

# 1 The Obstacle Course to a Market Economy in Israel

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## 1.1 Introduction

The structure and performance of the Israeli economy have changed substantially since the 1985 Economic Stabilization Program. The changes embrace all areas of economic policy, geopolitical background conditions, and the economy's performance. This chapter profiles the changes in each of these areas, analyzes them and their interrelations, and suggests lessons for the future on the basis of the analysis.

In 1985, the Israeli economy was on the verge of an extremely severe crisis. The annual inflation rate exceeded 400 percent, GDP was hardly growing, and the net external debt came to 80 percent of GDP. The state of the economy is totally different today. Since the stabilization program, GDP has been growing by 4.5 percent on annual average, the inflation rate in 1998 fell to a single-digit level, price stability has been achieved since then, and the external debt has fallen to 10.9 percent of GDP (table 1.1).

Macroeconomic indicators do not express the full effect of the structural changes. As we will see, the principal markets—such as capital, foreign-currency, and labor—and the structure of industry also underwent important changes. Government intervention in the markets of production factors and finance was significantly reduced, and deregulation has made the markets more competitive. The structure of main industry groups has become more intensive in trade and services at the expense of all other industries, including manufacturing. The nature of manufacturing, too, has changed profoundly; the share of human-capital-intensive civilian high-tech industries has been growing steadily and that of defense and traditional industries has been diminishing.

The dramatic change in economic developments is mainly the result of a profound change in the economic thinking of policymakers and has also been influenced by regional and global geopolitical processes.

The implementation of the Economic Stabilization Program in July 1985 halted the severe economic deterioration that was triggered by the Yom Kippur War. The program included many measures—first and foremost, the elimination of the government's budget deficit and a peg of the exchange rate aimed at anchoring prices. The stabilization program restored stability in the economy and extricated it from the crisis, but it also marked a turning point in the economic approach of the two large political parties: from an economy in which government is deeply involved, directly and indirectly, in almost all areas of economic activity, to an economy increasingly based on market forces. It took a broad national consensus to implement

**Table 1.1**

Israel: Basic Economic Data

	1984	1999
Mean population (million)	4.2	6.1
Israeli persons employed (million)	1.4	2.1
GDP (NIS billion, 1999 prices)	215.6	417.4
Per capita GDP (\$'000s, current prices)	6.2	16.5
Unemployment rate (percent)	5.9	8.9
Inflation rate (during year, percent)	444.9	1.3
Export (\$ billion)	10.5	39.3
Import (\$ billion)	15.3	47.5
Net foreign debt (percent of GDP)	79.6	10.9
General government expenditure (percent of GDP)	72.4	54.4
General government deficit (percent of GDP)	14.5	4.8

the budget cut and, a fortiori, to alter the existing economic regime. Indeed, the establishment of a national unity government in 1984, which ruled until 1991, helped to realize the turnabout in economic policy and consolidate the new economic policy. Thus, the new doctrine was continued even after the change of governments.

The purpose of the new policy was to make the growth process more sustainable—to achieve price stability and eliminate the current account deficit of the balance of payments—important conditions for the sustainability of growth. According to this approach, sustainable growth must emerge from the business sector. Thus, the role of government in the economy had to be reduced to free up resources for the business sector's growth. To facilitate this process, the government had to take a host of actions aimed at enhancing the efficiency and stability of the business environment. This included structural reforms in the major markets, a reduction of government involvement in directing the use of economic resources, and strengthening of competition in largely monopoly-controlled markets. These reforms were to improve resource allocation; lower the costs of important inputs such as labor, credit, electricity, fuel, and communications; and thereby improve business sector profitability and its incentive to invest and expand.

The share of general government expenditure in the GDP was sharply diminished; within ten years, it declined by an impressive 20 percent of GDP, freeing up extensive resources for the business sector. The composition of the budget was also revised to support growth of the business sector, as infrastructure investments expanded and government involvement in allocating production factors, by means of capital subsidies and taxes on labor, contracted greatly.

Although the beginnings of structural reforms to reduce government involvement in various markets were visible in the stabilization program itself, real change began in 1987. The reforms were implemented more slowly in Israel than in other countries and, even though fourteen years have passed since the restructuring began, the process has not yet been completed. For the most part, the macroeconomic reforms have by and large been carried out and have improved functioning of the financial and capital market, the foreign-currency market, and foreign trade. However, the microeconomic aspects of reform that aim to enhance competition in industries controlled by monopolies still need to be accomplished. The entry of competitors in the telecommunication market—cellular-telephone service and international calls—has been very successful and has helped to bring about a substantial fall in prices. However, other areas of infrastructure—electricity, fuel, refineries, ports, aviation, water, and public transit—remain monopolistic, and the government has settled for regulating rates in some of these industries in a more rational manner.

Geopolitical processes have been no less important. First, the disintegration of the Soviet Union caused a mass Jewish immigration to Israel that expanded the economy and enriched it with human capital. The newly established Eastern European countries opened up their trade with Israel. The second related political factor that left its imprint on the economy is the peace process. The peace accords reduced the effectiveness of the Arab boycott, allowed Israel to access new markets, mitigated Israel's security risks, and encouraged foreign investment in Israel.

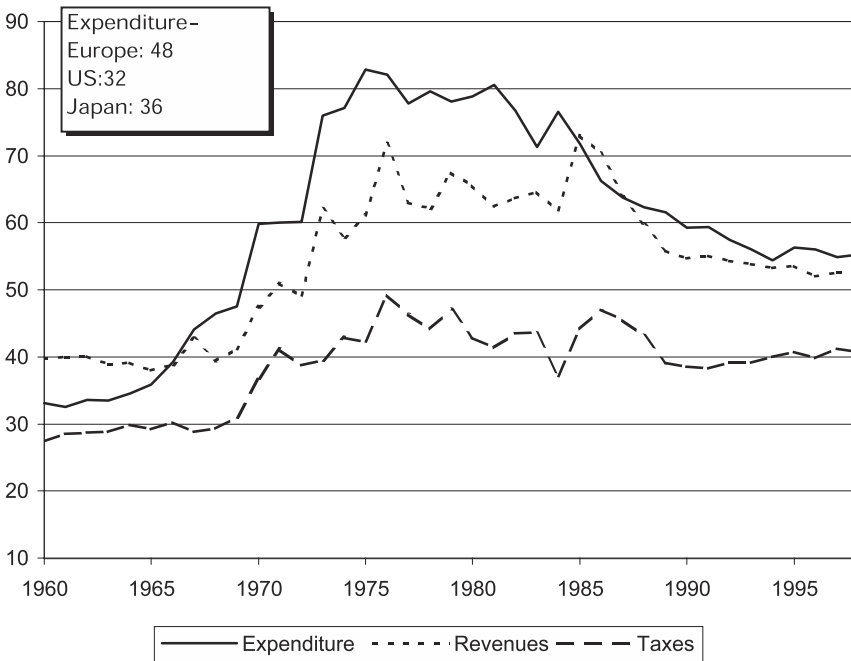
The downsizing of government, the structural reforms, and the peace process have helped to accelerate economic growth, particularly in the business sector. Thus, the business sector's share in GDP has grown steadily since the stabilization program, from 59 percent in 1984 to 67 percent in 1998. However, that growth and the rise in standard of living have come at a price—greater inequality in income distribution.

This chapter describes changes in fiscal and monetary policy, structural reforms, political processes, and their implications on resource allocation, growth, the balance of payments, and inflation. The chapter also analyzes the Israeli reform process from an international perspective and discusses the obstacles that Israel faces on its way to a market economy.

## 1.2 Budget Policy Reform

### The Size of Government

Between the Yom Kippur War and 1985, general government spending claimed a decisive share of economic resources, 77 percent of GDP on average. The desired size



**Figure 1.1**  
General-Government Expenditure and Tax Burden in GDP, 1960–1998  
(Percent)

of government expenditure relative to GDP and the nature of services offered by the government to the public are a matter of normative decision. Although Western economies differ among each other in their approach to this question, the relative size of government is much smaller in all Western countries than in Israel (figure 1.1). Furthermore, although government involvement in economic affairs has always been extensive in Israel, until 1967 the share of government expenditure in GDP was only 35 percent, rather small in comparison with other countries. The government's share began to rise steeply after the Six Day War (1967), following the increase in defense expenditure, and escalated further after the Yom Kippur War.

Such a scale of expansion does not leave much space for the business sector to develop. An increase in government expenditure eventually necessitates a corresponding increase in the tax burden and leaves the business sector with fewer available production factors. The high income tax penalizes the propensity to work and thus impedes employment growth. Fixed investment becomes less profitable and, accordingly, the business sector's capital stock is drained and capital utilization lowered.

Indeed, the tax burden (measured as share of taxes in GDP) rose considerably, from 28 percent in the early 1960s to 44 percent in the crisis years. However, since the added taxes did not suffice to cover the extra spending, the general-government deficit widened and reached a huge size—14 percent of GDP, on average, in 1974–1985. Consequently, the public debt got out of control, and price stability was undermined as well.

The composition of the financing of government expenditure is secondary in importance to the development of GDP of the business sector; its main effect is on the transmission channels between fiscal policy and business-sector GDP. This is certainly the case if one accepts the Ricardian equivalence theorem, which postulates that the public perceives the financing by means of bond issues as a future tax. Even if we disregard this approach, we find that proportional increases in government expenditure had a restraining effect on business-sector growth, partly by increasing the tax burden and partly by expanding the budget deficit. The increase in the general-government budget deficit may have stimulated economic activity in the short run but eventually led to higher inflation, increased economic uncertainty, and higher interest rates, all of which hampered investment demand and economic growth in the business sector.<sup>1</sup> For the same reasons, a reduction of government expenditure would set the opposite processes in motion, that is, accelerate growth of business-sector GDP and increase its share.

The Economic Stabilization Program that was implemented in July 1985 proved to be a turning point for the economy. It eliminated the government deficit in one stroke and prompted a gradual downscaling of general-government expenditure in terms of share of GDP. This process lasted until 1994. The proportion of average general-government expenditure was 21 percent of GDP lower in 1994–1998 than in 1980–1984. Although the share of general-government expenditure declined perceptibly, the tax burden contracted only by a negligible 1.1 percent of GDP. The sources freed up were used for two purposes—mitigating the government's dependency on foreign unilateral transfers and lowering the budget deficit.

Most central-government spending abroad is for defense imports, and the lion's share of the reduction in government expenditure was based on lowering defense expenditure, mainly for imports. Concurrently, foreign assistance for the financing of new defense procurements decreased, as did the repayment of loans previously taken to finance weapons imports. Foreign assistance to the government of Israel has remained constant in dollar terms since 1986, but its share in GDP has declined by 7 percentage points, much like the decline in government spending abroad (see table 1.2). This decrease in the government's dependency on external sources enhanced certainty that the proportional decline in government expenditure would be sustainable; it also lessened the risk of a balance-of-payments crisis.

**Table 1.2**  
General-Government Expenditure and Income, 1980–1998 (Percent of GDP, current prices)

	Domestic		Foreign currency		Total deficit
	Expenditure	Income	Expenditure	Income	
1980–1984	65.8	51.5	10.9	12.1	+13.2
1985–1989	55.6	51.2	9.5	13.4	+0.6
1990–1993	52.5	46.2	5.5	8.3	+3.6
1994–1998	51.6	47.6	3.8	5.2	+2.6
(1980/84)–(1994/98)	–14.2	–3.8	–7.1	–7.0	–10.6

*Source:* Central Bureau of Statistics.

The total decrease in the general-government budget deficit from the early '80s to the later '90s was 10.6 percent of GDP. In the first years after the stabilization program (1985–1989), the total general-government budget was nearly in balance. In the early 1990s, however, it became necessary to expand the deficit temporarily to absorb the mass immigration from the former Soviet Union. To make sure that the deviation would remain temporary, the government initiated a law that required it to reduce the deficit gradually starting in 1992 and to balance the budget by 1995. However, already in 1993, the target for 1995 was relaxed, requiring only a reduction in the share of the deficit over time. At first, the government adhered to these targets and actually overshot them. In 1995–1996, however, the deficit deviated significantly from the planned path—a development that was corrected in 1997. Notwithstanding the volatility of the deficit, overall the government's fiscal discipline seems to have improved substantially. Support for this impression may be found in the interrelationship between the reduction of expenditure and the lowering of the rate of taxation in GDP. Strawczynski and Zeira (in this volume) tested government spending and taxes for cointegration and found a significant change from weak to strong budget discipline after the stabilization program. The statistical tests also showed that the lag between the change in expenditure and the change in taxes has been decreasing over time. Legislation that forbade the government to “print money,” that is, to borrow from the central bank, also helped to strengthen fiscal discipline and to create a clear division of responsibilities between the government and the Bank of Israel.

In sum, we see that the main paths of transmission between downscaling government and letting the business sector expand ran along two axes—greater economic certainty and stability. Those were achieved by a smaller government deficit and less reliance on foreign assistance. The contraction of the tax burden, in contrast, was minimal.

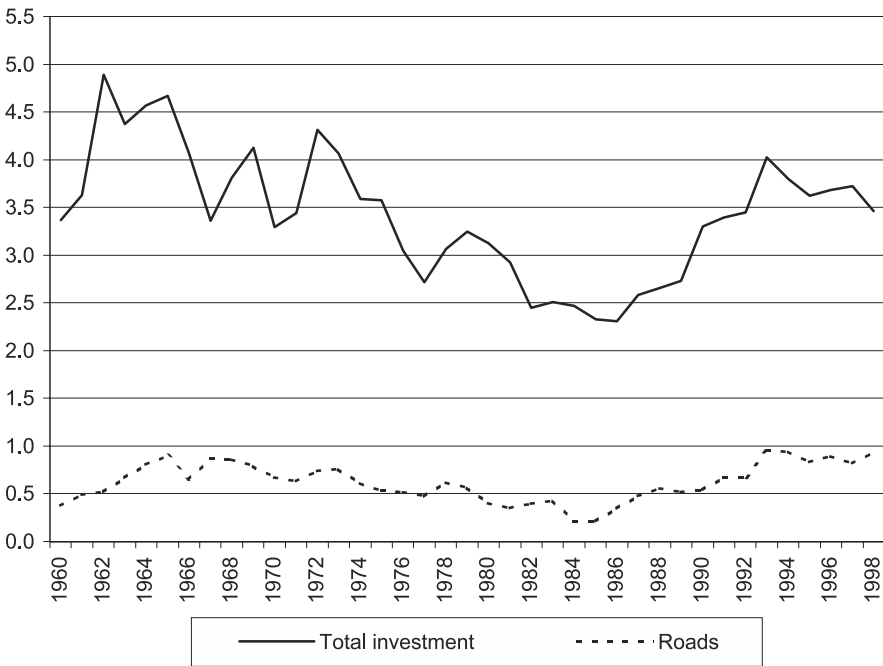
### Composition of the Budget

The composition of the budget also had several important implications for the expansion of the business sector: (a) The privatization process shifted a rising share of general-government expenditure to the business sector (see Strawczynski and Zeira in this volume), as reflected in a gradual and steady proportional increase in general-government purchases from the business sector, for example, for cleaning services, printing, health care, and contract labor. The share of purchases (in 1995 prices) in total civilian general-government consumption climbed from 13.1 percent in 1980–1984 to 26.3 percent in 1994–1998, whereas the share in defense consumption was unchanged. The increase in procurements from the business sector during that time contributed 2.6 percent to the increase in its share in GDP.<sup>2</sup>

(b) Infrastructure investments are of fundamental importance for business-sector growth because they act as a complementary production factor in business activity. However, the budget shortage during the crisis years led to a preference of the present over the future. As a result, general-government sources for infrastructure investments declined significantly, and therefore impaired growth and productivity. Since the stabilization program, however, the share of general-government investments began to rise again, from 2.5 percent of GDP in the early 1980s to 3.6 percent in 1994–1998 (figure 1.2). Bergman and Merom (1993) and Dahan and Strawczynski (1993) found a significant positive effect of infrastructure investments on business-sector GDP supply. Lavie and Strawczynski (1998) found that government investments in road infrastructure made a favorable contribution to the growth of business-sector GDP by improving productivity but did not have a complementary effect on the expansion of capital and labor factors.

### 1.3 Structural Reforms—The Full Half of the Glass

Intensive government involvement in managing the Israeli economy is as old as the economy itself. The first indications of change in the economic regime came into sight in the mid-1960s with an import liberalization, trade agreement with the European Common Market, and elimination of multiple exchange rate practices. In the early 1970s, the Interest Ordinance, which had subjected nonindexed interest rates to an administrative cap, was abolished. Thus, the approach that favored the directing of nonresidential investments by officials gave way to more rational investment-support criteria, in the course of which economic evaluation became more important. After the Yom Kippur War, however, public expenditure rose perceptively, especially for defense purposes but also for transfer payments. Rearmament and a more



**Figure 1.2**  
Infrastructure Investments, 1960–1998  
(Percent of GDP, current prices)

generous social-service policy, without a parallel increase in state revenues, caused a rapid expansion in the government deficit. As a result, the downtrend in government intervention that had been evident in the early 1970s was halted, and the situation was even worsened. The process of de facto nationalization of the supply of funds in the capital-market intensified, and the sources were used to finance government deficits, expand direct support, and provide credit benefits for the business sector. As the balance of payments worsened, nontariff import barriers also proliferated in various and sundry ways. Thus, on the verge of the stabilization program, the government was deeply involved in economic activities.

Only after the stabilization program went into effect in 1985 did policymakers realize that stabilizing the economy was not enough and that to reignite growth, structural reforms that would move Israel toward a market economy were needed. The success of the stabilization program helped its procreators to persuade the political system and the public that this second stage in healing the economy was crucial. At



first, a few reformatory steps were taken, mainly concerning financial markets, but soon a broad and clear conception took shape, first at the Bank of Israel and afterwards at the Ministry of Finance as well.<sup>3</sup>

### **Financial Reforms—Money, Capital, and Foreign-Currency Markets**

Until the mid-1980s, Israel's financial system fell far short of the essential conditions for perfect competition. One of the main reasons for the lack of competition was massive government intervention in all segments of the financial market—the money market, capital market, and international capital flows in both directions. Another factor is the oligopolistic structure of the financial intermediation system.

The government intervened in all activities in the market—raising capital, allocating it, and determining returns. The arguments for government intervention were diverse and varied over time. Until 1973, the main goal was to strengthen population growth in development towns in areas of high national priority, subsidizing housing for immigrants and young couples, and attaining economic targets in the business sector, such as exports and fixed investments, whereas the financing of the government's deficit was of secondary importance. However, the steep increase in the government deficit after the Yom Kippur War in 1973 led to a turning point in both the magnitudes and the goals of the intervention. After 1974, the government used administrative measures to channel most private savings to government bonds in order to finance its huge budget deficit at a lower price than competitive conditions would allow.<sup>4</sup>

The government used a host of tools to control financial markets and dictate its priorities—administrative barriers, exceptionally high liquidity ratios, credit quotas and exemptions from them, restrictions on international capital flows, discriminatory tax rates and subsidies. The financial market was virtually nationalized, and excess regulation made the market very complicated and cumbersome.

Heavy and persistent government intervention in the financial markets had distorted resource allocation. For example, the government allocated “directed credit” for exports in accordance with the rate of increase in export and imposed ceilings on credit for other purposes. Furthermore, interest rates on loans for exporters were subsidized. The preference for exports boosted the financial sources available for this use relative to other goals, such as the manufacture of import substitutes, even though both activities contribute toward narrowing the import surplus and increasing growth. Thus, efficiency in resource allocation was impaired and, for this reason, so was the growth rate. Another striking example—until the late 1970s, the government raised loans from the public in which the principal and interest were pegged to

the Consumer Price Index and, concurrently, granted nonindexed loans for favored purposes.

The variety of prohibitions and exceptions to them, the broad spectrum of controlled interest rates, and the range of tools that the government used to control the market brought about a complicated market structure, impaired its efficiency, and increased the costs of financial intermediators and their regulators. This was reflected in a positive trend in average interest.

The government's heavy-handed intervention impaired the efficacy and efficiency of monetary policy at two levels. First, the provision of unrestricted credit for certain purposes reduced the basis on which monetary policy could operate. For example, export credit, which accounted for one-third of total short-term credit, expanded automatically with export growth. This forced the Bank of Israel to attain its targets by applying policy on a smaller monetary base or, alternatively, to retreat from its original monetary goals. Second, the government's intervention in the financial and capital markets led to a chain reaction of problems. An attempt to solve one problem created a new one.

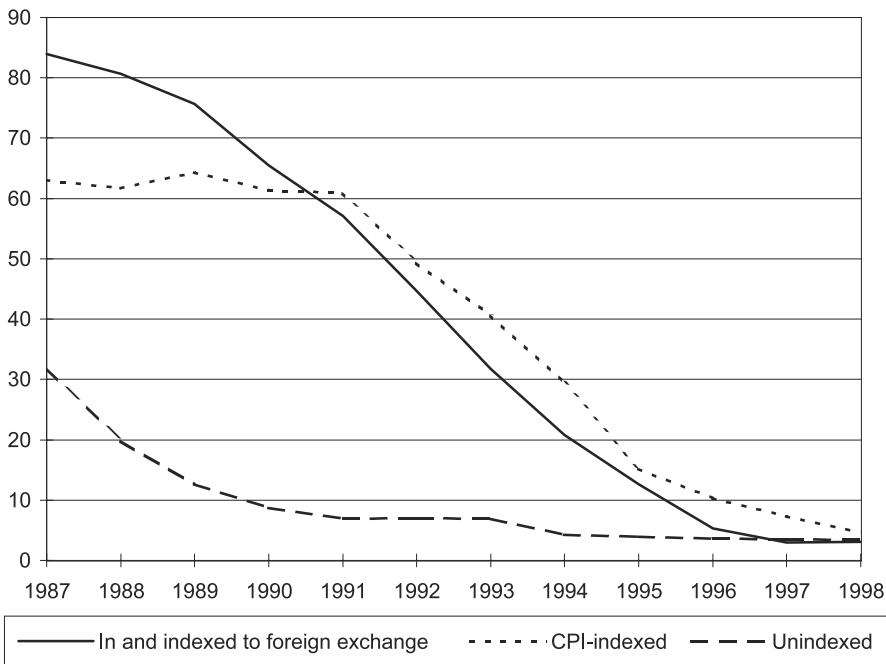
Thus, the financial system became a labyrinth of regulations. In 1977, for example, a foreign-currency liberalization was instituted despite large budget and balance-of-payment deficits. In the absence of appropriate macroeconomic conditions, policy-makers were afraid that the reform would trigger a large capital flight; therefore, they offered the public a government-backed deposit in domestic currency, indexed to the exchange rate (Patam accounts) as an alternative to investing abroad. The share of Patam in liquid assets (the M4 aggregate) climbed to 22 percent within several months of its debut, continued to rise gradually afterwards, and peaked at 66 percent in late 1984. Thus, the proportion of nonindexed assets, on which the management of monetary policy is based, decreased dramatically. Another example was the government policy in the bond market. In 1977–1982, the government stabilized real bond yields to mitigate the risk of holding bonds and, thereby, to reduce the price it had to pay for capital. This policy entailed the sale and purchase of bonds for considerations that were extraneous to the conduct of monetary policy, thereby weakening the Central Bank's control of the monetary base.<sup>5</sup> Furthermore, a sizeable share of nontradeable government bonds was issued to institutional investors at subsidized interest rates. Thus, the size of the free bond market was severely limited and the possibility of open market operations was thwarted. These developments contributed to the loss of monetary control and the high inflation process in 1974–1985.

After the stabilization program, especially from early 1987 on, the government gradually reduced its involvement in the domestic financial and capital market to

eliminate restrictions on cross-border capital flows and to enhance competition among financial intermediators. There exist strong substitution effects among the various segments of the financial system, and the degree of interdependence between them is high. However, each of these markets has unique attributes. Therefore, we first describe the reform in each segment and then examine the combined effect of the measures in making Israel's financial markets more competitive and efficient.

**Money-Market Reform** The financial-market reform was meant to eliminate restrictions that had distorted the assets-and-liabilities portfolios of households and businesses and to enhance the effectiveness of monetary policy. The reform included dozens of individual measures that may be categorized into several groups:

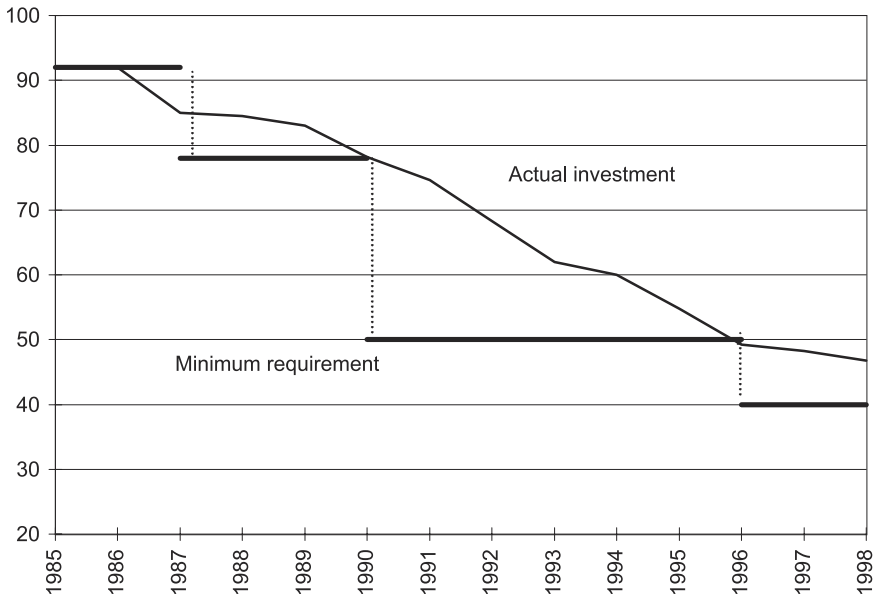
1. The Bank of Israel stopped using liquidity ratios as a tool of monetary policy. Accordingly, the ratios were lowered gradually to a level consistent with business liquidity ratios. The differences among ratios were also greatly reduced. Because a liquidity ratio is like a tax, it widens the spreads between credit and deposit interest rates. Variance in liquidity ratios creates discriminatory tax rates and distorts asset portfolios and, therefore, credit portfolios as well. In 1987, liquidity ratios ranged from 32 percent for domestic-currency deposits to 84 percent for deposits in denominated foreign currency or indexed to exchange rates (figure 1.3). Today, liquidity ratios on all types of deposits are 3–6 percent.
2. When the stabilization program went into effect, Patam deposits indexed to the exchange rate and backed by a government commitment became unidirectional; they could be redeemed but not newly created. Instead of Patam, the banking system was allowed to accept deposits indexed to the exchange rate (Patsam) and to lend to the public on their basis. The result—a decrease in Patam deposits and an increase in Patsam deposits—reduced government involvement in the market of indexed assets.
3. All term limitations on maturities on assets and liabilities indexed to the Consumer Price Index or the exchange rate were lifted.
4. All quotas on foreign-currency credit and bank guarantees were abolished.
5. All directed-credit arrangements were abolished. These arrangements had created a preference for exports, imports of special goods—equipment, fuel, and animal fodder—and assistance for industries in distress. Actually, directed credit began to contract in 1982.
6. As the plethora of restrictions on the financial market was eliminated, two new monetary policy tools were developed—monetary loans and deposits, and issue of Treasury bills. The Bank of Israel used these two tools to control domestic interest rates.



**Figure 1.3**  
Liquidity Ratios for Deposits, End of Year, 1987–1998  
(Percent)

**Capital Market Reform** By 1987, the government had taken several administrative actions that resulted in a de facto nationalization of a very large share of the public's middle- and long-term savings. The elimination of the government's budget deficit removed the main motive for the nationalization of private savings. This development, coupled with the change in the government's economic credo, marked the beginning of gradual reform in the composition of assets and liabilities of the public, institutional investors, and the business sector.

1. All institutional investors—provident funds, pension funds, and advanced-training funds—were required to invest most funds under their management in government bonds. The proportion was 80 percent in the 1960s, but escalating budget deficits raised the share to 93 percent in 1976. A similar requirement was imposed on banks' saving plans. In April 1987, the government began to change course by lowering the compulsory rate of investment in government bonds for all institutional investors except pension funds. The proportion today is 40 percent (figure 1.4). This deregulation



**Figure 1.4**

Share of Government Bonds in Portfolio of Provident Funds—Compulsory and Actual, 1985–1998 (Percent)

lation reduced the share of such bonds in institutional investors' portfolios. Because the adjustment was gradual, the new restrictions did not have a binding effect during most of this time. Today, the gap between the share of government bonds and the investment requirement is 7 percent.

2. Until the reform, corporate bond issues were prohibited except with government authorization, which was very rarely given. In 1987, the private sector was given a general permit to issue bonds. Additionally, the tax laws applying to corporate and government bonds were equalized.

3. Most government bonds issued to institutional investors were nontradeable and paid interest at a preferential rate. This deprived the Israeli free market of tradeable assets and made it susceptible to considerable volatility. Since mid-1985, the government has issued nontradeable bonds only to pension funds and for life-insurance plans. Consequently, the share of tradeable bonds in total internal debt climbed steadily, from 16 percent in 1986 to 51 percent in 1998.

4. In 1995, the government decided to revise the pension-fund industry comprehensively. Existing (henceforth, "old") pension funds were not allowed to accept new

members, and new funds were given a lower level of government support and required to maintain actuarial balance (Spivak, in this book). However, the method of support, for both old and new funds, was left unchanged, that is, the government continued to subsidize pension funds by providing them with nontradeable bonds that paid higher-than-market interest.

Subsidization of pension funds by means of preferred bonds perpetuates the absence of these funds from the capital market. The removal of such an important component from the capital market distorts the interest rate that would bring national savings and firms' demand for these savings into equilibrium. For this reason, it may impair the desired level of savings and investment in the economy at large. The issuance of earmarked bonds to pension funds also creates risks in managing the state budget and carries the hazard of government involvement in the economy. The law of diminishing budget deficits, in its original version, required the government to cut its budget deficit gradually until a balanced budget would result within four years.<sup>6</sup> Therefore, after fiscal consolidation will have been achieved, the government's undertaking to provide pension funds with special bonds will leave the government with unnecessary funds. The government might thus be tempted to increase public expenditure and retreat from its strategy of a diminishing deficit. Alternatively, the government may resume its superfluous function as a financial intermediary—borrowing from pension funds and lending to the business sector. The only way the government can avoid these problems is to refrain from recycling tradeable bonds that have matured, but in this case the tradeable bonds market will shrink and eventually disappear. Such an outcome would derail the economy from the reform path it has followed since the stabilization program, and it would mark a significant retreat from the process of capital-market and budget reform.

The establishment of new pension funds did not help to restructure this industry, which remains highly centralized. The new funds are even more centralized than the old ones (Spivak, in this volume). The main reason for the industry's oligopolistic structure is its high entrance barriers.

### Foreign-Currency Market Reform

**LIBERALIZATION OF CAPITAL FLOWS** The first attempt to carry out a sweeping liberalization in the foreign-currency market took place in 1977. The liberalization was carried out amidst grave economic problems—huge budget and balance-of-payments deficits, spiraling inflation, and a large public and external debt. Consequently, this liberalization attempt failed. Eventually, the government not only repealed it but also, within a few years, made foreign exchange control much stiffer than it had been shortly before the liberalization.

The lesson of the 1977 failure was learned well. It took until 1985, after the government invoked a far-reaching economic recovery program, to launch the second attempt to institute freedom of transaction in foreign currency. The government decided to liberalize foreign-currency activity gradually and to study continually the implications of measures already carried out. The liberalization of capital flows has substantive advantages for an economy—it allows for investment to exceed national savings; it creates the possibility of reducing portfolio risk for households and firms by diversifying the assets portfolio; it makes the financial and capital markets more competitive; and it enhances discipline in macroeconomic policy. However, the utility an economy may gain from these advantages entails risks. Integrating the domestic capital market into international markets exposes the domestic foreign-currency market to speculative attacks and makes the economy much more vulnerable to external shocks. Such shocks may have negative effects because financial markets often overreact in both directions. Furthermore, when Israel began to liberalize, the economy was characterized by two factors that placed the stability of the liberalization at exceptional risk. First, given that inflation spreads between Israel and its trading partners were rather large, there was an unusually high probability of speculative runs on the currency. Second, the public debt was still very high. Furthermore, policymakers were worried that the possibility of overseas investment after many years of a ban on such activity might generate a large capital outflow as the public sought to diversify its assets portfolio.

The choice of gradualism meant that the elimination of restrictions had to be sequenced. The sequence was dictated by three main criteria:

- Restrictions against the activity of the business sector, on both liabilities and assets, should be eliminated before restrictions pertaining to households and institutional investors, because this sequence would have a greater effect on GDP growth.
- Restrictions on capital inflow should be eliminated before restrictions on capital outflow. Given that the limited competition in the banking system is reflected chiefly in credit, competitive capital inflows would make a greater contribution. Additionally, the limitation of foreign-currency sources and the level of the internal debt made it necessary to give capital inflow a higher priority.
- Restrictions on individuals should be eliminated before restrictions pertaining to institutional investors, because most internal debt was invested with institutional funds.

The liberalization of international capital flows began in 1987 and was completed in 1998. The restrictions that were left in effect pertain to overseas investment by institutional investors and forward transactions (Gottlieb and Blejer, in this volume).

**DEVELOPMENT OF THE EXCHANGE-RATE REGIME** The exchange-rate regime is closely related to the intensity of the liberalization of capital flows. It is true that the use of the exchange rate as a peg for prices is advantageous in a small economy. However, since the liberalization of capital flows aggravates the volatility of foreign-currency demand and supply, considerable foreign reserves are needed to defend the exchange rate. A floating exchange rate facilitates liberalization of capital flows even without large reserves.

The process of enhancing the flexibility of the exchange-rate regime began in 1989. The inflation differentials between Israel and its trading partners generated expectations of frequent currency depreciation and, consequently, waves of speculation in the foreign-currency market. Because the exchange rate was defended mainly by means of the lending rate, the Central Bank's interest rate became severely volatile. To attenuate the speculative attacks, a changeover to a target zone regime—a horizontal band at first, a crawling band later on—was set in motion gradually. Furthermore, the band was broadened commensurate with the easing of restrictions on international capital flows, from 3 percent in either direction from the midpoint in 1989 to 15 percent in either direction in 1997. However, although the characteristics of the regime changed several times, only the changeover from a fixed exchange rate to a horizontal band in 1989 was found to be statistically significant.<sup>7</sup>

The transition to a crawling band was meant to reduce the business sector's uncertainty about the expected annual rate of change in the exchange rate and to mitigate the speculative attacks. Therefore, the Bank of Israel intervened not only at the boundaries of the band but also within the band (until May 1995) to keep the exchange rate from deviating far from the midpoint. However, since the main goal of the exchange-rate policy was inflation control, the intervention skewed the progression of the rate downward (Ben-Bassat, 1995). The preference of the inflation target over the maintenance of business-sector profitability gained strength in the middle of 1995, when the Bank of Israel stopped intervening within the band and predicated its anti-inflation policy on very high interest rates. These rates, in turn, caused the exchange rate to sink to the bottom of the band. This approach was also much in evidence in October 1998, when the Bank of Israel responded to the international financial crisis by raising the lending rate steeply to restrain inflation expectations that had risen sharply in response to the rapid currency depreciation that occurred.

**Competition in the Banking System** The Israeli banking system is characterized by an oligopolistic structure, that is, control of most countrywide financial activity by a small number of major banks. For example, about two-thirds of total assets in the banking system are concentrated in the hands of the two largest banks (Hapoalim



and Leumi), and some 80 percent are held by the three largest. Because the large banks also own banking subsidiaries, the industry is even more concentrated in terms of the share of large banking groups in it. International comparison shows that Israel has one of the highest rates of banking concentration in the Western world. This phenomenon can hardly be attributed to the utilization of economies of scale since banking in most small Western countries, such as Belgium, Denmark, and Norway, is much less concentrated than in Israel. Furthermore, Rothenberg (1994) found that the optimum size of an Israeli bank falls in the range of 9 to 12 percent of the market.

Small industrial countries have two additional sources of competition in the financial and capital market that are negligible in Israel. First, they have many substitute financial intermediators to banks, such as brokers, insurance companies, and pension funds. Second, they have a substantial share of foreign banks, and the banking system in the European Communities is quite close to being one big financial market. Additionally, banks in Israel offer the broadest spectrum of services known to exist in world banking. It includes all capital-market activities including management of provident funds, which are part of Israel's pension system. The banks' share in the Israeli pension system is exceptionally large even in European terms, where universal banking is practiced. Israel's two largest banks also controls numerous nonbanking corporations that generate a rather large fraction of GDP.<sup>8</sup> Notably, no other Western country has such a broad range of activities coupled with such a concentrated structure. This breadth of activities creates potential conflicts of interest and, therefore, dampens competition. Because financial intermediation by means of provident and mutual funds is an alternative to classical bank activity, competition is narrowed when banks control these funds (Yosha, 1993). The banks' control of nonbanking enterprises creates a captive market; therefore it, too, impairs competition and creates an entrance barrier (Ben-Bassat, 1996; Bebhuk et al., 1997; *Report of the Committee of Examination on Bank Holdings in Nonbanking Corporations*, 1995). The absence of pension funds in the bond and stock markets also narrows competition in the financial and capital market relative to the standard in developed countries.

In recent years, several decisions to enhance competition in this industry have been made, but few have been carried out. Bank Leumi was forced to sell off Union Bank, and first steps toward splitting of nonbanking corporations controlled by banks were taken.

There are several indications that the structure of Israel's banking system is not competitive. For a lengthy time, this structure caused an exceptionally large spread between credit interest and deposit interest (figure 1.8). Samet and Elias (1994) found a significant correlation between interest spreads and the degree of concentration in

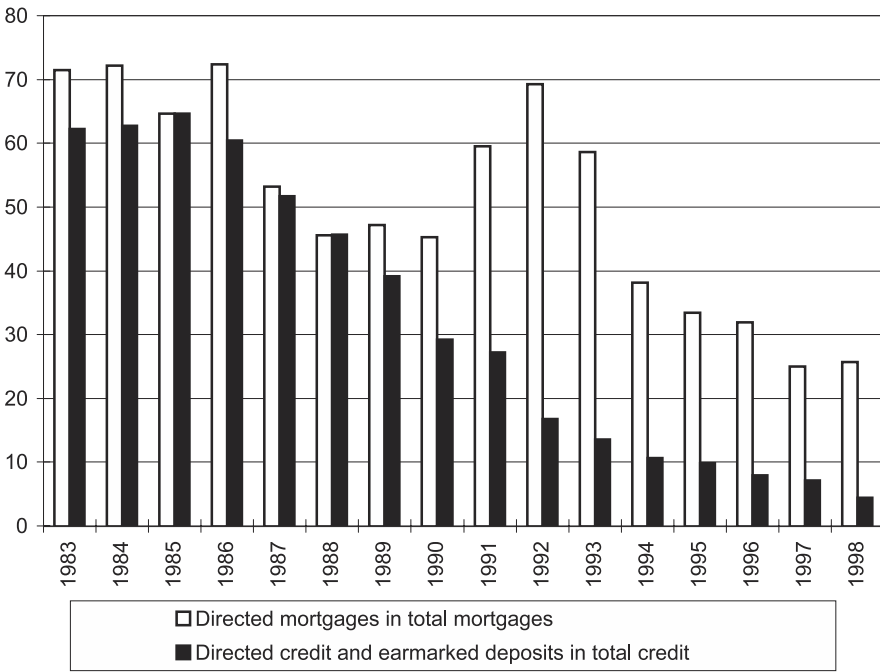
Israel. Recently, Yosha and Ribon (1998) showed that the deposit market is competitive but that the credit market operates in a noncompetitive environment. Moreover, the exploitation of conflicts of interest<sup>9</sup> would not be possible were the system competitive. The banking system has become somewhat more competitive in recent years, but because this is due to financial-system reforms at large, we will discuss its dimensions and causes in the next section.

**Indicators of Success of the Financial Reforms** Assets and liabilities interrelate in substitutionary or complementary ways, albeit in varying intensities. Therefore, each reform measure affects a broad spectrum of assets and liabilities as well as the overall matrix of yields. It is difficult to isolate the relative contribution of each of the many measures described above in enhancing competition and efficiency in the financial and capital market. However, the main factors in these developments are described in the presentation of the main results.

The reform measures have significantly revised the composition of finance in the business sector and among homebuyers. First, direct government involvement by means of directed credit and earmarked deposits decreased drastically—from 65 percent in 1985 to only 5 percent in 1998. Directed credit declined steeply in the mortgage market as well, from 72 percent in 1986 to 26 percent in 1998 (figure 1.5). Because the freeing up of uses of provident funds made more unrestricted sources available to mortgage banks, the proportions of credit offered to households were raised; the share of dwellings financed with unrestricted credit only climbed from 20 percent in 1984 to 60 percent in 1998.

The decrease in the general-government budget deficit and the contraction of central-government involvement in resource allocation freed up considerable resources for unrestricted uses. The composition of uses also changed significantly due to the elimination of the many restrictions that had applied to borrowers and lenders. The main trend in the composition of private-sector financing is the replacement of government-directed credit and government deposits for credit (table 1.3) with unrestricted credit and domestic and foreign share issues. Similar trends are visible in industrial finance (Yosha and Yafeh, 1995; Blass and Yosha, chapter 6). The reforms as a whole have animated a powerful dynamic in the composition of finance as a function of trends in source yields and risks.<sup>10</sup>

Before the reform, there were large interest spreads among near-substitute assets, among alternative liabilities, and, especially, among uses. Many forms of tax discrimination and subsidies were eliminated, and the removal of many restrictions narrowed interest spreads in all pairings of sources and uses. Several main examples follow:



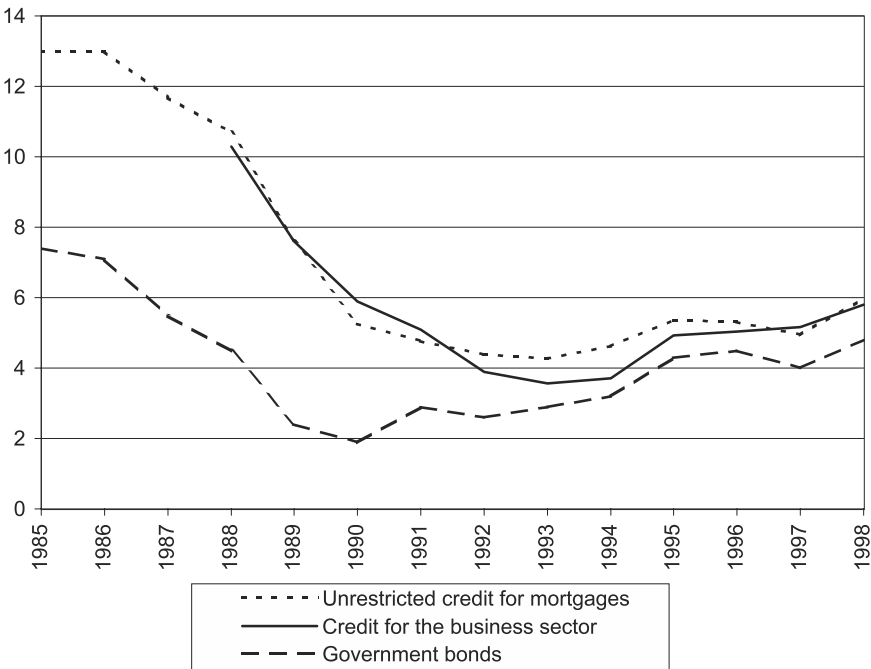
**Figure 1.5**  
Share of Government-Directed Credit, 1983–1998  
(Percent)

**Table 1.3**  
Composition of Private-Sector Finance, 1980–1998 (Percent)

	Issue of bonds			Change in credit			Total
	Domestic shares	Shares abroad	Bonds, net	Unrestricted	Directed and earmarked deposits	Direct from abroad	
1980–1984	19.5	0.0	2.4	24.0	38.8	15.4	100
1985–1989	9.6	0.0	30.9	99.6	-31.1	-8.9	100
1990–1993	38.7	3.0	-3.9	112.3	-49.2	-0.9	100
1994–1998	15.8	9.3	-6.9	82.8	-8.3	7.4	100

Source: Bank of Israel, *Annual Report*.

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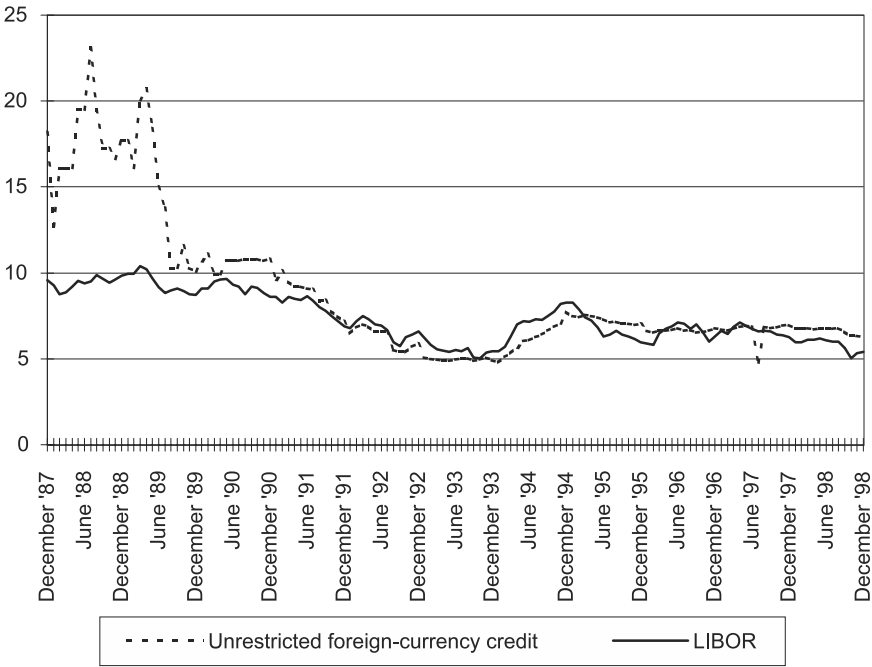


**Figure 1.6**  
Long-Term Credit and Government Bonds Interest, 1985–1998  
(Percent)

Foremost, the spread among different uses of the same type of credit was narrowed. For example, the interest rate on credit from abroad in 1985 ranged from 8.3 percent for borrowers in the preferred group to 33.8 percent for loans that were subject to administrative ceilings.<sup>11</sup> This spread was totally eliminated. There were also large spreads among households that qualified for mortgages from government deposits and households that took unrestricted credit for the same purpose.

The significantly preferential treatment that the government awarded itself in the capital market made capital much cheaper for government than for other uses. For example, the spread between interest on unrestricted mortgages and interest on government bonds contracted from 5 percentage points in 1985–1988 to only 1 percentage point in 1995–1998 (figure 1.6). Much the same happened to the spread of yields between CPI-indexed unrestricted credit and government bonds.

The right to borrow abroad lowered the interest rate on domestic bank loans in foreign currency to the LIBOR rate. The interest spread between these two sources of

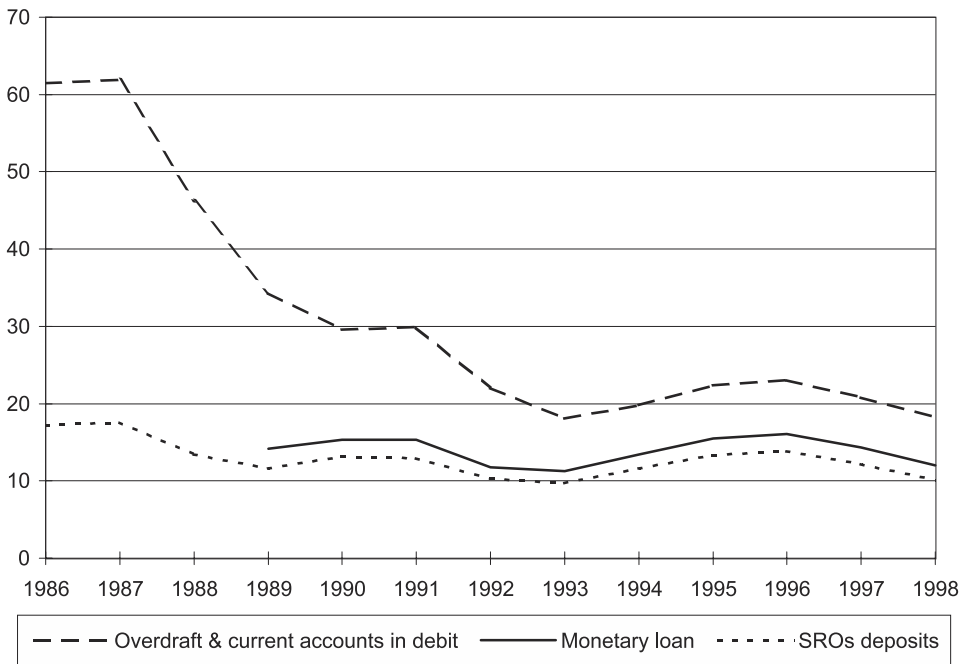


**Figure 1.7**  
 Domestic Cost of Foreign-Currency Credit and LIBOR Interest Rate, 1987–1998  
 (Percent)

credit plummeted from 8 percent in 1987–1988 to 0.4 percent in 1997–1998 (figure 1.7).

The interest spread that best reflects the contraction of government involvement and the enhancement of competition in the financial and capital market is that between short-term domestic-currency credit and domestic-currency deposits. This spread contracted gradually from 44 percentage points in 1987 to 8.5 percentage points in 1993 and has been stable since then (figure 1.8). Almost all the financial-reform measures had a contractionary effect on interest spreads—lowering of the liquidity ratio, freeing up of sources by the government; elimination of administrative restrictions in domestic currency that focused mainly on credit, partial deconcentration of the banking system (see Elias and Samet, 1994), the splitting of nonbanking enterprises from the two largest banks, and the liberalization of capital flows.<sup>12</sup> The decrease in interest spreads also reflects an upturn in competitiveness in the

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**Figure 1.8**  
Interest in Unindexed Domestic-Currency Activity, 1986–1998  
(Percent)

banking industry. Yosha and Ribon (1999) found that although both the deposit market and the credit market were characterized by less than perfect competition in the 1989–1996 period, the degree of uncompetitiveness declined steadily during that time.

The correction of imperfections in the financial and capital market has also enhanced the effectiveness of monetary policy. The transmission mechanisms between policy measures and financial markets have improved, as reflected in a gradual strengthening of the correspondence between changes in interest rates set by the Bank of Israel and changes in banks' borrowing and lending rates (Djivre and Tsidon, in this volume).

Summarizing this chapter, it should be noted that the financial reforms had many additional favorable implications that may be gauged by studying the other chapters in this book.

## Taxation and Subsidization of Production Factors and Goods

Since the 1950s, the government has been intervening in the allocation of production factors in many ways. Two of the most important budget-related ways were subsidization of capital (mainly in priority areas) and taxation of labor. This policy contributed to the establishment of excessively capital-intensive enterprises, harmed employment, and wasted foreign-currency sources. The Encouragement of Capital Investments law was enacted mainly to support employment in areas of national priority, but the many forms of discrimination built into the law—among production factors, industries, purposes of output, citizenship, and so forth—weakened its efficacy. Additionally, because R&D subsidies are awarded without regional differentiation, high-tech industries are concentrated in the large cities of the country where highly qualified labor is more easily available, whereas traditional and capital-intensive industries have gravitated to priority areas in the periphery (Schwartz and Razin, 1992). Because the technology chosen in each industry was also more capital-intensive in priority areas than in the center of the country, investments there contributed less to employment than they could have without the discriminatory government intervention. Moreover, these industries base themselves on unskilled labor, which, due to severe competition with developing countries, is barely profitable and fails to provide stable employment.

The rate of subsidy in total industrial investment has hardly changed since 1983 and has ranged from 8.5 percent to 11.5 percent (Ben-Bassat and Melnick, 1998). Unsurprisingly, despite the many incentives given to investors, the share of priority areas in employment has not increased since 1980.

The most important amendment to the law of Encouragement of Capital Investments was enacted in late 1995 to reduce the rate of grants in priority areas. The grant rate has been cut back gradually since then—from 38 percent of the approved investment in high priority areas and 20 percent in the lower priority areas to 20 percent and 10 percent, respectively.

Action to reduce discrimination between labor and capital began in 1987 when the employers' payroll tax was lowered from 7 percent to 4 percent. The tax was further cut to 3 percent in 1991 and finally eliminated a year later. Similarly, employers' social security contributions on employees' account were reduced from 15.5 percent of employees' wages in 1985 to 5 percent in 1997.

These measures, as a whole, did much to reduce the discrimination between acquisition of plant and equipment and hiring of labor; they also mitigated discrimination among uses. The support for goods (mainly for export) declined by 5 percent of GDP between the early 1980s and the second half of the 1990s. Capital benefits

**Table 1.4**

Taxation and Subsidization of Production Factors, Products, and Consumption, 1980–1998 (Percent of GDP)

	Business sector				Households		
	Employers' tax and social security*	Capital subsidy	Production subsidy***	Total	Transfer payments	Commodities subsidy****	Total
1980–1984	6.0	2.9	5.9	2.8	9.3	4.0	13.3
1985–1989	4.3	1.3	3.0	–0.1	11.1	1.9	13.0
1990–1993	3.1	2.8**	1.8	1.4	11.5	1.2	12.7
1994–1998	2.3	1.7	0.8	0.2	12.3	1.0	13.3
(1980/84)–(1994/98)	–3.7	–1.2	–5.2	–2.6	3.0	–3.0	0.0

\* Including social security contributions by employers on account of employees. In 1992, the employers' tax was abolished for businesses; thus, the tax in 1994–1998 is that paid by general government.

\*\* Including subsidization of contractors during the period of mass immigration from the former Soviet Union.

\*\*\* Including export subsidies, credit benefits, R&D, and miscellaneous.

\*\*\*\* Basic commodities and housing services.

Source: Central Bureau of Statistics.

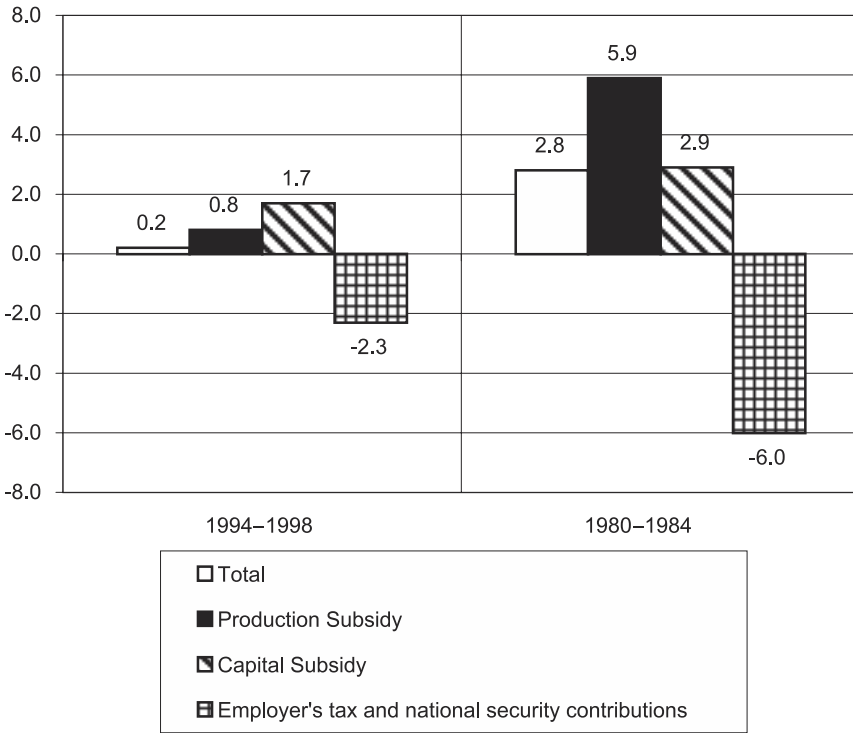
(grants and credit) decreased by 1.2 percent of GDP and payroll taxes (employers' tax and social security contributions) decreased by almost 4 percent of GDP (see table 1.4). Figure 1.9 shows clearly that total subsidization of the business sector resulting from a combination of reduced subsidization and tax cuts declined by 2.6 percent of GDP during this time. Even more important is the decrease in both the rate of subsidization of capital and the rate of taxation on labor; thus, discrimination among production factors decreased sharply. This helped to reduce distortions in resource allocation, stimulate employment, and enhance business-sector productivity.

The method of support for consumers also changed: Subsidization of basic goods, awarded irrespective of individuals' income, were significantly reduced and replaced with transfer payments to households. Notably, most transfer payments were given without income or standard-of-living tests. The two measures offset each other (table 1.4).

### Restructuring of the Labor Market

Since the early 1990s, the characteristics of the labor market and the wage-setting mechanisms have undergone many changes. Most of the changes stem from exogenous shocks and long-term domestic economic trends following the stabilization program; a few are the results of regulatory policy.





**Figure 1.9**  
Taxation and Subsidization of Production Factors and Goods in the Business Sector  
(Percent of GDP)

Two exogenous shocks—immigration from the former Soviet Union (FSU) and terrorist attacks that occasioned an influx of foreign workers—made the most important impacts to the increased flexibility of the labor market. These events share several characteristics and are interrelated. Both pertain to national goals, that is, immigrant absorption and replacing Palestinian labor, which had become a growing security risk. In both cases, the economy was given access to an almost intinitely large supply of labor from abroad, willing to work even for extremely low wages. The second important change was the decline in the Histadrut’s (the General Federation of Labor) power. This process began in the early 1980s, when industry structure shifted toward human-capital and technology intensive sectors, which are more open to the global market. The phenomenon became much more powerful after the stabilization program, as Israel moved toward a market economy with increasing

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momentum. Another factor that contributed to the increasing flexibility of the labor market was the grave failure of Histadrut-owned enterprises (Artstein, in this volume). The decline of the Histadrut's importance is manifested in a significant decline in membership and a proportional increase in hiring by personal contracts and through labor contractors, all without union representation.

There were few changes in regulatory policy pertaining to the labor market, and not all of them helped make this market more flexible. The major changes were the following:

1. The Cost-of-Living Allowance (COLA) arrangement was modified several times after the stabilization program to bring down the rate of automatic wage adjustment. Schiffer (1997) shows that the marginal rate of wage protection achieved by the COLA fell from 68 percent at its peak period to 42 percent in 1986–1989 and 36 percent thereafter. Several studies, however, have found that the decrease in automatic indexation created alternative, market-driven compensation mechanisms (Kleiman, 1989; Artstein and Sussman, 1992).
2. The most substantive change in labor-market regulation was a toughening of unemployment compensation eligibility terms and of rules pertaining to the unemployed. According to Artstein (1997), unemployment compensation has a perceptible positive effect on wages in all industries and prolongs the duration of unemployment (Ribon, 1990). These findings support the approach that advocates a short term of unemployment compensation, as exists in Israel in contrast to the European labor market.
3. In April 1987, the Knesset enacted a law that set the minimum wage at 45 percent of the national average wage. Ten years later, the legislature raised it to 47.5 percent. This change has diminished wage elasticity to employment and, therefore, may be detrimental to employment. However, since compliance with the law is rather poor (Flug and Kasir, 1993 and Gottlieb, 2000), the effect of the law on market flexibility has been minimal.
4. Employers' contributions to social security were lowered substantially in two phases—from 15.5 percent employees' wages in 1985 to only 2.4 percent in 1995. In 1997, the rate was raised to 5 percent. The reduction of payroll taxes helps to stimulate employment because taxation of employment is harmful to producers' profitability, demand for labor, and labor-market flexibility.

The increased flexibility of the labor market was reflected in two instances. First, between 1989 and 1995, the economy created jobs for half a million immigrants and nonimmigrants (augmenting employment by 35 percent). In addition, 140,000 for-

eign workers joined the economy, replacing 70,000 Palestinian laborers. Furthermore, the immigrants found work more quickly than any economic institute had predicted and even helped to lower the unemployment rate among nonimmigrants. Thus, the unemployment rate declined by 2.6 percentage points between 1989, before the mass immigration of the 1990s had started, and 1996. Second, real wages in the business sector declined by 5 percent between 1989 and 1994, almost solely due to the changes in the composition of employment (Artstein, in this volume), a recomposition that was strongly supported by the process of rapid growth. In 1997 and 1998, although rapid growth was halted, wages again rose swiftly despite a steep increase in the unemployment rate. The influx of foreign workers made only the wages of poorly paid unskilled workers more elastic, and at the price of greater inequality in income distribution and increased social tension (Kleiman et al., 1999). This shows that the structure of the labor market (especially in the public sector) still has mechanisms that reduce flexibility such as automatic wage drift and linkages in the wage structure among sectors and occupations, to name only two.

### Reforms in the Market for Goods and Services

Competition in the market for goods and services was enhanced in three channels. The most efficient way to create competition in tradeable goods in a small economy is by exposing domestic manufacture to competing imports. Even this does not assure perfect competition because of exclusive distribution agreements, concentration in imports, and control by local manufacturers of importing goods that are supposed to compete with them. Opening the economy to imports does not resolve the lack of competition in the market for goods that are not traded in international markets. This is especially true for government-owned, monopolistic, infrastructure. In these areas, it is necessary to restructure the domestic market and create competition, or at least to set price regulation and control mechanisms until the restructuring is complete. The third channel is the prevention of cartels in production and retailing.

**Import Liberalization** Israel's trade policy is predicated on its reciprocal tariff-reduction agreements with the European Community and the United States. The agreements with the European Community were signed in 1965–1975 and were fully applied by 1989; the agreement with the U.S. was signed in 1985 and fully implemented by 1995. With respect to other countries, protective barriers based mainly on tariffs were established. In the early 1980s, however, there was a significant retreat from the process of liberalization in a wide variety of aspects. The most severe of them was a set of nontariff barriers against imports from “third countries,” those with which Israel had no trade agreements. The number of customs items that were

subjected to nontariff barriers—such as compulsory licensing, compulsory marking in Hebrew, and the like—climbed by 68 percent. Liberalization vis-à-vis Europe and the United States also retreated, as evidenced in measures meant to bypass the agreements, such as duties on financial and nonfinancial transactions (1–3 percent) and imposition of purchase taxes in ways that discriminated against imports relative to domestic manufacture (Gabai and Rob, in this volume). The tariff-reduction process stipulated in the agreements did continue, the effective rate of protection declining from 28.2 percent in 1982 to 15.7 percent in 1987 (Halevi, 1994). This, however, was partly offset by the expansion of nontariff barriers. Furthermore, the composition of foreign trade became severely distorted. Trade was diverted from relatively inexpensive sources, from which imports were severely restricted, to expensive sources, foremost Europe. Thus, foreign-currency sources were wasted, and the level of consumer prices was pushed upwards.

Trade liberalization, similarly to the liberalization in the capital and financial markets, was implemented by a gradual approach. The measures taken to liberalize imports may be categorized in four main groups:

1. 1989–1993—elimination of discriminatory import purchase taxes.
2. 1990–1992—elimination of duties on foreign travel, purchase of foreign currency, and imported services.
3. 1991–1993—elimination of compulsory licensing for imports of industrial goods. In 1990, all nontariff barriers on imports from “third countries” were abolished and replaced with relatively high tariffs (20–75 percent). In 1992, a phased process of lowering these tariffs was started, and in 2000, they were to range between 8 and 12 percent. In 1995–1998, a similar process for agricultural products was set in motion.
4. Export subsidies, by means of exchange-rate insurance and preferential interest on credit, were phased out.

The implementation of these measures has moved the Israeli economy toward nearly total exposure to foreign trade. The nontariff barriers have been eliminated; tariffs are very low on average and have much smaller variance (table 1.5). This policy has had several favorable implications. The price of goods for which protection was significantly lowered (clothing and footwear) declined by 19 percent between 1991 and 1998 relative to the index of tradeable goods at large. The import penetration rate of industrial goods at large climbed from 25 percent to 30 percent. Many distortions in the composition of trade have been corrected; in industries in which the elimination of nontariff barriers in trade with “third countries” was dominant, the share of these countries in imports climbed from 16.2 percent to 22.3 per-

**Table 1.5**  
Effects of the Foreign-Trade Reform, 1990–1998

	1990–1991	1995–1996
Average rate of import taxation	11.0	8.1*
Range of tariffs	0–30	0–20
Share of “third countries” in imports:		
in which only nontariff barriers were lowered	16.2	22.3
in which nontariff barriers and purchase taxes were reduced	16.9	8.3
Price index of metal, footwear, and clothing relative to total tradeable goods	100	81*
Share of import penetration in industry	25	30**
Average rate of concentration in industry	33.8	29**

\* 1998.

\*\* 1994.

Source: Gabai and Rob (in this volume) and Bank of Israel, *Annual Report*.

cent. In contrast, in industries in which the elimination of discriminatory purchase taxes was more important than the elimination of nontariff barriers, the share of Europe and America climbed while that of “third countries” declined from 16.9 percent to 8.3 percent.

**Public Services** All firms in this sector (except for public transportation) that provide infrastructure services have a monopolistic status, and are fully or partly government-owned. Examples are the supply of electricity, water, port services, communications, and the oil refineries. These industries have a strong effect on the general productivity and profitability of the business sector, because most of their outputs are intermediate goods and services in other industries’ production processes. In the past, the industrial organization of most infrastructure services around the world was monopolistic because they were believed to have economies of scale. The concern that these companies would reduce output and raise prices prompted many countries to place them under government ownership. This was intended to avoid monopolistic exploitation of consumers. Excessive profits, insofar as the monopoly generated them, would enrich the government revenues and allow the government to provide more services or cut taxes.

In practice, the main beneficiaries of the excessive profits of monopolistic infrastructures were their employees and not the public at large. Organized labor in these industries took advantage of its ability to disrupt economic life to channel much of the monopolies’ surplus earnings into its pocket. Governments, ever fearful of strikes in vital services, succumbed to labor’s excessive wage demands. Thus, the wages of

employees of monopoly infrastructures exceed by far those of other workers in the business sector. In 1996, for example, the wages of transport and communications workers exceeded the national average wage by 30 percent and those in electricity and water by 100 percent (Gronau, in this volume). Fortunately the public's high sensitivity to excessive wage demands in the government sector limits the absorption of excess profits by means of wage increases. Nevertheless, the public sector employees sometimes enhance their welfare by reducing work effort and productivity and by pressuring the company to overhire. For example, the Shorer Committee, which looked into telephone rates (1993), reported that even in the company's view, headcount could be trimmed by 20 percent with no detriment to service. The Gronau Committee (1996) found that headcount per production-capacity unit at the oil refineries in 1992 was 60 percent over the Western European average. Public ownership also contributed to price gouging by suppliers of other equipment and services to the monopolistic infrastructures.

In addition to distorting the scope and price of inputs, the monopolies implemented a set of prices that reflected cross-subsidization of services and led to the distortion of efficient allocation of economic resources. For example, consumers with variable demand for electricity subsidized fixed-demand consumers. Intensive users of telephone services subsidized those who made few calls, and international dialers subsidized local dialers. At the ports, imports subsidized exports, and expensive import cargoes subsidized less expensive import cargoes.

The damage to efficiency and the distortions in relative prices created pressure for competition in monopolistic infrastructures by admitting new companies in the market (in communications and transport, for example) or by splitting existing companies into several competing companies (in electricity, refineries, and ports, for example). An important lesson of the Israeli experience is that firms should be privatized only after competition is created. Notwithstanding numerous plans, only the communications industry has been made more competitive among a few players, first in cellular telephone and added-value services and, afterwards, in international dialing. The privatization process in these fields did help reduce prices of dialing services considerably.

The obstacles in the path to competition in these industries generated pressure for interim solutions—rationalization of the pricing system and control of future pricing developments. In regulating prices, the guidelines were to base rates on the producer's costs in each product, eliminate cross-subsidization, and create a price-adjustment mechanism for the future, based on the behavior of input prices and on a price-reduction coefficient that takes company efficiency measures into account. The

**Table 1.6**  
Privatization of State-Owned Enterprises, 1985–1998 (\$ millions)

	State-owned enterprises	Banks	Total
4/1986–3/1990	328	0	328
4/1990–6/1992	514	230	743
7/1992–6/1996	1,228	1,246	2,474
7/1996–8/1998	636	2,659	3,295
1986–1998	2,696	4,135	6,840
Proportion sold to controlling investors	41	37	39

*Source:* Report of the Government Companies Authority.

efficiency-enhancement coefficient was based on an estimation of excess inputs in the base year, the company's scale economies, and foreseen technological changes in the industry. In other words, the price-setting method was revised from cost-plus to a price ceiling (Gronau, in this volume).

**Privatization of State-Owned Enterprises** In 1985, 160 companies, most of them very small, were under government ownership. About 90 percent of the employees of state-owned enterprises are concentrated in the ten largest firms. In 1983, the country's four largest banks joined the state-owned enterprises in the aftermath of the bank share crisis. In 1985—the year in which privatization was declared an important goal—8.6 percent of persons employed in the business sector worked for state-owned enterprises.

The privatization process has been advancing very slowly. Since it began, \$2.7 billion in equity of state-owned enterprises and \$4.1 billion in bank shares have been sold to the public (table 1.6). Only 40 percent of the shares sold resulted in the transfer of state control to private hands. For the rest, the sale of shares amounted to nothing more than raising capital. Furthermore, the sale of control in the monopolistic infrastructures has not yet begun due to obstacles in the process of making these industries more competitive and, mainly, due to resistance from labor.

## 1.4 Geopolitical Factors

The disintegration of the Soviet Union and the change in regime there affected the Israeli economy in two ways—the authorities' attitude toward Jewish emigration to Israel and the access given to Israel by Eastern European markets that had been off-limits to Israel since 1967.

Immigration from the former Soviet Union began in 1990, and from that time until 1997, 710,000 immigrants, mostly from those countries, boosted the Israeli population by 16 percent. Some 53 percent of the immigrants were of working age and about half of their labor-force participants had practiced an academic or management occupation before their immigration, as against 8 percent among the non-immigrant Israeli labor force. This is an exceptional rate compared to any other country. The immigrants' high human capital enhanced the economy's growth potential but also created hardship among the immigrants in the process of their absorption in occupations that did not always correspond to their schooling.

Despite the magnitude and complexity of the problem, the government decided not to intervene directly in creating jobs for the immigrants; instead, this task was left to market forces. The government's role had two focal points—providing public goods (such as education, health, and infrastructure investment) as warranted by the vigorous increase in population; and creating conditions that would accelerate business-sector growth and allow the business sector to hire most immigrants. This concept is a direct continuation of the approach that Israel adopted in the Economic Stabilization Program.

Mass immigration from the former Soviet Union caused private and public demand to expand steeply. The government reinforced this trend by granting immigrants a subsistence allowance in their first year in the country and by financing and subsidizing their purchase of housing. On the supply side, the government encouraged the business sector to create jobs by reducing employers' labor costs, subsidizing the newly hired for a limited period of time, sponsoring vocational training, streamlining the Employment Service, and refining the unemployment-compensation system. It also awarded credit subsidies for new investments and made progress in implementing structural reforms. Overall, however, the government policy to expand demand was exaggerated, and its actions to expand supply were rather weak relative to plans (Ben-Bassat and Melnick, 1999). It is especially important to note that the government did not seize the unique opportunity of immigrant absorption as a stimulus in order to complete the structural reforms.<sup>13</sup>

All in all, the immigrant absorption exceeded all expectations. Within six years, most immigrants found employment, and their unemployment rate today resembles that of nonimmigrants. Eckstein and Weiss (in this book) found that by dividing immigrants into three occupational categories—academic, white collar, and blue collar—one finds that the gaps between their original occupations and their Israeli occupations have been narrowing rapidly, especially among the young (those in the 26–40 age cohort). However, studies that classified immigrants by a broader range of



occupations found that the degree of the adjustment from original occupation to current occupation in Israel is slack and even worse than among previous immigration waves (Flug and Kasir, 1996; Ofer, Flug, and Kasir, 1997). The average wage of immigrants in their first stage of absorption in Israel is some 40 percent lower than that of nonimmigrants with similar occupational and demographic characteristics. The gap is shrinking gradually and is expected to narrow to 16 percent by the end of a twenty-five-year period, but no full convergence is expected (Eckstein and Weiss, in this volume). Furthermore, married immigrants were found to have higher wages than unmarried immigrants with similar traits, and their wages also increased more quickly.

The second geopolitical process that has left its imprint on the economy is peacemaking. The peace negotiations that began after the Gulf War reached a climax with the signing of peace agreements with the Palestinians and with Jordan. Pursuant to these agreements, it was increasingly believed that the Middle East conflict was about to end. The signing of the agreements in itself lessened Israel's perceived security risk and, therefore, enhanced motivation to do business with Israel. But the serious terrorist attacks in 1996 and the subsequent peacemaking uncertainty show how fragile the achievements are.

It is difficult to isolate the effects of the peace process on Israel's economic strength in the first half of the 1990s, and the effects of the destabilization of the process since 1996, because other dramatic political changes and the structural reform process occurred simultaneously. Furthermore, the interdependence between these factors are of utmost importance. However, one may point to several fields in which the peace process had a strongly favorable effect on developments. Inbound tourism doubled between 1990 and 1995. The peace agreements also contributed to a substantial expansion of net foreign investment in existing companies, new companies, and financial assets—from \$100 million in 1990 to \$2.5 billion in 1998. Israel's country rating as reflected in the *Institutional Investor* index was substantially improved between 1985 and 1998—from rank sixty-four to forty-one. According to other sources, the improvement was even greater (see Gottlieb and Blejer, in this volume). Consequently, Israel's risk premium in international borrowing contracted. The peace agreements also weakened, though did not officially abolish, the effectiveness of the Arab boycott on Israeli products. This prompted new markets, mostly in the Far East, to begin trading with Israel; accordingly, Israel's foreign trade expanded greatly, especially its exports (see table 1.9). The peace agreements and the belief that they would expand to the entire region also evoked expectations of a future decline in defense expenditure, thereby making it possible to reduce the GDP share of government expenditure further.

The staggering peace process since 1996 has reduced the economic gains that the process had set in motion at its beginning.

## 1.5 Results of the Policy

The turnabout in economic policy and its geopolitical background conditions ramified results but also claimed a price. In this section, we observe four main fields from a bird's eye perspective—growth and composition of GDP, balance of payments, inflation rate, and income distribution.

### GDP, Its Composition, and Productivity

The economic policy and geopolitical changes prompted an acceleration of GDP growth along several tracks on both the demand and supply sides. Until 1989, this acceleration of growth was powered by a policy that expanded GDP supply of the business sector. Crucial factors in this expansion between 1985 and 1989 were the budget policy and disinflation. As stated, this policy operated along three paths: (1) It enhanced economic certainty about the elimination of the general-government budget deficit and the contraction of dependency on foreign aid; (2) the expected long-run tax rate declined as a result of the fiscal consolidation, although the actual reduction in tax rates was insufficient; and (3) infrastructure investments increased. The government also carried out a series of reforms that reduced costs in the business sector, corrected distortions in relative production factor prices, and improved production factor allocation. Consequently, the annual growth rate of GDP climbed from 2.9 percent in 1980–1984 to 3.8 percent in 1985–1989. The uptrend in GDP of the business sector was even swifter (table 1.7).

The period between the stabilization program and the onset of immigration was not homogeneous. The first three years were marked by very rapid growth; a two-year slump followed. In part, the transition from boom to bust reflected the price of the freezing of the exchange rate and the exceptionally high real interest rate in the first years of stabilization. It also reflected a delayed response to structural problems in the business sector that became exposed in the aftermath of the stabilization program—inefficiency that stemmed from commodity and capital subsidies, cheap credit, administrative protection, bailouts for bankrupt enterprises, and wage rigidity (Bruno and Meridor, 1991), occasioned by institutional arrangements in setting wages and unemployment compensation. All these factors entailed recovery plans that involved layoffs and cutbacks in production in the short term.

**Table 1.7**  
Sources and Uses, 1980–1998 (Average annual percent change)

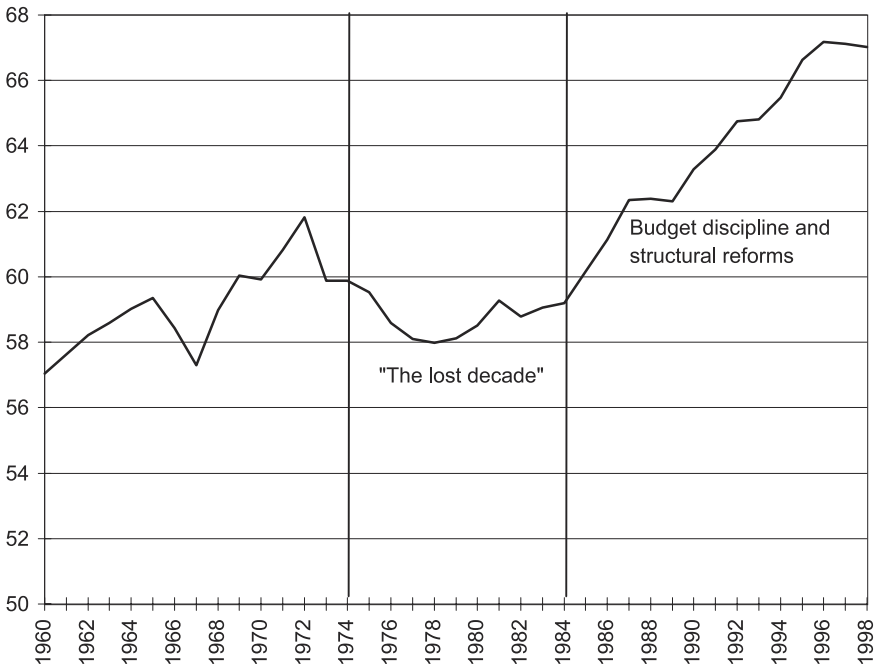
	Sources			Total sources = Total uses	Uses			
	GDP	Business GDP	Imports of goods and services		Private consump- tion	Public consump- tion	Gross domestic invest- ment	Export value in domestic market
1980–1984	2.9	3.3	2.5	2.8	3.6	1.6	–0.2	4.8
1985–1989	3.8	4.9	3.5	3.7	5.9	–0.3	–0.3	5.6
1990–1993	5.5	6.6	11.8	7.6	7.0	4.1	18.2	5.7
1994–1998	4.6	5.3	6.4	5.2	5.8	2.0	2.1	8.8
(80/84)– (94/98)	1.7	2.0	3.9	2.4	2.2	0.4	2.3	3.9

Source: Central Bureau of Statistics.

In 1990, two additional processes that expanded both domestic demand and GDP supply got under way. Immigration from the Former Soviet Union greatly expanded private and public demand, on the one hand, and labor supply, on the other. It also helped to make the labor market more flexible and restrain wages in the business sector, thereby making immigrant absorption relatively swift and easy. The government's goal of steering immigrants mainly to the business sector prompted it to sustain the structural-reform process.

Peace negotiations with the Palestinians also helped stimulate demand by improving Israel's country risk rating in international markets. These processes accelerated the annual growth rate further. Because some of the acceleration reflected a one-time adjustment, the growth rate began to decline in the middle of 1996. In 1997–1998, the economy entered a slowdown as a result of several factors—preference of the inflation target over the growth target. Fiscal and monetary policies were strongly tightened, and coincided with cyclical factors. However, supply-side indications show that, even after the main impetus of the immigration wave had been exhausted, Israel had a potential growth rate of about 4 to 5 percent per annum.<sup>14</sup>

Between the stabilization program and 1998, GDP of the business sector climbed more swiftly than overall GDP by about 1 percent per year. Thus, the share of business-sector GDP rose steadily from 59 percent in 1984 to 67 percent in 1998 (figure 1.10).<sup>15</sup> The increase in the share of the business sector in GDP since 1960 illuminates the importance of structural reforms for business-sector growth. In the 1960s, two background conditions that were important for business-sector growth—relatively small government expenditure and low inflation—were prevalent. However, since government involvement in the economy was extremely high, the proportional growth



**Figure 1.10**  
Share of the Business Sector in GDP, 1960–1998  
(Percent)

of the business sector in GDP was moderate during this time. In the crisis years (1975–1985), the share of the business sector actually decreased. After 1985, in addition to downscaling its share in GDP and stabilizing the economy, the government embarked on a gradual transition to a market economy. This transition had an especially strong effect in accelerating the growth rate of business-sector GDP, allowing the share of this sector to climb more rapidly than in the 1960s.

As the business sector expanded, the composition of its activity changed substantially. Two phenomena stand out in the industry-group composition of the business sector: The first is the long-term downtrend in agriculture, construction, electricity and water, and (since the late 1970s) manufacturing. The contraction of these industries was rapidly substituted by an expansion in services and trade, which together accounted for 50 percent of business-sector product in 1998. A similar trend is occurring in all industrialized countries. The second phenomenon is unique to the Israeli economy and is of utmost importance. Since the second half of the 1980s, the

composition of industry has been experiencing a structural change, as civilian high-tech industries have been accounting for a rising share of production, exports, and investment from domestic and foreign sources. This reflects a change in the composition of Israel's advanced industries, and this, too, should be credited largely to the economic restructuring that has been occurring since the stabilization program (see Justman, in this volume). Due to the downsizing of Israel's defense budget and the decrease in global demand for military equipment, demand for the output of the defense industries has declined severely. However, the most important point in the turnabout that defense manufacturing has experienced was the government's strategic decision in 1987 to discontinue the Lavie aircraft project. These changes prompted the defense industries to move to civilian outlets for their output, but they did not manage to revise the composition of production significantly and had to shed much of their staff. The twenty-nine enterprises that had previously sold 10 percent or more of output to the defense system dismissed thirty thousand workers between 1986 and 1996. Thus, personnel with advanced technological schooling and vast experience became available in the private sector. They were joined by higher-education graduates in the sciences in the 1990s—a group that previously had found work mainly in the military industries—and by immigrants from the Former Soviet Union. Thus, hundreds of new projects came into being, and some recorded impressive economic success. Some of these projects were based on unique knowledge that had been developed at the military industries. The liberalizations in financial markets and foreign trade helped these industries to establish marketing systems abroad, create cross-border partnerships, and benefit from cheap sources of finance. For example, investments by venture-capital funds escalated from one hundred million dollar per year in the early 1990s to roughly one billion dollar in 1999.

Israel had one of the world's highest rates of total factor productivity growth (4.4 percent per year) until 1972, but in the crisis years, this indicator plunged to 0.5 percent per year. Productivity made a considerable recovery after the stabilization program, but after 1990 the total productivity growth rate fell again to nearly zero. The National Accounts statistics indicate that average productivity in 1992–1998 was actually negative at about half a percent per year; data based on developments in nonresidential industries point to about 1 percent productivity per year. Be this as it may, the productivity trend in the 1990s is genuinely puzzling. The negligible improvement is very surprising because previous waves of immigration were noted for their high productivity and, especially, because the current wave is endowed with abundant human capital.

Some trace the explanation to measurement problems. Justman (in this volume) notes that productivity in agriculture, communications, electricity, and water in-

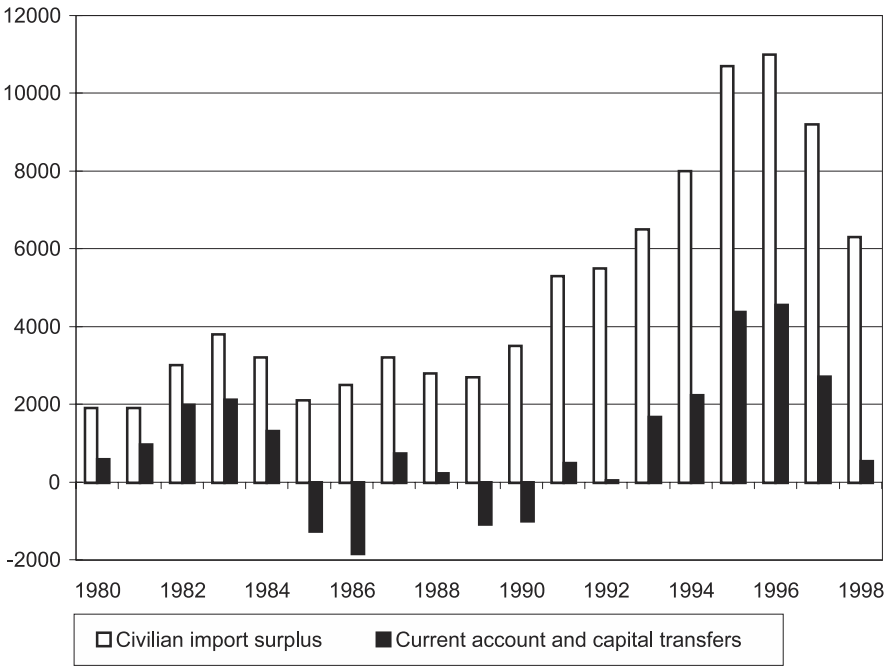
creased impressively and that the decline in productivity focuses on construction, services, and manufacturing. In his opinion, there are measurement problems in the first two industries mentioned, leaving only the productivity decline in manufacturing in need of explanation. In his estimation, the substantial upturn in the share of advanced industries has created a significant downward bias in the measurement of productivity. On the one hand, he argues that investments in human capital and in research and development are recorded as current expenditure instead of investment; on the other hand, sale of equity in high-tech companies to nonresidents is not recorded as an output, even though, in fact, it is part of the exports of these industries. In the estimation of Hercowitz (in this volume), and Hercowitz, Lavie, and Melnick (1998), the decrease in productivity in the 1990s is related to the massive intake of new equipment that has an embodied component of high technology. Since the adoption of these technologies initially entails learning expenses, it results in poor productivity.

The accelerated growth was accompanied by a secular rise in inequality in the income distribution. Economic inequality has been rising steadily since the mid-1970s and, in recent years, has exceeded the level in the United States, which characteristically exhibits the highest inequality among developed countries. Dahan (in this volume) notes that the increase in income inequality stems mainly from changes in the return on human capital and is not caused by greater inequality in the possession of human capital. In the 1990s, the wages of the highly trained workers have grown more steeply than those of the poorly trained, and the wages of the managerial occupations improved with particular vigor. The increase in the relative return on schooling coincides with an uptrend in the proportion of well-trained persons in the population. This indicates that demand for persons with higher schooling has outpaced its supply in the past decade. Perhaps, too, as the number of persons with higher schooling increased, schooling quality also became more diverse, and therefore, inequality among people whose schooling only seems to be equal expanded.

A massive increase of transfer payments was necessary to correct this trend. These developments emphasize the urgency to adopt policies aimed at narrowing economic inequality in the labor market. The main way to achieve this goal is to narrow schooling gaps among population groups—especially between Mizrahi (“Oriental”) Jews and those of European-American origin, and between the Muslim and Jewish populations.

### **Balance of Payments**

The balance of payments, like other indicators, improved perceptibly in the first five years after the stabilization program. Exports expanded more rapidly than imports,



**Figure 1.11**  
 Import Surplus and Current-Account Deficit, 1980–1998  
 (\$ millions)

and the import surplus declined in dollar and GDP terms (figure 1.11 and table 1.8).<sup>16</sup> Since 1990, however, several exogenous and endogenous processes have been causing trade and the import surplus to increase significantly. The most dramatic change is the collapse of the Soviet regime and the onset of Jewish immigration to Israel. Immigration led to strong growth in private and public consumption, residential and nonresidential investments, and GDP supply. However, since the growth of domestic demand outpaced GDP supply, the import surplus widened. Although civilian public expenditure increased, its share in GDP declined between 1980–1984 and 1994–1998 by 10.7 percentage points. This decrease was offset by a 10.9 percentage-point increase in private consumption. However, the strong increase in investments—by 5.4 percent of GDP—was reflected in a similar increase in the import surplus (table 1.8). The widening import surplus was also manifested in real currency appreciation. These two processes were able to occur because of a strong upturn in private unilateral transfers by immigrants and United States government credit guarantees to the government of Israel.

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**Table 1.8**  
Domestic Uses and Import Surplus, 1980–1998 (Percent of GDP)

	Domestic uses			Gross domestic investment	Import surplus*
	Private consumption	Public consumption	Thereof: domestic		
1980–1984	51.3	45.6	38.3	18.7	11.2
1985–1989	55.2	39.6	33.4	15.9	9.1
1990–1993	57.8	34.5	30.7	22.4	13.9
1994–1998	62.2	30.0	27.5	24.1	16.2
(80/84)– (94/98)	10.9	–15.6	–10.7	5.4	5.0

\*The change of base year in computing price indices every few years creates discrepancies in the relative prices of sources and uses. Accordingly, sources and uses are not identical in 1995 prices. The largest deviation occurred in 1980–1984, at 4.4 percent of GDP.

Source: Central Bureau of Statistics.

The components of Israel's international trade were affected not only by the trend in domestic GDP supply and demand but also by geopolitical developments and by reforms in foreign trade and other fields. The downfall of the Communist regimes in Eastern Europe opened these markets to Israel for the first time since the Six Day War (1967). Consequently, exports to Eastern Europe expanded in 1989–1991 by 34 percent on annual average,<sup>17</sup> as against an increase of 7 percent per year in exports to Western Europe and the United States (table 1.9). The peace process weakened the effectiveness of the Arab boycott and opened new markets in Asia—mainly in the Far East—to Israeli trade. As a result, in 1992–1996, exports to these countries expanded by 18 percent per year beyond the increase in exports to Western Europe and the United States. These two political turning points contributed 4.2 percent per year to the growth of exports in 1992–1996 and about 1 percent per year in 1989–1991.<sup>18</sup>

The restructuring of the economy made a perceptible contribution to both imports and exports. The foreign trade liberalization in the 1990s exposed domestic manufactures to competing imports mainly from Asian and Eastern European countries, and indeed, imports from these countries expanded much more rapidly than imports from the rest of the world (table 1.9). Presumably, imports were also affected by the peace process and the changes in regime in Eastern Europe. Evidence of the effect of the liberalization, however, may be found in the continued rapid growth of imports from these countries even in 1997–1998, while imports from other countries did not increase at all. This is almost definitely the result of the continued reduction of tariffs on imports from “third countries.”



**Table 1.9**  
Foreign Trade, by Region, 1989–1998 (Average annual percent change)

	Imports				Exports				
	Total	From countries with trade agreements*	Rest of Europe	Asia, incl. Japan	Total	From countries with trade agreements*	Rest of Europe	Asia, incl. Japan	Global trade
1989–1991	7.1	6.5	21.9	11.0	7.3	6.7	31.4	7.3	5.8
1992–1996	11.8	11.0	23.3	15.6	11.8	8.5	35.3	26.6	6.8
1997–1998	1.8	−0.2	24.6	9.4	10.4	12.5	7.9	1.1	6.5

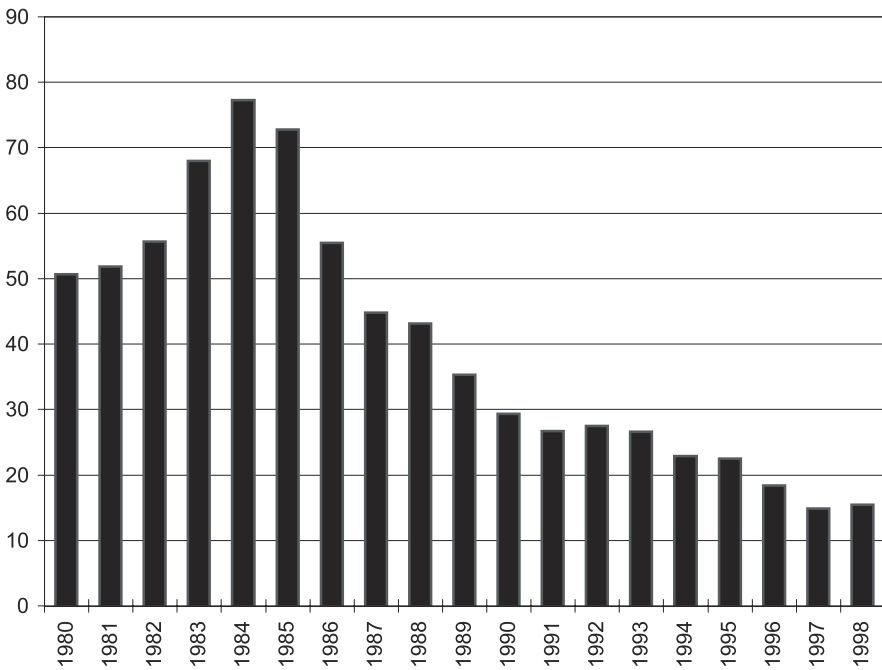
\* European Union, EFTA, and North America.

Source: Central Bureau of Statistics.

The contribution of the structural changes as a whole stands out in the trend of exports to Western Europe and the United States. Although Israel had free trade area agreements with these countries before the liberalization, exports to these destinations expanded more quickly than global trade by 2.3 percent on annual average in the 1990s.

Another favorable effect is reflected in greater openness to foreign trade. This openness increased steadily in the 1960s and 1970s, halted in the first half of the 1980s, and resumed with greater strength after the stabilization program. The combined share of imports and exports in GDP has been climbing rapidly—from 60 percent in 1980–1984 to 81 percent in 1994–1998.

On the eve of the stabilization program, net external debt had reached 80 percent of GDP, and the economy was on the brink of a balance-of-payments crisis. The economic recuperation and, mainly, the cutting of the general-government budget deficit gradually narrowed the external debt to 35 percent of GDP in 1989 (figure 1.12). However, mass immigration entailed large absorption outlays, especially in residential and nonresidential investment. At the beginning of the process, it was believed that much of this investment would be financed from foreign sources and that this would add twenty-three billion dollar to the current-account deficit in 1990–1995. The loans needed to finance this increase were expected to increase the share of external debt in GDP by 9 percentage points. However, the actual current-account deficit was much smaller than these expectations because the import surplus was unexpectedly small and transfers by immigrants were unexpectedly large (Ben-Bassat and Melnick, 1998).<sup>19</sup> From the onset of the mass immigration until 1998, the current-account deficit came to \$15.6 billion (figure 1.12). Notably, not all of the increase in the current-account deficit can be traced to immigrant absorption; some



**Figure 1.12**  
Net External Debt, 1980–1998  
(Percent of GDP)

of it originates in a deviation from budget policy in hiring, and, especially, in wages. Because GDP growth outpaced the increase in the outstanding foreign debt even during the era of immigrant-absorption, the share of net external debt in GDP continued to fall and came to 15.5 percent in 1998.

### Inflation

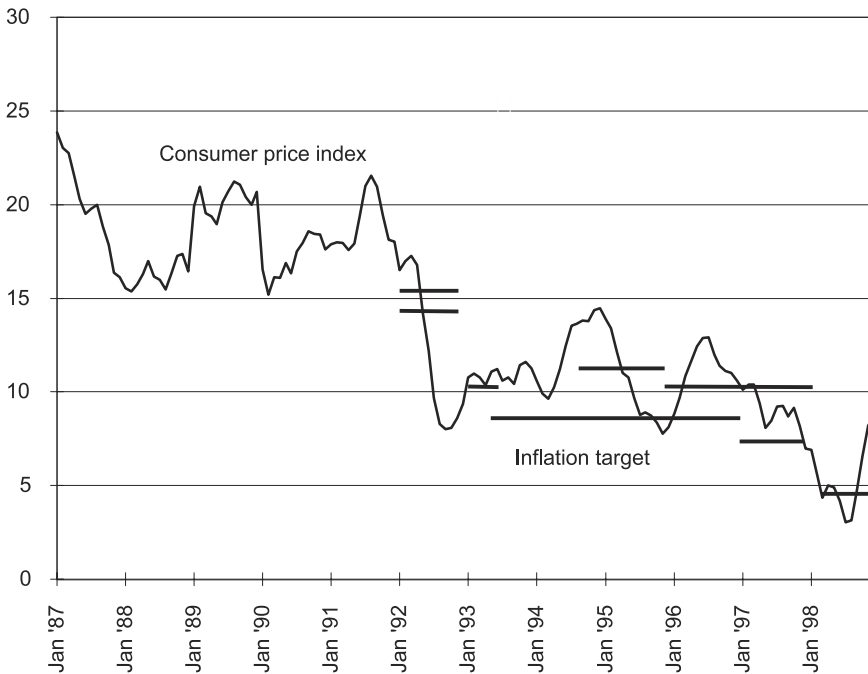
The stabilization program lowered the annual inflation rate immediately from about 400 percent to around 18 percent. Since then, disinflation has followed a stepwise pattern with relatively small variance around each step (Liviatan and Melnick, 1998). The first step was crossed in 1992, when the inflation rate fell to 9–10 percent. The second step occurred in 1997, the inflation rate falling to 5–6 percent. Notably, stabilization programs in most high-inflation countries did not lower inflation to a single-digit level in one step. Fischer and Orsmond (in this volume) analyzed nine

countries' attempts and found that only in Croatia did inflation fall immediately to a single-digit level; it took two years for this to occur in Argentina and Brazil and five years on average in other countries.

Developments in the pace of price increases in Israel correspond closely to the exchange-rate policy and the intensity of demand pressures. In the stabilization program, the exchange rate was chosen as the main nominal anchor,<sup>20</sup> because of the high proportion of tradable goods in the economy, and because many domestic transactions, nonfinancial and financial, were denominated in foreign currency. However, as the economy put the rapid-inflation period behind it, the main effect of the exchange rate focused on anchoring the prices of tradable goods; prices of non-tradable goods, in contrast, were affected largely by the intensity of demand pressures (Ben-Bassat, 1995). Both steps of disinflation had several factors in common. First, both featured a decrease in import prices and a slowdown in currency depreciation, which caused the increases in prices of tradable goods to decelerate. Second, both corresponded to an upturn in unemployment (Liviatan and Sussman, in this volume). Notably, Lavie and Sussman (1997) found a significant correlation between inflation and unemployment in the short term.

Several factors converged in the steep decrease in inflation in 1992 (see figure 1.13). A slowdown in prices of imported raw materials and currency depreciation helped slow the rate of increase in prices of tradable goods. However, the main turning point occurred in the prices of nontradable goods. This turnabout is primarily a response of the mass immigration from the former Soviet Union that began in 1990. At first, the immigrants boosted domestic demand, mainly for housing. The short-term housing shortage led to a considerable increase in housing prices, which was contained by the ensuing increase in supply. However, the immigrants' dominant impact on the inflation rate occurred on the supply side.

As the immigrants gradually joined the labor market, growth and employment accelerated but the unemployment rate climbed to a peak of 11.2 percent in 1992. By 1990, this development severely dampened nominal wage increases in the business sector and, in fact, caused the real wage to decline. Moreover, the immigration helped to make the responses of wage and employment in the labor market more flexible. It also affected the inflation process in indirect ways (Sussman and Liviatan, in this volume). The concern that immigrant absorption would disrupt the budget permanently led to legislation that required the government to lower its budget deficit gradually, thereby toughening fiscal discipline and improving its credibility. This concern, among other things, also led to greater foreign economic assistance in the form of U.S. government loan guarantees, which facilitated long-term restraint of prices of tradable goods by means of real currency appreciation.



**Figure 1.13**  
Inflation Rate and Inflation Target, 1987–1998  
(12-month rate of change, percent)

The second turning point, like the first, was related to the behavior of global prices and the policy that drove the economy into high unemployment. In 1994, inflationary pressures mounted due to an exceptional rise in civil-service wages that resulted in an increase in the budget deficit. In response, the Bank of Israel raised the interest rate substantially and thereby halted the negative price implications of the budget overrun. However, monetary restraint remained tight even after the government corrected the deviation of the deficit trajectory in 1997. The combination of fiscal and monetary restraint caused the unemployment rate to rise and began to leave its imprints on the pace of price increases. The adoption of such a contractionary mix of policy measures convinced the public that the government and the Bank of Israel were more determined than in the past to give disinflation priority over employment targets. This policy was assisted by a slowdown in the pace of increases of prices of tradable goods—which was partly exogenous, resulting from a decline in import

prices, and partly endogenous, as a consequence of lowering the slope of the crawling band from 4 percent to 2 percent.

The disinflation did not level off at that point because the protracted monetary restraint had triggered a large capital inflow and boosted the business sector's foreign-currency position to some fifteen billion dollars. There was concern that lowering the interest rate would cause a capital outflow, currency depreciation, and price increases. Djivre and Tsiddon (in this volume) mention another aspect of this phenomenon. In their estimation, the potential for inflationary pressure upon the easing of monetary restraint was created due to the overexpansion of the money base relative to the M1 aggregate and the perceptible increase in banks' deposits with the Bank of Israel.

## 1.6 Structural Reforms—The Empty Half of the Glass

The structural-reform process that aimed to reduce government involvement in the markets and enhance competition has been continuing for fourteen years and has not yet been completed. To assess the reasons for the slow pace of movement toward a market economy, we will compare Israel with other countries and analyze the motives for the reforms, the decision-making process, and the obstacles that have kept the process from completion.

### International Comparison

The following comparison of the pace of reforms in various countries is based mainly on the economic freedom index developed by the editors of the annual publication *Economic Freedom of the World*. This index is made up of twenty-five quantitative indicators that characterize seven main fields—state budget, monetary policy, financial markets, foreign-currency market, foreign trade, goods market, and economic legislation.

The indicators show that global economic freedom began to climb in the mid-1970s. At first, the increase occurred only in the industrial countries and several countries in Asia. Since the mid-1980s, a large majority of countries worldwide have been moving toward a market economy, and at an accelerating pace (table 1.10).

The industrial countries made strong progress in economic freedom even though they had more freedom than other countries to begin with. This is especially evident when one calculates the pace of progress toward a market economy as a share of the remaining potential.<sup>21</sup> However, the greatest progress between 1985 and 1987

**Table 1.10**

Average Economic Freedom of the World,\* 1985–1997 (Score on scale of 10)

	1985**	1990	1997
Industrialized countries	7.3	8.3	8.6
Europe and Middle East***	4.1	5.0	6.4
South America	3.8	4.9	6.7
Asia	4.8	5.5	6.7
Worldwide	6.7	7.6	8.1
Israel	3.3	4.4	6.0

\* Weighted in the GDP of each country in 1995 dollars.

\*\* The 1985 freedom indicators were adjusted to a new definition based on the relationship among indicators according to the various definitions in 1990.

\*\*\* Semi-industrialized countries in Europe (not including Eastern Europe).

Source: *Economic Freedom of the World*.

occurred in semi-industrialized countries that had lower degrees of economic freedom, such as New Zealand, Portugal, Spain, Greece, and most countries in South America (table 1.11). Israel, too, which until 1985 had rested almost at the bottom of the market-economy ladder, has experienced momentum in economic freedom, but in the pace of this momentum, Israel falls short of the semi-industrialized countries and most countries in South America.

### Motives and Timing of Reforms

Many researchers (Bates and Kruger, 1993; Pereira, 1993; Williamson, 1994; et al.) note that the stimulus for reforms seldom occurs when economic achievements are satisfactory. Furthermore, large-scale reforms were carried out in the aftermath of severe balance-of-payments crisis or were prompted by an exceptional upturn in inflation. An economic crisis creates a climate of urgency and greater receptiveness to a policy turnabout. It encourages those affected to learn from economies that have performed well over time and encourages the affected country to import the economic structure and policies that prevail in industrial countries (Harberger, 1993). At the initial stage of recovery, this influence is especially evident in budget and monetary policy because the measures most urgently needed to emerge from the crisis are in those fields. The success of the stabilization policy may convince the public that the reform measures should be extended to domains related to the economic system, that is, reducing government involvement in resource allocation and introducing competition in monopolistic industries. These actions are much harder to carry out because they affect strong pressure groups that have benefited from the existing system. Therefore, economic leaders in several countries have exploited crises to

**Table 1.11**  
Development of Economic Freedom in Selected Countries, 1985–1997

	Improvement in score, percent of potential*		Global ranking**	
	1985–1990	1990–1997	1985	1997
New Zealand	63.0	52.9	36	3
Portugal	18.4	45.2	49	29
Greece	15.8	44.4	60	37
Spain	15.3	40.5	31	26
Argentina	24.4	75.0	86	6
Peru	14.1	62.5	97	33
Bolivia	35.6	38.9	70	26
Costa Rica	44.6	27.6	54	20
Chile	38.5	30.0	43	20
Nicaragua	-2.1	52.7	96	47
Mexico	28.6	31.6	58	39
Ecuador	18.4	39.6	74	42
Brazil	13.5	25.0	87	68
Honduras	-5.2	26.2	24	44
Colombia	3.6	18.9	65	65
Venezuela	8.8	9.3	39	54
Uruguay	-12.5	23.3	13	29
Israel	16.0	29.4	84	59

\*  $(R_t - R_{t-1}) / (10 - R_{t-1})$ , where  $R_t$  expresses the economic freedom index for year  $t$ .

\*\*The country's ranking divided by the number of countries and multiplied by 100.

Source: *Economic Freedom of the World*.

bundle the most essential and urgent corrections, those pertaining to fiscal and monetary policy, with reforms in specific industries (Rodrik, 1994), even if the latter reforms could be postponed. This tactic mitigates the resistance of pressure groups by presenting the new policy to the public en bloc. At times of crisis, pressure groups are forced to give up their advantages because otherwise the economic stabilization measures, which correspond to their own interests, will not be carried out. Tommasi and Velasco (1995) cite the experience of Argentina in 1995 as an example of packaging especially tough reforms in the fields of pensions, labor-market elasticity, and privatization of banks under the umbrella of a new stabilization policy. Furthermore, many countries that did not implement reforms in conjunction with their stabilization programs rushed to do so immediately afterwards.

In Israel, the severe economic crisis in the first half of the 1980s provided the motive for the stabilization program. Unlike many countries, however, Israel did not exploit the crisis to promote economic structural reforms concurrently. A few structural actions were taken in the stabilization program itself, such as issuing provident

funds with tradable bonds instead of earmarked bonds. Real change, however, did not begin until early 1987, when the first phases of reform in the capital market were carried out (Ben-Bassat, 1991). There are several possible explanations for Israel's approach. First, Israel was one of the first countries to apply a heterodox policy to stabilize its economy. Because this approach was controversial at the time, one can understand that Israel found it difficult to carry the war to an additional front concurrently. Furthermore, structural change was not needed to lower the inflation rate. It was important to win the first battle before launching another one. Second, to assure rapid and sustainable disinflation and to create price synchronization, the program included a three-month price and wage freeze; afterwards, too, 90 percent of goods and services remained price-controlled, as against 25 percent before the stabilization program. The controls were lifted gradually, and in early 1998 the percent of price-controlled goods returned to its original level. Such intensive use of price control is inconsistent with reforms that aim to strengthen market mechanisms. Significant deregulation of prices is needed before the importance of the reforms can be presented convincingly.

Even when Israel began its reform process, it did so gradually and very slowly. South American countries made structural reforms along with or shortly after stabilization programs and, more importantly, applied many of the reforms within three to seven years (see also Tommasi and Velasco, 1995). In Israel, in contrast, the process has been going on for fourteen years and has not yet been accomplished. Even though economists disagree about the optimum pace of reforms, Israel's pace is exceptionally slow. Sachs (1994) and others believe that reforms are most efficient when implemented rapidly because this allows for greater saving on the expenses of adjusting the economy to the new situation. Furthermore, according to this view, it is the only possible strategy from the political standpoint. Martinelli and Tommasi (1993) reinforce this approach by explaining that gradualism would cause those who gain from the first reforms to thwart subsequent reforms because they would infringe on their interests. Some dispute these two claims. Desai (1995) and Gavin (1993) believe it is actually rapid implementation that boosts adjustment expenses, unemployment, and, consequently, opposition to the reforms. Several researchers (Wei, 1992, and Dewatripont and Ronald, 1994) argue that gradual implementation increases the probability of completing the reforms because each success in applying them enhances the government's credibility and, therefore, the public's support for the continuation of the process. In Israel, the gradual approach seems to have bolstered support for the transition to a market economy. All the measures carried out thus far have had favorable results for both the business sector and households. Furthermore, the group that might be harmed by future reforms has been contracting gradually.



Edwards (1992) considers gradualism important when the reforms are interdependent or where there are prerequisites for implementing them. In the Israeli case, one may note two markets in which the sequence of actions was important. Cutting the budget deficit reduced government capital-raising and, for this reason, diminished the government's motivation to intervene in the capital market and facilitated the elimination of restrictions on the composition of institutional investors' uses. A smaller budget deficit and a lower inflation rate were also crucial for foreign-currency liberalization. The experience of the 1977 liberalization showed that the foreign-currency reform would be doomed to failure without a prior solution of macroeconomic problems.

### **Accomplishments to Date**

As stated, although the economic restructuring began long ago, the process has not yet been completed. By and large, macroeconomic reforms in the financial markets have been carried out; most reforms meant to enhance competition in monopoly-controlled industries have remained on paper. The extent of implementation of reforms thus far is a consequence of the degree of harm to the interests of various groups and the power of the lobbies that support them. To illustrate this, I have ranked the reforms—those programmed and those carried out—by these criteria.

**Reforms That Improve Citizens' Welfare** This group is composed of all measures that reduce the public's tax burden, directly or indirectly, by eliminating administrative barriers and therefore are not opposed. It includes many of the financial reforms, such as repeal of duties and taxes on imports of goods, services, and capital; lowering of liquidity ratios for financial assets; permission to sell assets and credit indexed to the CPI or the exchange rate; liberalization of international capital flows; and permission to issue corporate bonds.

**Reforms That Contain Mutually Offsetting Benefits and Burdens** The offset may not be total and is definitely not total for the individual economic unit, but it greatly reduces opposition to the implementation of reforms. For example, the issuance of earmarked bonds for provident funds was terminated while the compulsory investment in government bonds was downsized. The capital subsidy was reduced as payroll taxation was lowered. Directed credit was eliminated along with restrictions on borrowing overseas and the capital-inflow surcharge—measures that in any case wiped out the built-in subsidy in directed credit.

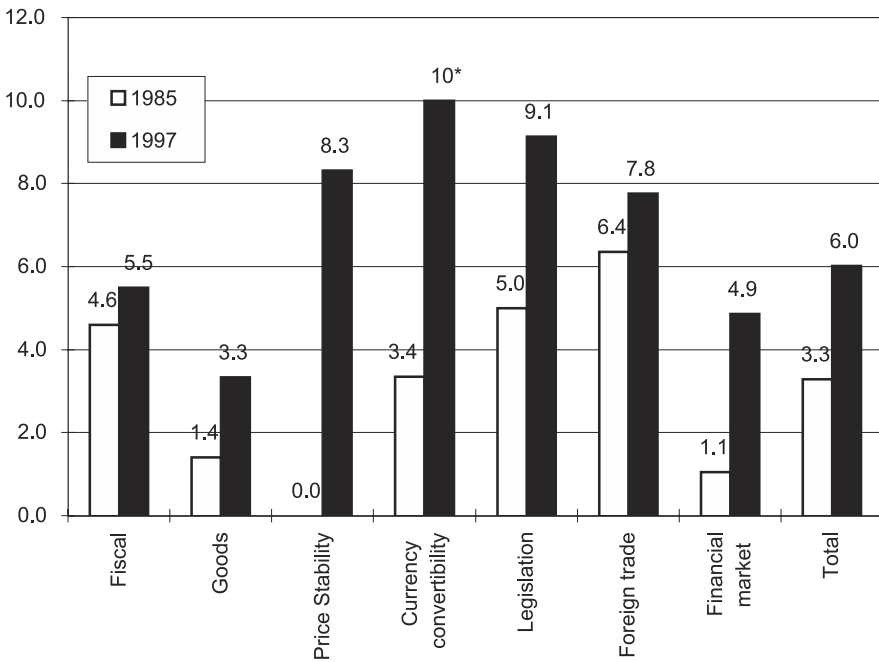
**Reforms Harming Weak Lobbies** This group includes the package of foreign-trade reforms—exposure of domestic manufacture to imports from “third countries,”

elimination of discriminatory purchase taxes, and elimination of the export subsidy that exchange-rate insurance had provided. Apparently, in this field, too, compensation was given by shifting or widening the crawling band. However, because the exchange rate was practically set by the market in between the boundaries of the band, this did not provide real compensation. Those harmed by these reforms were manufacturers and some merchants. This lobby lost much of its power after the stabilization program went into effect; in fact, it failed in most of its struggles. In addition to its failure to slow the import liberalization (except in the textile and lumber industries), it failed to effect change in the causes of greatest concern to it, the interest-rate and exchange-rate policies.

**Reforms Harming Strong Lobbies** Israel's two strongest economic lobbies are the development towns (new towns in priority areas) and the Histadrut. These lobbies have had greater success than others in preventing or impeding reforms. Many committees have proposed substantial cutbacks in investment grants for priority areas and their replacement with investments in physical, educational, and cultural infrastructure. However, the development-town lobby managed to impede these changes for a lengthy period of time. The lowering of capital grants did not begin until late 1995.

The lobby of owners of capital and the Histadrut, which derives most of its strength from the large labor unions, have managed to obstruct all attempts to tax capital gains and interest and have even prompted the government to retreat somewhat from the capital-market reform by means of the pension arrangements that were concluded in 1995. The Histadrut also prevented legislation that would have made the labor market more flexible, eliminated wage indexations among groups of workers, and downscaled automatic wage drift. Other countries also find labor-market reform one of the most difficult reforms to carry out.

**Reforms Harming Very Strong Lobbies** The most severe difficulties came to light in the attempt to create competition in monopolistic infrastructures, because the harm inflicted in this case is more specific and the potential losers are the economy's most powerful groups. In South American countries, too, progress was slowest in this field (Edwards, 1995). In Israel, the main success in this regard was attained in the communications industry, which is gradually becoming more competitive. Technological changes in communications have supported the government's efforts to promote structural change in this industry; evidently the main reason for the success of this reform is daring to struggle with the labor union. In banking, too, the government managed to effect several changes, foremost in prohibiting control of nonbanking corporations by banks. This prohibition forced the two largest banks to split several



**Figure 1.14**  
Development of Economic Freedom in Israel, 1985, 1997  
(Score on scale of 10)

\* 1998's rank

Source: J. Gwartney and R. Lawson, *Economic Freedom of the World*.

companies that they had controlled. However, other changes, especially the splitting of provident funds, still remain only on paper.

In all other monopolistic infrastructures (electricity, fuel, refineries, ports, aviation, and public transport), the government has not managed to create competition and has settled mainly for installing a more rational basis for price control. The successful experience with the communication industry shows that the concern about the exploitation of labor's strength to idle crucial services in order to stop the reforms was overstated.

Summing up, figure 1.14 shows Israel's progress in each field of economic freedom. The greatest progress was attained in price stability, from a score of 0 to 8.3; in currency convertibility, in which the score climbed from 3.4 to 10, in the financial markets,<sup>22</sup> and in economic legislation, from 5.0 to 9.1. Progress was also attained in budget policy and policy towards improved competition in goods markets, but in these fields much room for improvement remains.

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## 1.7 Summary and Lessons

In 1974–1984, Israel applied policies that cost it a decade of economic development and placed the internal and external strength of its economy at risk. The policy-makers eventually learned the lessons of these failures and within the framework of the 1985 Economic Stabilization Program, corrected the main policy errors that had caused the downside. After the stabilization program was implemented, a new economic approach took shape, was applied in most years since then, and has achieved a success worth imitating. There have been deviations from the path, for which a heavy price was paid, but these are exceptions that prove the rule. Just as we managed to learn from our errors, it is also important to reconstruct the policy that led to success for the Israeli economy and for others.

After the economy was stabilized in 1985, the policymakers set growth of business-sector product as their main economic target. To attain it, they downscaled government gradually and freed up sources for the use of the business sector. A lengthy series of measures meant to create a comfortable economic environment for investments and growth assured the absorption of labor and capital by the business sector. To bring this about, structural reforms in main markets reduced government involvement in directing resources to specific uses and made many markets more competitive. Monetary policy also supported the growth process by making the financial and capital markets more flexible, maintaining relative stability, and significantly lowering the real interest rates that followed the stabilization program.

This was a very successful recipe in most respects. Business-sector GDP expanded vigorously, the inflation rate dropped, the external debt declined perceptibly, and the Israeli economy became much more attractive in international markets. These trends were strongly reinforced by mass immigration from the former Soviet Union and by the peace process. However, economic inequalities among population groups have continued to widen.

In late 1994, the economy began to deviate from the positive trajectory that it had been following for a decade. Wages and workers in the public sector severely exceeded desired levels, and, in their wake, the budget deficit grew. The attempt to impede the negative effects of the budget breach by means of a tight monetary policy had some curative effects at first. However, the persistence of high interest rates even after the budget deficit was corrected did much to decelerate growth and raise unemployment, mainly due to currency appreciation that reduced export growth. The downward momentum accelerated in the middle of 1996 as monetary restraint was

joined by fiscal restraint, uncertainty in the peace process, financial crises abroad, and a slowdown in the implementation of structural reforms.

The favorable experience in 1985–1994 should guide us when we choose a policy strategy for the years to come. The way to return to a trajectory of sustainable growth is to complete the efforts begun during that decade. The main provisions of this policy should be the following:

### **Budget Policy**

- Because Israel still has a higher government-to-GDP ratio than industrialized countries, action to lower the ratio should continue. In other words, government spending may increase in the future but should grow more slowly than GDP. This will free up sources for sustainable growth of business-sector product.
- By lowering the ratio of general-government expenditure to GDP, it will also be possible to reduce the average tax burden. However, a tax reform that abolishes exemptions for preferred groups is needed; in order to expand the tax base and, thereby, make it possible to lower tax rates further.
- It is essential to maintain a low fiscal deficit and to keep the deficit on its long-term downward path. However, the expenditure policy should not be modified in either direction due to cyclical changes in tax collection (the automatic stabilizer).
- The composition of the budget should support the growth target by reserving a larger share for investments in education, vocational training, and transport infrastructure. These investments will not only boost the growth rate but also respond to specific problems such as intergroup gaps in education, inequality in income distribution, and road congestion.

### **Monetary Policy**

- The real interest rate is much higher than a growth-supportive level. However, the protracted high-interest policy has caused the currency to appreciate and exposed the business sector to a large foreign-currency position. If the interest rate is cut rapidly, an aberrant currency depreciation may ensue, and stability may be undermined. To escape the trap into which monetary policy has fallen, the interest rate should be lowered cautiously but more quickly than the Bank of Israel has lowered it thus far, both because the state of the economy requires preference of the growth target and because the current high unemployment rate will ease the inflationary pressures of currency depreciation.

## Structural Reforms

- *Overview:* The economy is structured much differently today than it was on the eve of the stabilization program. Government involvement in the various markets has decreased perceptibly, and economic competitiveness has risen. However, the implementation of reforms has been slower in Israel than in other semi-industrialized countries and has not yet been completed. The main macroeconomic reforms implemented have been those pertaining to financial markets, while most reforms meant to enhance competition in monopoly-controlled industries have remained on paper. The completion of the structural reforms will make resource allocation more efficient, lower consumer prices and producer costs, enhance business-sector profitability, and expand investments and growth.
- *Capital market:* There has been much progress in reforming the financial markets but important measures must still be taken. All government intervention in the composition of investments of provident and pension funds should be phased out, for example, compulsory investment in government bonds and the issuance of preferential nontradeable bonds for pension funds. All intervention that is not meant to enhance stability impairs competition and efficiency in the capital market and provides no return. All forms of discriminations in taxation of yields on different assets should also be abolished and replaced with a uniform tax rate on all assets yields for all savers.
- *Labor market:* The wage-setting mechanisms should be made more flexible in various ways, for instance, reducing automatic wage indexation between occupations and groups of workers, greatly reducing automatic wage drift and job ranks that do not correspond to employees' performance, and so forth. Because these increments create a floor on which the rate of wage increase is applied, they hinder disinflation or, alternatively, exacerbate unemployment.
- *Centralized industries:* Many industries, especially in infrastructure, are characterized by absence of competition (electricity, refineries, domestic calls, ports, public transport, etc.) or limited competition (banking and insurance). Nevertheless, Israeli governments have done very little to change this situation, mainly because the required measures would create struggles with labor and management in these enterprises. The fact that several communication industries have been made more competitive without disruption of industrial labor relations shows that the fear of labor's reaction is exaggerated. In almost all these industries, there are plans to enhance competition by splitting up active companies or allowing new players to enter the industry under license, depending on industry structure. It is important to apply these

plans promptly. After each industry has become competitive, the state-owned enterprise that operates in it should be privatized.

Many of these measures can help to lower unemployment and expedite growth by themselves, but some are interdependent. If one is adopted while the other is rejected, the desired results will not be fully achieved. Furthermore, the measures have positive correlations that will enhance the contribution of each when the program is carried out in full. En bloc implementation of this program will put the economy back on a growth path without disrupting internal and external stability.

## Notes

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1. The rapid acceleration of inflation caused loss of welfare in additional fields, e.g., an increase in sources devoted to anti-inflation defenses, impairment of tax-system functioning, and obscuring of transparency in many businesses (Kleiman, 1984; Merom, 1987).
2. Strawczynski and Zeira, *ibid.*, note that this increase exceeded the contribution of privatization to GDP of the business sector.
3. The Bank of Israel began to formulate a far-reaching reform plan in August 1986. The details of the working teams' analyses and recommendations appear in many internal memoranda. For a broad description of the recommended concept, see Bank of Israel (1988).
4. For a survey of government involvement in the capital market up to the reform, see Blum and Peterman (1987).
5. For a far-reaching discussion of the monetary policy and its institutional arrangements during the crisis period, see Sokolar and Cukierman (1989).
6. The law was amended several times. According to its most recent version, the central-government budget deficit must be pared to 1.5 percent of GDP by 2001.
7. The smaller the coefficient of variation of the exchange rate and the greater the coefficient of variation of foreign reserves and interest rate, the less volatile is the exchange rate (Ben-Bassat, 1995). For the purpose of the discussion above, the 1995 tests were adjusted to the end of 1998. Since May 1995, the Bank of Israel has intervened in the foreign-currency market by means of the interest rate when the exchange rate is within the band and directly when the exchange rate approaches the boundaries of the band.
8. See *Report of the Committee of Examination on Bank Holdings in Nonbanking Corporations*, 1995.
9. Conflicts of interest in the banking system were widely exploited until 1983. They are documented at length in *Report of the State Commission of Investigation on the Regulation of Bank Shares* (the "Bejski Report," 1986). A recently published study by Ber, Yafeh, and Yosha (1999) points to exploitation of conflicts of interest in the 1990s as well.
10. For a detailed analysis of the sources of funding, the use to which they were put, and correlations among them, with respect to 250 companies traded on the Tel Aviv Stock Exchange in 1990–1997, see Blass and Yosha (in this volume).
11. See Sokolar and Cukierman (1989), table 8.
12. See Yosha and Ribon (1998).
13. It is usually easier to carry out structural reforms at times of crisis or exceptional national events, because then far-reaching economic programs are more favorably received. (See also section 6.)

14. See *Bank of Israel Annual Report*, 1997, pp. 32–33.
15. The share was calculated in constant prices because the estimate is meant to test proportional changes that derive from real factors and not from relative prices.
16. The import surplus began to shrink in 1977. In GDP terms, it contracted from 16.2 percent in 1973–1979 to 11.2 percent in 1980–1984.
17. Notably, the extent of trade with Eastern European countries was very low at the point of origin.
18. The uptrend in exports to Asia and Eastern Europe slowed considerably in 1997–1998 because of the economic crises that beset many countries in these areas.
19. The Israel Central Bureau of Statistics adopted the IMF definitions in 1988. Therefore, it charges immigrants' transfers to the capital account instead of the current account. This makes the current-account deficit greater. Because capital transfers do not create external debt, the new definition dismantles the relationship between the current-account deficit and the added increment in external debt, which is crucial for the analysis presented here. See *Bank of Israel Annual Report*, 1998, p. 150.
20. Fischer and Orsmond (in this volume) note that all countries that attempted to bring down high inflation initially based themselves on the exchange rate as a nominal anchor.
21. Henderson (1998) suggests that the pace of progress be examined on the basis of the relationship between the change in each country's actual score and the highest possible score (10).
22. Notably, in 1998, much progress was achieved in making the sheqel convertible and by increasing the share of privately owned banks with the privatization of Bank Hapoalim. Accordingly, the author adjusted the score in view of the accepted indicators in the original study.

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