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FROM SHARP STABILIZATION TO GROWTH:
ON THE POLITICAL ECONOMY OF ISRAEL'S TRANSITION

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ABSTRACT

The paper considers the interplay of the design and execution of stabilization policy and structural reform with the role of various agents and pressure groups in a democracy. The context is the political economy of Israel's transition from a successful stabilization to a renewed growth process whose sustainability is yet to be attained. Particular emphasis is put on the role of Central Bank independence, the fight over the budget and over the role of the exchange rate in the aftermath of a sharp stabilization, and the process of financial and capital market reform.

The analysis was done from the point of view and temporary role of an academic as a policy-maker, in this case as the Governor of the Central Bank and Senior Advisor to the government.

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I. Introduction: Issues, Agents and Rules of the Policy Game[1]

In July 1985 Israel undertook a major stabilization program, followed by a process of structural reform, which ended a prolonged 12 year period of very high inflation, low growth, and persistent balance of payments crises. Since stabilization, the lower inflation rate of around 15-18 percent has been maintained, though not reduced further, and the external finances have substantially improved. At the same time economic activity went through a sharp cycle of a two-year boom (1986-87), followed by a two-year slump (1988-89) and a renewed take-off (1990-1991) which was only briefly interrupted by the Gulf War.

Figures 1-3 illustrate the performance indicators in these three areas in terms of the rate of change of the consumer price index (fig.1, quarterly data in annual terms), the external debt to GNP ratio (fig.2, annual percent averages) and the monthly state of the economy index (fig.3). A longer run analysis of growth in terms of the standard labour and capital inputs and total productivity residual is presented in fig. 4, suggesting a dramatic improvement in total productivity (which proxies for factor utilization,

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[1]This paper was prepared for the European Economic Association Conference session "Economists as Policy Makers", in Cambridge, England, September 1, 1991. It was written during tenure of a McDonnell Scholarship at WIDER, Helsinki. I am grateful to Dr Lal Jayawardena and to WIDER for their generous hospitality. I am indebted to Valentine Daniel, Mario Draghi, Stanley Fischer, David Klein and Gideon Schur for helpful comments on an earlier draft.

management, etc.) after 1985[2]. The forecast of sustained high growth shown after 1991 very much hinges on the successful absorption of a very large immigration wave from Soviet Russia which took off in 1990, the consequences of which will not be analyzed here.

The detailed developments have been documented elsewhere.[3] In the present context I shall confine myself to some observations on political economy issues pertaining to the aftermath of the Israeli stabilization, the structural reform process and the transition to growth. This will be done from the dual vantage point of an economic policy adviser and policy maker.[4] But first let me draw

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[2]The first two columns drawn above '90 correspond to actual growth during the first and second halves of that year. From 1991 onwards the columns are based on annual conditional forecast numbers taken from the Bank of Israel plan (1991).

[3]For an analysis of recent developments see Bruno and Meridor (1991) as well as Bank of Israel Annual Reports for recent years. A set of key summary indicators for the five years before and after stabilization appears in Table 1 of this paper.

[4]To clarify my own involvement (and thus disclaim any objectivity) I should mention first that during 1984-85 I had the benefit of participating informally as an outside academic in the design and immediate follow-up of the 1985 stabilization program. Subsequently, from June 1986 until August 1991, I served as Central Bank Governor. In the Israeli case the latter position involves a mixture of two different assignments. On the one hand it carries the direct policy making responsibilities in the area of monetary and exchange rate policy as well as banking supervision and financial market reform. In addition, however, in all other areas of macroeconomic policy, the Governor's involvement, by Israeli Law, is that of the Senior Policy Advisor to the Government. Such advice, of course, may or may not be heeded and often is not even requested, and in many ways one may here set one's own priorities.

The following discussion does neither purport to be a detached assessment of an interesting laboratory experiment nor to give an exposee of autobiographical anecdotes (though these too can sometimes be interesting ...). It is primarily an attempt to the road map of players and rules of the game.

Elsewhere I have expounded on the notion[5] that economic programs and policies, like commodities or services, can be considered in terms of their own market, which overlaps with the political marketplace, and whose rules may be quite remote from those governing acceptability in the academic marketplace, although that too may count. Many programs make perfect economic sense but could fall apart for a variety of reasons. Policies must be supplied and packaged in a way that would make them attractive to the policy makers, to the politicians as well as to the technicians who, in turn, must all be able to "produce" and "sell" the policies to the ultimate consumers - the public at large.

One can think of various other analogies with the commodity market although they should not, of course, be carried too far. A policy may be a one-time transitory act, like the sale of a perishable good, or it may be durable with some obsolescence attached to it. A more extensive program of economic action, for example, could be likened to the investment in a durable good whose upkeep depends on "maintenance" and its consumption comes in the form of a flow of services (i.e. current policies) which the consumers may or may not like to pay for. The act of "consumption" is usually collective, of course, involving simultaneously a benefit

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highlight certain issues to one's professional colleagues from the vantage point of an academic who has wandered temporarily into the labyrinth (and sometimes jungle) of policy-making.

[5]See Cairncross (1985) and Bruno (1990).

to some and a cost to others, and there is obvious scope for free riders and dynamically inconsistent behaviour. Therefore, much of the sale and the implementation of economic policies involves the enhancement of public acceptability as well as specific political pressures and compensation schemes. It is also important to stress that precisely because political forces and short-term political survival and expediency play such a key role in the execution and outcome of policies, one so often observes economies caught in "bad" equilibria such as result from persistent budget deficits and high inflation.

In our present context we mainly deal with the design and follow-up of a comprehensive program, like a stabilization package or structural reform. While usually much more complex than a single one-time policy in both design, sale and practical implementation, a reform of this kind may have the advantage that its collective "consumption" could eventually leave everybody better off, namely at a higher level, or "good", equilibrium. In other words, it could be represented as a positive-sum (rather than zero-sum) cooperative game. Technically, of course, it is a repeated game which must usually be played over several periods where both present costs and potential future pay-offs may be highly uncertain. Thus, illusive notions like the building up of trust, or the reputation and credibility of the policy maker, play an important role in the outcome.[6]

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[6]One should comment, as an aside, that while it is important that these notions are being formalized and are becoming more of a household word in our profession, there is little in the

What are the groups of players that participate in this game? I shall naturally deal specifically with the Israeli "marketplace", although there are obvious parallels in any other democratic system. It should be stressed at the outset that, unlike in many other economies that I know, the Prime Minister of Israel by tradition seldom takes an interest or intervenes in economic issues (Peres's in 1985 was a temporary aberration, brought about by very special circumstances). His or her preoccupation centers on matters of defense and foreign policy, while economic leadership and the substance of economic policy are usually delegated to the Minister of Finance who may or may not be vested with the full powers.

The most relevant groups (with which the Bank of Israel has to contend) are the following: 1) The Minister of Finance and his top officials who are in charge of the design and execution of government economic policy, in particular the various components of fiscal policy; 2) The other government ministries, whose main objective is to get the largest share of the budget pie; 3) The legislators and members of parliamentary committees. In Israel, at least, they mostly represent special, i.e. share-of-the-pie, interests (in particular, there is a relatively strong populist lobby) and do not particularly care for stability (of the price level or of macroeconomic policies) per se or for the need to increase the size of the pie. Moreover, they may sometimes

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conventional upbringing of an academic economist that should make him or her particularly suited to apply these in practice as a policy maker. I shall return to the relevance of economic theory at the end.

dangerously initiate budgetary expenditures on their own accord.

Next come the representatives of the private sector, 4) The workers unions (the powerful Histadruth, the Israeli Federation of Workers, as well as some quasi independent professional unions who breath down the Histadruth's neck). These usually represent the wage and work conditions of the insiders who are employed, rather than the outsiders who are unemployed. In the Israeli case the Histadruth is also the owner of some large scale industrial enterprises, the major health service, pension funds, etc; 5) The Employers Associations of which the Association of Manufacturers is the most influential. The latter's objective most often is to milk the budget for special investment subsidies, uphold protectionist measures, etc. In the present context they have all along also been the strongest pro-devaluation lobby, valuing the protection of the real exchange rate at the expense of price stability; Next come 6) The members of the economics profession (including universities, semiacademic research groups and the occasional public spirited economists in a government ministry). They, of course, usually represent the "common good" but are often divided on key policy issues such as the role of exchange rate policy. Finally there is 7) Public opinion at large, in the formation of which the media play a most important role.

Each one of these groups is by no means a monolith, sometimes coalescing against other groups and sometimes engaged in internal conflict. The resulting game is thus extremely complex and assessing the outcome, let alone affecting it, is an art rather than a science.

I have so far not mentioned the Bank of Israel (BOI) explicitly. Needless to say it is a key player in this game, as a fairly independent central bank would be. Two aspects of its standing in the Israel economy should be mentioned, however. One, already stated, has to do with the statutory, though unconventional, role of the Bank Governor as Senior Economic Advisor to the Government (in addition to the conventional responsibilities of a central banker). This makes the BOI's research department, which is a very important organ of the Bank, deal with whatever general analysis or policy questions on which the Bank chooses to offer an opinion. The other point worth mentioning is the increased measure of independence that the Bank has obtained since 1985. This results in part from an important piece of legislation, that has since 1986 forbidden the Ministry of Finance to borrow from the Central Bank other than for bridging loans within the fiscal year. Another less noticed endogenous element of self-acquired independence comes from a gradual but major reform that has taken place in the tools and implementation of monetary and exchange rate policy, an issue to which we shall return below.

Before turning to the aftermath of sharp stabilization let me briefly mention the ingredients of potential success in the initial phase of a program of this kind as they can be judged in hindsight from the Israeli experience: 1) The comprehensive program had better come in the wake of the failure of alternative partial attempts to correct the system (it should, of course, be believed to be a different program. There is little that is perceived to be less credible than trying again a program that had earlier failed - vide the repeated Argentinian and Brazilian stabilization attempts). 2) The central political leadership should be strong (preferably based on a wide coalition) and at the same time with "its back to the wall", namely there should be no obvious escape route but to adopt the program (promise of external aid that would otherwise not be forthcoming can help). 3) The program had better be designed as a whole, tightly integrated, indivisible package - there is nothing politicians like better than the ability to pick only the parts they like best, claiming that they have adopted "most" or "almost all" of the proposed program. 4) Attempt to obtain a consensus among some key members of the economics profession; another pet hobby of politicians is to exploit the differences of academic opinion to their advantage. 5) The program had better have the ingredients of potential welfare improvement for most of society even if a short-term sacrifice is inevitable. 6. Last but not least - the program had better be perceived as enhancing the (short or long-term) survival of the political leadership.

Even when all or most of these ingredients seem to be present ex-ante, the fate of even a seemingly good program is highly uncertain. The first hurdle of acceptance arises from the short--term costs dominating the calculus of some of the key players, e.g., Ministers who have to give up budgets which maintain their power base or unions that have to accept (temporary) real wage cuts. To overcome these there must be enough short-term carrots and sticks such as promised external aid that would be forthcoming if the program is accepted or the chaos that is perceived to prevail if not implemented. There must also be a strong enough contingent of players who perceive the long-term benefits such asindependent economists, the media, or members of the public who have nothing to lose from the adoption of the program.

Recent history abounds in major stabilization programs that were eventually adopted and have even succeeded in bringing down inflation quite dramatically in the first few months after stabilization. Cumulative experience, however, also shows that the toughest test comes at a somewhat later stage, when the real social and other costs have to be incurred. This and the process of structural reform are taken up in the subsequent sections.

II. The Cost of Making Low Inflation Sustainable

The contest over policy in the aftermath of a sharp stabilization, particularly when the latter comes at the end of a very prolonged period of high inflation, takes a special twist which will in general not be present in the conventional inflation - unemployment or balance of payments trade-offs under brief spells of single or double digit inflation. A sharp stabilization may, for a time, reduce inflation dramatically, but it will not in and of itself eradicate inbred inflation mentality or time-honoured norms of inflationary behaviour on the part of all relevant agents, both public and private. Expectation of automatic nominal monetary, wage and exchange rate accommodation, as well as automatic bailing out of failed enterprise, is a natural by-product of a sustained inflationary era (which in Israel lasted 12 years), and it is all too easy to become addicted to it. To this, one should add the false air of complacency that might accompany the first stage of seeming success in the dramatic reduction of inflation and the initial credibility signalled by the renewed build-up of foreign exchange reserves. It is as if immediately after the "worst is over" time would seem to be ripe to relax the fiscal and monetary reins, particularly if such worthy objective as "resumption of economic growth" can be invoked.[7]

The most obvious bones of contention, in the aftermath of stabilization, apart from the need to hold tight reins over the budget, are high real interest rates and the inevitable real appreciation that comes in the wake of choosing the nominal exchange rate as the key nominal anchor. The other side of the coin, in the Israeli case, was considerable real wage overshooting. This resulted from a combination of a precomitted post-stabilization nominal wage increase as the necessary inducement of the unions to get into the

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[7]In the Israeli context this took the form of an announcement by Prime Minister Peres in February-March of 1986, half a year after stabilization, that "now that we have licked inflation, it is time to grow". What he implied is that it was time to spend public funds liberally to help ailing Histadruth enterprise. Luckily Moda'i, the Minister of Finance (with some help from the side wings), eventually succeeded in resisting the pressure. This, of course, is the Achilles heel of all successful stabilizations . I have since had more than one occasion to recall the Israeli episode in an attempt to strengthen the hands of the corresponding actors in the aftermath of other sharp stabilizations (Mexico, Yugoslavia, Poland).

stabilization pact, as well as a "soft" employers' response to wage demands in the expectation of an exchange rate accommodation a few months after stabilization.

In all of these there are two separate credibility tests in which the serious intentions of the policy makers are tested by all players concerned. In the first of these, attaining credibility in the defense of fiscal restraint, the Bank and the Ministry of Finance (as well as the academic economists) have usually coalesced. But there is a different, though complementary, type of credibility game, which has to be fought even when fiscal balance is maintained, and that has to do with the use or avoidance of surprise inflation to obtain temporary erosion of the real wage or depreciation of the real exchange rate.[8] In this test, notably maintenance of monetary restraint and adherence to stable nominal exchange rates, the Bank had to be a loner (often against the pressures of the Ministry of Finance, which in turn is coaxed by the Manufacturers' Association, representing a short-sighted view of the exporters) with only few of the academic economists supporting the "new" approach to exchange rate policy. This debate is, of course, not foreign to participants of the European ERM, especially where these had previously been inflation-prone countries (France, Italy, U.K., Spain).

The slump that came only two years after stabilization (after

[8]On the importance of making this distinction see also Kiguel and Liviatan (1990). A general analysis of the price anchoring problem for an open economy is given in Bruno (1991).

a substantial post-stabilization boom - see figure 3), involving low growth and rising unemployment, reflects both the delayed emergence of the crisis in the real economy, hitherto concealed by the mirage of high inflation[9], as well as the repeated credibility formation game or learning process, in which the policy makers must signal their "true type" to the private sector. The most important fiscal signal came with a very painful decision, taken at the end of 1987, to stop the multi-billion dollar development of the Lavi aircraft project (in this the Bank of Israel played a major role) and was followed with the refusal to help, except under extremely strict terms, in the financial restructuring of a series of manufacturing and agricultural conglomerates, in some case (such as for Koor Industries) to the chagrine of foreign banks who in the past learnt to act under the false premise that automatic government bailing out would prevail. In almost all of these cases stringency has paid and the eventual recovery took the form of substantial restructuring, labour shedding (which at least in part explains the increase in unemployment in 1989. See Table 1) and considerable increase in productivity.

Figures 5a and 5b as well as Table 1 show the patterns of movement of the exchange rate, prices (in terms of the manufacturing wholesale price index), and nominal wages (hourly wage rate in manufacturing), each trailing the other in the monotonic downward movement during disinflation, where the balancing of the budget (see

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[9] For an analysis of this phenomenon as well as some parallels from the 1920s, see Bruno and Meridor (1991).

Table 1) and the pegging of the exchange rate played the key role. We note the very slow but consistently downward monotonic convergence of nominal wages towards a lower rate (the average annual rates of change fell monotonically from 61.4% in 1986 to 15.6% by 1990) . Some of this convergence has to do with a (slow) reform process going on in the labour market, of which more will be said in the next section.

The outcome has been a partial reversal of the 1986-87 overshooting of real wages (which was also showing in a substantial increase in per unit labour costs in those years. See Table 1) Figure 6 shows the turnaround in the relative wholesale price levels somewhere around 1988-89. This partly reflects an easing up on the exchange rate followed by a change in the exchange rate regime, but is no doubt also connected with the wage moderation process that was described earlier. It can also be seen from figure 7, in which a convergence of non-tradable goods prices to the price of tradable goods (another piece of evidence for the stabilization of the real exchange rate after substantial real appreciation had taken place) closely trails down the monotonic fall in wage inflation in the business sector.

A very similar slow convergence process, though through a somewhat different mechanism, has characterized interest rate behaviour. Figures 8a and 8b (see also Table 1) show a reduction of nominal interest rates (in terms of the interest rate on overdrafts) as well as a narrowing of the interest rate spread, all of which had been extremely high right after stabilization.[10] We note that after an excessively high rate immediately after stabilization in the second half of 1985 (under a previous central bank governor ...) , the rate came down and was then deliberately increased in March 1987 (this time the present author is to blame ...), during the first post-stabilization alignment of the exchange rate. This was done for fear that inflation would accelerate at that point, a fear which in hindsight turned out to be unjustified and also costly.

In view of the subsequent, very sluggish downward interest rate response to a substantial easing up of monetary restraint (by a highly concentrated banking system, acting, at that point in time, in cartel-like fashion), the preceding step on the monetary brakes seemed overly costly. The kink in the interest rate curve in the first half of 1989 reflects a direct step intervention by a frustrated central banker. Rather than "raising one's eye-brows", which in the case of Israel would be met by the bankers with only a smile, an open public threat to invoke direct legislation proved credible. Both that single act of "brute force" as well as a series of far-reaching reforms of the financial markets have since moved financial markets and interest rates into a much more free-market, Western style, mode of operation.

At what point in the disinflation from high inflation can the relatively extreme form of monetary and exchange rate restraint be eased up? The extent of screams by the business community are

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[10]Because of relative stability of the inflation rate after 1986, the fall in *nominal* rates also reflects a corresponding drop in real rates of interest.

certainly no guide (the "wolf,wolf" cries are a regular feature anyway), but nor is there any scientific way of finding out ahead of time. Some guide can be given by the extent of increase in unemployment and the gut assessment that the stabilization lesson may have finally penetrated. A less benevolent interpretation of events would view this as an ex-post rationalization of what may have been a series of unpredictable events.

One event, which is of more than anecdotal significance, has to do with the extended period, from March 1987 to December 1988, in which no exchange rate adjustment took place. Here traditional roles were reversed. Given wage and price developments in the preceding period and the emerging slump, the Bank of Israel felt that sometime in the first half of 1988 an exchange rate adjustment of around 6-7 percent was due. The minister of Finance (Nissim), on the other hand, dragged his feet in the belief that in the months preceding the impending general election of November 1988 a price hike would be politically unpopular. Since it takes two to dance the tango of a step devaluation, this had to be postponed until a massive speculative outflow forced a hurried dual (5 + 8 percent) devaluation with the help of the next Minister of Finance (this time Peres) immediately after elections.

This rather traumatic experience with a relatively rigid exchange rate peg was quite instrumental in accelerating our subsequent change of regime to much greater flexibility within a plus or minus 5% band. The incidental result of this shift was to give the Central Bank from then on much wider control over exchange rate policy, turning it into a more integrative part of monetary policy formation.[11]

Consider now the inflation rate in terms of the consumer price index (see fig. 1 and Table 1, first line). It displays remarkable, almost stubborn, stability after mid-1986. On the one hand, given the political pressures and the pro-inflation temptations and threats that have been described this can be considered a major achievement. In fact, in none of the other so-called success stories of recent years (Bolivia, Chile, Mexico, Poland) has inflation hitherto dropped to a lower rate. On the other hand, the fact that after 5 years it has not decelerated further is greatly disappointing. How and why inflation landed almost from the start on this particular rate may be entirely accidental.[12] Its persistence, on the other hand, is best explained in terms of backward and forward indexation (self-fulfilling expectations) and the perception that the key policy makers were not willing to impose the social costs (in the form of an extended recession and bigger unemployment) that would have to accompany another step reduction in inflation. In particular, another major recession could be ill afforded at a time in which the absorption of large scale

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[11]In terms of the division of policy responsibilities, this represents a shift of control from the Finance Ministry to the Bank.

[12]A possible reason may be the ongoing initial devaluation of the Shekel against the trade-weighted basket of currencies. This was the accidental result of maintaining a dollar peg (from July 1985 to August 1986) while the dollar depreciated against the other currencies.

immigration is of paramount importance.

A closer look at the figures (see Table 1, lines 2 and 3 and Figures 5b and 9) does, however, point to the possibility that core inflation (as represented by the wholesale price index or the net CPI index when purged of housing and government controlled prices) has dropped somewhat in 1990. Continued entry of new immigrants into the labour force and further wage moderation may yet help continue a gradual disinflation process in spite of another recent price hike coming from the appreciation of the dollar during the first half of 1991.

III. Structural Reform and the Resumption of Growth

The Israeli economy is sometimes caricatured as one of the most extreme cases of more or less fully government-controlled economies in the western hemisphere. While this may have had an element of truth in the 1950s and 1960s government-led development phase, even then only small parts of the economy could have been described as subject to the rules of a command economy-type system. The bulk of the economy, even the largely collectivized agriculture, was essentially market-oriented even though most of the land was publicly owned and investment was controlled and financed by the government. Also, substantial trade-liberalization has been a center-piece of the export-led growth strategy since the 1960s. There continued, however, substantial and widespread government control in some of the key areas of economic activity, especially in the financial, foreign exchange and capital markets, while the labour market has always been under the heavy influence of the trade union movement.

During the years of crisis, after 1973, some of these controls, particularly in the financial and capital markets, have taken a deeper hold. In large part this has been the result of the need to provide steady (and relatively cheap) finance for the persistently large government deficit. The latter, in turn, originated from large social expenditures on top of a high defense budget, while at the same time the government continued to supply subsidized government credit to the favoured economic sectors (mainly agriculture and manufacturing exports). The most glaring result of these developments has been a very large cumulative domestic (indexed) government debt reaching 130 percent of GNP on the eve of the 1985 program (in addition to the external debt of about 80 percent that was mentioned above).

The balancing of the budget from 1985 onwards has put a stop to the increase in net debt (see Table 1, last three lines) and provided the opportunity to free the financial and capital markets from the claws of extreme government control. On the other hand the sheltered convenience of a government-monopolized capital market (in terms of easy access at preferential terms), or the ability to allocate credit through extra-budgetary channels (and thus often sheltered from the scrutiny of parliamentary committees) is not a privilege that a Finance Ministry would give up easily. Nor was the government in Israel constrained by having its own hands tied to the kind of collective financial reform process that a typical member country of the EEC was forced to adopt in recent years. Unlike an extreme high inflation or hyperinflation crisis, where the politics of crisis management (or the need to obtain foreign aid) might lead one to adopt a quick-fix stabilization solution, the urge to reform a distorted market structure has hinged mainly on the internal pressures of the economists (led in this case by the Bank of Israel), occasionally helped by relevant parts of the business sector, and often obstructed by those in the business community who would stand to gain from the preservation of the status-quo.

In the course of the last five years the greatest progress has thus been made in those areas, primarily financial markets (including foreign exchange decontrol), where the Central Bank's legal or coercive powers are the strongest. Financial markets indeed gradually shifted from extreme segmentation and quantitative restrictions, which showed in huge interest rate differentials (between domestic and foreign, directed and nondirected, short and long-term credit), to a much more flexible, almost deregulated, system.

Before 1985, 70 percent of all outstanding credit in the economy was government-directed (in terms of quantity, price and destination) in one form or another. That included direct credit given to exporters through the Bank of Israel, a distortive system introduced in the 1970s as a substitute for direct export subsidies. It was completely abolished in 1990 as were previously a number of other direct channels of government credit. By now 70 percent of all outstanding credit in the economy is completely free while the remaining 30 percent consists of credit from government special deposits mostly inherited from the past and phasing out gradually. Next quantitative restrictions on direct and indirect foreign borrowing through the banks have been virtually abolished while considerable relaxation has taken place in the ability of Israeli firms to invest abroad.[13]

The opening up of the economy to capital movements was greatly facilitated by the change in exchange rate regime and the simultaneous development of the foreign exchange market, with suitable new financial instruments that have been introduced at the same time. So far the new regime has stood up to the test of some minor speculative attacks. A further opening up of the market in both directions, including the granting of permission to foreign citizens to trade in Israel Government bonds and in domestic currency, is planned for the near future.

During the same period a major shift has taken place in the mix and application of monetary instruments. From extreme reliance on the use of reserve (liquidity) ratios, which are cumbersome and require government approval, we have moved almost exclusively to periodic (monthly, weekly and daily) money market auctions and open market operations on government debt of short term maturity.

One central aspect that distinguishes the financial reform (as well as the other structural reforms) from the sharp stabilization

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[13]For a detailed decription of the deregulation process, by the senior manager in charge at the BOI, see David Klein (1991).

phase is the gradualist strategy that was chosen in this case (though partly with preannounced targets). While a quick-fix strategy for financial reform is sometimes claimed to be more effective (and less prone to reversal), it had the advantage, in the Israeli case, of being low-key, thus not attracting excessive political heat, and also enabling some check on unwanted or unexpected side consequences. As mentioned before, all of these developments (in both monetary and exchange rate policy implementation) also had the fortuitous result of giving an increasing measure of independence to the Central Bank. It is also worth pointing out that with the increasing deregulation of financial markets, banking supervision by the Controller of the Banks (at the BOI) had to be considerably tightened in several respects. This is an important sine qua non of financial deregulation that is often overlooked (vide recent upheavals in the U.S. banking system).

In other areas of structural reform the power of the Bank is confined to its advisory role, so that results depend on the degree of persuasion (or lack thereof) and thus on the more diffuse parallelogram of forces involving all or most of the participating groups mentioned. Some progress has been made, with the support of the Finance Minister (and the occasional obstruction of some of his officials) in deregulation of capital markets. One thorny issue had to do with the liberalization steps in the mandatory investment of bank savings plans and pension funds in tradable (and hitherto nontradable) government indexed bonds. Another measure has been the free entry of the private sector into the indexed bond issue market, which had previously been monopolized by the government.[14]

Some flexening, with more bounds than leaps, has taken place in the labour market, partly by agreement between the Finance ministry and the trade union federation on the relaxation of wage-price and wage-wage linkages, and partly as a result of market forces, namely the increasing labour market slack.[15]

Finally, an area in which least progress has been made hitherto is the privatization of state owned enterprise. While the size of the sector in the Israeli case is much less than it is sometimes made out to be (e.g. smaller than in the UK before the Thatcher privatization effort), this is nonetheless deplorable. The main obstacle so far has been political, ministers in charge like to keep a handle on the appointment to respective boards of directors, a convenient vehicle for the attainment of political power, and have thus freely exercised their veto.[16]

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[14]For an analysis of the objectives and preliminary results of the capital market reform up to 1989 (when it slowed down) see report by the head of the BOI research department, Avi Ben-Bassat (1990).

[15]The trouble with endogenous reform processes is that they may often have more distortive side consequences than one would get under explicit legislation or social compact. For example, minimum wage restrictions by profession or type of work (e.g. overtime pay) will apply in the organized part of the market (e.g. manufacturing, which is tradable) and discriminate in favour of production of goods and services which are typically less unionized (e.g. services which are on the whole nontradable).

[16]This hurdle may finally have been overcome by the setting up of a small ministerial committee (Minister of Finance, Minister of Justice and headed, as an exceptional circumstance, by the PM) with

Another privatization issue, with whose analysis the BOI has been associated more directly, is the sale of substantial commercial bank equity which has fallen into the hands of the government in the wake of a major bank share crisis during the high inflation period (1983). The microeconomic (and legal) implications of the so-called 1983 Bank Share Arrangement for the management of the commercial banks in question as well as the shape of their ownership structure has been occupying much of the Central Bank's time and energy. That is a separate and complex structural reform issue which is left out of the discussion here.

Since the end of 1989 the economy has been exhibiting a strong recovery in activity (see fig.3). The main push has come from the demand side, namely the housing and consumption needs of new immigrants. However, there is no doubt that with the various components of structural reform decribed here there has been a considerable improvement on the supply side, showing in a substantial increase in productivity (exhibited already during the slump years 1988-99) and in the fact that hitherto, at least, resumed growth in activity has taken place without any greater internal or external instability. At the same time, however, the test of a sustainable growth process still lies ahead. Physical investment in plant and equipment is growing but its rate is still

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exclusive power of decision.

far from the estimated needs of future capacity.[17]

A combination of sluggish increase in profits (hitherto depressed mainly by high labour costs), and a high level of economic and political uncertainty are probably the most important inhibiting factors. Economic uncertainy can be reduced by an improvement in preannounced macroeconomic policy rules (e.g. precommitted fiscal policy over more than one year). Further deregulation and dismantling of bureacratic procedures, particularly in the area of investment, is also required. Sustained growth along with large scale immigrant absorption also entails considerably large capital inflows to supplement domestic savings (a measure of that is incorporated in fig. 2. See also BOI (1991) op. cit.). This in turn depends on similar economic and political factors. The issue of internal or external political uncertainty does not, of course, fall within the realm of the present discussion.

IV. Epilogue

At this point in time, six years after a major stabilization effort and an ongoing structural adjustment process, there is a lot left to be done, since in none of these two areas has the ultimate goal as yet been achieved. On the other hand, implementation of economic policy should probably not be judged against one's own

[17]For an assessment of investment financing requirements, as well as a general policy evaluation of the immigration absorption problem over the next five years, see the recent Bank of Israel program (1991).

priors on the most desirable outcomes but belongs, like politics, to the art of the possible.[18]

What sorts of lessons can be drawn from one's policy experience, given the limited time-frame and the particular circumstances of any one country and point in time? Without even attempting to be exhaustive at this stage there are several thoughts that come to my mind. One has to do with the contrast between ex-ante perceptions and the ex-post adjustment to surprises along the way. Any academic with previous policy experience knows that one is venturing into unknown terrain and that it is important to avoid either extreme frame of mind - that of sticking to a doctrinaire preconception no matter what the complications of the real world are or else get exasperated and easily surrender to compromise. There is constant need to improvise and the challenge is to do so while at the same time not giving up systematic rational thinking. But given the limitations on time and energy the trickiest decision is on the order of priorities of where one wants to put up the biggest fights.

[18] In addition to issues of growth and stability another, not least important, macroeconomic performance measure, is that of income and wealth distribution. It is not mentioned here mainly because the first priority in this particular reform process has been the improvement of the quantity and quality (in terms of price stability) of aggregate output. In any case there are strong reasons to believe that the stabilization process per se has not worsened, and may even have improved, the overall performance with respect to distributive justice. One clear fact is the large increase in net disposable wage income relative to nonwage income (coming from both the increase in the gross wage and the relative drop in the tax burden on wages, when stabilization eliminates the inherent lag on tax revenues from nonwage income).

Upon reading an account like this one the reader may come to the wrong conclusion that learning the art of political and bureaucratic warfare may be a much more important preparation for an economic policy maker than the baggage of analytical tools that he brings with him, since sooner or later he would have to dispense with them. In my own experience that is certainly not the case. Applied theoretical and empirical economic research can be an important component in serious economic policy design. While many of the day to day decisions that a policy maker has to take at the spur of the moment do not allow the luxury or time to think and work out a model, intuition, after all, also feeds on all one's previous theoretical and empirical intakes.

What is no less an important lesson for economic science, though, is that practical policy experience in turn can fertilize and help the subsequent development of theory. The comparative policy experience of stabilization and structural reform in a number of countries in recent years has already led to a burgeoning theoretical literature. One of the interesting tests will be to find out how relevant or irrelevant these lessons will be in an institutional and political setting that is quite different, such as in the liberalizing economies of Eastern Europe.

If the Israeli example cited here is anything to go by, then it does point again to the fact that while a dramatic change in inflation and inflationary expectations and even maintaining a new low equilibrium rate, at least for a while, are perfectly feasible, the reform processes that are usually required to get at the deeper roots of the crisis are inherently long and protracted. While inflationary processes, once they erupt, are quite similar in different countries, the real economy is much more institution- and country-specific. The longer a process has to take, the more likely it is that there will be policy reversals for one reason or another and therefore the more important it becomes to signal policy precommitments in advance, a feat that is difficult under any political system. Maintaining policy momentum may therefore be the hardest task of all. Economics as such does not tell us much on that. A lot more work still needs to be done on specific types of social contracts and the development of suitably efficient institutional frameworks which would enhance the sustainability of structural reform.

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Table 1
Israel: Key Indicators 1980-90
(Annual growth at percentages)

	1981-1985	1986-1990	1986	1987	1988	1989	1990
Rate of Inflation (%)							
Consumer Prices	195	18	48	20	16	20	17
Net CPI[1]	192	16	55	22	17	15	11
Wholesale Prices	195	17	45	19	18	21	12
Wage Rate	200	21	61	30	22	18	16
Exchange Rate	186	11	37	14	2	16	11
Money (M3)	215	26	44	37	19	21	26
Nominal Interest Rates (annual percent)							
Overdraft	495[2]	47	62	62	46	34	30
Fixed Term Debt	257[2]	33	38	43	33	27	23
Time Deposits	255[2]	15	17	18	13	12	13
Labour Market Real Wage (percentage growth)	1.6	3.7	9	8	5	-2	-1
Unit Labor Cost (percentage growth)	2.5	1.2	6	4	-2	-1	0
Unemployment Rate (percent)	5.4	7.6	7.1	6.1	6.4	8.9	9.6
GDP & Employment (business sector) (percentage growth)							
GDP	3.4	4.8	5.7	7.8	2.5	2.0	6.2
Employment	1.6	2.1	1.6	3.9	3.2	0.0	2.0
Debt & Government Deficit (percent ratio)							
External Debt/GNP	68	46	63	53	44	38	32
Internal Debt/GNP	119	105	112	105	100	105	102
Deficit/GNP	-11	-1	3	0	-1	-4	-2

Source: Bank of Israel Annual Reports and Central Bureau of Statistics Annual Abstracts.

1. CPI excluding housing and controlled goods.
2. Figures are for 1983-1985.

FIGURE 1

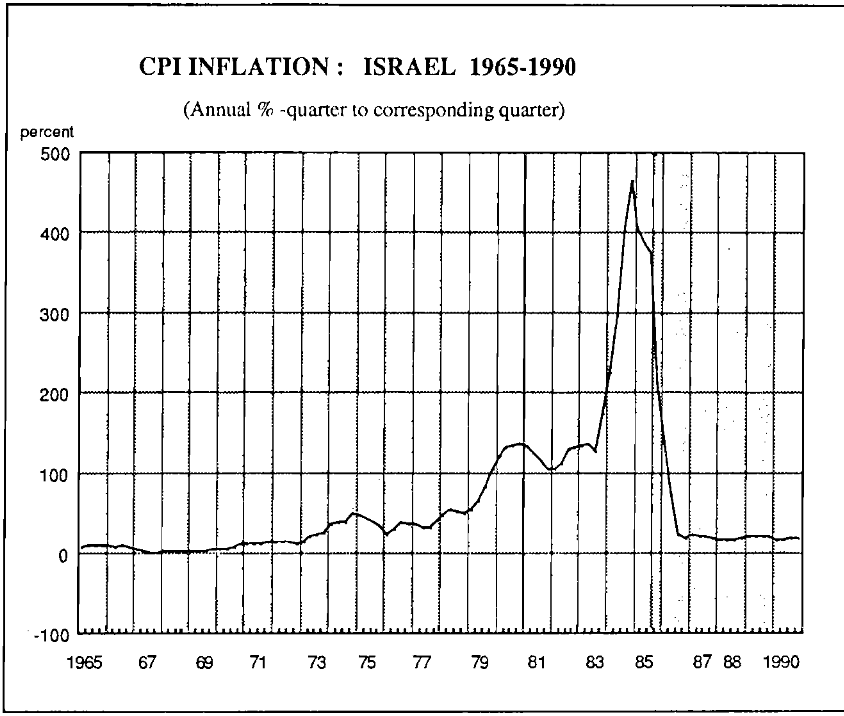

CPI INFLATION : ISRAEL 1965-1990
(Annual % -quarter to corresponding quarter)
percent
500
400
300
200
100
0
-100
1965
67
69
71
73
75
77
79
81
83
85
87
88
1990

Figure 2 External Debt as a Percentage of GNP

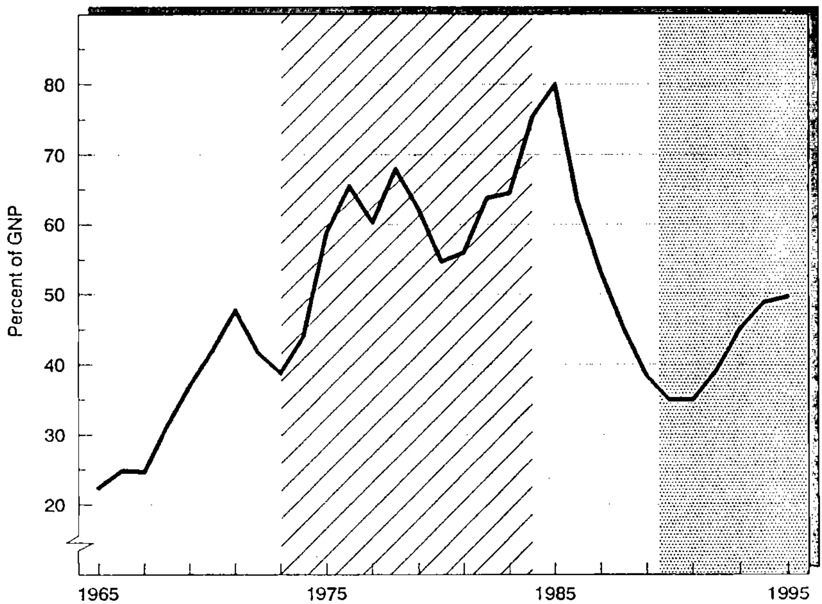


FIGURE 3

THE STATE-OF-THE-ECONOMY INDEX
1975.06 - 1991.05

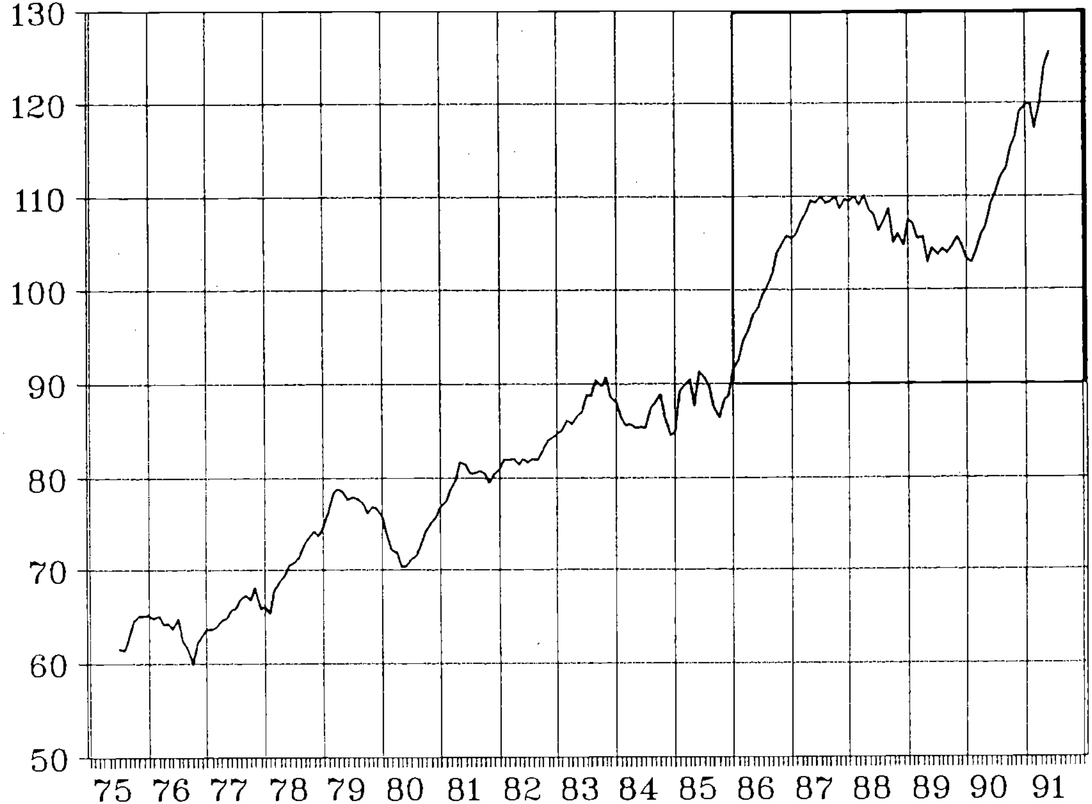
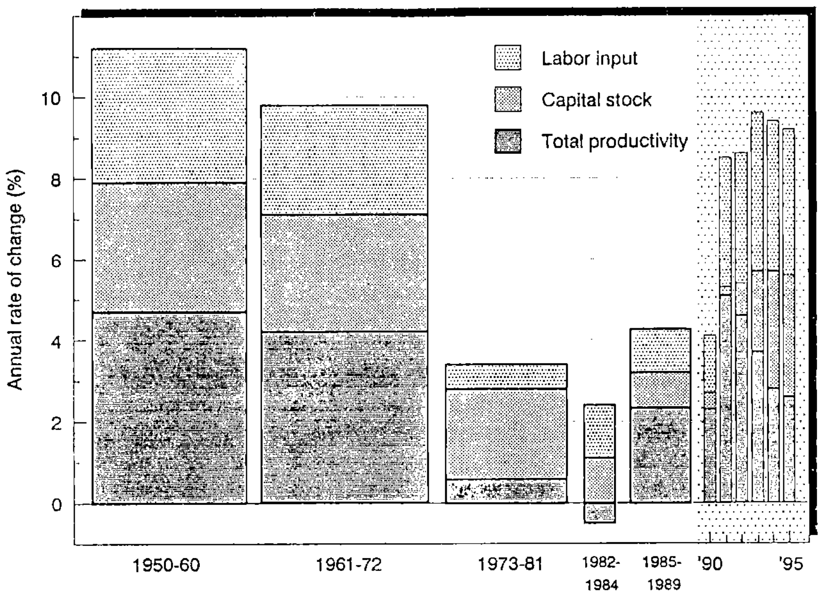


Figure 4. Product, Factor Inputs and Productivity
in the Business Sector, 1950-1995



Exchange Rate, Wage Rate & Wholesale Price

(Annual nominal % quarter to corresponding quarter)

FIGURE 5a

1981 -- 1990

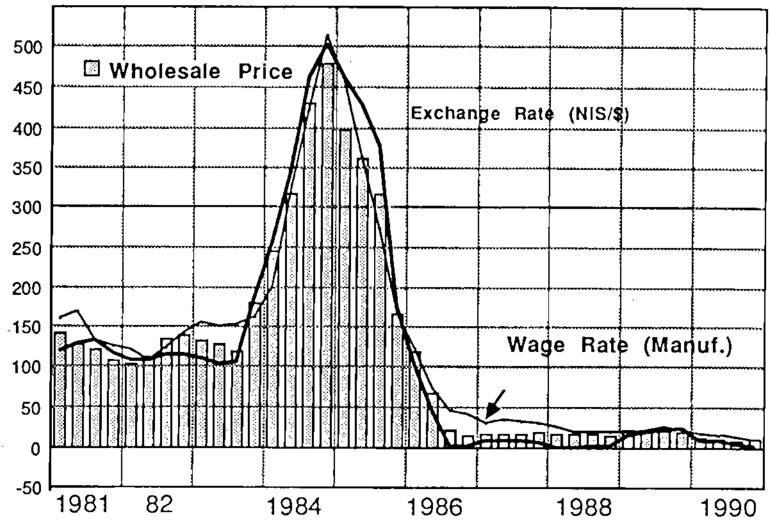


FIGURE 5b

1986 -- 1990

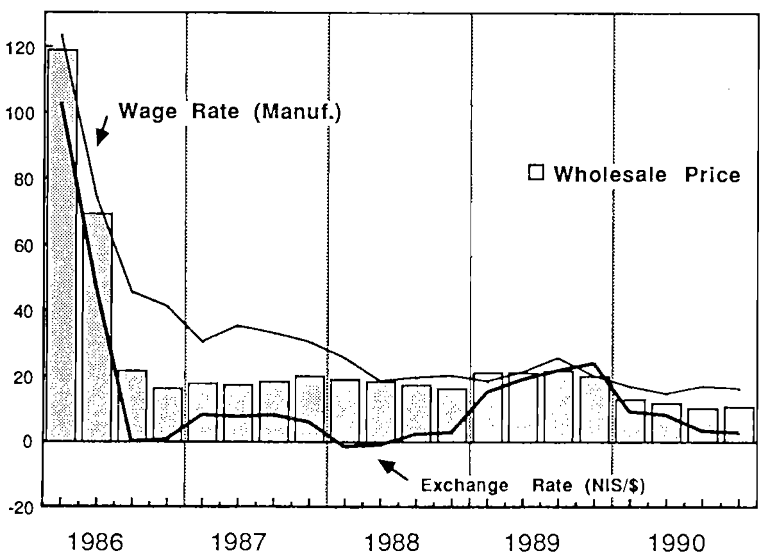


FIGURE 6

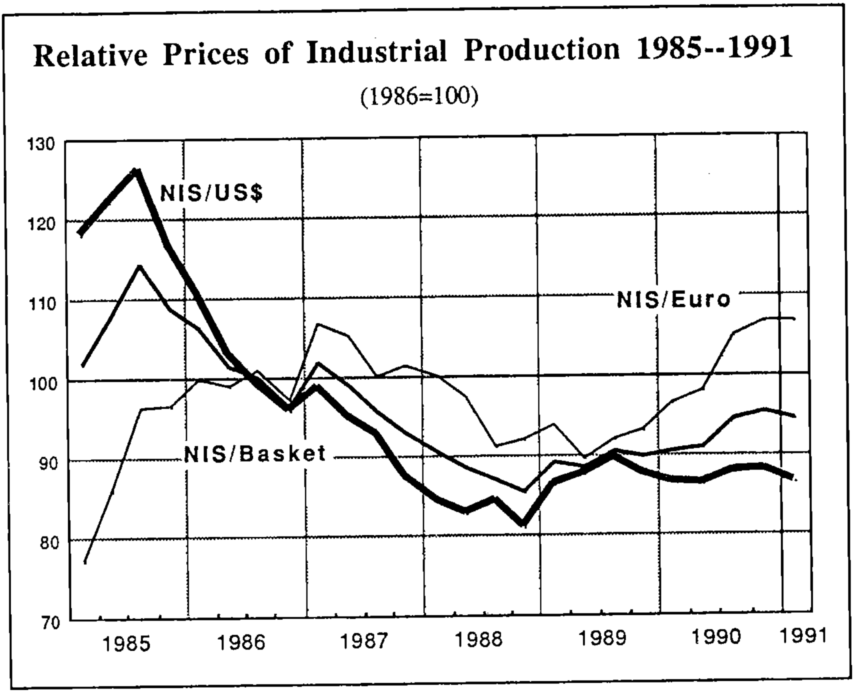
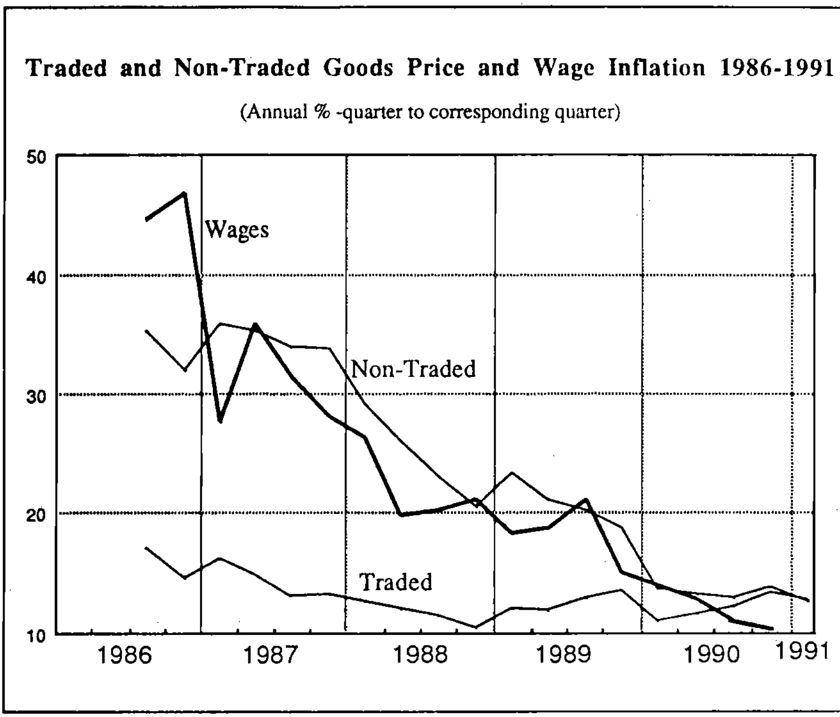

Relative Prices of Industrial Production 1985--1991
(1986=100)
130
120
110
100
90
80
70
NIS/US$
NIS/Euro
NIS/Basket
1985
1986
1987
1988
1989
1990
1991

FIGURE 7


Traded and Non-Traded Goods Price and Wage Inflation 1986-1991
(Annual % -quarter to corresponding quarter)
50
40
30
20
10
Wages
Non-Traded
Traded
1986
1987
1988
1989
1990
1991

Nominal Interest Rate and Inflation

FIGURE 8a

(Annual percent)

1984--1990

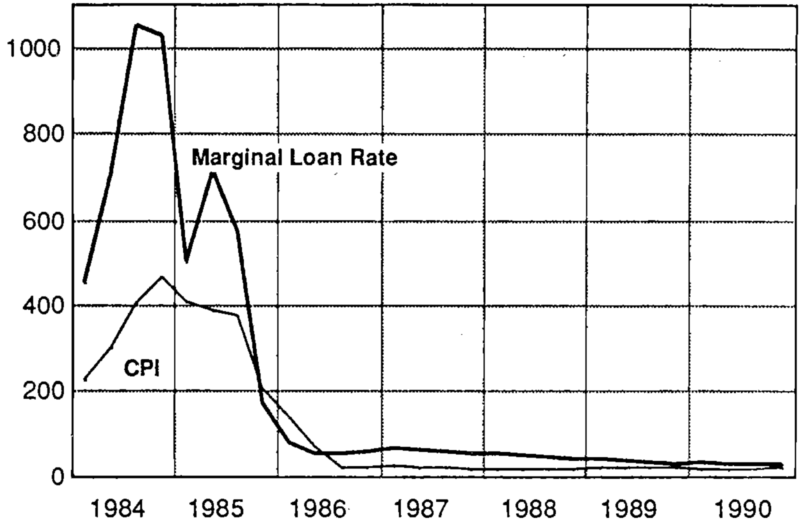


FIGURE 8b

1986--1990

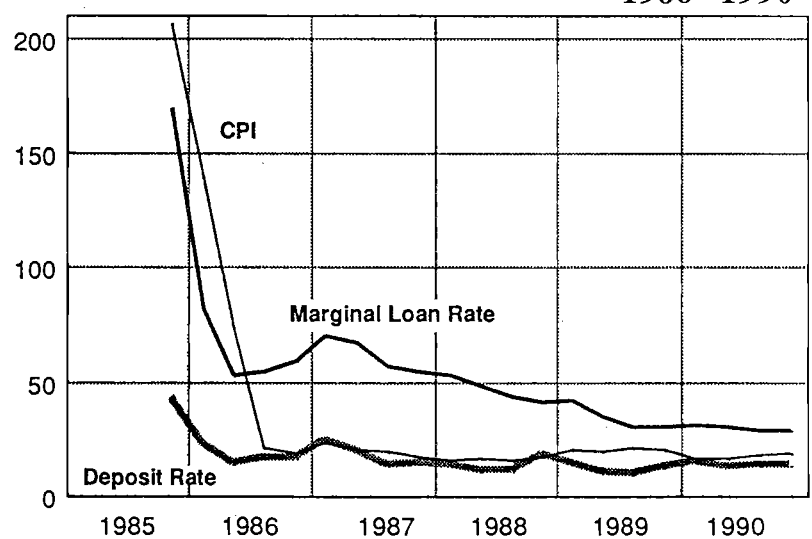
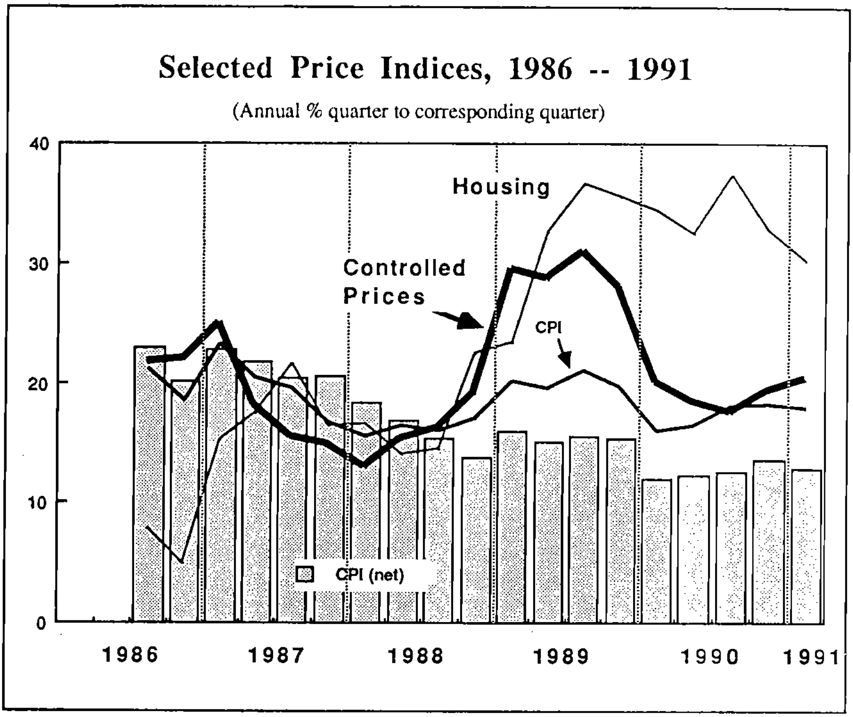


FIGURE 9


Selected Price Indices, 1986 -- 1991
(Annual % quarter to corresponding quarter)
40
30
20
10
0
Housing
Controlled
Prices
CPI
CPI (net)
1986
1987
1988
1989
1990
1991