Research Department

The Economy: Developments and Policies

summary

Israel is in a recession—the longest since the establishment of the State in 1948. GDP per capita fell by 3 percent in 2002, continuing its decline in 2001; business-sector product shrank by about 3 percent, and the unemployment rate rose to 10.3 percent of the labor force. The Consumer Price Index (CPI) rose to 6.5 percent, far above the target of price stability, with wide fluctuations. There was a steep increase in the first half of the year, in the wake of gradual depreciation, indicating that financial stability was being undermined, with a return to an environment of price stability in the second half of the year, alongside relative stability in the financial markets.

The factors underlying the prolonged economic recession are the Intifada, which began in September 2000, the slowdown in world trade, and the global slump in the high-tech industry. The effect of the Intifada, which in its first year was expressed primarily in plummeting tourism and exports to the Territories, extended to other areas, especially private consumption: per capita private consumption dropped by 2.5 percent—a decline unparalleled since 1984—because of individuals' assessments that the fall in their income would be a prolonged one. The cost of the Intifada, measured against a benchmark scenario in which it would be over by the end of 2001, is estimated at between 3 and 3.8 percent of GDP in 2002.

There were marked differences between economic policy in the two halves of the year. In the first half the policy mix was expansionary; the budget deficit grew notably, considerably overshooting the target, which was adjusted upward to 3 percent of GDP, and the Bank of Israel's key interest rate was set at a its lowest level for several years. The rise in the deficit came in the wake of its deviation from the target in 2001, and was due in part to over-optimistic budgetary estimations of tax receipts. The policy mix was in contradiction to the agreement reached by the Bank of Israel and the government regarding contractionary fiscal policy. In response to this policy mix there was significant local-currency credit depreciation in January, and inflation expectations approached the upper limit of the inflation target. After an interval which lasted until mid-March, the lack of credibility of the policy mix and the continued deterioration of the security-political situation led to the intensification of demand for foreign exchange and further local-currency depreciation, by a cumulative 18 percent, imperilling financial stability. In order to check the deterioration in the financial sphere, policymakers radically altered the mix: the Bank of Israel raised the interest rate by a cumulative 4.5 percent till the end of June, constituting a substantial real increase; the government decided on an economic emergency package, comprising higher taxes and cuts in expenditure while raising the deficit target to 3.9 percent. These measures restored stability to the foreign-currency

market in the second half of the year, although there were still indications of unrest: long-term interest remained high and the foreign-exchange market was still volatile.

The persistence of the recession was expressed in the labor market: the unemployment rate rose from 9.3 percent in 2001 to an average of 10.3 percent in 2002; the participation rate contracted markedly, reflecting mainly the 'discouraged worker effect;' for the first time in many years the average nominal business-sector wage declined, and the average real wage shrank by about 6 percent. The persistent economic recession caused employment to fall, after an initial stage in which the number of hours worked declined, possibly impairing the ability of many employees who have lost their jobs to return to the labor market.

The recovery of world trade was very slow in 2002, and did not extend to the high-tech industry. Because of the persistence of the global slump in this industry and the continued adverse effect of the Intifada on Israel's tourism, exports plummeted further in 2002, and the balance of payments deficit widened. This occurred despite the 6 percent real local currency depreciation which followed the real depreciation of 2001, the effects of which were felt mainly in the traditional industries. Only in 2002:IV did high-tech exports begin to rally.

One of the clearest lessons of the events of the last two years is the importance of fiscal policy with a long-term horizon, as is customary in the OECD. In those countries the rate of expansion of public expenditure has slowed in the past decade, alongside the contraction of the public-sector deficit, and many of those countries are now in surplus. This policy, which was implemented in uneventful years, enabled those countries to contend with the recession of the last two years in a balanced fashion, implementing a policy mix which allowed them to increase the budget deficit in response to the decline in tax receipts occasioned by the recession while at the same time gradually reducing short-term interest. The attempt to follow suit in Israel failed, because before the onset of the recession, at the end of 2000, the cyclically-adjusted deficit was high, the tax burden was increased significantly, and current public-sector expenditure per capita was raised markedly and on an ongoing basis. Moreover, the lack of progress in reducing the public-sector expenditure/GDP ratio and the burden of the budget deficit from previous years made it necessary to further increase the tax burden and slash public expenditure in the second half of the year. All this was coincident with the recession, and served to exacerbate it. The increased tax burden will weigh heavily on the economy in the future, once external conditions support a return to sustainable growth. Another lesson of the events of the last two years is the need to create a mechanism with pre-set dates for adjusting budgetary trends in accordance with changing economic circumstances.

As long as Israel continues to suffer from internal and external shocks, the objective of economic policy for 2003 must be to maintain financial stability and prevent the economy from contracting further. To that end, it is necessary to change the rules of the game in the fiscal sphere, adopting a budgetary policy that has a long-term horizon and incorporates steps to slow the rate at which public-sector current expenditure is expanding. This will make it possible to reduce the deficit, prevent further tax-hikes while aspiring to lower taxes in the future, as well as to implement programs of investment in the infrastructure.

All these measures will bring about a return to a growth path. The consistent contraction of the budget deficit will act to reduce long-term interest, making it possible to gradually reduce the Bank of Israel's key interest rate while restoring confidence in the government's economic policy, which has been seriously undermined in the last two years. The need for change in the fiscal sphere is indicated by a simulation of the development of the deficit in the next five years based on the decisions made to date and the assumption that the present trend of public-sector current expenditure will continue. According to the simulation, unless corrective measures are introduced, there will be a very large deviation from the deficit target in 2003, and in 2004–2007 the deficit will soar to 6 percent of GDP.

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1. MAIN DEVELOPMENTS

The deep recession which Israel is currently experiencing is the longest since the establishment of the State. In the last two years it was expressed in a 2 percent decline in GDP and 6 percent contraction in per capita GDP. The reduction of business-sector employment caused the unemployment rate to rise to an average of 10.3 percent of the labor force in 2002. Private consumption declined for the first time in many years, attesting to the entrenchment of individuals' assessments that the decline in their disposable income would endure. For the first time in many years the nominal wage has fallen, and the real wage has plummeted. In the first half of 2002 there was gradual but marked local-currency depreciation, alongside indications that financial stability was being undermined. The CPI rose by 6.5 percent in 2002, far above the target of price stability, with wide fluctuations. Prices rose significantly in the first half of the year, returning to an inflation rate that is in line with the target of price stability and relative calm in the financial markets in the second half.

The main causes of the recession were the Intifada, which began in September 2000 and has persisted till today, the contraction of world trade, and the slump in the high-tech industry. The ongoing crisis in world capital markets has also had an adverse effect on Israel, particularly as in recent years these markets have constituted an important source of investment financing. In its first year, the Intifada hit mainly tourism, construction, agriculture, and exports to the Territories. Its effects expanded to other areas in 2002, among them private consumption, in the wake of the entrenchment of individuals' assessments that the Intifada was not a passing phase, but an ongoing situation with far-reaching repercussions on income and taxes, adding up to a fall in permanent disposable income. According to the assessment presented in the second part of this report, Output and Principal Industries, the Intifada caused the loss of between 3 and 3.8 percent of GDP in 2002 measured against a benchmark scenario in which it would end in 2001 (Box 1.1 in the second part of this report). This loss exceeds that incurred due to the slowdown in world trade, and the slump in the high-tech industry in particular.

In macroeconomic policy there was a marked difference between the two halves of 2002. In the first half of the year economic policy operated under the agreement reached at the end of 2001 that the government would adopt a policy of fiscal restraint in order to meet the adjusted deficit target of 3 percent of GDP, which incorporated the annulment of private legislation introduced in 2001, while aiming for a declining deficit path subsequently. These objectives should have signaled fiscal discipline, alongside a 2 percent reduction in the Bank of Israel's key interest rate—a mix of fiscal restraint and expansionary monetary policy. At the end of December and in January there was significant local-currency depreciation, and inflation expectations rose to the region of the upper limit of the price-stability target. Since the budget was not amended accordingly, in the first half of the year the credibility of macroeconomic policy was eroded; the balanced policy mix which had been announced was in effect replaced by an expansionary mix (expansionary fiscal and monetary policy), which gave rise to serious misgivings regarding the Bank of Israel's ability to maintain financial stability in the long run. Confidence was also undermined by the attempt to amend the Bank of Israel Law so as to impair the central bank's independence in determining monetary policy, setting multiple targets that would prevent it from acting consistently to attain price stability. As a result of the loss of confidence in economic policy and the continued deterioration in the security-political situation, demand for foreign exchange rose, after an interval until the end of March when the exchange rate remained relatively stable. By June cumulative local-currency depreciation had reached 18 percent, jeopardizing financial stability. In June the government adopted an economic emergency package, based on a heavier tax burden and cuts in government expenditure, while further raising the deficit target to 3.9 percent. This, together with the cumulative 4.5 percent interest-rate hike by the Bank of Israel until the end of June, signaled a shift to a tight policy mix incorporating both monetary and fiscal policy. For the year as a whole, the general government's overall deficit grew from 4 percent to 4.4 percent of GDP, whereas the overall government deficit was 4 percent.,[1] near the new target of 3.9 percent of GDP, as adjusted in June. The Bank of Israel's key interest rate reached 9.1 percent, with a significant increase in real interest. Only towards the end of the year, after a tentative lull in the foreign-exchange market, was it possible to reduce the interest rate slightly, by 0.2 percentage points.

In 2002 the first indications of economic recovery were visible in the industrial countries (Table 1.2), but were not in evidence in Israel. One of the reasons for this was that much of the global turnaround was focused on the traditional industries, and this did not help Israel's exports, which are concentrated mainly in the high-tech industry. Although in the second half of the year US high-tech imports appeared to stabilize, contributing to the recovery of Israel's exports in 2002:IV, in the rest of the world demand for these products has not yet rallied, and this hampers the recovery of Israel's

[1] The budget deficit is biased downwards because of the deferment to 2003 of V.A.T. and income-tax rebates, and accounting adjustments (withdrawal of money accrued by public entities, e.g., the Ports Authority, the Postal Authority, Amidar, and the National Insurance Institute), whose economic effect is minimal.

exports. In the last two years start-ups have made a negative contribution to GDP, in contrast with 1997–2000, when they increased it substantially.

The ongoing economic recession was also expressed in the labor market: firms slashed staff numbers, and the unemployment rate rose to an average of 10.3 percent. The participation rate fell and the number of long-term unemployed persons rose. The expansion of public-sector employment offset 0.3 percent of the unemployment rate. After many years of real appreciation, in the last two years there has been real depreciation, which amounted to 5.8 percent in 2002. The real depreciation helped mainly the traditional industries, while the high-tech industry suffered from a lack of demand due to the global slump in that sector.

The CPI rose by 6.5 percent in 2002, far above the target of price stability (1–3 percent), reflecting mainly sharp local-currency depreciation in the first half of the year. Other contributory factors were the bursting of the Nasdaq bubble and the collapse of investors' confidence as a result of the accounting scandals that emerged in several leading US companies, the higher risk premium, and greater cost of raising capital, the latter serving to reduce capital inflow and foreign direct investment in Israel. Another contributory factor was the expected reduction of tax discrimination against foreign-currency investments in general—and financial investment abroad in particular—in the framework of the tax reform.

The importance of a long-term fiscal policy that affords greater freedom to act in a recession came to the fore in 2002. A policy of this kind was instituted in most of the OECD countries in the early 1990s, and the ongoing slowing of the rate of expansion of public-sector expenditure enabled many of them to deploy 'automatic stabilizers' in the two years of the recent recession, i.e., to allow the deficit to expand in response to a decline in tax receipts, without exceeding the deficit ceiling of 3 percent of GDP set in the Maastricht Accords. In Israel the deficit has expanded substantially in the last two years,[2] and the gross public-sector debt has risen to 105.3 percent of GDP, because the point of departure was very different from that in the OECD countries—due to the accelerated expansion of public expenditure in Israel over a long period. Furthermore, in contrast with the policy adopted in the OECD, in Israel the government had to increase taxes and cut expenditure during a recession, thereby exacerbating it. Another conspicuous feature of the last two years is that the rise in the deficit during a recession was accompanied by an optimistic forecast of tax receipts and a failure to bring fiscal parameters into line with changing economic circumstances, thereby signaling fiscal unreliability and uncertainty. It is advisable to take steps to avoid a repetition of this sequence of events in the future by determining stages during the year for monitoring budgetary performance at pre-set times. A long-term fiscal program based on the gradual deceleration of the expansion of public expenditure should be delineated; this will make it

[2] The general government deficit rose to 4.6 percent (2001–2002 average); according to the definition of the deficit in the Maastricht Accords, which is based on recording interest payments in nominal terms, the deficit grew to an average of 7 percent in the last two years.

possible at the initial stage to reduce the deficit, and at a later stage to lower taxes, similar to the measures adopted in the OECD countries, and in the EU in particular.

Box
Long Recessions in Israel

Israel is experiencing a recession[3] akin to others it has known only three times in the past: in 1952–53,[4] in 1966–67, and 1988–89. A comparison of the characteristics of the present recession with those of the previous ones shows that the most prominent feature of the present one is its protracted nature: whereas in the 1950s and 1960s employment was harder hit than is currently the case—to date—the continuous decline in GDP over a period of more than two years did not occur previously. Israel is therefore in the longest recession in its history, and as yet there are no indications of its reversal.

- In terms of the decline in GDP, the current recession is far more serious than those of the 1950s or 1960s: GDP and business-sector product have fallen by 2 and 4.1 percent respectively, compared with a negligible contraction in GDP in 1966–67.
- To date the unemployment rate has risen from 8.9 to 10.1 percent of the labor force—and is expected to continue rising. While in the 1950s and 1960s it started from a lower point, it eventually reached an even higher level—11 percent.
- In the economic slowdowns after the 1960s there was a drastic decline in the current account deficit of the balance of payments, in contrast with the current recession. This was also the case with regard to the rate of price increases, which moderated significantly in two of the previous slowdowns, while in the current one inflation has accelerated as a result of sharp depreciation in 2002. Note that the present level of the current account deficit does not seriously imperil the repayment of the foreign debt, as has occurred in other countries, because of its low level as well as the small scale of the net foreign debt from a historical perspective. The relatively low inflation environment also contributes to stability.
- During a recession the economy is more vulnerable to a financial crisis, expressed in sharp local-currency depreciation. The depreciation that took place in the first half of 2002 was very different from similar events in the previous recessions. In the 1960s the depreciation events were short and were perceived as responses with a lag to the rise in inflation. Thus, the depreciation of 2002, which persisted for six months and was due to portfolio adjustment, was dissimilar to those in previous recessions.

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[3] A recession is defined here as a decline in GDP and business-sector product; a slowdown or slump is defined as a decline in per capita GDP and per capita business-sector product

[4] That period began as a slowdown in economic activity alongside a 4 percent rise in GDP in 1952 and population growth of 7 percent, i.e., a reduction in per capita GDP. In 1953, on the other hand, there was a recession in economic activity alongside a 1.4 percent decline in GDP.

- Although in a long-term perspective Israel's increased openness to international trade has been crucial for economic growth, it also exposed the economy to demand shocks arising from shifts in world trade. Whereas in the recessions of the 1950s and 1960s the main contributory factor was the drastic decline in domestic demand, in the current one the fall in demand for exports was the principal cause, alongside the fall in domestic demand.
- Note, finally, that previous recessions ended suddenly as a result of events that radically changed individuals' expectations. The emergence from the recession of the 1950s was due to a great extent to mass immigration, which increased the population by 60 percent between 1949 and 1955. The slump of the 1960s was ended by the Six Day War, which constituted a turning-point in the strategic and economic situation of the region. The slowdown of 1988–89 concluded as a result of the influx of immigrants from the former USSR, which all at once increased the potential labor force by over 20 percent. In the present context these aspects underline the fact that a change in the security-political situation could play a significant role in enabling the economy to emerge from the recession.

2. REAL ECONOMIC ACTIVITY

The Intifada which began in 2000:IV, the slowdown in world trade, and the slump in the high-tech industry have all combined to drag Israel into the most protracted recession it has ever known (see box). GDP and business-sector product contracted (by 1 and 3 percent respectively) in both 2001 and 2002. The duration of the recession—more than two years—has gradually affected the expectations of economic agents regarding future income, and these expectations hamper emergence from the recession.

In 2001 the Intifada had an adverse effect primarily on industries that were vulnerable to the security situation—tourism exports, exports to the Territories, and residential construction—while in 2002 its influence extended to other aspects of the economy, especially private consumption. The persistence of the situation was perceived by individuals as a protracted reduction in their future income, and these expectations were in fact fulfilled, as is indicated by the decline in the nominal wage and rise in taxes. The decline in permanent income led to the sharp adjustment of private consumption, which fell by 0.5 percent—something which has not happened for a long time. Note, however, that private consumption contracted by less than income, attesting to consumption smoothing by individuals.

Additional spheres in which the adverse effects of the Intifada have been felt in the last two years are the commerce and services industries, tourism, exports to the Territories, and gross investment, which has reached a historical low point as a proportion of revenue (Table 2). All in all, the loss due to the Intifada in 2002 is estimated to be 3–3.8 percent of GDP.

Towards the end of 2000 there was a slump in world trade, and this persisted in 2001 and 2002. The slowdown in the global high-tech industry was particularly apparent, after the bubble of 2000. These events had a far-reaching effect on Israel's manufacturing exports, most of which are high-tech. Although there were indications in 2002 that the global economy was recovering, this was concentrated in the traditional industries, which do not account for very much of Israel's exports, so that the decline in exports persisted. Goods exports, which had expanded at an annual average of over 9 percent throughout the 1990s, and by 27 percent in 2000, fell by about 7 percent annually in 2001 and 2002. Start-ups contributed an annual 0.7 percent to the rise in GDP in 1997–2000, but in the last two years they have contributed an annual 0.8 percent to its decline. In the second half of 2002 US high-tech imports stabilized, contributing to the apparent recovery of Israel's exports (according to fourth-quarter data).

The effect of fiscal policy on economic activity was mixed in 2002. On the one hand, the marked rise in defense expenditure served to check the decline in activity to some extent, while on the other the increased tax burden and cuts in transfer payments in the second half of the year served to reduce private consumption. Note that the effect of the heavier tax burden will continue to be expressed in the coming years, hindering the return to a sustainable growth path. Apart from the negative impact on total factor productivity, individuals are afraid that the burden will grow heavier still, eroding their future permanent income; these expectations impel them to reduce consumption. Economic policy has not led to a permanent decline in real short-term interest rates—which would stimulate demand—even though an attempt was made to achieve this in the first half of the year. While the Bank of Israel gradually reduced its nominal interest rate in 2000 and until the end of 2001, attaining a low level of real interest in the first half of 2002, the undermining of financial stability in the middle of the year—against the backdrop of the erosion of fiscal discipline and the exacerbation of the security situation—required a radical response, and the real interest rate rose steeply. Over and above these events, there was considerable uncertainty as a result of the lack of coordination between the policy mix in the first half of the year and its sharp adjustment subsequently.

An examination of the development of the economy during 2002 shows that the decline in GDP was far more moderate than in 2001 (Table 2), even though the recession persisted, as indicated by the Composite Index. The apparent recovery in 2002 illustrates a feature of the business cycle that is well known: when there is a sudden recession accompanied by a steep drop in economic activity in the first year, a process of adjustment occurs in the second year which could contribute to the moderation of the recession. These processes are supported by the real economic forces which are typical of a recession, namely, real depreciation (because of the decline in domestic demand), and a decline in the real wage (because of lower demand for workers). Both these processes occurred in 2002; there was real depreciation of about 6 percent, continuing the depreciation of 2001 and in contrast with previous years, when there was ongoing real appreciation. The real depreciation appears to have contributed primarily to the recovery of the traditional industries, whose exports stabilized in 2002 after declining in 2001, as well as to reduce traditional imports, replacing them with domestic products. The slump persisted in the high-tech industry, and this appears to be due mainly to lack of demand abroad. The real wage declined due to the combination of lower nominal wages in the business sector and the unexpected acceleration of price increases. Although real economic forces have been at work since the beginning of the recession, these two processes have been delayed to some extent because of the lagged response of the nominal variables: there has been substantial local-currency depreciation set in only at the beginning of 2002, after the 2 percentage-point interest-rate cut, and the nominal wage fell only after the continued reduction in demand for labor. These factors contribute to an increase in the supply of GDP, and hence cannot by themselves rescue the economy from the recession if domestic and foreign demand do not recover.

The return on capital reached a very low level in 2002, despite the fall in unit labor costs. The processes of wage adjustment which are taking place as a result of the persistence of the recession are expected to improve the return on capital in the future.

Long-term trends in total factor productivity

An economic trend that gives rise to concern is the decline in total factor productivity in recent decades[5] (Table 5). This trend is affected by many factors, among them the accumulation of human capital, due *inter alia* to taxation policy. The worthwhileness of accumulating human capital is affected to a great extent by the taxation of labor—income tax and national insurance payments, both of which have risen in the last six years (Table1.A.13b). The decline in productivity underlines the importance of adopting a policy that will contribute to increasing it in the future, and in particular the need to ease the burden of taxation on labor on groups which invest in human capital. A reduction of this kind is included in the recommendations of the Rabinowitz Committee, but whether it will be implemented is unclear as this will depend on the government's ability to slow the rate of expansion of its current expenditure. Only a reduction of this kind will enable the public-sector deficit to be cut, thereby obviating the need to increase the tax burden yet again. Another policy measure that has a positive and significant effect on total factor productivity is infrastructure investment.[6] The effect of easing the tax burden and increasing infrastructure investment will be fully expressed once both domestic and foreign demand rally.

3. FISCAL POLICY

[5] Part of the explanation of the decline in total factor productivity is the pro-cyclical aspect of measurement. In a recession the utilization of capital (hours of use of machinery) and labor (effort in a given hour of work) plummets. In addition, the measurement of capital stock is biased upward because of changes in the lifetime of machinery and accelerated amortization—as a result of technological advances. Previous sensitivity tests indicate that these components could add 0.8 percent to the long-term average, meaning that there is still a marked decline in productivity over previous years.

[6] See Z. Hercowitz, Y. Lavi, and R. Melnick, "The Impact of Macroeconomic Factors on Productivity in Israel, 1960–19196" in *Bank of Israel, Economic Review*, 72, and Y. Lavi and M. Strawczynski, "The Effect of Policy Factors on the Increase in Business-Sector Product and its Components in Israel, 1960–1995," in *Bank of Israel Economic Review*, 73 (Hebrew).

The general government deficit rose from 4 percent of GDP in 2001 to 4.4 percent in 2002. There were two reasons for this. First, the continued recession, which led to a marked shortfall in tax receipts. Second, the continued acceleration of the rise in government expenditure until June, when corrective steps were taken in the framework of the economic emergency package. The increase in defense expenditure, primarily in the first half of the year, was the main source of the 4.1 percent increase in the government's domestic demand (Table 1.A.3.6b), and this served to check the decline in domestic demand. By contrast, the increase in the tax burden and the reduction in transfer payments in the second half of the year led to the contraction of private consumption.

Since the expansion of the deficit is explained in part by the reduced share of public-sector expenditure in GDP due to the decline in economic activity—a development that is independent of fiscal policy—it is customary to define the net effect of fiscal policy by means of the change in the cyclically-adjusted deficit, i.e. the deficit adjusted by the effect of the decline in economic activity on the government's tax revenues. According to this index, known as the fiscal impulse, fiscal policy was neutral in 2002 (Table 4), reflecting the two opposing forces noted earlier—the marked rise in domestic demand, on the one hand, and the slowing of the rise in transfer payments and increase in the tax burden, on the other.

Fiscal policy was one of the main factors behind the increase in the real yield on long-term government bonds in 2002. In the second half of 2001, even before the 2002 budget was approved, there were serious reservations regarding the forecast 4.5 percent increase in revenues forecast in the budget. An expansionary fiscal policy was adopted on the basis of the assumed rise in tax receipts, and this intensified in the course of the year, due *inter alia* to the rise in defense expenditure because of the Defensive Shield campaign. At the beginning of 2002 the deficit target was adjusted from 2.4 percent of GDP[7] to 3 percent, and the decision was made to introduce cuts which would enable the attainment of the new target, as announced, and to aim at attaining a declining deficit path in the coming years. These steps were taken only in June, however, and as a result of the sharp 2 percent interest-rate reduction by the Bank of Israel at the beginning of the year and the deterioration in the security-political situation there was sharp local-currency depreciation, which imperiled Israel's financial stability. This threat was averted only when the decision was made to increase the tax burden and slash public-sector expenditure while hiking the deficit target to 3.9 percent of GDP; the Bank of Israel raised its key interest rate by a cumulative 4.5 percentage points till the end of June.

While the government deficit stood at 4 percent of GDP, close to the adjusted target, this was achieved by deferring some V.A.T. and income-tax rebates to 2003.[8] A long-term view of the fiscal aggregates shows that they have declined markedly in the last two

[7] This target represents the adjustment of the original target, which was 1.5 percent of GDP.

[8] Accounting adjustments were also made by withdrawing accrued profits from government corporations and the National Insurance Institute.

years. Until June no adjustment was made on the expenditure side which could signal that there would be no further increase in the tax burden. On the contrary, the reduction of the deficit decided upon in June comprised NIS 3.2 billion in tax increases and only NIS 2.4 billion on the expenditure side. In addition, the 2003 budget approved by the Knesset is based on unrealistic assumptions regarding the income side which in effect perpetuate the increase in public-sector expenditure; this is not consistent with the deficit target and could make further tax increases necessary in the future. The net public-sector debt[9] has risen by 10 percent of GDP in the last two years to approach 86.3 percent of GDP (105.3 percent of the gross public-sector debt)—above the level prevailing in 1997.

All the industrial countries have reduced the rate of expansion of public-sector expenditure in the last eight years (Figure 2), and this has enabled them to slash their cyclically-adjusted deficit. Israel has gone in the opposite direction by increasing both public-sector expenditure and the cyclically-adjusted deficit. The lack of progress made in the fiscal sphere in previous years, when there was no recession, has obliged policymakers to impose economic restraint during a recession, thus acting in a pro-cyclical manner and deepening the recession. Note, in this context, that in countries which have cut expenditure and/or raised taxes, this has caused individuals' expectations to rise, leading private-sector economic activity to increase over and beyond the contractionary effect of the cut, and hence to an increase in GDP**.** For Israel in 2002, however, it is unlikely that these mechanisms are strong enough because of the difficult and ongoing security-political situation which first and foremost hits individuals' expectations regarding income in the foreseeable future. While in the long run the contraction of public-sector expenditure will help to change individuals' expectations, in order to alter them it is necessary to introduce structural reforms aimed at increasing competition (e.g., in electricity).

4. THE LABOR MARKET

The ongoing recession found expression in all the major labor market variables: business-sector employment declined by 1.1 percent, and the unemployment rate rose sharply to 10.3 percent; the participation rate fell by 0.2 percent of the labor force because some individuals left the pool of work-seekers; the proportion of persons unemployed for a long time rose; the nominal wage remained unchanged, as a result of its decline in the private sector and rise in the public sector; the real wage contracted markedly.

Developments in the labor market reflect the two main causes of the recession: the Intifada and the global slump in the high-tech industry. The Intifada led to a marked decline in demand for workers in the services industry, although this was offset to some extent by increased employment of security guards. The number of non-Israelis employed

[9] The gross public-sector debt *plus* the Bank of Israel's debt *less* the government's loans to the public and the foreign-exchange reserves.

dropped by 7 percent due to the contraction of employment of workers from the Territories after the Defensive Shield campaign and slight rise in the number of foreign workers. The crisis in the high-tech market, which impacted on the demand for exports of Israel's manufactured goods, was expressed in the contraction of employment in skilled-labor-intensive industries. Employment contracted by 4 percent in manufacturing—a rate unseen for a long time.

The rapid 3.1 percent expansion of employment in the public services offset the rise in the unemployment rate by 0.3 percentage points. Israelis employed in the public services rose continuously throughout 2001; in 2002:I their number was up by 1.5 percent from 2001:IV, while in the next two quarters it dipped slightly, then rose again in the last quarter. Most of the increase occurred in the local authorities and the public administration, due to the augmentation of the police force. There was also a notable rise in employment in the education services, principally in pre-school education, following the gradual introduction of free education for 3–4 year-olds, and improved school attendance in the Arab sector. Employment in institutions of higher education also expanded, due to the marked rise in the number of students.

In view of the deterioration in the security situation, the number of Palestinians employed continued to contract in 2002, and stood at 30,000, compared with 50,000 in 2001 and over 120,000 before the Intifada. The construction industry accounted for half of the decline in employment; consequently, and as a result of closures and the intensification of suicide-bombings, the process of substituting foreign workers for Palestinians continued in 2002. The proportion of foreign workers in total business-sector employment thus continued to rise—as it has throughout the 1990s—and reached 12.6 percent, while the share of Palestinian workers plummeted to an unprecedented low point of 1.5 percent, after reaching 6 percent in 1998 and 9 percent in 1990. The proportion of all non-Israelis employed in 2002 was 14.2 percent, a very high rate by international standards. The reduction of the quota of foreign workers in construction was offset by its increase in agriculture. Because of the lower demand for labor in the principal industries it is impossible to tell at this stage whether the relative stability in the number of foreign workers reflects greater determination in implementing the government's announced policy of reducing their employment.

During 2002 and in the Arrangements Law accompanying the 2003 budget significant changes were made which affect the labor market. Child allowances, income support, and associated benefits were reduced, the employment test was reinstated for some recipients of income support, the extent to which income support was offset against labor income was reduced, and changes were introduced in the allocation of unemployment benefits—the purpose of all these measures being to raise the participation rate. In the context of Israel's low participation rate by international standards these measures should operate in the right direction in the long run. They may have an adverse effect on the needy in the short run, however, because of difficulties in finding employment at a time of rising unemployment and the absence of efficient worker-placement mechanisms. Some of these difficulties could have been avoided if the government had implemented its declared policy of reducing the number of foreign workers, thereby enabling Israelis to find employment in their stead.

5. THE BALANCE OF PAYMENTS

There was some deterioration in 2002 in the current account deficit, which was $ 2.1 billion—2.1 percent of GDP, compared with 2 percent of GDP in 2001. The expansion of the current account deficit expresses the contraction of private and public savings and a more moderate decline in investments. An examination of the export and import sides of the current account reveals a 5.3 percent decline in exports of goods, services and factor inputs (at current prices), and a 4.4 percent fall in imports. With regard to capital flows, investment in Israel by nonresidents[10] continued the downward trend evident since 2000:IV, and amounted to $ 2.3 billion, compared with $ 3.5 billion in 2001. Investment abroad by residents rose in 2002 and stood at $ 3.6 billion, compared with $ 2.3 billion in 2001. In addition, and in contrast with previous years, the nonbanking private sector increased its deposits abroad by withdrawing foreign currency from Israel.

Exports of goods and services (excluding diamonds) plummeted by 8 percent in volume terms in 2002, despite real depreciation of 5.8 percent.[11] According to the export equation calculated by the Research Department,[12] the real depreciation together with the 2 percent expansion of world trade and 1.4 percent deterioration in Israel's terms of trade should have led to stability in goods and services exports (excluding diamonds).[13] Most of the gap between the expected development of exports on the basis of the equation and their actual development stems from the composition of the recovery of world trade: whereas the latter was based on the traditional industries, most of Israel's manufacturing exports (almost 75 percent) are high-tech, in which area the global slump persisted in 2002. The gap is also due in part to the impact of the Intifada, which continued to have an adverse effect on tourism in 2002 and may have led to some contraction in demand for Israeli exports due to the preference for products from sources not as likely to be affected by interruptions to supply. Towards the middle of the year the downward trend in high-tech exports was checked, and there was a slight single-digit rise in the second half of the year. This development was responsible for the trend of stability in manufacturing exports for the year as a whole.

In the absence of quarterly by-industry data on world trade, US imports serve as a good indicator of the development of demand for Israel's high-tech exports, as one third of them go to the US. The growth rate of Israel's high-tech exports in the past was in step

[10] Direct and securities portfolio investment.

[11] The real depreciation referred to here is that measured by prices of exports vis-à-vis business-sector product.

[12] See Box 6.2 in the 1999 edition of this report.

[13] For the purposes of the calculation, we assume that the crisis in exports that occurred in 2001 persisted in 2002, and that the process of adjusting exports to the new situation came to an end in 2001.

with that of US imports in that industry (see Chapter 1, Manufacturing, in the second part of this report).[14] In the second half of 2002, however, the two trends diverged, and while US high-tech imports began to rally, Israeli exports remained weak. The gap is particularly marked as regards ‘Electronic communications equipment,’ which led Israeli exports in 1999–2000. The difference in the development of US high-tech imports and Israeli high-tech exports indicates that the security situation is hampering the ability of exports to recover. In addition, a detailed analysis of US high-tech imports shows that the gap is explained in part by Israel’s areas of specialization: the areas in which Israel’s high-tech industry has specialized are not the same as those in which US demand has begun to grow.

Services exports (current dollars) plunged by 13.5 percent in 2002, further to their 21 percent decline in 2001. Exports of tourism services, which constitute 20 percent of total services exports, continued the contractionary trend that began with the intensification of the conflict with the Palestinians during the year, and prices in the industry plummeted. This trend intensified following the events of September 11 in the US and fears of additional attacks, which caused world tourism to contract. Exports of ‘other services,’ which include software and R&D (as well as sales of start-ups), fell by more than $ 1 billion due to the persistence of the world slump in the high-tech industry, expressed in a fall in both the prices of services and the volume of their exports.

The slowdown and the real depreciation led to a 7 percent decline in goods and services imports (excluding diamonds, at current prices), expressed in the contraction of imports of consumer goods, capital goods, raw materials, and services, by between 4 and 12 percent. Note that over and beyond Israel’s economic slowdown and real depreciation in 2002, the price of internal tourism, which substitutes to some extent for travel abroad, fell and this served to further reduce tourism services imports, which were down by 14 percent in 2002.

Since in recent years the Bank of Israel has not intervened in foreign-currency trading, the current account deficit of the private sector must by definition equal that sector’s capital inflows. This means that capital flows in the financial account exert pressure for an immediate adjustment of the exchange rate, while constituting an endogenous response to exchange-rate trends and offsetting excess demand or supply. In 1998–2001 investment by nonresidents generally led developments in the financial account and the exchange rate, while capital flows of residents offset it and reacted to exchange-rate shifts. The trend reversed in the second half of 2002: apprehensions of a financial crisis led residents to export capital—via institutional investors and privately, whether directly or by means of mutual funds—and capital outflow exerted pressure for depreciation. In the second half of the year, after the Bank of Israel had raised its key interest rate several times, the trend of capital outflow by residents slowed, and it was the activity of nonresidents in the

[14] Electronic components, electronic communications equipment, monitoring and control equipment, and medical and scientific equipment.

NIS/foreign-currency market which affected exchange-rate trends.[15] In September fears that the credit rating of Israel and its banking system would be downgraded led to purchases of foreign currency, mainly by nonresidents, as well as to depreciation, while in and around November President Bush's statement of support for Israel's economy and the expectation that loan guarantees would be extended by the US government led to sales of foreign currency by nonresidents and to local-currency appreciation. The differences in the behavior of residents and nonresidents in the two halves of the year attest to the contrast between the two sectors: residents are more susceptible to local-currency interest rates, while nonresidents are more sensitive to the risk of investing in Israel, expressed *inter alia* by Israel's credit rating.

Direct investment in Israel by nonresidents continued to contract in 2002, and was down by $ 1.7 billion from 2001, amounting to only $ 1.5 billion. There were two exogenous factors for this: 1. The contractionary trend of high-risk investments (including those in Israel) and the transition by investors to relatively safe assets in response to the events of September 11th and the war on terror declared by the US; 2. The accounting scandals discovered in major US companies, which seriously undermined confidence in public companies and hence their ability to raise capital.

6. MONETARY POLICY, PRICES, AND THE CAPITAL MARKET

The CPI rose by 6.5 percent in 2002, compared with increases of 1.4 and 0 percent in 2001 and 2000 respectively (Table 7), despite the continued slump in domestic demand (Figure 4). The rise in prices stemmed from the rapid local-currency depreciation.

Against the backdrop of the worsening recession, the marked deviation from the government deficit target in 2001, and the continued unrest among the Palestinians, policymakers decided at the beginning of 2002 to radically change the policy mix to one with a more expansionary monetary component, and to return to a declining deficit path, albeit with an upward adjustment of the deficit target to 3 percent of GDP. The interest rate was reduced at the end of 2001, its nominal and real short-term levels declined, reaching levels unknown since the introduction of the disinflationary policy of the 1990s, while at the same time the process of foreign-currency liberalization and the opening up of the markets to the free flow of capital was completed. As a result, the NIS/$ exchange rate rose markedly, as did inflation expectations, which stabilized near the upper limit of the inflation target, although still remaining within the 1–3 percent range (Figure 2). The interest-rate cut at the beginning of 2002, which constituted a sharp and unexpected departure from the policy to which the central bank had adhered since the beginning of

[15] Activity in the foreign-exchange market is not precisely in step with activity in the financial account. Thus, for example, the conversion of foreign currency by a nonresident and its deposit in a local-currency account affects the exchange rate but is not recorded in the financial account. On the other hand, the conversion of foreign currency and its investment in the stock market, for example, is recorded as a securities portfolio investment by a nonresident.

the disinflationary process, led to intensified foreign-exchange purchases. Nevertheless, it is reasonable to assume that price stability could have been restored had fiscal policy adhered to its designated course of a return to a declining deficit path. All this took place *inter alia* in the context of the non-inflationary circumstances prevailing in Israel in 2002—very moderate demand, a rising unemployment rate, and declining wages.

After a period (February and March) during which the exchange rate remained relatively stable, it began to rise again due to the exacerbation of the security situation leading to the Defensive Shield campaign, and the failure to adopt the tight fiscal measures to which the government had agreed. The credibility of economic policy was also undermined by the attempt to introduce legislation restricting the central bank's independence in the management of monetary policy. Local-currency depreciation between mid-March and June was 6.2 percent against the dollar and 5.3 percent against the currency basket, and inflation expectations for 12 months ahead exceeded the upper limit of the inflation target range (Figure 2). As expectations rose, so did the yield curve on government bonds, with a positive slope indicating expectations of an interest-rate hike. The Bank of Israel raised its key interest rate by 0.6 percent in March, though in retrospect this was not enough to avert the depreciation.

Until June 2002 there were clear indications that the public's confidence in fiscal and monetary policy had been eroded: real yields on long-term government bonds rose notably (Figure 3), attesting to the public's assessment of the relaxation of fiscal discipline. The public's inflation expectations for both the short and the long run (two and three years) rose to levels far above the price-stability target of 1–3 percent, indicating that the public's confidence in the Bank of Israel's ability to attain the inflation target had waned in view of the absence of fiscal restraint. Restoring confidence in policy required making a clear-cut commitment to a credible fiscal target enabling the reduction of the government debt/GDP ratio, on the one hand, and raising the interest rate by substantially more than the 2 percentage-point reduction made at the end of 2001, on the other.

The stability of the foreign-exchange market was re-established in the middle of 2002, but only after the Bank of Israel had significantly raised its key interest rate in two steps, bringing it to 9.1 percent by the end of June. Even at that stage there was considerable exchange-rate volatility, however. After two months of nominal appreciation and inflation expectations that were slightly below 3 percent, real depreciation resumed in September in the context of the erosion of the profitability of the banking system, the deterioration in the security situation, and assessments that a war in Iraq was imminent. Concurrently, inflation expectations again overshot the upper limit of the inflation target. Only in December, when the exchange rate stabilized, and the worsening recession expressed itself in a decline in the CPI, did inflation expectations return to the 1–3 percent range, enabling the Bank of Israel to lower its key interest rate for January 2003 by 0.2 percent (to 8.9 percent).

Other factors contributed during 2002 to the turbulence in the foreign-exchange market, which was also expressed in price increases. These included a rise in Israel's risk premium in 2002:IV alongside the higher cost of raising capital abroad, which served to reduce both capital inflow and inward financial investment. The expected reduction of tax discrimination against investments in foreign currency in general, and financial investment abroad in particular, in the framework of the tax reform of the capital market had a similar effect. Net capital inflow of about $ 4 billion in 2000 went down to $ 0.4 billion in 2001 and became a small capital outflow of $ 600 million in 2002. The instability also stemmed from the approaching war in Iraq and assessments of the deviation implicit in the deficit for the 2003 budget which was approved by the Knesset. These factors acted to generate local-currency depreciation towards the end of 2002.

The narrow money supply (M1) expanded in the first half of 2002 far beyond the inflation target and the long-term growth rate (Figure 4). Its rapid growth, which had begun in 2001, was initially due to increased demand for money, especially cash, due to the transition to cash transactions with Palestinians. Since the effect of this change is inevitably exhausted after a short period of adjustment, the low level of interest was almost certainly the reason for its subsequent persistence until the interest-rate hike in the middle of the year. This hypothesis is borne out by the fact that after the interest rate was raised in July the rate of expansion of the money supply moderated markedly, declining to an annual rate of 6 percent in December 2002 (compared with 26 percent in June 2002).

The reduction of the interest rate, to 1.5 percent in the US and to 3.5 percent in the EU in the course of 2002, supported Israel’s monetary policy of attaining the inflation target. The differential between those interest rates and Israel’s narrowed in the first half of 2002, albeit more moderately than the reduction of the interest rate in Israel, and widened considerably after the interest-rate hikes of June and July. These developments served to prevent the aggravation of capital outflow, hence dampening demand for foreign currency.

An examination of the inflation environment, expressed in the long-term inflation rate derived from the price equation (estimated in the framework of the Research Department’s model) as a function of the variables determining the inflation rate over a long period, shows that assuming that the change in the nominal exchange rate is consistent with the trend of continued real appreciation evident in the 1990s (an annual rate of about 2.4 percent), and assuming that the cyclically-adjusted deficit and debt relative to GDP remain around their 2002 level (which means that the budget deficit will continue to be above the deficit target determined in the Budget Deficit Reduction Law), the long-term inflation rate is about 4 percent, approximately one percentage point above the upper limit of the inflation target. The implication of this is that it is necessary to return to the declining deficit path decided by the government in order to restore price stability.

There were marked shifts in the financial markets in 2002. Not only were these changes affected by background conditions, chief among them the recession, but they also impacted on them and could serve to further moderate economic activity in the near future. One of the outstanding features of 2002 was the sharp decline—over 50 percent in real terms—in capital raised by the private sector on stock markets in Israel and abroad, as well as from banks and non-bank intermediaries, after the more moderate decline in 2001. This development derived from both the slowing of demand for sources of finance by firms and households as well as from the contraction in the supply of sources from the various financial intermediaries. Particularly prominent in 2002 was the cessation of the expansion of credit (in real terms) from Israel's banking system, after a consistent rise since the early 1990s which had continued in boom years as well as in slumps. Credit to the private sector rose by NIS 9 billion in 2002 compared with an increase of NIS 35 billion in 2001 (at constant prices). This calculation is not adjusted for the effect of depreciation on the revaluation of past credit denominated in and indexed to foreign currency; when this adjustment is made, credit extended to the private sector by banks in Israel has declined in absolute terms.

The value of the financial assets in the hands of the public fell significantly in 2002 (by 6.5 percent in real terms), after rising constantly for several years. Most of the decline was due to the erosion of the value of shares in Israel and abroad as well as to the erosion of unindexed local-currency assets due to the rise in inflation (which outstripped expectations at the beginning of the year). Another factor affecting the public's asset portfolio was the decline in the private saving rate. The income of individuals contracted but consumption fell by less than the decline in income, financed by a reduction in savings. The composition of the public's asset portfolio was notable in 2002 for the rise in residents' investments abroad, as a result of which the share of assets abroad amounted to 8 percent of the portfolio. Another significant change, which was made at the end of the year and could be expressed in the composition of the public's portfolio in the coming years, was the removal of the ceiling on investment abroad by institutional investors (provident and pension funds)—another step in the framework of the reform of the last decade intended to reduce government involvement in the capital and money markets.

At the beginning of 2002:II a major instance of embezzlement came to light in Trade Bank, and later in the year Industrial Development Bank experienced difficulties. The developments in these two banks led to a loss of public confidence in their stability. Deposits were also withdrawn from the other banks, both large and small, albeit to a lesser extent. Naturally, the contraction of deposits served to reduce the supply of credit from the domestic banking system. Another indication of a problem which developed in the course of the year regarding the supply of sources of finance is provided by the Bank of Israel's Companies Survey, which showed that in the last three quarters of 2002 the number of firms reporting credit restriction difficulties increased in all the principal industries.

Concurrent with the cessation of bank credit, sources of finance on stock exchanges abroad dried up almost completely for Israelis firms. The total amount of capital raised in the US was less than in any year in the 1990s, except for 1994, while capital raised in Europe by Israeli firms came to an absolute stop. This was the result of the marked decline in stock-market activity globally, expressed in falls of between 20 to 25 percent in share-price indices in those stock markets, and in the small number of IPOs abroad (by American and other companies). The share of IPOs abroad in total sources of finance for economic activity soared in the 1990s, reaching a peak of 22 percent of all sources raised from financial intermediaries in 2000. This source assumed paramount importance, primarily for R&D-led firms in industries with a high level of risk. The reduction of capital raised abroad by Israeli firms led to the contraction of economic involvement by foreign financial intermediaries in Israel.

The sources of finance raised by the private sector from Israeli and foreign extra-bank financial intermediaries—venture capital funds and investment banks—contracted drastically. These financial intermediaries, which largely financed start-ups and have developed rapidly during the last decade, shrank by 30 percent in 2002, although this is less than was the case with the other sources of finance. Their level of activity remained high relative to the 1990s except 2000; the flow of finance raised by firms from venture capital funds was about one percent of GDP.

New regulations concerning investment in provident and pension funds went into effect in October 2002. This constituted another significant step implemented by the government since the late 1980s aimed at reducing its involvement in the money and capital markets. The new regulations removed most of the quota restrictions on investments of various kinds, replacing them with various stabilizing restrictions. Thus, for example, the requirement that at least 50 percent of a pension fund’s assets be invested in government bonds was abolished, the ceiling on investment in shares was removed, and the ceiling on investment abroad was also rescinded. The stabilizing restrictions relate to the need to diversify investments (by determining a maximum rate of investment in a single asset). Note, however, that as regards the pension funds the reform applies in effect to only 30 percent of the public’s deposits with new funds opened since 1995 (and to about 10 percent of deposits in veteran funds), because the government continues to issue fixed-interest earmarked bonds against the remaining deposits.

7. OBJECTIVES AND POLICY RECOMMENDATIONS FOR THE FUTURE

As long as the significant internal and external shocks persist, one of the main aims in the short run must be to prevent a financial crisis. To achieve this it is necessary to implement a cautious macroeconomic policy which will reinforce individuals’ assessments regarding the stability of the macroeconomic environment while halting the contraction of economic activity. In the medium term the main policy target is to return to a path of sustainable growth, enabling employment to rise while tackling the problem of poverty, which has become a top priority issue.

The macroeconomic framework which will support financial stability and a return to economic growth requires a policy mix which preserves fiscal discipline and adheres to price stability. A mix of this kind will act to reduce long-term interest rates, as well as to support the gradual reduction of the Bank of Israel’s key interest rate and a return to sustainable growth, once the external conditions and the security-political situation improve.

a. Fiscal policy

The government decided to adopt declining deficit targets—3 percent of GDP in 2003, 2.5 percent in 2004, with additional reductions subsequently, to reach 1 percent of GDP in 2007. These targets seem almost unattainable from today's standpoint, considering the ongoing recession and the failure to make progress towards achieving the long-term targets, among them reducing the share of public-sector expenditure in GDP and the public-sector debt/GDP ratio. The importance of these targets in the context of globalization and increasing competition with industrial economies requires that drastic changes be made in the way fiscal policy is managed.

On the basis of updated assessments, the government budget for 2003 as approved by the Knesset—assuming that GDP remains unchanged and no corrective steps are taken—could soar to 6 percent of GDP. As far as the next few years are concerned, a calculation of the long-term budget framework based on the current development of expenditure and the decisions made to date (including the tax reform) shows that the deficit is expected to grow to 6 percent of GDP as of 2004. These assessments attest to the inconsistency between the expected path of fiscal policy and its targets. One of the fundamental principles in inspiring confidence in macroeconomic policy—which is crucial for the development of the business sector—is to adjust the budget in real time to changing economic circumstances. From the outset, the planning of the 2003 budget was based on the over-optimistic assumption that the growth rate of tax revenues would be significantly higher than that of GDP, and this came after a similar—and equally mistaken—assumption had been made regarding 2002.

The absence of fiscal appropriateness in previous years has brought Israel's economy to a point where restrictive measures are needed just at a time of recession. On the one hand, further cuts in the government's current expenditure in 2003 will dampen demand and could have a pro-cyclical effect, thereby deepening the recession. On the other, the failure to attain the deficit target of 3 percent of GDP will leave the yields on government bonds at their present high level while undermining confidence in macroeconomic policy, and this could lead to a further downgrading of Israel's credit rating—with dire consequences for real financial activity. The adjustment on which a decision will shortly be made should be based on two principles: 1. Preference for budgetary changes which support a return to growth rather than changes which impair it; hence, it is necessary to avoid raising taxes further, and to implement the planned increase in infrastructure investment. 2. The changes should be made in the framework of long-term planning. This should include creating new decision-making frameworks, unlike any yet seen in Israel's public administration, which will relate to specific topics from a horizon of five years or more. Two examples of long-term changes are moving gradually from universal to selective transfer payments, and adapting wage-arrangements to a situation of price stability.

In 1994–2002 the general government's current expenditure (excluding interest payments) rose by 6 percent in real terms (deflated by the index of business-sector product prices)—exceeding its rise in the preceding eight-year period. This increase in public-sector expenditure means that the annual average growth rate of per capita expenditure was 3.5 percent. Because of the budget deficit constraint, it had two negative effects: 1. Infrastructure investment, which is anyway lagging behind, was crowded out;

2. Taxes, which were raised in 2000, were increased further, including a hike in the statutory tax rate in 2002 (V.A.T. was raised by 1 percent, the ceiling on National Insurance payments was annulled, and the payroll tax was increased). These trends should be altered immediately by means of careful fiscal planning, which will make it possible to gradually slow the growth rate of public-sector current expenditure. A gradual change will enable the government to reorder its priorities smoothly and individuals to cope better with the pre-announced shifts in policy.

b. The encouragement of employment

One of the most unusual features of Israel's labor force is the very low participation rate of the working age population. In the 15–64 age-group the participation rate is 10 percentage points lower than in the OECD countries. This gap widened considerably in the 1990s, and is explained by various factors: 1. The existence of special population groups, e.g., the ultra-orthodox, whose participation rates are low for cultural reasons;[16] 2. The generosity (which has increased over time) of transfer payments, which are not contingent on participation in the labor market; 3. The departure of individuals from the labor market in recent years due to the recession (the 'discouraged worker' effect).

Research undertaken in Israel[17] shows that non-participation in the labor market is one of the main reasons for the expansion of poverty in recent years. Thus, the implementation of a program designed to increase the employment rate should be given the highest priority.

A focal aspect of this program[18] should be, as stated, to manage macroeconomic policy in such a way as to provide the business sector with a stable environment, as a return to sustainable growth will help to reduce unemployment.

The program should also aim at reducing the number of foreign workers, since they compete with low-income Israeli workers and exacerbate inequality. The way to reduce the number of foreign workers is to restrict the number of permits issued and expel workers who are in Israel illegally. At the same time the cost of employing them should be increased by some 40 percent, bringing it into line with the cost of employing their Israeli counterparts; this could be done by imposing a surcharge on their employment and requiring employers to pay into a fund, the proceeds of which these workers would be able to withdraw upon leaving Israel. The government must persist in its efforts in these areas in order to continue with the improvements made in 2002: the intensification of police activities aimed at deporting illegal workers, and the imposition of the surcharge (decided but not yet acted upon) on the employment of foreign workers.

[16] See A. Brender, O. Peled, N. Kasir (Kaliner) (2002), "Government Policy and the Labor-Force Participation Rates of the Prime Age Population: Israel and the OECD Countries in the 1990s," *Bank of Israel Discussion Paper*, 02.02 (Hebrew).

[17] K. Flug and N. Kasir (Kaliner), (2003) "Poverty and Employment, and the Gulf Between Them," *Israel Economic Review 1*.

[18] See *Economic Policy Recommendations*, Bank of Israel, Research Department, 2003.

The program should also comprise a policy intended to enhance the ability of individuals to earn in the long run. This can be achieved by improving the human capital of those who are having difficulty finding employment, making changes in the system of transfer payments and associated benefits thus making it more worthwhile to work, and improving the transport infrastructure, so that centers of employment are more accessible to the periphery.

In the framework of the policy on transfer payments and associated benefits, the changes introduced in the 2003 Arrangements Law must be re-examined. The amount which may be earned from labor without this being deducted from income support payments should be raised once more, thereby maintaining the incentive to participate in the labor market. The structure of child benefits should be altered so as to reduce the preference for large families, as regards children born in the future. Since the terms of Israel's unemployment laws are stricter than those in the rest of the world, the annulment of the additional restrictions imposed in the framework of the 2003 Arrangements Law should be considered, providing unemployed persons with a reasonable period of time in which to seek work that is commensurate with their abilities.

Finally, the transition to selective transfer payments should be made, while keeping in view the transfer of resources from the better-off to the poorer segments of the population. Universal reporting of income to the tax authorities would help to promote this. The unification of the databases of the income tax and national insurance authorities should go ahead, as this would provide a way of attaining a means test, enabling transfer payments to be made on a selective basis.

c. Increasing infrastructure investment and economic competition

The intensity of railways and roads in Israel is far lower than the level accepted in the industrial countries, and capital shortfall in the transport infrastructure is estimated at NIS 40 billion. In order to overcome this deficiency it is necessary to invest over 1.8 percent of GDP annually—some one third more than the amount currently invested. In general, it is advisable for projects to be implemented by the government in cooperation with the private sector. Some of the projects in which the private sector is involved should receive government assistance in their initial stages, in order to reduce their cost and the payment the general public is required to make.

In the context of financing infrastructure projects, a special opportunity has recently arisen due to the possible receipt of loan guarantees from the US government. Because of the high yield on such projects, which help to increase business-sector product, it is advisable to establish a special mechanism to ensure that the money from the guarantees is used to finance infrastructure projects. Pension fund money should also be diverted to finance long-term projects. The gradual cessation of issues of earmarked bonds to new members of pension funds should also make it possible to channel this money to finance infrastructure projects—provided the government reduces both the deficit and its borrowing requirement.

Some years ago the subject of structural changes and infrastructure investment was accorded top priority in cabinet discussions of the budget, with special sessions being devoted to it. In the last few years the construction of some mass transportation projects—e.g., the light railways in Jerusalem and the Tel Aviv conurbation—has begun. Nevertheless, not all the projects are proceeding at the necessary pace, and this could hamper the return to sustainable growth. It is consequently recommended that a special body be appointed within the economic cabinet with responsibility for the implementation and progress of the projects. At the same time as the budget is prepared, a special government meeting should be held at which the entities responsible for implementing the projects in such spheres as roads, water, electricity, gas, etc. are required to give a progress report; quarterly situation reports should also be submitted.

In many spheres, such as electricity, grain storage in the ports, freight services at airports, bus services, and oil refining, there is very little competition. It is important that the price of the infrastructure in these areas expresses its cost, preventing the cross-subsidization of one service by another, or of one consumer by another. It is also important to prevent monopoly profits, which could be reflected in a firm's balance-sheet items, such as wages. This could be done by opening up certain segments of the market to competition, or by introducing supervision by independent agencies.

Another area in which many deficiencies have been discovered is water. While it is vital to ensure that water is correctly priced, enabling demand to be channeled efficiently, it is also necessary to ensure that its supply is improved, in order to avoid inflicting irreparable damage on existing sources of water.

d. Monetary policy and the reform of the money and capital markets

The deviation from the inflation target in 2002, which was due largely to the rise in prices in the first half of the year, presents monetary policy with a challenge—reestablishing adherence to the target of price stability. The ongoing recession requires that economic policymakers in general, and monetary policymakers in particular, give the maintenance of financial stability top priority. As long as world trade does not recover and Israel's political-security situation fails to improve, the recession is liable to continue leading the economy towards financial instability. Given these conditions it is essential to implement a policy mix that will ensure financial stability while reducing the budget deficit. Such a mix will act to reduce the long-term interest rate and improve the chances that the Bank of Israel will gradually lower its key interest rate, while enabling events in the foreign-currency market to be monitored. One of the lessons of the events of the first half of 2002 is that as long as internal and external shocks persist, special caution is required in implementing economic policy—both fiscal and monetary—particularly in view of the rapid response of the financial markets, which are becoming ever more efficient. A return to the uncoordinated policy mix that eroded the credibility of economic policy, eventually obliging policymakers to adopt fiscal restraint, which aggravated the recession, must be avoided at all costs. Only if the budget deficit declines consistently will convergence between Israel's interest rates and those abroad (*plus* a risk premium) be possible.

In 2002 a proposal to amend the Bank of Israel Law was brought before the government. It involved establishing multiple targets for the activity of the central bank, and abolishing its independence in implementing monetary policy. An amendment of this kind would seriously impair the credibility of economic policy. The principal aim of monetary policy must be to maintain price stability, and subject to that the central bank can aspire to other objectives, in accordance with the government's economic policy. This should be done while retaining the central bank's complete independence regarding the choice and deployment of the monetary instruments required to maintain price stability, in line with the standards accepted in the rest of the world. Another reasonable proposal is for the decision on the short-term interest rate to be made in the framework of a Monetary Policy Council headed by the Governor of the Bank of Israel. The members of that Council should be experts who are not tainted by conflicts of interest, are appointed in a transparent process, and are approved by the government.

Despite the steps taken towards economic liberalization, the government is still involved in the financial field. The sharp rise in the public-sector debt in the last two years, to 105.3 percent of GDP (measured in accordance with the Maastricht Accord standards), increases the role of the government as a major player in the financial sphere, and its actions have a direct effect on the development of the financial markets. Since the public-sector debt is expected to expand still further in 2003, it is important for the government to ensure a long repayment schedule for its average net borrowing, in order to minimize risk. Reforms are also required that will reduce the government's direct involvement in the bond market—primarily in the sphere of the earmarked bonds, which are issued in the framework of the pension system and should gradually be concluded.

Compulsory pensions should be introduced in order to extend pension coverage to those sections of the population which are currently not insured.[19] The state pension must not be based on a system of earmarked bonds, as this intensifies the distortion of the capital market. Changes should also be made in the regulations regarding investment by pension funds, in order to deepen the capital market.

The implementation of the tax reform in 2002 is an important step towards creating an appropriate tax policy in the long run. The taxation of capital makes it possible to ease the heavy tax burden on labor and that segment of the population that pays income tax. Action should be taken to prevent discrimination between different investment channels, minimizing the differential in tax rates, and imposing a nominal tax on all assets.

[19] See E. Terkel and A. Spivak (2001), "Pension Coverage in Israel," *Economic Quarterly*, 3 (Hebrew). Only about one third of the population in the lowest decile has pension coverage.

Table 1a
Israel: Basic Economic Data,[a] 1986–2002

	1986–1989	1990–1992	1993–1996	1997–1999	2000	2001	2002
Mean population ('000s)	4,407	4,911	5,473	5,975	6,289	6,436	6,571
Population growth rate (percent)	1.6	4.3	2.6	2.5	2.7	2.3	2.1
Israelis employed ('000s)	1,416	1,569	1,895	2,078	2,216	2,265	2,284
GDP (NIS billion, 2001 prices)	258	306	373	430	474	470	465
GDP growth rate (percent)	3.7	6.6	5.5	3.0	7.4	-0.9	-1.0
Per capita GDP ($'000s, current prices)	8.7	12.2	15.2	17.2	18.1	17.4	15.6
Unemployment rate (percent)	7.1	10.5	7.8	8.4	8.8	9.3	10.3
Inflation rate (during year, percent)	18.2	15.0	11.1	5.7	0.0	1.4	6.5
Current-account deficit (percent of GDP)	0.2	-0.8	3.6	2.2	0.9	2.0	2.1
Foreign-exchange reserves ($ billion)	5.2	6.0	8.3	21.9	23.3	23.4	24.1
Net external debt (percent of GDP)	47.0	29.6	24.2	12.0	5.3	2.8	0.6

[a] Annual averages.
SOURCE: Based on Central Bureau of Statistics data.

Table 1b
Basic Economic Data: International Comparison, 1992–2002

(percent)

	2001			2002			1992–2002 average		
	Israel	G7	OECD	Israel	G7	OECD	Israel	G7	OECD
Population growth rate[a]	2.3	1.6	1.4	2.1	1.6	1.4	2.6	0.8	0.8
GDP growth rate	–0.9	0.6	0.7	–1.0	1.4	1.6	4.2	2.4	2.5
Per capita GDP growth	–3.1	–1.0	–0.6	–3.1	–0.2	0.1	1.3	1.6	1.7
Per capita GDP ($'000s, current prices)	17.4	30.2	26.5	15.6	30.2	26.5	16.0	28.7	25.5
Unemployment rate[b]	9.3	5.8	6.4	10.3	6.4	6.8	8.9	6.4	6.9
Inflation rate (average)	1.1	2.1	3.4	5.7	1.3	2.4	7.6	2.2	4.2
Inflation rate (during year)	1.4	1.1	2.6	6.5	2.0	2.7	7.1	2.1	4.1
Current-account deficit[b] (–) (percent of GDP)	–2.0	–1.4	–1.1	–2.1	–1.6	–1.2	–2.4	–0.8	–0.4
Net public debt[b] (percent of GDP)	85.0	48.0	43.8	86.3	50.4	45.7	88.0	49.4	45.6

[a] Figures for the G7 and OECD countries for 2002 are based on the 2001 figures.
[b] Figures for the G7 and OECD countries for 2002 are estimates.
SOURCE: OECD *Economic Outlook, 2002*; *World Economic Outlook, 2002*, and Bank of Israel annual reports.

Table 2
Sources and Uses in 1997–2002 and Developments in 2002[a]

	1997–1999	2000	2001	2002	2002 I	2002 II	2002 III	2002 IV
Sources and uses								
GDP	3.0	7.4	-0.9	-1.0	1.5	-0.7	-0.2	0.1
GDP excl. start-ups	2.7	5.5	0.1	-0.3	1.5	-0.8	0.5	0.6
Business-sector product	3.2	9.7	-2.4	-3.1	0.5	-2.3	-0.4	-1.0
Business-sector product excl. start-ups	2.7	7.0	-1.1	-2.1	0.4	-2.5	0.7	-0.2
Private consumption	3.8	7.2	2.5	-0.5	0.9	-2.3	-0.8	4.3
of which excl. durables	4.1	6.0	3.2	0.2	0.6	-2.6	1.6	2.5
Public consumption	2.4	1.3	3.3	5.3	-0.3	10.9	2.3	-5.7
Fixed investment	-1.4	1.7	-6.1	-8.5	-8.7	-1.5	-10.6	-8.6
Nonresidential	0.3	6.1	-3.9	-9.3	-8.9	1.6	-8.7	-11.0
Residential	-5.0	-9.6	-12.7	-5.8	-3.5	-16.6	-9.7	-4.0
Domestic investment excl. stock of start-ups	-1.2	-6.6	-4.8	-7.0	12.6	3.4	-11.9	1.4
Exports	8.7	25.3	-11.7	-3.5	-2.8	5.1	-7.6	11.1
of which excl. diamonds	10.5	27.8	-11.0	-8.0	-5.7	-3.4	-3.9	21.2
excl. start-ups	10.5	22.4	-6.9	-7.8	-5.2	-2.8	1.6	18.9
Tourism exports	2.5	-6.5	-33.0	-2.1	50.9	-43.4	19.4	35.4
Goods exports	7.7	23.4	-8.7	0.0	8.4	11.2	-8.8	9.2
Uses	3.9	8.9	-2.0	-1.5	1.2	3.1	-1.1	1.6
Imports	6.5	12.3	-4.5	-2.5	2.9	19.4	-14.0	11.5
of which excl. defense imports, ships, planes and diamonds	5.8	15.0	-4.2	-6.9	6.3	-5.8	-9.4	-6.7
Domestic uses	2.3	4.1	1.1	-0.8	10.3	-1.1	0.6	-2.6
Unemployment rate[b]	8.4	8.8	9.3	10.3	10.6	10.3	10.3	10.1
Business-sector employment[c]	1.3	4.6	1.3	-0.1	-0.4	1.0	4.9	7.6
Average hours worked[d]	-0.2	1.2	-2.2	1.0	9.4	-2.0	1.9	4.3

[a] Seasonally adjusted data; rates of change over preceding period, in annual terms.
[b] Percentage of labor force.
[c] Rate of change of number of Israeli employees in business sector.
[d] Average of hours worked per Israeli employee in business sector (rate of change).
SOURCE: Based on Central Bureau of Statistics data.

Table 3
Saving, Investment, and the Current Account, 1990–2002

(percent of total revenue, annual rates)

	1990–92	1993–96	1997	1998	1999	2000	2001	2002
Gross saving rate	20.1	19.5	19.7	19.7	20.1	19.4	18.3	16.7
Public	–0.5	–0.3	–1.3	–1.0	–1.6	0.0	–1.7	–1.6
Private	20.6	19.8	20.9	20.7	21.7	19.4	20.1	18.2
Gross investment	21.1	23.6	22.8	20.9	22.1	20.5	19.8	18.6
of which Business sector	12.7	15.5	14.7	14.3	14.7	14.3	13.4	12.7
Current account balance of payments	–1.0	–4.1	–3.1	–1.3	–1.9	–1.1	–1.4	–1.9

SOURCE: Based on Central Bureau of Statistics data.

Table 4
Main Indicators of Fiscal Policy, 1990–2002

(percent of GDP, annual rates)

	1990–92	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Overall public-sector deficit	4.3	4.5	3.3	4.3	5.8	4.4	3.7	4.2	2.0	4.0	4.4
Public-sector domestic deficit	7.3	6.2	4.4	5.5	6.8	5.6	5.1	5.4	3.3	5.0	5.4
Net total public-sector debt	109.5	97.1	87.5	89.3	87.8	85.0	84.4	82.6	79.4	85.0	86.3
Gross total public-sector debt	132.7	123.8	115.7	109.2	107.1	104.2	107.1	101.0	91.7	97.0	105.3
Total public-sector expenditure[a]	56.9	56.1	53.8	55.1	54.8	53.6	53.1	52.3	51.1	53.7	55.1
Total taxes[a]	38.2	38.7	39.5	39.9	38.6	39.3	38.5	38.7	40.3	40.3	39.8
Ceiling on domestic budget deficit[b]	6.2[d]	3.2	3.0	2.8	2.5	2.3	2.2	2.6	2.8	0.5	4.1
Actual domestic budget deficit	4.9[d]	2.3	1.9	3.1	4.4	3.0	2.8	2.8	0.5	3.6	3.9
Ceiling on total budget deficit incl. Bank of Israel profit[c]	8.5[d]	4.4	3.5	3.8	3.6	2.8	2.4	2.0	2.5	–	–
Ceiling on total budget deficit	8.5[d]	4.7	3.8	3.9	3.7	3.0	2.8	3.1	3.6	1.8	3.9[e]
Actual total budget deficit incl. Bank of Israel profit	3.8[d]	2.4	2.3	4.0	3.7	2.7	2.3	2.5	0.1	–	–
Actual total budget deficit	4.0[d]	2.5	2.3	4.3[e]	4.2[e]	3.3	3.3	3.4	0.7	4.6[f]	4.0[f]
Fiscal impulse[g]									–0.8	0.6	0.1

[a] From 1995, expenditure and taxes include health insurance tax and government transfers to the health funds in accordance with the National Health Insurance Law.

[b] Until 1996, the deficit ceiling as prescribed by law; from 1997 the planned deficit (excluding credit extended). The gap between the planned and actual deficit includes about 0.15 percent of GDP, reflecting income recorded as domestic at the time the budget was planned but recorded as income abroad in the implementation figures.

[c] Until 1996, the planned deficit; from 1997, the deficit ceiling as prescribed by law.

[d] For 1992 only.

[e] The target set in mid-2002, when the budget was approved by the Knesset, was 3.0 percent of GDP.

[f] The US economic aid was not received in 2001; if it had been, the total budget deficit would have been 4.0 percent of GDP. The aid was recorded in 2002, and reduced the deficit by 0.6 percent of GDP. However, aid of $ 431 million, which was expected in 2002, was not received even though forecast income for 2002 included it. If it had been received in 2002, the deficit would have been 0.4 percent of GDP lower. Hence, on the basis of aid of $ 600 million originally intended for 2002, the deficit that year would have been 4.2 percent of GDP.

[g] The change in the general government's cyclically-adjusted domestic deficit excluding the Bank of Israel, as in Table 3.2 (in the second part of this report).

SOURCE: Based on the National Budget and Central Bureau of Statistics data.

Table 5
The Business Sector: Selected Data, 1990–2002

(percent, in annual terms)

	1990–92	1993–96	1997–99	2000	2001	2002
Rate of growth of business-sector product	8.1	6.8	3.2	9.7	-2.4	-3.1
Rate of growth of domestic labor input	5.5	7.4	2.9	5.5	-1.6	-0.4
Civilian labor force	5.0	3.6	2.9	3.8	2.8	1.9
Labor supply[a]	5.2	4.1	4.0	3.9	1.9	1.0
Nonresidents' share in business sector	9.0	9.1	14.7	15.9	15.0	14.1
Rate of increase of gross capital stock	3.0	7.6	9.1	7.4	6.7	5.2
Rate of increase of total productivity	3.5	-1.0	-1.6	3.3	-3.3	-4.5
Rate of return on gross capital[b]	13.7	13.9	13.0	13.8	10.5	9.7
Rate of change of average real business-sector wage	-1.6	0.5	3.4	6.6	3.2	-6.3
Labor cost per unit of output in business sector	-3.7	1.6	0.3	-1.2	6.6	1.3
Change in real minimum wage	-1.8	1.6	4.6	4.9	7.9	-3.1

	1962–71	1972–81	1982–91	1992–2002
Development of total factor productivity	4.4	1.8	1.6	–1.2

[a] Civilian labor force *plus* foreign workers *plus* Palestinian workers.
[b] Before tax.
SOURCE: Based on Central Bureau of Statistics data.

Table 6
Balance of Payments, 1990–2002

($ billion, in annual terms)

	1990–92	1993–96	1997	1998	1999	2000	2001	2002
Import surplus	6.2	9.9	9.9	7.4	9.6	8.5	8.3	8.0
Current account	0.4	-3.2	-3.5	-1.4	-2.0	-1.1	-2.3	-2.1
Implied capital imports[a]	0.3	-19.7	12.8	3.3	3.1	1.6	2.0	1.3
Capital transfers	0.9	0.8	0.7	0.6	0.6	0.5	0.7	0.1
Investment in Israel by nonresidents[b]	0.3	1.7	3.3	2.2	4.4	8.9	3.9	1.9
Direct investment in Israel by nonresidents	0.4	0.9	1.6	1.7	2.9	4.5	3.2	1.5
Portfolio investment in Israel by nonresidents	0.0	0.8	1.7	0.4	1.5	4.3	0.7	0.4
Rise (–) in foreign-exchange reserves[c]	0.4	-1.5	-9.4	-1.9	-1.0	-0.6	0.3	0.8
Foreign-exchange reserves[d]	6.0	8.3	20.3	22.7	22.6	23.3	23.4	24.1
Net external debt	17.0	19.2	14.7	11.1	9.6	6.1	3.0	0.7

[a] Including errors and omissions.
[b] Direct and portfolio investment.
[c] Excluding revaluation differentials.
[d] Held by Bank of Israel and central monetary institutions at end of period.
SOURCE: Based on Central Bureau of Statistics data.

Table 7
Indicators of Price Developments, 1992–2002

(percent, in annual terms)

	1992–95	1996	1997	1998	1999	2000	2001	2002
Year-end								
CPI	10.8	10.6	7.0	8.6	1.3	0.0	1.4	6.5
CPI excl. housing	9.2	9.8	6.8	8.6	2.0	0.6	0.4	6.1
CPI excl. housing, fruit & vegetables, clothing & footwear	9.5	10.5	7.8	8.5	2.2	0.9	0.4	6.8
Wholesale price index	9.0	7.0	5.9	8.2	3.5	2.0	–1.9	6.9
Exchange rate against currency basket[a]	8.5	3.0	3.7	20.6	–2.5	–6.3	3.7	14.2
Exchange rate against dollar	8.0	5.0	7.9	18.2	0.4	–2.7	4.8	9.8
Average								
CPI	11.3	11.3	9.0	5.4	5.2	1.1	1.1	5.7
CPI excl. housing	9.7	9.8	8.4	5.3	6.0	2.0	0.4	4.1
CPI excl. housing, fruit & vegetables, clothing & footwear	9.9	10.5	8.9	6.0	6.4	2.2	0.4	4.5
Wholesale price index	9.2	8.6	6.3	4.2	7.1	3.6	–0.1	3.9
Exchange rate against currency basket	8.7	3.5	4.3	9.6	8.3	–4.7	1.4	14.2
Exchange rate against dollar	7.3	5.9	8.2	10.2	8.9	–1.5	3.1	12.7
Real exchange rate in export terms[b]	–2.6	–3.4	–2.7	0.4	2.0	–2.7	–1.3	5.8
Real exchange rate in import terms[c]	–1.8	–6.1	–6.3	–2.9	0.4	–0.5	–1.4	7.3
Terms of trade[d]	–0.8	2.9	3.8	3.4	1.6	–2.3	0.1	–1.4

[a] Average of last month of period vis-à-vis average of last month of preceding period.
[b] Ratio of export prices excluding diamonds to index of business-sector product prices including residential services.
[c] Ratio of import prices excluding diamonds to index of business-sector product prices including residential services.
[d] Import-export price ratio, excluding diamonds.
SOURCE: Based on Central Bureau of Satistics data.

Table 8
Monetary Indicators, 1990–2002

(percent, in annual terms)

	1990–1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
M1[a]	25.3	18.8	3.9	15.9	13.2	12.1	9.6	11.0	14.2	15.6
Total bank credit[a]	37.8	28.1	21.3	24.6	19.1	16.1	16.7	13.0	10.8	10.5
Nominal Bank of Israel interest rate	14.2	13.6	15.8	16.4	14.8	12.6	13.0	9.8	7.1	7.3
Expected inflation[b]	14.1	12.9	10.1	11.2	9.2	6.1	5.3	2.6	1.9	3.3
Nominal interest on SRO deposits (CDs)	11.5	11.6	13.3	13.8	12.2	10.3	10.7	8.0	5.6	5.1
Nominal interest on non-directed credit in NIS	22.4	17.4	20.2	20.7	18.7	16.2	16.4	12.8	10.0	9.9
Average currency-basket interest rate[c]	6.7	4.6	5.3	4.6	4.9	4.9	4.5	5.5	3.6	2.1
Real yield on 5-year bonds	2.2	3.1	4.3	4.6	4.1	5.1	5.6	6.0	4.9	4.8
Real Bank of Israel interest rate[d]	0.9	1.7	5.2	4.7	5.1	6.1	7.3	7.0	5.1	3.8
General Share-Price Index[e]	50.3	–38.5	14.8	–1.6	36.1	2.9	65.7	0.5	–6.9	–20.2

[a] Rise in annual average. M1 = cash in the hands of the public *plus* demand deposits. From 1996, this includes mortgage banks.

[b] 12-month inflation expectations estimated from the capital market, assuming full tax exemption.

[c] Based on 3-month Libid rate.

[d] Until 1997, daily average of effective marginal interest on monetary loan at quota; from 1998, average of effective interest at daily auction of banks' deposits in Bank of Israel *less* inflation expectations for 12 months, as derived from capital market.

[e] Index of all shares and convertible securities, rate of change during the year.

SOURCE: Based on Central Bureau of Statistics data.

Box Table
Comparison of Long Slowdowns in Israel

		1952–1953[a] Slump/Recession	1965:II–1967:II Recession	1987:IV–1989:IV Slump	2000:IV–???? Recession
Length[b]			9 quarters[c]	9 quarters	At least 9 quarters
Increase in GDP[d]	(before)	–	10.7	3.0	6.2
(annual terms)	(during)	2.8	–0.1	3.6	–2.0
Increase in business-sector product	(before)	–	8.6[a]	4.3	7.8
(annual terms)	(during)	0.8	–0.3[a]	3.9	–4.1
Increase in per capita GDP[d]	(before)	–	0.9[a]	2.6	5.0
(annual terms)	(during)	–8.8	–5.9[a]	2.2	–6.2
Unemployment[d]	(from)	5.8	3.0	5.9	8.9
(percent of labor force)	(to)	11.0	11.2	9.1	10.1
Current account deficit[e]	(from)	–	5.5	4.0	0.9
(percent of GDP)	(to)	4.8	0.3	–0.5	2.1
Inflation (%)	(before)	5.9	7.3	34.0	3.1
	(during)	101.9	5.1	18.6	3.7
Depreciation events[f]	(length in months)	0	0	1.5	6
	(rate)	404.2	16.7[g]	15.7	18.3
	(length in months)			5	
	(rate)			12.3	
Net public debt[e]	(from)	–	60.6	126.1	79.4
(percent of GDP)	(to)	–	70.5	135.7	86.3
Net foreign debt[e]	(from)	–	42.6	47.3	5.3
(percent of GDP)	(to)	–	53.5	37.2	0.6
Per capita GDP ($) (average in annual terms)		1,149[h]	1,403	9,634	16,912
Emergence trigger		Immigration	6-Day War	Immigration	?

[a] Annual data; rate of change 'during' is the 1953 figure compared with 1951, or 1967 compared with 1965.
[b] The main source for the 1965–67 recession is M. Bruno, "The Inflation Process in Israel: Shocks and Adaptation," in *Growth, Inflation, and Economic Stabilization,* 1984 (Hebrew); for subsequent periods the source is the composite index.
[c] For this period there are data as of 1964:I, so that the period 'before' is calculated for 4, not 9, quarters.
[d] Quarterly data, seasonally adjusted.
[e] Annual data.
[f] For depreciation events that continued for over a month (after the introduction of the exchange-rate band), the rate of change is from the minimum to the maximum point.
[g] Devaluation on 19 November 1967.
[h] Calculated by weighting the exchange rates before and after the devaluation of 1 January 1954, when the share of the new rate was 0.25 percent.
SOURCE: Based on Central Bureau of Statistics data and Y. Ben-Porath, *The Arab Labor Force in Israel*, Falk Institute of Economic Research, 1966 (Hebrew).