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ISRAEL'S CRISIS AND ECONOMIC REFORM: A HISTORICAL PERSPECTIVE

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ABSTRACT

This article analyses the roots of the deep crisis that has afflicted the Israeli economy since 1973 and the attempt at economic reform and recovery since 1985. All of these are discussed against the background of the long-term evolution in Israel's structure and growth process. At the center of the analysis lie the implications of an oversized government and especially the devastating effects on growth and inflation of the large and persistent public sector deficit on top of the growing tax and public expenditure levels. The norm of "living beyond one's means" at the public sector level has also severely affected the norms of behavior of the private, household as well as business, sectors.

Since 1985 there have been signs of recovery originating from the balancing of the budget and the relative stabilization of the currency. Labour and capital markets are gradually becoming more flexible and real interest rates are coming down. Even so, inflation rates are not yet down to international levels, continued budget balance is not assured and excessive wage increases have substantially diminished profit rates and investments in the business sector. Structural problems, rooted in economic mismanagement of the crisis years, are surfacing.

Resumption of a sustained growth process requires persistent budget balance and a substantial additional reduction in public expenditure and tax levels. Structural reforms, only barely started, have to be persistently followed in the labour and capital markets, in the fiscal system, and in the further opening up of commodity and financial markets to competition from both home and abroad.

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1. Introduction

The Israeli economy, like Israeli society, has always provided a fascinating area of research. Although the state was born in 1948, its economic structure had been laid down at least 25 years[2] earlier. Within just a few decades, a thriving, modern and diversified economy grew up here on the basis of the first small economic base which was established by the 1920s. From the early twenties, the Yishuv, the country's Jewish population, rose from only 80,000 to 600,000 in 1948 (a 7.5-fold increase), while the gross national product grew 25 times over the same period. In the first twenty five years since independence, 1948 to 1972, the country's population quadrupled, while its GNP increased 10-fold. Thus, in the space of 50 years, the population grew 30 times, while its economic activity increased by a factor of 250, truly astonishing figures when compared to any other country. There is

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[1] This article is based on a lecture given in March 1989 as part of a special public lecture series held by the Israel National Academy of Sciences during the country's 40th anniversary of independence. A Hebrew version appeared in the Economic Quarterly, July 1989. I am grateful to members of the Bank of Israel Research Department (mentioned individually in the appendix) for part of the data used in the article. I would like to thank Maggie Eisenstaedt of the Maurice Falk Institute for Economic Research in Israel for the diagrams (except for No. 11) and Gordon Shifman for the English translation of this article from the Hebrew version. Finally, my grateful acknowledgements are due to Avi Ben-Bassat, Yaakov Lavi, Mordechai Fraenkel, David Klein and Amos Rubin for their useful comments on a previous draft.

[2] The year 1922 can be taken as a reasonable starting point. It was at least, the first year for which we have properly defined economic indicators, compiled and analyzed by the late Robert Szereszewski, who fell in action during the Six Day War (the study appeared posthumously, in 1968).

probably no other economy in the world where. in the course of half acentury (from 1922 to 1972), per capita GNP rose from just 15% to one half of the corresponding U.S. figure, and reached a level equivalent to three quarters of the average prevailing in Western Europe.

But 1973 was marked by an unprecedented crisis. Economic growth virtually came to a halt, the balance of payments deficit rose to alarming proportions and, worst of all, Israel began to experience inflation on a scale which only the generation of our parents had known, albeit more briefly and more intensively, in Europe during the 1920s. The Yom Kippur War of that year heralded a decade and more of economic stagnation. This period, sometimes known as "the lost decade", was a time of deep economic and social crisis in every sense of the word, affecting not only the country's economic structure, but also norms of socio-economic behavior.

After 12 years, the stabilization plan of 1985, may be heralding the beginning of a turning point. There have been considerable achievements on the stabilization front. However, with respect to structural adjustment, the economy resembles a bruised and battered war veteran, on the road to recovery, but still not quite rehabilitated. Only after another five or ten years (perhaps on the State's 50th anniversary) we may be able to say if this was a real turning-point with regard to long term growth.

Bearing these facts in mind, we shall ask a series of questions grouped around two sets of issues:

1. What were the nature and causes of the economic crisis Israel had experienced since 1973? Was it mainly the result of international developments or did its origins lie closer home? This question has already been the subject of considerable research. Here I would refer to a series of research papers written at the Maurice Falk Institute during the height of the crisis, in 1982-84.[3] Nonetheless, it would be interesting to take a fresh look at the diagnose of the crisis from the

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[3] See The Israeli Economy: Maturing Through Crises, edited by Y. Ben-Porath, Harvard University Press, 1986. All of the articles in this publication, most of which will be mentioned subequently, are very relevant to the present discussion.

vantage point of the first stages of recovery. In order to chart the road to further recovery an in-depth understanding of the roots of the crisis is required.

2. In what sense, if at all, did the economy show signs of real recovery during the past four years? Economic developments since 1987 and particularly during the State's 40th anniversary year, 1988, were notable for the extent of structural economic problems which have surfaced. In view of the more recent developments, what is the chance of achieving steady economic growth within a reasonable period of time, while securing increased price stability and at the same time adapting to the trends towards greater integration especially in The New Europe of 1992? What economic reforms are necessary in order to achieve these targets?

In the following pages we will try and answer these questions, using past long-term and especially the more recent economic developments as a background.

2. Growth, Productivity and Inflation over the years 1960-86

We start by examining the development and composition of business sector GDP--the contributions of factors of production, capital and labor, and the 'unexplained' residual, total productivity, which captures the effects of changes in factor quality and utilization, as well as any other elements that might help explain why output should have grown faster than factor input. For this purpose, we will use the analytical framework which was first applied by Dr. A. L. Gaathon[4] to the Israeli economy.

Figure 1 shows the average business sector GDP growth rate since 1950 by sub-periods.[5] (The height of the rectangle describes the average rate of growth, while its width corresponds to the relative length of the period). The two periods, 1950-60 and 1961-72, are characterized by a very fast rate of GDP growth. This growth is composed of a significant labor force contribution deriving from successive waves

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[4] See A. L. Gaathon (1971); see also J. Metzer (1986) and M. Syrquin (1986).

[5] The figures on which the rates of growth are based are contained in Table 2 in the appendix.

of immigration, as well as the substantial capital investment which accompanied the growth process and made it possible. Some 30 percent of the growth in the GDP can be attributed to each of these two factors of production. Overall productivity accounts for the 40 percent unexplained residual. The 25 years prior to the birth of the State were, by and large, characterized by the same growth patterns. [see Syrkin's figures (1986)].

Fig. 1 highlights the dramatic fall in the growth rate after 1973, from some 10 percent to an average of 3-4 percent up till 1981, and 1.9 percent in the years 1982-84. This drop is even sharper when the period 1961-67 (which includes the recession of 1965-67) is taken out of the second rectangle in Fig. 2. Between the Six Day and Yom Kippur Wars, 1967-72, when the contribution of large-scale immigration to the labor force was augmented by an inflow of workers from the administered territories, business sector GDP grew at an average annual rate of 12 percent (!), before declining to just a quarter of this figure after 1973. The diagram also reveals several other notable features.

Firstly, there was a very significant decline in the contribution of labor to GDP growth after 1973. The growth rate of the business sector employment dropped from approximately 4 percent a year to only one percent (see Table 1 in the appendix). This phenomenon can only partly be explained by the decline in immigration after 1973. No less influential in reducing business sector employment was the increasingly large entry of new members of the labor force into the public service sector. By the very nature of their employment, these workers make no direct contribution to business sector GDP.

Secondly, there was a sharp drop in the residual productivity element whose contribution fell from 4 percent in the years of rapid growth to only 0.6 percent during the years 1973-81, while it fell even more (to the point of <u>negative</u> productivity growth) in 1982-84. These reductions in productivity growth are all the more noticeable considering that, surprisingly enough, capital stock continued to grow rapidly even after 1973 (see the middle segment of the rectangles in Fig. 1). The growth in capital stock can be attributed to the unprecedented government subsidization of investments, whereby half of investment finance consisted of a government grant.[*] At least part of these investments were made in unprofitable activities and led to the accumulation of substantial, unutilized capital stock, financed at highly negative real interest rates. The eventual need to replace this credit by more realistically (and later, excessively) priced market credit resulted in financial imbroglios from which the economy is still suffering today. See, for example, a recent article on the moshav economy by Sussman, Kislev and Lerman (1989). The continued large growth in capital stock concurrent with progressively declining productivity shows that there was a substantial waste of resources, illustrating only too well the argument that large-scale subsidization of investment does not necessarily lead to viable economic growth.

Fig. 1 also shows the rise in output after 1984. During 1985-87, business sector product grew by an annual average of nearly 6 percent, more than half of which derived from increased productivity. The cumulative productivity growth in these three years exceeded the accumulated growth in productivity during the entire 12 years of the recession, as can be roughly gauged by comparing the appropriate areas of the rectangles in Fig. 2. If we also consider the slow-down recorded during 1988 and take an overall view of the four years 1985-88, this recovery will appear less impressive, but no less exceptional. It is still too early to say whether this growth in economic activity was a one-time achievement, which was to a large extent fueled by the continued fast rise in private consumption, as we will see below, or if it signalled the beginning of genuine renewed growth. At a later stage, we will discuss the conditions necessary for ensuring that the average growth rate of 1985-87 will henceforth continue, and be accompanied by renewed investment. The direct contribution to the business sector GDP of the capital stock in 1985-88 was marginal, as is shown in the figure, reflecting the reduced rate of investment throughout the economy. This effect will also be discussed later.

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[*] Most of it is ex-post subsidization derived from the availability of huge, unlinked development loans at a time of rising inflation - see Litvin and Meridor (1982).

The year 1973, as we have noted, marked an unprecedented and extremely grave juncture for the economy, which plunged into a long, drawn-out crisis. Since that year also saw the world economy sink into a recession, we should once again ask to what extent Israel's economic woes can be attributed to external factors, or whether they resulted from a policy which failed to properly respond to the international crisis and adjust the structure of the economy to the new economic environment.

Fig. 2 provides a comparison of developments in the Israeli economy between 1960-87, the rest of the industrialized world's (OECD economies) and semi-industrialized economies, to which Israel belonged in the 1960s,[7] in terms of inflation, GDP and per capita GDP.

Fig. 2 highlights the fact that during the rapid growth years (1960-73), the Israeli economy developed significantly faster than the two groups, in terms of GDP and GDP per employee, while its inflation rate was only slightly higher than that prevailing in the industrialized world. As the figures in Fig. 2 show, the industrial countries were hit by the inflation and recession of the 1970s (semi-industrialized economies suffered from inflation, but not from impeded growth), but to a lesser extent than Israel. This difference became acute in the early

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[7] The left-hand rectangle of each grouping in Fig. 2, represents all of the OECD economies, while the right-hand one describes the semi-industrialized economies. In the absence of sequential data on the latter for each period, a sample of ten was used for the years 1981-87 [for further details see Bruno (1986)]. For 1981-87, these are the economies defined by the IMF as manufacturing exporters. Korea, Singapore and Yugoslavia appear in both groups, while the second group includes Hong Kong, Taiwan, Hungary, Rumania, India and Turkey. A partial comparison shows that the difference between the two groups in terms of average developments over time was not significant. Accordingly, the right-hand rectangle can be regarded as a representative point of comparison.

1980s, when GDP per employee fell and inflation rose sharply in Israel while the latter was declining elsewhere.[8]

After the implementation of the economic stabilization program in 1985, Israel's relative position, as regards inflation as well as its GDP growth rate, improved considerably (inflation, however, remained substantially higher than in the average of the other country groupings). Fig. 2 highlights the persistently high growth rate of the semi-industrialized countries with which Israel had so proudly compared itself in the 1960s. It is still not certain whether Israel's 5.7 percent average growth rate indicated in the diagram will be maintained in the years to come. Two conclusions can thus be drawn from Fig. 2. Firstly, Israel's economy deteriorated significantly more than other countries during the years of the world crisis, particularly when the industrialized countries had already begun to recover from the recession.[9] Secondly, even though there has been a relative improvement in recent years, Israel still lags behind these countries, as regards both inflation and the growth rate.

A more detailed analysis of the performance of the industrial economies indicates that while all of them suffered from continued unemployment and inflation (stagflation) resulting from the oil and other raw material price shocks, they managed to adjust, albeit to varying degress of success, through appropriate policies. The most successful country in this respect was Japan, which had and still has very high fuel and raw material import requirements. Yet by conducting proper fiscal and wage policies, Japan not only succeeded in extricating itself within a few years from the the severe recession it entered in 1973-74, but also managed to revolutionize its industrial production processes, ensure that failing industries were closed down and generally

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[8] In this context it is important to point out that the semi-industrialized groups represented here does not include the high-inflation Latin American countries (Argentina, Brazil and Mexico).

[9] A previous article (Bruno, 1986) provides a detailed study of the effects of the external shocks and Israel's failure, in comparison to other countries, to run a suitable structural adjustment policy.

turned the situation to its own benefit. Smaller European countries such as Austria and Finland are other positive examples. Israel's failure to extricate itself from the world recession, not to mention its embroilment in an even worse crisis must, therefore, be attributed to the lack of a suitably responsive economic policy, rather than to purely external factors. Israel's situation was, of course, aggravated by the Yom Kippur War and the resulting heavy defense burden. Yet this alone cannot explain the depth as well as the duration of the crisis.

There were two major manifestations of the failure to adapt to the changing environment. One was the underlying failure, mainly of the government, but also in the business and household sectors, to balance incomes and outlays - a constant attempt to live beyond ones means. The second element, which is not totally unrelated to the first, was the payment of excessive real wages relative to labor productivity, which led to a sharp progressive fall in the rate-of-return on capital in the business sector. We start by discussing the most important issue: the evolvement of the public sector's income and expenditure system.

3. The cumulative damage resulting from an uncontrolled public service sector

Fig. 3 presents the main data on public sector income and expenditure as a percentage of the gross national product for the sub-periods extending from 1960 to 1988.[10] Expenditure has been divided into four main groups (left-hand rectangle in each pair): 1. Civilian consumption and transfers (including services, and transfers to non-profit institutions and households). 2. Investment and subsidies (including subsidies on basic commodities). 3. Interest on the government debt. 4. Defense expenditures.

Income (represented by the right-hand rectangle in each pair) is divided into two sources: domestic total gross tax revenues and direct

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[10] Here, the public sector includes the central government, local authorities, the Jewish Agency and the Bank of Israel. The data up to 1983 are based on Meridor (1985). The summary data for the whole period appear in Appendix Table 3.

transfers from abroad. The gap between the two rectangles in each pair in Fig. 3 represents the public sector deficit as percentage of GNP.

It is interesting to note the substantial rise in the size of the overall public sector deficit even while the economy was still growing. From a state of near balance during the first half of the 1960s (as was also the case in the 1950s), the economy went into a deficit equivalent to 12.6 percent of the GNP in the "Golden Age" between the Six Day and Yom Kippur wars (1967-72). During this period, there was a rise in civilian consumption, investment and subsidies and, particularly, defense expenditures. At the time, the economy did not require any significant increase in tax rates as rapid growth made easy borrowing possible both domestically and abroad (see the subsequent discussion on the development of the internal and external debt). The government was also able to borrow substantial amounts from the Bank of Israel, and thereby print money in an economy which was characterized by relative stability and a growing demand for real balances.

Thus, the first seeds of trouble were sown as far back as the boom period between the two wars. This was an expansionary period dominatd by a "we can do anything" psychological mood. It was thus possible to increase every sector of government spending and "wave every flag" at once - the flags of defense, development and, in particular, of social welfare. Towards the late sixties and early seventies (when the War of Attrition ended and a local version of a 'black panther'movement became prominent) welfare issues once again became the focus of economic policy debate, at a time when there was no real balance of payments constraint problem and the only gradually emerging sign of trouble was some domestic imbalance in the economy (mainly showing in excess demand for labor).[11] At this time an extensive national insurance transfer system was introduced (mainly in the form of child allowances, as well

[11] The flag-waving analogy is taken from the controversy surrounding the approach of the then Defense Minister, Moshe Dayan, who claimed that "we cannot wave all the flags at once". In his view, top priority still had to be given to defense, even when compared to pressing social issues.

as other welfare allocations), and increased health and education budgets. The prevailing attitude among relevant circles, (with many economists and present company included), was that with such a thriving economy (business sector GDP grew in the inter-war years by an average of 12 percent per annum), greatly increased exports and no real threat to the balance of payments, the time was ripe for redistributing the national cake for the benefit of the underprivileged sectors of society. The impetus given to social expenditure should have been stopped after the onset of the crisis but it was not.

Table 3 in the appendix shows that the growth in social expenditure, so prominent in Fig. 3 - derived totally from an increase in transfers from 5 percent of GNP in 1960-66 to 9 percent in 1967-72, 16 percent after the start of the recession in 1973 and even more in the years 1985-88. There was an even higher relative growth in the various types of subsidies, mainly those allocated through cheap investment finance, the significance of which we have already discussed. With the concurrent growth in the interest rate on the excessive internal and external debt, and the further growth in defense expenditures (which were now financed by increased U.S. aid), government spending reached an all time high of 76 percent average of GNP in the years 1973-84. At the same time, gross taxation grew by a substantial 9 percent to reach 48 percent of GNP. [Net taxation, after allowing for transfers, grew at a much lower rate. However, it is <u>gross</u> taxation that affects negative growth incentives.] Despite increased foreign aid disbursements, the overall public-sector deficit rose to an unprecedented 17.3 percent of GNP during the recession. This average figure applied, with only minor variations, for an entire 12-year period. While isolated attempts were made to curtail the budget (in 1976 and 1979), the excessive public expenditure, accompanied as it was by very low growth, can only be described as short-sighted, irresponsible behavior on the part of successive, over-indulgent governments.

Fig 3 marks the sharp drop in the deficit from the crisis period of 1973-84 to the post-stabilization period of 1985-88, whereby the budget became almost balanced. (The average deficit during 1985-88 was one percent, a level similar to that prevailing in the years 1960-66).

In 1988, it rose again, to between 3-4 percent, generating risks which we will discuss below.) The fall in the deficit was marked by a sharp, 10 percentage point drop in expenditure (most of it was taken from defense and subsidies, while interest expenditures continued to rise), and a slight rise in taxation, which reached a record level of over 50 percent of GNP. Such a high tax rate does not, of course, stimulate growth, as it discourages the incentive to work, save or invest.

To conclude, the above-mentioned figures show that with the upsurge of the 1970's crisis, the government failed to change its order of priorities in response to changing circumstances, whether these were external (raw material price shocks and the ensuing world recession) or internal (heavily increased defense expenditure, and a reduced population and labor force growth rate). The only part of the budget which was cut after 1973, and which may well have caused long-term damage, was direct government investment in infrastructure (see Table 3 in the appendix).

The harmful implications of the large deficit, and the very size of the public sector, have manifested themselves in a number of areas, which will be detailed below, and particularly in a rapid increase in the external and internal debt. The growth in the external debt led to persistent balance-of-payments problems and to the need for price level adjustments - devaluations and subsidy cuts - which, given the well-lubricated and accomodative wage-price-money supply mechanism, led to sustained shifts in inflation rates. The growth in the internal debt contributed to the crowding-out of the private sector from the capital market, and discouraged private finance of investment and growth. At the same time, the increased internal debt limited the degrees of freedom of monetary policy. The expansionary public sector also prevented the movement of the increasing labour force into the private sector.

It is also important to point out the nature of government involvement in the income redistribution process. In the course of the crisis period, rather than support own human and tangible capital formation, government intervention increasingly took the form of direct commodity subsidization, extension of welfare and child allowances and other forms of support that are not conducive to self-reliance. This came as a political and social response to the demand to increase the share of the national cake among the underprivileged, with no effort being made to condition such support by incentives to work harder and produce more. It may be assumed that this factor also contributed to the fall in the growth rate which we have already mentioned. Finally, irresponsible budgetary policy by the government also affected similar behavior on part of the individual, both as producer and consumer. This will be discussed further below.

We will now go into more detail on some of the topics alreadv mentioned. The first of these concerns the contribution of the cumulative high public deficit to the increasing external and internal debt. Fig. 4 highlights the growth of the external debt from a mere 20 percent of the GNP before 1967, to between 40 and 50 percent on the eve of the crisis. At that time, the profitability of capital formation justified its finance by foreign borrowing. But the same argument no longer applied to the doubling of the ratio between the external debt and GNP during the subsequent decade (more on this below). We have no detailed figures on the internal debt before 1970, but its rise is even more striking than that of the external debt. From 50 percent of GNP in 1970, it increased to almost 140 percent at the height of the crisis. before the implementation of the stabilization program (by which time the combined external and internal debt amounted to more than double the GNP!). Most of private savings of economic agents, both households and companies, was thus primarily mobilized to finance a massive accumulation of government bonds rather than direct capital formation.

Among reasonably well-ordered economies public debt accumulation of such magnitude is unprecedented. It is true that during World War II Britain, for example, accumulated an internal debt equivalent to 200% of GNP. But it was not indexed (by contrast to the Israeli internal debt, all of which is index-linked) and was eroded during the inflation of the post-war years. After years of budget-balancing and even budget surpluses, the British economy may reach zero debt within the foreseeable future.

Fig. 4 also illustrates the reversal of these trends that occurred after 1985, as a direct result of the balancing of the budget and of the balance of payments respectively.[12] The progressive reduction of the internal debt to GNP ratio projected to 1989-92 in Fig. 4 depends on a renewed balancing of the budget from 1990, the necessary conditions for which will discussed later. If these conditions hold and GNP once again grows, at an annual rate of 5-6 percent, the external debt ratio will fall by 1992 to its level at the end of the 1960s, while the internal debt will take another 10-15 years to decline to 50 percent of GNP. An ongoing reduction in the internal government debt component is the main prerequisite for the reforms which are necessary in the capital and money markets.[13]

Apart from the size of the government deficit, which affects the scale and cost of the debt, the mere size of government expenditure is a very signficant factor. On the one hand, such level of expenditure requires a high level of taxation, which hampers growth. On the other hand, government expenditure on factor inputs has a direct impact on the amount of resources available to the private sector.

We will now examine the employment aspect of the large expansion of the public sector (Fig. 5). The lower curve in Fig.5 describes the unemployment rate as a percentage of the labor force since 1960. Apart from the temporary sharp rise at the time of the 1966-67 recession, the unemployment rate in Israel has been much lower than in Europe. This was particularly true during the 1970s (when it was 3-4 percent compared to 8-11 percent in Western Europe). Only in the early 1980s did Israeli unemployment start to rise to between 5-6 percent.[14] As previously mentioned, this low level cannot possibly be explained by any higher

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[12] Part of the external debt reduction relative to GNP, it should be noted, is connected with the change from debt to grant financing of defense purchases as well as the fall in the value of the dollar.

[13] It could be claimed that the level of the internal debt noted here represents a lower limit. This qualification is based on the risk that the government may at some future stage be forced once again to turn a private debt into a public debt (as the result, for example, of actuarial deficits in private sector pension funds).

[14] The slight rise only in unemployment after the economic stabilization program of 1985, at a time when the budget deficit was

rate of employment in the business sector (in which, as stated, there was a dramatic fall-off in new employment after 1973, as happened in Europe at the same time). The reason can be quite clearly found in concurrent, substantial rise in public sector emplovment, from 20-22 percent of the total workforce in the early seventies, to 28-30 percent by the end of that decade, as can be seen from the middle curve in Fig.5. The upper curve[15] combines the percentage of employees in the public sector and in the financial sector; it also increased very significantly as a direct by-product of high inflation, but declined thereafter.[16] The gap between the upper curve and a 100 percent level (not shown in the figure) represents the percentage of employees in the non-financial business sector, which, as stated, fell substantially and only began to rise again after 1983-84.

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slashed, is proof that the restrained budget did not have any Keynesian demand-reducing effect but, on the contrary, led to increased aggregate supply! On the other hand, the unemployment rate in 1988 and 1989 rose quite substantially as a result of previous excessive rises in real wages, an unusual increase in labour force participation rates, and as part of the considerable restructuring and labour shedding that has been underway in the business sector.

[15] The percentages of employees in the two upper curves of Fig.5 have been calculated on the basis of total employment in the economy and not the total labor force, as is the case with the unemployment rate curve. This discrepancy only marginally affects any comparisons which are made between relative employment and unemployment figures.

[16] See the figures in Table 5 of the appendix. These should be taken as mimimum indicators of employment in public and financial services. During the period in question, there were additional employees in the business sector who were involved mainly in "public services" (such as internal defense) or "financial management" instead of production, and therefore these too should have been placed in separate employment category. A highly important issue not discussed here is the categorization of the relative contribution of that part of the business sector involved in production for defense purposes. See Berglas (1986) and Halperin (1987).

The striking changes in the distribution of employment are even more poignant when incremental shares of the various sectors in employment are calculated. Between 1958 and 1972, which were years of normal growth, the non-financial business sector absorbed 73 percent of the increase in the overall number of employees in the economy, with the public and financial sector taking up the remaining 27 percent. This situation was almost completely reversed between 1973 and 1981, when the share of the non-financial business sector fell by a third to 37 percent (that is, 63 percent of the total additions to the number of employees was in the public and financial sector).[17] Between 1985 and 1987 this trend was once more dramatically reversed and the business sector absorbed 90 percent of additional labor, while the public sector - which hardly grew at all - took only 10 percent. But in 1988, public sector employment began to rise again, concurrent with a growth in expenditure and the deficit. It is to be hoped that this was only a temporary development.

To conclude this chapter, we can see that every aspect of public sector policy - with regard to high taxation, misallocation of the labor force, distorted subsidization of investment (while reducing government's own investment in infrastructure) - effectively hampered sound economic growth. Before we begin to discuss one of the worst results of the over-grown public sector - inflation - it should be stressed that the government's lack of restraint had a direct behavioural impact on the response of economic units in the private sector. The effects were particularly noticeable in the excessive rise in the standard of living, which became quite unconnected to the dramatic downturn in the economy after 1973. Throughout the entire period of rapid growth until the crisis of 1973, private consumption usually rose at a rate lower than the growth in per capita GNP. This was particularly true for the time of rapid growth between the temporary recession of the mid-sixties and the onset of the 1973 crisis, that is, the years 1965-72, when per capita GNP grew at an annual rate of 5.6

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[17] The respective figures for the entire period from 1973 to 1984 were 48 and 52 percent, respectively.

percent, while per capita private consumption rose at by an annual level of 3.6 percent.[16] Subsequently, from 1973 to 1982, the standard of living continued to rise almost unabated, at an annual rate of 3.0 percent, while the average growth in per capita GNP fell to just 1.1 percent. As will be mentioned later, the manufacturing sector was also characterized by the penchant for "living beyond one's means".

4. Aspects of the high inflation process and its termination

Much has been said about the nature of inflation during the 1970s and 1980s, and about the various features of the July 1985 economic stabilization program. There is no point in repeating all of this here, but we will briefly review a few aspects of the inflationary process which are relevant to our present discussion.[17]

The main source of inflation was the continued government deficit mentioned in the previous chapter. This "original sin" was the essential condition for the outbreak of inflation in the 1970s. However, the link between the budget deficit and inflation is not the conventional text-book one, since there was no time series correlation between the size of the deficit and the rate of inflation (see the articles mentioned in footnote 19). The high level of the deficit remained more or less stable for over 15 years, while inflation rose in

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[16] The difference between these two figures in previous periods was smaller. Between 1950-55, for example, per capita GNP rose by 4.6 percent and from 1955-65 by 5.8 percent, while per capita consumption increased by 4.2 and 5.2 percent respectively. These figures appear in Barkai (1988) and Klinov (1986). The continued rapid growth in consumption after 1973 can be partly explained by the slow-down in immigration and the fall in demand for housing, which made it possible to divert private resources from investment to consumption.

[17] For a detailed analysis of the high inflation process in Israel see the articles by Liviatan and Piterman (1986), Bruno (1986), and Bruno and Fischer (1986), all contained in Y. Ben-Porath (ed., 1986). For an analysis of the components of the stabilization program, see Bruno (1985).

stepwise fashion (see Fig. 6). Part of the reason for this progressive acceleration can be found in the connection between the budget deficit and the balance of payments deficit, and the government response in the form of devaluations and subsidy cuts. The transformation of price level shocks into accelerating rates of inflation has less to do with "the original sin" than with "adaption to living with the sin itself". We here refer to the accomodative monetary process and the exchange rate-prices-wage-money linkage system which were part of the economy's attempt to protect itself from the cost of inflation. But it is precisely the linkage system and monetary acomodation which enhanced rapid price increases. Eventually these factors eliminate the existence of a stable monetary anchor within the economy and allow the inflation process to diverge even while the budget deficit remains more or less stable.

A classic example of so-called immunization against inflation is the attempt to constantly adjust the exchange rate and devalue in line with the prevailing rate of inflation. This adjustment process was perfected with the policy of creeping devaluation (crawling peg) adopted in June 1975. Apart from a short period of a freely floating exchange rate (after the "economic turnaround" of October 1977), this characterized the exchange rate regime for the subsequent decade, until July 1985. The advantage of this regime lies in its ability to maintain a more or less stable real exchange rate for exports. In the course of time, this advantage became quite apparent. The export sector, in fact, was protected as an isolated enclave throughout the whole period of the crisis. Thus, export revenues grew at an average annual rate of 12 percent during the two decades from 1965 to 1984. Further evidence of the effect of this protective exchange rate adjustment policy was the growing share of industrial exports as a percentage of overall manufacturing output, from 20 percent in 1965 to 37 percent in 1975 and 52 percent in 1984. (In 1986, this share stood at 56 percent).[20]

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[20] These estimates appear in the chapter on the manufacturing sector in respective Bank of Israel Annual Reports and are based on input-output analysis.

Nevertheless, the real cost of continuous exchange rate adjustment at a time of a high budget deficit was the complete loss of a monetary anchor which also led to huge cumulative aggregate output and productivity losses.

Analysis of the inflationary process indicates there were two important land marks in the loss of the monetary anchor and the upsurge of inflationary expectations. One was in June 1975, when the crawling peg was introduced, [on the relevance of this date to the shift in the expectation-formation process, see Gottlieb, Melnick and Piterman (1985)]. The second turning point was the introduction of the Patam (foreign currency denominated) bank deposits as a close substitute for regular domestic money at the time of the October 1977 'economic turnaround' [for more on this, see Bruno and Fischer (1986)]. These two events help to explain how 'the gene was helped out of the bottle' - inflation rates leapt up after 1979 and 1983 in response to the price shocks caused by the devaluations of 1977 and October 1983. The latter date was the time of the bank-share crisis and the failure of the "5 percent-by-5 percent" attempt to reduce inflation by gradually lowering the rate of devaluation. The first step-devaluation made by the National Unity Government in September 1984 also led to a jump in inflation (see the peak of the inflation curve in Fig.6).

A two-pronged attack, on "the original sin" of the budget deficit and "the adaption to living with the sin" formed the two pillars of the July 1985 economic stabilization program. The success of the program lay in a totally balanced budget and the synchronized sharp reduction, within a social consensus agreement, of the rate of increase in prices, wages, credit and the exchange rate. Stabilization of the exchange rate, first against the dollar and then against a basket of trade-weighted currencies (since August 1986) provided the main anchor for price stability (conditional on wage stability - a weak point in the program which will be discussed later).

Looking back, there is no doubt about the program's success, both in terms of internal stabilization of the currency and in renewed external financial credibility. When inflation was slashed, however, it was left at a level of 15-18 percent a year. Although relatively low, this rate is still very high compared to that prevailing among Israel's trading partners. The January 1987 devaluation, necessitated by excessive wage rises, led to a temporary blip in the inflation curve (see point 87:1 in Fig.6). The aggregate 13.5 percent devaluation of December 1988 and January 1989 will have caused another temporary blip (not shown here) in the curve.[21] These two devaluations were carried out in conjunction with a social contract between the government, the Histadrut and the employers. At the time of writing (mid-1989) it is still too early to say whether the hopes for an additional drop in inflation to a yearly level of 10-12 percent towards the end of 1989 will be realized.

A prerequisite for sustained growth in Israel is a further reduction of inflation to the level prevailing among Israel's trading partners. The preconditions necessary for reducing inflation - a balanced budget and maximum wage restraint - are also essential for increasing the growth rate. Failing to achieve either of these two conditions will threaten growth, the balance of payments, the ability of industries to compete on export markets and overall economic stability. What is more, it will be impossible to maintain stable macro-economic policies and there will be need for recurrent anti-inflationary measures of the type that dampen economic activity or else the need to boost economic activity in a way that hampers price stability (i.e. stop-go policies). Reduced uncertainty and stable macro-economic policies are themselves a precondition for achieving both stability and growth objectives.

5. The path to renewed steady growth

The previous section detailed the very real progress that has been made in the direction of greater internal and external currency

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[21] Consumer price indexes not included in the graph for the first quarter of 1989 (compared to each previous month) were 4.7, 1.7 and 0.5 percent for January, February and March respectively. The ability to devalue in a manner which would raise the level of prices but not boost the rate of inflation depends among other things, on a renewed cost-of-living wage agreement.

stability after 12 years of continuous turmoil, even though the complete stability target has not yet been achieved. Reducing inflation resembles the medical achievement of drastically reducing the patient's fever. But the question remains as to whether the surgery itself has been successful. In other words, is the economy on the way to real recovery? Have the structural changes that are necessary for putting the economy on the road to steady growth been made? In this section we will discuss a number of structural changes that have taken place, bearing in mind that so far, these have been far less impressive than the efforts made to reduce inflation.

The period 1985-87 was marked by an upsurge in economic activity and a substantial rise in productivity, but, as we will mention later, since the middle of 1987 output has flattened off. There are increasing signs that the 1986-7 boom may have been a temporary though favorable output response to the lowered rate of inflation. This was primarily stimulated by a substantial increase in domestic demand caused by an excessive rise in real net wage incomes and in private consumption, while the basic structural problems of the economy remained unsolved.

The resumption of sustainable growth in the business sector, as distinct from a temporary boost to economic activity, depends on a continual release of resources from the public sector, in manpower reserves becoming available, on keeping wage rises in line with increasing productivity and on reducing the overall tax burden. An important indicator of sustainable growth is the level of new capital formation taking place so as to ensure that capacity at least keeps pace with output growth. For some time, output can draw up on unutilized capacity, but ultimately, the surest guarantee of renewed growth is a suitable flow of investment spured by the producers' own profit incentives and not by excessive government support, as was the case in the 1970s.

We will start by discussing savings and investment behavior over time, and then examine the two main determinants of the volume of investment - the cost of capital and its profitability . Fig. 7 shows that gross domestic investment[22] declined from 27-28 percent of GNP

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[22] It would be useful to divide gross investment and the growth in

during 1960-72 and the early years of the crisis (1974-79)[23] to 22 percent in 1980-84. In the subsequent four years (1985-88), there has been a further decline of some 4 percentage points. Note that the ageing of capital stock, part of which is now obsolete, indicates the existence of an even more serious problem in terms of net investment (after discards). This should be even more disturbing in view of the fact that technological innovation usually gets embodied in new tangible capital formation. A rough estimate of the gross investment necessary for capital stock to keep pace with a 5-6 percent growth in business sector GDP suggests that within the space of a few years, investment must be raised from its current level of 18.5 percent to at least 21-23 percent of GNP.

What is holding back increased investment today? In the past, it could be argued that limitations on domestic saving and on foreign borrowing were the effective limits on investment. The tip of the arrow in the right-hand bar of each period described in Fig.7 indicates the volume of total saving, divided up into private and public saving, as a percentage of GNP.[24] The figure shows that from 1960 right through to

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capital stock by their principal destinations - dwellings and producer durables - something which is missing here. Nevertheless, the general trend in gross domestic investment is a good illustration of the problem being discussed. Mayshar (1986) provides a detailed analysis of savings and investment developments until 1983.

[23] Investment in the first six years after 1973 was promoted by massive and excessive public finance and, as will be seen, it was not accompanied by any rise in profitability. During this period, the real interest on development loans was negative, amounting to -17 percent! [see Litvin-Meridor (1983)]. From 1979 onwards, most of the subsidy embodied in unindexed loans loans was abolished. It can be assumed that this change only became effective after 1981 because of the administrative time-lag of previously approved projects in the pipeline.

[24] The length of the arrow represents the volume of public saving. Its direction is first positive and subsequently negative, in the crisis periods (1974-79, 1979-84).

1984, investment exceeded domestic saving, that is, part of the gross investment was financed by imported capital. [Let us remember that by national accounting definitions, the difference between domestic investment and total saving is equivalent to the difference between total imports and exports plus unilateral transfers from abroad (the current account).] But since the stabilization program, total saving has grown slightly (private saving[25] declined, but so did government dissaving), while gross investment fell to less than total saving (that is, there was a surplus on the current account). In other words, neither the volume of total saving nor the availability of overseas finance were effective limitations on investment. Let us, therefore, move on to discuss the cost of finance and investment profitability.

Figures on the real yield-to-maturity of government bonds can serve as an indicator of long-term real interest rate developments. Fig. 8 shows a marked increase in the yield after the 1983 bank shares crisis and until the start of the stabilization program in 1985 (because of reduced public confidence in the government's ability to repay). Since the start of the program, the yield has fallen sharply, to the levels prevailing in the mid-1970s. There was a similar fall in the issuing cost of government bonds, from approximately 6 percent to 3.5 percent today. After the reform in the capital market in early 1987, private issues on the capital market increased. Concurrently, issuing costs fell from some 8 percent, as of 1986, to less than 6 percent today. The figures for 1986-88 are contained in Table 8 of the appendix.[26] While short term credit costs mainly affect working capital, inventories and current production, it is sometimes asserted that the unlinked shekel interest rate, particularly the rate on overdraft facilities, affects demand for investments.[27] Fig. 9 also points to a significant fall in

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[25] This is a mirror image of the steep rise in private consumption (which grew by an average of over 5 percent a year per capita), over and above disposable income. The rise in consumption explains the large, if temporary, increase in economic activity during 1985-87.

[26] A detailed review of the preliminary effects of the reform in the capital market can be found in A. Ben-Bassat (1989).

[27] See Lavi (1988).

this marginal rate (the highest charged). The distance between the nominal interest curve in the graph and the inflation curve provides an estimate of the real interest rate. During the first months of the stabilization program, the latter grew enormously, to as much as 10 percent a month but subseqently dropped and, except for a short period in early 1987 (when it rose after the January 1987 devaluation), continued to fall, from 33-39 percent in 1986-87 to 19 percent in the last quarter of 1988. Interest on fixed-term credit, however, and particularly average interest on short-term credit (including both directed and foreign-currency linked credit) fell to much lower levels, to 10 and 6 percent respectively in the last quarter of 1988 (see the figures in Table 9 of the appendix). During the first half of 1989 these interest rates have fallen further.

Even if it can be argued that certain interest rates are still higher than is desirable for the long run, it is hard to argue that the cost of capital could be an effective hindrance to the resumption of capital formation. We note, however, that it is the balanced budget that allowed both long and short term interest to be cut. The budget deficit increased in 1988 and there is a danger of it rising further in 1989. This would increase government borrowing and might bring about a renewed rise in long-term interest rates. Thus, if the present expansionary monetary policy is to be maintained and short-term interest is to be cut, a balanced budget is essential.

Let us now look at business sector profitability. This measure is derived from the national accounts value added estimates by deducting returns to labor (including the imputed return to labor of the self-employed); the residual is divided by the capital stock of the business sector. The upper part of Fig. 10 illustrates the share of labor as a percentage of business sector GDP. In the rapid growth period of 1967-72, the share of labor fell dramatically, but began to rise gradually after 1975, and, apart from temporary falls in 1981-82 and 1984-85, continued to do so until after 1988 (to a rate approximating 85 percent of GDP). The distributive share of labor also measures the ratio of the wage rate to GDP per employed person. A significant growth in the wage component of GDP usually indicates an excessive rise in wages over productivity. During the years of rising inflation 1975-79, this resulted from the workers' desire to over-insure themselves against the effects of inflation. In the period since the stabilization program. when business sector wages rose by 20 percent while productivity increased by only 10 percent. This resulted from a combination of wage arrangements which had not been adjusted to the lower rate of inflation, institutional constraints (the cost-of-living agreement. the minimum wage law, wage linkage between employees in both failing and profitable enterprises). and producers' readiness to accede to wage demands in the (mistaken) hope that they would be bailed out by government policies such as frequent devaluations.

Dividing the product share of capital (the complement of the product share of labor) by the capital-output ratio (capital stock/GDP) yields the gross rate of return on capital; as can be seen, it fell steeply along with the excessive rise in wages. During the 'Golden Age' of 1967-72, the latter stood at 15-18 percent, but subsequently fell to the lowest ever level of just 6 percent in 1988. The average level of profitability should be taken as only a rough guide as it is an average of both ailing and profitable industries. Note too that the denominator of the rate-of-return, gross capital stock, may be upward biased, with effective capital being smaller (because of unprofitable investments made in the 1970s, that should be written off so that in some industries, capacity may never may be fully utilized). Actually what matters is the marginal profitability expected on incremental investment, which may be considerably higher than actual average profitability. A major cause for concern and certainly the main reason for the paucity of investment even after the stabilization program lies in the high share of labor and the low share of capital (the residual) in the past few years. Immediately after the stabilization program began, the business sector's relative tax burden grew, leading to even smaller net earnings. Demand for investment is also liable to be affected by uncertainty over future earnings, which in turn is governed by numerous factors - such as expectations regarding the extent of economic stability, future economic policy and the general political climate.

What is the chance that gross profitability will henceforth rise or, in other words, is there a chance that wages will at least temporarily rise more slowly than productivity, as happened on more than one occasion during the years of rapid growth? In 1988 the increase in real wages certainly began to level off, while the first quarter of 1989 saw a fall in real wages following the devaluation and its sterilization from the cost-of-living agreement.[28] There are also signs of a change in the rules of the game in the labor market: less importance is now placed on nationwide wage agreements with greater flexibility being shown at the industry and enterprise level; there is less insistence on wage linkage (linking groups of workers in the private sector with public sector wage agreements, for example); cost-of-living agreements have been moderated and adjusted to lower inflation; and finally, there have been striking cases where nominal wage rates in trouble-hit industries have been cut (Koor, for example). Particularly important too is the willingness to dismiss workers in the course of restructuring as at Israel Aircraft Industries, The Shipyards and Solel Boneh (a major contracting firm owned by the Histadruth). Rising unemployment along with the other factors mentioned have recently helped to halt excessive wage rises in the business sector.[29]

Recent experience such as, for example, in the British economy, shows that changes in the rules of the game in the labor market very much depend on the government's determination to change conventional attitudes, even at the price of higher unemployment. Successive Israeli governments have always felt obliged to maintain full employment and guarantee security of tenure. This is partly a result of the trauma of

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[28] According to the new cost-of-living agreement which came into effect on April 1st, 1989, no compensation will be given to wages for monthly inflation rates below 0.5 percent, while increments amounting to 85 percent of any price rise in excess of 0.5 percent will be paid twice a year.

[29] The moderating effect, however, can only be partial, since in a period of structural change, there can be unemployment in one industry, occupation or sector, concurrent with labor shortage elsewhere. A wage rise resulting from a shortage in one place is not usually balanced out by a concurrent fall in wages somewhere else.

the 1965-66 recession, when unemployment rose above 10 percent. One of the potential threats to the July 1985 stabilization program was the fear that unemployment would grow to above 8-9 percent. If one is going to persist in implementing structural changes in the economy, it may become necessary to accept an unemployment rate of around 7-8 percent for some time ahead.

The main danger of an excessive wage increase is in the public sector, where the threat of large-scale dismissals is almost non-existent. As public sector wages have lagged behind those in the business sector since the stabilization program, there is a danger that they may now pick up again. Should this happen, the effect of the factors that have moderated wage rises in the business sector may also be weakened. Here again the outcome hinges on the handling of public sector policy. The imposition of rigid rules there will also have an impact on the business sector.[30]

6. What reforms are needed?

So far, we have mentioned two prerequisites for resumed growth and a further disinflation. These are a balanced budget, to be achieved by trimming the relative size of the public sector. and moderation of wage rises to a level below the growth in productivity. In the former area there was some degree of success during the first three years after the stabilization program, but the future of budgetary restraint is now at risk. On the wage front and in the labor market we may now be observing the first signs of progress. These two conditions are both necessary, but are not sufficient. The main reason behind the crisis of the 1970s.

[30] Considering that public sector wages are relatively low, particularly among senior ranks, and in view of considerable disguised unemployment, wage rises in the public sector should be coupled with a parallel increase in efficiency, i.e. dismissing workers on the basis of Clause 8 of the public sector wage agreement, a clause which has scarcely been acted on till now. Recent reform proposals by the Sussman Commission (on public sector wages) would adjust wage scales in the right direction, but do not in themselves deal with the problem of persistent excess employment in the public sector.

as we have seen, was the failure to adapt to the far-reaching external changes, both on the government level and among individual producers and consumers. Real economic recovery demands behavorial changes in both sectors, including in the nature of their interdependence. A necessary condition for renewed economic growth is the consistent implementation of structural reforms in the main areas of economic activity where the government is heavily involved.[31]

6.1. Government involvement; its extent and operation

Much has been said about the importance of wiping out the budget deficit. As stated, a balanced budget is not enough to bring about a steadv reduction in the government's relative weight in the economy, which is among the highest in the world (over 50 percent of GNP, see Fig. 3). The division of labor between the government and private economic agents must be altered. Fundamental structural changes should be initiated and government services greatly reduced wherever the government has no clear advantage over the private sector, and the government service provided is not run according to economic principles. Blatant examples of this situation can be found in health and hospitalization insurance, but they are also to be found in education.[32] The government must concentrate only on areas in which there may be market failures and where it has a natural economic advantage, such as the development of physical infrastructure for transport services, basic research, R&D, higher education and development areas. At the same time, the government should rid itself of

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[31] Further details are contained in the program submitted to the Government by the Bank of Israel in January, when new economic policy measures were adopted. See A Plan for the Resumption of Growth and the Lowering of Inflation, Bank of Israel, Jerusalem, December 1988, Hebrew) (henceforth referred to as the Bank of Israel plan). Similar proposals have been put forward by Neubach, Sadka, and Razin (1988).

[32] In this respect, the recent decision not to charge a minimal fee for visits to a doctor and not to charge high school education fees are the exact opposite of reduced government support. Apart from this, radical organizational changes are necessary in the health sector in order to increase efficiency.

direct holdings in enterprises and from excessive interference in business management. Only reduced government activity will make it possible to decrease the overall tax burden, which runs counter to the main incentives to growth - the desire to work, save and invest. With respect to taxation, it is also necessary to implement reforms which may not decrease the average tax burden, but which do reduce marginal tax rates while increasing the tax base (Sheshinski Commission proposals).

The government must also review its social welfare activities and move from forms of assistance which do nothing to encourage personal responsibility (such as subsidies, child allowances and unconditional unemployment benefits) to helping those who help themselves. An example is the proposal to replace payments to parents of large families with direct financial assistance to discharged soldiers in the formation of physical and human capital (like the "Threshold Fund" suggested as far back as the 1970s by this writer, as well as by others). The partial government assistance provided to problem enterprises as part of a recovery and debt rescheduling program also falls into the category of 'helping those who help themselves'. Such aid is conditional on a clear proof that an enterprise or economic unit (Koor industries and the kibbutz movement, for example) has developed a plan based on strict self-discipline and that it has the ability to recover fully within a few years. Clearly, such government assistance can only be provided if it does not transcend limits in the overall state budget, where avoiding a deficit is, as stated, the main prerequisite for economic recovery.

In Fig. 11, the forecast for 1989-92 presupposes an average drop of approximately one percent a year in the ratio of expenditure and taxation to GNP between 1989-92.[33]

6.2. Reforms in the money and capital markets.

Excessive government intervention in the money and capital markets was one of the reasons for the lack of growth in the 1970s. Several of

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[33] For the budget to be balanced as soon as 1990, a substantial, immediate cut is necessary. Public sector consumption in 1989, except for defense imports, must remain constant, while in 1990-92 it can then grow at an annual rate of not more than 1.7 percent. See the Bank of Israel Program, December 1988.

the reforms initiated in these markets during 1985-87 are now bearing fruit. But there is still a need for the reduction of budgetary and other involvement by the government. The effectiveness of reform in this area depends on a balanced budget, together with increased competitition in the banking system in order to bring down the interest-rate spread. Selling government-held bank shares, after ensuring equal voting rights, to business organizations and individuals will provide an opportunity to improve the structure of the banking system. The subsidization of banking services to the government should be gradually abolished, together with the direct subsidization of pension fund interest rates. The banks must be exposed to competition, both externally (by capital imports) and internally (e.g. by developing a short-term commercial bill market in the stock exchange). These are but a few examples from a long list of structural corrections, including changes in taxation, which will increase competition in the money and capital markets, reduce the interest rate spread and reestablish the capital market as the main channel for financing capital formation.

6.3. Improving the price mechanism and the opening up the economy

Apart from wage flexibility, discussed in the previous section, further measures are needed to moderate the rigid price mechanisms which stand in the way of reducing inflation to Western levels. A whole range of administrative restrictions which still either ban or curtail imports must be abolished in order to further expose local production to greater competition from abroad. Existing restrictions hinder competition in domestic markets, thereby lessening the effect of the exchange rate as a means of stabilizing prices. Effective exchange rates should be completely unified towards full integration in the world market. There is also a need for more closely controlling domestic monopolies which do not face competition from imports.

Another area requiring a more liberal stance is the flow of capital, providing that inflation actually does fall and control over monetary policy can be maintained. Greater flexibility in this field will help reduce interest rate spreads and liberalize the commodity market, in view of the drastic changes which are expected in the world market during the next few years, with special reference to Europe by 1992.

7. Concluding Remarks

Fig. 12 gives an overall view of major economic developments in terms of inflation, the civilian import surplus as a percentage of GNP, and the growth rate of business sector GDP from 1965, through the years of crisis and until the partial recovery from it since 1985. Particularly striking is the sharp fall in the growth rate of business sector GDP in 1988, only part of which was foreseen during the second half of 1987 [point a. in the diagram indicates the 1988 National Budget forecast made in September 1987]. Part of the fall - some 1.5-2 percentage points - can be attributed to the intifada, which began in December 1987 [point b. in the diagram]. The remainder derived from other factors connected with the government's reluctance to take major policy decisions during an election year (devaluation and various reforms were held back, for example) and with unexpected structural difficulties. The forecast figures for 1989 to 1992 are conditional on the implementation of budgetary cuts and a suitable wage policy, together with the previously mentioned reforms. Only if these conditions are met is there likely to be a fall in inflation to the average level prevailing in the West (5-8 percent a year), a drop in the civilian import surplus to 6 percent of GNP - to be covered by grants and other unilateral transfers - and gradually increased business sector GDP growth to the target rate of 6 percent a year.

These forecasts are strictly conditional. All the reforms in the areas mentioned (the budget, wages etc.) demand, first and foremost, a fundamental rethinking of the role of government. They also require a radical change in the way the private sector operates. Lessons of the past indicate the need to break away from the amorphous system of mutual guarantees that has characterized relations between the government and the private sector, within the business sector and within large conglomerates. Examples of the latter are to be found in the Kibbutz and Moshav movements and in the Histadrut enterprises. The fundamental weakness of a system of mutual reliance is its avoidance of clear-cut personal and corporate responsibility for sins of omission and commission by producers or consumers that are part of such larger economic systems.

The crisis and the ensuing recovery have made it necessary to freshly review the basis of Israel's socio-economic system. There is need to redefine the nature of society's responsibilities towards its weaker sub-groups. Is there any contradiction between the increased competition and efficiency which create greater wealth, and the concern over a more equitable divison of this wealth? Heightened concern over fair shares of the increased national wealth produced in the 1960s, it should be remembered, actually led to the contraction of growth since then and impaired the efficiency with which output and wealth were produced. This, in turn, has impaired the ability to further reallocate significant slices of the national cake.

To avoid repeating such mistakes, one needs to redetermine the minimum amount of infrastructure and health, education and welfare services which the government should provide (whether universally or not) to various sectors of the population. Confinement to this minimum will allow market forces to act more freely and provide more opportunity for own-financing by the individual, ultimately leading to greater efficiency. In other words, it will increase the size of the national cake, which shrunk so noteably during the years of the crisis.

Which socio-economic model is best-suited for Israel to aspire to? Since 1985, it has been lucky enough to excape the divisive and unstable model that has been observed in many Latin American countries. But is there a tendency to follow the U.S. pattern, where maximum free enterprise is the rule or of Britain during the past few years, or of semi-industrialized countries such as Singapore and South Korea? Or are Israelis more inclined to emulate European countries such as Sweden, Finland or Austria, where free competition exists side by side with a considerably greater degree of worker participation and a clear concern for social objectives? In this respect, there is a lack of any well thought out new long-term strategy, and there is apparently no redefined national consensus on the long-term socio-economic goals. Although, as in Europe, Israel has witnessed some retreat from the concept of a 1950s and 1960s-style welfare state, this withdrawal is only partial and the ensuing vacuum has not yet been filled.

Despite the lack of a well-defined and accepted socio-economic model on which it could be based, much of the 1985 stabilization program's success derived from the achievement of a social consensus over such key issues as balancing the budget and changes in the cost-of-living agreement. A similar consensus seems to exist on the general direction of the necessary structural reforms. Even if the long-term goal is not clearly defined, only few would deny the need for a drastic reduction in the current level of government intervention. Yet it is far from certain whether the government and the public at large fullv understand that sustained growth and internal economic stability depend on resolute, single-minded policy implementation, which may have its sacrifices in the short run and only bears fruit after a considerable time. In this respect, the recently growing tendency, much encouraged by major representatives of the business sector, to regard "growth incentives" as ad hoc, micro-economic measures offering short-term benefits, gives cause for concern. Rather than constituting the threads of a new macro-economic fabric suited to the needs of the 1990s and the 21st century, these are really just a series of stop-gap measures, whose cost is far from negligible, in the style of 1950s and 1960s government micro- intervention. It is not so easy to explain to producers and the public at large that real growth hinges on creation of the right macro-economic environment, which may be easy to define but is hard to create, as are the attempts to reduce taxation and interest rates (which are themselves ultimately dependent on a balanced budget). The same applies to macro-economic reforms manifested in such obvious "micro" forms as a more flexible price and wage system. But if such conditions are actuallv brought about, they will undoubtedly lead to economic growth, without the need for any other micro-economic incentives, which rather than ironing out structural distortions, usually only perpetuate them. There is no better proof of this than the sad experience of the 1970s and the early 1980s.

The government has done much to enhance its public credibility bv the measures it has taken since July 1985. Now, it needs to continue along the same path unswervingly, even if the country has apparently extricated itself from the former dire economic straits (and <u>apparently</u> is the operative word). Only time will judge whether government policv since July 1985 has led to a genuine turnabout in the restructuring of the economy and the renewed opportunities for growth.

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Table 1. Business Sector GDP, Factor Input, and Productivity in Israel 1950-1988

(annual percentage growth)

	1950-60	1961-72	1977-81	1982-84	1985-87	1985-88
GDP	11.2	9.7	3.4	1.9	5.7	4.4
Labor input*	3.3	2.7	0.6	1.3	1.5	1.0
Capital input*	3.2	2.8	2.2	1.1	0.9	0.9
Total productivity	4.7	4.2	0.6	-0.5	3.3	2.5

*Factor input calculated by weighting the rate of growth of each factor by its share in business sector GDP (approximately 75 percent for labor and 25 percent for capital, with variable weights). Total productivity is calculated as a residual: GDP growth rate less weighted growth rate of factor inputs.

SOURCE: 1950-81: Syrquin (1986) and Metzer (1986), on the basis of Gaathon's method (1971).

1982-84, 1985-87: Bank of Israel Annual Report 1987, p. 18.

1985-88: Estimates of the Bank of Israel Research Department (Yaacob Lavi), January 1989.

Table 2. Inflation and Economic Growth: International Comparison, 1960-1987

	1960-73	1974-80	1981-84	1985-87
A. Rate of GDP growth (per employed person				
Israel	9.2(5.5)	3.3(2.2)	3.5(0.1)	5.7(3.5)
Semi-industrialized countries	6.7(2.7)	6.0(3.0)	6.0(3.9)	6.6(5.2)
Industrial countries	4.7(3.6)	2.6(2.0)	2.2(1.8)	3.0(1.4)
B. Annual rate of inflation				
Israel	7.4	57.8	19.2	19.2
Semi-industrial countries	6.3	18.5	10.3	6.7
Industrial countries	4.7	10.8	6.8	3.1

SOURCE (A): 1960-80: Bruno (1986).

1981-87: Israel--Bank of Israel Annual Report, p. 22; Industrial countries (OECD total) and semi-industrialized countries (exporters of industrial goods)--IMF World Economic Outlook, 1988, pp. 111, 115-117.

SOURCE (B): 1960-80: Bruno (1986).

1981-87: Israel--Consumer price index data, Central Bureau of Statistics; Other countries--IMF World Economic Outlook, 1988, pp. 120, 123.

Table 3. Public Sector Expenditures and Their Financing, 1960-1987

(percentage of GNP)

	1960-66	1967-72	1973-84	1985-87
1. Total public sector expenditures	36.8	55.3	76.0	65.6
Public civilian consumption	11.8	11.3	11.6	11.0
Transfers	5.4	9.1	16.0	17.4
Public sector investments	4.9	5.4	4.1	3.1
Subsidies (plus indirectly on credit)	3.4	5.6	12.9	5.1
Real interest payments	1.6	2.9	5.7	10.5
Defense expenditures	9.7	21.1	25.7	18.6
3. Total revenues	35.6	42.7	58.8	64.5
Taxes and income from property	32.6	38.6	47.7	50.6
Unilateral transfers from abroad	3.0	4.1	11.0	13.9
4. Total deficit	1.3	12.6	17.3	1.1

SOURCE: Bank of Israel calculations for 1960-83. See L. Meridor (1985).

Note: In Fig. 3, civilian consumption and transfers have been grouped together, as have investments and subsidies.

Table 4. The External and Internal Debt as a Percentage of GNP, 1964-1992

Year	External debt[1]	Internal debt[2]
1964	23.3	--
1965	22.4	--
1966	24.8	--
1967	24.7	--
1968	31.2	--
1969	37.0	--
1970	42.0	55.6
1971	47.7	66.3
1972	41.7	64.8
1973	38.8	77.8
1974	44.0	92.3
1975	53.5	97.5
1976	61.1	103.9
1977	60.5	110.6
1978	67.1	120.6
1979	63.8	122.4
1980	57.8	121.3
1981	60.5	123.5
1982	66.9	120.8
1983	68.6	123.4
1984	80.2	132.5
1985	84.3	136.7
1986	67.9	124.8
1987	57.4	112.9
1988	47.3	119.7
"Plan"		
1989	44.4	119.5
1990	39.4	113.9
1991	35.4	109.4
1992	31.7	104.8

[1] Debt at year end.

[2] Net internal debt (at average prices).

SOURCE: Research Department of the Bank of Israel (D. Gottlieb).
1989-92--Bank of Israel plan, December 1988.

Table 5. Sectoral Composition of Employment, 1960-1988

(thousands)

	Public services	Non-financial business sector*	Industry	Financial Sector	Total Employment
1960	144.6	547.4	147.2	..	692.0
1961	159.9	576.2	161.1	..	736.0
1962	156.7	620.2	176.9	..	776.9
1963	166.4	631.3	184.2	..	797.7
1964	175.0	667.1	196.4	..	842.1
1965	186.0	680.8	202.2	..	866.9
1966	190.6	671.0	206.4	..	861.7
1967	188.7	630.3	184.9	..	819.1
1968	203.7	694.3	214.8	..	898.1
1969	214.7	717.7	223.8	..	932.4
1970	229.7	717.1	232.6	25.7	972.5
1971	240.6	750.9	241.7	29.1	1,020.6
1972	251.9	807.8	254.4	30.6	1,090.3
1973	269.0	843.3	281.2	34.4	1,146.7
1974	284.8	835.8	287.1	36.9	1,157.4
1975	300.2	829.3	283.4	40.4	1,169.9
1976	308.5	836.8	283.8	39.4	1,184.6
1977	321.0	848.0	288.2	45.3	1,214.2
1978	348.2	874.1	297.5	51.0	1,273.3
1979	360.0	894.2	312.3	53.4	1,307.6
1980	366.0	893.7	306.2	56.6	1,316.3
1981	379.2	901.6	307.7	61.5	1,342.3
1982	385.2	915.3	305.2	63.3	1,363.8
1983	390.5	953.2	315.6	67.7	1,411.5
1984	396.1	971.1	323.9	65.9	1,433.1
1985	402.9	974.1	325.5	64.5	1,441.5
1986	405.9	995.4	339.1	64.2	1,465.6
1987	404.2	1,045.7	348.2	62.7	1,512.5
1988	418.7	1,079.0	338.2	64.8	1,562.5

*Includes the financial sector until 1970.

SOURCE: Research Department of the Bank of Israel; based on Central Bureau of Statistics Labour Force Survey.

Table 7. <u>Total Savings, Gross Domestic Savings, and the Balance-of Payments Current Account[1], 1960-1988</u>

(percent of GNP at current prices according to the official exchange rate)

	1960-72	1974-79	1980-84	1985-88
1. Total saving	22.6	20.3	18.0	20.5
a. Private	(20.6)	(28.0)	(23.9)	(16.4)
b. Public	(2.0)	(-7.7)	(-5.9)	(4.1)
2. Fixed investment	25.9	25.4	21.8	18.1
	27.6	27.2	22.2	18.5
3. Change in inventories	1.7	1.8	0.4	0.4
4. Net current account (1-2-3)[2]	-5.0	-6.9	-4.2	2.0

[1] There is a break in the series at 1980, after which the public/private breakdown conforms to the 1988 SNA. The two series were chained in 1980.

[2] Advance payments for defense imports have been calculated as actual imports and have been included in defense imports.

SOURCE: Research Department of the Bank of Israel (Yaacob Lavi).

Table 8. Real Interest Rates (ex-post) on Credit And Asset Holdings of the Public, from 1986-1988

(percent per annum)

	Short-term credit to the public			Asset holdings of the public		
	Overdraft facilities	Term credit	Total[a]	Indexed Private bond issues[b]	one month treasury bills	Six year indexed government bonds
1986	33.4	16.6	8.2	7.9	-0.9	6.0
1987	38.5	20.1	18.8	6.7	2.5	4.8
1988	25.4	14.5	13.8	6.2	-2.4	4.0
1988 I	29.0	15.2	14.7	6.7	-2.8	4.3
II	24.3	13.1	13.1	6.4	-5.1	4.2
III	29.8	19.7	21.5	5.8	1.0	4.1
IV	18.7	10.1	6.2	5.8	-2.5	3.5

[a] Including directed credit and foreign-currency linked credit not detailed in the table.

[b] Including a 1.6 percent imputed issuing cost. The 1986 figure is the average for July to December.

SOURCE: Table VIII-2 in the Bank of Israel Annual Report 1988 (Hebrew edition).

Table 10. Business Sector GDP and the Gross Share of Labor and Capital 1961-1988

(current pric

	GDP (1)	Loan subsidy (2)	1+2 (3)	Returns to labor (4)	Gross capital stock (5)	Returns to labor percent (6)	Gross rate of return to capital[1] (7)
Thousands of NIS							
1961	369.1			272.6	688.4	73.9	14.0
1962	440.9			333.6	956.8	75.7	11.2
1963	526.0			399.5	1,110.8	76.0	11.4
1964	605.2			462.6	1,256.8	76.4	11.3
1965	720.0			586.4	1,433.8	78.7	10.6
1966	757.6			629.9	1,603.5	83.1	8.0
1967	788.8			640.5	1,725.5	81.2	8.6
1968	964.0			706.7	1,902.5	73.3	13.5
1969	1,120.3			746.3	2,128.0	66.6	17.6
1970	1,286.8			938.2	2,491.0	72.9	14.0
1971	1,614			1,122.1	3,081.0	69.5	16.0
1972	2,101			1,392	3,951.8	66.3	17.9
1973	2,585			1,756	5,299.6	67.9	15.6
1974	3,627			2,350	7,987.0	64.8	16.0
1975	5,297	243	5,540	3,280	12,046.1	61.9	16.7
1976	6,647	490	7,137	4,695	16,272.7	70.6	12.0
1977	9,603	626	10,229	6,831	24,306.0	71.1	11.4
1978	15,575	815	16,390	11,302	43,301.9	72.6	9.9
1979	27,699	1,848	29,547	21,576	78,766.2	77.9	7.8
1980	67,341	3,913	71,254	49,456	180,044.7	73.4	9.9
1981	169,681	7,529	177,210	120,700	427,322.8	71.1	11.5
Millions of NIS							
1982	374.6	14.5	389.1	278.8	972.2	74.4	9.9
1983	935.5	29.6	965.1	743.2	2,372.5	79.4	8.1
1984	4,720.1	133.1	4,853.2	3,507.4	12,295.5	74.3	9.9
1985	16,954.4	483.4	17,437.8	12,598.9	46,750.6	74.3	9.3
1986	25,725.5	626.3	26,351.7	20,369.2	71,783.9	79.2	7.5
1987	32,522.5	683.5	33,206.0	27,026.1	89,177.0	83.1	6.2
1988	38,910.0	513.0	39,423.0	32,790.4	103,187.3	84.3	5.9
"Plan"							
1989	45,966			37,940	123,530	82.5	6.5
1990	50,992			41,315	130,615	81.0	7.4
1991	55,873			44,825	138,815	80.2	8.0
1992	61,299			48,680	147,945	79.4	8.5

[1] Percent of capital stock.

SOURCE: Research Department of the Bank of Israel, 1989-92 data based on Bank of Israel plan, December 1988.

Fig 1: Product, Production Factors and Productivity in the Business Sector, 1950-1987(8)

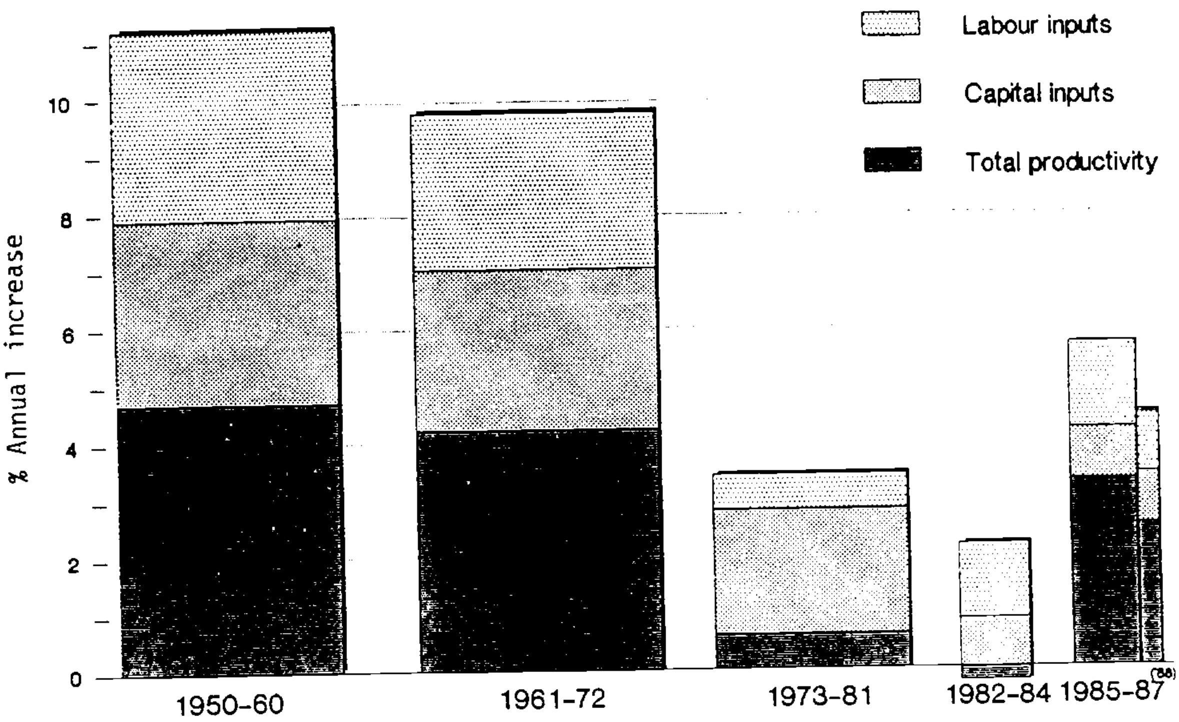


Fig 2: Inflation and Growth: International Comparison, 1960-1987

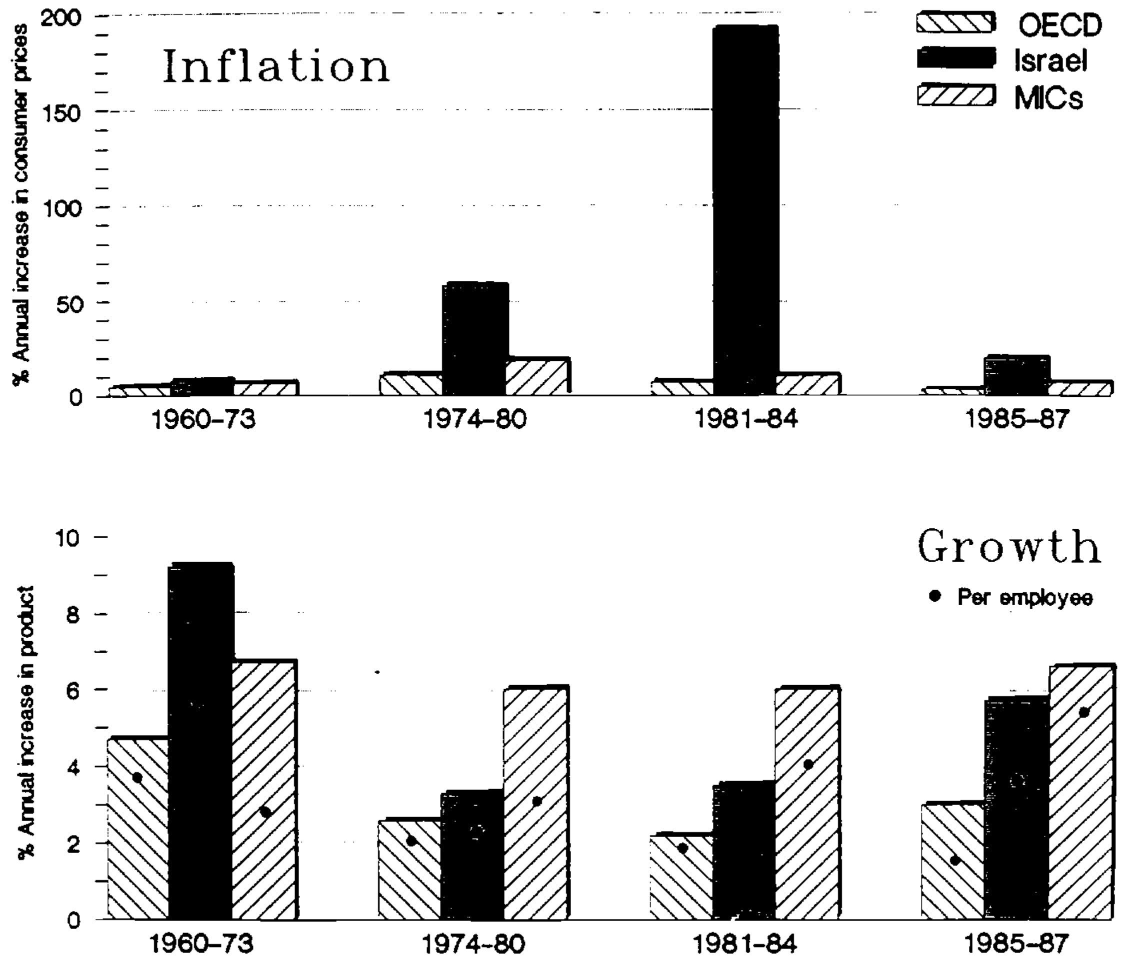


Fig 3: Public-Sector Expenditures and Their Financing, 1960-1988

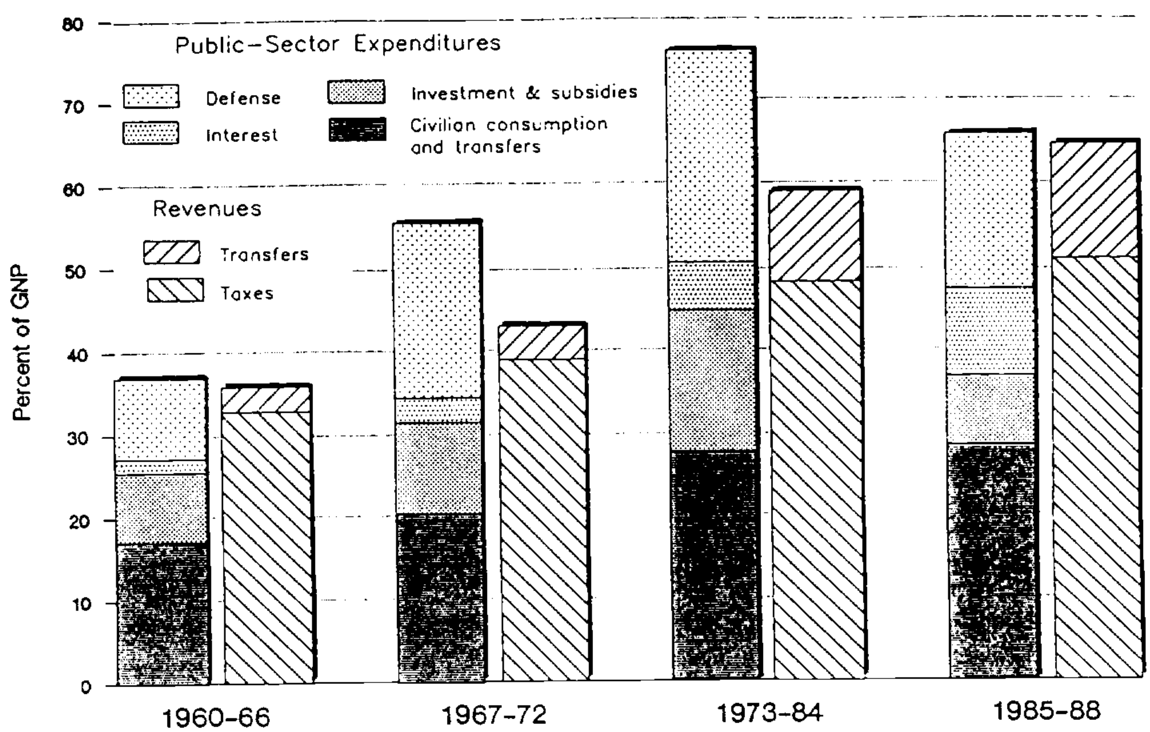


Fig 4: Israel's Internal and External Debt as Percent of GNP

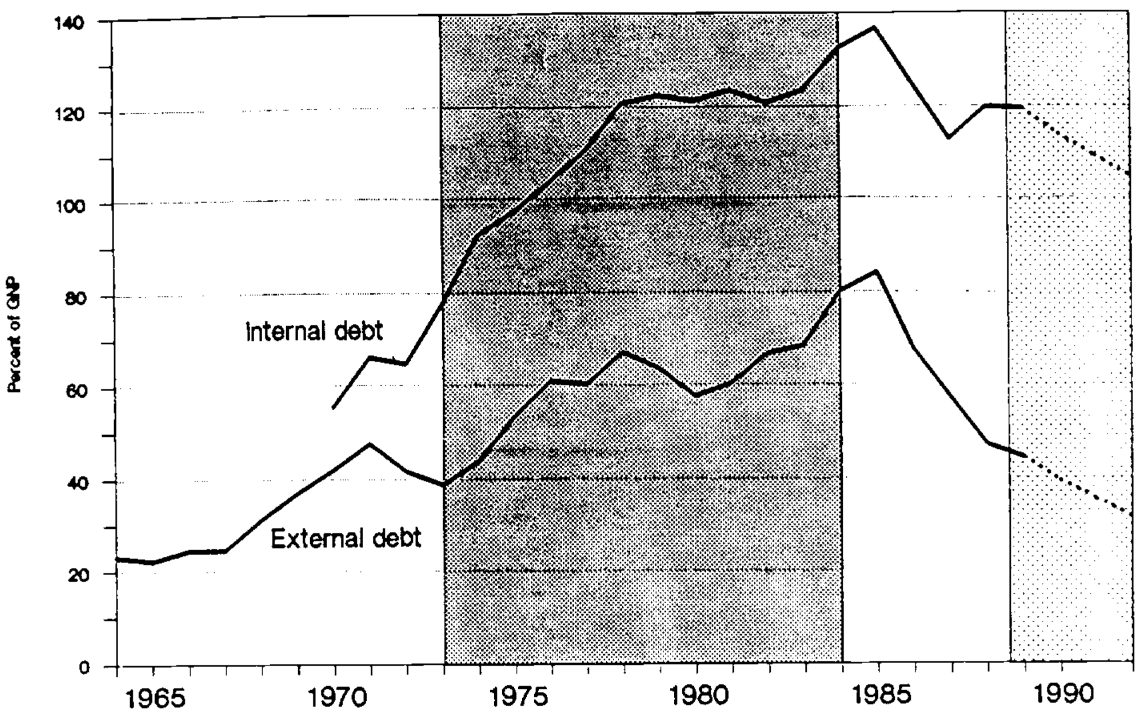
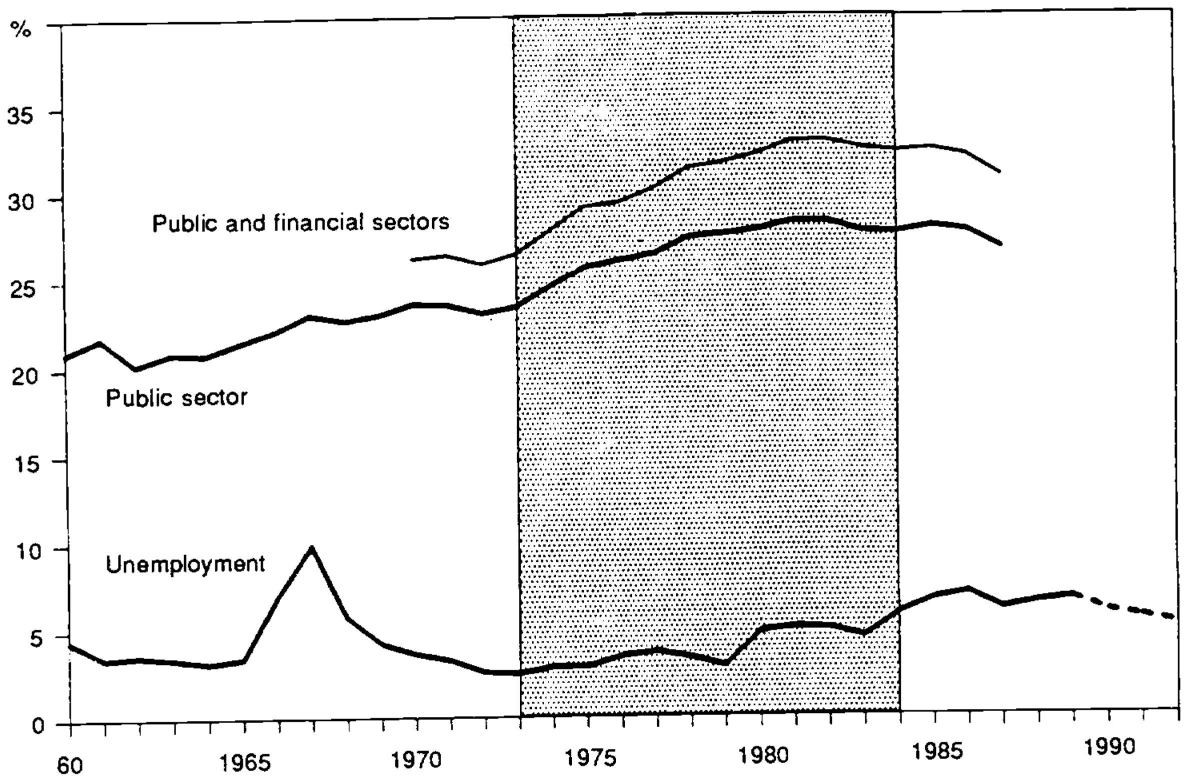


Figure 5. Employment and Unemployment Rate, 1960–1992



SOURCE: Employment—Appendix Table 5.
Unemployment rate—1960–88, CBS, labour force surveys data.
1989–92, contingent forecast of the Bank of Israel's December 1988 program.

Fig 6: Israeli CPI Inflation
(Annual % - quarter to corresponding quarter)

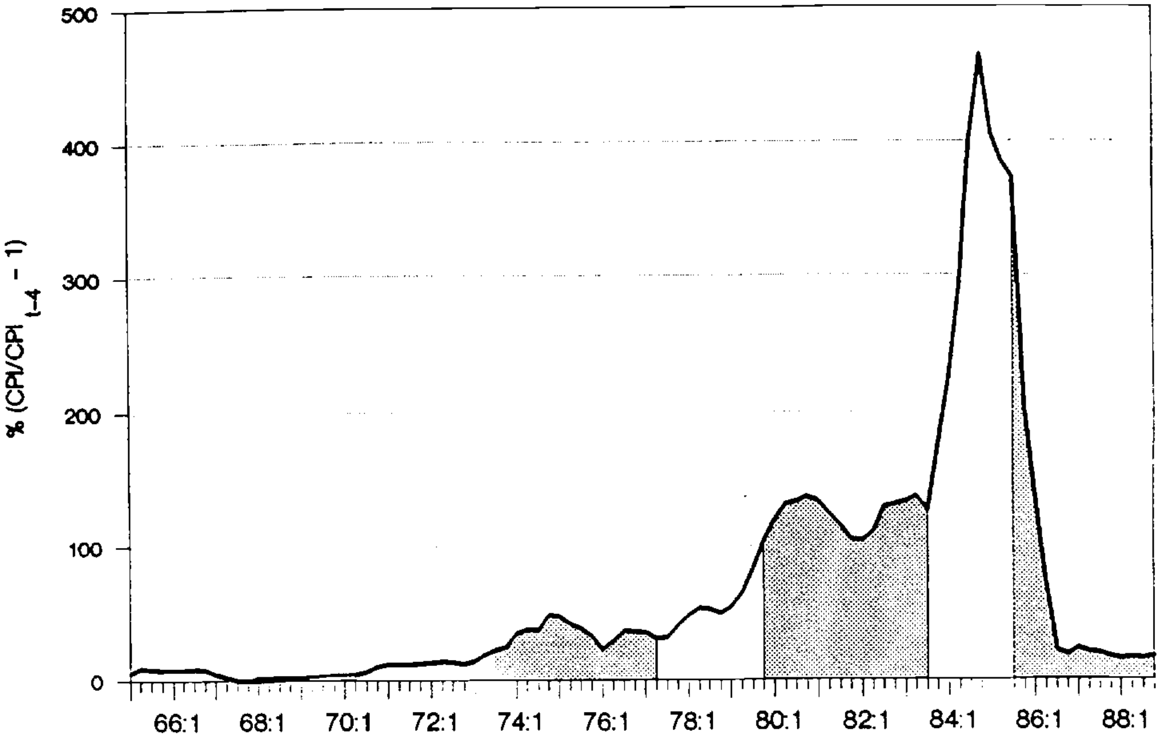


Fig 7: National Saving (Private and Public) and Gross Domestic Investment

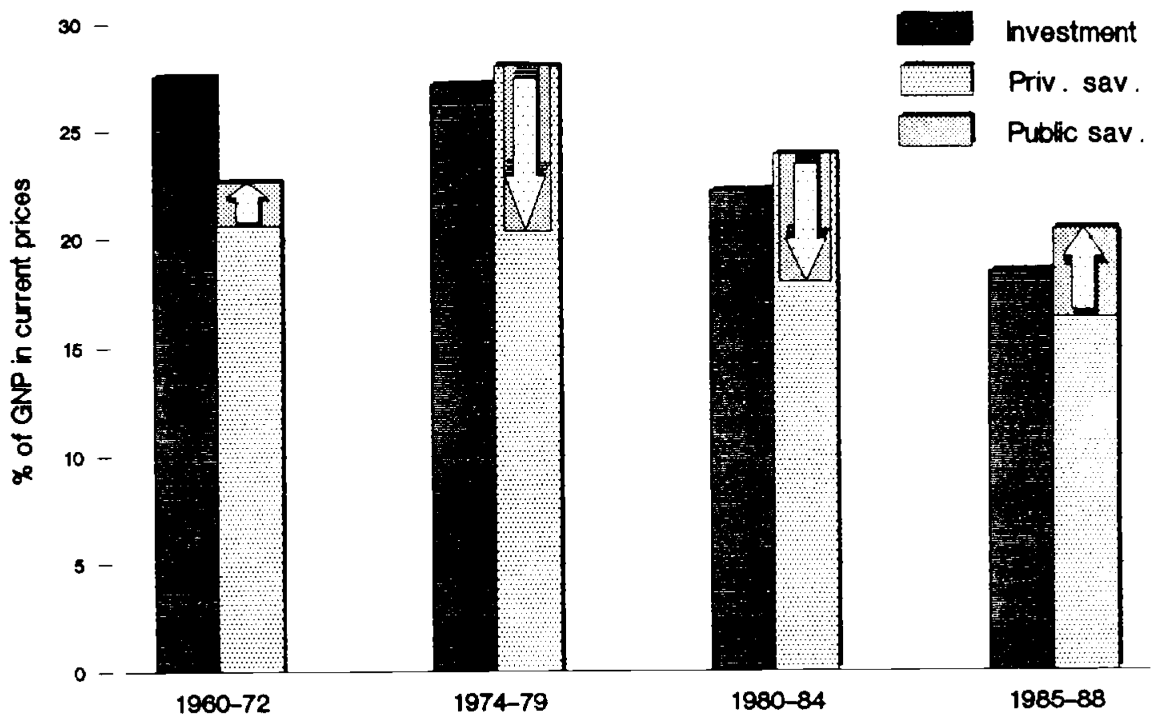


Fig 8: REAL RATES OF RETURN ON GOVERNMENT BONDS, 1975–1988

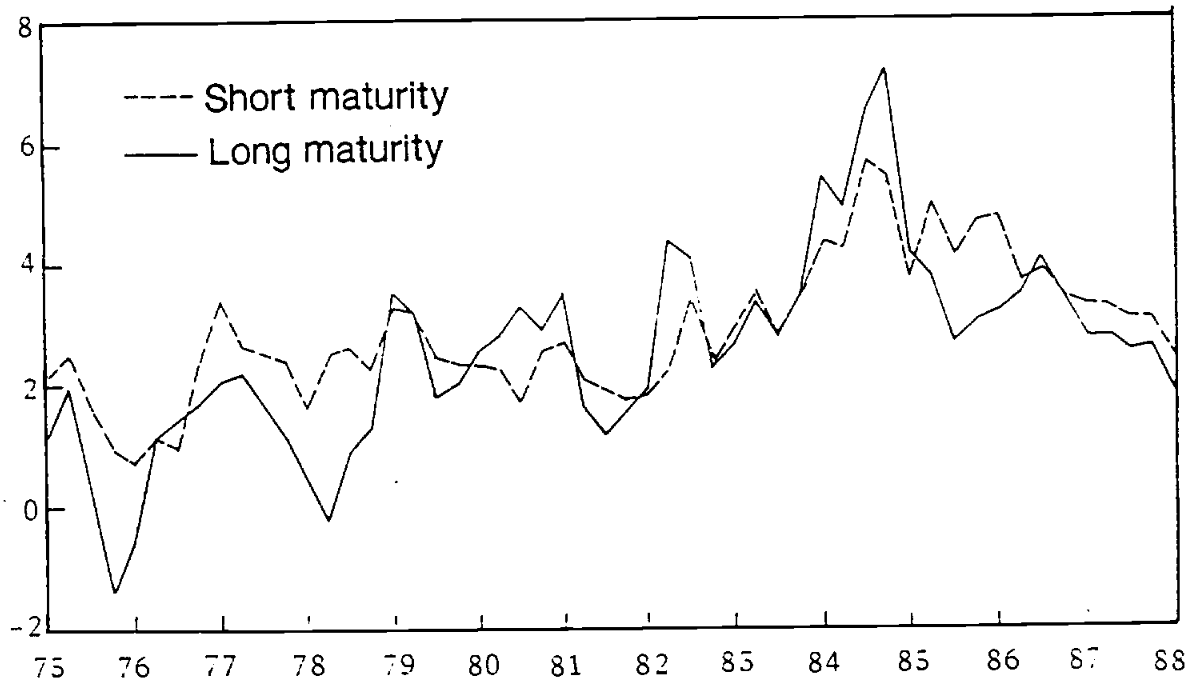


Figure 9. The Marginal Interest Rate and the Consumer Price Index

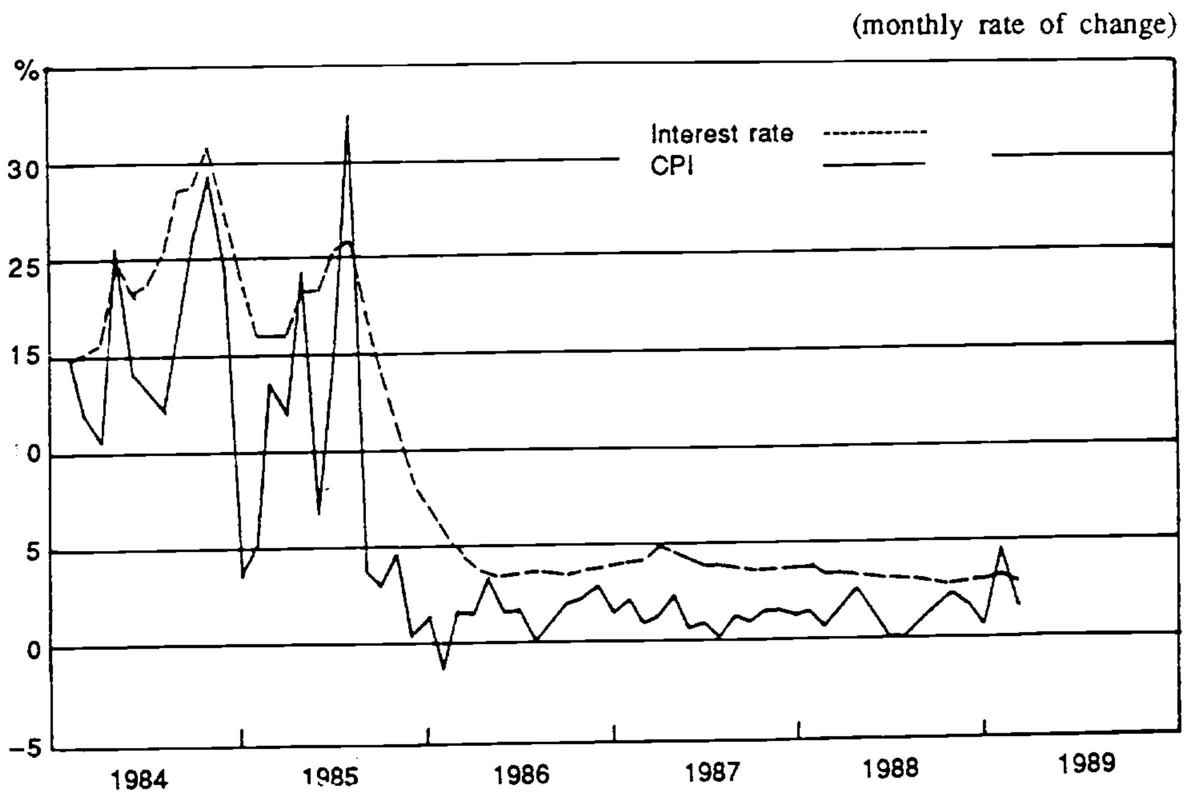


Fig 10: Share of Labour in Product and Rate of Return to Capital, 1961-1988

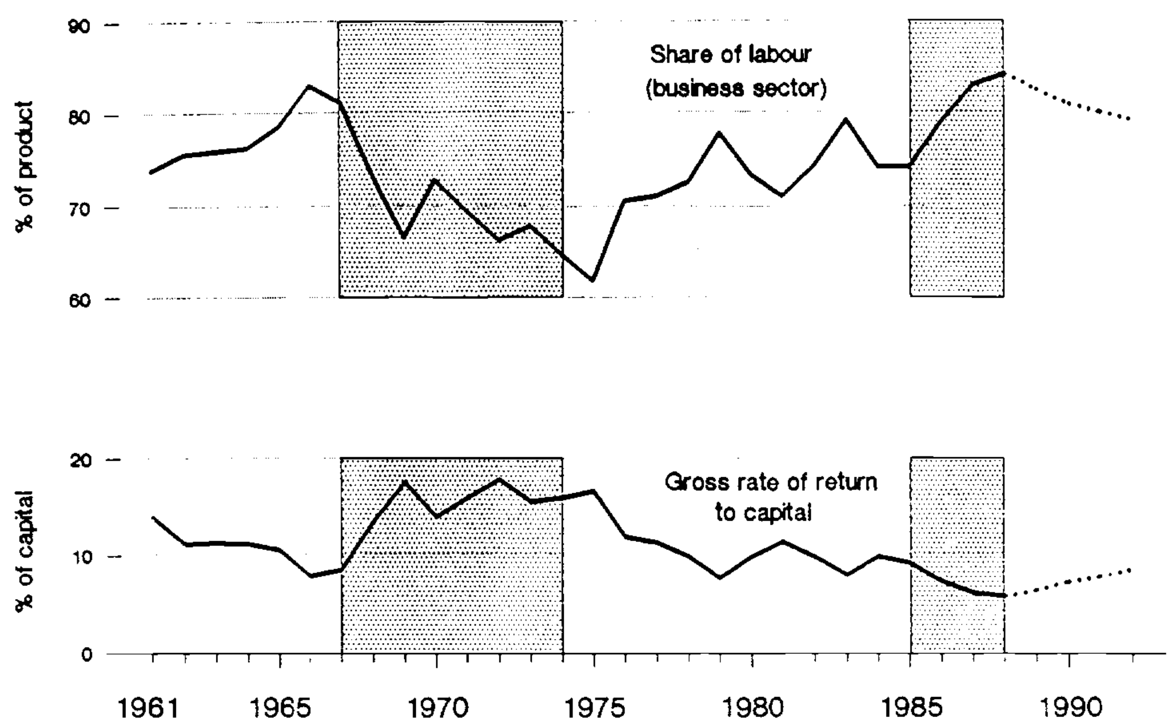
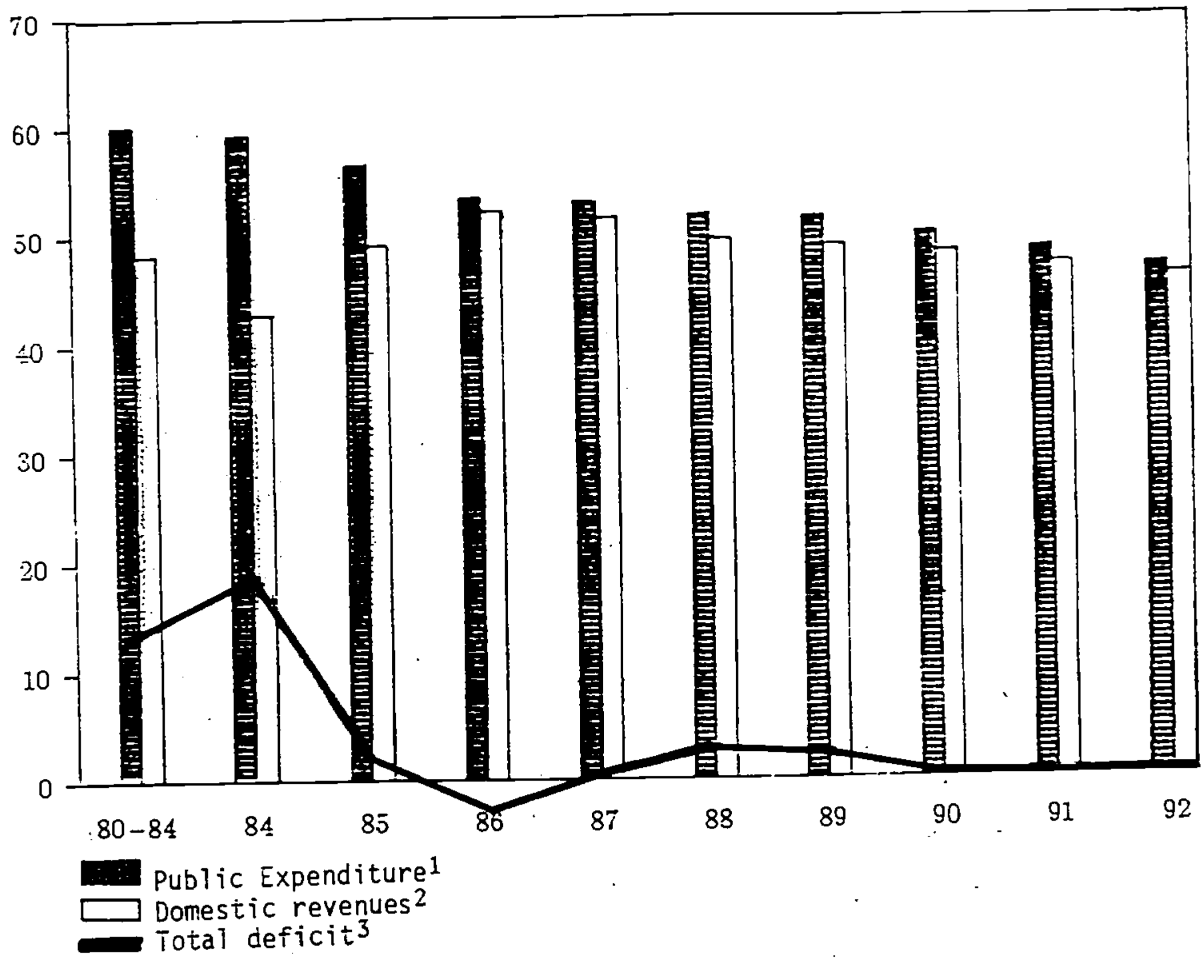


Fig 11: Public Expenditure, Taxes and Public Sector Deficit
(as a percentage of GNP)



1. Public sector consumption and investment, excluding direct defence imports and other domestic expenditure (subsidies, transfer payments and others).

2. Including total gross taxes, domestic income from property and other income.

3. Overall deficit of the public sector.

Source: Bank of Israel. Estimate for 1988. forecast for 1989-92.

Fig 12. Inflation, Trade Deficit and Growth, 1965-1992