



Bank of Israel

INFLATION REPORT

2003
July–December

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The Inflation Report for the second half of 2003 is submitted to the government, the Knesset, and the public as part of the process of periodic monitoring of the course of inflation and adherence to the inflation targets set by the government, and is intended to increase the transparency of macroeconomic policy. The transparency of policy—both fiscal and monetary—is important as an aid to households and firms, both resident and nonresident, in planning their economic activities.

In August 2000 the government decided on a path of inflation targets for the coming years, setting the target for 2003 and subsequent years at an annual 1–3 percent, defined as price stability. Accordingly, the object of monetary policy is no longer a target defined by a calendar year but rather a continuous and constant target, and at any point in time the policy is aimed at attaining it within the next twelve months. This allows for temporary, short-term deviations in either direction in order to avoid wide fluctuations in the interest rate. Temporary deviations may occur because prices are affected in the short term by factors which cannot be rapidly offset by interest-rate policy, such as additional information regarding the budget deficit, short-term movements in the foreign-exchange market and shocks in global markets.

The CPI (Consumer Price Index) declined by 1.4 percent in the second half of 2003, and by 1.9 percent in the year as a whole, below the long-term target consistent with price stability. The decline was most pronounced in 2003:II and 2003:III, and was related to the significant appreciation of the NIS against the dollar from February to July as well as to the low level of real economic activity. This affected prices via the dampening of demand and cuts in wages in various sectors. Although, as stated, the CPI deviated from the inflation target, inflation expectations for one year forward and beyond—those derived from the capital market as well as those of forecasters—remained within the target range throughout the period reviewed (July–December 2003).

In contrast to the declines in prices of goods and services, in the exchange rate, in housing prices and in wages, prices of domestic financial assets rose considerably, mainly share prices, but also bond prices, and in particular prices of unindexed bonds.

These price developments stemmed from several basic factors, some of them related to the global and domestic geopolitical situation and some to economic policy. The formation of a relatively broad-based government that quickly adopted a wide-ranging economic plan, the rapid conclusion of the war in Iraq, and the decision by the US government to provide guarantees for Israel's new loans all served to significantly lower Israel's country risk, the degree of uncertainty in Israel's foreign-currency market, and the government's need for domestic borrowing. The strengthening of the NIS against the dollar was also a consequence of the latter's weakness on world markets. All the above, together with growing worldwide willingness to invest in emerging markets, led to some increase in capital inflow to Israel.

The government formed at the beginning of 2003 succeeded in instilling confidence in the public and the markets regarding its intention to restore fiscal discipline, as reflected by a decline in the deficit and debt relative to GDP. This was manifested by its budgetary decisions and several proposed structural reforms, despite the rise in the deficit from 2002 to 2003, its significant deviation from the target, and a renewed rise in the debt/GDP ratio. The feeling that the government did indeed intend to re-establish fiscal discipline was reflected *inter alia* by the decline in yields on the different types of long bonds

Against this background, the monetary restraint that was imposed in the second half of 2002—with the intention of halting the surge in inflation at the beginning of that year and removing the threat of a financial crisis then hanging over the economy—was eased, and the Bank of Israel gradually reduced its key interest rate from 9.1

percent at the end of 2002 to 4.8 percent at the end of 2003. Although the latter interest rate is still higher than that prevailing in most advanced economies, interest-rate spreads, particularly between different domestic rates, are low. The policy of gradually reducing the interest rate was necessary in the light of the erosion of confidence in macroeconomic policy in 2002, and it enabled the Bank of Israel to assess the markets' reaction to the steps taken. Note, in this context, that in the decade since the introduction of the inflation-target regime inflation has overshoot the target range four times, and in every case a factor unrelated to monetary policy was involved, e.g., the start of talks with the Palestinians following the Oslo Agreement, the global financial crisis, and fiscal expansion instead of the fiscal restraint that should have accompanied monetary expansion. After each of these inflationary surges the Bank of Israel had to restrain inflation and regain the public's confidence in its determination to adhere to the policy of achieving price and financial stability, by raising its key interest rate.

Throughout the decade Israel's governments have not given sufficient support to the policy of obtaining price and financial stability. This was expressed, *inter alia*, by their reluctance to follow many of their counterparts abroad in the 1990s by adopting a modern central bank law that would clearly set price stability as the main target of monetary policy, thereby contributing to economic growth. This should go hand in hand with the appropriate institutional arrangements, primarily instrument independence and a professional Monetary Council untainted by conflicts of interest.

The current objective of monetary policy is to bolster economic growth while maintaining price and financial stability. The Bank of Israel assesses that despite the sharp rise in prices of domestic financial assets and the revival indicated in real activity, it may be possible to continue lowering the interest rate, as long as price stability is maintained and the financial markets remain calm. The latter now depends more and more on confidence in the government's ability to steer the economy back to a path of growth while maintaining stability. The government's economic program laid the foundations for achieving this objective, and is now entering the phase of being tested by actual implementation, at the same time as certain required missing components are being added. These will enable the government to carry out its fundamental decisions: to massively increase infrastructure investment while implementing the structural changes required to make the economy more competitive; to close the gap between the rate of employment in Israel and the norm in other countries while carrying out reforms in the labor market; and to adopt a policy aimed at reducing poverty.

Concurrently, a detailed work plan should be formulated and presented to the government and the public enabling the government to carry out its critical decision to restrict the increase in its expenditure between 2005 and 2010 to one percent a year. The opportunities offered by the US government loan guarantees are limited in time and quantity. When the window of opportunity closes, in another two years, the share of government expenditure in GDP must be on a path that enables the easing of the tax burden and debt to continue. This is the core of the policy of continuous growth by means of the business sector.

This Inflation Report was prepared at the Bank of Israel within the framework of the Senior Monetary Forum. The Forum—headed by the Governor—is the inter-departmental team (whose members include the Deputy Governors and the heads of the Monetary, Research, Foreign Currency, and Foreign Exchange Activity Departments) within which monetary policy issues are discussed.



David Klein
Governor

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Summary

- The Consumer Price Index (CPI) declined by 1.4 percent in the second half of 2003, and by 1.9 percent from the beginning of the year, below the lower limit of the inflation target (1–3 percent).
- Despite price reductions during the year, one-year inflation expectations derived from the capital market were within the target inflation range until November, and throughout the year the assessments of private forecasters for one year were within the target range and for 2004 were close to the middle of the range. Longer range forecasts were within the target range or above it each month.
- The fall in the CPI was most pronounced in 2003:II and 2003:III, and was related to the significant local-currency appreciation against the dollar from February to July and the low level of real economic activity. Although some recovery in real activity was evident in 2003, mainly in the second half of the year, with GDP rising by 1.2 percent after two years of contraction, the output gap remained negative and high, exerting pressure to moderate the rate of price increases or even to reduce prices.
- The local-currency appreciation resulted from the marked reduction of uncertainty and Israel's country-risk premium as well as the wide interest-rate differentials between the NIS and the dollar, and the weakening of the dollar worldwide. Uncertainty started to abate towards the end of 2003:I following the rapid conclusion of the war in Iraq, the increased credibility of fiscal policy, the approval of the loan guarantees by the US government, and the renewal (albeit short-lived) of the peace process (the *hudna*, or ceasefire).
- Shortly after its formation at the beginning of 2003, the new government adopted a program of cuts in the budget planned at the end of 2002, and structural reforms of great importance for the long-term streamlining of the economy. These decisions increased the public's confidence in the government's intention to restore fiscal discipline in the next few years to be reflected by a declining deficit and debt relative to GDP, even though the budget deficit was expected to considerably exceed its target in 2003. Although fiscal restraint contributed to the low level of demand during the year, it was necessary for maintaining financial stability in view of the experience of 2002.
- Price reductions in the months when the NIS appreciated were due largely to the considerable weight of the housing component in the CPI and the close relation between housing prices and changes in the exchange rate. In July the trend reversed, and the NIS depreciated moderately, since when price reductions have flattened out and occurred in nearly all the components of the index.
- Monetary policy also played a role in the moderation of price changes, via its effect on demand and inflation expectations, and as the result of the relatively high interest-rate differentials between the NIS and other currencies throughout the first half of the year. The continuous cuts in the interest rate could only start in the second quarter of 2003, when it became clear that the reduction in uncertainty was not a passing phase; however, in the light of the circumstances that necessitated the hike in the interest rate in the middle of 2002, it was important to start with modest cuts in the rate and see whether the positive trends persisted.
- As the positive trends in the financial markets continued, and against the background of the very moderate rate of price changes from the second quarter, the Bank of Israel stepped up the pace of cuts of the interest rate. Since June the rate has been reduced by 0.4–0.5 percentage points each month, giving a cumulative reduction of 2.8 percentage points in the second half of 2003, and a total of 3.9 percentage points since the beginning of the year.
- The Bank of Israel has avoided increasing the pace of reductions in the interest rate due to concern that lowering the rate more rapidly would result in too fast a narrowing of the interest rate differentials, and would thus encourage rapid and undesirable adjustment of the asset portfolio, which could well undermine financial stability. Moreover, there was concern that faster reductions in the interest rate would again raise doubts in the public's mind regarding the Bank's determination to adhere to the policy of long-term price stability.

- The NIS/\$ exchange rate during the year was affected largely by the activity of nonresidents in short-term financial instruments vis-à-vis the NIS. This activity was in turn affected by both global trends and the reduction in Israel's country risk, together with the narrowing of the interest-rate differentials between the NIS and other currencies.

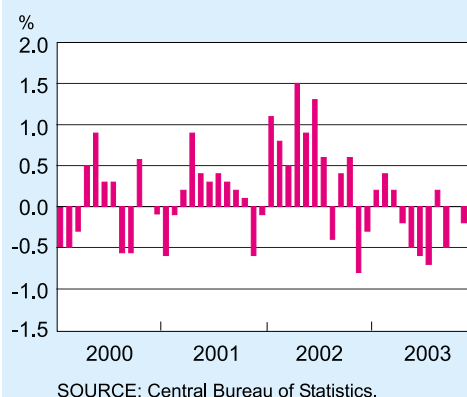
I. THE DEVELOPMENT OF THE CPI

The Consumer Price Index (CPI) declined by 1.4 percent in the second half of 2003, giving a total reduction of 1.9 percent since the beginning of the year (Table A.1 and Figure 1)—deviating from the price-stability target defined as a 1–3 percent increase in the CPI. Prices did not change uniformly over the year: in 2003:I the CPI rose by 0.8 percent, exceeding the seasonal path consistent with the midpoint of the inflation target, and from 2003:II prices fell. In 2003:II and 2003:III the fall in prices amounted to 2.3 percent, followed by a more moderate decline of 0.4 percent in 2003:IV. In most months the drop in the CPI came as a surprise: in nine months the average of the prevailing forecasts regarding the CPI was higher than the actual change, and in one month only did the reverse occur with the CPI exceeding the forecasts. Over the last five years the CPI has risen at an annual rate of 1.5 percent.

In the second half of the year nine of the ten component items of the CPI declined, and only one, housing maintenance, rose slightly (Figure 2). The CPI excluding housing went down in the second half of the year by 1.7 percent, after rising by 1.3 percent in the first half. The reductions in the components of the CPI in the second half of the year after adjusting for seasonal items were between 1.1 percent and 1.3 percent. The Wholesale Price Index rose by 3.3 percent in the whole of 2003, and by 1.8 percent in July to December.

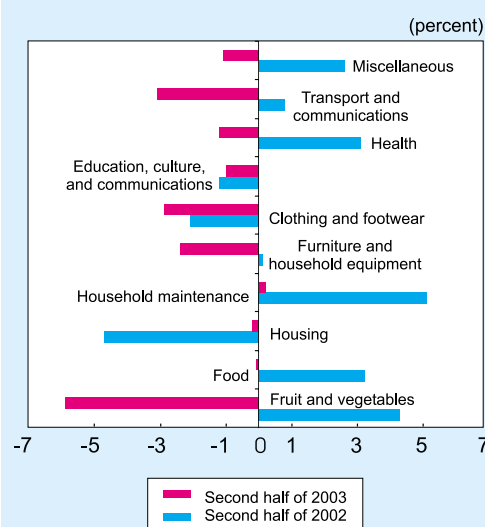
The inter-month standard deviation of the CPI fell slightly in 2003, and the difference between the maximum and minimum monthly change also fell this year. Part of the inter-month standard deviation may be ascribed to the seasonality of some items in the CPI and to changes in the exchange rate, which has both a direct and an indirect effect on many components. Even when the effect of the exchange rate is not immediate, its volatility combined with the effect of the transmission mechanism from it to prices causes volatility in the different price indices. In the second half of the year, the months July and September were particularly notable as regards the extent of the fall in the CPI: in July it dipped by 0.7 percent due to the effect of seasonal items (fruit and vegetables, and clothing and footwear) and housing prices, and in September it fell by 0.5 percent, of which 0.3 percent was due to a regulatory change.¹

Figure 1
Monthly Rates of Change of CPI,
2000–2003



In 2003 the change in the CPI deviated from the range defined as price stability, declining by 1.9 percent.

Figure 2
Development of Components of CPI,
Second Halves of 2002 and 2003



All components of the CPI declined in the second half of 2003, except for household maintenance. The prices of clothing and footwear, fruit and vegetables and transport and communications dropped considerably.

¹ A change in telephone rates.

II. MONETARY POLICY, INFLATION, AND THE ECONOMIC ENVIRONMENT

a. Monetary policy

In the second half of 2003 monetary policy operated in a fairly sluggish economic environment: real economic activity recovered slightly after more than two years of contraction, with moderate GDP growth, a rise in exports and private consumption, and a decline in investment in capital assets. The main factors preventing faster recovery were the persistent uncertainty in the security situation for the third successive year, and the relatively slow rate of recovery of world trade. In the short term, macroeconomic policy also served to slow activity, adhering to budgetary discipline on the expenditure side and keeping the real interest rate relatively high. These two aspects of policy were needed in view of the serious upward deviations from the deficit and inflation targets in 2002, which undermined financial stability. As the year progressed, greater stability enabled the gradual easing of monetary restraint alongside continued fiscal discipline. This mix of macroeconomic policy together with the receipt of the US government loan guarantees supports the reduction of interest rates for all terms, and stimulates sustainable growth.

Despite the persistent recession and lack of progress towards an end to the conflict with the Palestinians, the trends in the financial markets were positive throughout most of the second half of 2003. These trends resulted from several events that occurred towards the end of 2003:I and during 2003:II, and contributed to the reduction of uncertainty throughout the year: the formation of the new government at the end of February, its rapid adoption of an economic program that included sweeping spending cuts and important economic reforms, serving to re-establish the credibility of fiscal policy despite the large deviation from the deficit target. the approval of the loan guarantees by the US government in March contributed to the stability of the domestic foreign-currency market, to a significant lowering of the assessment of Israel's government's external debt risk and to the view that domestic borrowing could be reduced below its planned level; the rapid ending of the war in Iraq in April removed a serious geopolitical threat to Israel's economy. In addition to all the above, the peace process with the Palestinians—the *hudna*, or ceasefire—resumed, but ended after a short time.

All these developments, together with the reduction of the risk premium of emerging markets, created a positive atmosphere in domestic financial markets in March–June. This was expressed

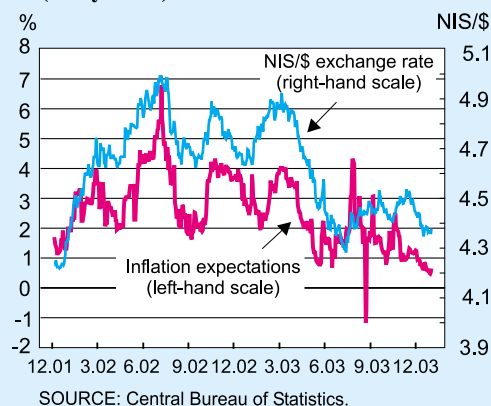
in a steep fall in yields on government bonds and a rise in share prices, due also to a sharp increase in share prices worldwide. The decline in uncertainty, alongside relatively high NIS/dollar interest-rate differentials and the weakening of the dollar in world markets, led to sharp NIS appreciation against the dollar and very moderate price developments. Inflation expectations for a year ahead also declined sharply during this period (Figure 3). Against this backdrop, the Bank of Israel renewed the process of interest-rate reductions in April, at first very cautiously because of the proximity to security events and the desire to examine the response of the markets to the reductions, and later more rapidly, in view of the persistence of the positive trends in the markets and in order to boost the moderate level of real economic activity. It was also necessary to display caution at the initial stages of interest-rate reduction in view of the experience of missing the inflation and deficit targets in 2002, as well as because of several indicators from the foreign-currency market which still attested to a high level of uncertainty.

The interest-rate cuts were accelerated in the second half of 2003, with a 0.5 percentage-point reduction each month (with the exception of October and December, when it was cut by 0.4 percentage points). Altogether, in the second half of 2003 the interest rate was reduced by a cumulative 2.8 percentage points, and by 3.9 percentage points from the beginning of the year.

The Bank of Israel refrained from accelerating the interest-rate cuts by more than 0.5 percentage points a month because a faster rate could have caused the public to doubt the Bank's determination to attain price stability over time, and could have narrowed the interest-rate differential between Israel and abroad too quickly, causing rapid adjustments to the asset portfolio, thereby undermining financial stability. The gradual reductions made it possible to review the reactions of the markets on an ongoing basis as well as to adjust policy measures accordingly. In June, when it transpired that inflation in 2003 might undershoot the target, the Bank of Israel preferred not to accelerate the rate of interest-rate cuts beyond 0.5 percentage points a month, as the attempt to attain the price-stability target in 2003, after cumulative price reductions of 0.5 percent in the first half of the year, would have required the acceleration of inflation in the short run, alongside sharp interest-rate cuts. This could have imperiled the attainment of the target in the long run, thereby harming financial stability and the fragile process of economic recovery.

This approach is also consistent with the government's decision of August 2000 that from 2003 and subsequently the inflation target would no longer be confined to the calendar year but would be a

Figure 3
NIS/\$ Exchange Rate and Inflation
Expectations Derived from the
Capital Market,
December 2001–December 2003
(daily data)



One-year inflation expectations in the second half of 2003 generally moved within the limits of the inflation target, below the mid-point of the range. Towards the end of the year expectations converged towards the lower limit, and even fell below it.

constant one of price stability, defined as price increases of 1–3 percent a year. Hence, the interest-rate policy is intended to attain price stability over time rather than in a specific calendar year, enabling short-term deviations from the target in either direction. Since inflation expectations for a year ahead as derived from the capital market were within the target range until November, and forecasters' estimates of inflation for a year ahead and 2004 were near the midpoint of the target range throughout 2003, the Bank of Israel assessed that the deviation from the target was temporary and refrained from adjusting the interest rate sharply. The rationale for this also derived from the fact that the effect of policy is felt with a lag, and hence it is not appropriate for dealing with short-term events.

In July and August some of the positive trends in the financial markets were checked and even reversed, in view of the reduction of long-term interest rates in the US, reducing the attractiveness of investment in emerging markets, including Israel. Concurrently, public pressure against expected budget cuts intensified, and Treasury estimates of the size of the expected 2003 deficit—6 percent of GDP—were published. In addition, the peace process came to a halt once more and terrorist attacks were resumed. Despite the change, the Bank of Israel continued to reduce the interest rate by 0.5 percentage points a month in August and September, since in view of the very modest price developments since the beginning of the year, the assessment was that it would be possible to continue reducing the interest rate without imperiling attainment of the target for the next one and two years. In addition, the trend reversal in the markets was relatively moderate, barely perceptible according to the indicators, and only slightly offset the positive trends evident since April.

The positive trends in the markets re-emerged in September, most prominent among them the continued decline in nominal and real yields and stability in the foreign-currency market, expressed in moderate NIS depreciation vis-à-vis the dollar, alongside low actual and implied exchange-rate volatility, the latter being derived from the options market. In addition, share prices began to rise. These developments in the markets, as well as the low level of inflation expectations and moderate price developments, constituted a convenient backdrop to interest-rate cuts, and between October and December the Bank of Israel did in fact reduce the interest rate by 0.4–0.5 percentage points a month.

Refraining from making more rapid interest-rate cuts was also required in view of fiscal policy. In 2003 this policy had become more credible, contributing to the decline in real long-term yields

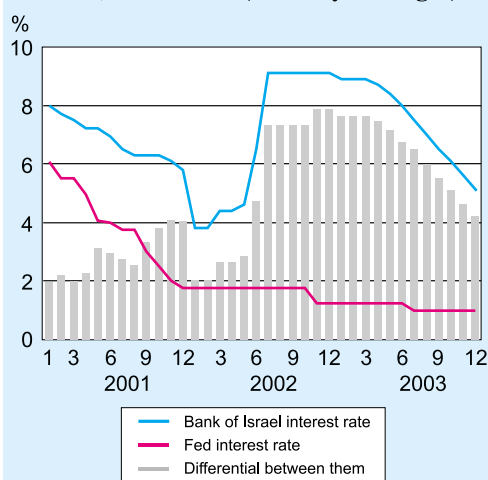
and enabling relatively rapid interest-rate reductions, but despite the extensive budget cuts and rapid approval of the economic package, the 2003 deficit was expected to be considerably above the target due to the recession. It was predicted that the debt/GDP ratio would rise in 2003 and the subsequent two years. All these factors made it necessary to avoid reducing the interest rate too rapidly, because a large budget deficit increases the risk that the decline in long-term yields will slow or even be checked, as occurred in July and August, when the size of the deficit expected in 2003 became clear. Over-rapid reduction of the short-term interest rate could therefore have created an imbalance which would eventually have made it necessary to raise the short-term interest rate.

After a year of continuous reductions, Israel's interest rate reached 5.2 percent in December, and with the additional reduction for January 2004 it reached 4.8 percent. Although Israel has not had such low nominal interest rates since the 1970s (with the exception of a brief period in the first half of 2002), actual and expected inflation have never been so low either. While real interest has declined, it is still higher than in most advanced economies, making it possible to continue reducing it as long as price stability is maintained and the financial markets remain calm. The reduction of the interest-rate differential between Israel and abroad requires using caution when making further cuts, as the lower the differential, the greater the effect on the financial markets of any potential shock, thereby undermining the stability attained. Note in this connection that long-term interest-rate differentials have contracted even more than is required in light of the interest-rate differentials between the central bank rates, because of the increase in long-term interest in the US since June, in line with the trend there of relatively rapid recovery, which will apparently lead to further increases.

b. Why the inflation target was undershot in 2003

The year began with a high level of uncertainty, which diminished markedly towards the end of 2003:I and the beginning of 2003:II (the political and economic developments which led to this are described in section a above). The rapid reduction of uncertainty was accompanied by the decline in Israel's risk premium, largely against the backdrop of the approval of the US guarantees and increased credibility of macroeconomic policy, exerting considerable influence on the exchange rate. From mid-February to the beginning of July the NIS appreciated by 13 percent local-currency against the dollar and 12 percent against the currency basket.

Figure 4
Short-term Interest Rates in Israel and the US and the Differential between them, 2001–2003 (monthly averages)



SOURCE: Bank of Israel.

In the second half of 2003 the differential between interest rates in Israel and the US narrowed considerably due to the continued lowering of the rate in Israel. At the end of the year the differential reached 4.2 percentage points, down from 6.75 in June 2003.

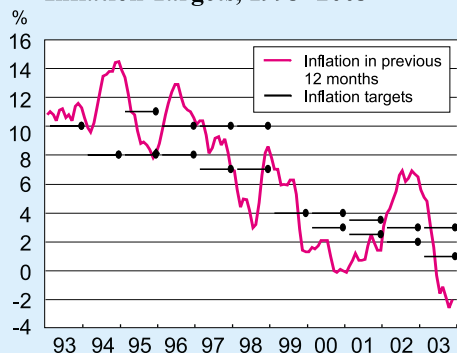
In view of the depreciation and because of the high rate of transmission from the exchange rate to prices which characterizes Israel's economy for historical reasons, the passthrough from February to July was very moderate and amounted to a 1.8 percent decline in prices. This was primarily the result of the large share of housing prices in the CPI (Consumer Price Index) and the close connection between the development of these prices and exchange-rate changes. Thus, housing prices fell by 8.4 percent in the months in which there was local-currency appreciation, contributing 1.9 percent to the decline in the CPI, while the average price of other items remained unchanged, despite the appreciation.

The appreciation was also the outcome of large interest-rate differentials between the NIS and foreign currencies, primarily the dollar (Figure 4). These differentials grew notably in the first half of 2002 due to the undermining of price stability in the markets, making three sharp interest-rate hikes necessary in order to avoid a financial crisis. In the first half of 2003, and especially in 2003:II, when uncertainty declined radically and the financial markets calmed, the Bank of Israel began a process of interest-rate cuts. This began slowly and accelerated gradually, because in view of the circumstances which led to the sharp interest-rate hike in mid-2002 it was important to begin the process gently and examine whether the positive trends were maintained, in order both to create more convenient background conditions and examine whether the public perceived the pace of interest-rate cuts as being in line with the continuation of stability. Hence, the NIS/\$ interest-rate differential remained relatively high in the first half of 2003—averaging 7 percent. Only in the second half of 2003, as the interest-rate cuts intensified and accumulated, did the interest-rate differential contract significantly, reaching 4.2 percent in December.

The Bank of Israel refrained from making sharper interest-rate cuts because the experience of the last decade with the inflation target has shown that steep reductions lead to sharp reactions in the financial markets. In view of the wide fluctuations in inflation since 1992 (Figure 5) and the persistent marked effect of exchange-rate developments on inflation, it was important to impress upon the public that the low inflation rates were not a transient phenomenon. The Bank of Israel consequently did not make sharp and sudden changes in the interest rate, as these could have had an adverse effect on the credibility of policy and awareness of the central bank's commitment to establishing a low inflation environment over time.

The ongoing recession and negative output gap also influenced prices. Although in the months of appreciation price reductions

Figure 5
Inflation in Previous 12 Months, and Inflation Targets, 1993–2003



SOURCE: Central Bureau of Statistics.

The declines in the rate of inflation in Israel in the last few years have shown high volatility.

were concentrated in the housing component, these persisted even after the appreciation trend reversed in July and became moderate depreciation. Prices continued to fall, albeit more moderately, encompassing most of the items in the CPI, influenced mainly by the contraction of domestic demand, high unemployment rates, and the sharp erosion of the real wage. These developments, together with downsizing by firms in the last two years, increased readiness to lower prices, particularly in view of the persistent recession. In addition, the trend of local-currency depreciation vis-à-vis the dollar evident from July, was very moderate and not sufficient to offset the sharp appreciation evident between February and June, so that firms' readiness to reduce prices, especially of tradables, remained high.

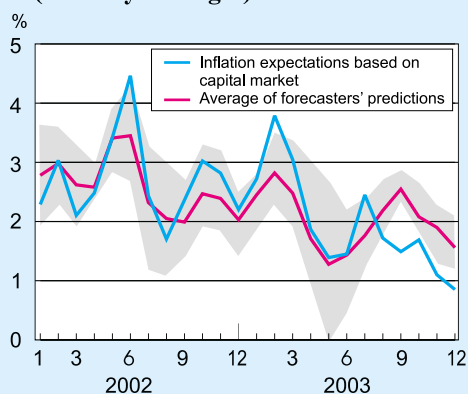
The deviation of inflation from the target in 2003 derived primarily from exogenous developments which served to generate local-currency appreciation and moderate demand—factors which are not under the control of policymakers. Even if it had been possible to foresee some of these developments, it would have been very difficult to assess the extent to which they influenced the exchange rate and aggregate demand, as well as the intensity with which the exchange rate and reduction of demand affected prices. These forces could be offset only slightly by means of the interest rate: since the impact of interest is limited and expressed in part with a lag, it was difficult to use it to influence prices in 2003 in an orderly and predictable fashion. Furthermore, over-rapid interest-rate cuts could have affected price developments in 2003, but only at the cost of undermining financial and price stability, and the economy's ability to grow in the long term.

c. The monetary indicators underlying interest-rate policy

In order to make interest-rate decisions, the Bank of Israel tracks the development of various economic indicators in the capital, money, and foreign-currency markets, alongside macroeconomic data on inflation and real economic activity. Some of the data are analyzed in a judgmental framework, and some on the basis of econometric models for forecasting inflation. Monitoring these indicators enables the Bank of Israel to constantly review the response of the market to developments and reduce the interest rate as long as it appears possible to maintain price stability for one or two years ahead with a lower rate of interest and without undermining the stability of the financial markets.

The various indicators are given below, together with a description of their development in the second half of 2003.

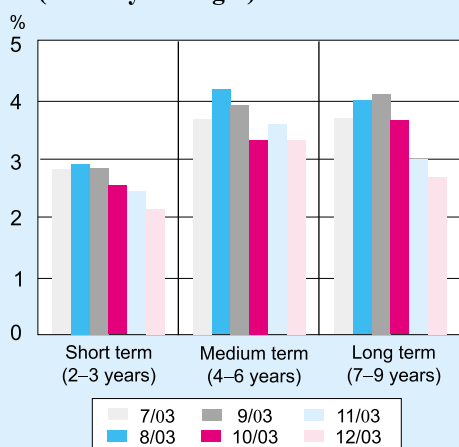
Figure 6
One year Inflation Expectations Based on the Capital Market, and Forecasters' Predictions, 2002–2003 (monthly averages)



SOURCE: Bank of Israel Monetary Department and private forecasters.

Inflation expectations derived from the capital market reacted more strongly to the reduction of uncertainty in the second half of 2003 than did inflation predictions of private forecasters, and since August they have followed a downward trend and have been lower than the forecasters' predictions.

Figure 7
Long-Term (Forward) Inflation Expectations, July–December 2003 (monthly averages)



SOURCE: Bank of Israel Monetary Department.

Inflation expectations for the long term (2–9 years) were on a downward trend in the second half of 2003. Expectations for the relatively short term (2–3 years) were within the target inflation range as early as May, whereas those for the longer term (7–9 years) did not come into the range until November. Inflation expectations for the medium term were still in excess of the upper limit of the target.

(i) Indicators of expected inflation

Inflation expectations for a year ahead derived from the capital market averaged 1.5 percent in June, rose to 2.5 percent in July, and dipped to 1.6 percent in August–October, considerably below the midpoint of the target range (Figure 6). Following publication of the September CPI, which was below all assessments, they then fell further, reaching 1.1 and 0.7 percent in November and December respectively. The level of expectations remained within the limits of the target range until November, but in December dipped below the lower limit, despite the continuous reduction of the interest rate by the Bank of Israel during the second half of 2003. This occurred against the backdrop of the increased credibility of macroeconomic policy, relative stability in the foreign-currency market, and moderate development of prices. The Treasury-bond yield curve was influenced to a great extent in 2003 by the tax reform, hampering interpretation of the expectations data derived from it.

Private forecasters' assessments of expected inflation for a year ahead rose gradually in 2003:III from an average of 1.4 percent in June to 2.5 percent in September, after which they dipped again to 1.6 percent in December (Figure 6). The rise in forecasters' assessments in 2003:III was not consistent with the development of expectations as derived from the capital market and was based on forecasters' assessments that after a succession of negative CPI changes in 2003:II and 2003:III, the inflation rate would accelerate once more and rise markedly in 2003:IV; this view turned out to be mistaken, however. Only after the publication of the CPI for September, which was notably lower than assessments, did the forecasters revise their predictions downwards, but even then these remained higher than the assessments derived from the markets. The range of forecasts, which also serves as an indicator of the level of uncertainty, contracted during the second half of 2003, and the predictions of all forecasters were within the target range throughout the second half of the year.

Long-term inflation expectations (for 1–10 years) derived from the capital market, measured by the yield gaps between unindexed local-currency bonds (*Shahar*) and CPI-indexed bonds (*Galil*), dipped slightly in the second half of 2003, to average 2.7 percent in December (Figure 7). Expectations for shorter terms (2 or 3 years) converged to within the limits of the target in May, and expectations for longer terms (7–9 years) did so in November. Expectations for the medium term are still above the target. The decline in long-term expectations attests to reduction of the risk premium in the course of the period, against the backdrop of the

easing of uncertainty and rise in the credibility of macroeconomic policy.

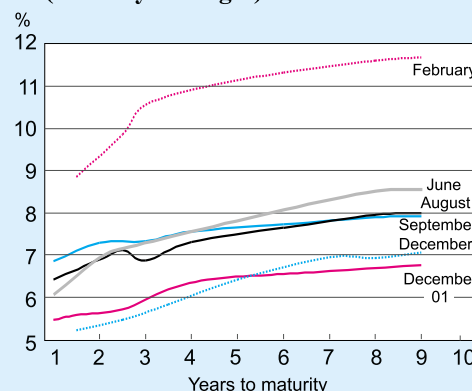
Econometric models developed in the Bank of Israel help to assess expected inflation and determine the interest-rate path required to attain the target, enabling the processes underlying inflation to be analyzed under various assumptions as to their future development. The models rely on several economic correlations, known from the past, in order to predict future developments, thereby providing a convenient structural framework for their analysis. However, since the models cannot reflect developments specific to each period, their usefulness is limited. During the period reviewed the models also showed that it was possible to continue to lower the interest rate gradually, without imperiling attainment of the inflation target.

(ii) Other indicators

Yields on government bonds: during the period reviewed the downward trend in real and nominal yields, which had begun in February and March respectively, continued, with the inauguration of the new government and its rapid adoption of the economic package, attesting to its commitment to restoring fiscal discipline. The rapid conclusion of the war in Iraq, resumption of the peace process, receipt of the US government guarantees, and reduction of the risk premium of emerging economies also contributed to the decline in yields. All these led to a lower assessment of Israel's risk, expressed in the gradual flattening of the yield curves. The fall in yields was checked temporarily in August, against the backdrop of disappointment with the cessation of the peace process and rise in world interest rates, but revived in September. The factors behind the decline in yields in the second half of the year were the persistent interest-rate cuts and greater credibility of fiscal policy, due to the government's evident determination to reduce the deficit and implement important structural reforms. Expectations of a continued fall in yields were reinforced by the predicted contraction of net borrowing by the government in the domestic market in view of the receipt of the US guarantees and the fact that the pension funds were permitted to resort to the market (Box 1).

Nominal yields declined by about 1.5 percent in the period reviewed—from an average of 7.5 percent in June to 6.0 percent in December. Since long-term yields declined more steeply along the curve, its sharply positive slope (which had reached 2.5 percent in August and September) moderated, expressing the decline in uncertainty in the long term, too.

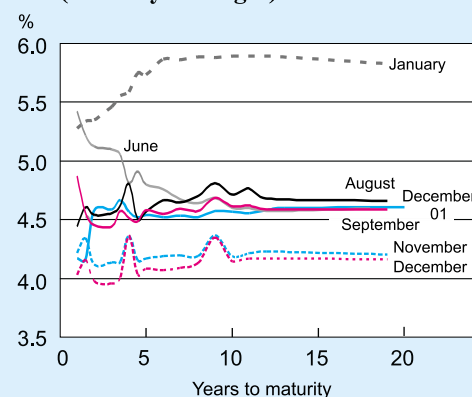
Figure 8
Yield to Maturity of Unindexed
“Shahar” Bonds, 2003
(monthly averages)



SOURCE: Bank of Israel Monetary Department.

In the second half of 2003 nominal yields which had started falling in March continued to drop. This trend was evident in all months in the period except for August. Since reaching their peak of 10.6 percent (average) in February, the yields have declined to an average of 6.0 percent in December.

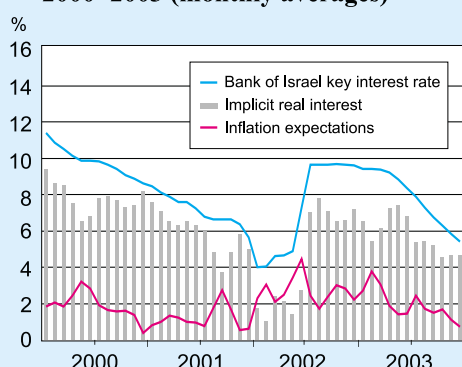
Figure 9
Yield to Maturity of CPI-Indexed
Bonds, 2003
(monthly averages)



SOURCE: Bank of Israel Monetary Department.

In the second half of 2003 the downward trend of real yields which had started in February persisted. This trend was evident in all months in the period except for August. Since reaching their peak of 5.7 percent (average) in January, real yields have declined to an average of 4.2 percent in December. The slope of the yield curve, which was negative at the beginning of the second half of the year, became almost completely flat towards the end of the year.

Figure 10
The Bank of Israel's Key Interest Rate,^a Inflation Expectations,^b and the Implicit Real Interest Rate, 2000–2003 (monthly averages)

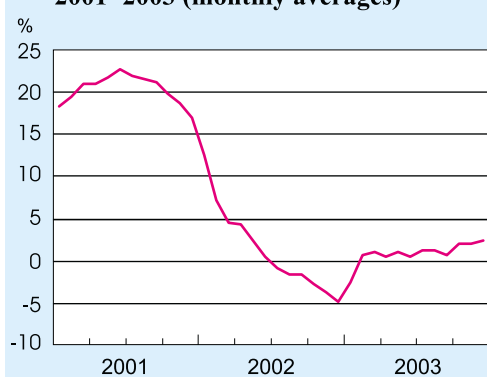


^a Effective interest rate at the Bank of Israel auctions.
^b For 12 months ahead; derived from capital market.

SOURCE: Bank of Israel Monetary Department.

Implicit real interest fell considerably from 6.8 percent in June to 4.6 percent in December. The decline in real interest is the result of the continued cuts in the Bank of Israel key interest rate partly offset by the reduction of inflation expectations.

Figure 11
Annual Rates of Change of M2, 2001–2003 (monthly averages)



SOURCE: Bank of Israel Monetary Department.

In July–December 2003 unindexed local-currency deposits rose by 3.4 percent, after their balance had fallen by 0.8 percent in the first half of the year, and by 5 percent in 2002.

Real yields also continued to decline markedly in the second half of 2003, from an average of 4.9 percent in June to 4.2 percent in December (Figure 9). The slope of the curve, which was negative at the beginning of the period, became slightly positive towards its end, because the decline in short-term yields was steeper than that in long-term ones.

Expected real interest on Bank of Israel sources is derived from the difference between the central bank's key interest rate and inflation expectations, and indicates the extent of monetary restraint. During the second half of 2003 expected real interest fell sharply, from an average of 6.6 percent in the first half of the year to 4.6 percent in December—due to the interest-rate reductions implemented by the Bank of Israel during the second half, although this was partly offset by the decline in inflation expectations (Figure 10). The relaxation of monetary restraint during the period was made possible by the decline in uncertainty in the financial markets and continued moderation in real economic activity.

The *unindexed local-currency deposits of the public (M2)* began to rise again—by 3.4 percent—in the period reviewed, after contracting by 0.8 percent in the first half of 2003, and by 5 percent in 2002 (Figure 11). The growth rate of these deposits has fallen markedly since December 2001, initially in the context of the sharp interest-rate cut and rise in the inflation rate, and later against the backdrop of the cancellation of the tax benefit on these deposits, as they were taxed from January 2003, and the continued regular cuts in the interest rate. This trend was reinforced by a change in the Bank of Israel's monetary policy; this involved a gradual shift from using banks' deposits as a policy instrument to the use of Treasury bills, which are subject to market forces. This transition was made possible by the abolition of the ceiling on Treasury-bill issuance at the end of 2001. The share of short-term Treasury bills (up to 3 months), which had risen gradually after the interest-rate cut of December 2001, remained high in 2003—78.7 percent in December, compared with 72.7 percent in December 2001.

The Assets Portfolio, by Indexation Base, 2002–2003

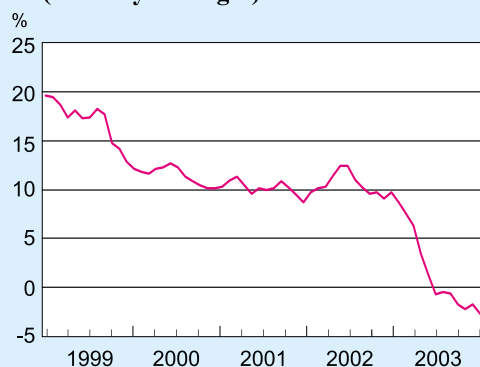
	NIS billion		Distribution (percent)		Distribution excluding shares (percent)	
Unindexed	385.3	429.8	31.2	31.0	36.9	39.3
CPI-indexed	463.1	475.3	37.5	34.3	44.3	43.5
Foreign-currency						
indexed	196.0	188.4	15.9	13.6	18.8	17.2
Shares in Israel	171.3	262.7	13.9	18.9		
Shares abroad	18.7	30.8	1.5	2.2		
Total	1,234.4	1,387.0	100.0	100.0		
Total excluding shares	1,044.4	1,093.5			100.0	100.0

The *narrow money supply (M1)*, which accounted for 15 percent of short-term deposits in December, rose by a cumulative 8.2 percent in the period reviewed, compared with a 0.3 percent decline in the first half of 2003 (Figure 12). Most of the increase was in the current account component, which grew by 11.7 percent in the period, while cash rose more moderately, by 4.9 percent. The expansion of the money supply is regarded *inter alia* as a response to the Bank of Israel's cumulative interest-rate reduction.

The *overall credit aggregate (C3)*, which expanded by an annual average of 10 percent in 2000–2002, contracted in 2003, and its growth rate turned negative, –2.7 percent (Figure 13). The contraction of this aggregate apparently derived from both the fall in the demand for credit in view of the recession and the greater rigidity of the banking system's criteria for extending credit because of the change in the assessment of risk. The credit data also indicate that the share of unindexed credit rose from 27.9 percent at the beginning of the year to 29.6 percent at the end of 2003, parallel to the decline in the share of indexed credit.

The value of the *public's asset portfolio* rose sharply, by 12 percent, in 2003, mainly in the context of the sharp price increases in the tradable components of the portfolio, especially shares. Consequently, the proportion of shares in the portfolio rose from 15.4 percent in December 2002 to 21.1 percent at the end of 2003, at the expense of all the other indexed components. When shares are neutralized, the share of unindexed local-currency assets rose from 36.9 percent in December 2002 to 39.3 percent at the end of 2003, while that of indexed assets declined (Figure 14).

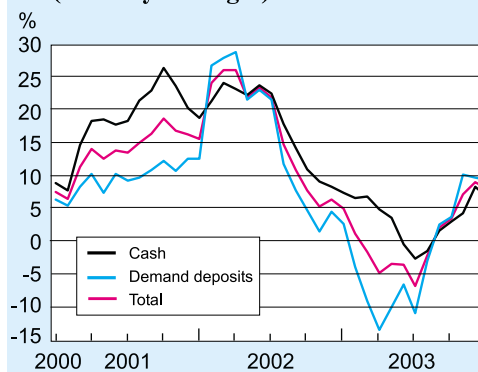
Figure 13
Annual Rates of Change of Credit to the Public (C3), 1999–2003
(monthly averages)



SOURCE: Bank of Israel Monetary Department.

The credit aggregate, after rising at an average annual rate of about 10 percent in 2000–2002, went down by 2.7 percent in 2003.

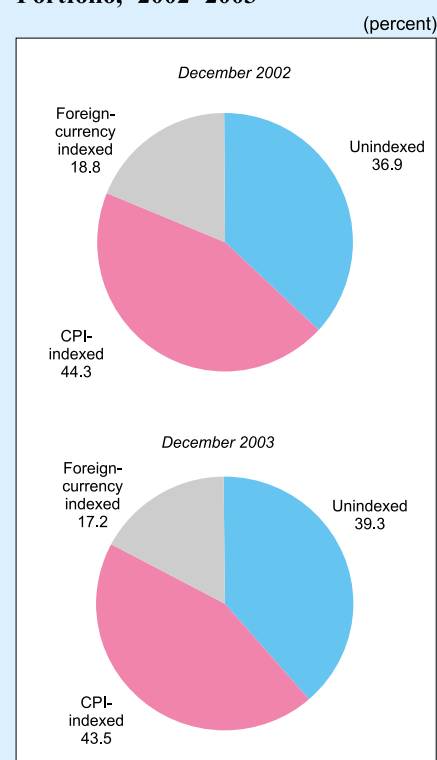
Figure 12
Rate of Change of M1 and its Components, December 2000–December 2003
(monthly averages)



SOURCE: Monetary Department, Bank of Israel.

The narrow (M1) money supply grew by 8.2 percent in the second half of 2003, after contracting by 0.3 percent in the first half. The main part of the increase was in the demand deposits components, which rose by 11.7 percent, while cash increased by a more modest 4.9 percent.

Figure 14
The Public's Financial Assets Portfolio,^a 2002–2003



^a Excluding shares.

SOURCE: Banks' balance sheets, TASE, Ministry of Finance; the Bank of Israel's Foreign Currency Activity and Monetary Departments and the Supervision of Banks.

Box 1

The Reform of the Pension Funds and its Expected Effects on the Markets

In May 2003 the Knesset approved a far-reaching reform of the pension funds which was intended to deal with the actuarial deficits of the veteran funds by means of government aid while at the same time limiting the excessive rights of some of their members and increasing pension contributions. In the framework of the reform special fund managers were appointed and a uniform set of articles instituted for all of them, setting out a mechanism for maintaining actuarial balance, similar to the mechanism existing in new pension funds. It was also decided to slash the extent of investment by pension funds (both new and old) in earmarked bonds (untraded government bonds), to cut the extent of subsidization implicit in these bonds, and to divert most of the savings (70 percent) in pension funds to the market, in a gradual process taking several years. To achieve this, new investment articles were approved for the funds under which the balances of earmarked bonds should not exceed 30 percent of their assets (compared with 70 percent and at least 93 percent in the new and old funds respectively, before the reform). The extent of investment in earmarked bonds would be reduced gradually, and this process began in September 2003, when issuance of these bonds for veteran pension funds stopped; their issuance for new pension funds ceased in January 2004. As a result, balances of earmarked bonds should gradually decline. Their issuance will resume only when their balance is less than 30 percent of the funds' assets, and only in the amount necessary to maintain that level.

According to estimates made by the Capital Market Division of the Ministry of Finance, the pension funds are expected to divert NIS 12–14 billion to the capital market in each of the next few years as a result of the redemption of earmarked bonds and net accrual. Since under the new investment regulations the veteran pension funds are obliged to invest most of their assets in government bonds, and in the first few years of the reform most of these amounts should stem from the redemption of the *Meiron* bonds held by the veteran pension funds, most of the amount in those years can be expected to be invested in tradable government bonds.

Permitting the pension funds to resort to the market is not expected, as a first approximation, to affect yields in the government bond market, since alongside the rise in demand for bonds their supply will also increase—as long as there is no change in the government's borrowing requirement. Nevertheless, the expansion of stocks of tradable bonds and the addition of a group of solid, long-term investors to the market is expected to improve the bond market and reduce its volatility. Increased competition between the pension funds as a result of their exposure to investment in the markets, and improved possibilities of transition between funds, could serve to make the funds more professional and lead to the development of new market instruments. Some of the savings in pension funds (mainly of the new funds) are also expected to be gradually diverted to new investment channels, thereby increasing competition in the market and serving as an alternative to the banking system as a source of long-term finance. To enable this to occur, the government must reduce both its deficit and its borrowing from the private sector.

Further to the rise in the share of unindexed local-currency assets, there was a shift in their composition: the share of Treasury bills and unindexed local-currency bonds (*Shahar*) rose, while that of local-currency deposits fell (see above). The backdrop to the increased proportion of Treasury bills and *Shahar* bonds was the accumulation of about NIS 31 billion in the mutual funds, some NIS 21 billion of it in those specializing in local-currency assets. Hence, the balance of the funds' assets rose by 82 percent, to stand at NIS 83 billion in December—about 6 percent of the public's asset portfolio. The public switched to investment in mutual funds that invested in unindexed local-currency assets, assessing that the yields on these assets would be higher because of expectations that interest would continue to decline. This assessment was also supported by the funds' vigorous marketing efforts, focusing on funds specializing in local-currency assets, designated as tax-exempt in 2003. Another outcome of this development was the increased share of tradable assets in the portfolio—up from 34.9 percent in December 2002 to 41.8 percent at the end of 2003. The increased proportion of shares in the portfolio, primarily as a result of the rise in their price, also contributed to this.

The share of CPI-indexed assets in the portfolio dipped, to stand at 43.5 percent at the end of 2003, after 44.3 percent at the end of 2002. Their composition also changed, with a decline in the proportion of savings schemes and a rise in that of tradable bonds. The change was apparently due to the tax reform, which abolished the exemption on interest in savings schemes and reduced the tax on interest income from CPI-indexed bonds, the object being to institute a uniform tax rate for all CPI-indexed assets.

The share of assets denominated in and indexed to foreign currency fell from 18.8 percent to 17.2 percent in 2003, largely as a result of local-currency appreciation.

Capital raised on the domestic market by the private sector expanded in 2003 and reached NIS 20.5 billion, compared with NIS 12 billion in 2002. Most of the increase was in nontradable corporate bonds issued to institutional investors, estimated at some NIS 11.6 billion in 2003 compared with NIS 6.1 billion in 2002, serving as an alternative source of funding to bank credit. Issues of tradable bonds also grew, amounting to NIS 6.2 billion in 2003, compared with NIS 4.2 billion in 2002. Most of these issues were of foreign-currency-indexed financial instruments, and were intended to meet the demand for foreign-currency-indexed assets, in view of the fact that the *Gilboa* bond had reached maturity (Box 2).

Box 2

The Effect of the Redemption of *Gilboa* Bonds on the Foreign-Currency Market

The government began to issue dollar-indexed bonds at the end of 1981, and continued to do so until the beginning of 2000. In that period other bonds of varying terms and extent were issued, the largest, of \$ 1 billion, in 1998, in the context of rapid local-currency depreciation in 1998:IV. In 2000 the government ceased to issue foreign-currency-indexed bonds, announcing that it had no intention of recycling series which reached maturity. The cessation of issuance of dollar-indexed bonds to the domestic market was one of several measures intended to end intervention by the government and the Bank of Israel in the foreign-currency market.

In February 2003 the recorded capital balance of these bonds was \$ 3.3 billion. Some \$ 725 million reached maturity in March, and another \$ 1.2 billion in September. The two last series, amounting to \$ 1.2 billion, will reach maturity in 2004, thus ending the era of foreign-currency-indexed bonds issued to the domestic market by the government.¹

As of 30 August 2003, prior to the second redemption, the balance of holdings of *Gilboa* bonds was distributed as follows: 39 percent was held by mutual funds, primarily those specializing in investment in foreign-currency assets in Israel; 28 percent was held by the banks, mainly against foreign-currency-indexed savings schemes; 13 percent was held by other institutional investors (provident, pension, and advanced study funds, and insurance companies), and the rest by the public.

Redemptions of *Gilboa* bonds in 2003, and those expected in 2004, significantly *reduce* the supply of foreign-currency assets. On the *demand* side, however, holders have not reduced their exposure, and do not intend to do so in the future as a result of redemptions of these bonds.²

In an economy that is open to capital flows the gap between supply and demand for dollar-indexed bonds could be expected to be closed by means of direct purchases of similar assets abroad. In effect, however, some of the excess demand was diverted to the domestic market, which offered substitutes in the form of dollar-indexed corporate bonds in an amount totaling \$ 0.7 billion. Some of these bonds were issued by private-sector intermediaries who bought most of the foreign bonds to back up issues, while some were issued by firms as a result of currency-management considerations arising from their assets and liabilities portfolio. The main reason for preferring foreign-currency assets in the domestic market to foreign bonds is the tax discrimination between income from domestic and foreign assets. This applies to all holders of *Gilboa* bonds (except insurance companies), most prominent among them being the provident, pension, and advanced study funds.

In January 2005, once the tax rates on domestic and foreign bonds are equalized, the need for domestic dollar-indexed bond issues will fall even further, and the potential demand for foreign-currency assets will be met by the foreign markets.

Several factors combined with the surge in issues of dollar-indexed bonds to prevent the redemptions of *Gilboa* bonds in March and September from undermining the stability of the market:

- (i) The information about the redemptions existed in the market a long time before they took place, so that holders could prepare themselves accordingly.
- (ii) The foreign-currency market has become far more efficient in recent years, as expressed in its depth and liquidity, the development of derivatives, etc.

¹ The last redemption, of \$ 50 million, is expected in 2010.

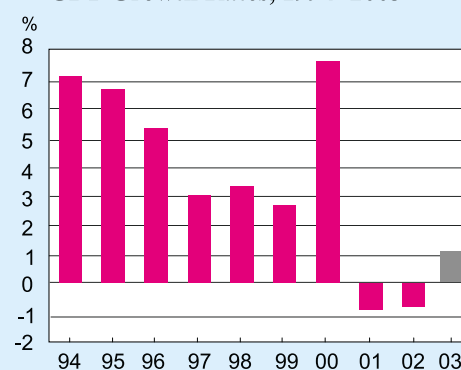
² On the basis of conversations with the principal holders.

d. Real activity

Real economic activity started recovering in 2003, and GDP rose by 1.2 percent. This constituted a decline in per capita GDP, but was a trend change from the previous two years, when the absolute level of GDP fell (Figure 15). Despite the recovery in activity during the year, the output gap remained high and negative, exerting pressure to dampen price increases and even reduce prices. In the second half of the year indications of economic recovery became stronger, and GDP grew at an annual rate of 1.7 percent, supported by a rise in private consumption and exports, and a decline in investment in capital assets. In the light of the persistent decline in investment, it is too soon to determine whether the reversal of the trend in economic activity is the forerunner of a return to a path of continued growth, or whether the economy is merely undergoing a temporary recovery. The composite state-of-the-economy index, which is based on monthly indices, indicates that the trend changed towards the end of the first half of the year, with the index rising at an annual rate of 1.5 percent between June and December, after declining continuously for three years. The main exogenous factors that sparked the recovery were the rise in world demand for high-tech products and the improvement in the security situation. In addition to these, in the second half of the year activity was affected by fiscal policy that maintained discipline on the expenditure side, and by monetary policy that enabled the reduction of short-term real interest. The labor market has not shown any signs of recovery to date: labor input in the third quarter of 2003 was only 1.2 percent higher than in the third quarter of 2002, and the rate of unemployment remained steady at 10.7 percent.

Private consumption per capita rose at an annual real rate of 5.8 percent in the second half of the year, and over the whole of 2003 it remained steady, after declining by 1.9 percent in 2002. The positive changes in private consumption were related to the improved security situation in the second quarter with the ending of the war in Iraq, and in the third quarter because of the *hudna*, or ceasefire—an improvement that apparently instilled into the public optimistic expectations regarding the approach of the end of the *intifada* and the recession. Another contributory factor in the trend change in private consumption was the lowering of income tax, part of the long-term reform of direct taxation, and the re-introduction of the income ceiling with regard to payments to National Insurance and health insurance. On the other hand, the further cuts in National Insurance allowances effective from July, the persistent rise in the rate of unemployment, and the more

Figure 15
GDP Growth Rates, 1994–2003^a

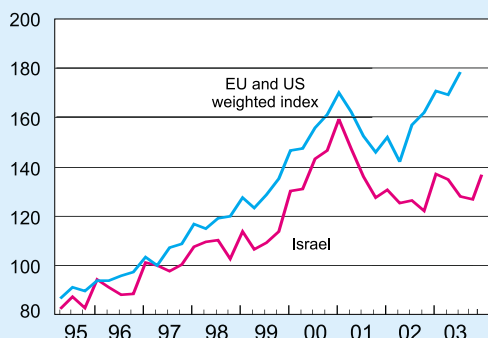


^a The figure for 2003 is based on preliminary estimates published by the Central Bureau of Statistics.

SOURCE: Central Bureau of Statistics.

In 2003 real economic activity began to recover, and GDP grew by 1.2 percent. This represents a decline in per capita GDP, but nevertheless constitutes a positive change relative to 2001 and 2002, when GDP fell.

Figure 16
Israel's Exports Index^a and the Imports Index^{a,b} of the EU and the US,^c 1995–2003



^a Indices based on current dollars.

^b Weighted by industry.

^c The data for the EU and the US are up to June 2003. Index based on the weights of US and EU imports of Israeli goods weighted by industry.

SOURCE: The Central Bureau of Statistics and Eurostat USITC.

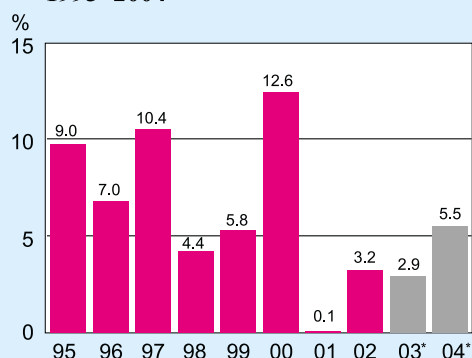
The rate of increase of Israel's exports worldwide, excluding diamonds, from 2002:I to 2003:III was lower than was expected based on the development of imports of the US and the EU.

stringent conditions for receiving unemployment pay all acted to reduce the disposable income of the weaker sectors of the population and reduced private consumption. Investment data show that the optimism exhibited by consumers was not shared by investors: investment in capital goods fell in the second half of the year at an annual rate of 4.8 percent, following declines in every half year since the second half of 2000. The fall in the second half of 2003 reflected a decline in investment in the principal industries and a standstill in investment in residential construction. Financing difficulties arising from the banks' cautious credit policy and the high rate of long-term real interest² also served to depress new investment.

The deficit in the balance of payment current account continued to decline in 2003, and reached 0.6 percent of GDP (see footnote 7). This was the result of the persistent low level of economic activity expressed by a small increase in imports and a more significant increase, 5.6 percent, in exports (at current prices). The drop in the number of foreign workers contributed more than \$ 300 million to the reduction of the deficit in the current account.

Goods exports rose in 2003, after falling steeply in 2001 and 2002.³ It seems that the change in the trend of world demand played a part in stopping the downward exports trend and in starting the process of recovery. If the change in Israel's exports is compared with the change in imports of the US and the EU weighted according to the industry components of Israel's exports, the effect of the recovery of demand in the latter countries on Israel's exports was less than expected. One prominent finding was the reduction in the share of Israel's exports in the imports of EU countries (from non-EU members) in the last eighteen months (Figure 16). This gives rise to two hypotheses about the reasons for the difficulties encountered along the route of recovery of Israel's exports. The first is that the security situation has an adverse effect on Israeli brands. The second is that Israel's export growth in the last few years was based on specific high-tech sub-industries, the demand for whose products is recovering slowly. IMF data on world trade that compares the average for 2003 with that for 2002 still indicate a slow increase of 2.9 percent. The IMF economists expect more significant growth, 5.5 percent, as early as in 2004⁴ (Figure 17).

Figure 17
The Volume Growth of World Trade, 1995–2004



* Forecasts

SOURCE: World Economic Outlook, IMF, September 2003.

The rate of recovery of world trade has a major impact on the ability of Israel's exports to grow.

² Although long-term real yields fell sharply during the year, they remained high. For example, the yield on 10-year indexed bonds at the end of the year was more than 4 percent.

³ In the first three quarters of the 2003 they were 2 percent higher, at constant prices, than in the equivalent period in 2002.

⁴ World trade at constant prices grew by about 3 percent in 2002 and in 2003, a slow rate compared to the average of 8 percent in the years from 1995 to 2000.

Services exports rose by 10 percent in 2003, but were more than 20 percent lower than in 2000, due to the severe crisis still affecting tourism and exports of software and R&D services. Tourists' hotel bed nights increased by 15 percent in 2003, with the upward trend peaking in the third quarter, the period of the *hudna*. The decline in exports of software and R&D services continued throughout the year, albeit more slowly than in the previous two years.

Goods imports (at current prices) started on an upward trend in the second half of 2003. This was led by raw material imports, used for current production, whereas capital good imports, which might serve as an indicator regarding expectations of the end of the recession, remained steady. Consumer goods imports, a small component of total goods imports, continued along the upward trend that started at the beginning of 2003.

The various indices relating to the real exchange rate do not present a consistent picture of its development, so that it is difficult to analyze its effect on activity. The real exchange rate, defined as the ratio of export prices to prices of business-sector product (including housing services) showed appreciation of 2.1 percent. Another index, which uses import prices instead of export prices, indicates real depreciation of 1 percent. The weakening of the dollar against the euro at an average rate of 20 percent, and the fact that Israel has a trade deficit vis-à-vis Europe and is approximately in balance in trade with the US contributed to the difference between the two indices of the real exchange rate. The index of the real exchange rate based on purchasing power parity (ppp) relative to those countries with which Israel trades indicates depreciation of 2.5 percent.⁵

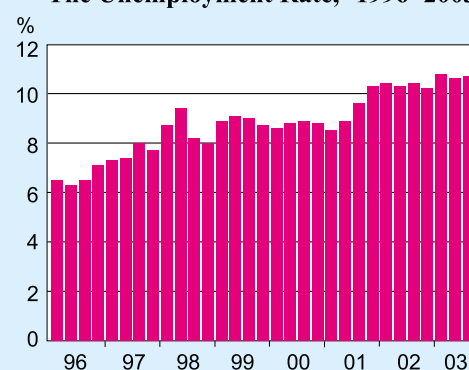
Israel's terms of trade (i.e., the ratio of export prices to import prices, excluding diamonds, ships and aircraft) deteriorated in the first three quarters of 2003 from their average in 2002 by more than 3 percent. In the light of Israel's large trade deficit vis-à-vis Europe and its balance in trade with the US, the weakening of the dollar against the euro has an adverse effect of Israel's terms of trade. An internal Bank of Israel research paper found that the appreciation of the euro against the dollar worsened Israel's terms of trade by between 2 percent and 2.5 percent.⁶

The signs of recovery did not reach the labor market. The rate of unemployment in the second half of the year remained steady, and the average rate of 10.7 percent was 0.4 percentage points higher than the average rate in 2002 (Figure 18). Although this

⁵ This index is based on the first three quarters of 2003.

⁶ Y. Friedmann and H. Kaiser, "The Effect of Changes in the \$/Euro Exchange Rate on Israel's Terms of Trade," Internal Bank of Israel Research Department paper (Hebrew).

Figure 18
The Unemployment Rate,^a 1996–2003

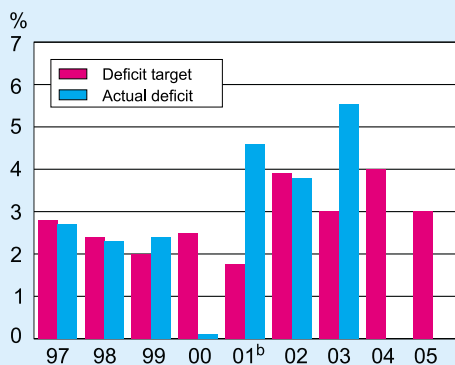


^a Seasonally adjusted.

SOURCE: Central Bureau of Statistics.

The unemployment rate remained steady in the second half of 2003. The average rate in 2003, 10.7 percent, was 0.4 percentage points higher than the average in 2002.

Figure 19
The Budget Deficit and Target,^a
1997–2005



^a From 1997, the government's overall deficit target including the Bank of Israel's profit, by law; from 2001, the government's overall deficit target, by Law.

^b The actual deficit for 2001 includes 0.5 percentage points for the delay in US aid.

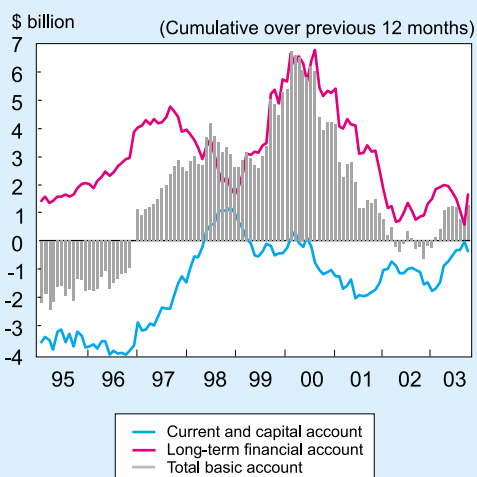
SOURCE: Bank of Israel, *Annual Reports*.

The government deficit for 2003 was 5.6 percent of GDP—a marked deviation from the target of 3 percent.

rise is significant, it is low if the continued decline in average annual per capita GDP is taken into account. One of the main reasons for the slow rise in unemployment is the government's policy of reducing the number of foreign workers: in the first three quarters of 2003 their number went down by more than 60,000, a sharp drop of about 25 percent. The effect of this policy was felt particularly strongly in the construction industry, where the number of foreign workers fell by 20,000 and the number of Israelis increased by 10,000. The rate of participation in the labor force remained relatively stable in the third quarter at 54.2 percent. In 2003 the participation rate was affected by two opposing forces: the rise in the rate and depth of unemployment acted to increase the discouraged worker effect that reduces the participation rate, whereas the cutbacks in National Insurance allowances served to widen the circle of participants in the labor force. The effect of the recession on the labor force could be seen in the continued decline in the real wage per employee post. In the business sector the real wage declined in the first nine months of the year by 3.9 percent, and the drop in the public sector was even greater—5.6 percent. The steep reduction in the public-sector wage was the outcome of the agreement between the government and the Histadrut that incorporated dismissals and wage cuts as steps towards streamlining that sector, changes that were made necessary by the fall in tax revenue.

The budget deficit in 2003 (excluding net new credit) amounted to 5.6 percent of GDP, a significant deviation from the original target of 3 percent of GDP (Figure 19). The deviation reflects the fall in tax revenue of about 2.5 percent at constant prices (after deducting the effects of legislative changes and tax rebates)—the effect of the slowdown in economic activity that had not been foreseen at the time the budget was being drawn up. In the first few months of the year it was already clear that the deficit would exceed the target and that significant steps would be needed to try to stop the upward trend that has persisted for two years, steps that would return the budget to a downward deficit path. This was the background against which the government adopted an economic program that incorporated widespread changes in National Insurance allowances and the pension funds, a halt to the expansion of employment in the public sector, wage cuts in the public sector, and the accelerated implementation of the income tax reform. Two important aspects of the program—cuts in transfer payments and changes in pension arrangements—have significant long-term implications for the economy. The cuts in transfer payments came in the wake of previous cuts in 2002, following many years of real increases in the total amount of these payments. In the third quarter income support and unemployment payments

Figure 20
Long-Term Foreign-Currency Sales
(+) and Purchases (–) (the Basic
Account), 1995–2003



SOURCE: Bank of Israel Foreign Exchange Activity Department.

The current account continued to improve in the period reviewed. The long-term financial account deteriorated despite the rise in nonresidents' direct investment, and was mainly due to the rise in institutional investment in shares abroad.

were a real 20 percent lower than in the third quarter of 2002. The long-term aim of the cuts in transfer payments is to increase the rate of participation in the labor force and to enable the share of government expenditure in GDP to fall; in the short term however, the sharp and rapid cut in those payments strikes at the weaker sections of the population who are unable to adjust to the new situation, particularly in the light of the high rate of unemployment. The changes in pension arrangements are intended to bring the long-established (“old”) pension funds back into balance, to increase the involvement of both old and new pension funds in the capital market, and to reduce the government’s commitment with regard to employees covered by unfunded pensions. (See Box 1 for a more detailed description, including an assessment of the effects of the reform on the capital market.)

e. The exchange rate and the foreign-currency activity of the different sectors

(i) The exchange rate

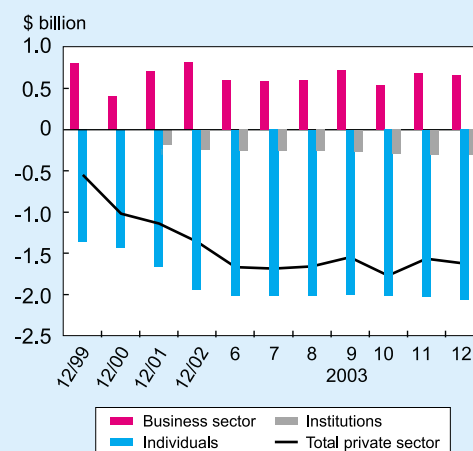
The most notable point with regard to the foreign-currency market in the second half of 2003 was the significant effect which nonresidents had on the NIS exchange rate, mainly via their activity in short-term instruments. This activity was affected by global factors and by changes in global and Israeli uncertainty factors that resulted in a lowering of the assessment of Israel’s economic risk and the exchange-rate risk.

Together with the short-term activity of nonresidents, there were certain positive long-term trends that brought stability to the foreign-currency market in the period reviewed. These included the loan guarantees provided for Israel by the US government; the increase in nonresidents’ direct investment in Israel, which totaled \$ 3.3 billion in 2003 compared with \$ 1.7 billion in 2002; the reduction of the current-account deficit⁷ (Figure 20); the reduction in the exposure of the business sector to depreciation (Figure 21); and the continued improvement in the net external debt (Figure 22).

Regarding the development of the exchange rate in the second half of the year, the period may be divided into two sub-periods (Figure 23). In the first, from July to August, the NIS depreciated by about 3 percent against the dollar, having appreciated by about 9 percent in the first half of the year. In the second sub-period, from mid-August to the end of the year, the exchange rate moved within a narrow range around the average level of NIS 4.45 to the dollar, without exhibiting any clear trend.

⁷ According to the Central Bureau of Statistics estimate. Various indicators suggest that the current account has moved from a deficit to being balanced.

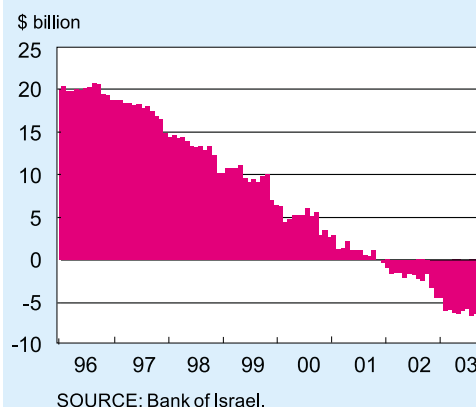
Figure 21
Exposure to Depreciation, by Sector,
1999–2003



SOURCE: Bank of Israel.

In 2003 Israeli residents reduced their exposure to depreciation by \$4.1 billion.

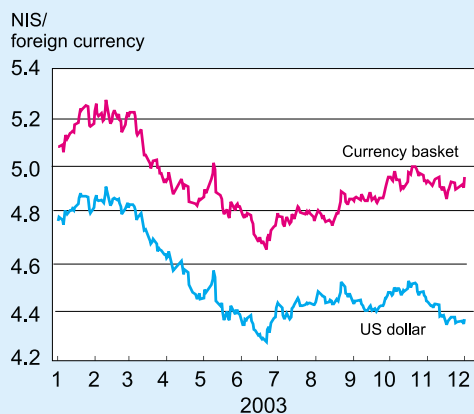
Figure 22
Israel's Net External Debt,
1996–2003



SOURCE: Bank of Israel.

The improvement in Israel's net external debt—which since January 2002 has turned Israel from a borrower from abroad to a lender to abroad—continued in 2003.

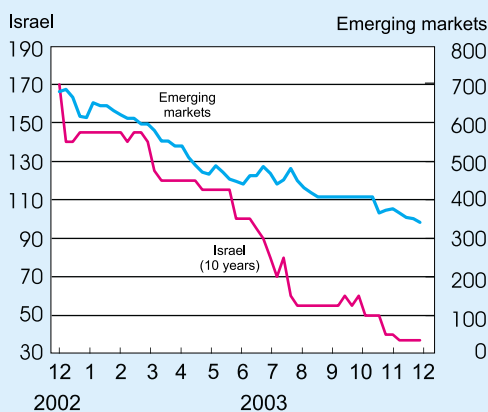
Figure 23
The NIS Exchange Rates Against
Various Currencies, 2003



SOURCE: Bank of Israel.

With regard to the NIS exchange rate, the period reviewed can be divided into two sub-periods: from the beginning of July 2003 to mid-August the NIS depreciated by about 3 percent against the \$, and thereafter it moved within a narrow band around an average of NIS 4.45 per \$ without showing any distinct trend.

Figure 24
Israel's Country Risk vis-a-vis
those of Emerging Markets,
December 2002 to December 2003
(basis points)



SOURCE: BNP Paribas, Salomon Smith Barney, WEO (04/2003) Deutsche Bank.

Israel's country risk premium continued to fall in the second half of 2003, albeit more slowly than in the first half. This was in line with the development of country risk premiums required for investments in other emerging markets.

The speedy ending of the war in Iraq dissipated a major uncertainty factor that had acted as a brake on global and domestic economic development for several months. A number of domestic uncertainty factors also underwent major changes: the general election was followed by the formation of a stable government; an economic program was adopted that focused on the commitment to bring the budget deficit under control; and negotiations with the Palestinians restarted. The reduction of the uncertainty factors and the expectations regarding the approval of the US government loan guarantees helped to lower Israel's risk assessment. This was expressed *inter alia* by a sharp decline in the risk premium required on investment in Israel government bonds traded abroad, and was part of a general trend in the development of risk premiums of emerging markets (Figure 24). Against the background of the reduction in risk and as part of the global trend towards increased investment in emerging markets with high interest rates, international investment houses began to divert considerable capital flows into investments in interest-bearing NIS assets (Figure 25). Nonresidents' increased purchases of short-term NIS assets strengthened the NIS in the first half of 2003.

With the rise in yields on long US government bonds at the beginning of the second half of 2003 (Figure 26), and in the light of stronger expectations of economic recovery in the US, international financial institutions slowed the rate of their investments in emerging markets, including their short-term investments in Israel. Together with global trends, there were several factors specific to Israel that also tended to weaken the NIS: the assessments that the budget deficit would end up at twice the original target turned out to be correct, and the hopes regarding calm in the dispute with the Palestinians were dashed. Against the background of the narrowing of the interest-rate differential, these developments led to the reversal of the short-term flows of nonresidents' capital, and they began to buy limited quantities of foreign currency. This activity brought to halt the strengthening of the NIS, which depreciated slightly.

In the last quarter of 2003 the international financial institutions restarted investing in short-term NIS assets, although at a lower level than in the first half of the year. This slowed the rate of depreciation, and the NIS exchange rate stabilized.

Turnover in the foreign-currency market in the second half of the year was low, and in October reached its lowest level for two-and-a-half years: the daily average (excluding swaps) was about \$ 570 million, down from an average of \$ 820 million in 2002. The steep fall encompassed all participants in foreign-currency activity, including foreign financial entities (Figure 27).

One notable aspect of the development of the exchange rate in the second half of the year was the sharp decline in its volatility. The standard deviation of the daily change in the NIS/\$ exchange rate fell from an average of 8.8 percent in the first half of the year to 5.6 percent in the second (Figure 28), which is low both in international terms and from a historical perspective. The decline was the result of short-term factors related to the improvement in areas of uncertainty that affected the economy in 2002 and at the beginning of 2003, and of positive long-term developments in the foreign-currency market described above. The standard deviation declined despite the effect of structural changes—such as greater flexibility of the exchange-rate band and the completion of the liberalization process—that tend to raise it and push it closer to the levels common in advanced economies.

Following the sharp drop in the actual standard deviation and the decline in the assessment of Israel's country risk, indications started appearing, for the first time since the 2-percentage-point reduction of the interest rate in December 2001, of a significant decline in the volatility implied by the NIS/\$ options traded in all markets. Thus, for example, the implied volatility in OTC NIS/\$ options was 5.7 percent at the beginning of December 2003, compared with an average of 8.6 percent in 2002 and 9.4 percent in the first half of 2003.

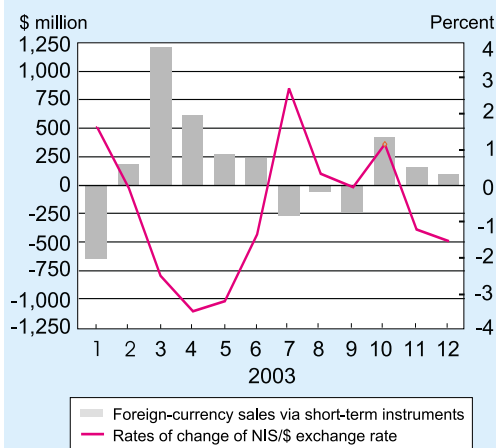
The calm in the foreign-currency market in the period reviewed was expressed *inter alia* by a fall in the probability of a sharp depreciation (i.e., depreciation of more than 10 percent within six months) derived from NIS/\$ options, from an average of 14.3 percent in the first half of 2003 to about 4 percent in December (Figure 29).

(ii) Foreign-currency activity of the different segments Nonresidents

It was quite clear in 2003 that nonresidents' activity, particularly in short instruments—affected in the period reviewed by considerations related specifically to Israel as well as global trends—spearheaded NIS exchange-rate trends (Figure 25).

Against the background of the end of the war in Iraq and the continuous decline of interest in Europe and the US, international financial institutions started diverting capital flows to emerging markets. These were directed mainly to those countries with high interest rates, and served to strengthen their currencies (Figure 30). Concurrently, several economic and political events took place in Israel that led to the lowering of Israel's country risk. These factors, alongside the wide interest-rate differential, led to a trend change in nonresidents' investment in Israel, and in February –

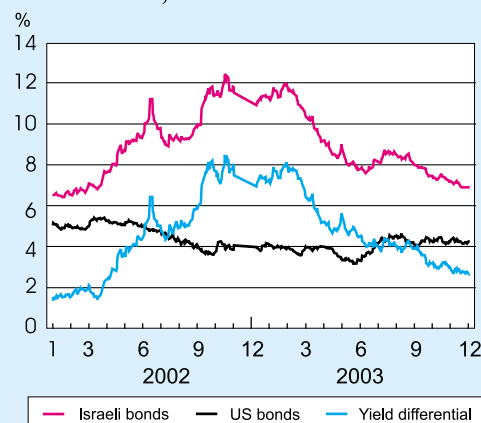
Figure 25
Nonresidents' Foreign-Currency
Sales (+) and Purchases (-) via
Short-Term Instruments, 2003



SOURCE: Bank of Israel Foreign Exchange Activity Department.

Nonresidents' activity in 2003 affected exchange-rate trends: they were net foreign-currency purchasers at times of depreciation, and vice versa.

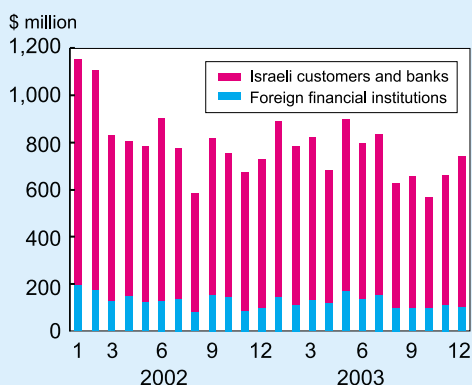
Figure 26
Yields on and the Yield Differential
between 10-Year Bonds in the US
and Israel, 2002–2003



SOURCE: Bank of Israel Foreign Exchange Activity Department.

The rise in the yields on long US government bonds in the second half of 2003 together with the fall in yields on long Israeli government bonds reduced the differential between their long yields.

Figure 27
Average Daily Trade in the Foreign-Currency Market (excluding swaps), 2002–2003



SOURCE: Bank of Israel Foreign Exchange Activity Department.

Foreign-currency trade turnover in the second half of 2003 was lower than in the previous year and a half in all active segments of the market.

June they bought short-term NIS assets totaling a considerable \$ 2.5 billion. As a result of these purchases, nonresidents were in a position of a surplus in NIS debt instruments for the first time in several years. At the end of April nonresidents' held a surplus of about \$ 0.5 billion of interest-bearing NIS assets, compared to average surplus liabilities of \$ 750 million, on average, in 2001 and 2002 (Figure 31). Most of the rise in investments derived from net forward foreign-currency sales and the purchase of government bonds.

The stronger expectations of a recovery in the US economy and the rise in yields on long US government bonds at the beginning of the second half of 2003 slowed the rate of investment by international financial entities in emerging markets. These trends, against the background of the contraction of interest-rate differentials and the increase in uncertainty factors, reversed the direction of nonresidents' activity: in 2003:III they purchased a cumulative net \$ 0.5 billion of foreign currency forward.

In 2003:IV international financial entities again started investing in Israel, in modest quantities, although unlike their tendency to invest in shares in other emerging markets, in Israel they preferred short-term debt instruments.

Residents

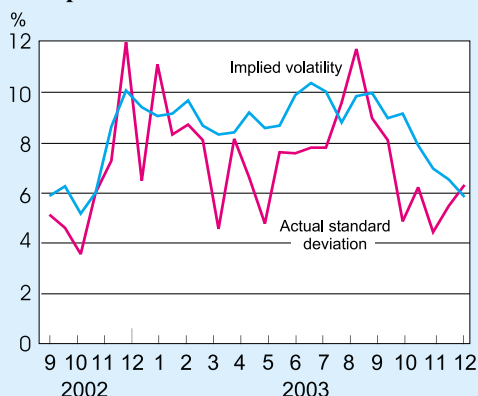
Unlike in the first half of 2003, during most of which Israelis acted contrary to the exchange-rate trend, in the second half they sometimes acted with the trend and sometimes against it.

In the period reviewed signs started becoming evident of households withdrawing from deposits from abroad, after a long period of net accumulation in them. Although this took place in modest quantities, it provides evidence of increased confidence in Israel's macroeconomic policy, after this confidence had been undermined in the first half of 2002.

In 2003 the business sector reduced the balance of its exposure to depreciation by about \$ 1.5 billion, after this had risen by about \$ 3 billion in 2001 and \$ 1.1 billion in 2002 (Figure 21). The balance of households' and institutions' foreign-currency assets increased by \$ 2 billion, so that Israelis' exposure to depreciation fell by about \$ 3.5 billion during the year.

Regarding foreign-currency credit taken by the business sector, the period reviewed can be divided into two subperiods: in 2003:III net credit of about \$ 0.6 billion was taken, while in 2003:IV net repayments of \$ 0.5 billion were made. Among the reasons for the latter were the continued contraction of the interest-rate differential between local-currency credit and dollar credit, the decline of bank credit, and the rise in raising debt via bond issues.

Figure 28
The Standard Deviation of the Daily Change in the NIS/\$ Exchange Rate and the Implied Volatility of OTC Options, September 2002–December 2003



SOURCE: Bank of Israel Foreign Exchange Activity Department.

One of the noteworthy changes in the exchange rate in the second half of 2003 was the sharp decline in both its actual standard deviation and in the implied volatility of NIS/\$ options traded in all markets.

f. Global developments

In recent months there have been growing indications that the world economy is recovering. In the US, which is an engine of growth for many other countries, GDP growth exceeded 8 percent (in annual terms) in 2003:III, after 3.2 percent in 2003:II. The acceleration of the growth rate expresses the expansion of private consumption—the result of a steep rise in disposable income and the wealth effect following the rise in share prices—and an increase in investment. Concurrently, the growth rate of US public consumption slowed. The European economy is still weak, with few indications of recovery. Nevertheless, positive growth data for 2003:III and 2003:IV in Germany and France—the two largest EU economies—attest to expected recovery in the EU, due *inter alia* to export demand from the US. Recent economic figures for Japan continue to point to recovery, led by manufacturing; GDP growth there was 2.2 percent in 2003:III, after 3.9 percent in 2002:II.

The positive data find only partial expression in the unemployment figures at present; the adjusted unemployment rate in the 27 OECD countries dipped by a tenth of a percentage point to 7.1 percent in 2003:III, expressing *inter alia* the stability of the unemployment rate in the EU, a slight decline in the US, and a slightly more significant decline in Japan.

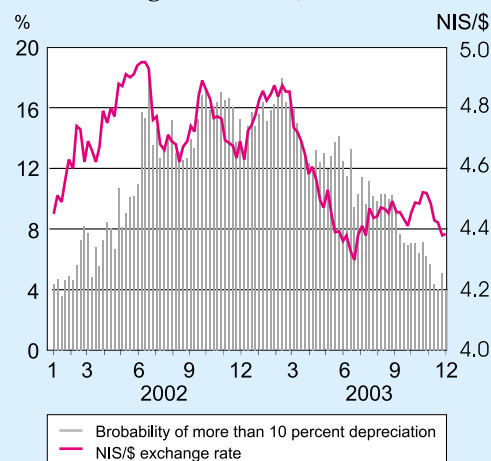
Upward pressure on prices continues to remain weak. The inflation rate for the last 12 months was 1.8 percent in the US, 2.1 percent in the EU, and the OECD average was 2.0 percent. Low price increases together with the continued negative output gap made it possible to persist with expansionary monetary policy in both the EU and the US. In view of the slowdown, the developed countries also adopted an expansionary fiscal policy in 2003: in the US the 2003 deficit is expected to reach 6 percent of GDP,⁸ compared with less than 1 percent of GDP in 2001, and in Germany and France it will reach 4 percent of GDP—deviating from the rate which eurozone countries are required to attain.⁹ The combination of expansionary monetary and fiscal policy in the developed countries has served to stimulate their return to a growth path.

World capital markets have been favorable for investors in the last nine months. The rapid conclusion of the Gulf War—which had an adverse effect on these markets for a long time before it began—together with low interest rates and indications that the

⁸ Including the Federal government and the states.

⁹ The finance ministers of the eurozone countries have decided at present not to impose sanctions on countries whose deficits exceed the agreed limit.

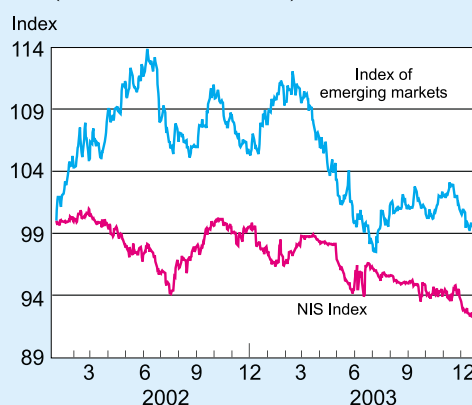
Figure 29
The Representative Exchange Rate and the Probability of Depreciation of more than 10 percent in the Following Six Months, 2002–2003



SOURCE: Bank of Israel Foreign Exchange Activity Department.

The probability of a sharp depreciation (of 10 percent or more)—derived from six-month option—fell in the second half of 2003.

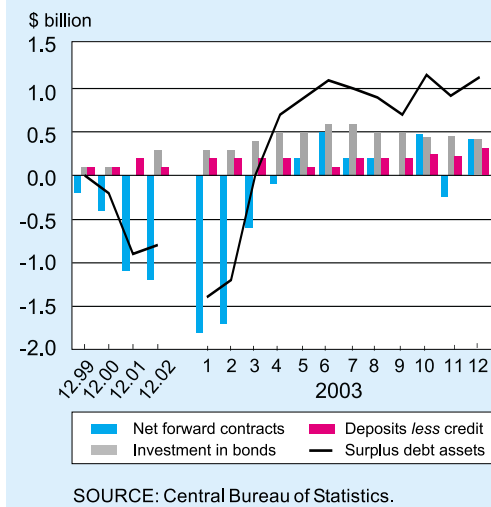
Figure 30
Exchange Rates of Emerging Markets and the NIS Against the Dollar, 2002–2003
(1.1.2002 index = 100)



SOURCE: Bank of Israel Foreign Exchange Activity Department.

The effect of global trends on the exchange rate strengthened in 2003. This was evident in the high correlation between the NIS/\$ exchange rate and the index of the exchange rates of currencies of emerging markets against the dollar.

Figure 31
Balance of Nonresidents' NIS Debt
Assets,
December 2002–December 2003



In April 2003 nonresidents held a surplus of NIS debt assets for the first time in several years. At the end of that month the balance of nonresidents' investments in interest-bearing NIS assets was in surplus to the amount of \$0.5 billion, compared with an average balance of surplus liabilities of \$750 million in 2001 and 2002.

recession had ended caused share prices to rise. Leading share price indices, such as the Dow-Jones, Nasdaq, DAX (Germany), and FTSE (UK), rose by between 20 and 45 percent from April to the end of the year, and a similar trend was displayed by the leading share price indices in the emerging markets. At the same time, the risk premium on investment in bonds of countries classified as emerging markets declined, contributing to its reduction in Israel, too.

In the foreign-currency markets, the dollar continued to weaken relative to the other principal currencies in the second half of 2003. This trend has persisted for over a year and reflects the huge current-account deficit on the US balance of payments—over 5 percent of GDP in 2003—and the low dollar interest rate; the dollar declined by about 20 percent against the euro in 2003. The economic recovery in Japan has caused the yen to strengthen by about 7 percent in recent months, although at the end of December 2003 and the beginning of January 2004 the trend reversed and the yen weakened by about 3.5 percent against the euro.

III. EXPECTED DEVELOPMENTS IN INFLATION AND THE FORECAST FOR THE NEXT FEW YEARS

a. Expected changes in the factors affecting inflation

(i) Global developments¹⁰

The most reasonable scenario for the next two years is of sustainable growth in the US and growing recovery in Europe and Japan, together with the maintenance of low levels of inflation and a decline in unemployment rates. A growth rate of 3 percent is forecast for the OECD countries in 2004, and slightly more in 2005, compared with only 2 percent in 2003. The US growth rate is expected to reach 4.2 percent in 2004, with the negative output gap closing in the coming year. The growth predicted for the EU in 2004 is 1.9 percent, although the output gap is expected to remain negative.

Inflation in the OECD countries is expected to remain low—about 1.4 percent—in 2004, too. The inflation rates forecast the US and the EU in 2004 remain low—1.2 and 1.8 percent respectively. The process of price reductions which began some years ago is expected to persist in Japan, and the forecast for 2004 is that prices will dip by 1.3 percent. In light of the low inflation rates and continued negative output gap, it is estimated that the central banks in the US and the eurozone will not alter their interest-

¹⁰ Based mainly on OECD Economic Outlook 74, December 2003.

rate policy in the coming year. Assessments of the key interest rate at the end of 2004 range from 1–2 percent in the US, and from 1.75–3 percent in Europe.

(ii) Real economic activity

In the course of 2003 there were growing indications of a recovery in real economic activity, after two years of acute recession. The forecast that follows is based on the assumption that the global recovery in the developed countries, which contributed to the initial rally in Israel's economy, will persist in 2004, and that there will not be a drastic change in the security situation. According to the forecast, Israel's GDP will grow by 2.4 percent and business-sector product by 3.7 percent in 2004, compared with 1.2 and 1.5 percent respectively in 2003. The forecast growth rate is expected to be supported by a 2.8 percent rise in private consumption, 2.0 percent rise in investment in fixed assets after three years of a decline in investment, and a 5.5 percent expansion of exports, similar to their increase in 2003. This forecast is relatively close to the optimistic scenario developed by the Bank of Israel in the framework of its *Economic Developments and Macroeconomic Policy, 2003–2005* published in October 2003. The updated figures attesting to the expansion of world trade, alongside data on signs of recovery in the second half of the year that elevated the basis of the forecast, served to increase the per capita GDP growth rate expected in 2004.

(iii) Fiscal policy

The government's policy of stimulating economic activity and bringing it to a sustainable growth path is based on reducing the share of the public sector. In order to attain these objectives the government set the deficit target for 2004 at 4 percent of GDP, proscribed a real increase of more than 1 percent in government expenditure between 2005 and 2010, and announced that the deficit would not exceed 3 percent of GDP. According to the forecast development of the fiscal aggregates in 2004, the government deficit is expected to reach 4 percent of GDP or slightly more, assuming that the growth rate is 2.4 percent.

(iv) Expected developments in foreign exchange and capital flows

According to the Bank of Israel's long-range forecast for the foreign-currency market, a surplus in long-term capital inflow is expected in 2004. This forecast is based *inter alia* on assessments by business-sector elements that IPOs abroad by Israeli firms and investment in Israeli high-tech companies will increase, in the context of the rise in expectations of a global economic recovery, especially in the high-tech sector.

Nonresidents' long-term capital inflow is expected to be partly offset by residents' long-term capital outflow because, according to assessments, residents' investment abroad will expand; this will emerge in the framework of preparations to abolish the tax discrimination between domestic and foreign securities in 2005, and also as part of a long-term trend of portfolio adjustment.

As regards short-term activity, continued lowering of the Bank of Israel key interest rate alongside a possible interest-rate hike in the US in the second half of 2004 (according to current forecasts by various agents), might lead to capital outflow. However, the experience of the last few years has shown that apart from the interest-rate differential between Israel and abroad, short-term capital flows are affected by a series of domestic and global factors, so that it is difficult to assess the trend and intensity of their influence on exchange-rate developments.

Among the factors impacting on short-term activity in the foreign-currency market are global trends, which affect the tendency of international financial institutions to invest in emerging markets, as well as domestic uncertainty factors, which influence the assessment of a country's risk and the exchange rate (in this case, of the NIS). In the second half of 2003 Israel's exchange-rate risk declined to low levels by both international and historical standards. This was primarily because domestic foci of economic uncertainty had cleared up, even though the structural changes introduced in the foreign-currency market in recent years support a rise in risk, bringing it nearer to the levels prevailing in the foreign-currency markets of advanced economies.

b. Assessments of future inflation and the balance of inflation risks

(i) Assessments of future inflation

After two years of marked deviations from the target, inflation is expected to converge once more to the target range, below the midpoint, in 2004. This is indicated by all assessments of inflation—those derived from the capital market, made by private forecasters, and in the Bank of Israel's Companies Survey. Most of the assessments are based on expectations of a moderate change

Assessments of Inflation in 2004

	Survey of companies	Private forecasters	Derived from capital market	(percent) Target
Range	1–3		0.8–1.8	
Average	2	0.9	1.5	2.0

in the exchange rate, fiscal policy that aspires to attain the targets set, and the further reduction of the interest rate by the Bank of Israel in 2004 which, according to some assessments, will reach its lowest level in the first quarter. In addition, underlying most assessments is the assumption that in the course of 2004 there will be no substantial change in Israel's security situation and the growth rate will be relatively moderate.

The Bank of Israel also assesses that it will be possible to attain the inflation target in 2004, together with the continued reduction of the interest rate during the year, provided inflation expectations undershoot the target and the financial markets are stable.

(ii) The balance of inflation risks

On the basis of the above assessments of inflation, apprehensions that the target may be undershot still exceed those that it will be overshot. This scenario is upheld by several factors:

- Growth rates are expected to be relatively low in 2004, *inter alia* in view of assessments that the politico-security situation in the region will not change radically. The continuation of sluggish economic activity for the third successive year is expected to moderate price increases, mainly due to the expected persistent slump in domestic demand, because the sharp drop in the real wage, cuts in transfer payments, and the unemployment rate, which is expected to remain high, will keep private consumption down.
- The economic recovery evident in 2003 in developed countries in general and the US in particular, and expectations of the acceleration of growth in 2004, increase the chances of a revival in the IPO market. Renewed IPO activity abroad by Israeli firms and increased direct investment in Israel by nonresidents could be expressed in greater capital inflow, exerting pressure for local-currency appreciation.

If it transpires in 2004 that assessments of inflation are below the target and the financial markets remain stable, the Bank of Israel will continue to reduce interest in order to bring inflation back to within the target range. Nevertheless, there are fears that the continued narrowing of the interest-rate differential between Israel and abroad—in view of the additional interest-rate reductions expected in Israel and the rise in interest-rates abroad—may stimulate capital outflow. This danger will intensify if the credibility of macroeconomic policy is undermined or exceptional political developments increase Israel's country risk.

The danger of renewed damage to the credibility of fiscal policy arose at the beginning of 2004, in the course of the approval of the 2004 budget by the Knesset, as this involved a marked increase in budgetary expenditure, beyond what had been planned and

approved by the government. An increase of this kind would impair the ability of policy to attain the deficit target as determined in the budget, and could once more erode the credibility which has only recently been rehabilitated.

Note that despite the protracted disinflationary process, and even though Israel's inflation rate has been very low in the last five years (with the exception of a period in the first half of 2002), mechanisms of indexation to the dollar or the CPI are still prevalent. These serve to intensify the effects of exchange-rate or CPI shocks—even if only temporary—on prices, and increase the risk of either overshooting or undershooting the target.

Appendix 1

Range of Monthly Change in CPI, Standard Deviation of the Monthly Change, and Annual Inflation Rate, 1993–2003

					(percent)
	Annual inflation rate (1)	Maximum monthly change (2)	Minimum monthly change (3)	Difference between maximum and minimum monthly change (4) = (2) – (3)	Inter-month standard deviation (6)
1993	11.2	1.4	0.1	1.3	0.46
1994	14.5	2.0	0.6	1.4	0.36
1995	8.1	1.2	–0.1	1.3	0.46
1996	10.6	1.7	0.3	1.4	0.45
1997	7.0	1.2	–0.3	1.5	0.55
1998	8.6	3.0	–0.2	3.2	0.93 ^a
1999	1.3	0.7	–0.8	1.5	0.44
2000	0.0	0.9	–0.6	1.5	0.48
2001	1.4	0.9	–0.6	1.5	0.42
2002	6.5	1.5	–0.8	2.3	0.71
2003	–1.9	0.4	–0.7	1.1	0.36

^a The marked deviation of this figure from the long-term trend derives from the sharp rise in the exchange rate in October 1998, which constituted a temporary shock.

Appendix 2

Press Releases Regarding the Bank of Israel's Monetary Policy, Monthly Programs July 2003–January 2004

The Bank of Israel's Monetary Program for July 2003

The Bank of Israel today announced its monetary program for July 2003, according to which the interest rate will be reduced by 0.5 percentage points to 7.5 percent.

This reduction in the interest rate was made possible by the reduction in one-year inflation expectations, the continued calm in the foreign-currency market and in the money and capital markets, and the drop in the rate of actual price rises. In the last two months, one-year inflation expectations derived from the capital market stabilized, and they are below the middle of the government's price-stability target of 1–3 percent. Inflation expectations for the second year ahead and beyond continued to decline, and are now in the upper part of the target range. Private forecasters' predictions of 12-month inflation are within the range of 1–2 percent, and the models developed by the Bank of Israel indicate that it is possible to attain the inflation target for the coming year and the following year while continuing to reduce the interest rate. It is important to bear in mind that the interest policy is directed towards the achievement of price stability for the coming year and for the years thereafter, and not necessarily within a particular calendar year. The reduction in risk was reflected in the strengthening of the NIS in the last few months and in the continued reduction of the interest rates on unindexed long-term government bonds to about 8.0 percent, down from about 11.7 percent in February 2003, and in the reduction of more than one percentage point in the yield on 10-year indexed government bonds in that same period, to 4.7 percent. These developments may be explained mainly by the reduced regional political uncertainty following the conclusion of the war in Iraq, the confirmation of the loan guarantees by the US government and as part of the worldwide trend of improved demand for bonds in emerging markets. Nevertheless, there is still a feeling of uncertainty, and it seems that despite the budget cuts that accompanied the approval of the economic package, the deficit this year and in the next few years will be significantly higher than the path set by the government. If this does occur, long-term interest will be unable to achieve its full potential reduction, which is necessary to encourage investment and growth in the economy, and under certain circumstances this could constitute a source of instability.

Although the economic program halts the deterioration of the fiscal situation, nevertheless the acceptance of a government deficit of between 5 and 6 percent of GDP in 2003 and similar assessments regarding the deficit in 2004—which is high by all international standards—do not indicate convergence to a downward path for the deficit and for the debt/GDP ratio, and are inconsistent with the government decision to adhere to the downward deficit path from 3 percent of GDP in 2003 to 1 percent in 2007. In planning the budget for 2004, therefore, the government must revert to the deficit targets set and to a downward-sloping path for the debt/GDP ratio. It must be borne in mind that a rise in the debt means a rise in the tax burden in the future. Fiscal discipline is an essential requisite for the ability to attract sources from private savings into investment and credit, for the continued reduction of long-term interest on government bonds, and hence for the reduction of interest on credit for investment and mortgages that is so important for renewed growth and the encouragement of employment. Further cuts in the short-term interest rate while maintaining price stability depend to a great extent on the government's ability to ensure fiscal discipline and to return to a downward-sloping deficit and debt path which are also required to strengthen the financial system.

The Bank of Israel keeps a watchful eye on exchange-rate developments, and in particular analyses their implications for the inflation rate, but it is a long time since the exchange rate at any level, its trend, or its volatility have in themselves constituted targets for monetary policy. High volatility has been evident in the market in the last few months, reflected in a rise in the risk premium as calculated from the NIS/\$ options issued by the Bank of Israel, as well as in a rise in the intraday volatility and in the margins between banks' foreign-currency buying and selling prices. Foreign-currency markets throughout the world are highly volatile, sometimes exhibiting sharp trend reversals, and the market in Israel, which is highly developed, is similar in this respect to the international markets.

The Bank of Israel will continue to monitor developments in the markets, in order to ensure that the inflation rate defined as price stability is maintained while bolstering financial stability. Subject to these conditions, the Bank will act to support the government's policy to foster employment and shorten the recession.

The Bank of Israel's Monetary Program for August 2003

The Bank of Israel today announced its monetary program for August 2003, according to which the interest rate will be reduced by 0.5 percentage points to 7.0 percent.

This reduction in the interest rate was made possible despite some increase in one-year inflation expectations, against the background of the continued calm in the foreign-currency market and in the money and capital markets, and the drop in the rate of actual price rises. In the last two months, one-year inflation expectations derived from the capital market rose slightly, but remained around the middle of the government's price-stability target of 1–3 percent. Thus real short-term interest went down in this period due to the decline in nominal interest as well as the rise in inflation expectations. Inflation expectations for the second year ahead and beyond continued to decline, and are now in the upper part of the target range. Private forecasters' predictions of 12-month inflation are close to the middle of the target range, and the models developed by the Bank of Israel indicate that it is possible to attain the inflation target for the coming year and the following year while continuing to reduce the interest rate. The reduction in risk in the financial markets was reflected in the strengthening of the NIS in the last few months, that has slowed down recently, in the continued reduction of yields on unindexed long-term government bonds to below 8.0 percent, a cumulative reduction of about 4 percentage points since February 2003, and a reduction of 1.5 percentage points in the yield on 10-year indexed government bonds in that same period, to 4.4 percent. These developments may be explained mainly by the reduced regional political uncertainty following the conclusion of the war in Iraq, the confirmation of the loan guarantees by the US government, and as part of the worldwide trend of increased demand for bonds in emerging markets. Nevertheless, uncertainty still prevails, because despite the budget cuts, the deficit this year and in the next few years will be significantly higher than the path set by the government. If this scenario becomes a reality, it will prevent long-term interest from achieving its full potential reduction, which is needed to encourage investment and growth in the economy, and under certain circumstances it could constitute a source of instability.

The Bank of Israel's interest-rate policy is aimed at achieving price stability in the coming year and the next few years, in accordance with the government decision taken in 2000 which set the inflation target for 2003 and thereafter—and not necessarily for any particular calendar year—at between 1 and 3 percent (defined as price stability). In this context it should be noted that a change in the price-stability target is likely to be interpreted by the market as the first sign that the government was backing out of its commitment to price stability, and this could raise Israel's country risk premium, increase the cost of government borrowing, and

make it difficult to continue the process of reducing the short-term interest rate.

Although the economic program halts the deterioration of the fiscal situation, nevertheless a government deficit of 6 percent of GDP in 2003 and of a similar size in 2004—which is high by all international standards—are inconsistent with the government decision to adhere to a downward deficit path, reducing from 3 percent of GDP in 2003 to 1 percent in 2007. The reduction in market yields reflects the public's confidence that the government will revert to a downward-sloping path for the deficit and the debt/GDP ratio. To achieve this, a decision must be made regarding a significant cut in the budget for 2004, which will be judged, in the final analysis, by the degree of its implementation. If the public assesses that the required cuts will not be carried out, the downward yield trend is likely to halt and could even change direction. Such a development would undermine the credibility of the government's ability to revert to fiscal discipline, and would itself also cause a rise in interest rates for all periods, which would damage the economy's chances of reverting to a path of growth and increased employment. Continued reductions in the short-term interest rate alongside the maintenance of price stability depends to a great extent on the government's ability to observe fiscal discipline, with a return to a downward deficit and debt path required to strengthen the financial system.

The Bank of Israel keeps a watchful eye on exchange-rate developments, and in particular analyses their implications for the inflation rate, but it is a long time since the exchange rate at any level, its trend, or its volatility have in themselves constituted targets for monetary policy. Foreign-currency markets throughout the world are highly volatile, sometimes exhibiting sharp trend reversals, and the market in Israel, which is highly developed and which offers derivative financial instruments that enable investors to contend with volatility, is similar in this respect to the international markets. Capital flows into and out of the economy are affected inter alia by interest rates in Israel and abroad, changes in which do not necessarily coincide with changes in interest rates determined by central banks. At the beginning of the year, for example, the yield spread between Israeli and US long-term government bonds contracted by more than 3 percentage points, while the differential between the interest rates of the Bank of Israel and the Fed declined by only 1 percentage point. The significance of this is that the market interest rates indicate less pressure to import capital than that reflected by the interest-rate differential between the central banks.

The Bank of Israel will continue to monitor developments in the markets, in order to ensure that the inflation rate defined as price stability is maintained while bolstering financial stability. Subject to these conditions, the Bank will act to support the government's policy to foster employment and shorten the recession.

The Bank of Israel's Monetary Program for September 2003

The Bank of Israel today announced its monetary program for September 2003, according to which the interest rate will be reduced by 0.5 percentage points to 6.5 percent.

The continuation of the process of reducing the interest rate is made possible by the fact that the level of one-year inflation expectations is within the government's price-stability target of 1–3 percent; at the same time the current background is made up of the continued decline in the rate of actual price rises, the stabilization of real activity at a modest level, and the relative calm in the foreign currency, money and capital markets. This calm prevailed despite a certain rise in the exchange rate and in nominal and real long-term yields in the last few weeks.

One-year inflation expectations derived from the capital market in August remained at a similar level to that in July, and expectations for the second year ahead and beyond rose slightly, but most of them are still in the upper part of the target range. Private forecasters' predictions of 12-month inflation are in the middle of

the target range, and the models developed by the Bank of Israel indicate that it is possible to attain the inflation target for the coming year and the following year while continuing to reduce the interest rate. The interest policy is directed towards achieving durable price stability in accordance with the government's decision that set the inflation target for 2003 and thereafter—and not necessarily for any particular calendar year—at between 1 and 3 percent (defined as price stability). Accordingly, the Bank of Israel's policy at all times in the year is aimed at attaining price stability over a period of one and two years forward.

In the last two months, with the cuts in the Bank of Israel interest rate, real and nominal long-term yields rose, after a persistent decline since February 2003 that was supported by the reduced uncertainty on the regional security and political front and the confirmation of the loan guarantees by the US government. It is not yet clear whether the change evident in the last two months in the trend in the exchange rate—from appreciation to depreciation—and in real and nominal long-term yields, from decline to a rise, is a temporary deviation from the trend of stability that has characterized the markets. In the current regime of convergence to price stability, temporary deviations above and below the range of price stability may be tolerated without an immediate response via the interest rate, provided the assessment is that other factors are acting to bring the prices path back to the target. In the currently prevailing circumstances, these factors could be the slowdown in the economy and a credible fiscal policy for 2004 that will bring the rates of the deficit and debt back onto a downward path.

Although the most recent economic package did halt the fiscal deterioration, the expected budget deficit in 2003 of 6 percent of GDP is high by any international standards and is inconsistent with government decisions to strive to return to a downward path for the deficit and the share of debt in GDP. Hence government decisions regarding the size of the budget and the deficit for 2004 will constitute a crucial test of the government's fiscal control. The absence of a suitable budget cut and a lack of determination to revert to a downward deficit path that express fiscal discipline are likely to lead to a continuation of the rise in real and nominal long-term yields, indications of which have been evident recently, and this would damage the economy's chances of returning to a path of growth and increased employment. In this context, it is unreasonable to assume that the markets will come to terms with a reality in which the Bank of Israel's interest rate is falling while long-term interest rates are rising.

The Bank of Israel keeps a watchful eye on exchange-rate developments, and in particular analyses their implications for the inflation rate, but the exchange rate at any level, its trend and its volatility do not in themselves constitute a target for monetary policy. Capital flows into and out of the economy, which have slowed in the last two months, are affected inter alia by interest rates for different terms in the markets in Israel and abroad, changes in which do not necessarily coincide with interest-rate changes determined by central banks.

The Bank of Israel will continue to monitor developments in the markets, in order to ensure that the inflation rate defined as price stability is maintained while bolstering financial stability. Subject to these conditions, the Bank will act to support the government's policy to foster employment and shorten the recession.

The Bank of Israel's Monetary Program for October 2003

The Bank of Israel today announced its monetary program for October 2003, according to which the interest rate will be reduced by 0.4 percentage points to 6.1 percent. This brings the cumulative reduction in the Bank of Israel's interest rate since December 2002 to 3.0 percentage points.

The continuation of the process of reducing the interest rate is made possible by the fact that the level of one-year inflation expectations is within the price-stability target of 1–3 percent, against the background of a moderate rate of actual price increases, the stabilization of real activity at a modest level, and the relative calm in the foreign currency, money and capital markets.

One-year inflation expectations derived from the capital market in September remained at a similar level to that in August, at about the middle of the target range (a little below 2 percent), and expectations for the second year ahead and beyond are still in the upper part of the target range. Private forecasters' predictions of 12-month inflation rose slightly, but are also in the middle of the target range, and the models developed by the Bank of Israel indicate that it is possible to attain the inflation target for the coming year and the following year while continuing to reduce the interest rate. In accordance with the government's decision taken in 2000, the interest policy is directed towards achieving long-term price stability and not necessarily for any particular calendar year. Accordingly, the Bank of Israel's policy at all times in the year is aimed at attaining price stability over a period of one and two years forward.

In the last month the rise in real and nominal yields on government bonds that had started in July halted. These yields had declined between February and June 2003 due partially to the reduced uncertainty on the regional security and political front, the confirmation of the loan guarantees by the US government, and the government's economic program for 2003. The current stabilization apparently reflects a waiting position in the financial markets in their assessment of decisions regarding the 2004 budget and the possible effects of uncertainty related to the security situation on the renewal of economic activity.

The government's budget for 2004 must clearly indicate a convergence to a downward trend for the deficit and government debt. It would be appropriate in this context for the government to adopt a system of monthly monitoring of budget performance and of attainment of deficit targets to enable deviations, if any, to be rectified during the year. According to Bank of Israel estimates, the probability of achieving the deficit target for 2004 of 4 percent of GDP is low, but even that deficit level means a rising share of government debt in GDP. In addition, it is unclear whether the overall program of infrastructure investment and the plan for reducing the number of foreign workers by raising the cost of employing them can be implemented. The budget as approved contains some positive steps that have long-term implications and that help provide a basis for stability and lead the economy back to growth. On the other hand, whittling away at the budget framework while approving it and a lack of determination to revert to a downward deficit path that reflects fiscal discipline are likely to undermine stability and lead to a rise in nominal and real long-term yields, obstructing the process of economic recovery. It is unreasonable to assume that the markets will accept an ongoing situation in which the Bank of Israel's interest rate is coming down while long-term interest is rising.

The Bank of Israel keeps a watchful eye on exchange-rate developments, and in particular analyses their implications for the inflation rate, but the exchange rate at any level, its trend and its volatility do not in themselves constitute a target for monetary policy. Capital flows into and out of the economy, which have slowed in the last two months, are affected inter alia by interest rates for different terms in the markets in Israel and abroad, changes in which do not necessarily coincide with interest-rate changes determined by central banks.

The Bank of Israel will continue to monitor developments in the markets, in order to ensure that the inflation rate defined as price stability is maintained while bolstering financial stability. Subject to these conditions, the Bank will act to support the policy to foster employment and shorten the recession.

The Bank of Israel's Monetary Program for November 2003

The Bank of Israel today announced its monetary program for November 2003, according to which the interest rate will be reduced by 0.5 percentage points to 5.6 percent. This brings the cumulative reduction in the Bank of Israel's interest rate since December 2002 to 3.5 percentage points.

The continuation of the process of reducing the interest rate is called for due to the level of one-year inflation expectations which are within the price-stability target of 1–3 percent, against the background of the actual reduction in the Consumer Price Index in the last twelve months, the continued modest level of real economic activity, and the relative calm in the foreign currency, money and capital markets. The cut in the interest rate thus supports the government's policy to encourage economic growth and boost employment, while maintaining price and financial stability.

One-year inflation expectations derived from the capital market declined slightly in October to a little below the middle of the target range (i.e., just below 2 percent), and expectations for the second year ahead and beyond are still in the upper part of the target range. Private forecasters' predictions of 12-month inflation went down slightly, but are also in the middle of the target range, and the models developed by the Bank of Israel indicate that it is possible to attain the inflation target for the coming year and the following year while continuing to reduce the interest rate.

The interest policy is directed towards achieving price stability on an ongoing basis, and not necessarily for any particular calendar year. Any attempt to achieve the target of price stability by the end of 2003, following the fall in prices at the beginning of the year, would require rapid acceleration of inflation in the short term, with steep cuts in the interest rate, which would probably endanger price stability, financial stability and the fragile process of economic recovery. Accordingly, the Bank of Israel's policy at all times is aimed at attaining price stability over a period of one and two years forward.

In the last few months the yields on government bonds started declining again, so that nominal yields have dropped by about 4 percentage points since the beginning of the year to a level of about 7.8 percent, and real yields by some 1.5 percentage points in that period to a level of about 4.4 percent. The reduction in long-term interest on government bonds apparently indicates that the public considers that the (relatively large) budget deficit derives mainly from the temporary effect of the low level of economic activity in reducing government tax revenues, and that it is to a lesser degree a structural deficit constituting a long-term problem.

The reduction of the short-term interest rate per se cannot bring about the renewal of growth. A precondition is the maintenance of fiscal discipline, and indeed, the government's budget for 2004 submitted to the Knesset indicates the start of convergence to a downward trend for the deficit and government debt, following their three-year upward trend. This, together with the reform in the labor market and the reduction in the number of foreign workers, the implementation of the plans for infrastructure investment and other steps with long-term implications related to curbing public expenditure may be expected to help buttress stability and steer the economy back to a path of growth. It is important that in the course of approving the budget there should be no whittling away at the budget framework or weakening of the determination to revert to a downward deficit path that reflects fiscal discipline; such would be likely to undermine stability and lead to a rise in nominal and real long-term yields, obstructing the process of economic recovery.

Calm continues to prevail in the foreign currency market, reflected in the implied standard deviation of the options issued by the Bank of Israel, which averaged about 6.5 percent in October compared with close to 9 percent in June. Moreover, Israel's risk premium as measured by the 5-year credit-default-swap (CDS) market went down in October to 70 basis points, continuing the downward path that started in the first quarter of

2003. The calm in the market may be due to the US government loan guarantees and the credibility of macroeconomic policy in the eyes of the public, despite the recent rise in the level of security-related uncertainty.

The Bank of Israel monitors developments in the markets, in order to ensure that the inflation rate defined as price stability is maintained while bolstering financial stability. Subject to these conditions, the Bank will continue acting to support the policy to foster employment and shorten the recession.

The Bank of Israel's Monetary Program for December 2003

The Bank of Israel today announced its monetary program for December 2003, according to which the interest rate will be reduced by 0.4 percentage points to 5.2 percent. This brings the cumulative reduction in the Bank of Israel's interest rate since December 2002 to 3.9 percentage points.

The continuation of the process of reducing the interest rate is made possible by the fact that one-year inflation expectations are within the price-stability target of 1–3 percent, against the background of the actual reduction in the Consumer Price Index in the last twelve months, the continued modest level of real economic activity, and the relative calm in the foreign currency, money and capital markets. The cut in the interest rate thus supports the government's policy to encourage economic growth and boost employment, while maintaining price and financial stability.

One-year inflation expectations derived from the capital market declined in November, and are currently in the lower part of the target range (i.e., just above 1 percent), and expectations for the second year ahead are still in the upper part of the target range. Private forecasters' predictions of 12-month inflation are still in the middle of the target range, and some of the models developed by the Bank of Israel indicate that it is possible to attain the inflation target for the coming year and the following year while slowly proceeding to reduce the interest rate.

The interest policy is directed towards achieving price stability on an ongoing basis, and not necessarily for any particular calendar year. Any attempt to achieve the target of price stability by the end of 2003, following the fall in prices at the beginning of the year, would require rapid acceleration of inflation in the short term, with steep cuts in interest rates, which would probably endanger financial stability, the process of economic recovery, and in the final analysis price stability itself. Accordingly, the Bank of Israel's policy at all times is aimed at attaining price stability over a period of one and two years forward.

In the last few months the yields on government bonds started declining again after edging up in the months from June to August. Since the beginning of the year nominal yields have dropped by more than 4 percentage points to a level of about 7.4 percent, and real yields by more than 1.5 percentage points to a level of about 4.2 percent. The reduction in long-term interest on government bonds apparently indicates that the public considers that the (relatively large) budget deficit derives mainly from the temporary effect of the low level of economic activity in reducing government tax revenues, and that it is to a lesser degree a structural deficit constituting a long-term problem.

The reduction of the short-term interest rate per se cannot bring about the renewal of growth. A precondition is the maintenance of fiscal discipline, and indeed, the government's budget for 2004 submitted to the Knesset indicates the start of convergence to a downward trend for the deficit and government debt, following their three-year upward trend. This, together with the reform in the labor market and the reduction in the number of foreign workers, the implementation of the plans for infrastructure investment and other steps with long-term implications related to curbing public expenditure may be expected to help buttress stability and steer the

economy back to a path of growth. It is important that in the course of approving the budget there should be no whittling away at its framework or weakening of the determination to revert to a downward deficit path; such would be likely to undermine stability and lead to a rise in nominal and real long-term yields, obstructing the process of economic recovery.

Despite the intermittent weakening of the NIS in the foreign currency market in the last few months, there was a fall in the implied standard deviation of the options issued by the Bank of Israel to an average of about 6.5 percent in November from close to 9 percent in June. Moreover, Israel's risk premium as measured by the 5-year credit-default-swap (CDS) market went down in November to 60 basis points, continuing the downward path that started in the first quarter of 2003. The calm in the market may be due to the US government loan guarantees and the credibility of macroeconomic policy in the eyes of the public, the security-related uncertainty notwithstanding.

Nonresidents' short-term capital inflow to Israel is affected among other things by changes in interest rates in other advanced and emerging economies and not only in the US and Europe. This can be seen from Table 3: the Bank of Israel's interest rate is currently similar to the upper level of interest rates of central banks in other advanced economies (Australia and New Zealand—5 percent), and is in the middle of the range of interest rates of central banks in emerging and other developing economies.

The Bank of Israel monitors developments in the markets in order to ensure that the inflation rate defined as price stability is maintained while bolstering financial stability. Subject to these conditions, the Bank will continue acting to support the policy to foster employment and shorten the recession.

The Bank of Israel's Monetary Program for January 2004

The Bank of Israel today announced its monetary program for January 2004, according to which the interest rate will be reduced by 0.4 percentage points to 4.8 percent. This brings the cumulative reduction in the Bank of Israel's interest rate since December 2002 to 4.3 percentage points.

The continuation of the process of reducing the interest rate is made possible by the fact that one-year inflation expectations are slightly below the price-stability target of 1–3 percent, against the background of the actual reduction in the Consumer Price Index in the last twelve months, the continued moderate level of real economic activity, and the relative calm in the foreign currency, money, and capital markets. The cut in the interest rate serves to support the encouragement of economic growth and increase employment—short-term interest declined from 7.2 percent in December 2002 to 4.5 percent in December 2003—while maintaining price and financial stability.

One-year inflation expectations derived from the capital market declined in December, and are currently slightly below the lower boundary of the target range (i.e., just below 1 percent), and expectations for the second year ahead are still within the target range. Private forecasters' predictions of 12-month inflation are down slightly and are below the middle of the target range; some of the models developed by the Bank of Israel indicate that it is possible to attain the inflation target for the coming year and the following year while slowly continuing to reduce the interest rate.

The changes in the composition of the public's asset portfolio derive inter alia from the process of interest-rate reduction by the Bank of Israel. Most prominent among them this year is the rise in the proportion of shares in it due to the increase in their price, and this accounted for about two-thirds of the increase in the portfolio between the beginning of the year and October 2003. The decline in short- and long-term interest

rates led to a rise in the value of tradable assets, and their proportion expanded relative to bank deposits. Furthermore, despite the marked reduction in the interest-rate differential between Israel and the rest of the world as a result of Israel's interest-rate reduction process, there has been a gradual alignment between the share of local-currency and foreign-currency assets in the portfolio, alongside the continued sound functioning of the markets.

The interest-rate policy is directed towards achieving price stability on an ongoing basis, and not necessarily for any particular calendar year. Any attempt to achieve the target of price stability by the end of 2003, following the fall in prices since the beginning of the year, would have required the rapid acceleration of inflation in the short term, alongside steep cuts in interest rates, which could have endangered financial stability, the process of economic recovery, and in the final analysis price stability itself. Accordingly, the Bank of Israel's policy at all times is aimed at attaining price stability over a period of one and two years forward.

In the last few months the decline in yields on government bonds has persisted, albeit at a slower rate: since the beginning of the year nominal yields (on 10-year bonds) have dropped by more than 4.5 percentage points to a level of about 7.0 percent, and real yields by more than 1.5 percentage points to a level of about 4.2 percent. The reduction in long-term interest on government bonds apparently indicates that the public considers that the budget deficit (which is relatively large and greater than in 2002) derives mainly from the temporary effect of the low level of economic activity in reducing the government's tax revenues, and that it is to a lesser degree a structural deficit constituting a long-term problem.

The approval of the government's budget for 2004 and the avoidance of any departure from the budget framework is vital for maintaining the stability that has been attained. Adherence to this stance, and the determination to return to a declining government deficit and debt path, together with the reform of the labor market and the implementation of the plans for infrastructure investment, contribute to steering the economy back to a growth path. Departure from this path, in view of the large government debt, could lead to a rise in nominal and real yields, and hamper the process of economic recovery that has recently begun to emerge.

The calm in the foreign currency market, expressed in the strengthening of the NIS relative to the dollar and its depreciation against the euro, reflects shifts in the international currency markets. Israel's risk premium, as measured by the 5-year credit-default-swap (CDS) market, remained at 60 basis points in December, after the downward path evident since the first quarter of 2003. The calm in the market appears to be due to the US government loan guarantees and the credibility of macroeconomic policy in the eyes of the public.

Nonresidents' short-term capital inflow to Israel is affected among other things by changes in interest rates in other advanced and emerging economies (not only the US and Europe) to which international capital flows are directed. This can be seen from Table 3: the Bank of Israel's interest rate is already slightly below the upper level of interest rates of central banks in the advanced economies (Australia and New Zealand—5 percent), only one percentage point higher than in the UK, and in the mid-range of central-bank interest rates in emerging markets and other developing economies.

The Bank of Israel monitors developments in the markets and will continue to act to turn the inflation rate back to the price stability range while bolstering financial stability. Subject to these conditions, the Bank will continue to act to support the policy of fostering employment and bolstering economic activity.