing about the income tax in Israel, was much more specific. From his book we can learn that even "insiders" do not have the information:

"Only in February 1975, could I hear the following from an economist with the Bank of Israel: 'Currently there are no reliable estimates of the national income distribution between employees, entrepreneurs, and firms. A serious, reliable and detailed estimate does not exist at all. For no year. This worries us a great deal. The numbers that were published on 1971,

and aroused an outcry, are of the distribution of non-wage income. The estimate was very general. An actual study has not been done. There are sum-totals for industrial corporations. On that there are outdated figures, usually for big firms only. For small firms either no data exist, or the existing data are worthless' " (Nadel, 1975, pp. 222 - 223, trans.)

As far as wealth is concerned, macroeconomics makes reference to the "capital stock" or to the "Financial Assets Held by the Public". These categories however, have very little to do with the "property relations" or "power structure" determined by the distribution of wealth. Consistent with this lack of interest, is the complete absence in Israel of statistics like the "National Balance Sheet", not to speak of a more detailed breakdown like the one assembled in McGraw Hill's "Compustat" data base for the most important corporations in the United States and Canada.

But as far as some positive macroeconomists are concerned, there is nothing necessarily inappropriate in the use of erroneous institutional assumptions, explicit or implicit. If the Government is not a neutral "exogenous" agent, if most of the "public wealth" is concentrated under the control of less than 10 holding groups, if these are interlocked (with the government and within themselves in a web of ownership ties, mutual buying/selling arrangements, a series of joint ventures, and a complicated system of exclusive concessions, certificates and alike) if all of these are prominent market characteristics, but our predictions are still correct, then, following Milton Friedman (1953, pp. 39 - 43), the "as-if" competitive market assumption is a perfectly legitimate element of theory.

If on the other hand, we do not attempt to "predict" or to make "policy recommendations", but limit ourselves to the understanding of the Israeli market, we can use an alternative approach: a teleological retrospect that traces current characteristics in past developments, and makes specific reference to dominant institutions, firms, and individuals. This is the subject matter of the present work.

In the first chapter, we describe the development of the market as it has been reflected in the growth of the big economy - the largest holding groups and their relations with the government as a manifestation of the historical evolution of Israel's institutional patterns.

Chapter Two makes a contribution to the study of the big economy in Israel. It provides a collection of time series pertaining to items from the financial reports of Israel's most important holding groups. As far as we know, this has not previously been done in Israel. The chapter describes our data collection experience and discusses the practical difficulties we have encountered throughout the assembling of the information.

The third chapter reviews existing theories that relate macroeconomic developments and features of the big economy. Further, it suggests several extensions appropriate for the Israeli case. Finally, it briefly discusses the availability and appropriateness of data.

Certain relations between big holding groups of Israel's economy, and wider economic phenomena are suggested in the first chapter. These are further explained in the theoretical discussion of Chapter Three. With data made available in Chapter Two, it is possible to formulate some of these relations as testable hypotheses. This is done in the fourth chapter, where we apply standard econometric techniques to the political economy of the holding groups.

Chapter Five summarizes the conclusions of the thesis, and proposes directions for further research.

CHAPTER ONE

HISTORICAL DEVELOPMENTS

One of the rare instances arousing some interest in the "market structure" and the "institutional arrangements" was the October 1983 collapse of the Tel Aviv Stock Exchange. Between the beginning and end of 1983, the total market value of shares and options on the exchange fell by more than US\$10 billion: from US\$15,575 million to US\$5,085 million according to the Statistical Abstract of Israel, 1983. This loss of value (43% of the 1983 GNP figure), ended an eleven-year period of continuous value expansion.

The stock market is considered by many economists as close to the ideal type of perfect competition. This, however, was not acknowledged by the participants on the Israeli exchange. Started initially by Bank Hapoalim and followed later by the other major banks (mainly Bank Leumi and the Discount Bank), share prices were manipulated and finally monitored and precisely determined by the banks. These banks have acted as the main stock brokers controlling some 3/4 of the trading. Using internal clearing houses and mutual fund subsidiaries as a financial leverage, the banks assured for a "cautious" investor in their shares a predetermined rate of return on his investment (mainly in the form of capital gains). For instance, the real rate of capital gain on the banks' shares (deflated by the CPI) was 40.6% in 1980, 32.9% in 1981, and 29.1% in 1982. Since the real rate of return on equity of the Israeli banking system was only 4.5% in 1982, it is not surprising banks became the main investors in their own shares

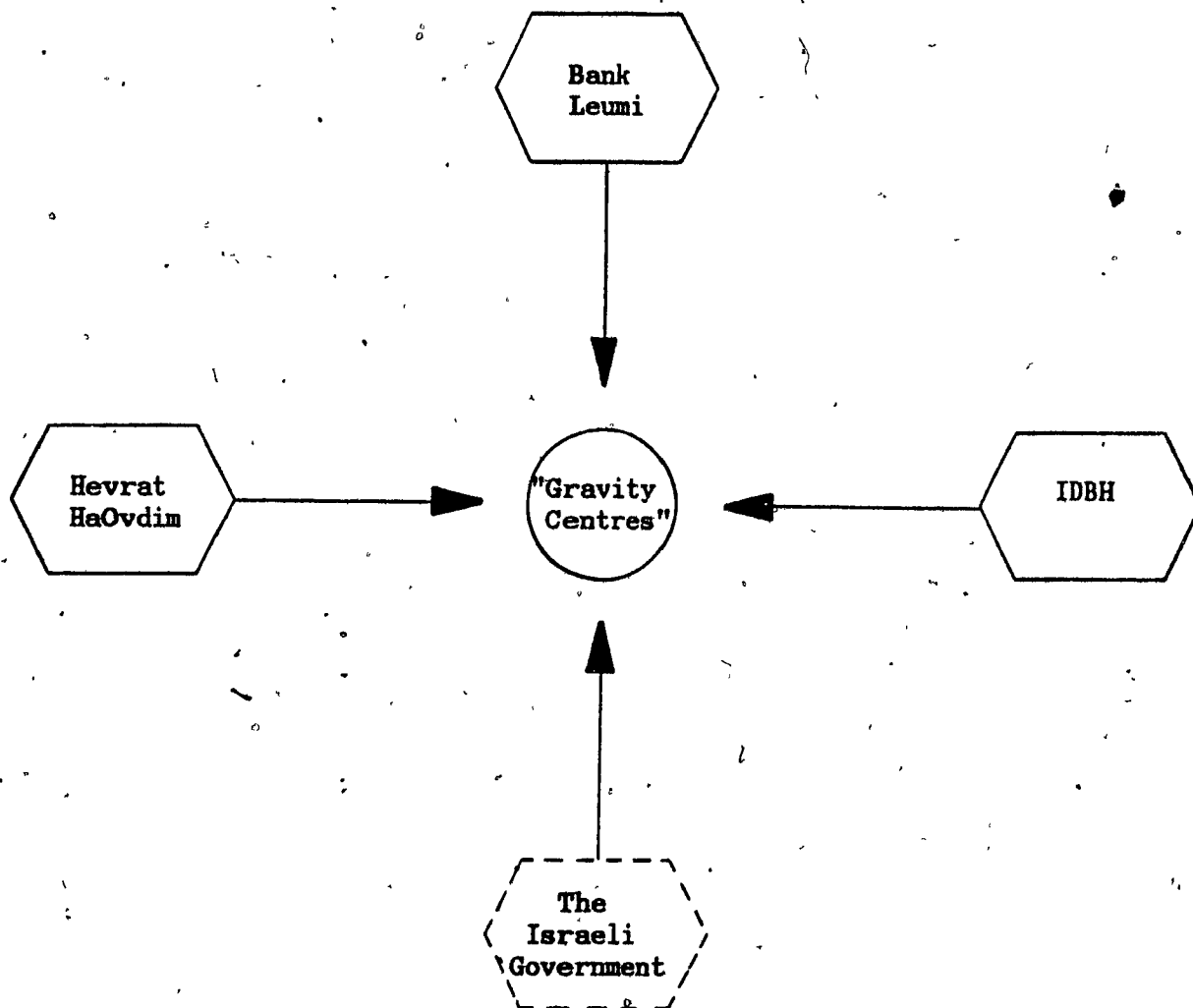
(HaOlam Hazhe, June 15th, 1983). The banks dealt with "speculative" activity as well. Here the IDBH group (Discount) provides the most conspicuous examples (Frenkel and Bichler, 1984, pp. 47 - 50). A knowledgeable insider could perhaps turn a US\$100 investment in 1978 into a US\$10,000 capital gain (which is tax-free in Israel) by 1984.

The banks could not sustain this pace for so long without a tuned synchronization with the government. A persistent foreign exchange policy that devaluated the Israeli Shekel slower than the pace of inflation finally triggered a rapid move to U.S. dollar-indexed assets and the collapse of the stock market. The government, however, did not allow a complete collapse. It turned the banks' shares into government bonds indexed to the U.S. dollar value of the shares prior to the collapse with an additional five percent interest. A State Inquiry is now looking into the nature and causes of the collapse, focusing on possible illegal activities of the government and the banks.

Legality, however, is of no major importance to our discussion. Important is the fact that like the stock market, almost every other activity in the Israeli economy is dominated by the three banks mentioned (Leumi, Hapoalim and Discount), or by the groups of which they are part. By 1985, one could identify few centres of power to which we now turn.

FIGURE 1.1

Israel's Dominant Holding Groups



i. Hevrat HaOvdim

This is probably the largest non-government control group. Formally it is part of the Histadrut, which is also Israel's largest "labour union" ("Hevrat HaOvdim" translates to "workers society/company"). Hevrat HaOvdim controls (at least formally) a series of holding corporations and large firms. The most important of which are:

- Bank Hapoalim; the second largest bank.
- Koor Industries; the largest industrial conglomerate, with direct ownership in hundreds of firms.
- Solel Boneh; the largest construction corporation.
- Teus; a diversified industrial holding corporation.
- Hassneh group; the largest insurance company.
- Tnuva; a cooperative affiliated with Hevrat HaOvdim and controlling 70% of Israel food supply.
- The Kibbutzim Industry; a diversified industrial network affiliated with Hevrat HaOvdim.

ii. Bank Leumi

This bank is formally controlled by the Jewish Agency which owns a series of other firms. In practice, Bank Leumi is a "managerial corporation", having a board of directors that nominates itself. The bank is Israel's largest and is concentrated mainly in financially related activities. To a lesser extent, it is involved in direct investment in other sectors.

iii. IDBH (Israel Discount Bankholding Corporation)

IDBH is Israel's biggest privately held group, controlled by a

few families headed by the Recanatis. Structurally, it is divided into:

- Israel Discount Bank; the third largest bank.
- IDB Development; the non-financial branch of IDBH. IDB Development is further divided into P.E.C Israel Economic Corporation and Discount Investment Corporation (DIC is the country's second largest investment holding group with direct interest in over 50 firms).

iv. The Israeli Government

The government in Israel is involved in almost every sector in the market by direct investment in firms. It has minority or majority interest in hundreds of companies, the most important of which are:

- Israel Aircraft Industries (IAI); the country's largest industrial firm with 20,000 employees.
- Oil Refineries; petroleum.
- Israel Chemicals; Israel's largest chemical/mineral concern.
- Israel Military Industries (IMI); the army's weapon production branch.
- RAFAEL (Armament Development Authority).

v. "Gravity Centres"

These are joint ventures between Hevrat HaOvdim (mainly through Bank Hapoalim), Bank Leumi, IDBH, foreign investors, and the Government. The most important "gravity centres" are:

- Clal (Israel); Israel's largest investment holding group, with direct interest in over 150 firms.
- The Industrial Development Bank of Israel; allocates much of the

industrial capital from government controlled sources.

vi. Foreign Capital

Foreign capital is not as important as the previously mentioned groups in terms of direct involvement. The major multinational groups investing in Israel are:

- Eisenberg group.
- Shidlovsky.
- Control Data Corp. (CDC); A joint venture with IDBH.
- General Telephone Equipment (GTE); A joint venture with Koor, via its Tadiran subsidiary.

vii. Horizontally/vertically Integrated Firms

Although not as large as the main holding groups, these are usually monopolies or "near monopolies" in their sectors. Examples:

- Elite; food, candies, coffee.
- Dubec; tobacco products.
- Shiff group; hotels.

It seems that the sectoral breakdown traditionally found in industrial organization literature is insufficient in the Israeli case. Out of "Dun's 100 - Israel's 100 Largest Industrial Enterprises" in 1984, 29 are controlled by Hevrat HaOvdin, 9 by the Government, 8 by IDBH, and 8 by Clal (Israel) - 54 in total. These four groups control 32 of the first 50 and 16 out of the first 20 of the largest industrial firms. In the financial sector, the three biggest banks, Leumi, Hapoalim, and Discount, account for approximately 90% of assets, employment and branches. This concentrated state of affairs

repeats itself in a more detailed breakdown. The country's economy is to a large extent directly owned and controlled by these groups. Furthermore, their operations are mutually linked through big and small joint ventures, and intricate relations with the government. In the cautious words of Aharoni (1976):

"Finally, the entrepreneurship question is strongly tied with Israel's social structure - a structure in which there probably exists a fair amount of informal influence, and overlapping between economic and political power. Any attempt to estimate the influence of one sector on the other, on the basis of their relative weight, is highly misleading, due to the intricate web of mutual relations between the various sectors, and the informal power of certain sectors influencing firms' behaviour. There is no doubt this question has to be dealt with by methods more advanced than the share of any sector (or any firm or holding group) in input [...] output [...] or resource utilization. All of these indexes - in spite of their great importance - present only a very partial picture, due to the existence of 'informal influence'" (p. 382, trans., emphasis added).

In the highly concentrated and integrated Israeli market, the analysis of macroeconomic phenomena and policy cannot abstract from the concrete structure of the economy. Most of the broader economic phenomena and public policies throughout Israel's history can be traced to the "institutional arrangement" among several corporate groups and the Government. The historical evolution of the important institutional patterns, and the related development of the country's dominant holding groups are outlined in the current chapter. The chapter does not provide a detailed history of the holding groups. Also, it does not discuss the individuals that control/own these groups. These issues are important but transcend the scope of this essay.

A. The Pre-independence Period, 1920 - 1948.

"It seems impossible to get to the roots of Israel's economic structure without an historical analysis of the country's roots and sources, or the organizations preceeding it, and the basic ideology that brought about its creation" (Aharoni, 1976, p. 373, trans.)

Looking back as early as the 1920s, economists have tended to divide the market into sectors organized according to some political/ideological demarcation:

The civilian sector; an unconsolidated "political right" headed by citriculturists, importers, merchants, landlords, city mayors, etc.

The Histadrut Sector; the "ideological enemy" of the civilian sector, combining workers' political and economic organizations.

The 'would be' national sector; a network of financial organizations established since the beginning of the century by Zionist institutions in Germany and Great Britain: Basko, A.P.C (the 'would be' Bank Leumi) and others.

Foreign investors; cooperating with the national institutions: P.E.C, P.C., Africa Israel, Rothschild, Shell, and others.

However, the political demarcation and ideological "struggle" were more a remnant from inflation-hit Europe of the post-World War I. They had very little to do with the reality in Palestine of the 1920s. The struggle for which the ideological differences acted as a "front window" was over the allocation of Jewish philanthropic capital, and for a share in the "autonomous spending" of the British Mandate and in the business certificates it issued (cf. Sharshavsky, 1968).

In parallel to the establishment of the Histadrut (1920), Bank Hapoalim (1921), The Office for Public Works (the 'would be' Solel Bonhe, 1921), Hevrat HaOvdim (1923), and others in the Histadrut sector, one can name a series of civilian sector organizations like the Industry Owners and Employers Association of Tel Aviv-Jaffa (1921), the Farmers Association (1922) and the General Merchant and Middle Class Association, the official aims of which were a share in the import and business certificates granted by the British Mandate (1925).

The first institutional arrangement surpassing the "ideological" differences, was the division of labour between the Jewish Agency that imported Jewish capital via its Anglo-Palestine Company (A.P.C.), and the Histadrut that imported and organized the labour force. According to the dominant view, the Histadrut is a "workers' organization" and a "labour union". Officially, Ben Gurion pushed for the establishment of Hevrat HaOvdim that would concentrate all the economic activities of the Histadrut with the stated intention of making every worker into an owner. However, throughout the development of the Histadrut and the related organization of Hevrat HaOvdim "workers' ownership" remained a rather remote ideal. A more important characteristic was the struggle of the Histadrut for concentrating the control over the country's various labour organizations and economic institutions associated with the labour movement (cf. Shapira, 1975 and Tevet, 1976). Many of the Histadrut leaders, and Ben Gurion in particular, accepted the private sector's claim that the "national interest" of immigration dictated low wages. On the other hand, they declared a strike whenever workers

were not employed through a Histadrut agency (Tevet, 1976, Vol. II, pp. 300, 316).

The struggle over resource allocation was intensified with the coming of World War II. The British Mandate enacted a regime of strict input-output allocation system to monitor its war effort. One of the important winners was Solel Boneh, a member of Hevrat HaOvdim:

"... More than we had wished to produce and sell glass, it had been demanded by the [British] army for its urgent needs.... the domestic market was of no importance in those days.... the British army was the main consumer. We enabled the army authorities to buy whatever they needed directly from the factory. We established 4 marketing firms abroad, together with local merchants. We sold the marketing firms one square metre for 3.5 Israeli pounds; they sold it for 7.... Within less than 3 years our profits surpassed all of our investment, leaving us with net profit of 75,000 Israeli pounds" (Dan, 1963, p.188, trans.)

Another winner was The Israeli Central Company for Trade and Investment of the "civilian sector". The company was established in 1944, uniting in a cartel most of the wood and steel importers for the British army. The company [today, a part of Clal (Israel)] has grown in a close cooperation with the labour-associated Solel Boneh. An important example of the blurring ideological and sectoral demarcation, was the early concentration of the construction supplies market. In 1945, the two companies jointly bought in a giant deal (for one million British pounds), the cement company Nesher, a highly important supplier for the construction industry. The deal with the "class enemy" aroused a turmoil in the Histadrut leadership, but Solel Boneh management did not respond:

"We kept silent, as we did not want to let our critics know we intended to extract from the factory such profits, which would repay in a short period our investment many times over" (cited in Erenkel and Bichler, 1984, p. 196, trans.)

This period of pre-independence also saw the birth of today's largest privately owned group. Massive capital and human outflows from Europe of the 1930s brought the Recanati family to Palestine in 1935. Infrastructure investment by the Jewish Agency and the British Mandate had created a need for credit. In 1936 the Discount Bank was established. Unlike many of the other banks established in the early 1930s, Discount did not limit its enterprise to the family boundaries. It expanded its capital base by association with several important Sephardic families, dealing mainly in real estate and trade. This practice of cooperation with "outsiders" (which has been a prominent Discount policy ever since) helped the bank to survive the crisis in late 1930s, to receive a considerable share in the British Mandate allocations, and to emerge towards the Independence as the country's biggest privately held bank.

B. The Austerity Era, 1949 - 1954

With the termination of the British Mandate and the 1948 War of Independence, Israel was abruptly cut off from the British and surrounding Arab markets. In parallel, massive Jewish immigration increased the population from 650,000 in 1949 to 1,400,000 by 1952. These new immigrants, survivors of the Holocaust and deported from Arab countries, arrived with practically no property or productive skills. Far from creating a "multiplier" through increasing private consumption, they imposed a severe burden on the economy. Private investment activity sharply declined and much of the foreign Jewish donations was needed to prevent hunger.

Under such objective opening conditions, and the limited domestic capital base, the government enacted in 1949 an "austerity" program that lasted officially until 1952. Later, when the Israeli national accounts system has started to develop along with the country's macroeconomic profession, this program was severely criticized. Most writers tend to perceive the austerity era as a manifestation of a policy. Many (including those preferring free market forces) agree that, considering the severe objective conditions, a planning policy was essential, but they reject the tools of that policy; namely, distorted foreign exchange rates, negative export incentives vis à vis the domestic market, chronic government budget deficits, price controls unsynchronized with the money supply, massive governmental intervention in the input-output processes throughout the economy, excessive intervention in the capital market, incorrect allocations of

the capital inflows between consumption and investment and so on.¹ Unlike the economist's retrospect, the political leadership of the time was not overwhelmingly concerned with economic theory:

"... moreover, Ben Gurion was repelled by the beliefs in economic laws and in the autonomy of the economic mechanism. He had never understood them, loathed them, and viewed them as a mystery web, a fetter on human will. He wished to rape the economic laws, and by so doing to break their rule and uncover their nullity" (Horowitz, 1975, p. 41, trans.)

Irrespective of the dispute between the "objective" economist and the "passionate" politician, the "Austerity Era" of 1949-54 (and not 1952 - the year in which the plan was formally ended) constitutes the critical period in which the authority/property relations in the Israeli society had been determined. Most of today's "natural" institutional arrangements saw their birth in that period, when it was decided who was to emerge as a "market force" and who was to remain an anonymous worker-consumer, or simply, to whom and how would the land, capital and the control of the labor force be allocated.

Almost all of the country's population was unaware (then as well as now) of the issues at stake. On the other hand, most of the limited number of organizations and firms that dominate today's economy were already established at the beginning of the process as on-going concerns, situated in key positions: Hevrat HaOvdim (Bank Hapoalim, Solel Bonhe, Koor), The Jewish Agency (Bank Leumi, Rasko), Israel Discount Bank, and many other entities that later were merged into one of these, or formed the basis for a "gravity centre".

1. Cf. Patinkin (1965, ch. 1,2,3), and Halevi and Klivnov-Malul (1968, ch. 10)

From the "Outline for the Government Program" (1949), one can see that the government had decided on "incentives for private investment as the main avenue for rapid solution of the central economic problems. The main objective of the incentive policy is 'national product growth, and the reduction of the balance of payment deficit'. This was to be enacted by "...special concessions for productive capital investment that help the rapid and efficient development of the country's resources and economic opportunities, as well as concessions for foreign Jewish capital transfers from the diaspora." (trans.)

The "central economic problems" as well as the "main objectives", appeared then (as today) to be macroeconomic in scope. For most of Israel's inhabitants of that period, this macro-context revealed itself as a severe scarcity and rationing of values-in-use: basic necessities for final consumption. On the other hand, for those institutions, firms, and individuals that were supposed to solve the country's problems, this context could have been concisely summarized by the phrase "special concessions". These encompassed the ways by which scarce resources were to be allocated. They also included the selective removal of man-made quasi-scarcities: a whole range of exclusive rights and certificates discretionally authorized by the government and then immediately turned into valuable, perhaps essential, means of production. Following the customary grouping of economic resources, we can now discuss the allocation of capital, land and labour. These are dealt with in the next few sections.

1. Capital

The deep involvement of the government in the capital market started as early as 1948. The government channeled most (60-80%) of the foreign capital transfers and loans, as well as the limited domestic sources. Since most of the capital sources channeled by the government were otherwise unavailable for domestic uses (cf. Patinkin, 1965, p. 83); no "crowding out" arguments had been raised against the "state involvement". Rather than that, the Knesset (the Israeli parliament) chose to debate the subordination to foreign lenders (the U.S.A) or the impact of government policy on the competitive nature of the Israeli economy. These debates, however, had very little to do with principles. The main aim was allocation.

Examples are abundant. Initially, in the first years of the austerity, Herut (a "right wing" party that later became a part of the Likud political bloc) fought for the interests of the "small citizen" and the principle of pluralism. It demanded the establishment of civilian committees to allocate capital. These were supposed to replace the ruling Mapai party that "threatened with a complete economic dominance" through the Histadrut and government corporations (Proceedings of the Knesset, 1949, various places). Later, when the first U.S. loan arrived in 1951, the principle of competition was abandoned for that of "private enterprise". Abraham Recanati, a Herut M.P. as well as a member of the Recanati family (the Discount Bank), ceased campaigning against the big Histadrut organization. When part of the U.S. loan was allocated to the orchard industry, he demanded it be centralized through one establishment. The one he had in mind was

Pardes Syndicate, that dominated 1/4 of the country's orchards, and was under partial control of the Discount Bank. (The orchard industry is now completely controlled by the three big banks.) Another part of the U.S. loan was bound for the shipping sector. Recanati fought against special privileges for Zim Lines (then under the Histadrut's control). Two years earlier however, in 1949, Discount (via the Israeli Company for Finance and Investment - the 'would be' Discount Investment Corporation) was granted along with Zim, Ampal (a U.S. subsidiary of Bank Hapoalim), and P.E.C (later a part of the Discount Group) a certificate to establish the Israel-America Line. This shipping joint venture had exclusive rights on the transportation of supplies from the U.S.A. After a short while, the deal broke down. Discount withdrew from the venture, founded its own shipping line, El-Yam, and Recanati started fighting for efficient allocation and against Zim. (Today the two companies are Israel's biggest shipping lines.)

Foreign capital transfers have been channeled into capital formation via the "Development Budget". Allocations were principally made by government "approved loans". When the interest rate was 20-30% (and up to 40% in the black market), the government "approved loan" was given at less than 10%. The negative real interest rate made capital even more "scarce" than it was. This negative interest arrangement remained in place until the early 1980s.

This allocation mechanism, however, has not been any more visible than the "invisible hand". Indeed the distribution of capital

formation and its guidelines at that period have never been systematically recorded. Nor have they been convincingly discovered by later researchers. As noted by Patinkin (1965, p. 80), there was no simple relation between government allocation and the investment of the firms being granted the loans. Government grants and loans in 1952-3, for instance, totalled more than the sum of all investment made by the receiving entities! Barkai (1964) in his study of the three "sectors" suggests a proportional pattern of 60-20-20%, according to which the private sector, the government corporations and the Histadrut sector respectively, shared the capital allocation. This hypothetical "code" represents a conceptual framework perhaps adequate for the pre-independence sectoral division. By the early 1950's when the cores of the holding groups have started to emerge, the allocation code might have been quite different from this pattern.

Less quantifiable than the direct capital allocation, but of no lesser importance, were the man-made quasi-scarcities and the qualifications required for their removal. The government held (as it holds today) the authority to certify a bank. It is still hard to unveil the "productivity" or "efficiency" criteria by which certificates were awarded. It is easier to relate them to political and economic ties between the various factions of the Israeli elite that were starting to consolidate in the Austerity Era. Among the certificates, one can note the Union Bank that later came under the control of Bank Leumi. Another certificate was awarded to M.B. Gitter. Although closely associated with the Mapai party, Gitter handed the ownership of the Israel Development and Mortgage Bank, which he was certified to establish, over to the Discount group, in which he became

an owner and a director.

Another scarce resource was the authorization to deal with foreign currency. An important example is Ampal, a subsidiary of Bank Hapoalim that was already mentioned. Ampal acted as an external clearing house for complicated barter and foreign exchange deals. In the 1970s and 1980s it became a gate for capital outflows from Israel. A second example is Swiss-Israel Bank that later became a member of the gravity centre Clal (Israel). This list of scarce resources can be extended to include certificates for preferred custom duty rates, for bond and stock issuance/floation, for preferred foreign exchange rates, for special government bond rates, and for release from direct taxes. Provision of many of these certificates is associated with the absence of adequate records.

The government also got involved in "traditional" fiscal activities. The IDF (Israel Defence Force) was formed. This was an element that later became the most important single item on the government purchase list, mainly for purchases from the large holding groups. Finally, the government started to establish a series of "crown corporations" that subsequently became market powers in their own right. It also started the tradition of joint ventures with Hevrat HaOvdim, the Discount and Leumi groups by the establishment of El-Al Israel Airlines and Delek, an oil marketing joint venture.

2. Land

In 1948, 700,000 Palestinians left the country and abandoned 5,750 square km. of agricultural and urban land. They also abandoned, according to a cautious estimate of the U.N. Refugees Agency, some US\$330 million in other properties.

How was this "absentee property" reallocated? According to Segev's (1984, pp. 84 - 94), it appears that "everybody" was looting. Had this been the case, it is unclear what was the role of the committee dealing with the allocation of the "absentee property". It is also uncertain why the official documents of this committee are still being held inaccessible in the State Archives. As far as agricultural land was concerned, scattered sources indicate that the Kibbutzim received the lion share. Unfortunately there are hardly any indications about urban land allocation. There is almost no information of effective control over land granted via government leasing. In silence, within few years, the allocation of land took place, drew little attention and left hardly any recorded traces.

3. Labour

Most important of all was the initial institutionalization of control over the immigration and organization of the labour force. Growth could hardly have been conceived without substantial increases in population. Without these, capital and land allocation are much less relevant, and this dependence was clear to the Israeli elite of

the time. In order to compensate for the 1948 loss of the Palestinian population, "absorption of immigrants" was made into a national goal. All of the country's main political/economic institutions competed over this scarce resource. The superior position was probably held by the Mapai party, although, as is the case with the other factors of production, the actual process of allocation is unclear. Of utmost importance was the integration and standardization of the heterogeneous labour force. It has been suggested that the deliberate stirring up of the Israeli-Arab conflict by the Israeli leadership in the early 1950s was partially affected in order to assist this cause (Sharet, 1978, vol. III, various places).

Under the curtain of broadly stated macroeconomic goals, developments in the Austerity period acted to rapidly concentrate the Israeli economy and to determine its structure for subsequent years. In his biography, Hari Recanati (1984), the second Discount Bank chairman writes:

"By 1951, I had good reasons for being satisfied with the completed task. The bank left to us by our father has prospered, and constituted the base for a first-rate Israeli financial group ... " (pp. 71 - 72, trans.)

Discount, a small bank, had been turned within 15 years of its foundation by a non-banker into the second largest bank and the fourth largest industrial concern in the country. Despite its fairly conservative management, it invested in new areas like rubber, paper, fuel supply, shipping, aluminum, electricity and more. Its pace of expansion was rapid, and more importantly profitable, due to the non-competitive conditions of the Austerity Era. The government imposition of barriers on entry, the capital that it allocated cheaply and

selectively along with other special property rights, all forced the Discount group to face problems common to a mature oligopolistic concern:

"... I have striven toward thinking about new initiatives in Israel, but saw no success, as we already had in our group all the subsidiaries appropriate to our basic operation" (Recanati, 1984, p. 72, trans.)

The year that he was addressing was 1951, only three years after Independence.

C. The German Compensation, Growth and Recession, 1955 - 1966

In 1954, Israel signed a compensation accord with West Germany, by which the latter would pay the Israeli government US\$500 million during a ten year span, as a compensation for the genocide of six million Jews and the confiscation of their property. In addition, it was agreed to individually compensate Israeli Jews harmed by the Nazis. In that year, the Austerity as an era had come to an end. Based on this capital injection, the government could finally launch a development plan. The list of participants in the plan was rather short with no newcomers.

By 1956, the government had decided to establish a financial institution to deal with medium and long term industrial credit, originated in domestic and foreign sources. The Industrial Development Bank of Israel was established in 1957. Its main capital source was the German compensation payments. The bank institutionalized a form of capital allocation, the subsidized loan, already prominent in the Austerity period (1949-54).

The control over the bank has been held by the "Loan Committee". This is an informal body of eight members (whose names are not disclosed), deciding "to whom", "how much", and "in what conditions" the loans are to be made. The bank's board of director, from which the committee is chosen, is nominated by the bank's main share holders - the Government, Hevrat HaOvdim, Bank Leumi, the Discount Bank and a list of others, mainly foreign investors. In the bank's Executive

Committee, we can find representatives of the three biggest banks and the Government.

The Industrial Development Bank of Israel is an example of a "Gravity Centre" - where all the important market forces coincide - in this case to equilibrate (allocate) the cheap government credit. It also reflects the government tendency to assume a controlling share much lower than its share in the total investment (1/4 of the directors versus 1/2 of the common stock).

The flow of foreign transfers had its impact on the industrial structure as well. Solel Boneh, a member of Hevrat HaOvdim, went through a reorganization. In 1957, it was split into three divisions: Solel Boneh, Solel Boneh International, and Koor. Although Solel Boneh has remained an important concern (one of the world's largest construction companies), the split reflects the shift in the Israeli economy from construction to industrial activity, which finally turned Koor into Israel's largest industrial conglomerate. In 1961, the Discount Bank established Discount Investment Corporation (DIC is today's second largest investment group), which assumed the non-financial activities of the Discount group. A year later, Clal (Israel) - today's largest investment group - was formed. The venture was put together by the Minister of Finance, Pinchas Sapir, as an attractive investment outlet for Jewish capital, especially from South America. Foreign investors were expected to contribute 80% of the capital. The other 20% were supposed to come from the domestic partners: the Government, Bank Leumi, Koor, Solel Boneh, Bank Hapoalim, the Discount group and the Israeli Central Company for

Trade and Investment. Aside from Koor, DIC, and the gravity centre Clal (Israel), the late 1950s saw the birth of several other industrial concerns, many of which were later merged into the big holding groups: G.A.S. Rasco, Teus and others.

All of these initiatives aimed at a stake in foreign capital, allocated mainly through the Development Budget via the Industrial Development Bank of Israel. The initial years were mainly devoted for hectic expansion partly through internal growth but mainly through mergers and acquisitions, which were approved and financed by the government. Apparently, the pace of expansion was too rapid: Koor found itself in difficulties and the government was forced in 1962 to invest nine million Israeli pounds (20% of Koor's capital) to save the company from losses. In the same year, Clal (Israel) found itself in even greater difficulties which were concealed from its foreign investors by complicated manoeuvres using government finance.

In the early 1960s, "government needs" for capital increased. Signs of difficulties in the domestic economy and the expected ending of the compensation accord led the government increasingly into the local capital market. In these years, many of the institutionalized characteristics of the domestic national debt evolved.

The government selectively awarded the certificates for its bond issuance and underwriting. Bank Leumi, the Discount Bank, and Bank Hapoalim, together with Discount Investment Corporation and Clal (Israel) were almost its sole agents. The underwriting fees, however,

have not been the important part of this arrangement. Most of the government bonds are bought by the "institutional investors": mutual funds, social insurance funds, and insurance companies. In the late 1950s, much of the insurance activity was already accounted for by the three big banks: Migdal Insurance (Bank Leumi), Hassneh Insurance of Israel (Hevrat HaOvdim) and The Israel Phoenix Assurance Co. (Discount and the London Phoenix). Mutual funds assets were similarly concentrated in the same hands. But of more importance, has been the development associated with social insurance funds (pension funds, provident funds, severance funds, and social funds). As the number of insured employees increased to at least 70% of all employees by the early 1960's, the number of social insurance funds has drastically declined. The most important single reason for this was the consolidation of all of the Histadrut's social insurance under one parent company, Gmool, accounting for more than half of the country's total pensions and other employee's compensations.

Gmool buys government bonds through one of Hevrat HaOvdim's subsidiaries and the proceeds are deposited in Bank Hapoalim. One half of them are used as "directed credit" - directed at government discretion to the final user. The other half is considered as "authorized deposits for granting loans" whereby the government authorizes Hevrat HaOvdim (in this instance) to use the funds according to its own discretion. This set-up repeats itself with the other groups mentioned although Hevrat HaOvdim has been awarded a considerable "competitive edge" due to Gmool's asset size. Hevrat HaOvdim is formally associated with the Labour party. When the Likud bloc replaced the Labour party in power in the late 1970s, Hevrat

HaOvdin's priority was challenged by the other groups, who wanted a larger stake in the capital granted from the resources of social insurance funds.

The most important detail, however, is still missing. Like the subsidized loans through the Industrial Development Bank of Israel and the "directed credit" through the commercial banks, the "authorized deposits for granting loans" are not indexed or only partially indexed. On the other hand, the bonds held by the "institutional investors" are fully indexed. As inflation started to accelerate, the assets of the bond holders (the main holding groups) were accordingly inflated. The credit awarded to the main holding groups - "directed" as well as "authorized" - became cheaper and the government accounted for the difference by further additions to the domestic national debt.

D. Growth and Stagnation, Arms and Finance, 1967 - 1985

In 1965, the German compensation period ended. The allocation of the compensation funds had not launched an industrial takeoff. Problems in the balance of payment, government deficit, and domestic debt could not be dealt with without an alternative foreign capital source. In its absence the government publically announced the onset of a planned recession.

The turning point came with the 1967 War. The market expanded overnight to include an additional population of some 800,000 workers-consumers from the West Bank and the Gaza Strip. The multiplier was considerable. Similarly, Jewish capital donations from the Diaspora rose substantially. However, the most important development occurred in 1966, a year before the war when Israel was granted US\$90 million as a military loan from the U.S.A. In that year Israel changed its course from an association with decaying European powers like France and Great Britain to a growing dependence on the United States. The growth of the army following the war and the shift to more expensive U.S. military hardware gave birth, in the late 1960s, to a rapid expansion of local arms production. Initially, production was carried out by the state: Israel Aircraft Industries (IAI), Israeli Military Industries (IMI), and RAFAEL. Then the industry opened its gates for other interested parties.

In 1968, Dan Tolkovsky was nominated as chairman of Discount Investment Corporation. An offspring of the Israeli aristocracy and a

former IDF General (first head of the Israeli Air Force), Tolkovski suited the needs of the Discount group in the industrial field, especially in arms production. Already in 1962, he had established, with the Rockefellers, Elron Electronic Industries which became (in the late 1960s) the centre for Discount's armament activities. In 1967, Elron established jointly with the U.S.-based Control Data, Elbit Computers (headed by the former General B. Peled, one of Tolkovski's successors in the Air Force). Since then Elron has added some other nine subsidiaries, all of which are engaged almost exclusively with arms. In 1967, DIC also established Iscar Blades (with TRW, a U.S. arms conglomerate) as well as two R&D joint ventures with the government. By 1983 Discount Investment Corporation had direct interest in dozens of industrial groups and firms with "a deep commitment to high technology ever since 1962" (Discount Investment Corporation: Annual Report, 1983, p. 2).

One of the industrial groups in which Discount shares ownership and control is Clal (Israel). Although state subsidized until 1967, Clal (Israel) came out of the "red" by the late 1960s. In that period, Clal (Israel) was awarded a state-owned investment company along with its subsidiaries and acquired a series of other industrial entities that could hardly survive the 1965-66 recession. With cheap government finance, the company expanded after its reorganization in 1970 into finance, construction, real estate, services and most importantly, into manufacturing. At the head of Clal Industries - a subsidiary that today accounts for over half of the group's profits - stands Zvi Zur, a former Chief of Staff. The industrial division controls most of the group's arms business although Clal (Israel)'s subsidiaries Clal

Electronics and Clal Trade are also involved in the field.

The expansion of Clal (Israel) to become Israel's biggest investment group, with over 150 firms and 12,000 employees, was highlighted by the struggle over the group's control. The firm was initially "designed" to attract foreign capital to Israel, a plan which was quickly abandoned in light of Clal (Israel)'s growing importance for its domestic owners. In 1969, competition over the control had begun. It ended by 1975, when Bank Leumi held 8%, the Discount group 21%, and Bank Hapoalim 30%, collectively over half of the common shares.

The most important shareholder in this gravity centre is Hevrat HaOvdim (via Bank Hapoalim). Even without including its involvement in Clal's armament activity, Hevrat HaOvdim is the most important non-governmental arms producer in the country. As we have already mentioned, it was in the early 1960s when the group's industrial activity was concentrated via Koor, an offspring of the construction giant Solel Boneh. In 1973 Koor was reorganized into seven industrial divisions, a move influenced by the late 1960s - early 1970s shift of government expenditures towards the military:

"Removing the centre of gravity from the construction supply industry onto the fields of chemistry, metals and electronics, has prevented unnecessary shocks, and enabled us to concentrate on security and export. This has been reflected in a substantial growth in profits - absolutely and in relation to turnover" (Koor: Annual Report, 1973, trans., emphasis added).

Out of Koor's hundreds of firms, many dozens are armament producers. The most important of all is Tadiran, Israel's second largest industrial firm. The firm was created in the late 1950s as a joint

venture with the government. After 1967, when government support was no longer required, the state shares were bought by the U.S.-based GTE which assured the export markets. In 1984, GTE sold its share back to Tadiran, which is now looking for another foreign partner. Koor, like Discount Investment Corporation and Clal (Israel), also has former army generals situated in key positions. The company was headed by the former IDF General Meir Amit and its current chairman is the former General Yesha'yahu Gavish.

With the intensification of the conflict after 1967, the U.S. involvement greatly increased through arms supplies. These were mainly financed through U.S. military loans, the accumulation of which accounted for about one half of Israel's net foreign debt as of 1984. The rest of the armament growth can be associated with the domestic debt. If we measure it according to the share of defence spending in the budget, the domestic arms sector accounts for a half of the domestic debt. This sector is composed of hundreds of firms, most of which are bounded under the control of several industrial/financial conglomerates, which are strongly linked through mutual investments, joint directorships and relations with the state. Although the armament activities of these conglomerates or holding groups directly account for a considerable part of the domestic debt, government expenditures, industrial output and export, we know of no serious study that analyses this "defence sector"

The shift from a civilian to a military oriented market was associated with a rapid and disproportional growth of the financial

sector, essentially the financial activities of the three big banks. The recession of 1965-66 and the boom following the 1967 War permitted the rapid expansion of the biggest financial institutions. In the period of 1967-74, Bank Leumi acquired control over a series of eight banks. The Discount group went through reorganization when IDBH, Israel Discount Bankholding, was created controlling the Discount Bank and IDB Development. The most conspicuous performance however, was recorded by Bank Hapoalim which surpassed Discount to become Israel's second largest bank.

The pace of expansion of Bank Hapoalim can be mainly attributed to Jacob Levinson, nominated as chairman in 1970. Levinson was closely associated with the then Minister of Finance, Pinchas Sapir, who wanted to turn the bank into the country's most important financial institution. Levinson, through a bitter struggle with Hevrat HaOvdim's leadership, managed to channel nearly all of the group's financial activity through the bank. This was complemented by moving the group's investment fund and the social insurance fund Gmool under Bank Hapoalim's control. These financial tools aided considerably in the series of bank acquisitions throughout the 1970s.

With the growth of the banks came the "Gilded Age" of the stock exchange (the end of which has been already outlined). The banks found it feasible to compete with the terms of government bonds, which amounted to a real rate of return of 20-30%. The government was perfectly aware of the banks' growing market share (vis à vis its bonds). It was also aware of the methods used in stock price manipulation but considering mutual dependence and interests, no

government steps against the banks' practices in the stock market occurred before the 1983 collapse.

Predetermined and high profit margins in arms production were associated with stagnating civilian industry. Similar links can be suggested between the secularly rising rate of return on financial investment and the stagnating industrial investment and output since the early 1970s:

"Speculators may do no harm as bubbles on a steady stream of enterprise. But the position is serious when enterprise becomes the bubble on a whirlpool of speculation" (Keynes, 1936, p. 159).

A similar fetter on productive investment was imposed by the rising cost of loan capital allocated by the bank. Like the rates of return obtainable on the Tel Aviv Stock Exchange, the real rate of interest on loan capital has very little to do with the competitive equilibrium of "demand" and "supply". In the Israeli context, the interest rate was more likely to be equilibrated (determined) among a limited number of individuals heading several business institutions and the Ministry of Finance. Macroeconomic goals, like growth, were influenced by the determination of the interest rate. So was the profit of Israel's largest banks.

E. Macroeconomics and the "Big Economy"

As we have attempted to outline, many of the important macroeconomic phenomena in the Israeli economy can be meaningfully linked to developments in the "big economy" - in particular to the evolution of the institutional arrangements among several holding groups and the Government. In the following paragraphs we briefly summarize some of these links.

With respect to Capital Transfers, their allocation pattern was initially determined in the Austerity Era of 1949-54, and institutionalized through the Industrial Development Bank in the late 1950s - a pattern followed ever since. The Domestic Debt had started to build up in the early 1960s and was institutionalized via the indexation arrangements. The managers of the foreign transfers and the issuers of the domestic debt have been the big holding groups, which also received a considerable share of the capital thus formed and in "preferred conditions".

In parallel to the growth of foreign capital injections, the pattern of their investment, consumption, and waste, was established. The Balance of Payment Deficit has been strongly linked to the arms imports, which acted to accelerate the transformation of the domestic market from a civilian to a military oriented production. Although arms became Israel's biggest export item, they could not offset the strain on the domestic economy imposed by the local military expenditures. Almost all of Israel's arms production and exports are

in the hands of the big holding groups. Thus the development of these groups are directly related to the largest items on the Government Budget (and Deficit); namely, military expenditures and the debt services associated with them (foreign and domestic).

The Government Involvement in the Capital Market started in the Austerity Era and has intensified throughout the years. The government formally controlled inputs and outputs in this market, but gradually has become dependent on the holding groups, mainly the three biggest banks acting as its agents. Thus, the government could not withstand pressure from the banks when they started to raise capital in the stock exchange. It had to turn this capital into government bonds when the stock market collapsed. Recently, the banks' managements even threatened to advise foreign investors not to invest in Israel and not to channel foreign currency into Israel as a "counter measure" against the State Inquiry on the stock market collapse (HaAretz, July 1st, 1985).

The notion of Entrepreneurial Efficiency was selectively used in the Israeli history when the government, countercyclically to profits, bought or sold firms. Of no less importance have been the government less visible forms of aid to "entrepreneurs". Most of Israel's "success stories", especially in the high-technology armament-related fields, have been written with the aid of a stable consumer (the government), cheap finance, generous tax concessions, and lack of competition.

In an attempt to provide some lessons from Israel's inflationary experience, Don Patinkin criticizes the claim that inflation is a government tax on cash balances.

"... for in Israel every time the price level goes up, the government loses money - it does not gain. That results from the very special situation in which the Israeli government borrows by means of indexed loans, and lends from its development budget without indexing. Thus every increase in the price level increases the government's debt to the public without affecting the public's debt to the government.... thus the government loses in real terms every time inflation occurs" (Patinkin, 1979, p. 129, emphasis added).

Patinkin also associated governmental losses with the "subsidy" of the non-indexed loan:

"I would like to emphasize that to give a subsidy is not necessarily bad; but to give an arbitrary one is. And failure to index a loan provides a subsidy to industry not in accordance with any principle, but instead arbitrarily, as a function of whatever the rate of inflation turns out to be: the higher the rate of inflation, the greater the subsidy. That is not rational (ibid, p. 131, emphasis added).

Patinkin does not make any specific reference to the banks and the social insurance funds ("the public") holding the bonds, nor to holding groups ("industry") awarded the subsidized non indexed loans. Further, there is no word in his entire article on the special relation between the "public" holding the debt, the "industry" being allocated the non-indexed loans, and the government.

Formally, social insurance funds' assets belong to Israel's workers. In practice, they are one of the most important sources of financial leverage of the holding groups. The banks, acting as trustees of Israel's social insurance funds members, even used those assets in order to try and support their falling share prices before the October 1983 collapse (Hadashot, May 14th, 1985). Similarly, Bank

Leumi's provident funds have recently been receiving a monthly interest rate of 20% on their deposits, interest of which no part was passed on to the members' accounts. After criticism, the funds agreed to pay 8-12% to their members, which fell short of the full 20% "due to technical difficulties" (HaArets, July 1st, 1985).

All of this suggests why is it so hard to depreciate the value of the country's indexed savings as a mainstream anti-inflationary policy might suggest:

"... the Minister Gad Yaacobi sharply opposed any suggestion to hurt the savings 'nearly all savings are held by the employees, and hurting it will bring the abandoning of the saving route and the acceleration of inflation' said Yaacobi and added 'It is about time to remove, once and for all, this subject from the government's agenda'" (Hadashot, July 1st 1985, trans., emphasis added)

When it comes to wages, however, almost "everyone" agrees they are an active catalyst in the inflationary process. Even the Histadrut's secretary general, Israel Kessar asserts that:

"Israel has succeeded in creating an immune system by indexing everything so you don't feel how bad the economy is" (The Financial Post, July 7th 1984, emphasis added).

He adds:

"The system of linkages (indexation) is for everybody's survival, not just the workers" (ibid, emphasis added).

One has to note that the value of Israel's average gross monthly wage fell since the above statement from over US\$400 to less than US\$300.¹

1. There are no regularly published figures of wage distribution in Israel. This distribution is probably highly skewed, with the mode much less than the mean. Furthermore, there is no simple relation between the distribution of gross and net wages, as tax bracket changes are not "synchronized" with inflation. There are no official figures for net wages in Israel.

In light of the continuous fall in "real" wages for the past few years, it might be possible, that wages are not after all part of the "immune system" or "everything" in the terms of Kessar.

Sitting in the management of Israel's biggest industrial/financial group, Kessar's authority is over the Histadrut's 1.5 million "members" (almost the entire labour force). As far as decision making is concerned, workers have since the 1920s never had a voice in Hevrat HaOvdim's economic activities. They have been a factor of production that the group happens to manage. There is neither a paradox nor a conflict of interests. That is why "package deals" between the government, the employers, and the Histadrut (the workers) that fix wages and prices, have been so easy to reach. Rather than reflections of a "class conflict" they constitute another forum, or a "gravity centre", where allocation decisions are being arrived at by the Israeli elite. This elite is rooted in the British Mandate era. It has consolidated through the Austerity period and has been increasingly "militarized" since 1967. (There are currently more than 40 former Chiefs of Staff and Generals occupying key positions in the big holding groups.) It is responsible for all the important institutional arrangements, and more important, it controls the nation's capital, land, and labour force.

The conclusion is fairly straightforward. Instead of concentrating solely on amorphous macroeconomic categories in order to describe and analyse the Israeli economy, the framework should be extended to include the quantifiable development of Israel's main holding groups. To this we turn in the following chapter.

CHAPTER TWO

ISRAEL'S LARGEST BUSINESS GROUPS: QUANTITATIVE DATA

The first chapter was an institutional narrative and a historical introduction to the theoretical discussion which will be presented in the third chapter. In order to turn our theoretical propositions into testable hypotheses and to enable a brief econometric analysis, it was essential to deal with the quantitative dimensions of Israel's "big economy". The current chapter describes the process of data collection that we have followed and presents part of the assembled information that came from our effort. Evaluation of the data must await the theoretical propositions developed in the third chapter.

A. Our Data Collection Experience for Corporate Financial Statistics

Our data requirements were rather limited. We were interested in seven time series for each of Israel's main holding groups covering as long a period as possible. In accordance with their importance to us, we considered four of the time series as "major" items: "Total Assets", "Shareholders' Equity", "Pretax Profit", and "Net Profit". The other three series have been labeled as "supplementary" items: "Tax Payments", "Sales", and "Export". With the possible exception of the "Export" category, these items are customarily included in corporate financial statements.

According to the "Companies Ordinance 1929-1936", shareholders and debenture holders of a given company are entitled to receive a

copy of its balance sheet. Any public company is required to file with the Registrar of Companies both an audited balance sheet and a directors' report. If the firm offers securities to the public, it has to supply the Registrar of Companies with full audited financial statements and other supplemental information. The same information should be furnished in case of a security offer - to the Securities Authority. Companies listing their securities have to provide their financial statements to all members of the Tel-Aviv Stock Exchange. Banks and other financial institutions are required to publish their yearly financial statements in the daily press. The law also requires every Israeli publication, including corporate financial statements, to be sent in two copies to the National Library in Jerusalem. Finally, one can expect the Income Tax Commission to keep financial records of Israeli corporations.

Apparently, a student of the "big economy" in Israel has a considerable choice of sources, from which he can draw basic financial information on Israel's large public corporations. Since our data needs were confined to aggregate figures, we might have expected no difficulties to occur in obtaining them from the firms' financial reports. These reports, or the information they contain, are apparently available (as indicated in the preceding paragraph) from a multitude of entities: individuals, institutions and written publications. Further, it is reasonable to expect these series to appear in an already compiled form (published as series, or retrievable from a computerized database). Our interest was focused on less than ten very large groups, whose importance in the Israeli market can hardly be

overstated. Financial data of these groups could be of interest to the government, business, and the academic researchers. The cost of assembling and computerizing such an information should have been anything but prohibitive.

As far as government publications are concerned, however, we did not entertain high expectations of finding readily-compiled corporate financial data. As we have already mentioned in the first chapter, Israel's Central Bureau of Statistics (CBoS) publishes neither "national income" data nor "national balance sheet" data. Further, we are still unaware of any regular or irregular publication of the CBoS that maps the Israeli corporate universe (or a subset of it) along the lines of the seven time series mentioned.

What has been of little interest to the governmental statistical agency, might still have been a profitable operation for a private statistical service. One of the world's leading private entities dealing with corporate statistics is the U.S.-based multinational company Dun & Bradstreet Corp. Its Israeli subsidiary, Dun & Bradstreet (Israel), started to publish data on Israeli firms only in 1982 (for 1980). These data have been limited to the "industry level" and excluded consolidated information for the main holding groups, all of which are diversified conglomerates. Partial financial information on these groups only began to appear by 1984 (for 1983). Furthermore, Dun & Bradstreet's publications contain information on only two of the seven data items that were of interest to us - "Sales" and "Export" - yet Dun & Bradstreet (Israel) provides the most comprehensive privately published corporate statistics in Israel.

In our search for compiled data, we had no greater success with Israel's universities. The Institute for Business Documentation of Tel-Aviv University receives financial reports of large Israeli corporations. It does not maintain, however, a compiled record of the sort we have been looking for. We approached several professors in the School of Business Administration at Tel Aviv University.¹ They were unaware of any database maintaining financial statistics on Israel's main business groups.² Similar responses were obtained from academic personnel in the Faculty of Business Administration and the Department of Economics at the Hebrew University in Jerusalem. Whatever cautious expectations we initially entertained gradually faded. Israel's corporate statistics seem to have been left out of the "information revolution". We realized that we had to compile the data.

Our first attempt to approach the "raw" data (the firms' financial reports) was with the Institute for Business Documentation at Tel-Aviv University. The procedure of obtaining information from the Institute makes the retrieval of financial time series infeasible. The user has to apply for any particular piece of information required and then wait for about two weeks to receive it. Applying for over 100 time series, each extending over 30 years, would have been rejected at the very outset, as we learned from the Institute's librarian. We discover from the librarian that the Institute's collection of firms'

1. Professor B. Lev and Professor Y. Aharoni, in particular.

2. The Faculty of Business Administration in Tel-Aviv, as a subscriber of McGraw Hill's "Compustat", maintains such a database for the U.S.A and Canada.

annual reports is incomplete having numerous discontinuities and gaps. Since we could gain no direct access to the shelves of the Institute library, and in light of the apparent data incompleteness, we preferred to move ahead toward other potential sources.

The initial step was to scan the indexes of Israel's main university libraries. Using a computerized system shared by those libraries, we were able to search each library index for the possible existence of a collection of firms' annual reports. Such a collection appeared to be maintained only in Israel's National Library.

From all the data sources we have subsequently used, the National Library's collection has proven to be the most comprehensive. We spent over two weeks collecting data directly from the reports held by that library. However, after exhausting this source, our series were still incomplete. Although the law requires every public firm to send its reports to the National Library, only very big firms appear to have been doing so, though not consistently even then. To fill the many gaps left in our series, we proceeded to "second best" sources.

The first of the "second best" sources was the Securities Authority.¹ There we found financial reports for most of the large entities in which we were interested (specifically, those that are offering securities to the public). The span of the reports, however, was rather short. The Securities Authority discards every report older

1. The Securities Authority is not obliged to disclose information to the public.

than five years. Even for the five years between 1980 and 1984, many annual reports were missing.

Another "second best" source was the Bank of Israel (BoI). The BoI publishes data on the Israeli banking system and one might reasonably assume it has a computerized database with information on individual banks. The publications of the BoI, however, are always consolidated for the banking system as a whole, or for the three biggest banks. For reasons of confidentiality, published data are rarely broken down by firm.

Financial data are available, at least in principle, from the companies' own published reports. Such reports can be found in the BoI's library to which we then turned. There we found that reports were again kept for only a limited number of firms, mainly the large ones. With the experience we have gained by then, we were hardly surprised to find the collection in a disarray, with large gaps and discontinuities. Consequently, only a limited number of entries were added to our series at the BoI library.

It seemed that the marginal contribution - the contribution of each successive source of information - was rapidly falling. While in the National Library we had filled about 70% of our tables, the Securities Authority had contributed only 15%, and the BoI's library had accounted for no more than 5% of our series. Certain years for some corporations seemed harder to trace than others. We had to turn to other, "third best", sources.

The first of the "third best" sources was the Registrar of Companies. From a legal standpoint, most of our data needs could have been made available from this source alone. As was already noted, any public company has to supply the Registrar of Companies with its balance sheet. Complete audited financial reports should be furnished in case a company issues securities to the public. Our reluctance to use this source had to do with the practical rather than the legal availability of the data. The Registrar of Companies is not at all geared toward the needs of economic research. To make use of certain company files, the user has to file a request form, no later than 10:30a.m. on a given day. The form is then taken to the archives, and the attendant files arrive by 11:00a.m. The user can use the files in the congested reception hall until 12:30p.m. when the Registrar of Companies closes to the public. This time interval might be long enough for a lawyer in search for a particular detail (and lawyers seem to be almost the sole users of the Registrar of Companies' facility) but it is certainly too short for collecting the amount of data for which we were looking. More troublesome than the limited working time and the inconvenient working conditions, were the state of the files, their storage and handling. The Registrar of Companies' archives is located in an over-congested dusty cellar. Due to lack of shelf space, many files and documents are stacked or simply scattered on the floor. The shelved files are often put in the wrong place and cannot be located. The files themselves are overstuffed with documents, which are kept under no apparent order, usually unbound. Many of the documents are torn. It was hardly a surprise to be unable to locate several files, or certain documents within the files. A

considerable portion of the documents stored in the Registrar of Companies' archives, record information which exists nowhere else. Since the archives has no "backup", many of the documents and files lost are thus unrecoverable.

Another "third best" source we were forced to utilize was the Tel Aviv Stock Exchange library. At that stage of our data collection, we were missing items which should have been found in this library: reports for companies listing their securities. We were able to fill most of the remaining gaps, but not all. Few of the reports were still untraceable.

"Third best" sources also included the companies themselves. We have not made an extensive use of this source, for a fairly simple reason. Many of the firms that we approached have not got a complete record of their own past. "Looking ahead", they simply discard many of the "outdated" annual reports.

A final source one should mention is the Government Corporations' Authority, which formally controls all the government-owned corporations. The Authority publishes an annual report that contains, for every firm under its control, highlights from its financial statements as well as some other information. While reviewing these reports in the National Library, we found numerous inconsistencies,

discontinuities and several errors¹. In an attempt to resolve these difficulties, we tried (and succeeded) to gain access to the Authority's archives.² To our requests, the familiar reply was again that the archives contains firms' reports only for the latest three to four years. Previous reports had been sent to Israel's State Archives.

Our "data mining" activities stopped short of Israel's State Archives. Other potential sources we have not utilized are the Income Tax Commission³, and the archives of Israel's daily newspapers. Time constraints prevented us from searching for other possible sources, to whose existence we might have been unaware. We had reviewed, however, information contained in, or held by the following publications and institutions:

- (i) Dun & Bradstreet (Israel)'s publications.
- (ii) The Institute for Business Documentation of the Tel Aviv University.
- (iii) The Libraries of Israel's universities.
- (iv) The National Library in Jerusalem.
- (v) The Securities Authority.
- (vi) The Bank of Israel's library.
- (vii) The Registrar of Companies.
- (viii) The Library of the Tel Aviv Stock Exchange.

1. Alternate shifts from a calendar to a fiscal-based yearly reporting; usage of different names to describe the same categories; incorrectly stated figures, etc.

2. The Archives is not open to the public.

3. We are unaware of the extent to which past corporate financial figures are being kept by the Income Tax Commission. Based on our previous experience with the Commission, however, it is unlikely we could have gained access to such a record if it exists.

- (ix) The Government Corporations Authority.
- (x) Various Israeli Corporations.

As far as our incomplete, yet extensive, data collection experience indicates:

- (i) There appears to exist in Israel no compiled record (computerized or otherwise) of past corporate financial figures whether for large firms or for medium and small ones.
- (ii) Wherever a collection of firms' past annual reports is maintained, it is always incomplete, usually highly incomplete.
- (iii) Where corporate financial data exist, they are often carelessly maintained.

Basic financial statistics for large public corporations are always openly disclosed. The absence of their historical documentation in Israel suggests a general lack of interest in this area. The most comprehensive discussion of Israel's ownership/holding groups of which we are aware can be found in Aharoni (1976). Aharoni's seven-year project is rich in historical narrative, theoretical propositions, empirical data and analysis. No systematic attention is devoted, however, to the seven basic financial items that dominate our current chapter. Aharoni's figures on Bank Leumi are limited to the years 1972-1974. For those years only "Shareholders' Equity", "Operating Pretax Profit" and "Net Profit" are recorded. No consolidated figures are provided (p. 161). Unconsolidated figures for Bank Hapoalim exist for 1968-1974: "Total Assets", "Shareholders' Equity", and "Pretax Profit" (p. 204). Unconsolidated figures for the Discount Bank are

provided for "Total Assets" and "Shareholders Equity" in the years 1964-1974 (p. 228). For Koor, only "Sales" and "Export" are recorded (pp. 190-191). Financial data for Clal (Israel)'s are not provided at all. The four "main" items are recorded for Discount Investment Corporation (1961-1974, consolidated and unconsolidated), as well as unconsolidated figures for "Export" (p. 240). If consolidated and unconsolidated figures had been provided for the above mentioned six corporate entities, for each of the seven financial items - the number of series would sum-up to 84. Aharoni lists only 16 and these are for limited time periods only.

A lack of interest in the financial statistics of the "big economy" in Israel might be rationalized in various ways. One might claim the data are falsified, that they reflect an "accounting" rather than an "economic" reality, or that they are simply unrelated to macroeconomic issues. To these possible claims we return in the third chapter after we develop some of our theoretical arguments. In the rest of this chapter, we provide a subset of the financial data we have compiled.

B. The Data Subset

The collection of the seven financial time series for Israel's main business groups ("Total Assets", "Shareholders' Equity", "Pretax Profit", "Net Profit", "Tax Payments", "Sales", and "Export") has been designed as part of a more comprehensive project. The aim has been to build a computerized database relevant to the study of the political economy of Israel. The "economics" section of this "Israel's Political Economy Data Base" (IPEDB) contains published macroeconomic data, as well as other information which we believe has not been previously compiled nor computerized. In this section one can find financial time series for large Israeli business groups, as well as for some of their subsidiaries or affiliated firms, which are of special interest. (The database already contains over 200 such series, related to 32 large groups and "special interest" firms.) Another part of the "economics" section features ownership/directorship information, of which a considerable amount has already been compiled. From the "economics" section one can also access the index of an archives of newspaper extracts, containing over half a million items. The detailed description of IPEDB, however, is beyond the scope of the present essay. Wherever we make further use of information contained in IPEDB, the data, sources and references are given. In the present chapter, we confine the discussion to financial data for large Israeli business groups.

Configuring the social organization, or structure of capital (and economic activity) in Israel, requires a prior theoretical

discussion of ownership and control. As far as "raw" financial data are concerned, this structure is "predetermined" partly by legal requirements, but mostly by accounting conventions. Formally, for instance, Koor, Solel Boneh, Bank Hapoalim, and other Histadrut's associated entities are controlled by Hevrat HaOvdim. "Effective" control, however, might reveal a second configuration whereby Bank Hapoalim is independent from Hevrat HaOvdim as a "parent" but is strongly linked with "external" entities such as Bank Leumi and IDBH, via the "gravity centre" Clal (Israel) and numerous other formal and informal ties. Yet a third configuration is laid out by accounting conventions. Hevrat HaOvdim does not publish a report consolidating the various business organizations under its control; nor do the mutual ties between Bank Leumi, IDBH, and Bank Hapoalim, lead to a consolidated report for the three. Financial reporting "recognizes" neither the formal control of Hevrat HaOvdim, nor the effective links with the other groups. It lists the various business groups in Hevrat HaOvdim as entities independent of the superstructure organization as well as the external groups.

Aside from minor adaptations which will be specified, the following reported data are confined to figures extracted directly from the firms' annual reports. In this sense, we accept the "accounting determined" social structure of capital. Even so, our reported data do not map all of Israel's "big economy" but rather a subset of it. Table 2.1 lists the corporate entities and time series included in this data subset.

TABLE 2.1

Index to Financial Data Subset

Corporate Group	Type	Total Assets	Shareholders' Equity	Pretax Profit	Net Profit
Bank Hapoalim	uc	1956-83	1956-83	1963-83	1957-60, 63-83
	c	1972-83	1972-83	1972-83	1972-83
Koor	uc				
	c	1950-52, 59-83	1950-52, 59-83	1950-52, 59-83	1950-52, 59-83
Bank Leumi	uc	1951-84	1951-75, 77-84	1963-84	1963-84
	c	1951-84	1951-75, 77-84	1963-84	1963-84
IDBH	uc				
	c	1969-84	1969-84	1969-84	1969-84
Discount Bank	uc	1961-63, 70-84	1961-73, 70-84	1970-84	1962-63, 70-84
	c	1953-60, 63-84	1953-60, 63-84	1964-84	54-5, 57-61, 63-84
Discount Investment Corp.	uc	1962-75	1962-75	1962-75	1962-75
	c	1964-84	1964-84	1966-84	1964-84
Clal (Israel)	uc				
	c	1963-75, 77-84	1963-75, 77-84	1963-75, 77-84	1963-75, 77-84

uc: unconsolidated figures

c: consolidated figures

Exclusion of an entity from the subset, was influenced by several factors:

- (i) Non Existing Data. IPEDB contains financial statistics for various State-owned corporations. It also contains aggregates of Assets, Profits, etc., for all the government investments. These totals, however, are derived as simple arithmetic sums across the State-owned firms. (These arithmetic totals are irregularly published in the annual reports of the Government Corporations Authority.) The Government, as a holding group, publishes no report consolidating the corporations under its ownership/control, which is the primary reason for its exclusion from the data subset.
- (ii) Highly Incomplete Time Series. Another important group excluded from the subset is Solel Bonhe. Data for this group reside in IPEDB, but are fragmented by several lengthy temporal discontinuities, and thus excluded from the subset.
- (iii) Intended Usage of the Subset. The ultimate aim of our project is not the mere provision of financial figures for Israel's "big economy". We intend to develop testable hypotheses, for which the data are only a potential means of proof or refutation. For that purpose, the sample provided by our subset is sufficient.

Aside from the Government (as a holding group), and Solel Bonhe, the subset includes Israel's largest holding groups for which financial reports are regularly published: Bank Hapoalim, Koor, Bank Leumi, IDBH (Discount Bank, Discount Investment Corporation), and Clal (Israel).

Although, the data tables are accompanied by footnotes, some general remarks are still required:

(i) Series. For the subset corporate groups, only the four "major" financial items are included, while the three "supplementary" items are excluded. Data for "Sales" and "Export" exist in IPEDB, but are to a large extent temporally incomplete. Data for "Tax Payments" are even poorer since corporations usually report incurred "Tax Liabilities" rather than actual payments. For various reasons, the two might be different.

(ii) Consolidation. Consolidated reports were legally optional until 1969, when the "Securities Regulation, 1969 (Preparation of Financial Statements)" made under the "Securities Law, 1968" obliged companies offering securities to the public to prepare consolidated financial statements. Consolidated figures include subsidiaries in which the "parent" (the reporting firm) has 50% or more controlling interest. Other "affiliated" firms were included by the "cost" method until 1972. In 1973, Israeli accounting conventions for such investment were changed for the "equity" method.¹

(iii) Profits. Where capital gains were originally excluded from reported Pretax or Net Profit, they were re-added (capital gains are tax exempted in Israel). The only other minor adaptation made was in the figures for Bank Leumi, combining "Net Operating Profit" with "Net Irregular Profit Items" to obtain "Net Profit".

(iv) Conventions. For uniformity, all tables range from 1950 to 1984. A dash "-" indicates the corresponding figure is missing (not

1. We elaborate on the significance of these accounting conventions and others in the third chapter.

published or not found). No dashes or figures appear for years prior to the establishment of a corporation.

TABLE 2.2

Bank Hapoalim

I.S. millions

Year	Total Assets	Shareholders' Equity ^a	Pretax Profit ^b	Net Profit ^b
1950	-	-	-	-
1951	-	-	-	-
1952	-	-	-	-
1953	-	-	-	-
1954	-	-	-	-
1955	-	-	-	-
1956 ^c	1.130683	0.256968	-	-
1957	16.31185	0.519613	-	340496.0
1958	19.44592	0.566233	-	304988.0
1959	24.83646	0.730527	-	414316.0
1960	31.29588	0.839526	-	589618.0
1961	41.15323	1.005648	-	-
1962	63.04202	1.552032	-	-
1963	71.08708	2.116181	0.438377	0.510219
1964	82.18449	3.131176	0.510219	0.300219
1965	100.6322	3.211316	0.565822	0.310822
1966	120.9658	3.284804	0.644970	0.307970
1967	148.9016	4.201112	0.701290	0.351290
1968	190.1255	4.359530	0.908202	0.458201
1969	274.0187	5.965440	1.352496	0.632496
1970	408.9917	7.579455	1.586022	0.806022
1971	667.9379	11.34975	3.264866 ^d	1.739866 ^d
1972	996.2393	17.86324	6.130927	2.980927
1973	1499.501	26.85007	11.28078	4.580779
1974	2720.671	50.55325	24.00813	9.328126
1975	4112.511	79.54570	44.20540	13.10540
1976	6282.127	122.2557	55.25360	20.05360
1977	12255.32	206.5683	94.61480	39.11480
1978	21248.34	299.6796	189.3799	73.77990
1979	48693.67	608.6788	454.5355	172.6346
1980	126463.8	1748.716	1364.074	649.4710
1981	292957.2	4592.435	3077.676	1592.471
1982	748039.3	13219.26	4497.978	4648.576
1983	2027365. ^d	20804.93 ^d	-2284.266 ^d	3320.478 ^d
1984	-	-	-	-

a. The sum of Share Capital, Reserves and Surplus.

b. Including capital gains.

c. From here onward, year ending December 31st.

d. Reclassified.

TABLE 2.3

Bank Hapoalim
(consolidated^a)

I.S. millions

Year	Total Assets	Shareholders' Equity ^b	Pretax Profit ^c	Net Profit ^c
1950	-	-	-	-
1951	-	-	-	-
1952	-	-	-	-
1953	-	-	-	-
1954	-	-	-	-
1955	-	-	-	-
1956	-	-	-	-
1957	-	-	-	-
1958	-	-	-	-
1959	-	-	-	-
1960	-	-	-	-
1961	-	-	-	-
1962	-	-	-	-
1963	-	-	-	-
1964	-	-	-	-
1965	-	-	-	-
1966	-	-	-	-
1967	-	-	-	-
1968	-	-	-	-
1969	-	-	-	-
1970	-	-	-	-
1971	-	-	-	-
1972 ^{d, e}	1061.586	19.98049	8.259582	4.366790
1973	1615.622	31.64908	16.79431	7.014901
1974	2858.187	60.84632	38.91106	14.19513
1975	4246.810	97.02930	65.32710	20.61400
1976	6335.986	146.2095	81.15430	26.57990
1977	12442.75	255.0346	135.8723	48.46150
1978	21612.81	377.7823	247.3905	84.60870
1979	49606.18	823.3006	593.0000	201.2187
1980	128382.0	1748.716	1761.855	649.4710
1981	297548.4	4592.435	3995.270	1592.471
1982	749135.0	13219.26	6657.569	4648.576
1983	2100653.	20813.60	5683.597	3320.478
1984	-	-	-	-

- a. Including subsidiaries in which Bank Hapoalim has over 50% controlling interest; excluding provident funds managed by the bank.
b. The sum of Share Capital, Reserves and Surplus.
c. Including capital gains.
d. From here onward, year ending December 31st.
e. First year for which consolidated figures are available.

TABLE 2.4

Koor Industries(consolidated^a)

I.S. millions

Year	Total Assets	Shareholders' Equity ^b	Pretax Profit ^c	Net Profit ^d
1950 ^e	0.079889	0.078329	0.002486	0.002154
1951	0.083887	0.078917	0.002277	0.001963
1952	0.110208	0.106997	0.002329	0.001952
1953	-	-	-	-
1954	-	-	-	-
1955	-	-	-	-
1956	-	-	-	-
1957	-	-	-	-
1958	-	-	-	-
1959	6.456022	2.209086	0.030244	0.019244
1960	6.857476	2.217895	0.032935	0.022935
1961	8.593871	4.239692	0.083567	0.052567
1962	9.040350 ^f	4.549481 ^f	0.206020 ^f	0.161020 ^f
1963	9.903544	4.844789	0.192192	0.152192
1964	13.24499	4.586455	0.181834	0.109834
1965	13.13254	4.560453	0.374825	0.339825
1966	15.34243	4.836912	0.218662	0.173662
1967	18.13928	3.678420	-0.964424	-1.280208
1968 ^g	38.01634	3.457970	0.827405	0.938659
1969	46.42619	5.560733	1.769150	1.427287
1970	61.40928	7.154880	0.547623	0.932550
1971	90.18439	9.218792	0.624388	1.415866
1972	102.3108	11.62873	1.503642	1.409671
1973	131.2094	13.96064	2.441211	2.053381
1974	256.7361	21.91704	9.808715	6.608171
1975	419.9764	30.41460	11.89910	6.701600
1976	813.2000	34.00000	32.40000	0.890600
1977	856.0779	61.70070	32.74820 ^f	16.19380 ^f
1978	1729.953	146.7055	91.24040	73.57530
1979	2876.208	271.4188	129.5875	106.4175
1980	6495.322	663.3950	454.3010	365.2910
1981	16646.18	1629.493	1069.256	925.4010
1982	44642.00	4567.000	4080.000	2504.000
1983	188456.0	9704.000	9582.000	4537.000
1984	-	-	-	-

a. Including subsidiaries in which Koor has over 50% controlling interest.

b. The sum of Share Capital, Reserves, and Surplus.

c. Including capital gains; including minority interest.

d. Including capital gains; excluding minority interest.

e. From here onward, year ending March 31st.

f. Reclassified.

g. From here onward, year ending December 31st.

TABLE 2.5

Bank Leumi

I.S. millions

Year	Total Assets	Shareholders' Equity ^a	Pretax Profit ^b	Net Profit ^b
1950	-	-	-	-
1951 ^c	12.94425	0.125369	-	-
1952	18.24332	0.150939	-	-
1953	24.47625	0.406216	-	-
1954	36.07851	0.456903	-	-
1955	28.66772	0.509160	-	-
1956	34.98946	0.534692	-	-
1957	39.34499	0.560894	-	-
1958	44.41032	0.587994	-	-
1959	46.71044 ^d	0.806010 ^d	-	-
1960	57.14214	1.228822	-	-
1961	73.89982	1.536582	-	-
1962	126.2107	3.057871	-	-
1963	146.0734	5.907412	1.003700 ^e	0.560705 ^e
1964	168.5904	6.226086	1.147900	0.645169
1965	192.3023	6.433353	1.196800	0.761788
1966	224.5499	6.637619	1.081600	0.596586
1967	298.1196	6.912774	1.930541 ^d	1.036541 ^d
1968	340.9187	7.243195	2.380344	1.320344
1969	438.7851	8.571239	3.201135	1.751135
1970	570.8945	9.205559	3.646944	2.196944
1971	860.8370 ^d	12.73530 ^d	5.660100 ^d	2.846700 ^d
1972	1143.904	21.02990	8.225100	3.693200
1973	1866.965	30.06440	12.66010	5.316500
1974	3186.854 ^d	46.78160 ^d	24.98000 ^d	7.382100 ^d
1975	4556.689	64.53440	37.73960	13.51530
1976	6664.900	-	50.76990	18.62130
1977	12337.75	198.0723	88.55370	41.45290
1978	20618.04	281.3035	124.5716	53.20820
1979	45864.37 ^d	367.6993 ^d	282.4070 ^d	120.0148 ^d
1980	116396.7 ^d	1488.011 ^d	893.9450 ^d	530.5980 ^d
1981	267201.8	3638.891	1439.991	1163.827
1982	670508.6	12085.21	1731.995	3923.800
1983	1837319.	22998.00	-2206.564	3742.436
1984	10225190	117215.0	33306.00	67120.00

a. The sum of Share Capital, Reserves, and Surplus.

b. Including capital gains.

c. From here onward, year ending December 31st.

d. Reclassified.

e. First year for which profit figures are available.

TABLE 2.6

Bank Leumi(consolidated^a)

I.S. millions

Year	Total Assets	Shareholders' Equity ^b	Pretax Profit ^c	Net Profit ^d
1950 ^e	-	-	-	-
1951	14.59669	0.304729	-	-
1952	20.35519	0.373849	-	-
1953	27.05670	0.477373	-	-
1954	39.88020	0.543564	-	-
1955	34.25393	0.589144	-	-
1956	43.02104	0.644469	-	-
1957	49.16134	0.693522	-	-
1958	57.05324	0.752080	-	-
1959	65.03716 ^f	0.989731 ^f	-	-
1960	81.96099	1.451561	-	-
1961	120.0278	2.018091	-	-
1962	199.7049	3.796673	-	-
1963	237.1123	6.811445	2.076200 ^g	1.123661 ^g
1964	274.3012	7.253257	2.282300	1.287245
1965	306.4767	7.690043	2.490200	1.579594
1966	355.0605	7.990001	2.134100	1.197764
1967	448.8508	8.557489	3.394110 ^f	1.271229 ^f
1968	552.7315	9.142181	4.439412	1.665488
1969	700.1912	10.72224	5.413620	1.081447
1970	877.8353 ^f	11.78592 ^f	5.822126 ^f	2.598263 ^f
1971	1327.276 ^f	16.79750 ^f	8.444800 ^f	3.141000 ^f
1972	1779.520 ^f	26.10140 ^f	13.02760 ^f	4.797200 ^f
1973	2569.560	37.76950	21.76710	8.251800
1974	4106.891 ^f	65.42880 ^f	39.85580 ^f	13.99160 ^f
1975	5612.856	90.49561	57.78690	18.85160
1976	8169.300	-	78.54670	22.02050
1977	15224.70 ^f	271.4113 ^f	151.6910 ^f	61.79940 ^f
1978	24788.30	396.4072	226.3653	77.09170
1979	54606.18 ^f	612.4488 ^f	514.2157 ^f	179.3527 ^f
1980	139486.5	1488.011	1492.132	530.5980
1981	317328.7	3638.891	3008.452	1163.827
1982	787650.3 ^f	12085.21 ^f	5943.888 ^f	3923.800 ^f
1983	2309300.	22758.73	7027.230	3742.767
1984	12927230	117215.0	115559.0	67120.00

a. Including subsidiaries in which Bank Leumi has over 50% controlling interest; excluding Provident Funds managed by the bank.

b. The sum of Share Capital, Reserves, and Surplus.

c. Including capital gains; including minority interest.

d. Including capital gains; excluding minority interest.

e. From here onward, year ending December 31st.

f. Reclassified. g. First year for which profit figures are available.

TABLE 2.7

Israel Discount Bankholding Corporation (IDBH)(consolidated^a)

I.S. millions

Year	Total Assets	Shareholders' Equity ^b	Pretax Profit ^c	Net Profit ^d
1950				
1951				
1952				
1953				
1954				
1955				
1956				
1957				
1958				
1959				
1960				
1961				
1962				
1963				
1964				
1965				
1966				
1967				
1968				
1969 ^e	336.3568	12.74018	2.550142	1.820677
1970	449.4094	13.30790	2.798925	1.983781
1971	750.7418	15.34932	5.394713	3.144560
1972	953.8586	20.22018	6.669977	3.302141
1973	1163.977	28.42874	10.45220	5.155145
1974	1836.065	46.75710	21.33107	10.86057
1975	2507.945	67.64901	29.39183	11.65768
1976	3641.051	101.4201	38.57204	15.97757
1977	7113.501	209.8036	84.57462	37.29840
1978	11983.10	335.9708	144.3543	62.84870 ^g
1979	26694.75	545.2745	313.5255 ^g	151.0754 ^g
1980	64214.70	1213.901	860.3660	461.9980
1981	152207.9	3475.724	2645.784	1287.062
1982	380248.7	9589.318	5050.990	4254.951
1983	1170652.	22949.84	8808.663	7795.521
1984	6847768.	115733.0	59032.00	49212.00

a. Including subsidiaries in which IDBH has over 50% controlling interest.

b. The sum of Share Capital, Reserves, and Surplus.

c. Including capital gains; including minority interest.

d. Including capital gains; excluding minority interest.

e. Year IDBH was established.

f. From here onward, year ending December 31st.

g. Reclassified.

TABLE 2.8 °

Israel Discount Bank

I.S. millions

Year	Total Assets	Shareholders' Equity ^a	Pretax Profit ^b	Net Profit ^b
1950	-	-	-	-
1951	-	-	-	-
1952	-	-	-	-
1953	-	-	-	-
1954	-	-	-	-
1955	-	-	-	-
1956	-	-	-	-
1957	-	-	-	-
1958	-	-	-	-
1959	-	-	-	-
1960	-	-	-	-
1961 ^c	42.54623	1.448521	-	-
1962	71.72339	1.736078	-	0.174529
1963	97.22275	3.627948	-	0.539628
1964	-	-	-	-
1965	-	-	-	-
1966	-	-	-	-
1967	-	-	-	-
1968	-	-	-	-
1969	-	-	-	-
1970	434.8980	7.234190	2.244183	1.400619
1971	625.9435	7.716835	5.258229	2.992566
1972	807.0625	11.71716	5.770000	2.980000
1973	1003.700	16.09000	6.990000	3.640000
1974	1639.297	28.76825	14.24606	6.562549
1975	2263.800	40.06000	17.20000	6.270000
1976	3364.220	61.42000	21.88000	8.380000
1977	6543.730	128.6744	61.34350	22.11350
1978	10879.07	169.5196	85.34690	34.07190
1979	24859.07	318.7190	161.5580	97.70300
1980	48723.23	767.8530	364.0120	239.6520
1981	109044.8	1991.426	253.3100 ^d	538.8040
1982	274781.4	6829.940	458.4250 ^d	1358.490
1983	748160.4	16119.32	-4088.126 ^d	671.4560
1984	4048525.	84499.00	-18351.00 ^d	27604.00

a. The sum of Share Capital, Reserves, and Surplus.

b. Including capital gains.

c. From here onward, year ending December 31st.

d. Excluding the bank's share in subsidiaries' profit.

TABLE 2.9

Israel Discount Bank(consolidated^a)

I.S. millions

Year	Total Assets	Shareholders' Equity ^b	Pretax Profit ^c	Net Profit ^d
1950	-	-	-	-
1951	-	-	-	-
1952	-	-	-	-
1953 ^e	7.964926	0.162054	-	-
1954	9.425889	0.200214	-	0.031850
1955	12.11893	0.210000	-	0.032662
1956	14.95995	0.235694	-	-
1957	17.02988	0.256544	-	0.031610
1958	20.34411	0.285076	-	0.037655
1959	25.91928	0.374540	-	0.044304
1960	32.59819	0.676438	-	0.068805
1961	-	-	-	0.097884
1962	-	-	-	-
1963	99.38562	3.644432	-	0.509093
1964	117.7034	4.947661	1.101713	0.672607
1965	143.2850	5.190486	1.058984	0.708994
1966	167.0988	5.349565	1.050266	0.702266
1967	217.8835	5.556391	1.110582	0.775082
1968	277.1094	6.479775	1.546939	0.911939
1969	329.4729	6.885437	2.065770	1.270455
1970	442.5852	7.330812	2.372608	1.475604
1971	627.6329	7.905201	5.361694	2.917592
1972	944.8319	11.77429	5.976826	2.983791
1973	1160.534	16.31475	8.545810	3.923459
1974	1843.812	30.40757	18.60484	7.622599
1975	2517.981	43.10355	23.94995	7.418616
1976	3680.893	66.87399	30.54079	10.17103
1977	7167.043	142.1229	77.98340	25.66750
1978	12017.23	193.7361	120.0230	42.12490
1979	26895.34	318.7190	254.5230	99.70300
1980	64418.01	767.8530	591.2250	239.6520
1981	151736.5	1991.426	995.6330	538.8040
1982	390629.0	6829.940	2227.774	1358.490
1983	1166318.	15188.92	2577.617	671.4560
1984	6786681.	84449.00	45978.00	27604.00

- a. Including subsidiaries in which Israel Discount Bank has over 50% controlling interest; excluding provident funds managed by the bank.
b. The sum of Share Capital, Reserves, and Surplus.
c. Including capital gains; including minority interest.
d. Including capital gains; excluding minority interest.
e. From here onward, year ending December 31st.

TABLE 2.10

Discount Investment Corporation

I.S. millions

Year	Total Assets	Shareholders' Equity ^a	Pretax Profit ^b	Net Profit ^b
1950				
1951				
1952				
1953				
1954				
1955				
1956				
1957				
1958				
1959				
1960				
1961 ^{c, d}	-	-	-	-
1962	3.072487	1.241698	0.149698	0.137198
1963	5.462382	1.969893	0.271127	0.243627
1964	6.738611	3.383657	0.407509	0.372009
1965	7.265966	3.436000	0.353203	0.323203
1966	10.27053	3.299697	0.328079	0.289996
1967	14.11450	3.318462	0.288884	0.260855
1968	20.04001	3.357657	0.366785	0.281285
1969	25.70912	3.434085	0.471937	0.366937
1970 ^e	40.72474 ^f	3.779774 ^f	0.458621 ^f	0.417621 ^f
1971	52.61350	4.164942	0.855177	0.675677
1972	71.16285	5.915423	1.582916	1.312916
1973	101.2922 ^f	6.280003 ^f	1.316206 ^f	0.776206 ^f
1974	166.9193	6.979470	2.424915	1.284915
1975	220.2695	7.852447	2.821222	1.371222
1976	-	-	-	-
1977	-	-	-	-
1978	-	-	-	-
1979	-	-	-	-
1980	-	-	-	-
1981	-	-	-	-
1982	-	-	-	-
1983	-	-	-	-
1984	-	-	-	-

- a. The sum of Share Capital, Reserves, and Surplus.
b. Including capital gains.
c. Year Discount Investment Corporation was established.
d. From here onward, year ending March 31st.
e. From here onward, year ending December 31st.
f. Reclassified.

TABLE 2.11

Discount Investment Corporation(consolidated^a)

I.S. millions

Year	Total Assets	Shareholders' Equity ^b	Pretax Profit ^c	Net Profit ^d
1950				
1951				
1952				
1953				
1954				
1955				
1956				
1957				
1958				
1959				
1960				
1961 ^e	-	-	-	-
1962	-	-	-	-
1963	-	-	-	-
1964 ^f	15.07965	3.461266	-	0.417001
1965	17.50359	3.507756	-	0.359269
1966	23.06167	3.389738	0.676410	0.311727
1967	28.67070	3.437316	0.637313	0.296278
1968	37.77328	3.501947	0.670553	0.302766
1969	48.15615	3.719392	0.906679	0.463957
1970 ^g	67.51657 ^h	4.057651 ^h	0.918154 ^h	0.474928 ^h
1971	83.76910	4.521130	1.436557	0.767246
1972	72.19213	6.057189	2.096559	1.198518
1973	104.9990 ^h	8.692276 ^h	2.068391 ^h	1.517390 ^h
1974	172.0112	10.72268	3.840915	2.716595
1975	227.9286	13.60763	4.767757	3.358754
1976	351.9011 ^h	16.53362 ^h	4.913160 ^h	3.637173 ^h
1977	542.4548	24.61079	9.947800	7.127800
1978	856.8117	41.07369	16.51719	10.74719
1979	1806.314	62.34190	34.51530	20.78910
1980	4452.551	156.7350	89.02000	65.32000
1981	9484.388	470.9600	253.9370	221.8370
1982	22704.45	1373.605	565.3910	500.6910
1983	59580.45	4012.072	2086.114	2086.114
1984	268787.0	19424.57	9669.660	9588.644

- a. Including subsidiaries in which Discount Investment Corporation over has over 50% controlling interest. b. The sum of Share Capital, Reserves, and Surplus.
c. Including capital gains: including minority interest.
d. Including capital gains; excluding minority interest.
e. Year Discount Investment Corporation was established.
f. From here onward, year ending March 31st.
g. From here onward, year ending December 31st. h. Reclassified.

TABLE 2.12

Clal (Israel)(consolidated^a)

I.S. millions

Year	Total Assets ^a	Shareholders' Equity ^b	Pretax Profit ^c	Net Profit ^c
1950				
1951				
1952				
1953				
1954				
1955				
1956				
1957				
1958				
1959				
1960				
1961				
1962 ^{e, f}	-	-	-	-
1963	2.382725	2.330304	0.034122	0.028122
1964	5.301998	5.095707	0.221423	0.186423
1965	6.562295	6.068375	0.218100	0.190100
1966	10.75744	7.528648	0.731798	0.591798
1967	11.68395	7.597925	0.707358	0.564914
1968	18.70318	7.802920	0.825659	0.778766
1969	28.37744	8.450642	1.119276	1.004152
1970	31.40755	8.870548	1.349582	1.194792
1971	53.46766	9.516463	2.981999	1.978210
1972	90.95564	15.36746	4.068233	2.528895
1973	120.2466	20.23790	4.836936	3.030281
1974	198.2663	75.65925	8.081304	5.234919
1975	274.5884	110.7080	10.23896	6.866771
1976	-	-	-	-
1977	502.6642	57.50050	25.92460	17.53810
1978	807.2263	109.6937	61.97640	44.20240
1979	1458.092	190.7361	103.6907	89.22190
1980	3353.117	456.0420	324.6430	281.6990
1981	8642.380	1183.064	828.9070	701.9800
1982	24003.51	3922.712	3184.474	2317.200
1983	68292.14	7031.781	4842.000	3109.069
1984	381712.0	23824.00	25712.00	13509.00

a. Including subsidiaries in which Clal (Israel) has over 50% controlling interest.

b. The sum of Share Capital, Reserves, and Surplus.

c. Including capital gains; including minority interest.

d. Including capital gains; excluding minority interest.

e. Year Clal (Israel) was established.

f. From here onward, year ending December 31st.

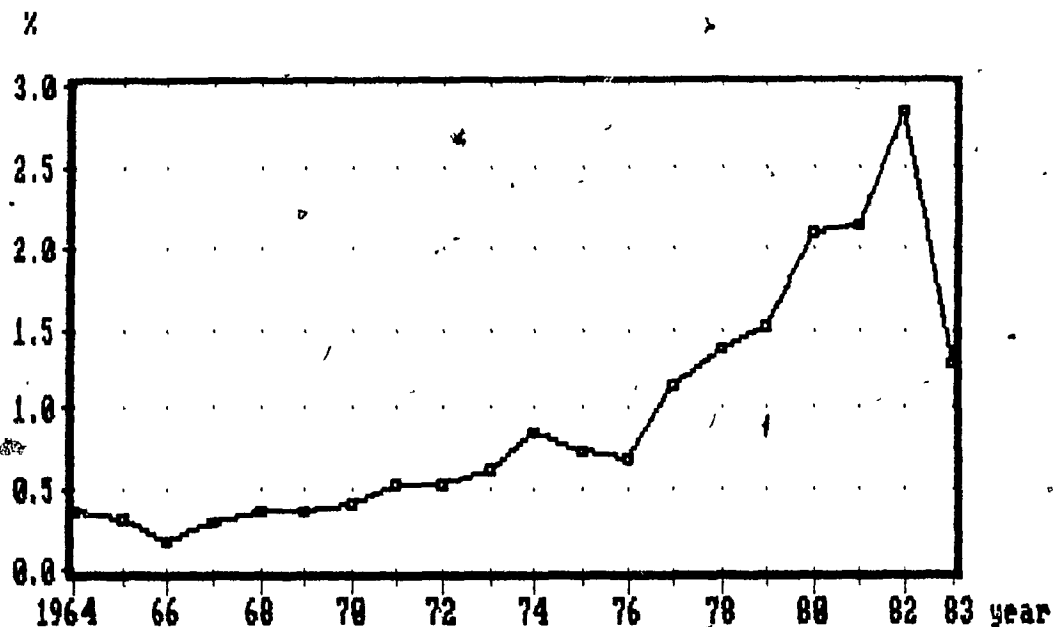
CHAPTER THREE

THEORETICAL OVERVIEW AND INTERPRETATIONS

Between 1964 and 1982, the annual growth rate of Israel's real GNP fell from 9.8% to 1.4%. The yearly percentage change in the CPI (December to December) rose from 4.5% to 131%. The share of military spendings in the GNP rose from 9.3% to 23.6%. The ratio of net foreign debt to the GNP increased from 30.1% to 97%, and the ratio of domestic debt services to the GNP rose from 2% to 12.7%.

FIGURE 3.1

Bank Hapoalim, Koor, Bank Leumi, Discount Bank, Discount Investment Corporation, Clal (Israel) - Net Profits As a Percentage of GNP



In the same period, the aggregate net profits of Israel's six biggest corporate groups, Bank Hapoalim, Koor, Bank Leumi, Discount

Bank, Discount Investment corporation, and Clal (Israel)¹, which are further controlled by Israel's three largest holding groups: Hevrat HaOvdim, Bank Leumi⁶, and IDBH - rose almost eight times faster than the GNP, as can be seen in figure 3.1 above. We name these aggregate net profits Israel's 3. To put the magnitude involved in some perspective, let us aggregate the net profits of the 650 largest corporations in the U.S.A.:² the 500 largest industrial firms, the 50 biggest commercial banks, the 50 biggest utilities, and the 50 largest retailers. We obtain what we name U.S.A's 650.³

TABLE 3.1

An Index for the Relative Size of the Big Economy:
Israel Versus U.S.A

<u>U.S.A.'s 650</u>	<u>Israel's 3</u>
<u>U.S.A.'s GNP</u>	<u>Israel's GNP</u>
=====	

1964	3.6%	0.36%
1982	3.0%	2.84%

Source for Israel's 3 - IPEDB data collected from firms' financial reports.

Source for U.S.A's 650 - "Fortune Directory", Fortune July 1965, August 1965, "The 500" Fortune, May 2, 1983 "Sevice 500" Fortune, June 1983.

1. Minor adjustments were made in aggregation due to fiscal/calendar differences. For further details, see page 110.
2. Industrial and retailing corporations are ranked by sales, while commercial banks and utilities by total assets.
3. both U.S.A's 650 and Israel's 3 are in current figures (US\$ and IS)

Table 3.1 above compares U.S.A's 650 and Israel's 3 to the relevant nominal GNP figures in both countries. If our sample size is "appropriate" in each case, the results give some indication of the relative importance of a "representative giant firm" in each market (the percentage figures divided by the number of corporate entities). Relatively to their local markets in 1964, an Israeli "representative giant" was already 22 times larger than its U.S.A counterpart. By 1982, three groups in Israel appropriated roughly the same percentage of GNP as did the 650 largest firms in the U.S.A. In that year, an Israeli "representative giant" was relatively 205 times larger than its U.S.A parallel.

This relative development of the big economy in Israel is most likely unparalleled in any of the other developed capitalist countries. However, the question still remains: are their relevant theoretical explanations, that link macroeconomic phenomena like stagflation, Government military expenditures, domestic and external debt from one side, and the growth of these three holding groups from the other? Can such theoretical links be further substantiated in a quantitative analysis?

A. Theoretical Overview

Our vantage point is based on several theories related to the Marxian antinomy of overproduction-underconsumption, and to the centralization/concentration of capital under modern capitalism. Written in the first six decades of the current century, all these theories lack certain essential features required for the understanding of several phenomena which arose during the 1970s and 1980s. Further, they all relate primarily to big capitalistic economies (commonly using the U.S.A as a case study), and thus, are not readily applicable to the Israeli case. However, the general principles suggested in those theories together with few important amendments, might prove illuminating for the study of the Israeli economy, and also for the role the United States has come to play in it.

Probably the first author to include the 'degree of monopoly' as a central element in a macroeconomic model was Michal Kalecki in his 1939 article "The Distribution of the National Income" and in "Cost and Prices" originally published in 1943 (both are reprinted in Kalecki, 1971). Kalecki differentiated between demand-determined prices associated with raw materials industries and cost-determined prices associated with finished goods industries. Starting from the analysis of cost determined prices for one firm, he successively developed his results for the industry, and finally stated their relevancy for the distribution of the national income.

Essentially, the main assumption for the finished goods sector is

of an almost-horizontal short run prime cost curve in the relevant range of production. In this range the marginal and average cost curves coincide; further, the ratio between total product value (overhead, profits, wage bill, and raw materials cost) and prime cost (wage bill, and raw materials cost) is equal to the ratio between average unit price and average unit prime cost.

This scheme is incompatible with the results of perfect competition (price equals marginal cost) which could hold here only if profits and overhead sum up to zero. Otherwise, the relations between price and unit prime cost are a reflection of the 'degree of monopoly' in this sector (Kalecki, 1971, p. 45). Kalecki further established the relations between the degree of monopoly over all the economy and the distribution of the national income: the higher the degree of monopoly the larger is the share of overhead and profits in the national income.

Kalecki rejected the Neo-classical premise, according to which a rise in the capital/output ratio, ceteris paribus, will raise the ratio of price to unit prime cost. This will occur, according to Kalecki, only inasmuch as changes in the capital/output ratio affect the degree of monopoly (ibid, pp. 52 - 53). On the other hand, Kalecki identified the process of concentration of industry and the creation of the giant corporation, as the foremost important factor raising the degree of monopoly (ibid, pp. 49 - 50).

The 'degree of monopoly' concept, its impact on income

distribution and, thus, its indirect effect on national income determination, appear in Kalecki's writings mainly in the discussion of the business cycle. It was these booms and busts, or more appropriately their apparent disappearance, which (among other things) led Baran and Sweezy, more than two decades later, to publish their essay on 'monopoly capital'.

While Kalecki was dealing with cycle theory under the impression of the Great Depression, Baran and Sweezy in Monopoly Capital (1966) tried to explain two decades of an almost uninterrupted prosperity following the Second World War. According to Baran and Sweezy, the Marxian economic theories of the time were ill-equipped to explain that prosperity as they did not acknowledge the qualitative shift from a competitive capitalism to what the authors named 'Monopoly Capitalism'.

In its essentials, their argument develops as follows: The dominant economic unit in the United States economy is the giant corporation, the focal point of which is the productive process. Unlike Kalecki who dealt mainly with ex post relations between unit price and unit prime cost, Baran and Sweezy tried to further identify the mechanism by which these relations are determined.

Under the impression of price stability of the 1950s and 1960s, Baran and Sweezy claimed that the dominance of oligopolistic structure generates a significant downward price rigidity (or even a moderate upward price bias). The main dynamic element in price-cost relations is the development of productivity as a primary weapon in non-price

competition among industrial oligopolies. The net result, given the above scheme, is of "continuously widening profit margins... [which]... in turn imply aggregate profits which rise not only absolutely, but as a share of the national product" (Baran and Sweezy, 1966, pp. 71 - 72).

While political economists of the nineteenth century, like Ricardo and Marx, were concerned with falling rates of profits, under the different conditions of the twentieth century "... if we provisionally equate aggregate profits with society's economic surplus, we can formulate as a law of monopoly capitalism that the surplus tends to rise both absolutely and relatively as the system develops" (*ibid*, p. 72).

The surplus is mostly appropriated by the industrial giants and enables them to achieve financial independence from 'external' financial institutions. This, in turn, removes the inherent industrial instability associated with speculative activities of the financial 'interest groups' that dominated big business in the turn of the century (cf. Veblen, 1904). But far from assuring prosperity, the tendency of the surplus to rise threatens the United States economy with chronic stagnation (Baran and Sweezy, 1966, p. 76). Absence of sufficient ways for 'absorbing' the rising surplus (or rising surplus potential) is seen by the giant corporations as a lack of investment opportunities, which causes them to reduce economic activity, and eventually leads to a reduction in society's surplus. On the other hand, the tendency of the surplus to rise might materialize, given

adequate ways of absorbing or 'realizing' it. Indeed the prosperous experience of the 1950s and 1960s is explained by the authors along these lines. Their main claim is that the most effective means to counteract stagnation tendencies are the wasteful expenditures (also private, but mainly public). By directing resources away from the reproductive process (by "wasting" them), those expenditures enable the creation of the surplus without further enhancing its tendency to rise. Among the wasteful expenditures, the largest single item is military spending.

Baran and Sweezy published their book in 1966, the year in which the Vietnam conflict exerted its initial impact on the United States economy via military spending. In that year military expenditures constituted less than 8% of the GNP, but accounted for about a 1/3 of the annual increase in the GNP.¹ Almost a decade earlier, in 1957, Shigeto Tsuru published an article in the Japanese journal Sekai which he named: "Has Capitalism Changed?" (This article was subsequently included in a 1961 book edited by Tsuru and carrying the same name.) Looking at the U.S.A, Tsuru's focal point was an empirical investigation of the "offsets to saving" which he equated with all the GNE components excluding personal consumption.

As far as savings were concerned, Tsuru inspected the corporate rate of profit (the ratio of reported net profits to shareholders' equity) and the ratio of corporate saving to the GNP (corporate saving = undistributed profits + depreciation and depletion allowances). The

1. U.S. President (1982) Economic Report of the President

data indicated that both corporate profitability and the share of corporate saving in the economy were substantially and consistently higher in the post-World War II years, than in the prewar era. Tsuru claimed that these higher ratios could be sustained - and stagnation or crisis thus avoided - only if the GNE components which "offset" savings would grow fast enough to maintain their relative share in national expenditures.

A more detailed analysis of those offsets to savings, led Tsuru to conclude that both private capital formation and net exports were already at near-ceiling levels relatively to the GNE, and would probably be lower in the coming decade. Civilian government spendings were also contained by obstacles imposed by private interests. The only dynamic elements were the various items of "institutionalized waste", of which military spending were by far the largest. The difficulty lay in the fact that, by 1955, military spending already amounted to 10.2% of GNE:

"... if the U.S. economy needs that relative figure, of ten percent as an offset to saving for the prosperity level of economic activities, it would mean that its defense expenditures will have to amount to 56 billion dollars ten years from now when its gross national product is expected to rise to the level of 560 billion dollars. We must say (and we should like to say for the sake of world peace) that it is rather questionable if the United States can spend on defense as much as 16 billion dollars more than today in 1968" (Tsuru, 1961, pp. 27 - 28, emphasis in the original).

It appears that Tsuru was right. That level of military expenditures could not be "institutionalized" in peace time. By 1968 the United States was well into the Vietnam war.

B. The Case of Israel

The above theories suggest that underconsumption - overproduction tendencies are intensified by the rise in the 'degree of monopoly' (Kalecki) or in general, by the qualitative shift from a competitive to an oligopolistic industrial structure (Baran and Sweezy). The "institutionalized waste" is the force counteracting the enhanced tendency for stagnation/crisis. Among the various forms of institutionalized waste, armaments are the most prominent. Since they entail very large outlays, their production hardly reduces their scarcity, and they do not compete with private capital - military expenditures enable the government to best serve particular business interests (the large corporations), and to propel overall economic activity, at the same time (Baran and Sweezy, Tsuru).

However revealing, this scheme is insufficient to explain the case of Israel for it is primarily occupied with the productive process, it devotes little attention, theoretical or empirical, to capital, and further, it is mainly concerned with a closed system.

As described in the first chapter, the Israeli stock market and the domestic debt gathered momentum from the early 1970s. The rapid expansion of this so-called "financial capital" was, in a sense, inversely related to developments of the underlying domestic "productive" activity. A similar scheme had been partially anticipated by Thorstein Veblen in The Theory of Business Enterprise (1904) and in The Vested Interest and the Common Man (1919). Veblen identified

conflicting interests between industrial activities that profit from commodity production and the so-called "speculative" business concerned with credit and manipulation of capital values for capital gain. The "artificial" inflation of financial capital makes commodity production decreasingly attractive vis à vis financial investment; the flow of capital out of "production" and into "finance" enhances capital inflation and widens the gap between capital values (and capital gains), and underlying earning capacity from industrial activity. Since capital values must ultimately be based on this underlying earning capacity, capital revaluation and crises threaten society. However, rapidly increasing productivity of the "machine process" does not let the gap between capital values and earning capacity grow sufficiently wide to trigger a crisis. Another counteracting force is provided by the government's colossal waste on armaments, and the conspicuous consumption of the leisure class. Under these circumstances, the crisis is avoided only to be replaced by a chronic industrial depression in the midst of "financial prosperity". Veblen makes the interesting suggestion that monopolization might become a "positive" factor in counteracting stagnation, at least in the short run. It enables commodity price inflation, which raises profitability in the productive process and, thus, lures capital back into production.

Developments in Israel appear quite similar, but for somewhat different reasons. For Veblen, credit expansion and the inflation of capital values result from competition among businesses. The expansion of the Israeli stock market and the growth of its domestic debt, in contrast, have been associated with a coalition of three holding

groups and the Government. Thus, capital values have not been subject to revaluation in light of the underlying earning capacity of the Israeli industry. Even the collapse of the stock market in 1983 has not been a reflection of such a revaluation. The "autonomy" of those capital values was manifested when the Government reversed the collapse and turned the stocks into public debt.

Under such conditions, profitable industrial activities are only those which assure an expected return/risk combination superior to that of the stock market or the government debt. If we take into account the fact that no taxes are levied on capital gains in Israel, the choice among alternative investment strategies becomes quite limited and is increasingly associated with one or more of the three following features.

(a) Spheres of production in which the government's capital allocations and taxing arrangements are highly favorable to participants in these spheres. According to a recent survey conducted by Prof. Haim Levi of the Hebrew University in Jerusalem, this was the case for a sample of 13 industrial companies, all of which were subsidiaries of Israel's three largest holding groups. Between 1971 and 1980, these companies had an average effective capital cost of -18.4%. Due to a combination of the average effective nominal tax rate of only 30% and subsidized capital allocations, these companies could obtain a 18.4% net rate of return on investment before production even started (HaAretz, June 16, 1985).

(b) An industrial strategy of stagflation; that is, stagnating industrial production coupled with rapid inflation. The stagflation process in Israel is somewhat intricate but its essential features can be outlined.

Contrary to suggestions made by the academic school emphasising 'Rational Expectations', Israeli workers did not seem to develop successful expectations pertaining to future rates of inflation. Even if they did, their forward-looking expectations were rarely reflected in wage settlements as the wage rate was always indexed to the last period inflation rate.

FIGURE 3.2

The Integral of Inflationary Profits - a Schematic Representation

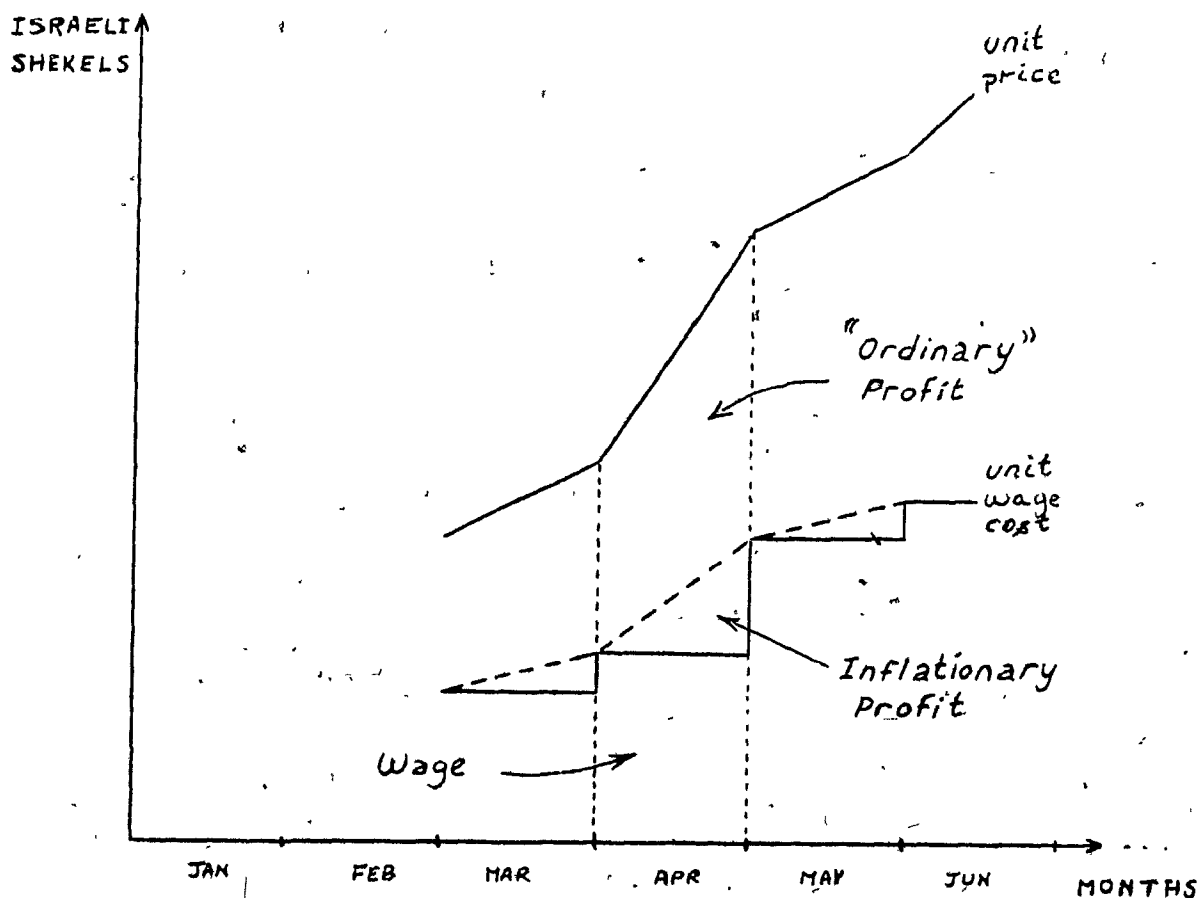


Figure 3.2 is a ceteris paribus description of wage and price changes (assuming wages are the sole production costs). If wages and prices change at the same rate, inflation is indeed "neutral". The price/wage ratio is sustained at some "normal" level, and the profit integral is the "ordinary" profit. Otherwise, inflation is not neutral. As far as price makers are concerned, the rationale of the Israeli inflation is evident. Wage changes are discrete while price changes are continuous. Thus, even if wages are fully indexed to prices by the end of each period, an integral of inflationary profit is still redistributed from workers to employers due to this wage-price lag.

The Israeli Government has a significant role in the process. Many of the prices are government-regulated, especially those of subsidized commodities. The Government also sets wage indexation patterns through wage contracts with its 90,000 employees. Finally, the Government controls the adjustment of income tax brackets to inflation. The extent to which the Government encourages price increases or prevents full indexation of wages is positively related to the integral of inflationary profits. Its tax share in this integral is monitored by the degree to which tax brackets are adjusted to take account of price changes.

Considering monthly price increases from 10% to 50%, for which employees are only partially compensated at the end of each period, the inflationary integral might be very large. The time span between subsequent wage adjustments is also positively related to the size of

the integral. Only in 1984 was that this time span reduced from a quarter to a month, although a three-digit annual rate of inflation had been experienced since 1979, and two-digit rates experienced since 1970. Of special significance is the fact that the bulk of those inflationary profits are appropriated by the Government and a few other business groups that employ well above half of the Israeli labour force. The result is a rapidly growing and highly-centralized capital accumulation.

The other side of the inflationary accumulation appears in the form of stagnating mass consumption confined by the appropriation of the inflationary integral from wage income (as well as a secular decline of real wages). Thus, the inflationary process is necessarily stagflationary.

Curtailling the mass-consumption part of "aggregate demand" need not reduce inflation as a demand pull rationale might suggest. The expansion of the luxury commodity market (associated with inflationary profits) offsets part of the decline in mass consumption, resources are further diverted from civilian to military production, and, most importantly, inflationary accumulations originating in production are "offset", or absorbed, by the stock market and the public debt, which, unlike wages, are fully indexed to inflation. Thus the rationale of inflation comes to a full circle. This was clearly demonstrated when the Government, in its recent attempts to combat "wage inflation", sought to devise a second price index. This new price index, it was suggested, would be lower than the official one and would form the basis for all indexation in the market. The Histadrut (the labour

union, Hevrat HaOvdim) immediately accepted the suggestion expressing the workers' contribution to the national interest. It took two days for the suggestion to be removed after strong objections were voiced by those groups holding much of the CPI-indexed national debt. Those same groups are also Israel's biggest employers who stood to gain from such a change in the sphere of production. Their objection gives some indication of the importance of inflation for "independent" expansion of their capital values.

(c) The final alternative investment strategy, and by far the most important, is that of armament production. In the Israeli case, the analysis is more complicated than initially assumed in the theories of Tsuru, Baran and Sweezy, and Kalecki. Since the "degree of monopoly" in Israel determines capital values independently from production, "institutionalized waste" is needed as an investment outlet not only for surplus accumulated from production, but also for "autonomously" growing capital values. The international circumstances within which Israel has developed, made armament production the most important industrial sphere and facilitated greatly the "institutionalization" of waste, known otherwise as the Security Budget.¹ On the other side of the Security Budget stand the same three groups that control the stock market, the national debt, and the civilian economic activity. It is mainly their capital which is being absorbed into military production. Thus, the link between armaments and prosperity, which was made by Tsuru with respect to the United

1. "Waste" is used here to denote the channeling of resources away from the reproductive process. See also page 80.

States, need not hold in Israel. Military spending could act as a "prosperity multiplier" in a relatively segmented market structure, where different firms operate in different "sectors". In Israel, however, such segmentation does not exist and military spending enhance stagnation tendencies rather than prosperity. Israel's holding groups direct capital among their various spheres of business activities; in some of which spheres, they have a substantial impact on profitability. Thus, a profitability rise stemming from the military sector which is mainly associated with its expansion, ceteris paribus, will spur stagflation in civilian production untill the point at which rates of return on the two investment alternatives (military and civilian) are "equilibrated".

Things are even more complicated when we consider Israel as an open system. Foreign trade, transfer payments, and capital movements were never made central by the above authors. They must, however, be carefully considered in the case of Israel, where net imports amount consistently to 10% - 20% of the GNP. The difficulty lies in the fact that the generation and absorption of surplus cannot be fully understood by considering Israel in isolation.

Israeli "needs" for the "U.S. Government Assistance" (comprising 30% of total capital imports in the early 1970s and over 70% in the early 1980s) are tied to the rate of expansion of Israel's major holding groups via direct capital allocation, or indirectly through the multiplier of military imports on domestic armament procurements. Of no lesser importance has been the supply side of this capital flow

- in particular, the provision of "offsets" to the savings of large corporations in the United States especially those that are armament oriented. These later considerations are raised again in the concluding chapter.

Since a thorough analysis that encompasses those complications is outside the scope of this work, we conclude the theoretical discussion with the identification of some of the main problems: (1) The concept of "capital", (2) The mapping of surplus and capital movements.

1. The Concept of Capital

According to mainstream macroeconomics, the definition of capital has to do with its productive capacity. Since output has numerous qualitative characteristics, the central problem is to convert them into comparable quantitative units. In the general procedure to construct quantity and price indexes recommended by the U.N. we can read:

"First it is necessary to clarify variables [attributes of the product] according to the degree in which they possess one or more desirable properties. These properties should be so formulated that their validity is as far as possible timeless [...] Second, it is necessary to estimate an average price for each variety in the base period, or more generally, to find the relationship between quality factors and price in the base period [...] Finally, it is necessary to enumerate or measure each variety in subsequent periods, or more generally, to measure the degree in which the various quality factors are present in those periods" (United Nations, A System of National Accounts, 1968, p. 65, emphasis added).

Since the identification of "timeless desirable properties" of a factory (or its output) and their (equilibrium) relations to prices is

a somewhat difficult task, the U.N. suggests a practical alternative:

"Capital: The aim here should be to measure the gross capital stock of fixed capital in different activities at constant replacement cost. This is one of the measures of capital stock usually made in perpetual inventory methods. This method consists of: accumulating gross fixed capital formation usually subdivided by type of asset, on the initial capital stock similarly subdivided; reducing the components to their replacement cost in the base year; and allowing for components retired, scrapped or destroyed, usually by reference to assumptions about average, normal lifetime and information on destruction from insurance sources" (*ibid*, p. 63, emphasis added).

The implicit assumption is that changes in replacement costs (i.e. capital outlays deflated by the appropriate index of input prices) are a good approximation to quality changes, or changes in the productive capacity of machines, plants, etc. (cf. Griliches, 1971, p. 14). Yet, even if their outputs could be compared, it is still unclear why a factory constructed with X units of "real" labour in 1980, ceteris paribus, has half the productive capacity of a plant constructed with 2X "real" labour units in 1950?

However, the validity of the heroic assumptions made in constructing capital stock indexes is not in itself a guarantee that these indexes appropriately represent actual productive capacity. The same machines producing at a high operating rate in 1928, stood idle a year later after Black Friday of 1929. The productive capacity of Solel Boneh (of Hevrat HaOvdim group) did not increase between 1966 and 1967 as a result of huge capital outlays but rather due to the 1967 War and the re-employment of idle labour and equipment. When the three largest Israeli banks raise the long term lending rates, no machine is physically scrapped but productive capacity might decline

following plant closure.¹ All these changes commonly appear for the macroeconomist as exogenously triggered shifts of the aggregate production function. Alternatively, these changes are reflections of the social organization of capital and production.

To summarize, the capital stock index of macroeconomics is concerned with a quantitative measure of physical, or "real" productive capacity. However, this index does not properly reflect capacity to produce since (a) the theoretical methodology of turning qualities into quantities is largely arbitrary, (b) the actual procedure of constructing the index has very little to do with the theoretical formulations, and (c) the dependence of productive capacity on social organization is not incorporated into the index. But even if these difficulties were somehow overcome, the question still remains: is productive capacity the only important aspect in the discussion of capital?

For IDBH, Hevrat HaOvdim, or Bank Leumi, what matters is the value of their capital and its rate of expansion. Thus, those groups are concerned with expected profit and risk associated with alternative investments or "business moves". These have nothing to do with the physical character of capital. A \$1 million investment in government bonds or in a speculative stock deal, are on the same

1. Note the exclusion of the banking financial assets from the capital stock measure (United Nations, A System of National Accounts, p. 63). Since these assets are "only" claims against physical capacity already included in the capital stock, the importance of banking organizations to production is reduced to the "facilitation of transactions".

indifference curve for corporate portfolios with a similar investment in a food producing plant, given an identity between the associated combinations of expected risk/profit. The capital commanded by IDBH contains buildings, machines, stocks of commodities, but also government bonds, corporate shares and debt, and a whole list of other "promises to pay". All these appear on the assets side of the balance sheet. What is of interest to IDBH is the liabilities side. Here we find the distinction between debt and equity.

From a legal perspective, the capitalist is concerned with equity only (shares and retained earnings). As far as the operation of a business institution is concerned, the formal demarcation between owners and debtors is of much lesser importance.¹ Important is the totality of resources that operate as one capital, and the interaction of this capital with similar capital of other institutions. If we examine modern business concerns like the Israeli holding groups (or, for that matter, multinational firms like Exxon, IBM, United Technologies or Citicorp), their owner's equity size (whether absolute or relative to total assets) is little indication of their capacity to operate and expand. For that matter, the accounting figure of total assets is of a greater significance. Similarly, the distinction between "active" ownership via shares, and "passive" involvement through debt is not very revealing. This was already stressed in Veblen (1904, cf. ch. 5, 6) and is clear even when we observe simple reciprocal corporate structures. A parent company, controlling 100% of

1. We abstract from differences in dividend distribution and alike.

its subsidiary's shares, might be subject to the discretion of an institutional investor or a bank holding the rest of its liabilities via corporate bonds and debt. Also, a parent corporation can reduce its direct share ownership in a subsidiary while raising its debt holdings in it, without altering effective control.

Clearly, the balance sheets of the big economy include an amplified "double counting" since private credit is considered in mainstream economics as "inside money" and, thus, not part of "wealth". (This is in a striking contrast to the public debt or money notes printed by the government. Unlike private debt, these promises are considered as "outside money" and thus included in "wealth".) This "double counting" can be viewed as a "data imperfection" to be corrected. It could also be the subject of an illuminating study of reciprocal relations between large corporations. Such an attempt was made, for example, by Yusaku Futatsugi (1973) in his analysis of corporate interrelations in Japan.

If the behaviour of giant corporate groups is a determinant of macroeconomic phenomena in modern markets, attention must be devoted to the size and structure of their capital. For that matter, the measure of "real" capital stock or productive capacity are of a limited significance. A more fruitful direction is the structure of effective ownership/control over capital values that are moved by the business concerns.

2. The Mapping of Surplus and Capital Movements

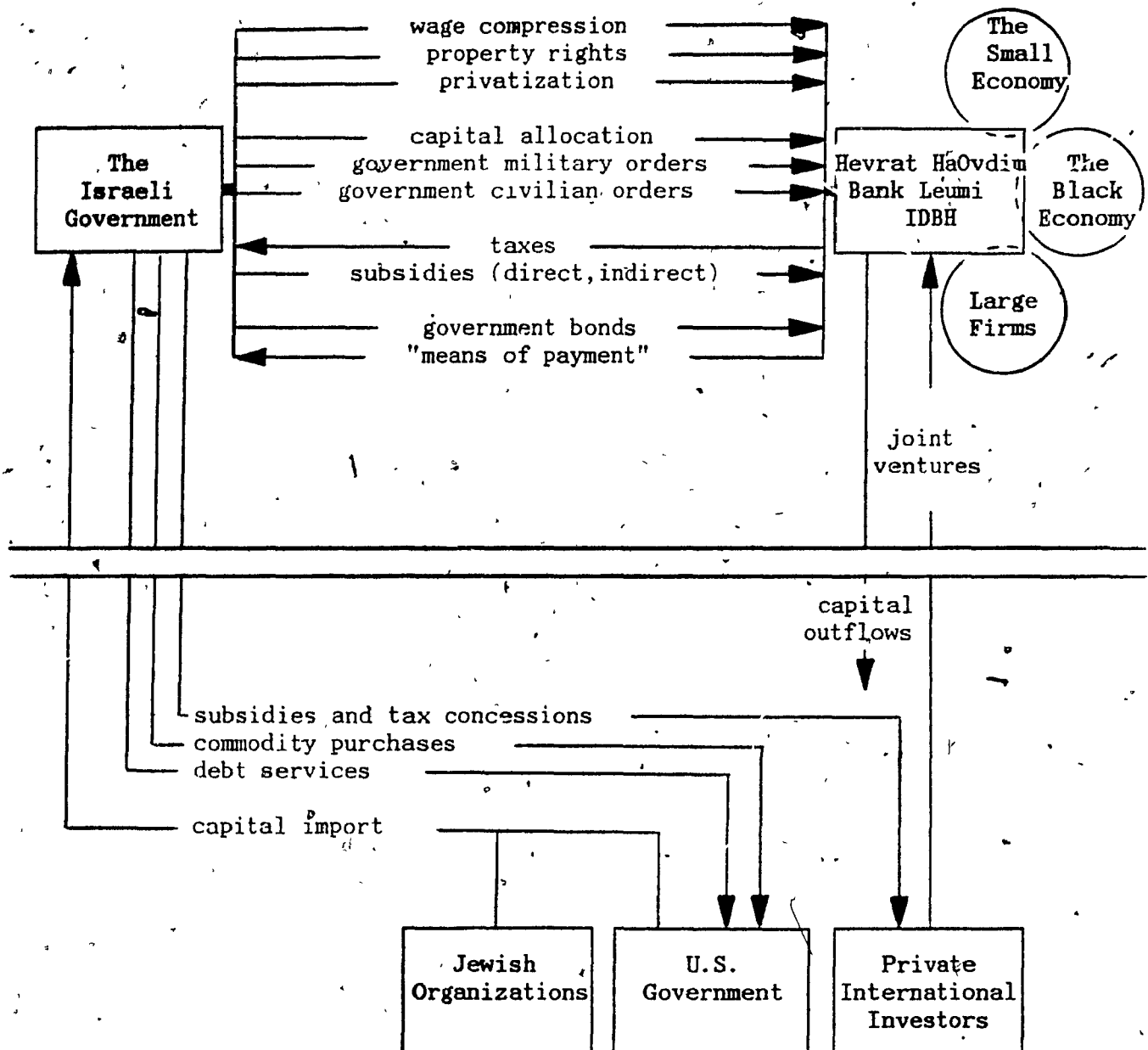
Figure 3.3 below is a highly abstract description of important factors in the process of concentration and centralization of capital in Israel, and macroeconomic phenomena integrated within this process.

In light of the limited scope of the present work, we give a brief account of several features of these factors only.

(a) Wage compression and inflationary accumulation. The main difficulty facing further research is acquisition of adequate data. Employment in the Israeli industry is highly concentrated. In 1980, 46% of the workers were employed by 150 establishments (1.4% of all establishments), which were further controlled by far fewer corporate groups. Thus, wage data are relatively accessible. The National Insurance Institute and the Central Bureau of Statistics collect monthly data from all employers. But publications of monthly wage data detailed by occupation, do not exist. To study the integral of inflationary profit, we need to distinguish between production workers, clerical employees, managers, and executives, which are all reflected in the "average monthly wage" figure. For that matter, a more detailed breakdown on an annual basis is of no help, as it does not reflect the importance of wage/price fluctuations within the year. Further, the share of the government in the inflationary profit integral via wage taxation, cannot be analyzed. Tax deduction at source is compulsory for wage-earners, and thus the most comprehensive data on net wages are compiled by the Income Tax Commission. Nevertheless, no net wage figures are publicly available in Israel.

FIGURE 3.3

Surplus and Capital Movements: an Abstract View



(b) The Domestic National Debt. The ownership, or holding distribution, of the National Debt (estimated at US\$ 35 billion by 1984) is confidential.

(c) Taxes and Subsidies. These are other important devices through which the surplus is divided between the Government and the big economy. They also have a powerful impact on concentration and centralization due to their bias in favour of the big holding groups. Finally, they influence the allocation of economic resources, especially by favouring financial to productive investment via "negative taxation" on capital gains. Tax/subsidy data broken down by corporate group are unavailable.

(d) Other areas of interaction. Property rights, privatization, direct allocation of capital imports, and most importantly, military and civilian government orders all present similar data problems. Total figures are sometimes available but they are without further breakdown by corporate institution.

(e) International links. The two horizontal solid lines across figure 3.3 represent the "demarcation" between Israel and foreign elements. Here the flows are mainly to and from the Israeli Government, from which data are generally available. As for other capital outflows from Israel (mainly from the big economy and the black economy), the gaps in the data are substantial even for grand totals. To illustrate, between 1979 and 1981 over US\$1.5 billion were "leaking" from Israel's Balance of Payments accounts, as revealed by

the "statistical discrepancies" figures for those years.

(f) Capital and income data from corporate sources. The collection of data from financial reports was already discussed at some length in the second chapter. Here, we attempt to assess the validity of the data and its suitability to the study of Israel's big economy.

According to Aharon Dovrat, the chairman of Clal (Israel):

"The accounting method in Israel has gone bankrupt [...] In the Clal group, four financial reports are prepared: nominal, in U.S. dollar, adjusted to inflation, and a financial report for tax purposes. Neither of these is capable of reflecting the group's condition" (HaAretz, April 13, 1984, trans.)

However, these financial reports are the only available data source as far as corporate income and capital are concerned, and they are the ones to be used in the preparation of the national income accounts (U.N. A System of National Accounts, 1968, pp. 81 - 82). Since the Israeli national income has not been mapped for years subsequent to 1954 (see page 4), these problems did not constitute a major concern for Israel macroeconomists. However, as we intend to use some of the corporate data provided in Chapter Two, their evaluation is a prerequisite. In this evaluation we do not attempt to provide a thorough review of the accounting methods of financial reporting, but rather to highlight the main difficulties that arise in the Israeli circumstance. These fall under three main headings (i) consolidation principles, (ii) instability of the money unit of measure, and (iii) reliability of reports.

(i) Consolidation principles. Large corporations in Israel conventionally consolidate their accounts only with "subsidiaries" in which they hold over 50% of the voting shares. The reports of other "affiliated" companies are not consolidated with the parent's accounts, but are reflected in them on an equity basis. The rationale behind this consolidation convention is fully accepted by the U.N. in its recommendations for identifying the transactors of the Income and Outlay and Capital Accounts:

"For most purposes, the transactors wanted are those who independently direct and manage the receipt and disposition of income, the accumulation of property, and borrowing and lending. This leads to statistical units consisting of families of incorporated or quasi-corporate enterprises which as a result of ties of ownership, are controlled and managed by the same interests. Using the family of entities will also avoid showing formal transactions and links between the entities, which are not meaningful economically. The families may be defined as consisting of the entities, the majority, that is 50 per cent or more, of the equity (shares or other forms of capital participation) of each of which is owned by the same interest" (United Nations, A System of National Accounts, 1968, p. 81, emphasis added).

The above approach is based on two principles. (a) "Meaningful" economic transactions are only those made at arm's length between "independent" transactors. In the background, stand the axioms of a competitive market structure, in which transactions are made at "market prices" (equilibrium) determined by market forces. When the will of one or more of the transactors becomes a market force in itself, the price is no longer the "market price" and the transaction is not economically meaningful (ibid pp. 72, 94, and many other places, where it is suggested that such transactions should be revaluated at the "appropriate" market price). (b) The power to distort arm's length, economically-meaningful transactions between

related companies is exercised only with 50% or more of the voting rights.

There are serious problems with the common consolidation convention and the rationale behind it. Using a 50% ownership as a control threshold for big Israeli holding groups imposes a strong downward bias on the consolidated figures. If these reports are assumed to reflect the effective control of the parent over resources, a substantially lower threshold, 15% or 20% say, is more appropriate. Much of the hierarchical corporate structure in Israel's big economy exists with voting rights significantly lower than 50%. Further, not all groups publish consolidated reports. Only in 1970, for example, when IDBH was established as its formal holding corporation, did the Discount group start to publish consolidated reports. The Israeli Government does not properly consolidate its reports and Hevrat HaOvdim, as a parent entity, does not provide any financial reports.

But even a lower voting threshold and a proper holding-group consolidation are insufficient to establish the groups of independent units which are engaged in meaningful economic transactions at market prices. How mutually independent are Hevrat HaOvdim, Bank Leumi, and IDBH? How independent are they from the Government? If their mutual interdependence (discussed in Chapter One, and further demonstrated in the fourth chapter) acts as a criteria, not many transactions in Israel are "economically meaningful". Alternatively, every transaction is meaningful. The question is whether it truly reflects a movement of resources/power, rather than an accounting exercise lacking any such dimension.

(ii) Instability of the money unit of measure. For our purpose, non-arm's length transactions impose no difficulty. The problem lies elsewhere, with the money unit in which transactions are recorded. Accounting conventions rely heavily on the assumption of stable relations between money and other commodities; in other words, on stable prices. Inflation, and especially rapid inflation, impose a serious difficulty. The first "distortions" appear in the quotation of asset values. The conservative bias of accounting conventions to hold asset values down until assets are "realized", causes "Total Assets" figures to underestimate the "realizable value" of the underlying assets. With annual inflation at three-digit figures, fixed assets and financial portfolios recorded at historical cost or book value, represent only a very small fraction of their "market value" (which in Israel might have very little to do with a competitive equilibrium). The order of this gap has been maintained even after the stock market collapse in 1983. This problem is much reduced with respect to the "Total Assets" of the banks since they are mainly composed of deposits and obligations, which are largely indexed to the CPI or the US\$.

Another important bias appears in the net profit figure. Many claims have been voiced on the extent to which those profits are "paper profits" rather than actual ones. The main concern of these claims was the comparison between historical material cost and current sale revenues. Although various counter-claims can be made along similar lines, different considerations might be of a greater significance: capital gains and index linkages on principals which

have not been "realized" are considered as changes in equity rather than components of profits, and thus are not reflected in the income statements. These items grow with inflation, and so too does the underestimation of gross profit they entail. Further, tax payments may be different without full indexation. This will cause net profits to be underestimated by the reported figures, which record nominal tax obligations. The bias is positively related to the rate of inflation.

(iii) Reliability of reports. It is often argued that some corporations and the accounting firms representing them manipulate and falsify their financial reports (numerous examples are provided in Shmueli, 1970). Many of these cases suggest, however, that for a particular firm the deviation of the reported figures from the corresponding "objective" facts often follow a general pattern throughout the years. It might be that report "adaptation" conforms with certain methods "traditionally" pursued by the accounting firm. If this "stable adaptation" hypothesis is valid, the pattern of report manipulation/falsification is reinforced the longer is the contract between the corporation and its particular accounting firm. The opposite can be said when a corporation frequently alters its accounting firm and with it changes the pattern of its report manipulation. Since their establishment, none of the large holding groups we surveyed replaced its accounting firm. Thus, if the general argument presented in this paragraph is correct, much of the possible falsification could be "trended" if reports were inspected for a long enough period of time.

To summarize; the principles of consolidation underestimate the scope of resources controlled by Israel's large holding groups; for non-bank corporations, "Total Assets" values are seriously underestimated by the reported figures; "Net Profits" are most probably underestimated; report reliability is questionable but the bias is likely proportional to the overall order of the figures. These general statements appear to be a plausible starting point for using the corporate data we have gathered.

CHAPTER FOUR

THE POLITICAL ECONOMY OF THE HOLDING GROUPS: AN ECONOMETRIC APPROACH

Succinctly put, our basic hypotheses are that (a) macroeconomic phenomena, and public policy in Israel are strongly related to the development of the three largest Israeli holding groups while (b) both are reflections of strong processes for concentration of capital, the centralization of its control, and the related intensification of underconsumption/overproduction tendencies in the Israeli economy.

To establish an empirical "proof" for the second hypothesis might be very difficult. Turning concepts like concentration, centralization and underconsumption/overproduction, into quantitative categories raises immense methodological questions, with which we do not attempt to deal. In contrast, the empirical investigation in the first hypothesis imposes fewer methodological riddles. We need only to specify the actual decisions made by the Israeli Government and the large holding groups. In the Israeli context, this may be sufficient to establish whether a price rise is designed to serve the profits of Hevrat HaOvdim, a capital allocation is meant to increase the assets of Bank Leumi, or a military procurement is intended for the benefit of IDBH.

There are two reasons why we did not follow such an approach: data deficiencies and the availability of an alternative statistical method. In modern macroeconomics, a proof is often established when estimates for an econometric model pre-specifying a set of functional

relations, confirms the expectations about the signs and magnitudes of the coefficients in this model. This is the methodology we adopt in this chapter.

Unlike attempts made in economy-wide models, we do not try to map all of Israel's macroeconomic phenomena. Consequently, our model is small and the techniques are kept as simple as possible. Our work draws attention to the central anomaly in most of the macroeconomic literature on Israel, namely, the neglect of dominant property relations.

A. Private Dominant Capital: Choosing the "Appropriate" Indicator

There are four dominant holding groups in the Israeli economy: IDBH, Bank Leumi, Hevrat HaOvdim, and the Israeli Government. Of the first three groups, only IDBH is controlled by "private" interests. But in their essence, all three groups behave as private corporate entities: under a particularly effective control seeking their own expansion. In our empirical work, we do not consider the capital and profits of the corporations controlled by the Government, partly because the lack of comprehensive data, and the numerous "inconsistencies" in data which do exist, but, mostly, because capital controlled by the Government does not behave as private capital. Its main functions are to support the expansion of the three other groups via "counter cyclical" privatization/nationalization, and to indirectly subsidize the other three groups through reciprocal buying and selling arrangements.¹

What magnitude should one use to describe the development of those three groups? In principle, the "Total Assets" figure should reflect the totality of assets under their effective control. However, this figure has two main drawbacks. Accounting conventions of historical costs impose a strong downward bias on asset values (see page 101). The assets of the banking system also include the deposits and saving accounts of the Israeli "public" (which are further

1. For instance, Israel Aircraft Industries, the country's largest industrial firm, primarily armament oriented, is continuously at losses, while its hundreds of subcontractors (most of which under the control of the three largest holding groups) prosper.

inflated via credit expansion). Should those be considered as the private capital controlled by the banks?¹

Until a better indicator representing the "total capital under effective control" is devised, we prefer to reject the "Total Assets" figure. In its place we adopt the "Net Profit" figure. This later category is deficient mainly because it does not capture the accumulation process from profits and other sources (as well as other problems enumerated on pages 98 - 102). On the other hand, it is liable to raise fewer objections than the "Total Assets" figure because of its categorical proximity to the national accounts and the macroeconomic variables we use in our model.

A final difficulty is the data availability. Preferably, we would work with consolidated reports of Hevrat Haovdim, IDBH, and Bank Leumi, and selected items extracted from them. In practice, reported data are often limited to "subgroups" within the above mentioned three holding groups. Complete time series available for our purpose are only those for:

Bank Hapoalim (Hevrat HaOvdim) - unconsolidated.

Koor (Hevrat HaOvdim) - consolidated.

Discount Bank (IDBH) - consolidated.

Discount Investment Corporation (IDBH) - consolidated.

1. It is to be noted, however, that by 1985, 50% of the public savings were held by 1% of the savers, and most of the long term deposits held in 15% of the long term accounts. (Shlomo Frenkel and Shimshon Bichler: "Whom is Inflation Serving", Hadashot, September 12, 1985. also Shimshon Erlich: "An Internal Survey in One of the Banks: Half a Percent of the Clients Hold Half the Assets", HaAretz, August 18, 1985)

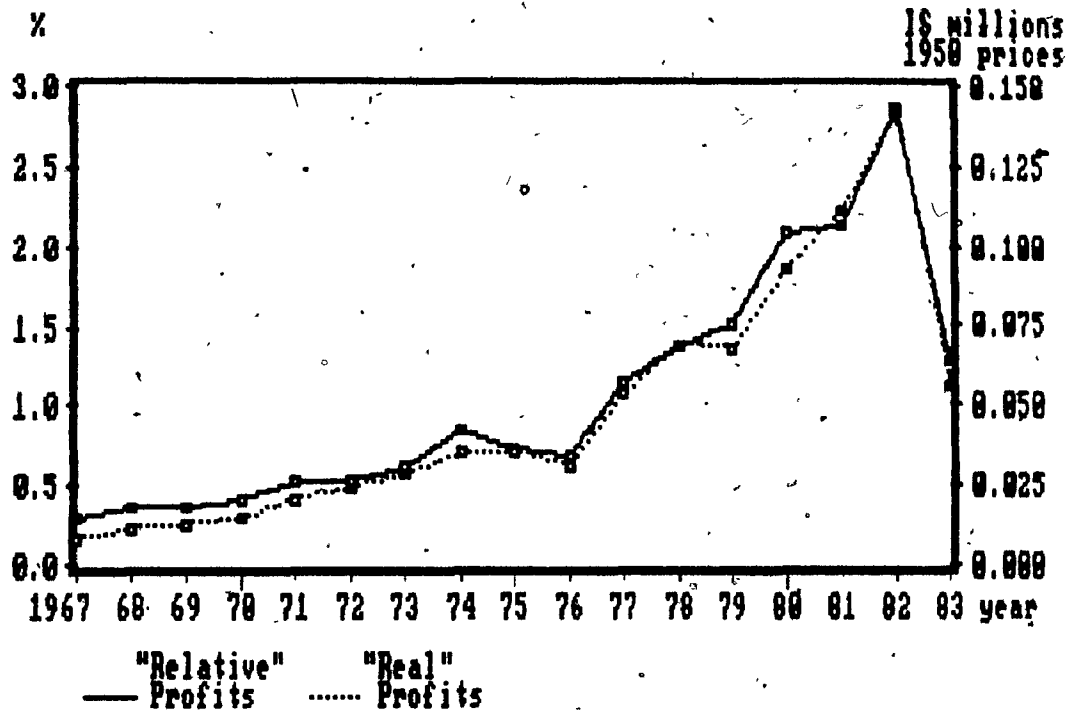
Bank Leumi - consolidated.

Clal (Israel) (Hevrat HaOvdim, IDBH, Bank Leumi) - consolidated.

In itself, the nominal net profit figure is not very helpful. In macroeconomics, it is customary to use "real" figures - i.e., nominal figures deflated by the "appropriate" price index. But what is the appropriate price index to use in order to deflate profits of giant holding groups? These groups often use in their reports the consumer price index as such deflator. The deflated figures resulting from this method reflect a "real" magnitude only if these profits are destined for current or future private consumption. We prefer to "deflate" the net profit figure by the size of the national market, best described (considering the data available) by the nominal figure of GNP. The extent to which underconsumption/overproduction and concentration/centralization tendencies operate in Israel and are tied together with income distribution patterns is already reflected in the "holding groups' net profit / GNP" ratio. (This ratio does not incorporate the possible repercussions of the above tendencies on the distribution of assets.) As far as temporal behaviour is concerned, Figure 4.1 indicates how close the "real" profit figures (in 1950 prices) are to our "relative" figures. This should remove most of the possible objections to our "distribution index".

FIGURE 4.1

Holding Groups: "Real" Versus "Relative" Profits



"Relative" Profits = The share of the aggregate net profits of Bank Hapoalim, Koor, Discount Bank, Discount Investment Corporation, Bank Leumi, and Clal (Israel), in the GNP.

"Real" Profits = The aggregate net profits of the above groups expressed in 1950 prices.

B. A Note on Data Conversion

All the annual variables used in the models of this chapter are for calendar years. Some data appear originally on a fiscal year basis (April to March). Using the following weighted average formulas, we have "converted" such data to a parallel calendar basis:

(1) For a calendar year which is covered by fiscal figures only (for instance, year ending December 1970 is covered by year ending March 1970, and year ending March 1971):

$$Y(\text{ending Dec.})_t = 1/4 Y(\text{ending Mar.})_t + 3/4 Y(\text{ending Mar.})_{t+1}$$

(2) For a calendar year in which original reporting of figures was changed from a fiscal to a calendar basis (for instance, year ending December 1970 where data exist for year ending March 1969, and the following figure is for year ending December 1971):

$$Y(\text{ending Dec.})_t = 1/4 Y(\text{ending Mar.})_t + 3/8 [Y(\text{ending Mar.})_t + Y(\text{ending Mar.})_{t+1}]$$

These conversion formulas are based on the assumption that flows are evenly distributed throughout the annual period (i.e., for an annual figure of X, every monthly figure is assumed to equal X/12).

C. The Model

The model has two parts. The first is concerned with the stagflationary process and the domestic national debt. The second deals with the militaristic characteristics of the Israeli economy. (Time series used in the model are provided in the Appendix.)

1. The Largest Banks - Stagflation and the Domestic National Debt.

The position to be clarified here is that between 1967 and 1983, the net profits of Israel's three largest banks as a share of the national product were positively associated with the stagflationary process (related to the movement of capital from production to finance), and the rapid expansion of the interest repayments on the domestic debt (resulting from debt growth and inflation), all of which are prominent malaises of the Israeli economy. We can treat this as a source of a collection of hypotheses for fitted equations.

The Variables

NPFG = The percentage share of the aggregate net profits of the three financial institutions, Bank Hapoalim (unconsolidated), Discount Bank (consolidated), and Bank Leumi (consolidated), in the GNP.

Source for profit data: Israel's Political Economy Data Base (IPEDB).

Source for GNP: Statistical Abstract of Israel (SAoI) (1984).

INFDD = The annual percentage rate of change in the CPI between December and December.

Source: SAoI (1984)

RGNP80 = The annual percentage rate of change of "real" GNP (i.e. GNP in constant 1980 prices)

Source: SAoI (1984)

IRDDG = The percentage ratio of interest repayment on the domestic national debt to the GNP.

Interest repayments on the domestic national debt originally appear on a fiscal year basis, and were converted to a calendar parallel.

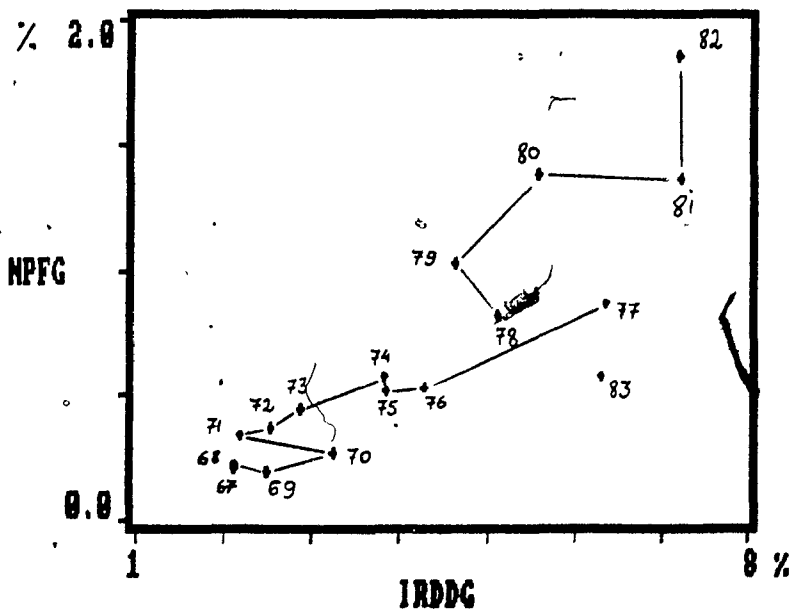
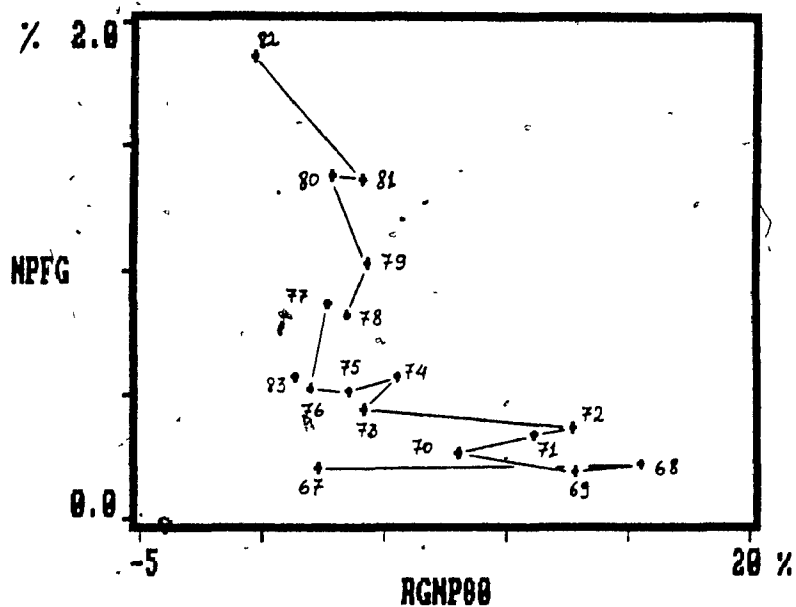
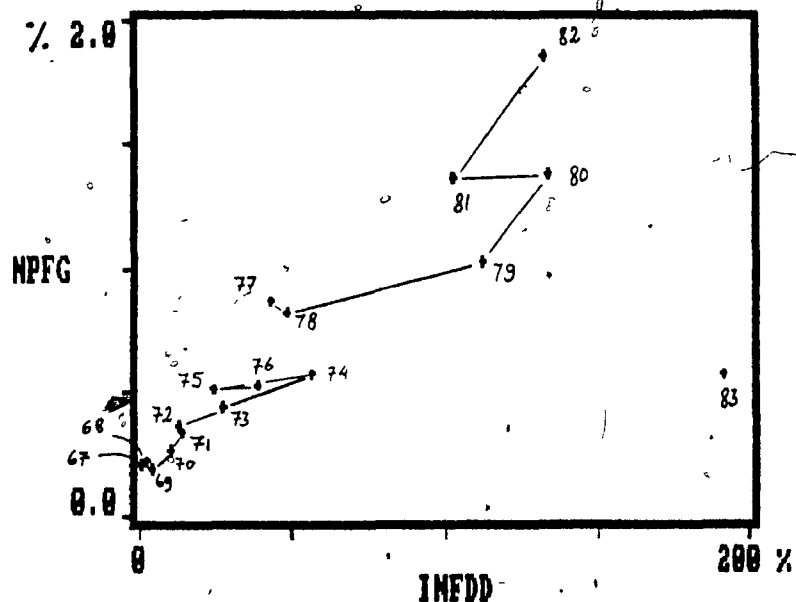
Source for debt data: Budget Proposal Principles (various years)

Source for GNP: as above.

Since the beginning of their rapid growth in the early 1970s and until the Tel-Aviv Stock Market collapsed in October 1983, the largest Israeli banks presented themselves as a positive and essential element in the development of the Israeli economy. Their well-known advertising slogan was "The Banks - The Oxygen of the Country". Our hypothesis, however, suggests a somewhat different association between the prosperity of the banks and the economic development of Israel. The adequacy of our hypothesis is revealed in Figure 4.2 below. In 1983, as a result of the stock market collapse, the banks' net profits declined substantially. Otherwise, the banks' share of GNP appropriated as net profits (NPPG) is positively related with the rate of inflation (INFDD), negatively related to the annual real growth rate (RGNP80), and again positively related to the ratio between interest repayments on the domestic national debt and the GNP (IRDDG).

FIGURE 4.2

The Banks - The Oxygen of the Country: 1967 - 1983



Further, a suggestion can be made for a structural change occurring with the rise of the Likud Bloc to power in May 1977. The change of political parties is associated with the intensification of the relations implied in the hypothesis, i.e. with increases in the multipliers of our carriers on the variable of interest.

These claims are summarized below by the linear equations (1) and (2), and the analysis that supplements them. Greek symbols represent unknown parameters that are being estimated.

$$(1) \dots NPG_t = \alpha_0 + \beta_0 INFDD_t + \gamma_0 RGNP80_t + \delta_0 IRDDG_t + \phi_0 D1_t + u_t$$

$$(2) \dots NPG_t = \alpha_1 S7_t + \alpha_2 S8_t + \beta_1 INFDD_t S7_t + \beta_2 INFDD_t S8_t \\ + \gamma_1 RGNP80_t S7_t + \gamma_2 RGNP80_t S8_t \\ + \delta_1 IRDDG_t S7_t + \delta_2 IRDDG_t S8_t \\ + \phi_0 D1_t + u_t$$

where:

$$S7 = \begin{cases} 1 & \text{for 1967 - 1977} \\ 0 & \text{for 1978 - 1983} \end{cases}$$

$$S8 = \begin{cases} 0 & \text{for 1967 - 1977} \\ 1 & \text{for 1978 - 1983} \end{cases}$$

$$D1 = \begin{cases} 0 & \text{for 1967 - 1982} \\ 1 & \text{for 1983} \end{cases} \quad \begin{array}{l} \text{(a dummy variable to take} \\ \text{account of the stock} \\ \text{market collapse)} \end{array}$$

Equation (1) is the "constrained" model, while equation (2) reflects the hypothesis of a 1977/8 structural change, by incorporating the multiplicative terms S7 and S8 where appropriate. Table 4.1 contains the Ordinary Least Squares parameter estimates as

TABLE 4.1

Econometric Results: Equations (1) and (2)Equation (1)

Period: 1967 - 1983 (17 annual observations)

$$\begin{aligned} \text{NPFG} = & -0.1252 + 0.0066 \text{ INFDD} + 0.0023 \text{ RGNP80} + 0.1189 \text{ IRDDG} \\ & (-0.905) \quad (5.967) \quad (0.274) \quad (3.743) \\ & - 1.3093 \text{ D1} \\ & \quad \quad \quad (-8.114) \end{aligned}$$

 $R^2 = 0.96$

DW = 2.04

F-statistics = 69.18

SSR = 0.154

Equation (2)

Period: 1967 - 1983 (17 annual observations)

$$\begin{aligned} \text{NPFG} = & -0.0105 \text{ S7} + 0.0870 \text{ S8} + 0.0044 \text{ INFDD S7} + 0.0052 \text{ INFDD S8} \\ & (-0.110) \quad (0.344) \quad (2.531) \quad (4.908) \\ & + 0.0005 \text{ RGNP80 S7} - 0.0753 \text{ RGNP80 S8} \\ & \quad \quad \quad (0.090) \quad \quad \quad (-3.430) \\ & + 0.0994 \text{ IRDDG S7} + 0.1455 \text{ IRDDG S8} \\ & \quad \quad \quad (3.841) \quad \quad \quad (4.439) \\ & - 1.3331 \text{ D1} \\ & \quad \quad \quad (-12.121) \end{aligned}$$

 $R^2 = 0.99$

DW = 2.10

F-statistics = 107.42

SSR = 0.034

well as additional statistics. (The Durbin Watson Statistics and a residual analysis did not suggest any apparant violations of the assumptions of the Classical Linear Model). Each parameter is accompanied by the t-statistics in parentheses.

From the estimates of equation (1), it is clear that the coefficients associated with inflation (INFDD) and the interest payments on the domestic national debt (IRDDG), are positively related with the profits of the three largest banks as a share of GNP (NPFG). The t-statistic associated with each of these coefficient estimates is greater than 2.13 (the 5% two-tail significance level threshold associated with the null hypothesis H_0 : coefficient = 0, based on the assumption that the equation errors are normally distributed). The problem arises with the growth variable (RGNP80), for which the null hypothesis of a zero coefficient can not be rejected at the 5% significance level.

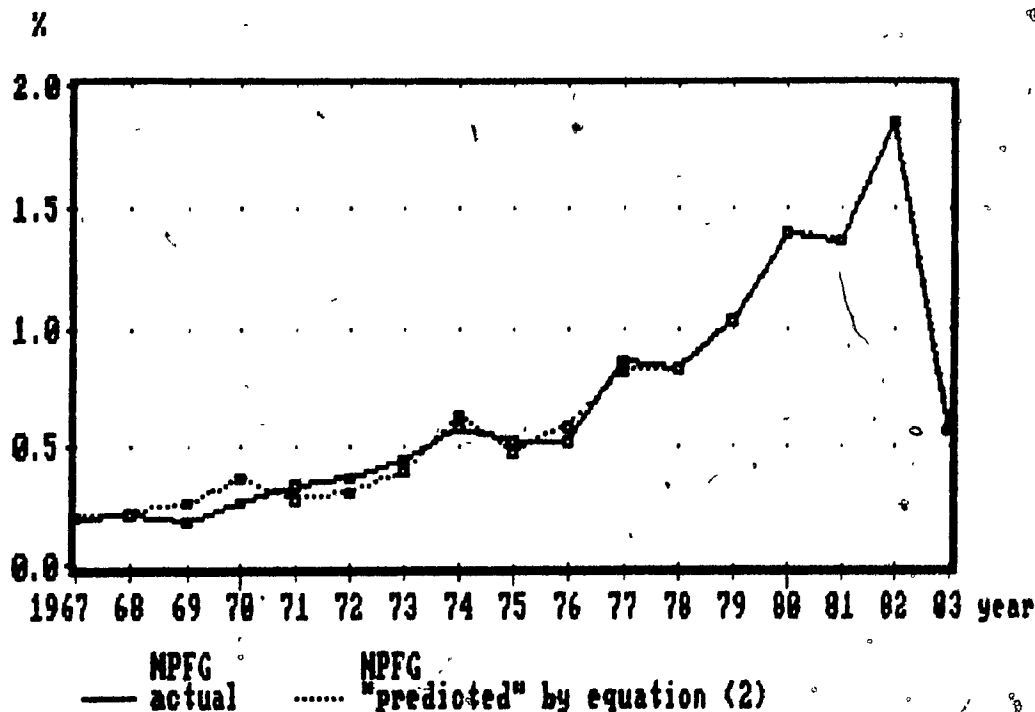
This result is resolved by equation (2), where we estimate each coefficient separately for the two different periods. The coefficient estimates of both INFDD and IRDDG increase between the two periods by 15% and 50% respectively, although a comparison of two point estimates is not substantial evidence in this case. With respect to the coefficient estimate of the growth variable, RGNP80, the change has been dramatic. From a positive magnitude not significantly different from zero in 1967 - 1977, it has reversed its sign for the period of 1978 -1983 and is significantly different from zero, which is more in accordance with our initial hypothesis. (We should draw attention again to Figure 4.2 which indicates negative relations between RGNP80

and NPFG in both periods when we abstract from the "impact" of the other variables on NPFG).

Note that the F-test for the null hypothesis of no structural change in 1977/1978, yields $F=7.0122$ with (8,4) numerator/denominator degrees of freedom. This is higher than the 5% significance level threshold ($F = 6.04$), and hence equation (2) is preferred to equation (1). The "tightness" of the model's fit is evident from Figure 4.3. The fit appears to be better since the mid 1970s. As the relative size of the largest banks (NPFG) increased, so did increase the significance of inflation, stagnation and the domestic debt for their growth.

FIGURE 4.3

The Share of the Three Largest Banks' Net Profits in the GNP:
Actual and as "Predicted" by Equation (2)



As indicated by equation (2), the stagflationary process and the burden imposed on the economy with the rise in interest repayments on the domestic national debt, both augment NPFG, the share of GNP appropriated by the holding groups via their net banking profits. In this sense, the basic need inherent in the Israeli economy to generate "offsets" to the savings of the holding groups is intensified. The increased involvement of the holding groups with armaments is discussed in the following part of the model, to which we now turn.

2. The Largest Industrial Groups - Armament Procurements, and Military Exports

The literature dealing with the economics of arms in Israel is again severely constrained by lack of data. There is, however, a general belief among researchers that can be summarized by the following:

"Insofar as Israel is concerned, one cannot apply the concept of military industrial complex to this Western-style democracy in the sense of a conspiracy by heads of the political, defense, and economic establishment solely for the sake of furthering their own interests. After all, Israel's very survival has been threatened for many years" (Mintz, 1983, p. 104, emphasis added).

"That the strength of private capital in Israel influences and directs the country's defense is a doubtful proposition" (Peri and Neubach, 1983, p. 3, emphasis added).

The notion is that military expenditures, armament production, trade and exports, are exogenous constraints "imposed" on the Israeli market. To that extent, private capital¹ is more of a passive actor

1. Peri and Neubach do not elaborate on the concept of private capital. It seems to indicate non-Government firms.

playing under predetermined rules.

The interesting point is that these claims act as an assumption rather than a testable hypothesis. In particular, there is no attempt in the above writings to empirically identify the "economic establishment" or "private capital". Most significant is the fact, that the above works do not contain a single figure of assets, shareholders' equity or profits for any firm involved in armaments. In the following part of the model we provide a preliminary view into the relations between "private dominant capital" and some of the militaristic aspects of the Israeli economy.

Our hypothesis suggests that whatever is the causal direction, domestic armament procurements and military exports (both as a percentage share of the GNP), are positively and strongly tied together with the increased involvement of the three largest Israeli holding groups in armaments and/or, the increased profitability of their armament activities.

The Variables

NPIG = The percentage share of the aggregate net profits of the following three "industrial" groups in the GNP:

- Koor (consolidated) - Until 1967 data were on a fiscal year basis and had to be converted to a calendar basis.
- Discount Investment Corporation (consolidated) - Until 1969 data were on a fiscal year basis and had to be converted to a

calendar basis.

- Clal (Israel) (consolidated).

Source for profit data: IPEDB.

Source for GNP data: SAoI (1984).

MDPG = The percentage share of military domestic procurements in the GNP.

Source for domestic military procurements: CBoS, Monthly Bulletin of Statistics, No. 7, Vol. 35, July 1984.

Source for GNP: as above.

XMTG = The percentage ratio between total military exports and the GNP.

Total military exports were derived, by aggregating the export categories of Metal Products, Electrical and Electronic Equipment, and Transport Equipment. In Israel these are composed almost solely of armament hardware. These categories are reported in current US\$. Thus, they were first converted into current Israeli Shekels through division by the annual average exchange rate for the US\$.

Source for military exports: SAoI (various years)

Source for annual average exchange rate of the US\$: "Exchange Rates of the Israeli Currency 1948-1984" (1984) The Bank of Israel.

Source for GNP: as above.

FIGURE 4.4

The Economics of National Security: 1967 - 1983

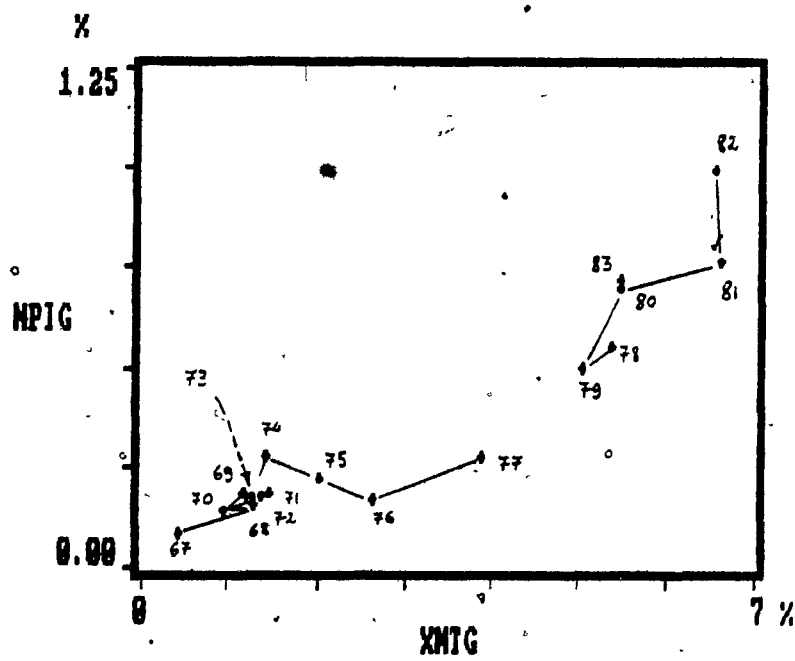
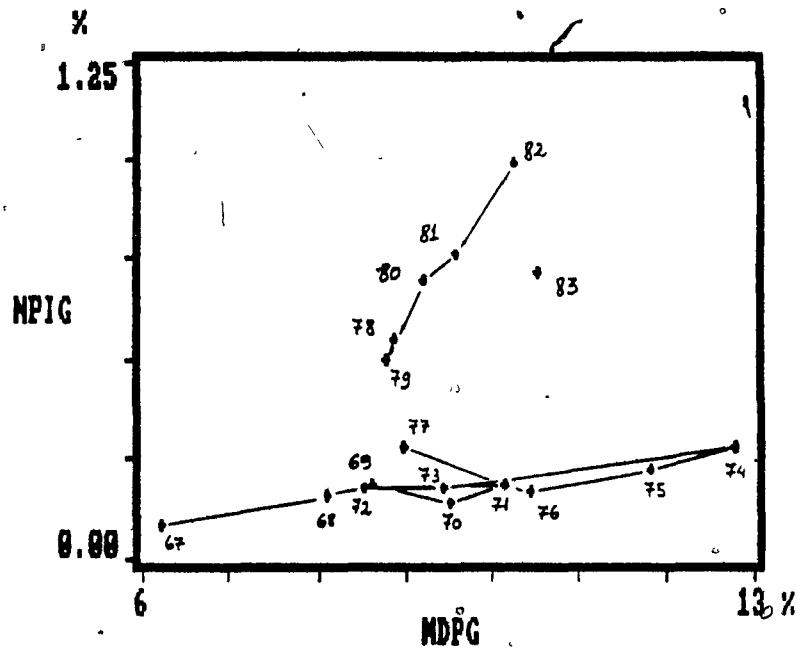


Figure 4.4 indicates that, considered separately, the share of domestic military procurements in the GNP (MDPG), and the ratio of military exports to the GNP (XMTG), are both positively and tightly related to our variable of interest NPIG. Further, the 1977/1978 structural change in the first part of our model, can also be extended to the armament activities of the three largest holding groups. It is especially marked in the NPIG - MDPG relations. This suggests the following linear model in which equation (3) is the constrained model and equation (4) is the unconstrained one.

$$(3) \dots NPIG_t = \alpha_0 + \beta_1 MDPG_t + \gamma_1 XMTG_t + \phi_0 D1_t + u_t$$

$$(4) \dots NPIG_t = \alpha_1 S7_t + \alpha_2 S8_t + \beta_1 MDPG_t S7_t + \beta_2 MDPG_t S8_t \\ + \gamma_1 XMTG_t S7_t + \gamma_2 XMTG_t S8_t \\ + \phi_0 D1_t + u_t$$

where:

$$S7 = \begin{cases} 1 & \text{for 1967 - 1977} \\ 0 & \text{for 1978 - 1983} \end{cases}$$

$$S8 = \begin{cases} 0 & \text{for 1967 - 1977} \\ 1 & \text{for 1978 - 1983} \end{cases}$$

$$D1 = \begin{cases} 0 & \text{for 1967 - 1982} \\ 1 & \text{for 1983} \end{cases} \quad \begin{array}{l} \text{(a dummy variable to take} \\ \text{account of the stock} \\ \text{market collapse)} \end{array}$$

Table 4.2 provides the Ordinary Least Squares parameter estimates and other statistics in the format of Table 4.1

TABLE 4.2

Econometric Results: Equations (3) and (4)Equation (3)

Period: 1967 - 1983 (17 annual observations)

$$\text{NPIG} = -0.1034 + 0.0118 \text{MDPG} + 0.1154 \text{XMTG} + 0.0639 \text{D1}$$

(-0.620)
(0.679)
(9.641)
(0.584)

$$R^2 = 0.89$$

$$\text{DW} = 1.29$$

$$\text{F-statistics} = 35.97$$

$$\text{SSR} = 0.132$$

Equation (4)

Period: 1967 - 1983 (17 annual observations)

$$\begin{aligned} \text{NPIG} = & -0.0245 \text{S7} - 2.4812 \text{S8} + 0.0166 \text{MDPG S7} + 0.3463 \text{MDPG S8} \\ & (-0.435) \quad (-7.183) \quad (2.726) \quad (5.637) \\ & + 0.0316 \text{XMTG S7} - 0.0223 \text{XMTG S8} \\ & \quad (2.697) \quad (-0.436) \\ & - 0.4032 \text{D1} \\ & \quad (-4.202) \end{aligned}$$

$$R^2 = 0.99$$

$$\text{DW} = 2.53$$

$$\text{F-statistics} = 184.34$$

$$\text{SSR} = 0.011$$

The F-test relevant for the hypothesis of no structural change in 1977/8, yields the value of 36.66 with (10,3) degrees of freedom. The null hypothesis of no structural change could not be accepted with probability greater than 0.01, and is thus rejected (the relevant 1% significance threshold is $F = 27.23$). In equation (4) the difficulty is with γ_2 , the coefficient of XMTG in the second period. In contrast to our expectations, it has a negative sign (although it is not significantly different from zero). In light of the tight positive relations for that period indicated by figure 4.4, as well as our theoretical bias, we prefer to alter the model slightly, rather than to exclude XMTG from the second period. The final model is provided in equation (5).

$$(5) \dots \text{NPIG}_t = \alpha_1 S7_t + \alpha_2 S8_t + \beta_1 \text{MDPG}_t S7_t + \beta_2 \text{MDPG}_t S8_t \\ + \gamma_0 \text{XMTG}_t + \phi_0 \text{DI}_t + u_t$$

Table 4.3 lists the Ordinary Least Squares results for equation (5). The Durbin-Watson test statistics is inconclusive with respect to first-order negative autoregression of the errors, but a residual inspection does not indicate such autoregression. The two-tail significance levels associated with the parameter estimates of MDPG, XMTG, DI are all lower than 5% (again, on the assumption of normally distributed errors).¹

1. If the errors follow an autoregressive pattern, the usual formulas for estimated standard errors and t-statistics are invalid.

TABLE 4.3

Econometric Results: Equation (5)Equation (5)

Period: 1967 - 1983 (17 annual observations)

$$\begin{aligned}
 \text{NPIG} = & -0.0241 \text{ S7} - 2.1849 \text{ S8} + 0.0170 \text{ MDPG S7} + 0.2912 \text{ MDPG S8} \\
 & (-0.426) \quad (-8.393) \quad (2.792) \quad (9.698) \\
 & + 0.0289 \text{ XMTG} - 0.3205 \text{ D1} \\
 & (2.525) \quad (-6.131)
 \end{aligned}$$

$$R^2 = 0.99$$

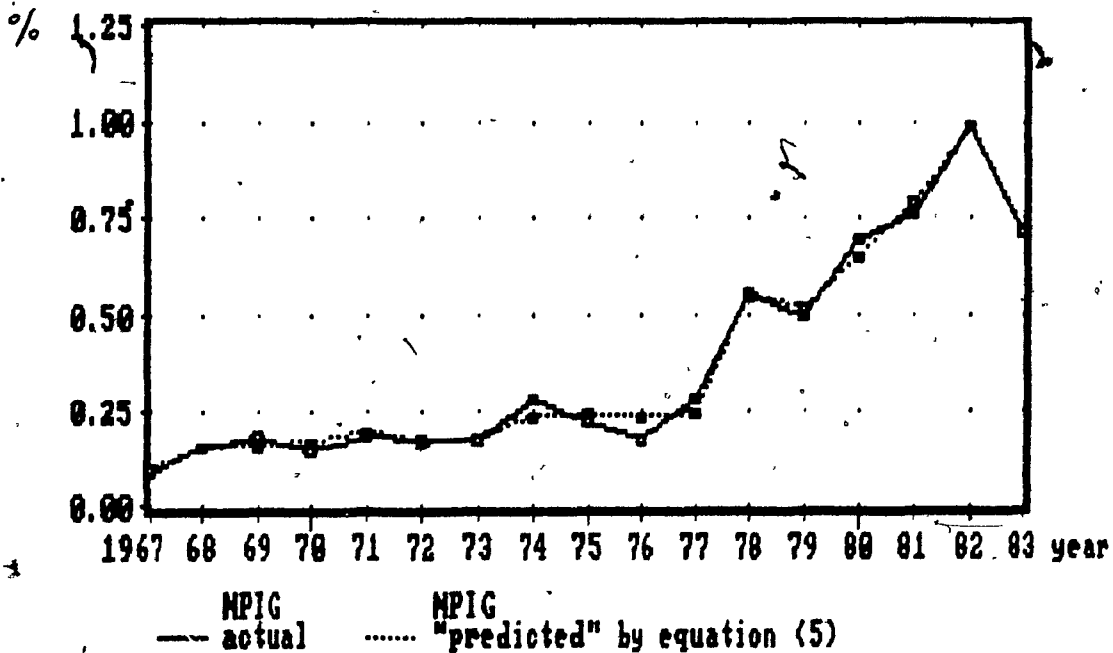
$$\text{DW} = 2.75$$

$$\text{F-statistics} = 219.89$$

$$\text{SSR} = 0.012$$

FIGURE 4.5

The Share of the Three Largest Industrial Groups' Net Profits
in the GNP: Actual and as "Predicted" by Equation (5)



Koor, Discount Investment Corporation, and Clal (Israel) - the industrial branches of Israel's three largest holding groups - are all involved in civilian as well as military business. It is interesting to note that, since 1967, their share of the GNP appropriated as net profits can be "explained" almost solely with the military characteristics of the Israeli economy ($R^2=0.99$, Figure 4.5). The reason might be that the civilian market is "rigid" as far as income distribution is concerned. Most of the strong fluctuations in profits, and thus, in the generation and absorption of surplus and the consequent income redistribution, result from "government intervention" via the "institutionalized waste" of domestic armament procurements, and encouragement of military exports. The structural change in 1977/78 can thus be associated with (a) increased involvement of Koor, Discount Investment Corporation, and Clal (Israel) in armament *vis à vis* civilian activities and/or, (b) a rise in the profitability of their armament business.

3. Conclusion

As far as Israel is concerned, government policy influences and, to an extent, even determines macroeconomic variables like military procurements, armament exports, stagflation, and changes in the domestic debt. This is most probably the dominant view among Israel's macroeconomists and it is also accepted by us. Macroeconomics is further concerned with the degree to which government intervention distorts the free functioning of market forces, and the extent to which such distortions are desirable. We see this latter preoccupation as a hypothetical exercise since the presence of free market forces in

the economic history of Israel is, at best, doubtful. The important point for us is the relation between macroeconomic phenomena and policy on one side, and the development of the big economy on the other.

Our econometric analysis establishes that the intensification of stagflation, the growing burden of the domestic debt and of the domestic military procurements, and the rise of military exports / (which can be shown as a net cost to the Israel market)¹ - are all strongly and positively related to the rapidly expanding share of the three largest holding groups' net profits in the GNP. Thus, the extent to which public policy influences these macroeconomic variables, is also the extent to which it influences the development of the above three holding groups.

The interesting question relates to the causal direction of these relationships between macroeconomics and the big economy. An answer to this question must be sought outside the realm of econometrics.

Our historical introduction, theoretical discussion and econometric analysis suggest that broad economic developments are tied together with the "institutional arrangements" that revolve around the concrete control/ownership structure of the Israeli economy. Thus,

1. The "overhead" cost of Israeli military exports are roughly the domestic military expenditures (required as a threshold), and the domestic and foreign debt services associate with armament related debt. Since 1967, the ratio between this overhead cost and the total value of military exports has been consistently larger than 4.

drastic changes in economic policy, like a redirection of resources from finance into production, or a neutral foreign policy that substantially reduces armament budgets (and thus reduces Government deficit, debt and inflation) assume the will and ability of "policy makers" to change this control/ownership structure of the Israeli economy. Alternatively, policy might be altered in order to accomodate changes in the "requirements" of the big economy. In this light, the 1977/78 "change of regime" might not have been an exogenous event given to the economic system, but rather a reflection of increasing constraints imposed on the expansionary pace of dominant private capital, and the building pressure to remove these constraints. The causal analysis cannot be extended, however, until we identify the "policy makers" and those who control or own the largest Israeli holding groups. This task has to be left to a later study or to the efforts of other researchers.

CHAPTER FIVE

SUMMARY, CONCESSIONS, AND SUGGESTED EXTENSIONS

A. Summary and Conclusions

Since the early 1970s, the Israeli economy has experienced severe inflation, stagnation, widening trade deficits, rapidly rising domestic and foreign debt, and large budget deficits mainly associated with armament expenditures and debt services. Most of the theoretical attempts to explain these phenomena rely on macroeconomic theory that largely substitutes anonymous market forces for dominant property relations. The "property structure" of the Israeli economy, more than most other developed capitalist countries, is highly centralized. This fact might have been acknowledged by many of Israel's important economists, but it is generally considered irrelevant for the macroeconomic discussion.

There are two important works on the structure of the Israeli economy. The first is the unpublished study of Barkai (1964). He tried to establish a "sectoral" pattern according to which capital allocations were made. His sectors were parallel to the alleged political "pillars" of the Israeli society - the "private" sector, the "Histadrut" sector, and the "Government" sector. Barkai's approach was criticized by Aharoni (1976), who was the first researcher to analyse what he termed "ownership groups". Aharoni defines an "ownership group" as a legal entity that controls (at least partially) at least four firms, which are engaged in at least four different economic

activities, one of which must be financial. This approach is more appropriate than the one taken by Barkai, yet its formal basis is misleading. Aharoni's definition leads to many ownership groups, the number of which is very sensitive even to slight changes in capital portfolios. Further, for Aharoni, the Government is essentially "exogenous" on the macro level.

We have suggested a different approach to exploration of the structure of property relations in the Israeli economy. We made no strict formal definition of a "holding group". Instead, we started by inspecting the present dominant property relations, and traced them back to their historic origin. Currently, the Israeli economy is largely dominated by three large groups: Hevrat HaOvdim, IDBH (the Discount group), and Bank Leumi. The cores of these groups precede the creation of the state, and are traceable back to the 1920s and 1930s. It was largely those cores which have dominated the economic development of Israel, and the evolvement of its institutional patterns of capital allocation and income distribution. We also tried to demonstrate that the Government has acted as a partial actor rather than an exogenous neutral force. In particular, it has "regulated" market resource allocation in synchronization with the above groups. This is the reason why we did not include business activities of the Government on a par with those of the dominant holding groups. Consequently, we suggested that most of Israel's macroeconomic developments and public policies can be understood from the reciprocal relations between the dominant holding groups and the Israeli Government.

Our theoretical discussion started with the theories of Kalecki (1971), Baran and Sweezy (1966), and Tsuru (1961). The general thread throughout those theories is that overproduction/underconsumption tendencies inherent in capitalism, are intensified by concentration / centralization processes. The increased government intervention in the economy, mainly via the institutionalization of armament "waste", is thus seen as a major force counteracting stagnation. It offsets corporate savings that tend to rise with the "degree of monopoly". This approach is mainly concerned with the productive process. Its principal implication is that government policy serves particular business interests and broader goals of growth, at the same time.

In Israel, a highly concentrated market associated with colossal military spendings make the above theories a relevant starting point. We further suggested that these theories require certain extensions and amendments to make them relevant to the Israeli case. It is no longer sufficient to confine the analysis to the productive process. The Government, together with the three largest holding groups, completely dominate the capital market. The non-competitive character of this market makes capital values "independent" from production. Also, an oligopolistic industrial structure turns stagflation into an effective vehicle for rapid redistribution of income from wages to profits and inflationary accumulation of "indexed capital". Finally, a substantial part of the surplus is not domestically generated but is "imported" mainly via the U.S. Government Assistance to Israel.

These features of the Israeli economy complicate the analysis of

surplus generation and absorption. The problem is further amplified by lack of relevant data. However, the following two suggestions can be made. (a) It is no longer clear that government policy serves particular business interests and broader economic goals at the same time. The three features outlined in the preceding paragraph imply the intensification of capital concentration/centralization. Since they all augment the relative expansion of Israel dominant holding groups, they enhance rather than counteract stagnation tendencies. To this extent, the investment outlets provided by wasteful armament expenditures are more necessary from the holding groups' perspective. Yet, even these do not materially counteract stagnation, since they lead to the curtailment of civilian activity. (b) The contradiction between particular business interests, and broadly stated macroeconomic goals is apparent.

Insofar as Israeli public policy has determined macroeconomic developments, it has been associated with severe stagflation, rapid expansion in foreign and domestic debt, large military expenditures, and increased dependence on military exports. Since the early 1970s, mainstream macroeconomics has suggested many explanations for the apparent failure of policy makers to "cure the illnesses" of the Israeli economy: incompetence of policy makers, wrong interpretation of economic laws, or political biases that oppress objective economic reasoning. It seldom suggested, however, the relevancy of the institutional patterns of property relations to macroeconomic policy.

Our explanation does not try to rationalize the failure of

macroeconomic policy. To the extent to which Israeli public policy reflects the development of dominant private capital, it has not yet failed. This was established in our empirical analysis for the period of 1967 - 1983. It was shown that the share of GNP appropriated as net profits by the most important corporations under the control of Israel's three largest holding groups, was all but fully explained by the main macroeconomic illnesses of the Israeli market. In Israel, macroeconomics is the other side of the political economy of the holding groups.

Our thesis is only a pilot study. It contains numerous shortcomings and neglected points, both theoretical and empirical. Of these, some important direction for future research, are discussed below in the closing section of this work.

B. Further Suggestions

This essay presents an overview of the central role played by several large holding groups in the economic history of Israel. A more detailed study has to investigate the historical evolution of each of the largest corporate groups, and to explore the various financial and industrial aspects of such developments in relation to the following questions. How does the historical experience of one group compare with another? What have been the attraction/repulsion forces among those groups, and to what extent have these forces influenced the size and shape of the groups? How are these groups related to the small and "black" economies? How do these groups interact with the corporations controlled by the Government? These questions, despite their importance to the understanding of the Israeli economy, have not been systematically dealt with by Israeli economists.

The study of many of the above issues raises theoretical questions. In a complicated holding-groups structure with numerous formal and informal ties, what is the "firm"? How relevant is a sectoral breakdown when each holding group operates in all sectors? Such questions, however, cannot be dealt with solely on a theoretical level. The personal aspects of the control/ownership structure must be empirically identified, and can assist in the demarcation among corporate groups. Similar identification requirements apply to the "policy makers". In what ways are they linked with the holding groups? How are these links related to the determination of public policy?

Another possible direction for future research is related to wider international considerations. One of the important institutional patterns in Israel's economic development since the early 1950s has been the U.S. capital inflows. Since 1951, Israel has received from the U.S. about US\$ 30 billion of loans and grants, of which over US\$ 20 billion arrived since 1966 in the form of military hardware. Most of this hardware was produced by 10 to 20 U.S.-based armament concerns. The role of these firms in the development of the significant features of the Israeli economy must be carefully studied: How do these firms influence U.S. policy in the Middle East in general and U.S.-Israel economic relations in particular? How do the Israeli holding groups interact with these U.S. armament concerns? What are the indirect effects of arms imports to Israel on local arms production? Questions in this direction have largely remained unanswered.

APPENDIX

TIME SERIES DATA FOR THE ECONOMETRIC MODEL

TABLE A.1

Time Series for Part 1 of the Econometric Model

year	NPEG	INFDD	RGNP80	IRDDG
1967	0.204591	0.168501	2.200000	2.090622
1968	0.220757	1.934402	15.49906	2.103483
1969	0.188112	3.877878	12.69906	2.485030
1970	0.263593	10.14116	7.899971	3.249068
1971	0.336677	13.38090	11.09952	2.169408
1972	0.360654	12.35248	12.59949	2.538539
1973	0.445639	26.40061	4.100221	2.865691
1974	0.580423	56.17719	5.500173	3.831364
1975	0.511704	23.51903	3.499748	3.840156
1976	0.524602	38.02408	1.899513	4.264987
1977	0.862567	42.54248	2.599546	6.361158
1978	0.825866	48.13928	3.399467	5.105054
1979	1.026546	111.3857	4.200210	4.620918
1980	1.383757	132.9500	2.800487	5.577784
1981	1.363839	101.4944	4.015636	7.200492
1982	1.851057	131.5035	-0.382317	7.192818
1983	0.568856	190.6923	1.337590	6.302834

TABLE A.2

Time Series for Part 2 of the Econometric Model

year	NPIG	MDPG	XMTG
1967	0.082997	6.186534	0.415707
1968	0.155704	8.093957	1.264999
1969	0.182934	8.616451	1.169240
1970	0.140565	9.506833	0.947172
1971	0.179654	10.14117	1.443790
1972	0.172154	8.512064	1.365281
1973	0.175560	9.414893	1.258883
1974	0.273113	12.75558	1.390264
1975	0.219976	11.81287	2.000456
1976	0.167991	10.44282	2.623708
1977	0.278431	8.960817	3.869970
1978	0.549980	8.853609	5.352894
1979	0.491872	8.765710	5.041530
1980	0.694266	9.188199	5.460817
1981	0.765389	9.573478	6.611582
1982	0.991970	10.25038	6.555330
1983	0.715763	10.51854	5.471412

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