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Letter of the Acting Governor, Dr. Meir Sokoler

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The Inflation Report for the second half of 2004* 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, fiscal and monetary, is important as a means of increasing the confidence in the economy of Israeli and foreign individuals and companies, and contributes to the proper functioning of the markets and the economy as a whole.

The Consumer Price Index (CPI) rose by 1.2 percent in 2004, within the target range of price stability, i.e., a rise of between 1 percent and 3 percent, set by the government for 2003 onwards. Thus the monetary policy conducted by the Bank of Israel in the last six years succeeded in establishing the achievement of the disinflation process pursued during the last decade and in maintaining price stability, according to the government's targets. In the last six years, since 1999, annual inflation in Israel has averaged 1.4 percent, within the price-stability target range. This was achieved despite the fact that inflation during this period was, and still is, more volatile than in other countries in which price stability prevails. As price stability was becoming more firmly based, the financial markets, including the foreign currency market, continued to be stable. At the same time, as part of the Bank of Israel's monetary policy, the short-term nominal interest rate was reduced during the last two years, to reach a level of 3.5 percent in February 2005, a historically low level. This took place against the background of stable conditions reflected by, among other things, inflation expectations at a level consistent with the price stability range, and sometimes even with its lower half. This process of reducing the local-currency interest rate, as the rate in the US has started rising recently, led to the contraction of the interest-rate differential between the NIS and the dollar to less than 1.5 percentage points in February 2005.

GDP increased by a rapid 4.2 percent and business-sector product by 6 percent in 2004 (annual averages), against the backdrop of economic recovery world wide and a certain easing of the security situation. This growth was accompanied by a rise in employment, mainly in the business sector, reflecting a moderate downward trend in unemployment, from a peak of 10.9 percent in the third quarter of 2003 to 10.2 percent in the third quarter of 2004, alongside a rise in the participation rate in the labor force and a rise in labor productivity. These welcome indications were based on macroeconomic policy which focused on strict fiscal discipline and adherence to long-term budget targets, structural reforms, infrastructure investment, and stability with regard to prices and in the financial markets.

The major objectives currently confronting macroeconomic-policy makers is to secure a firm base for long-term growth and to deal with the problem of poverty and social gaps. This policy must rest on a fiscal strategy designed to reduce the weight of the public sector in the economy, transferring resources into business-sector activity, and continuing with the monetary strategy of price stability. In this context it is important to implement the reform of the capital market according to the recommendations of the Bachar Committee, increasing competition in the financial markets, broadening the range of sources of finance, and reducing the extent of conflict of interests in the banking system. At the same time the structural reforms that have started should continue at a faster pace, and

* This report incorporates the Report on the Expansion of the Money Supply, in accordance with section 35 of the Bank of Israel Law, 5714–1954: in each month from April 2004 to December 2004 (inclusive) the money supply exceeded that in the preceding twelve months by more than 15 percent. The changes in the monetary aggregates, including the money supply, are discussed in section IIb(iii) and in Box 2 in this report.

those planned should be implemented, in the public sector, the labor market, the ports, the education system and the infrastructures, as well as the privatization process.

Together with these important steps, special attention must be given to reducing poverty and social gaps. These problems can only be tackled effectively on the basis of a policy that encourages a rise in the rate of participation in the labor force, increased retraining among the weaker segments, improvement in the education system, and focused support of the weak and elderly and other groups in the population unable to participate in the labor force.

The time has come to enact a modern Bank of Israel Law that will clearly set the maintenance of price stability as the prime objective of the central bank vis-à-vis other possible objectives. This Law should clearly state the Bank's operational independence and should establish a Monetary Policy Committee (MPC), headed by the Governor, that will make decisions regarding the policy and management of the Bank of Israel. Such legislation, according to the standards accepted with regard to central banks throughout the world, will ensure the Bank's ability to meet the goals set before it.

The Inflation Report was prepared in the Bank of Israel within the framework of the Senior Monetary Forum, headed by the Governor. The Forum 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—which discusses monetary policy issues.

Meir Sokoler

Meir Sokoler
Acting Governor

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Summary

- The Consumer Price Index (CPI) went down by 0.2 percent in the second half of 2004, after rising by 1.4 percent in the first half. The cumulative annual rise in prices came to 1.2 percent, close to the lower limit of the price-stability target range, and followed a price drop of 1.9 percent in 2003.
- In the first half of the year the Bank of Israel continued reducing the monetary interest rate until April, and then halted the process, and until November the interest rate stood at 4.1 percent. This took place against the background of price rises in the second quarter of the year, indicators suggesting that expected inflation was within the target range, and concern regarding the effect on the foreign currency market of the narrowing of the interest-rate differential between the NIS and the dollar with the rise in the interest rate in the US. As more data became available in the third quarter indicating a slowdown in the growth rate, increasing appreciation of the NIS against the dollar with the weakening of the dollar worldwide, and falling long-term yields, the Bank of Israel responded by cutting the interest rate for December 2004, and January and February 2005. The Bank of Israel interest rate in February 2005 stood at 3.5 percent.
- The background to the change in prices and to monetary policy was the responsible fiscal policy implemented during the year, reflected by the cut in public expenditure, and by a deficit that was significantly lower than that in 2003, and even lower than the target for the year. The compatibility of the tight fiscal policy with the expansionary monetary policy helped to boost the public's confidence in the overall macroeconomic policy, thereby enabling the interest rate to be reduced further. The global economic growth that led to accelerated domestic growth, and the political and economic calm throughout the year also formed part of the background. All the above led to stability in the financial markets, which was supported by the reforms carried out in the last few years, in particular the removal of the ceiling on the issue of Treasury bills and the greater flexibility of the exchange-rate band.
- The moderate rise in prices over the year as a whole and their reduction in the second half were related to changes in the exchange rate—depreciation of the NIS against the dollar in the first half-year, that served to raise prices, and appreciation against the dollar in the second half, that tended to lower them. The level of activity did not put upward pressure on prices, despite the rapid rate of economic growth; this was due to excess capacity. Acting in the opposite direction, the rise in world fuel prices exerted upward pressure on prices in Israel.
- In the second half of the year the exchange rate of the NIS showed low volatility with a trend of appreciation, and it appreciated by 4.2 percent against the dollar and by 0.7 percent against the currency basket. The relative stability of the foreign currency market was the result of a balance between the forces that affect the exchange rate: those acting to weaken the NIS were opposed by domestic and global factors that tended to strengthen it.
- The effect of the cumulative reductions in the interest rate during the last two years and the low level of short-term real interest currently prevailing are expected to raise the rate of inflation in 2005. Based on assessments of inflation for the coming year derived from the capital market, private forecasters predictions, and the Bank of Israel's Companies Survey, inflation is expected to rise to between 1 percent and 2.5 percent. The assessment in the Bank of Israel is that in order to keep within the target range of price stability during the next twelve months a certain rise in the interest rate will be required, the extent of which will depend among other things on interest-rate developments world wide.

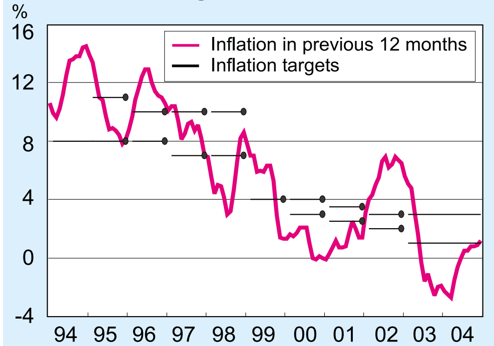
I. THE CPI AND THE MAIN FORCES AFFECTING PRICES

In the second half of the year the CPI went down by 0.2 percent, after rising by 1.4 percent in the first half (mostly in April and May). The inter-month volatility of the CPI was lower in the second half of the year than in previous years (Table A.1). Over the year as a whole the CPI rose by a modest 1.2 percent, close to the lower limit of the price-stability target of 1–3 percent (Figure 1), after falling by 1.9 percent in 2003. Some of the monthly Consumer Price Indices in the second half of the year (Figure 2) went down as a result of reductions in several of the components of the CPI (Figure 3), including housing, and moderate rises in other components, except for the fruit and vegetables index, which rose steeply. Over the whole of 2004 the CPI excluding housing and the seasonally adjusted indices rose faster than did the CPI itself. For example, the CPI excluding housing rose by 2.3 percent, and the CPI excluding fruit and vegetables, controlled-price goods, clothing and footwear and housing rose by 2.5 percent.

The moderate rise in prices during the year was the result of several main economic processes. Firstly, despite the economy's recovery from the recession, that started in the second half of 2003 and gathered speed in the first half of 2004, increased economic activity did not exert upward pressure on prices, because of excess capacity that had accumulated during the years of the recession. Concurrently, the NIS/$ exchange rate at the end of 2004 was similar to that at the end of 2003, so that over the year it was not reflected by a general rise in prices in 2004, but was reflected by the path followed by prices during the year. Thus, in the first half of the year the NIS depreciated against the dollar, contributing to rises in the CPI in that period via the effect on prices of tradables and housing. In the second half of the year the NIS appreciated against the dollar, mainly due to the weakening of the dollar world wide (changes in currency cross-rates), and despite the contraction of the interest-rate differential between Israel and the US, and this acted to lower the price indices, especially in the last quarter. On the other hand, prices of imported inputs, that rose in 2004 mainly because of the marked increase in fuel prices throughout the world, from about $ 32 per barrel at the end of 2003 to a peak of about $ 56 per barrel in the second half of 2004, acted in the opposite direction, i.e., they exerted upward pressure on prices (Figure 4 and Box 3).

Counteracting the forces which moderated the rate of price increases, particularly in the second half of the year, the Bank of Israel's monetary policy was expansionary. This policy was expressed in cuts in the interest rate that totaled 5 percentage points

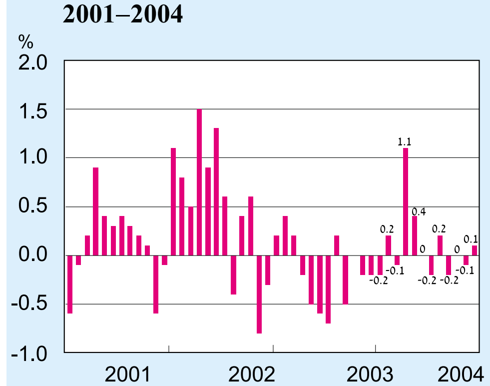
Figure 1
Inflation in Previous 12 Months, and Inflation Targets, 1994–2004



SOURCE: Central Bureau of Statistics.

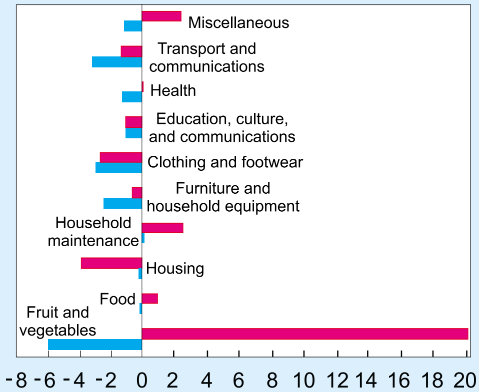
The CPI went down in the second half of the year by 0.2 percent; in the last 12 months of 2004 it rose by 1.2 percent. The rise in prices during the year reflects the return of inflation to the range of price stability following the fall of 1.9 percent in the CPI in 2003.

Figure 2
Monthly Rates of Change of the CPI, 2001–2004



SOURCE: Central Bureau of Statistics.

Figure 3
Changes in the Components of the CPI in the Second Half of the Year, 2003 and 2004 (percent)



SOURCE: Based on Central Bureau of Statistics data.

In the second half of 2004 the CPI components rose or fell moderately, except for prices of fruit and vegetables, which rose steeply.

in the period from the beginning of 2003 to April 2004. The fact that the interest rate was held at 4.1 percent for eight months until December 2004 (when it was cut to 3.9 percent) meant that the expected short-term real interest rate fell to its lowest level in several years—an average of about 2.6 percent for 2004 (compared to about 5.1 percent in 2003).

Figure 4
The Price of a Barrel of Oil, April 2001–December 2004

SOURCE: Bloomberg.

Oil prices rose steeply in 2004, peaking at the end of October.

Box 1
From Disinflation to Price Stability

A long-term review of inflation in Israel shows that since 1999, following a disinflation process during the 1990s, Israel has had low inflation (with the exception of 2002). The year 2004 now joins the ranks of years of low inflation. In most of the last few years inflation was lower than the lower limit of the inflation target.

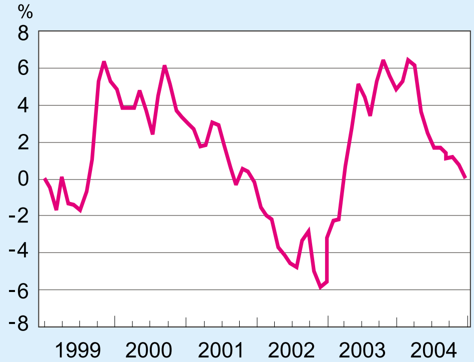
Several factors made it difficult to achieve the target with a greater degree of accuracy:

The first and main factor is the difficulty of assessing the path of the NIS exchange rate against the dollar—a prominent economic variable in its effect on prices in Israel, especially in the light of its great weight in the housing component, most of which is dollar-linked. In 2004, too, this resulted in a lower-than-forecast rise in prices. Thus, at the end of the first half of the year most forecasters assumed that the NIS would continue to depreciate against the dollar; in practice, in the second half of the year the NIS appreciated by about 4 percent against the dollar in the light of the weakening of the dollar world wide, that led to a decline in the CPI in that period. The development of the CPI excluding the housing component, that enables us to isolate the effect on prices of a large part of the dollar linkage, shows that that index rose by 2.3 percent in 2004. Moreover, in Israel's economy, which is a small open economy, monetary policy also affects the exchange rate, and hence prices, and the speed and strength of that transmission mechanism are surrounded by uncertainty.

Secondly, the relatively high inter-month volatility of the CPI in the last few years—higher than that in the advanced economies—made it more difficult to achieve the inflation target (Table A.1). It created some uncertainty concerning the prevailing inflation environment, and sometimes made it difficult to assess whether a steep rise in the CPI in any particular month or two reflected a non-recurring price rise or a rise in the rate of inflation.

Monetary policy operated alongside the above aspects that placed obstacles along the path to achieving the inflation target. In order to maintain a low inflation environment, in some years the Bank of Israel had to boost the public's confidence in the economic policy and in its commitment to attaining price stability. This necessitated raising the interest rate and keeping it higher than would have been required in a period of stability. This was the case at the end of 1998 in the wake of the global financial crisis, when there was concern that its effects would reach Israel too, and at the beginning of 2002, after the Bank of Israel had slashed its interest rate by 2 percentage points but fiscal policy did not exercise the restraint necessary to match the expansionary monetary policy. Following these two events when the Bank of Israel's interest rate rose steeply, a cautious monetary policy was adopted, with gradual reductions in the interest rate until credibility was restored, enabling the Bank of Israel to react more quickly to the lowering of the inflation environment. Such a rapid response occurred at the end of 2004. When it became clear that prices were rising at a very modest rate, and against the background of the compatibility of monetary policy and fiscal policy that boosted the public's confidence in the policymakers' commitment to the macroeconomic targets, the Bank of Israel cut the interest rate again,

Figure 5
The Gap between Inflation Expectations and Actual Inflation,[a] 1999–2004

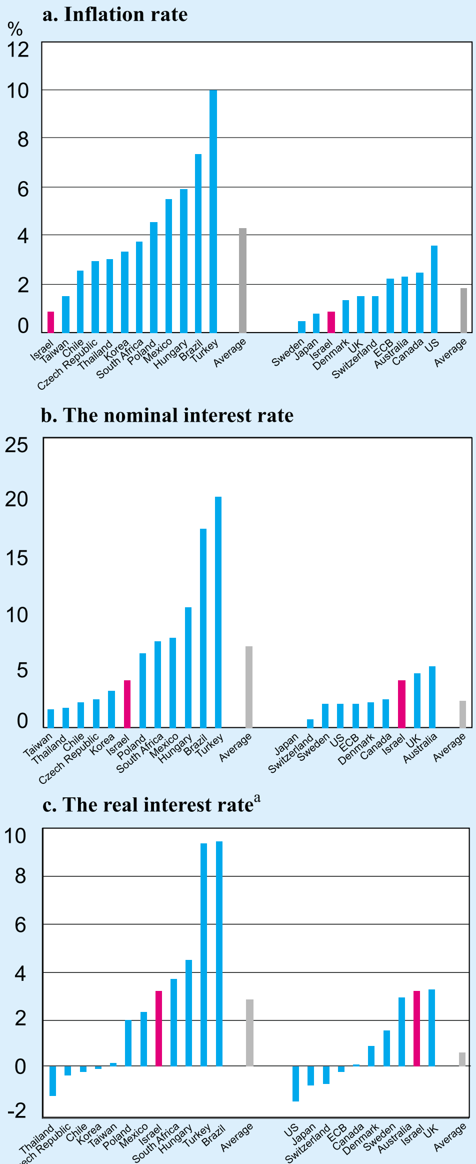


[a] The difference between expected inflation derived from the capital market and actual inflation for the same time.

SOURCE: Bank of Israel Monetary Department.

During the last six years inflation expectations in many months exceeded the level of inflation that actually occurred.

Figure 6
Israel vis-à-vis Advanced Countries and Emerging Markets, 2004



[a] The nominal interest rate *minus* actual inflation.

SOURCE: The Economist, January 2005. Data to November 2004.

despite expectations in the financial markets that it would raise the interest rate later in the year, and despite the fact that inflation expectations were in the middle of the price-stability range.

In the last few years inflation was not only lower than the target, but also lower than the public's expectations as derived from the capital market (Figure 5). Average expectations over the years under review stood at about 3 percent, whereas actual inflation during the same period averaged 1.7 percent (with high inter-year volatility). In 2003 and 2004, however, inflation expectations were relatively stable and within the target range (and were less affected by the rate of price increases in the previous year). It would thus appear that in these two years the public believed that monetary policy would bring inflation back into the target range, as indeed occurred in 2004.

Another benchmark for the level of inflation in Israel is inflation in other advanced and emerging economies. This shows that in the last few years inflation in Israel has converged towards that in the advanced economies (Figure 6a). The reduction in inflation was achieved alongside the reduction in nominal and real interest rates which approached the levels generally prevailing abroad. The real ex post short-term rate of interest, which is the central bank's interest rate *minus* the actual rate of inflation, was 3.2 percent in Israel in 2004, higher than the rate in the advanced economies (an average of 0.6 percent) and similar to the level in the emerging economies (2.8 percent, Figure 6c). However, the gap between the interest rate in Israel and that in the advanced economies contracted significantly from 6 percentage points in 2003 to 2 percentage points in 2004.

II. MONETARY POLICY, INFLATION, AND THE ECONOMIC ENVIRONMENT

a. Monetary policy

The aim of monetary policy in the second half of 2004 continued to be the attainment of price stability, against the backdrop of a growing government commitment to the budget targets and of stability in the financial markets. This was in the context of the target of price stability set for 2003 and thereafter, defined in the government decision of August 2000 as inflation of between 1 percent and 3 percent a year. Against this background, and in spite of the expectations[1] that the interest rate would rise in the last quarter of the year—based on inflation expectations that were higher than the actual rate of inflation—the Bank of Israel continually cut the interest rate from the beginning of 2003 to April 2004 by a cumulative 5 percentage points, to 4.1 percent, at which it was held until November. Consistent with this, the annual rate of inflation started rising in the second quarter of the year towards the target inflation range, having fallen short of the target in 2003. As more indicators came to light showing that the financial markets were maintaining their stability, and as it became clear

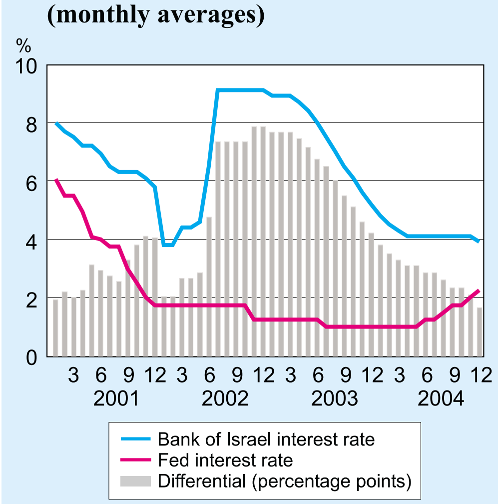
[1] Expectations in the capital market and of private forecasters, and simulations carried out by the Bank of Israel.

that the price rises of April and May were not translating into ongoing inflation, and in fact price rises in the next few months were lower than expected, the Bank of Israel cut the interest rate for December by 0.2 percentage points, to 3.9 percent. One of the considerations behind this reduction was the assessment that it would be possible to achieve the inflation target over the next two years at a lower rate of interest without undermining the relative stability of the financial markets.

With regard to price developments in the last few (calendar) years, inflation undershot the target—mainly because of unexpected changes in the economic environment—and the volatility of price changes was high. On the other hand, inflation expectations, both those derived from the capital market and those of private forecasters, were relatively stable in this period; this was particularly notable in 2004. The stability of expected inflation in the middle of the inflation target range despite the actual volatility of prices is evidence that the public believes that monetary policy is striving to achieve the inflation target in the long run, not necessarily in terms of particular calendar years. The stability of the financial markets will also play a part in making it possible to attain long-term stability of inflation within the target.

The Bank of Israel continued the process of lowering the interest rate in 2004; this also applies to the eight months when the interest rate did not change, despite expectations of a hike in the interest rate in Israel and abroad, and the rises in the US interest rate from June. From the second quarter of the year the various indicators pointed to the fact that expected inflation was stabilizing at a higher level than that prevailing at the beginning of the year, close to the middle of the target range, and indicated that the financial markets were stable. Nevertheless, there was increasing concern over the narrowing interest-rate differential between the US and Israel with the expectations of a rise of the rate in the US, a differential that could exert pressure for a sharp depreciation and inflation (Figure 7). This concern notwithstanding, and despite relatively steep price rises at the beginning of the second quarter, no increase in the interest rate was necessary, due to the prevailing stability. The assessments derived from the capital market and those of the private forecasters with regard to a future hike in the interest rate were put back month by month. As long as it was not evident that the stability was firmly established, the process of reducing the interest rate could not continue. This applied particularly in the light of developments that could push prices upwards—growing concern regarding a sharp depreciation due to the persistently narrowing interest-rate differential, the continued trend towards economic growth in Israel and abroad, and the budget deficit,

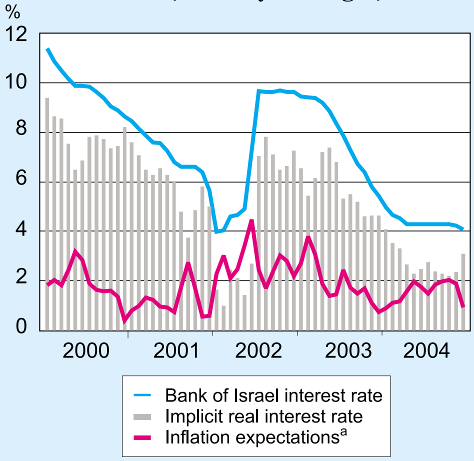
Figure 7
Short-Term Interest Rates in Israel and the US and the Differential Between Them, 2001–2004 (monthly averages)



SOURCE: Bank of Israel.

During the period reviewed the interest-rate differential between the NIS and the $ continued to contract, from 2.85 percentage points in July to 1.65 percentage points at the end of the year; this was mainly due to the continued increases in the interest rate in the US.

Figure 8
The Bank of Israel Interest Rate,[a] Inflation Expectations,[b] and the Implicit Real Interest Rate, 2000–2004 (monthly averages)



[a] The effective interest rate in the Bank of Israel auctions.
[b] For 12 months, derived from the capital market.

SOURCE: Bank of Israel Monetary Department.

The expected implicit real interest rate on Bank of Israel sources stabilized in the second half of the year, and averaged 2.5 percent from April. This followed a reduction from a high interest environment of about 7 percent prevailing at the end of 2002, and about 5 percent at the end of 2003. This process derived from the continued reductions in the monetary interest rate together with more moderate declines in inflation expectations.

which although it was moving along a path consistent with the target, was still too high taking into account the rapid rate of growth. The combination of several indicators made it possible to cut the interest rate for December: they showed a slowdown in the rate of growth from the third quarter, continued and stronger appreciation of the NIS against the dollar against the background of the latter's weakness world wide, a budget deficit converging to a level lower than the target, and more firmly established stability in the capital market, with a decline in long-term yields.

The combination of the cumulative cuts in the monetary interest rate and the stabilization of expected inflation in the middle of the target inflation range led to the decline of expected real interest to a low and stable level of about 2–2.5 percent (Figure 8). This stability is the outcome of long-term monetary policy pursued in the context of a long-term inflation target together with fiscal policy that exhibited increased commitment to lowering the budget deficit. This combined macroeconomic policy is a *sine qua non* for sustainable growth alongside price stability, in an environment of low real interest rates, both short and long term. The reduction of the share of the government debt in GDP and its convergence to the rates considered normal in the advanced economies will support the low-interest environment, although this also depends on interest rates abroad and the rate of growth.

During 2004 fiscal policy acted to reduce government expenditure while attempting to meet the deficit target, concurrent with tax reductions. The moderate downward trend of long-term nominal yields in the government bond market indicates that the public afforded greater credibility to the government's commitment to fiscal discipline than it had in the past; this was also partly due to the commitment shown by the government to the implementation of important reforms. In addition, real yields, especially short-term yields, on CPI-indexed government bonds declined, reflecting the easing of the tight monetary policy. All these were affected by the reduction of Israel's country risk premium, in line with the trend regarding other emerging markets, an improvement that apparently derived from the assessment by domestic and foreign investors of Israel's greater financial robustness.

The growth trend that started in the second half of 2003 derived from the increase in domestic private consumption and the rise in the various export industries. The trend helped create optimism in the markets and acted to increase the rate of inflation in the second quarter, together with a trend of depreciation of the NIS against the dollar. In the second half of the year, however, as more data became available indicating a slower rate of growth in Israel and abroad, there was a slow decline in long-term yields, the NIS appreciated faster and faster, as a result of which the rate of inflation also moderated. Another factor that contributed to the development of prices was the output gap, which showed that despite the expansion of economic activity after years of a prolonged recession, the economy had not exhausted its growth potential so that the forces that could exert inflationary pressure were not called into play.

The moderate price changes in the period under review were affected by the appreciation of the NIS against the dollar, a trend that accelerated in the last quarter; this took place against the backdrop of the weakening of the dollar throughout the world, and it occurred despite the contraction of the interest-rate differential between the dollar and the NIS and expectations that this would continue. This development was accompanied by stability in the foreign currency market, which is governed by market forces. This is specially notable in the light of the complete openness of Israel's economy today to trade and capital flows, a situation that exposes it to the effects of global developments. Thus, until the third quarter, the implied volatility of Bank of Israel options went down to the lowest levels in several years. At the same time investors assessed that the probability of sharp changes in the exchange rate had fallen, as was reflected by the trade in options on the stock exchange. All the above provide indications of a relatively low level of uncertainty in the foreign currency market, both actual and expected in the near future. In November and December the above indicators rose again, albeit to lower levels than those prevailing at the beginning of the year.

The implementation and promotion of important reforms during the year also contributed to the stability of the markets; the long-term purpose of the reforms is to broaden and deepen the financial markets. The process of making the government debt tradable started in 2004, also in the new pension funds, while the process with regard to life insurance schemes continued. In November the recommendations of the Bachar Committee for Structural Reform in the Capital Market were published, the main one being the sale of the provident funds and mutual funds owned by the banks to non-bank entities. The continued implementation of all these are essential to ensure a firm foundation for the stability of the markets and to strengthen their ability to withstand shocks.

b. The indicators that guide monetary policy

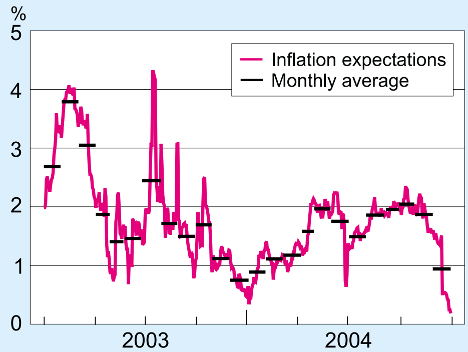
In the process of decision making with regard to the interest rate, the Bank of Israel monitors the development of various economic indicators from the capital, money and foreign currency markets, and analyses macroeconomic data on inflation and real activity. In analyzing the data the Bank uses econometric models developed to examine inflation. Monitoring this range of indicators enables the Bank to keep a constant watch on the markets' reactions and their implications for expected inflation, and to determine what it considers to be the appropriate level of interest to achieve the inflation target for the next one and two years, while preserving the stability of the financial markets.

From April to November 2004 the monetary interest rate was held at 4.1 percent, and in December it was reduced to 3.9 percent. This policy was made possible by several indicators that showed the stabilization of expected inflation close to the middle of the target range and by the calm in the markets, which was expected to persist.

(*i*) *Indicators of expected inflation*

Inflation expectations for a year ahead derived from the capital market[2] in the second half of 2004 settled around the middle of the target range, and declined towards the end of the year, and their volatility dropped markedly, despite the volatility of actual inflation. From April, while the monetary interest rate was held constant until November and then reduced, expectations moved within a relatively narrow band of between 1.5 percent and 2 percent, after rising slightly from the lower limit of the target range from the beginning of the year (Figure 9). The period in which inflation expectations moved within a narrow band close to the middle of the target range was the longest such period since the government set a long-term inflation target, in August 2000. The stabilization of expected inflation, which contributes to the stability of actual inflation, is the extension of process that monetary policy strives to achieve—long-term low inflation within the limits of the target, the norm throughout the world. The decline in inflation expectations in December after the cut in the interest rate provides evidence of the public's assessment that despite the narrow interest-rate differential the inflation environment has dropped.

Figure 9
Inflation Expectations Derived from the Capital Market, 2003 and 2004 (daily data)



SOURCE: Bank of Israel Monetary Department

From April to November inflation expectations fluctuated within a relatively narrow band of between 1.5 percent and 2 percent, after rising slightly from the lower limit of the price-stability target band from the beginning of the year. In December inflation expectations declined again to the area of the lower limit of the price-stability target band.

Private forecasters' assessments[3] of expected inflation for a year ahead stabilized during the second half-year close to the middle of the price-stability target, with a slight drop towards the end of

[2] Calculated from the yield gap between unindexed securities (Treasury bills) and CPI-indexed (*Galil*) bonds.
[3] Based on a sample of seven forecasters from the financial sector, most of them from the banking system.

the year, although at between 2 percent and 2.5 percent it was at a higher level than the expectations derived from the capital market (Figure 10). According to their assessments the rise in expected inflation one year ahead that occurred from the beginning of the year also stopped in the second quarter; they assessed that the Bank of Israel interest rate would remain stable during the following months. Although it was also assessed that the interest rate would rise towards the end of the year and would continue rising in 2005 till a cumulative rise of one percentage point had been implemented, the forecast period for the rise was put back month by month for several months. During the second half of the year the gap between the highest forecast of inflation and the lowest was relatively wide, but towards the end of the year, when the average of the forecasts declined, the gap narrowed.

The fact that expected inflation, both that derived from the capital market and that of private forecasters, was stable and close to the middle of the target range was the more notable in the light of the volatility of actual inflation; this may indicate that the public is less affected by past inflation, and believes that policymakers will act so as to make inflation come close to the target.

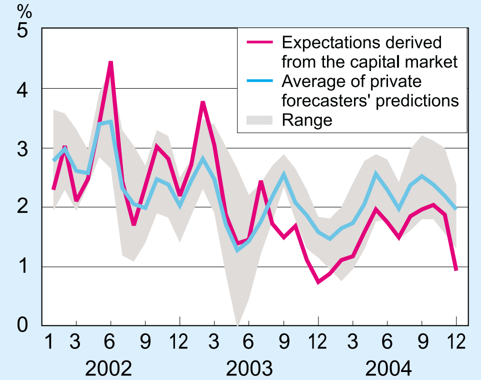
Inflation expectations for the medium and long terms[4] which include an inflation-risk premium,[5] rose in the third quarter, and the deviation from the upper limit of the target range widened, particularly those for the longer horizons, so that the positive slope of inflation expectations became steeper. In the light of the period of relative stability, it seems that this deviation is not significant, and derives mainly from the inflation-risk premium. In the fourth quarter there was a clear drop in expectations for all periods to a lower level than that prevailing at the beginning of the second half of the year, so that short-term expectations stood at 2.3 percent at the end of the year, and for four years ahead and beyond, they were 3.6 percent, on average (Figure 11).

Econometric models developed in the Bank of Israel help to assess expected inflation and to determine the interest-rate path required to attain the target. Such models are used by nearly all central banks for economic analysis and to forecast developments, and serve policymakers as tools for examining different projections based on alternative assumptions about the different variables.

[4] Calculated from the yield gap between unindexed local-currency (*Shahar*) bonds and CPI-indexed (*Galil*) bonds.

[5] A premium for inflation risk that investors require on assets that are not CPI-indexed over and above the inflation compensation that they expect and over and above compensation for other risks. The premium rises with the length of the horizon of the expectations.

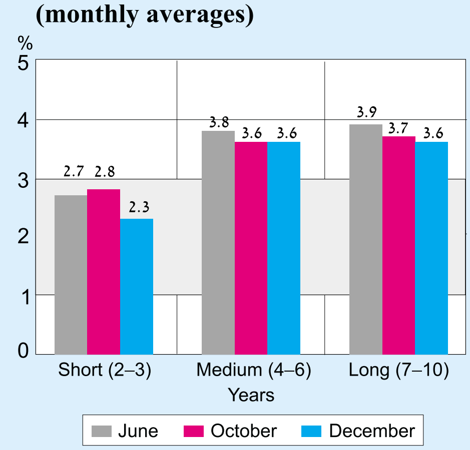
Figure 10
Inflation Expectations for the Next Year Derived from the Capital Market and According to Private Forecasters, 2002–2004 (monthly averages)



SOURCE: Private forecasters' reports and the Bank of Israel Monetary Department.

During the second half of 2004 private forecasters' assessments of inflation stabilized close to the middle of the price-stability target range, declining slightly towards the end of the year, at between 2 percent and 2.5 percent, a level higher than that derived from the capital market. The gap between the highest and the lowest inflation forecasts was relatively wide, but it narrowed towards the end of the year when the average of the forecasts dropped.

Figure 11
Long-Term Forward Inflation Expectations Derived from the Capital Market, June 2004–December 2004 (monthly averages)



SOURCE: Bank of Israel Monetary Department.

Inflation expectations for the medium and long terms (2–10 years) rose in the course of the third quarter, and in the fourth quarter expectations for all terms declined to lower levels than those prevailing at the beginning of the second half of the year. At the end of the year inflation expectations for the short term (2–3 years) stood at 2.3 percent, and for 4 years and beyond at 3.6 percent, on average.

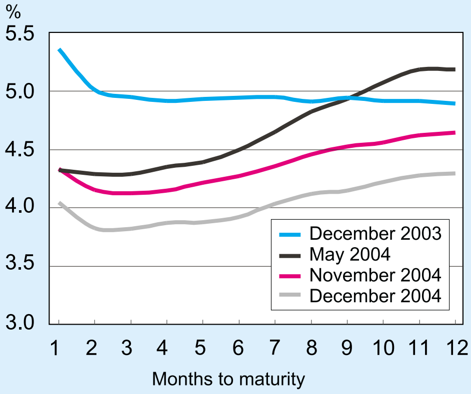
The results derived from the models are not always accurate, since they cannot handle unexpected significant changes to the economic environment. Decisions on the interest rate are therefore based on other analytical tools and assessments of all the indicators. At the beginning of the year the models suggested that the interest rate at the time was appropriate for the achievement of the inflation target for one and two years forward. Thereafter the models showed that the interest rate was lower than it should be, and indicated the possibility of an increase in the rate to prevent inflation from exceeding the target. The gap between the interest-rate path derived from the models and the path actually required may be due to the increased credibility with which the public viewed the policy—an aspect not covered by the model which was estimated in a period when credibility was at a lower level.

(*ii*) *Indicators from the capital market*

In the second half of the year the Treasury bill and government bond markets were relatively stable, with a moderate decline in yields from June following an upward trend till May concurrent with a rise in bond yields in the US. The domestic factors that helped to buttress stability in the markets were the policy of gradually lowering the monetary interest rate and the fact that the public viewed fiscal policy with greater confidence in the light of the government's continued adherence to its aim of cutting the budget deficit. The government also continued to promote and implement structural reforms that constitute the infrastructure for the robustness of the economy. Furthermore, the gradual switch from conducting monetary policy by means of the banks' deposits to pursuing it via market instruments—Treasury bills and Repos—also contributed to the markets' stability.

The downward trend of the *Treasury bill yield curve* that started at the beginning of 2003 reversed in the second quarter of 2004, with the halt in the process of lowering the interest rate and expectations of a rise in the interest rate together with expectations of a rise in the interest rate in the US. From June yields started falling, but more moderately and mainly for the long term, and the low environment of the curve stabilized at a short-term yield of around 4.3 percent, and at about 4.6 percent for the one-year horizon (Figure 12). After the cut in the interest rate for December the curve dropped by about 0.3 of a percentage point along its entire length, keeping its positive slope. It thus reverted to its lowest environment, that in January 2002. The positive slope of the curve relative to its slope at the beginning of the year reflected expectations of a moderate rise in the Bank of Israel interest rate in the year ahead, expectations which were put back month by

Figure 12
The Treasury-Bills Yield Curve, December 2003–December 2004 (monthly averages)



SOURCE: Bank of Israel Monetary Department.

From June 2004 yields on Treasury bills, mainly long-term yields, declined, and the slope of the curve became positive compared with that at the beginning of the year. The low environment of the curve became more settled at yields of 4.3 percent for the short term and 4.6 percent for one year. Thereafter, when the interest rate for December was cut, the curve dropped along its entire length by about 0.3 of a percentage point, reaching its lowest environment since January 2002.

month; this effect was over and above the risk premium that compensates for future uncertainty, and was in line with expectations of an interest-rate hike in the US.

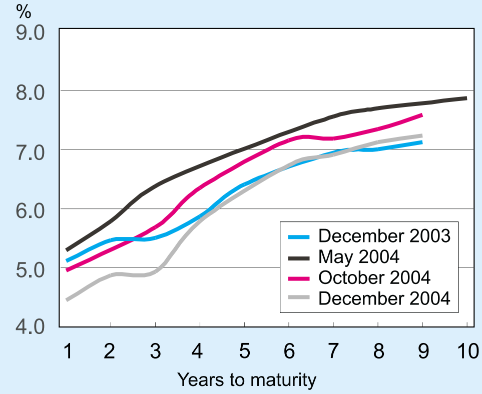
The rise in *yields on unindexed (Shahar) bonds* in the first few months of 2004 ended in May, and when the monetary interest rate remained unchanged their gradual decline was notable (Figure 13). The yields continued to fall in November and December, when medium- and long-term inflation expectations went down. The yield curve in the second half of the year was also affected by the drop in long-term yields in the US that occurred despite the rise in the Federal Reserve interest rate. This development may also reflect the public's increased confidence in fiscal policy that acted to reduce the deficit, which was lower than in the previous year, and was actually on a path below that required to meet the annual target. Thus in the period reviewed the curve stabilized in a relatively low environment, with a moderate decline in yields and a steepening of the curve, and at the end of the year the short-term yield reached 4.4 percent, and the longest-term, 7.2 percent.

Real yields along the yield curve of CPI-indexed (Galil) bonds in 2004 did not develop uniformly: short-term yields fell and long-term yields rose, so that the slope of the curve changed from completely flat to positive (Figure 14)—reflecting the easing of monetary restraint by the Bank of Israel and the recovery of real economic activity. In the second half of 2004 the shorter the period to redemption, the greater the decline in yields from the high levels prevailing in May, with the result that the positive slope of the curve became steeper and steeper. The difference between the short-term yield and the long-term yield was the largest it has been in the last few years together with the lowest level of yields––about 3 percent and 4.4 percent respectively.

The expected real rate of interest on Bank of Israel funds[6] stabilized in the period reviewed at an average of 2.5 percent from April, when the Bank of Israel stopped the downward path of the interest rate (Figure 8). This followed the reduction from the high real-interest environment of about 7 percent that prevailed at the end of 2002 and about 5 percent at the end of 2003. This process stemmed from the continued reductions of the monetary interest rate and occurred together with the more modest decline in inflation expectations. The decline in real interest from the beginning of the year till it reached its current level, which was maintained since April, was accompanied by a slight rise in inflation expectations. This low rate of real interest was made possible by

[6] A change in this index reflects the change expected in the Bank of Israel's interest rate due to changes in real factors that affect the interest rate and due to a factor that reflects the Bank's response to a deviation of inflation from its target.

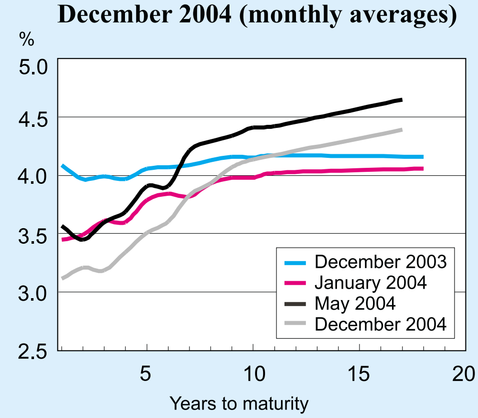
Figure 13
Yield-To-Maturity Curve of Unindexed (*Shahar*) Bonds, December 2003–December 2004 (monthly averages)



SOURCE: Bank of Israel Monetary Department.

The rise in yields on unindexed bonds that started in the first months of 2004 ended in May. In November and December yields continued to fall, so that the relatively low environment of the curve became more soundly based, with moderate reductions in yields and a steepening of the slope. At the end of the second half of the year yields reached 4.4 percent for the short term and 7.2 percent for the longer term.

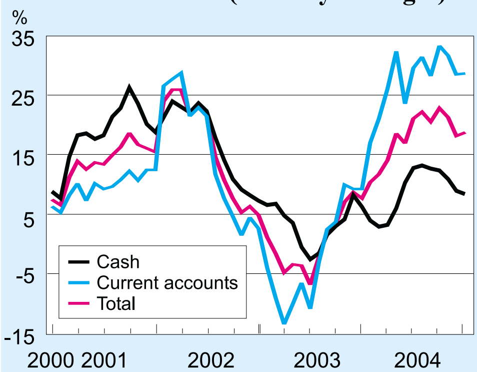
Figure 14
Yield-To-Maturity Curve of CPI-Indexed Bonds, December 2003–December 2004 (monthly averages)



SOURCE: Bank of Israel Monetary Department.

Short-term real yields to maturity declined during 2004, and long-term yields rose, so that the slope changed from being completely flat to positive. The reduction in yields in the second half of the year from their high level in May was greater the shorter the term to maturity, with the result that the positive slope of the curve became steeper. At the end of the year short-term yields stood at about 3 percent, and long-term yields at about 4.4 percent.

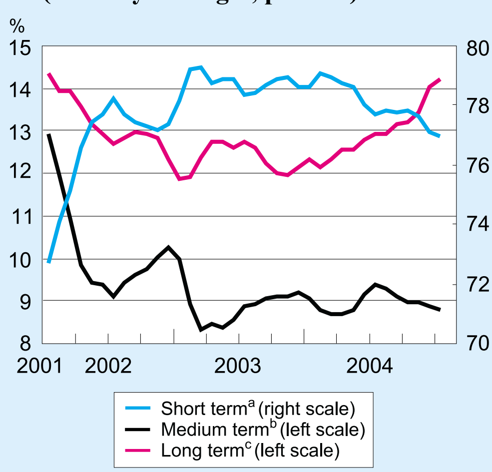
Figure 15
Annual Change in M1 and its Components, December 2000–December 2004 (monthly averages)



SOURCE: Bank of Israel Monetary Department.

During the second half of 2002 the annual rate of increase of the M1 monetary aggregate rose to 19 percent. Most of the increase was in the current-account component, which rose at the beginning of the year at a rate of 29 percent, while the cash component rose more slowly, by 9 percent.

Figure 16
The Composition of Unindexed NIS Deposits (M2), December 2001–December 2004
(monthly averages, percent)



[a] M1, three-month resident time deposits and SRO deposits.
[b] Three-month to one-year resident time deposits.
[a] Deposits for one year or longer.

SOURCE: Bank of Israel Monetary Department.

The share of short-term deposits in the broader M2 monetary aggregate declined by about two percentage points in 2004 to 77 percent, while the share of long-term deposits rose to 14 percent.

price stability and stability in the financial markets, and it supports economic growth.

(*iii*) *The monetary aggregates, credit, and the public's assets portfolio*

The upward trend in the *money supply* that started in the second half of 2003 persisted during 2004 (Figure 15). The (narrow) money supply (M1), which is determined by the demand for money in a regime where monetary policy is conducted via the interest rate in the context of an inflation target, was affected by the continued adjustment to the low level of interest following its reduction since the beginning of 2003. This can be seen also from econometric estimates of the demand for money (see Box 2). This aggregate rose at an annual rate of 19 percent in the period reviewed—faster than the rate in advanced economies (6 percent in the US and about 10 percent in the EU). The main increase occurred in the current-account component, which rose by 29 percent from the beginning of the year, while the cash component went up by a more modest 9 percent.

Unindexed interest-bearing local-currency deposits remained virtually unchanged in 2004, following the slowdown in their expansion since December 2001, mainly due to the process of reducing the interest rate. this trend was supported by the gradual move from conducting monetary policy by means of the banks' deposits to managing it via market instruments, i.e., Treasury bills and Repos. The broader (M2) money supply expanded principally due to the increase of the M1 money supply. The share of short-term deposits fell during the year to 77 percent, despite the increase in current accounts, in favor of long-term deposits, which reached 14 percent (Figure 16). In spite of the lengthening of the period of local-currency deposits in the last two years, the share of short-term deposits is still the largest.

The *overall credit aggregate* (C3) remained almost unchanged in 2004, after contracting by 2.8 percent in 2003 (Figure 17). The moderate change in bank credit despite the recovery in economic activity derived from, among other things, the reduced amount of credit extended by the banks as a result of limitations on borrowers imposed by the Banking Supervision Department as well as an increase in the supply of nonbank credit alternatives available to investors looking for attractive channels because of the low rate of interest. Thus the share of bank credit in total credit sources of finance for companies' business activity declined steadily,[7] and in the last few years an alternative market of corporate bonds has

[7] Those beyond their internal sources of finance.

arisen. This is reflected in the rise in capital raised by companies via tradable and nontradable bonds, which in 2003 and 2004 totaled NIS 37 billion, up from a total of NIS 15 billion in 2001 and 2002. The decline in the real return on government bonds, which provides a basis for the costing of corporate bonds, also boosted the development of this market, as it reduced companies' costs of raising capital. In addition, the gap between these yields contracted, an indication of investors' willingness to purchase corporate bonds. The relative liveliness in this market notwithstanding, it is still undeveloped by comparison with the level of the government bond market and with similar markets in the advanced economies.

The value of the public's financial-assets portfolio continued rising in 2004, at a rate of 7.6 percent, half its rate of increase in 2003. This was mainly due to the continued rise in prices of financial assets, particularly of shares, albeit at a slower pace. Assets did not change uniformly during the year: in July the value of the portfolio declined after rising continuously in the first half of the year. Against the background of the process of cuts in the interest rate, the reform of income tax on individuals and the completion of the liberalization process in foreign currency, the public has continued to adjust its portfolio gradually. Hence the rising trend of the share of tradable assets in the portfolio has persisted, alongside a more balanced spread of investments between domestic assets and foreign assets, and between bank deposits and investments in the capital market. Moreover, the proportion of CPI-indexed assets in the portfolio dropped by about two percentage points to 31.3 percent, while shares increased to 22 percent. The composition of the portfolio excluding shares shows a clear switch from CPI-indexed assets, mainly savings schemes, to unindexed assets such as Treasury bills and long-term local-currency deposits.

Figure 17
Annual Rates of Change of Bank Credit to the Public (C3), 2000–2004 (monthly averages)

SOURCE: Bank of Israel Monetary Department.

The total-bank-credit aggregate C3, which rose in 2000–2002 at an annual average rate of some 10 percent, remained almost unchanged in 2004, after contracting by 2.8 percent in 2003.

Box 2
The Demand for Narrow Money (M1) in the Last Few Years

Narrow money, M1 (cash held by the public and current-account deposits), rose at a cumulative rate of 19 percent from the beginning of 2003 to June 2004—a rise of 12 percent in cash and 26 percent in current-account deposits. This increase greatly exceeded the rise in real GDP *plus* the annual inflation target.

Such a rise in the quantity of money gives rise to concern regarding the creation of inflationary pressure, and special attention should be paid to this matter when formulating monetary policy. It is true to say the existing monetary regime in Israel and many other countries that is based on a specific inflation target as a monetary anchor in which the interest rate serves as a policy instrument does not allow for the creation of excess money supply and inflationary pressure. However, the tradition of analyzing inflation as "a monetary phenomenon always and everywhere" is well established and it is important to examine the reliability of estimates of the demand for money.

The Monetary Department of the Bank of Israel carried out such an examination;[1] its main finding was that most of the apparently exceptional growth of the quantity of money since the beginning of 2003 is well explained by the reduction of the interest rate, in a way that does not deviate from the econometric equations. In the Department's view, there is no reason for the growth in the quantity of money to create inflationary pressure.

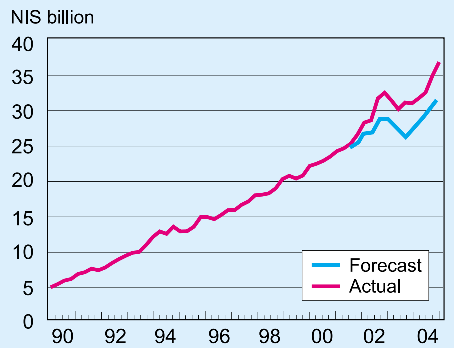
The demand equations for the narrow money aggregate as estimated in the 1990s in the Bank of Israel yielded satisfactory results that were consistent with economic theory and successfully forecast the quantity of money outside the sample period.

From the third quarter of 2000, difficulties arose with the equations and a gap developed between the actual quantity of money and that forecast from the money-demand equations. In order to analyze the development of money demand, and due to the different changes in cash and current-account deposits, separate equations were estimated for each of these two major components:

1. The cash component increased markedly from 2000:IV to 2001:III, and has remained at a high level since then. Its expansion in this period cannot be explained only by the real-activity and nominal-interest-rate elements,[2] and apparently reflects increased demand from another factor. The exceptional rise in the quantity of money in this period may possibly be ascribed to the *intifada* that broke out in September 2000. Exceptional demand for cash at times of war is a logical development and is supported by past experience: during the Gulf War there was an exceptional increase in demand for cash in Israel, and the rise in money in circulation in the US during World War II has been documented in the academic literature. Nevertheless, no direct evidence is available at this time to explain this rise in the demand for cash. In 2002 there were signs that the rate of increase in the cash component of M1 was slowing, apparently with the completion of the process of adjustment to the new security situation. Since 2002 the demand for cash is back on its expected path, at a higher level.

2. The results of the quarterly estimating equation for the demand for current-account deposits show that it has good forecasting ability, so that there is correlation between the actual values and values obtained from the equation throughout the period of the forecast (2000:IV–2004:II).

The Money Demand Equation, 1990–2004



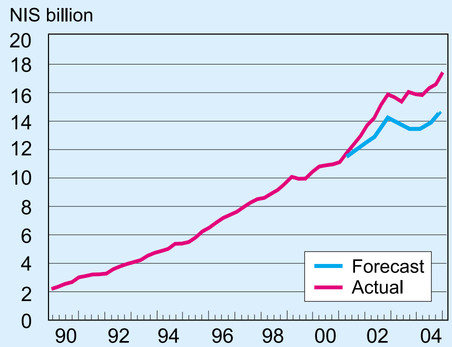
SOURCE: Bank of Israel Monetary Deparment.

[1] The examination included estimating equations for M1, cash in the hands of the public, and current-account deposits, for the period from 1990:I to 2000:III. The variables incorporated in the equations are private consumption as the scale variable, the Bank of Israel effective interest rate as the proxy for the opportunity cost of holding money, the real turnover of shares on the stock exchange reflecting changes in the value of financial transactions, dummy variables for quarterly seasonality and other external factors that affect the demand for money (such as the Gulf War). A forecast outside the sample period, that examines the stability of the equations, was carried out for the period between 2000:IV and 2004:IV. The detailed findings are currently being prepared and will be published in the Monetary Studies series of the Monetary Department.

[2] The equation for the demand for money is formulated as a function of nominal interest, representing the yield on an alternative asset to money, a scale variable reflecting the transactions motive, and a transfer fee from money to an alternative interest-bearing asset. In the absence of available data on transfer fees it is usually assumed that they are constant.

Most of the downward trend in the rate of increase in current-account deposits during 2002 and in the first half of 2003 can be explained by the increase in the interest rate in the first half of 2002 and its remaining at a high level in the second half of the year. On the other hand, the opposite, upward trend of the faster rate of increase of current-account deposits since the middle of 2003 is explained by the process of reducing the interest rate since then and by the increased scale of trade on the stock exchange in that period.[3]

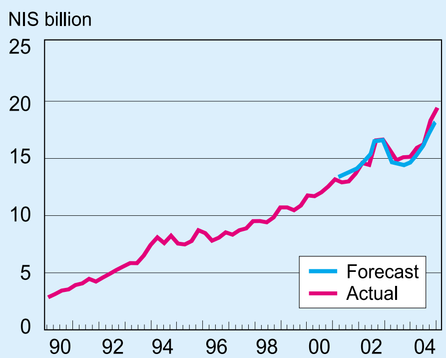
Equation of Cash Held by the Public, 1990–2004



SOURCE: Bank of Israel Monetary Deparment.

To summarize: the forecasts derived from the cash equation fall short of the actual values due to the increased demand for cash, apparently as a result of the security situation at the end of 2000. On the other hand the demand equation for current-account deposits provides reasonable results that are consistent with the actual values. Hence most of the gap that arose in the quantity of money in 2000:III was due to the sharp rise in demand for cash.

Equation of Current-Account Deposits, 1990–2004



SOURCE: Bank of Israel Monetary Deparment.

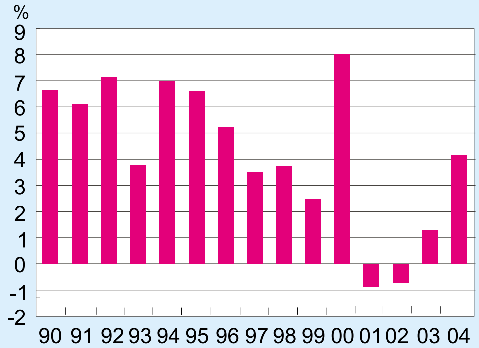
The simulations (see Figures in this Box). performed with the demand equations for cash and for M1 indicate that the gap that arose between the actual and the forecast money quantities as a result of the exceptional rise in the demand for cash stabilized, and has not risen since the middle of 2002. The quantity of money is reverting to the path determined by the elements of its demand, but at a higher level than before. It is not thought likely that the rise in money will create inflationary pressure. In the last few months the gap between the actual and the forecast levels of M1 have not changed to a significant degree. This gap has existed for more than three years without causing inflation so far, so that the money-quantity indicator does not cause concern regarding future inflationary pressure.

[3] As far as the demand for money is concerned, the direction of the effect is from the rise in trade on the stock exchange to demand for money, to meet the need to implement the transactions on the stock exchange. In stating this the intention is not to reduce the possible importance of the connection between monetary policy and asset prices, but this effect is expressed more strongly in total credit and not in the money supply. See for example Borio, Claudio and Phillip Lowe (2002), "Asset Prices, Financial and Monetary Stability," *BIS Working Paper* No. 114, July.

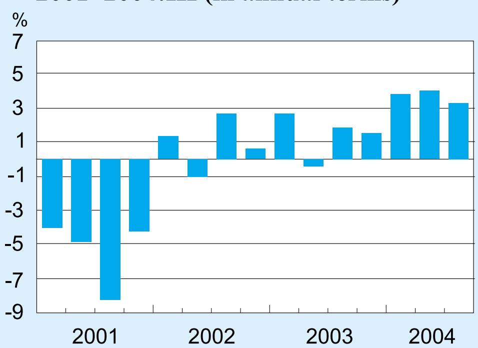
c. Real activity

The economic growth rate increased during 2004 following three years of recession. This increase is reflected by a 4.2 percent rise in GDP (Figure 18) and a 6 percent growth in business-sector product. Signs of an end to the recession were already apparent in the second half of 2003, and the growth rate accelerated during the first two quarters of 2004. The faster pace of growth was also a function of the low level of activity in the economy during

Figure 18
GDP Growth Rates, 1990–2004



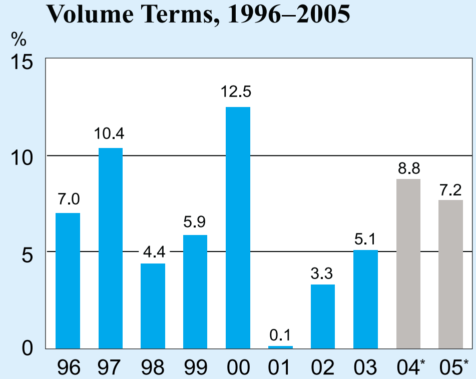
Quarterly Growth Rates, 2001–2004:III (in annual terms)



SOURCE: The Bank of Israel Annual Report.

During 2004 economic activity expanded at a fast rate, a trend that started in the second half of 2003. The rise in GDP reflected a rapid increase in exports and private consumption.

Figure 19
The Increase in World Trade, in Volume Terms, 1996–2005



* Forecasts

SOURCE: World Economic Outlook, IMF, April 2004.

The rise in exports, and particularly in those of the advanced industries derived mainly from the rise in demand world wide. According to IMF data, world trade rose by 8.8. percent in 2004, and is expected to continue growing in 2005, by 7.2 percent. This follows lower growth rates in the previous three years.

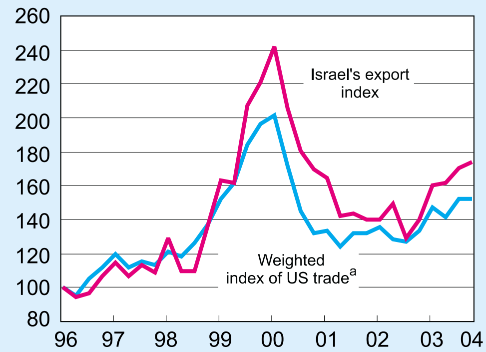
the recession years. In the second half of the year, the pace of growth slowed, and in the third quarter business-sector product rose by 3.3 percent in annual terms. Nevertheless, economic indicators and the Bank of Israel Companies Survey showed that growth consolidated, encompassing the principal industries except for the construction industry, and that expectations of further growth were prevalent. The faster pace of economic growth during the year did not create an upward pressure on prices because the output gap, which is the difference between potential and actual GDP, remained large. (See the Inflation Report for the first half of 2004, Box 2.)

The economic forces that led to growth in 2004 were the faster pace of global growth, as reflected by an increase in world trade and by expectations of a further increases, the relatively calm security situation, and the combination of a contractionary fiscal policy with tax reductions, and an expansionary monetary policy that was apparent from a significant decrease in the real interest rate in the economy and that enabled firms to reduce their financing expenses and increase their profitability. The large rise in oil prices offset to some extent both global growth (Box 3) and growth in Israel.

Leading the year's rapid growth were the upsurge in exports and the expansion in private consumption. The growth in exports, which amounted to 14 percent, is attributed to the rapid increase in world trade (Figure 19), which reached 8.8 percent compared with 5.1 percent in 2003 and lower rates of increase in the previous two years. Other factors contributing to the upsurge in exports were the renewed expansion in the high-tech industries worldwide, the growth in demand for their products (Figure 20), and the depreciation of the real exchange rate in terms of export and import prices following the depreciation in 2003. Concurrent with the growth in exports of goods, service exports, especially tourism services, also increased considerably during the year. After increasing in the first quarter of the year, the growth in merchandize exports slowed during the rest of 2004, although the pace of growth remained high. The rapid 5.3 percent expansion in private consumption during the year, together with the growth in per-capita consumption, are attributed to the rise in disposable income that resulted from the rapid growth in GDP, the increase in real wages, the fall in the unemployment rate, the growth in firms' profits, the wealth effect created by the rise in securities prices in the stock market, the cuts in income tax and the cut in indirect taxes—all these despite the reduction in transfer payments. The principal component of private consumption that expanded during 2004 was durables consumption, mainly in the first half of the year. In the third quarter, private consumption rose by a relatively modest rate, reflecting a decrease in per-capita consumption. Investment in fixed assets fell by 1.8 percent in 2004 due to unchanged levels of investment in the principal industries concurrent with a further decrease in housing investment. Notable increases were recorded during the year in investment in machinery, equipment and land transportation vehicles as well as in inventories, due in particular to the increased investment at start-up companies. As compared to the expansion in exports and private consumption, demand for public consumption contracted by 1.9 percent. This was because fiscal policy had the effect of reducing the growth in expenditure concurrent with the previously mentioned tax cuts. As a result, the budget deficit amounted to 3.9 percent of GDP in 2004, slightly below the targeted level (Figure 21) concurrent with under-implementation of the budget. The deficit-GDP ratio in 2004 was considerably lower than that recorded in 2003.

While growth in 2004 was led by exports and consumption as stated, it was not centered in a single industry or specific sector, and encompassed most of the principal industries, at all technology-levels. The Bank of Israel Companies Survey shows that in each of the first three quarters of the year, the output of the manufacturing sector increased, as did sales in the commerce sector, activity in the hotels industry and in the transport and communications industry, and revenue from activity in the service industries. All these industries reported a reduction in demand-side restrictions during the year. The expansion in the manufacturing sector was rapid in the advanced-technology and mixed-technology industries, but also reflected a growth in the output in the traditional industries (Figure 22). In addition, reports from companies covered by the Survey reveal that the expansion encompassed both large companies

Figure 20
The Electronics Industry: Israel's Exports, and US Trade, December 1996–November 2004[a] (index, 1996 = 100)

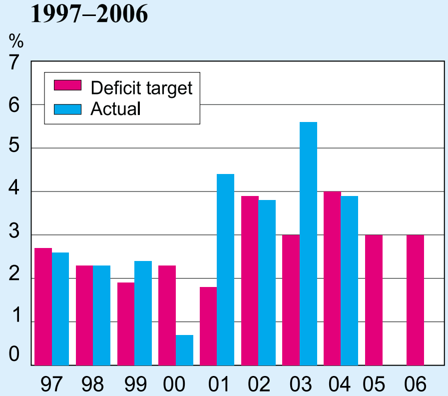


[a] Data for 2004:IV extrapolated from the known data of October and November.

SOURCE: Israel's exports based on Central Bureau of Statistics data; US data–United States International Trade Commission.

The index of US trade is weighted according to the weights of Israel's exports to the US.

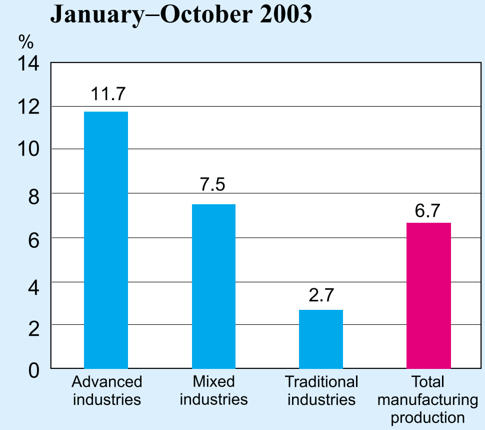
Figure 21
The Government Deficit (percent of GDP),[a] Targets and Actual, 1997–2006



[a] From 1997 the total government deficit ceiling including the Bank of Israel profit. From 2001, the total government deficit ceiling.

The government deficit fell significantly in 2004 from its level in 2003, and was actually below the target.

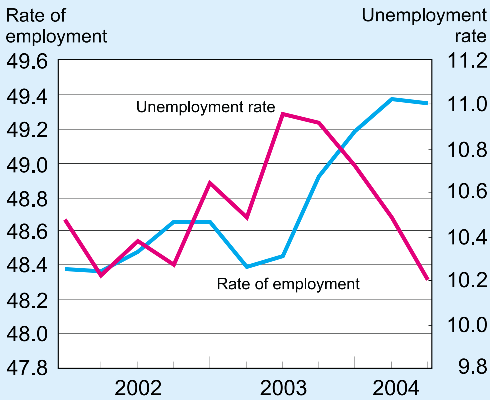
Figure 22
Rate of Change of Expansion of Manufacturing Production by Degree of Technological Innovation, January–October 2004 vis-à-vis January–October 2003



SOURCE: Based on Central Bureau of Statistics data.

The rate of increase of production accelerated in the advanced and mixed industries, but production of the traditional industries also increased, albeit more moderately.

Figure 23
The Rate of Employment and the Unemployment Rate,[a] 2002–2004:III (percent)

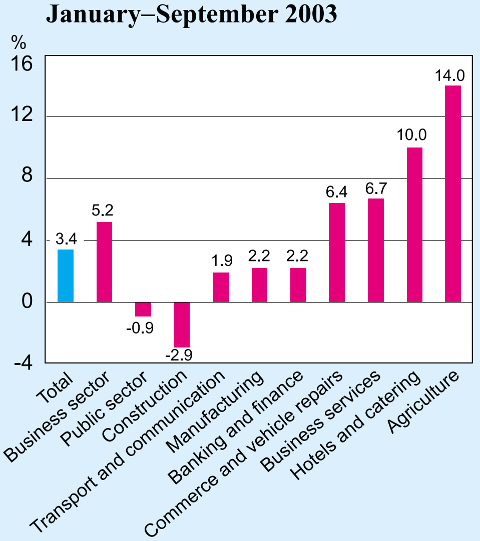


[a] Unemployment rate–percent of labor force; Rate of employment–percent of working-age population.

SOURCE: Labour Force Surveys.

During 2004 the unemployment rate went down to reach 10.2 percent at the end of the year. At the same time the rate of employment rose markedly. Nevertheless, a large proportion of the newly employed were in only part-time jobs.

Figure 24
Percentage Increase in the Number of Employed Persons, by Industry, January–September 2004 vis-à-vis January–September 2003

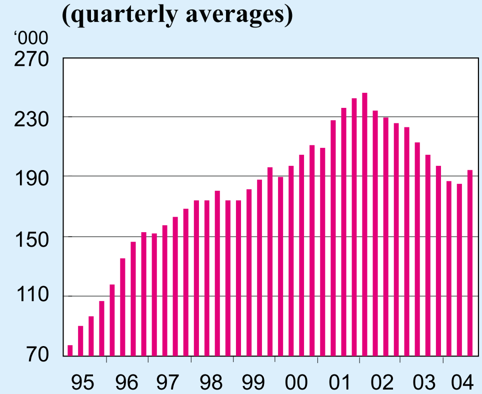


SOURCE: Labour Force Surveys

(employing over 100 persons), and small and medium-sized companies. In the construction industry however, activity remained at a recession level as stated, in the area of building construction and in the area of infrastructure. No expectations of a recovery in this industry in the near future are apparent.

The growth in economic activity was reflected in all labor market indexes. The number of Israeli employed persons increased by 77 thousand or 3.4 percent during the first three quarters of the year compared with the same period of 2003. However, part of the increase in newly employed persons was in part-time positions only. As a result of the increase in the number of employed persons, the employment rate (the proportion of employed persons to the total working age population) rose during the year and amounted to 49.3 percent in the third quarter (Figure 23), while the unemployment rate fell from 10.9 percent in the last quarter of 2003 (and from a record 11 percent in the third quarter of that year) to 10.2 percent in the third quarter of 2004, despite the large average rise in the labor force participation rate in the course of the year. The rise in the participation rate is indicative of the public's increased willingness to work due to the greater chances of finding work, the resumption of growth and the reduction in transfer payments. An examination of the distribution of the change in the number of employed persons among the principal industries also shows that growth encompassed most industries. The number of employed persons increased in all industries in the business sector except for the construction industry (Figure 24). It should be noted that the increase was centered entirely in the business sector, and that the number of employed persons in the public sector decreased. The decrease in the number of (Israeli) employed persons in the construction industry conforms to the previously mentioned decline in activity in that industry. The fall in unemployment also resulted from the continued reduction in the number of foreign workers in the economy (Figure 25). From March 2002, when the number of foreign workers peaked at 247 thousand, their number dropped to 184 thousand in June

Figure 25
The Number of Foreign Workers, 1995–September 2004 (quarterly averages)



SOURCE: National Accounts data.

2004. Later in the year, a moderate increase was recorded in nominal and real wages following a large decrease during the previous two years. The wage increases did not create an upward pressure on prices because product per work hour rose considerably, and the cost of labor per unit of GDP therefore fell.

Box 3
The Impact of the Rise in Oil Prices on Growth and Prices Worldwide and in Israel

The rapid recovery in global activity was accompanied by a large rise in world prices for commodities and especially oil prices. The price of crude oil rose from $32 a barrel at the end of 2003 to a record $56 a barrel at the end of October 2004 (Figure 4), while a decrease is forecast for the coming year. The rise in oil prices mainly reflects the growth in demand for oil, particularly in the USA and the Far East countries, principally China. The large increase in the number of oil barrels consumed during the year reflected this growth in demand. Global demand increased concurrent with a relatively limited and rigid supply of oil in the short term, which resulted from OPEC countries' mistaken demand forecasts, among other things. Since a large rise in oil prices leads to the increased usage of alternative sources of energy, it does not serve the long-term interests of the oil-producing countries. Apart from the growth in demand and the limited supply, which resulted in the price increases, high oil prices also reflect a risk premium in respect of instability in the Middle East, which could lead to a reduction in supply. It should be realized that despite the large rise in oil prices, in real terms prices are lower than during previous crisis periods, for example 1973-1974 and 1979-1980.

The large rise in oil prices again prompted the question as to its macroeconomic effects. On previous occasions when oil prices rose, growth slowed and prices increased as a result, which also affected the trade balance of the oil-importing countries. A key determinant of the intensity of the impact of oil prices on a country's economy is the extent to which it uses oil products, that is oil consumption relative to GDP. In the industrialized countries, a persistent decrease in oil consumption has been recorded since the 1973 crisis. In 2002, this consumption was 50 percent less than in 1972. Today therefore, an oil price crisis has less economic impact. Moreover, since the rise in oil prices during 2004 mainly resulted from increased demand and global growth, and not from a reduction in supply, it can be assumed that the impact on growth was and will be more limited than during the previously mentioned crisis periods, and that the impact on prices will be greater.

A change in oil prices affects the economy by means of a number of pass-through mechanisms. Firstly, a rise in oil prices increases production costs and the prices of goods to the consumer. The latter increase derives from the direct rise in prices of oil products and from the rise in prices of products for which oil is used in their production process, such as electricity, public transport and air travel. A rise in oil prices will also adversely affect the terms of trade. The decrease in real income reduces the demand for goods and thereby slows economic activity, which can moderate the price increase resulting from the reduction in supply.

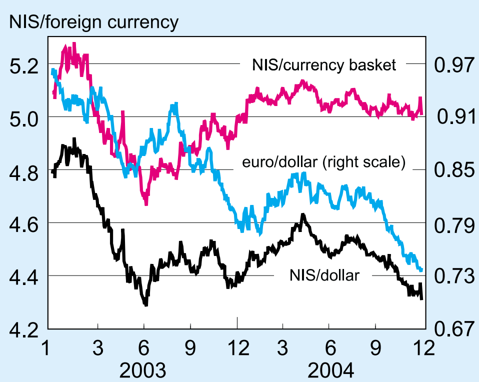
Studies conducted by the OECD countries and the International Energy Agency[1] found that a $10 increase in the price of oil that is maintained over time will be reflected by a 0.4 percentage point decrease in the real GDP of those countries during the first and second years following the price increase. This impact is stronger in the eurozone because their oil-product consumption is more intensive than in

[1] "The Macroeconomic Impact of Higher Oil Prices," *in Economic Survey of Europe*, 2004.2, Economic Commission for Europe.

the USA. The forecast effect of this rise in oil prices on inflation in the developed countries is 0.5 percentage points. Economic models show that the impact of a similar rise in the price per barrel during the crisis years 1990-1991 was twice as intense as the current impact.

Bank of Israel models show that oil, which is an input in the production process of finished goods, affects the consumer price index as part of the impact of imported input prices on the index. (The proportion of the oil input is estimated at 20 percent of the imported inputs.) On the basis of the Bank of Israel models, the contribution of the 40 percent average increase in oil prices in 2004 to the rise in the CPI is assessed at 0.5 percentage points. But since the proportion of oil used in electricity production during 2004 decreased (with the move to the use of natural gas), this assessment may be slightly upward biased. The rise in oil prices also affected the wholesale price index of industrial production. This index rose by 7.6 percent in 2004, with a large part of the increase deriving from oil prices and industries that employ oil-intensive production processes. The incomplete pass-through between the rise in wholesale prices and the rise in consumer prices results *inter alia* from the fact that the consumption basket reflects not only the output of local industry, but also imported consumer goods and service prices. During past years, the ratio between the consumer price index and the wholesale price index remained relatively stable. But during the last two years, this ratio dropped appreciably, meaning that consumer prices rose less than wholesale prices. An analysis conducted by the Bank of Israel shows that if oil prices do not fall, the faster rate of increase in the wholesale price index could subsequently run over into the consumer price index.

Figure 26
The NIS Exchange Rate against Selected Currencies and the Euro/Dollar Exchange Rate, 2003 and 2004 (daily data)



SOURCE: Bank of Israel.

In the second half of 2004 the NIS exchange rate moved within a narrow band, with low volatility and a slight trend of appreciation.

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

(i) The exchange rate

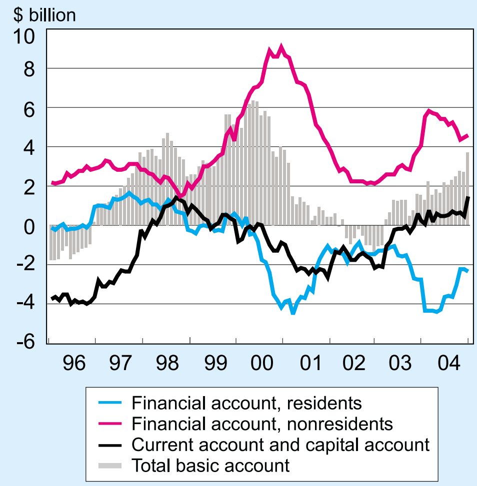
The NIS exchange rate strengthened to a moderate extent during the second half of the year, and the volatility of the exchange rate was low (Figure 26). From the beginning of the second half, the NIS appreciated by 4.2 percent against the dollar and by 0.7 percent against the currency basket.

The relative stability in the foreign-currency market during 2004 resulted from the balance between forces that affect the exchange rate. Alongside the factors that acted to weaken the NIS, a number of local and global factors acted to strengthen the NIS. The local factors supporting the NIS were mainly long-term in nature, continuing the trends observed in 2003: (1) The improvement in the basic account that derived from the inflow of long-term capital to the economy at a time of stability in the current account (Figure 27); (2) The continued improvement in the economy's net external debt (Figure 28); (3) Households' continued holding of a record amount of foreign currency concurrent with a large decrease in the business sector's exposure to depreciation (Figure 29); (4) The stabilization of the Israeli economy's risk premium at low levels (Figure 30). Together with the long-term developments supporting the NIS, monetary policy and fiscal policy continued to benefit from a high degree of credibility on the part of the public. The government was resolute in its efforts to decrease the budget deficit, and to implement reforms and structural changes in the capital market, while the Bank of Israel's monetary policy matched background conditions and did not surprise the markets.

The principal factors that had a weakening effect on the NIS were the contraction of the interest-rate differential and the planned tax reform. The interest-rate differential between Israel and the USA decreased to 1.45 percent in 2004 as a result of the Fed's five rate hikes by cumulative 1.25 percentage points, and the 0.4 percentage point reduction in the Bank of Israel's interest rate in November and December. This differential is 6.4 percentage points lower than the interest-rate differential prevailing in December 2002, and close to the differential at the end of December 2001. But in contrast to the market's strong reaction to the contraction of the interest-rate differential in December 2001, which was reflected *inter alia* by a large depreciation of the NIS, its response to the contraction of the interest-rate differential in 2004 was moderate, and was scarcely reflected in the exchange rate. The difference in the intensity of the market's reaction to the contraction in the interest-rate differentials in the two periods resulted from the prevailing background conditions and the extent of the public's credibility in macroeconomic policy. The differences in background conditions were reflected both by the basic factors that affect the long-term supply of foreign currency in the economy, and by the range of short-term factors that are expressed by exchange rate risk.

A long-term factor that actually had the effect of weakening the NIS in 2004 was the equalization of the tax rate on foreign currency investments with the tax rate on NIS investments. Under the tax reform, the rate of tax on earnings from securities, currently 35 percent, will be equalized at the beginning of 2007 with respect to private investors, and at the beginning of 2006

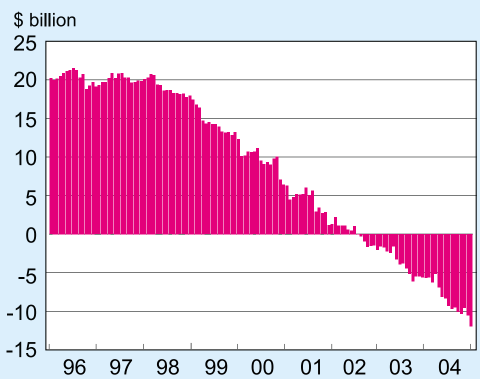
Figure 27
Sales (+) and Purchases (–) of Long-Term Foreign Currency (the Basic Account), 1996–2004 (cumulative over the previous 12 months)



SOURCE: Bank of Israel Foreign Exchange Activity Department.

The basic account, which constitutes the supply of long-term foreign currency to the economy, continue to support the NIS, against the background of the balance in the current account and the continued inflow of long-term capital into Israel.

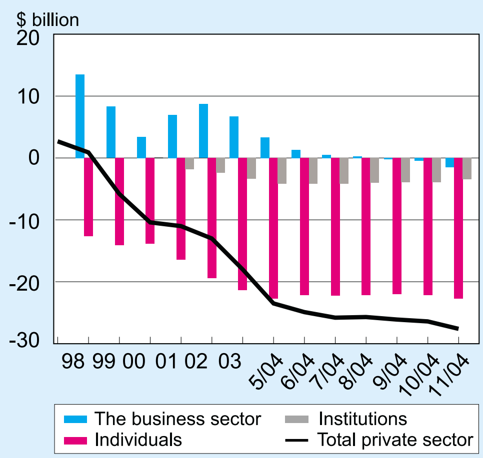
Figure 28
Israel's Net External Debt, 1996–2004



SOURCE: Bank of Israel Foreign Exchange Activity Department.

In the period reviewed the trend of improvement in the net external debt continued. Since January 2002 Israel's economy has lent to abroad rather than borrowing from abroad.

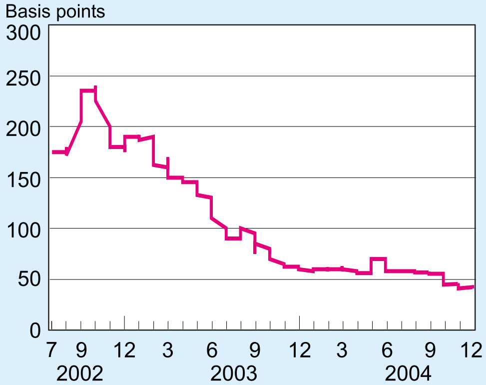
Figure 29
Exposure to Depreciation of the NIS, by Sector, 1996–October 2004



SOURCE: Bank of Israel Foreign Exchange Activity Department.

Assets held by the household segment stabilized at their peak level in the period reviewed, concurrently with the sharp decline in the business sector's exposure to depreciation.

Figure 30
Israel's Country Risk Premium, July 2002–December 2004



SOURCE: Bloomberg and the Bank of Israel Foreign Exchange Activity Department.

In the second half of 2004 Israel's country risk premium stabilized at low levels, as was reflected by the CDS data.

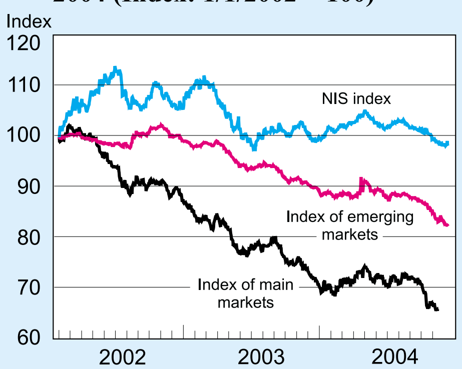
with respect to institutional investors, to the rates imposed in Israel. A legislative change was formulated in the course of the year that was aimed at expediting the abolition of the tax discrimination to the beginning of 2005.

Accompanying the positive expectations regarding the tax reform is the fear of an outflow of sources from the Israeli capital market as a result of the increase in the relative feasibility of investment in foreign securities that in the short-term at least, could lead to a rapid depreciation of the NIS. However, this fear was not reflected in the foreign-currency market, apparently due to the prevailing assessment among local and foreign financial institutions that the adjustment of Israeli residents' portfolios as a result of the tax reform will be gradual and staggered over a long period (Box 4). Moreover, it is uncertain when the legislative process involved in expediting the tax reform will be completed.

The strengthening of the NIS during 2004, which intensified in the last quarter of the year, derived mainly from the worldwide weakening of the dollar. However, the weakening of the dollar against the NIS was more moderate than its weakening against the currencies of other emerging markets (Figure 31). Since from the aspect of international capital flows, the Israeli economy is numbered among the emerging markets, it could have been expected that developments in the exchange rate of the NIS against the dollar would be similar to developments of the exchange rates of this group of countries, unless local factors were acting to cause a deviation from this trend. Accordingly, it can be assumed that the entire range of local factors, principally short-term factors, exerted pressure towards a weakening of the NIS in 2004.

The inflow of nonresidents' long-term investments, which were the main factor supporting the NIS in the first half of 2004, slowed in mid-year due to the slower pace of global recovery that was reflected

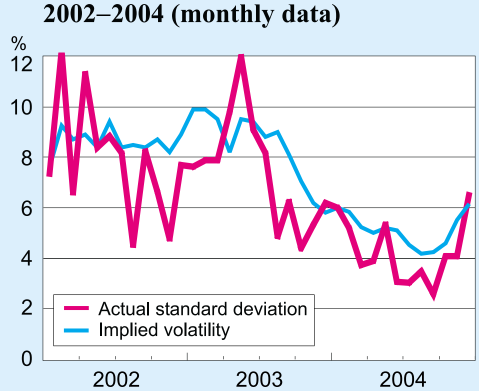
Figure 31
The Exchange Rate of the US$ World Wide, and the NIS/$ Exchange Rate, 2002–December 2004 (Index: 1/1/2002 = 100)



SOURCE: Bloomberg and the Bank of Israel Foreign Exchange Activity Department.

Against the background of domestic forces that supported the stability of the NIS, the dollar followed a moderate trend throughout the period reviewed, and particularly in 2004:IV, of weakening against the major currencies and against the currencies of the emerging markets.

Figure 32
The Standard Deviation of the Daily Changes in the NIS/$ Exchange Rate and the Implied Volatility in NIS/$ Options Traded Over the Counter, 2002–2004 (monthly data)



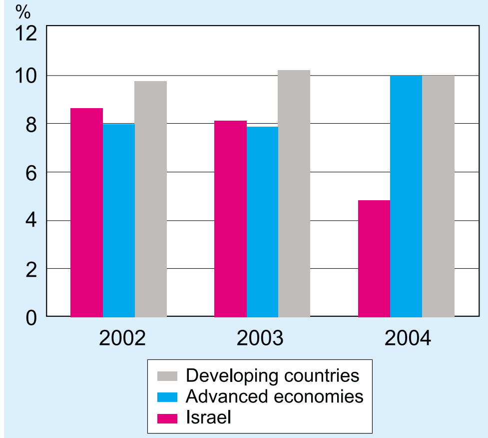
SOURCE: Bank of Israel.

Exchange-rate risk continued to decline at the beginning of the second half of the year, and settled at an all-time low.

inter alia by more moderate price rises in the financial markets and especially in the US equities market. Nevertheless, the relative stability in foreign currency during the first half of 2004 was maintained in the second half. This was because Israeli residents' investments abroad decreased at the same time as the fall off in nonresidents' long-term investments in the economy. The correlation between these flows is not arbitrary, and is mainly connected with the development of prices in the world's principal equities markets. Past experience shows a high degree of correlation between the volume of Israeli companies' issues abroad and developments in the Nasdaq index – Expectations of a rise in the index increase the feasibility for Israeli companies of raising capital abroad and the chances of such issues' success, since the overwhelming majority of their issues are in that market. On the other hand, Israeli residents' long-term investments abroad are also affected by assessments of price developments in the world's principal equities markets. This is because apart from long-term considerations that support an international diversification of investments, their investment policy is also based on short-term considerations, such as the relative attractiveness of asset prices.

The relative stability in the foreign-currency market during the second half of 2004 was reflected by a further decrease in exchange rate risk at the beginning of the period, and the subsequent stabilization of this risk at a low level, both from the historical aspect (Figure 32) and by international standards (Figure 33). As an example, the average level of the implied volatility of the NIS-dollar options that the Bank of Israel issues, which is one of the indexes of exchange rate risk, amounted to 5 percent in the period reviewed compared with 8.5 percent in 2002 and 9.4 percent in the first half of 2003. The stabilization of exchange rate risk at a historically low level is particularly notable in view of the structural changes in the foreign-currency market during recent years, such

Figure 33
Actual Standard Deviation, Domestic Currencies against the Dollar, International Comparison, 2002–2004



SOURCE: Bloomberg.

The stabilization of exchange-rate risk at low levels is particularly noteworthy in the light of the structural aspects of the foreign exchange market such as the greater flexibility of the exchange-rate band, and the completion of the liberalization process, that support its rise and its approach to the levels prevailing in the advanced economies.

Table 1
Activity in the NIS/Foreign-Currency Market by Segments and Timing Terms, 2002 to 2004, Sales (+) and Purchases (–)

($ billion)

	2002	2003	2004 First half	2004 Second half
1 Basic activity (1.1+1.2)	**–1.5**	**1.5**	**1.9**	**2.2**
Long-term financial account				
1.1 Term	0.7	1.3	1.3	1.3
Nonresident	2.1	4.1	3.4	1.3
Residents	–1.4	–2.8	–2.1	0.0
Of which Households	0.4	–0.3	–0.2	0.2
Business sector	–1.4	–1.3	–0.8	0.4
Institutional investors	–0.5	–0.8	–0.7	–0.4
1.2 Current and capital account	–2.2	0.2	0.6	0.8
2 Short-term activity (2.1+2.2)	**1.2**	**0**	**–2.0**	**–1.0**
2.1 Short-term activity excluding banks	0.8	–0.1	–2.1	–3.1
Nonresidents	0.5	1.8	–0.8	0.7
Residents	0.3	–1.9	–1.4	–3.8
Of which Households	–2.6	–1.5	–0.8	–0.2
Business sector	3.0	–1.1	–0.7	–4.0
Institutional investors	–0.1	0.4	–0.3	0.3
2.2 Banks	0.4	0.1	0.2	2.1
3 Government and statistical differences	**0.3**	**–1.6**	**0.1**	**–1.2**

as the increased flexibility of the band of mobility and the completion of the liberalization process, which support an increase in risk to levels approaching those prevailing in the developed countries. It should be noted however that the decrease in exchange rate risk is not unique to the foreign-currency market in Israel, and also characterized the emerging markets and from the second quarter of the year, the euro against the dollar as well.

(ii) Foreign-currency activity of the different sectors

Israeli residents

During the period reviewed, Israeli residents purchased foreign currency to the net amount of $ 3.8 billion compared with $ 3.5 billion in the first half. Although net foreign currency purchases during the period reviewed were similar to the level in the first half, their composition differed. While long-term investments abroad decreased appreciably, a large increase in short-term instruments was recorded, mainly in the last quarter.

Israeli resident's short-term capital outflow totaled $ 3.5 billion in the period reviewed compared with $ 1.4 billion in the first half. As in the first half, their activity in short-term instruments was not uniform in direction. The net foreign currency purchases recorded with respect to certain instruments were partly offset by sales of foreign currency by means of other instrument.

Israeli residents' long-term investments abroad totaled $ 0.3 billion during the period reviewed compared with $ 2.1 billion in the first half. The large decrease in Israeli residents' long-term investments abroad derived mainly from the slower pace of global economic recovery, which was reflected by a more moderate rate of price increases in the international financial markets.

The expansion of households' foreign currency assets also slowed, after households had increased their accrual in mutual funds specializing in foreign currency assets during the first quarter, in response to the implementation of the tax reform and the reduction in the interest-rate differential. During the period reviewed households redeemed a net amount of $ 0.7 billion from the mutual funds specializing in foreign currency, compared with an accrual of approximately a billion dollars in the first four months of 2004. Concurrent with the redemptions from foreign-currency mutual funds, households continued to increase their accrual in mutual funds specializing in NIS assets. As a result, the foreign-currency mutual funds' share of total mutual fund assets fell during the period reviewed.

One of the factors supporting the stability of the NIS during the period reviewed was the business sector's low exposure to depreciation, after the sector had considerably reduced its exposure to this form of risk in the first half by employing a variety of measures, such as the redemption of foreign currency credit, an increase in foreign currency deposits, and foreign currency purchases via futures transactions and options (Figure 29).

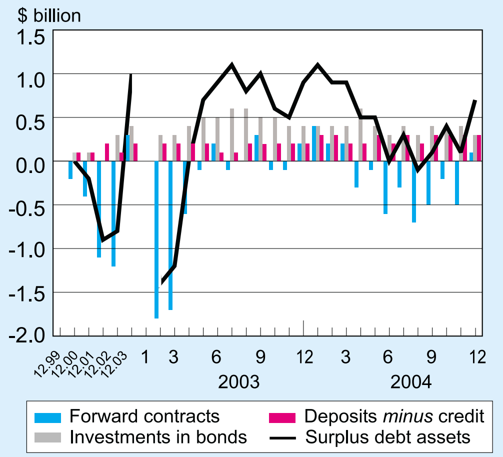
Nonresidents

Nonresidents sold foreign currency to the net amount of $ 2.1 billion during the period reviewed compared with $ 2.6 billion in the first half. This amount resulted from the decrease in long-term activity concurrent with the move to foreign currency purchases and sales by means of short-term instruments.

Nonresidents' long-term investments, which increased greatly during the first half, decreased during the period reviewed due to the slower pace of global economic recovery, which was reflected by a more moderate rate of price increases in the financial markets, especially in the US equities market. Nonresidents' long-term investments totaled $ 1.2 billion in the period reviewed compared with $ 3.2 billion in the first half. The decrease in nonresidents' long-term activity was apparent from the reduction in net direct investments, which partly resulted from the realization of investments, and from the smaller volume of issues by Israeli companies abroad. Due to the price rise on the Nasdaq during the last quarter however, the volume of Israel companies' issues abroad began to increase. The upturn in Israeli companies' issues abroad is only partially reflected in the data, because part of the transactions concluded in the last quarter were scheduled for implementation at the beginning of 2005.

During the period reviewed nonresidents' short-term NIS positions were maintained at levels close to zero, following a long period when nonresidents had held short-term positions favoring the NIS (Figure 34). The closure of nonresidents' NIS positions was centered largely in the second quarter and was part of a worldwide process of realizing short-term investments in emerging economies due to the rise in bond yields in the USA. The relative impact of nonresidents' short-term activity on developments in the foreign-currency market has increased greatly during recent years, and in 2003 actually determined the trends in the exchange rate. The decrease in such activity during the period reviewed therefore contributed much to the stabilization of the NIS.

Figure 34
Nonresidents' Surplus NIS Debt Assets, December 1999–December 2004



SOURCE: Bank of Israel Foreign Exchange Activity Department.

In the period reviewed nonresidents' NIS short-term position was held at relatively low levels, close to zero.

Box 4

Abolition of the Tax Discrimination between Israeli Securities and Foreign Securities

The tax reform that went into effect in January 2003 stipulated that the rates of tax on capital gains, income from dividend and interest income from foreign securities, rates currently amounting to 35 percent, will be equalized in January 2007 to those applying to investments in Israeli securities. For the pension funds, the advanced study funds and the provident funds, the equalization of tax rates implies an **exemption** from tax on earnings from foreign securities. In any event, the tax reform does not affect the insurance companies, which are currently exempt from tax on earnings from foreign securities,[1] and firms that pay a uniform rate of tax on earnings from Israeli and foreign securities.

Table 2
Rates of Tax on Capital Gains, Income from Dividend and Interest Income from Foreign Securities Before and After Implementation of the Reform

(Percent)

	Domestic securities		Foreign securities			
			Tax rates before reform		Tax rates after reform	
	Capital gains	Income from dividend/ interest	Capital gains	Income from dividend/interest	Capital gains	Income from dividend/interest
Pension and provident funds	0	0	35	35	0	0
Insurance companies	0	0	0	0	0	0
Private investors[a]						
Shares	15	25	35	35	15	25
CPI-indexed bonds	15	15	35	35	15	15
Unindexed bonds	10	10				

[a] Households and mutual funds.

Legislation was formulated during the period reviewed and completed towards the end of the year, for the purpose of expediting the reform to January 2005. Table 2 summarizes the rates of tax on earnings from foreign securities before and after the implementation of the tax reform.

The abolition of the tax discrimination between foreign securities and Israeli securities is likely to have conflicting effects. On the one hand, the Israeli investor's welfare will increase and his situation will improve, because the rate of tax that he will pay on investments in foreign securities will decrease. On the other hand, the growth in the relative feasibility of investment in foreign securities could lead to a redirection of sources from the Israeli capital market abroad and as a result, to a rapid depreciation of the NIS, a drop in prices in the Israeli capital market, and to a tendency by firms to raise capital abroad due to the difficulties that could arise in raising capital in Israel.

A Bank of Israel study examined the potential impact of the tax reform on the composition of the public's asset portfolio, with an empirical analysis of investors' investment patterns in Israel, and especially their tendency to invest in local assets.[2] The study focused on households' marketable securities portfolios, mutual funds and institutional investors, on which the main impact of the reform is expected to be apparent. The study found that as in many countries, Israeli investors display a strong tendency to invest in local equities: The rate of investment in local equities is much higher than that optimal rate of

[1] The insurance companies are exempt from tax only in the "profit-sharing" and "guaranteed yield" portfolio. In the nostro portfolio or in the general insurance portfolio, they pay corporation tax as well as an additional tax applying to financial institutions.

[2] Golan Benita and Haim Levy (2004), "Potential Effect of Elimination of Tax Discrimination between Israel and Foreign Securities on the Composition of the Public's Portfolio of Assets," *Foreign Currency Issues*, February 2004 (availabe on the Bank of Israel website: http://www.bankisrael.gov.il .

investment derived from yield and risk considerations. However, a similar tendency was not found in the composition of the investors' bond portfolio.

The findings of the analysis show that the outflow of capital abroad expected as a result of the reform totals $ 11.5 billion, of which $ 10 million consists of increased investment in foreign bonds and the remainder of increased investment in foreign equities. This is because the abolition of the tax discrimination has a greater impact on the relative feasibility of investment in bonds. The study also shows that the reform is expected to have a much greater impact (in relative and monetary terms) on institutional investors, mainly due to the fact that the current tax discrimination is more significant for these investors.

How will the redirection of investments abroad expected as a result of the tax reform affect the financial markets and the foreign-currency market?

One of the main factors affecting the developments expected in the financial markets and the foreign-currency market as a result of the reform is the pace of portfolio adjustment. An analysis of the investment patterns typical of local investors and the factors affecting the composition of their asset portfolio reveals a number of indicators showing that the pace of portfolio adjustment as a result of the reform is expected to be slow and gradual:

- Since the tax reform is expected to mainly affect institutional investors, their behavior following the reform is expected to be a key factor in the development of the financial markets and the foreign-currency market. Past experience shows that institutional investors have acted in a gradual and slow manner in the wake of regulatory changes. A striking example in this respect is the insurance companies' portfolio adjustment process (as stated, the insurance companies are exempt from tax on earnings from foreign securities) following the removal of the restriction on investment in foreign assets. In this case, the portfolio adjustment was gradual and staggered over a number of years: Between 2001 and 2003, the insurance companies' increased their rate of investment in equities by 11 percent.
- Another factor that could moderate capital outflows abroad as a result of the reform is the directive requiring the insurance companies and provident funds to publish returns at a monthly frequency (without noting standard deviation). This directive is expected to adversely affect institutional investors' motivation for international diversification of the portfolio, because the directive's impact on portfolio management will derive partly from short-term considerations while the motive for international diversification is usually based on long-term motives. As an example, a temporary appreciation of the exchange rate could delay an increase in the rate of investment abroad as a result of the reform. This is despite the fact that long-term considerations would make portfolio adjustment desirable.
- The pace of portfolio adjustment will also be affected by price developments in the financial markets. A rapid outflow of capital from the local market could lead to over-shooting in the prices of local securities and as a result, investment in them will become attractive for both local and foreign investors – a process that could continue until the attainment of a new state of equilibrium. Such a development could moderate the rapid pace of adjustment of the portfolio, because apart from long-term considerations supporting international portfolio diversification, investors also act out of short-term considerations, such as the relative attractiveness of asset prices.
- Past experience shows that households invest abroad mainly via mutual funds. Since the capital market is today highly sensitive to the aggressive marketing of financial products, unlike in the past, it can be assumed that the marketing efforts of mutual funds specializing in foreign securities in connection with the reform will be moderate.

e. Global developments

Global growth in 2004 is expected to reach 5 percent, the highest rate for the past three years. One of the factors contributing to growth in 2004 was the expansion in world trade, which according to the IMF amounted to 8.8 percent. Following the rapid growth in activity in 2003 and the first half of 2004, the pace of growth gradually fell. During the second half of 2004, the growth rate slowed but remained high from an annual perspective. The slower growth resulted *inter alia* from high oil prices, which reached a peak in October.

The USA is continuing to lead global growth, with a GDP growth rate that is expected to amount to 4.4 percent in 2004 following growth of 3 percent in 2003. For the last quarter of 2004, growth of 4.0 percent is expected following growth rates of 3.7 percent in the third quarter and 3.3 percent in the second quarter.[8] Among the factors behind the positive trend in the USA are the expansion in domestic demand and the rise in private consumption there. Positive indicators were also obtained from the American labor market in the course of the year: Apart from a continued increase in the number of employed persons, the number of weekly labor hours and wages per work hour also rose. Favorable employment reports and the increase in consumers' purchasing power contributed to a growth in domestic demand. Initial indicators for the fourth quarter, from the labor market and indicators of investment and price developments, point to further economic expansion. The low level of the dollar and its considerable weakening during the year helped American exports, although the US trade deficit is still burgeoning and posing a threat to further growth. The Federal Reserve Bank raised its interest rate by one and a quarter percent during the year, to a level of 2.25 percent.

In the eurozone, growth has recently consolidated despite the forecasts of slow growth in 2004. The growth rate is still slow compared with the global rate, and the OECD's latest forecast of 1.8 percent growth in the course of the year. In the third quarter, the annualized growth rate in the eurozone amounted to 1.2 percent. As economic activity in Europe expanded, the inflation rate rose to a level slightly below the upper limit of the range targeted by the European Central Bank, and actual inflation in 2004 amounted to 1.9 percent. Leading the rise in the consumer price index were

[8] All rates in this section are in annual terms.

Table 3

Macroeconomic Developments in Selected Countries, 2004 to 2006

(Percent)

		2004	2005	2006
Growth	USA	4.4	3.3	3.6
	Eurozone	1.8	1.9	2.5
	Japan	4.0	2.1	2.3
	China	9.2	8.0	8.5
	Russia	6.4	5.5	5.5
	Brazil	4.5	3.6	3.5
Inflation	USA	2.0	1.8	1.7
	Eurozone	1.9	1.7	1.8
	Japan	–2.3	–1.3	–0.3
	China	4.2	4.0	4.0
	Russia	11.0	10.5	9.5
	Brazil	7.3	6.0	5.0

The data are estimates and forecasts from the OECD Economic Outlook, October 2004.

oil prices and indirect taxes. Higher inflation rates were recorded in Greece, Spain and Portugal. The continued appreciation of the euro is holding down the price increases in Europe. Growth in Europe is supported by the expansion in global demand and the improvement in industrial output, although consumer confidence and sales are still low. Unemployment was and remains one of the major problems in Europe. The unemployment rate forecast for 2004 is 8.8 percent, while Spain, Germany and France are experiencing even higher rates.

In Japan, the pace of growth slowed in the course of the year but remained at a high level of 4.0 percent. The slacker pace of growth derived from the decrease in Japan's exports, especially to the Chinese market. Other factors behind the slower pace of growth were the slowdown in exports by Japanese high-tech industries and reduced investment in fixed assets. Positive developments that are enabling Japan to sustain its economic growth are the improvement in business-sector profitability and the rise in private consumption. Deflation of 2.3 percent is expected in 2004, a situation that is prompting the Japanese central bank to maintain a policy of monetary expansion.

Among the emerging markets, China is notable for its rapid growth. Russia's economy is still expanding rapidly due to the rise in oil prices, the growth in domestic demand and the continuation of an expansionary fiscal policy. The growth rate in South America is expected to reach over 4 percent in 2004. In Brazil, growth is spreading to all sectors, and the economy has become less vulnerable to external shocks.

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

a. Expected changes in the main variables affecting inflation

(i) Global developments

Global growth is expected to continue during the coming years, but at a more moderate rate than that recorded in 2004. Oil prices are expected to continue affecting growth (see Box 3). The growth rate forecast for the developed economies is 2.9 percent in 2005 and 3.1 percent in 2006, and the rate of increase in the consumer price index during the next two years is expected to reach 1.7 percent. It is feared that a further weakening of the dollar due to the size of the US current account deficit, following its heavy downturn in 2004, will have the effect of slowing the increase in world trade and harm Far East economies, which are currently expanding rapidly and fueling global growth.

The inflation rate in the developed economies forecast for the next two years is 1.7 percent. The Federal Reserve Bank is expected to raise its interest rate to a level of 3.5 percent at the end of the year. In the eurozone, the inflation rate is expected to fall during the next two years as a result of the strengthening of the euro, surplus production capacity and stable wage levels. The European Central Bank is expected to start raising its interest rate only in the third quarter of 2005. In Japan, since deflation is expected to continue during the coming years, the interest rate is expected to remain unchanged in the coming year. Only in 2006 is inflation expected to balance, with deflation of 0.3 percent.

In the emerging economies, further rapid growth is expected. China, whose economy has recently over-heated, is expected to increase the flexibility of its exchange rate to some extent, and to maintain a contractionary policy during the coming year. In Russia, the growth rate is expected to fall off slightly due to a forecast slowdown in exports and a rapid expansion in imports, although Russia will continue to benefit from the rise in oil prices and other raw materials. In Brazil, which recently benefited from an increase in private investment and private consumption, the growth in imports is expected to exceed the growth in exports, with the result that the current account surplus is expected to contract in 2005 and 2006.

(ii) Fiscal policy

The government is expected to end 2005 with a budget deficit of 3 percent of GDP, in line with the targeted deficit set in the Budget Law. This is exclusive of the budgetary expenditures that will be involved in implementing the Gaza Strip disengagement plan. Although the revenue forecast in the draft budget for 2005 that was submitted to the Knesset is estimated as too high, the budget also includes spending items that are not expected to be fully implemented. The government must therefore maintain a stringent attitude towards budgetary discipline, and should not transfer surplus amounts to other expenditure items in the course of the year.

(iii) Real activity

The economy is expected to continue expanding in 2005, although at a slower pace than in 2004. The GDP growth rate is forecast at 3.5 percent following 4.2 percent growth in 2004, and business-sector product is expected to rise by 4.5 percent in 2005 compared with 6 percent in 2004. This forecast is based on the assumptions that fiscal restraint will be maintained and that the housing industry will continue to develop at a slow pace. Factors responsible for the more moderate pace of growth are the slower rate of expansion forecast for exports and private consumption, which will be partly offset by a more rapid growth in investment in the principal industries. Part of the incremental growth during the period reviewed resulted from the end of the deep recession that had been prevailing in the economy, and from the low level of activity. Against this background, some degree of slowdown in the rate of growth in GDP and domestic demand is foreseeable and natural.

Exports of goods (excluding diamonds) are expected to rise by 9 percent in 2005 following an increase of 16 percent in 2004. The slower pace of export growth in 2005 will result from the forecast of a slower pace of expansion in world trade, which is expected to increase by 7.2 percent compared with 8.8 percent in 2004. Another factor that could slow the pace of export growth is the real appreciation that is expected after the real depreciation of the last two years. This result is typical of a period of economic growth, in which domestic demand rises, leading to an increase in the prices of domestic product, and autonomous capital flows to the economy expand. The more moderate rate of increase in private consumption forecast for 2005 derives from the somewhat slower rate of increase expected in disposable income. However, domestic investment is expected to expand in 2005, due to the consolidation of economic growth and the lag in investment that follows a turnaround in business cycles.

(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 small surplus of long-term capital flow to the economy is expected in 2005, reflecting underlying pressure for an appreciation of the NIS. This forecast is based *inter alia* on assessments by business-sector elements that long-term capital inflows to the economy will be maintained on a scale similar to that in 2004.

Nonresidents' long-term capital inflow is expected to be partly offset by Israeli residents' long-term capital outflow, principally by institutional investors that are expected to increase their investments abroad as a result of the abolition of the tax discrimination between Israeli and foreign securities (Box 4), and as part of a long-term trend of portfolio adjustment. The process of portfolio adjustment resulting from the abolition of the tax discrimination is expected to be gradual and staggered over a long period. This assessment is based on the assumption that local investors will not change their investment patterns as a result of the reform, However, the reform in itself could catalyze a change in these patterns, meaning that the natural tendency for domestic investment will decrease, a development that could increase the reform's impact on capital outflow.

With respect to short-term activity, the domestic forces affecting short-term capital flows are expected to weaken in comparison with 2004. This assessment is based on the fact that exchange rate risk is at a low level, and the impact of geopolitical developments on short-term capital flows has weakened compared with previous years. However, short-term capital flows will still be influenced by the global financial environment, particularly cross exchange rate developments in the principal currency blocs, and by international financial institutions' tendency to invest in emerging economies.

The stabilization of exchange rate risk at a low level is a striking development in view of the structural changes in the foreign-currency market, which support an increase in this risk. An analysis of the range of local factors affecting exchange rate risk indicates that the local developments expected in 2005 do not support a substantial change in this risk. Indeed, experience from 2004 shows that the instability typical of the exchange rates of the major currencies is only partially reflected in NIS exchange rate risk.

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

(i) Assessments of future inflation

Inflation in 2004 amounted to 1.2 percent following a price decrease of 1.9 percent in 2003. Even though the pace of inflation increased to within the targeted range of price stability, the inflation rate in 2004 was lower than capital market expectations and various forecasts, and lower than the rate derived from simulations conducted by means of econometric models at the Bank of Israel at the end of 2003 and in the first half of 2004. All this was despite the fact that the Bank of Israel cut the interest rate to a significant cumulative extent, and particularly the fact that the different assessments and the Bank of Israel simulation were based on the assumption that the interest rate would remain largely unchanged, and would be reduced by an only moderate extent or possibly even raised in the last quarter of the year. A major reason for the difference between inflation forecasts and the actual development of inflation was the assessment that failed to materialize regarding a depreciation of the dollar exchange rate, which as is known has a strong impact on inflation in Israel. This assessment was based on the assumption that the short-term capital outflow resulted from expectations of contraction of the interest-rate differential with the USA would exceed long-term capital inflow due to the global growth and the financial stability in Israel, which led to an appreciation. Moreover, the models were estimated on the basis of past data, and therefore failed to adequately perceive the downturn in the inflation environment and the increased credibility of monetary policy.

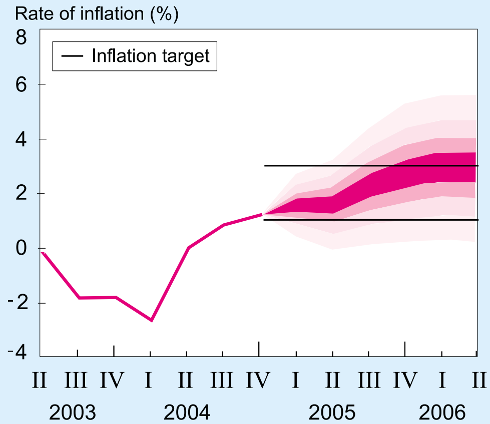
Inflation in 2005 is expected to rise to the range of between 1 and 2.5 percent, according to inflation expectations derived from the capital market for one year ahead, private forecasters' assessments and the Bank of Israel Companies Survey. Most of the assessments are based on expectations of an average 3.5 percent nominal depreciation of the NIS (concurrent with assessments that a real appreciation will occur in the coming year, as previously mentioned). The different assessments are also based on assumptions that fiscal policy will be directed at attaining the defined objectives, and that the Bank of Israel's interest rate will be raised by approximately one percentage point from the second quarter of 2005.

Inflation Assessments for 2005 (percent)

	Target	Capital market	Private forecasters	Companies Survey
Average	2	1	2	2.1
Range	1–3		1.7–2.5	

The impact of the cumulative interest rate cuts during the last two years and the short-term real interest rate that is considerably lower than the interest rate that would be expected to prevail in the economy at a time of sustained growth could lead to a rise in

Figure 35
Actual and Expected Inflation, 2003–2006 (cumulative increase in prices over previous four quarters)



SOURCE: Bank of Israel Research Department.

The areas of values of future inflation around the specific forecasts are indicated in shades of magenta. The color becomes paler the further the inflation value is from the specific forecast. The forecast for 2005 and 2006 are based on a rising interest-rate path and an unchanged exchange rate.

inflation during 2005. According to Bank of Israel assessments, if the exchange rate remains unchanged and the monetary interest rate is left at its present level, it is highly likely that inflation will exceed the upper limit of its targeted range. In order to adhere to the inflation target, it will therefore be necessary to raise the key interest rate to an extent that is dependent on extent of rate hikes abroad, the situation with respect to real activity, the fiscal situation and other factors that were described above (Figure 35).

(ii) The balance of inflation risks

The exchange rate is a key element of risk inherent in the price developments that will emerge during the coming year. The development of the exchange rate, which is difficult to predict, could generate an upward pressure on prices although the opposite situation could occur, in which the appreciation recorded in the last half year will continue and powerful forces exerting a downward pressure on prices will emerge. Capital flows may therefore be diverted outside the economy, leading to a depreciation, as a result of the expectations of a further interest rate hike in the USA and a contraction in the interest-rate differential with Israel, which to date has failed to offset the forces acting towards an appreciation of the NIS. The abolition of the tax discrimination between Israeli securities and foreign securities (in January 2005), which will increase the relative feasibility of investment in foreign assets, will also support an outflow of capital.

However, since the development of the exchange rate of the NIS against the dollar is heavily dependent on developments in euro and dollar cross exchange rates, the worldwide weakening of the dollar, which is expected to continue, could lead to an appreciation of the NIS. In addition, the growth expected in the developed countries, particularly in the USA, is increasing the chances of an upturn in the issues markets. Stock issues by Israeli companies abroad and nonresidents' increased flow of direct investment in Israel could be reflected by capital inflow, and thereby exert pressure for an appreciation of the NIS. This is also due to the improvement in Israel's geopolitical situation and international financial institutions' growing tendency to invest in emerging economies.

In addition to developments in the exchange rate, which as described above could affect inflation in both directions, a number of other factors could lead to an upsurge in inflation despite the low inflation environment existing today:

1. The growth in the economy that is expected to continue in 2005 could weaken the downward pressure on prices deriving from the output gap, and possibly even lead to an upturn in inflation.

2. Attention should be paid in this respect to the growing signs of a further increase in real wages, not only in the high-tech industries, which are mainly affected by the global situation, but also in sectors that are less affected by competition. A rise in real wages over and above the growth in productivity has a direct impact on price increases.

3. In the fiscal arena, the budgetary framework was preserved in 2004 as stated, and the budget deficit fell appreciably in comparison with 2003. It is important to sustain the efforts that are being made in this direction, and to reject pressures to expand the budget that may arise due to the composition of the new coalition and the implementation of the disengagement plan from the Gaza Strip, which involves budgetary expenditures that have so far not been included in the 2005 budget. Fiscal stability is important in order to maintain policy credibility in the eyes of the public. Such credibility affects the stability of the financial environment and therefore the opportunity for achieving price stability, as well as the Bank of Israel's ability to manage an expansionary monetary policy.

The Bank of Israel will continue to regularly assess developments and adjust the interest rate to the extent that it believes to be necessary in order to attain the inflation target.

Appendix 1

Press releases regarding the Bank of Israel's monetary policy monthly programs
July 2004–January 2005

The Bank of Israel's Interest Rate for July 2004

The Bank of Israel today announced that in the context of its monetary program for July 2004, the interest rate will be unchanged at 4.1 percent. From the end of 2002 to April 2004 the interest rate was cut by a cumulative 5 percentage points.

The decision to leave the interest rate unchanged for the third month in succession is based on the expectation that inflation one and two years forward will follow a path consistent with that of price stability, i.e., 1–3 percent a year. Inflation expectations derived from the capital market and the predictions of private forecasters for the next twelve months are around 2 percent.

In addition, developments in the capital market, and in particular in the government bond market and the foreign-currency market, give strong support to the decision not to change the interest rate for July. In the government bond market the upward trend in yields evident since the beginning of the year has halted, and since the beginning of June they have actually declined slightly. This change, which can be explained by the increasing likelihood that the government will meet its deficit target of 4 percent of GDP in 2004 and by surplus borrowing by the government in the first half of the year, also led to a halt in the widening of the differential between the yield on government bonds and the Bank of Israel's interest rate. This widening differential is inconsistent in the long term with price stability. The foreign-currency market is calm, with the main developments being a certain strengthening of the NIS and, recently, relatively moderate fluctuations, chiefly connected with external factors; no clear market trend is evident, despite the latest occurrences in the political arena.

The decision not to change the interest rate for July means that short-term real interest continues at a very low level of about 2.2 percent,. This policy is intended to continue supporting economic recovery, as long as the Bank of Israel assesses that this is consistent with price stability, which is one of the conditions necessary for the creation of sustained growth.

It is important that the government continue to maintain the credibility of its macroeconomic policy that focuses on the long-term budget targets that it set, that it persist in carrying out structural reforms such as those in the labor market, public services, the Ports Authority and the financial markets, and that it ensure that the infrastructure investment program is executed at a faster pace. The right decisions in the discussions on the budget for 2005 that are scheduled to start in July will play a significant role in the assessment of whether the economy's current growth is sustainable.

The differentials between the Bank of Israel's interest rate, both current and expected, and those of other central banks continue to contract, and the Bank of Israel's interest rate is still lower than that of the central banks of some advanced economies (the UK, Australia and New Zealand). This trend supports short-term capital outflow from Israel, and the balance in the foreign-currency market is maintained at present by long-term capital inflow accompanying economic growth.

The Bank of Israel's Interest Rate for August 2004

The Bank of Israel today announced that in the context of its monetary program for August 2004, the interest rate will be unchanged at 4.1 percent. From the end of 2002 to April 2004 the interest rate was cut by a cumulative 5 percentage points.

The decision to leave the interest rate unchanged for the fourth month in succession is based on the fact that assessments of inflation one and two years forward—according to inflation expectations derived from the capital market and the predictions of private forecasters—are consistent with the price-stability target, i.e., 1–3 percent a year. The background of financial stability on the one hand and the continued increase in real activity on the other were also taken into account in arriving at the decision to leave the interest rate unchanged.

The continued financial stability in Israel is reflected by the markets. The foreign-currency market is stable, with the net outflow of short-term capital offsetting the net inflow of long-term capital; the exchange rate continues to move without wide fluctuations and with no discernible trend; exchange-rate risk continues to decline; and bid-offer spreads, after falling somewhat, remain low. For the third month in succession yields in the bond market are relatively stable, with some actually falling to some extent, after following an upward trend at the beginning of the year. Treasury bill yields, mainly for a year, are still on a downward path, apparently due to market players' assessment (similar to that of private forecasters) that if short-term nominal yields are going to rise, it will not be in the near future, despite the fact that the interest rate in the US has started rising and is expected to continue to rise. The fact that nominal and real short-term interest rates are relatively low and stable is also relevant. Since April short-term real interest has been particularly low at around 2.5 percent. The current interest levels, together with continued expansion of economic activity, explain the rise in the money supply, which reflects the contribution made by an expansionary interest-rate policy to the economy's real activity, provided that in the Bank of Israel's view this remains consistent with price stability.

The recovery in real activity is continuing, albeit more slowly than in the first quarter of the year as could have been expected. At the same time the recovery is spreading to most industries, with a rise in the number of those actively seeking work and in the number of employees.

It is important that in the discussions on the budget for 2005 the government continue to adhere to the long-term budget targets that it set—a deficit reducing to 3 percent of GDP and government expenditure rising by no more than 1 percent. Meeting these targets, together with the assessment that the government will stick to the 2004 budget targets and that the deficit in 2004 will be about 4 percent of GDP, will result in a return to a downward path of the debt burden in the GDP from 2005. Persevering in this policy while continuing to implement structural reforms and advancing the infrastructure investment program more rapidly will preserve and even strengthen the credibility of the government's macroeconomic policy, and increase the probability that economic growth will become sustainable in the longer term..

The Bank of Israel's Interest Rate for September 2004

The Bank of Israel today announced its monetary program for September 2004, according to which the Bank's interest rate will remain at the level of 4.1 percent, following cumulative reductions of 5 percent between the end of 2002 and April 2004.

The Bank explains that its decision not to change the rate, for the fifth consecutive month, is based on the fact that assessments concerning the development of inflation for a period of one to two years ahead, from market-derived inflation expectations and various forecasts of private forecasters, are consistent with the inflation target, 1 percent to 3 percent per year. This is in spite of some increase in these measures during the past month. Continued stability and calm in the financial markets, along with approval by the Government of its budget for 2005 in a manner that confirms its fiscal strategy as determined last year, and continued recovery in real economic activity, are the background for the decision not to change the interest rate for September.

Concerning the continued stability in the financial markets, most noteworthy are the foreign exchange market, the bond market and the Treasury bill market. Thus, continued calm in the foreign exchange market is expressed in relatively low trading volumes and heterogeneous activity in the market, i.e., the presence of demands and supplies on the basis of varied needs and expectations , that largely offset each other. As a result, capital outflows and inflows are balanced and the exchange rate continues to develop without large swings or a trend, with trading spreads that remain low. The behavior of the foreign exchange market is especially notable in light of the contraction in the interest rate differential between the NIS and the dollar, and the increase in the (negative) differential between the NIS and the pound sterling. In the government bond market, both non-linked ("Shachar") and index linked ("Galil") yields have been relatively stable for the past four months, after trending higher during the first four months of the year. Yields on short term bills ("makam") reflect the market's view—similar to that of private forecasters—that an increase in Shekel interest rates expected by them will be later than was expected by them in recent months.

The commitment of the government to the fiscal strategy adopted last year has been expressed in its passing of the 2005 budget which is based on a fiscal program through the end of the decade- a budget deficit which does not exceed three percent of GDP and an increase in government expenditures of no more than one percent in real terms annually. This constitutes a necessary basis for continued economic activity and putting the Israeli economy on a path of sustainable growth in the future. The same is true of having actual budgetary performance in 2004 meeting the budget planned. It is important that the 2005 budget which is passed by the Knesset be consistent with the fiscal strategy of the government. Continuation of this policy will eventually lead to a reduction in the weight of the government debt relative to GDP and lower long-term interest rates, and will contribute towards keeping short-term interest rates low. This will lay the foundations for private sector led growth and continued financial stability.

The recovery in real economic activity continues, including a reduction in government expenditures relative to GDP and expansion of the business sector, by 5 percent in the last four quarters. The Bank of Israel emphasizes that continued growth is dependent on positive developments in private sector investment. This, in turn is dependent on macro-economic policies—fiscal and monetary—which make resources available for private sector activities and support low short- and long-term real interest rates.

The Bank of Israel's Interest Rate for October 2004

The Bank of Israel today announced that in the context of its monetary program for October 2004, the interest rate will be unchanged at 4.1 percent, for the sixth month in succession.

The decision to leave the interest rate unchanged is based on the fact that assessments of inflation one and two years forward—according to inflation expectations derived from the capital market and the predictions of private forecasters—has been within the price-stability target range, i.e., 1–3 percent a year, for a considerable period. The background to the decision is ongoing stability in the financial markets, the expectation that the fiscal strategy being pursued in 2004 will continue—following the confirmation of the 2005 budget by the government—and the recovery in real activity.

Developments in the financial markets in the last six months are consistent with the stabilization of the Bank of Israel interest rate at 4.1 percent in that period, following its steady reduction month by month from the end of 2002 to April 2004 by a cumulative 5 percentage points.

Thus, stability in the foreign-currency market persisted during the last six months, with the exchange rate continuing to move without wide fluctuations and with no discernible trend, and with low bid-offer spreads. This took place against the backdrop of the continued narrowing of the interest-rate differential, both actual and expected, especially that between the NIS and the dollar. In the government bond and Treasury bill markets too calm has prevailed during the last half year. Nominal yields on government bonds (of the *Shahar* type) and on CPI-indexed bonds (of the *Galil* type) are stable, after following an upward trend during the first four months of the year. In the Treasury bill market the three-month yield has been maintained at close to the Bank of Israel interest rate, while the one-year yield declined by about half a percentage point in the last six months. Yields on the Treasury bill market thus reflect expectations of *investors* as well as of *private forecasters* that the interest rate will remain stable for some time and will then rise.

According to Bank of Israel assessments the performance of the 2004 budget continues to be consistent with the budgetary targets set. At this stage it is important that the Knesset approve the proposed 2005 budget decided upon by the government. This budget expresses a fiscal strategy based on budget targets up to the end of the decade, according to which the deficit will not exceed 3 percent of GDP, and government expenditure will not rise by more than one percent a year in real terms—a policy that will lead to the reduction of the government debt burden and of the cost of servicing the debt. This is the foundation required for the reduction of long-term interest and for the return of the economy onto a path of sustained growth, led by the business sector.

The recovery in real activity is continuing, with a decline in the share of government expenditure in GDP and a considerable rise in business-sector product. At the same time the number of employees has risen, as have the rate of employment and the rates of participation in the labor market—which have halted the upward trend in the rate of unemployment. Concurrently the balance of payments has come close to being in balance.

It is essential that the government persist in important structural reforms—in the ports, the financial markets, the labor market, and the public services such as in the local authorities. These steps, together with the continuation of the macroeconomic policy, monetary and fiscal, and with vigorous management of infrastructure investment, will release resources for private-sector activity and will help to cause a positive turnaround in investment in the principal industries, and thereby ensure the conditions for sustained growth.

The process of lowering the interest rate until its convergence to its current level in the last half year is reflected among other things by a low level of real interest, in particular short term, and by a rise in the money supply. This interest-rate policy provides important support for the continued recovery of real activity based on financial stability in general and price stability in particular.

The Bank of Israel's Interest Rate for November 2004

The Bank of Israel today announced that in the context of its monetary program for November 2004, the interest rate will be unchanged at 4.1 percent for the eighth month in succession.

The decision to leave the interest rate unchanged is based on assessments of inflation one and two years forward—according to inflation expectations derived from the capital market and the predictions of private forecasters—which for a considerable period have been within the price-stability target range, i.e., 1–3 percent a year, and which have been around the mid-point of that range in the last few months.

The stability in the financial markets evident in the last few months strengthens the ability of the Bank of Israel's policy to maintain price stability at the current interest level. The foreign-currency market continues to be stable—reflected in low bid-offer spreads, with the exchange rate continuing to move without wide fluctuations and with no discernible trend. Since the beginning of the year the NIS depreciated moderately, by between 1 percent and 1.5 percent, against the dollar, the euro and the currency basket. This took place against the backdrop of the continued narrowing of the interest-rate differential, especially that between the NIS and the dollar. In the government bond and Treasury bill markets too calm has prevailed during the last half year, reflected mainly in steady yields, with a slight downward trend.

Nevertheless, if the current situation persists, several developments are likely to affect the behavior of the financial markets and the future path of inflation, and will necessitate a change to the present interest-rate policy in order to preserve price stability as required by the target.

First, the Knesset must without delay approve the proposed 2005 budget along the lines decided upon by the government, including the deficit and expenditure targets. This is essential in order to remove as quickly as possible the uncertainty in this area that derives from the current political uncertainty. Adherence to the deficit and expenditure targets is a prerequisite for halting the rise in the government debt burden and for maintaining interest rates close to the norms abroad, which are required to support economic growth. It is important that the process of approving the budget be transparent, and that it show the overall budget picture. Any slackening of the fiscal discipline that the government is observing strictly and that is embodied in the proposed 2005 budget would cast a shadow over the future preservation of price stability at the current short- and long-term interest rates.

Second, the realization of the assessments in the financial markets, including the predictions of the private forecasters, that the process of raising the interest rate in the US will continue, and with it the narrowing of the interest differential between the NIS and the dollar, makes it more likely that a change in the NIS interest rate, when it occurs, will be upwards, in order to maintain price stability.

Third, global assessments regarding the continued rise in fuel prices—which hitherto has not affected price developments in Israel—introduce an element of uncertainty about domestic prices, and are likely to result in the need for a higher NIS rate of interest than that currently prevailing.

The current interest-rate policy supports continued recovery in real activity that is based on overall financial stability and price stability in particular. The backdrop to this is a lower level of real interest, especially short-term, than in the past, and a continued rise in the money supply, which does not augur well for price stability.

The Bank of Israel's Interest Rate for December 2004

The Bank of Israel today announced that in the context of its monetary program for December 2004, the interest rate will be reduced by 0.2 of a percentage point, to 3.9 percent.

The decision to lower the interest rate is based on the Bank's assessment that the cumulative economic developments in the last few months indicate that it may be possible to continue maintaining price stability at a lower interest rate than that prevailing hitherto. This is consistent with the Bank of Israel's policy of supporting the continued recovery in real activity at the lowest possible short-term interest rate by preserving price stability, thereby contributing to financial stability.

Several developments that occurred in the last few months, since the Bank of Israel's interest rate was first reduced to 4.1 percent, indicate that Israel's economy may currently be in a situation in which price stability can be maintained at a lower rate of interest:

Inflation: Although assessments of inflation twelve months forward—both inflation expectations derived from the capital market and predictions of private forecasters—have been at the center of the price-stability target for several months, *the CPIs published in the last few months indicate monthly price rises close to zero*. Furthermore, according to the forecasters this situation is expected to persist in the coming months. It thus seems that *the picture that emerges within a one-year horizon is one in which although the forecast price increases are likely to take place, this will not be in the near future*.

It should be noted with regard to prices that real activity continues to recover, but the current slower rate of recovery means weaker pressure on prices.

The changes in the public's financial asset portfolio also shows that the public is not concerned about the possibility of continued price rises, and this is reflected by the persistent decline in the share of CPI-indexed assets, and by the absence of a tendency to increase the share of exchange-rate-indexed investments.

The foreign currency market: *The assessment is becoming more firm that with the steady narrowing of the interest differential between the NIS and the dollar, which is expected to continue, in the present circumstances the economy can cope with smaller interest-rate differentials than in the past without causing a deviation from the path of price stability.* Moreover, the narrowing of the interest-rate differentials has until now not been reflected by the behavior of the exchange rate, which is currently affected mainly by the worldwide weakness of the dollar. The various indicators derived from the financial markets point to the possibility that the contraction of the interest-rate differentials will eventually be expressed by a certain rise in the exchange rate, but not in the near future. In this context it is relevant to note that for some time the economy has benefited from long-term capital inflow of about $ 4–5 billion a year, and it appears that this is likely to continue in the future. The foreign currency market has been operating for a while at low bid-offer spreads, with low volatility, and at a relatively low trade volume.

Fiscal policy: *The slow persistent decline in yields in the Treasury-bill and government-bond markets shows that the financial markets continue to consider the long-term fiscal discipline adopted by the government—expressed by the budget targets for 2005 and thereafter—as credible.* In this context it is essential for the Knesset to pass the 2005 budget, along the lines confirmed by the government, without delay, and thus remove the uncertainty that still lingers in this area.

The government must take special steps to boost economic growth. Heading the list is organizing priorities so that infrastructure investment moves up the scale. In this way the government would support investment in the economy in general, and in particular would help the construction industry, whose growth is still lagging behind that in other principal industries. In addition, the structural changes in the capital market recommended by the Bachar Committee and confirmed by the government must be implemented. This would ease the financing constraint of long-term investments and would complement the policy of speeding up the rate of infrastructure investment.

The Bank will continue to monitor closely world wide developments in exchange rates and capital flows into and out of Israel. These, together with the preservation of the credibility of fiscal discipline, could affect the Bank's ability to keep short-term interest rates low to encourage growth while maintaining price stability.

The Bank of Israel's Interest Rate for January 2005

The Bank of Israel today announced that in the context of its monetary program for December 2004, the interest rate will be reduced by 0.2 of a percentage point, to 3.7 percent. The decision to lower the interest rate is based on the Bank's assessment that the expected rate of inflation next year is within the range of the government's target of price stability, i.e., 1-3 percent a year.

Developments in the foreign currency market, the Treasury bill market, and the government bond market also help to make it possible to continue preserving price stability at a lower interest rate:

- **The foreign currency market is stable**. The exchange rate continues to be relatively stable. Since the beginning of the year the NIS appreciated by about one percent against the dollar, and depreciated by about one percent against the currency basket. Bid-offer spreads remain low, and Israel's general country risk premium and the risk premium of the foreign currency market also continue to be low.
- **The Treasury bill market is calm, and has shown a persistent reduction in yields in the last few months.** Thus, the yield on one-year Treasury bills which reached its 2004 peak in May, at 5.2 percent, is currently down to only 4.3 percent.
- **In the government bond market, for both CPI-indexed and unindexed bonds, the decline in yields to all terms persists**. For example, the yield on unindexed 10-year government (*Shahar*) bonds went down from 7.9 percent in May to 7.3 percent in December, and in the same period the real yield on indexed 10-year government (*Galil*) bonds declined from 4.4 percent to 4.1 percent. This decline is an indication of the public's confidence that the government will continue to observe fiscal discipline. In this context the great importance of the Knesset's approval of the 2005 budget along the lines confirmed by the government must be stressed yet again.

Despite the above, the uncertainty deriving from the markets' potential reaction to the large deficits in the US budget and current account—that is likely to affect the future level of the interest rate and growth in the US, and hence also, directly and indirectly, Israel's economy—cannot be ignored. Nevertheless, Israel's economy is continuing along a path of growth, and additional jobs are being created, and there are signs of a slow downward trend in unemployment, with a rise in the rate of participation in the labor force. Investments still constitute the Achilles' heel of the growth process. In this context it would be appropriate to afford special attention to providing renewed impetus to infrastructure investment.

In the last two years the Bank of Israel has changed the focus of its interest-rate policy so as to support economic growth. Within this framework the Bank reduced the interest rate from 9.1 percent in December 2002 to the current rate of 3.7 percent. Concurrently, real interest came down from about 7 percent to its present level of 2-3 percent. This process also had a significant effect on the money supply: in the first half of 2003 the change in the money supply, with the high interest rate, was negative; as the interest rate was reduced, the money supply started expanding from the second half of 2003, and in 2004 the rate of change increased till it reached 20 percent a year in the second half of the year. Against the background of fiscal discipline observed in the last two years, the process of lowering the short-term interest rate by the Bank of Israel contributed to the reduction of medium-term and long-term yields, as well as to the rise in the stock market. These developments help to lower the cost of sources of finance, and thereby have positive implications for the recovery of real economic activity.

The Bank of Israel will continue to monitor closely: the effects on capital flows of the contraction of the differential between its interest rate and that of the US Federal Reserve and the contraction of the yield gaps between US and Israeli government bonds; the trends of capital flows to and from emerging markets; and changes in the risks attributed to Israel's economy by Israeli and foreign investors. These risks are still at a low level, enabling the continued contraction of the differentials between Israel's interest rate and those abroad, without disturbing the equilibrium of the foreign currency market.

Appendix Table 1
Range of Monthly Change in CPI, Standard Deviation of the Monthly Change, and Annual Inflation Rate, 1993–2004

(percent)

	Annual rate of inflation (1)	Largest monthly change (2)	Smallest monthly change (3)	Difference between largest and smallest 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
2004	1.2	1.1	–0.2	1.3	0.37
Second half of 2003	–2.8	0.2	–0.7	0.9	0.32
First half of 2004	2.8	1.1	–0.2	1.3	0.48
Second half of 2004	–0.4	0.2	–0.2	0.4	0.16

[a] The deviation of this figure from the long-term trend derives from the steep rise in the exchange rate in December 1998, which constituted only a temporary shock.

Appendix Table 2
Interest Rates in Israel and the US, 1998–2004

End of year	Central banks' interest rates: Israel – Change	Israel – Interest rate[a]	US – Change	US – Interest rate	Differential between central banks' interest rates	Yield spread between US and Israel 10-year government bonds[b]
	Percentage points	%	Percentage points	%	Percentage points	Percentage points
1998		13.5		4.75	8.75	
1999	–2.3	11.2	0.75	5.50	5.70	–3.05
2000	–3.0	8.2	1.0	6.50	1.7	–4.0
2001	–2.4	5.8	–4.75	1.75	4.05	1.6
2002	3.3	9.1	–0.5	1.25	7.85	6.8
2003	–3.9	5.2	–0.25	1.00	4.2	3.0
Monthly data						
2002 December	0.0	9.1	0.0	1.25	7.85	6.8
2003 January	–0.2	8.9	0.0	1.25	7.65	7.5
February	0.0	8.9	0.0	1.25	7.65	7.9
March	0.0	8.9	0.0	1.25	7.65	7.0
April	–0.2	8.7	0.0	1.25	7.45	5.6
May	–0.3	8.4	0.0	1.25	7.15	5.0
June	–0.4	8.0	0.0	1.25	6.75	4.7
July	–0.5	7.5	–0.25	1.00	6.5	4.1
August	–0.5	7.0	0.0	1.00	6.0	4.3
September	–0.5	6.5	0.0	1.00	5.5	4.0
October	–0.4	6.1	0.0	1.00	5.1	3.6
November	–0.5	5.6	0.0	1.00	4.6	3.3
December	–0.4	5.2	0.0	1.00	4.2	3.0
2004 January	–0.4	4.8	0.0	1.00	3.8	3.1
February	–0.3	4.5	0.0	1.00	3.5	3.5
March	–0.2	4.3	0.0	1.00	3.3	3.8
April	–0.2	4.1	0.0	1.00	3.1	3.6
May	0.0	4.1	0.0	1.00	3.1	3.2
June	0.0	4.1	0.0	1.00	3.1	3.0
July	0.0	4.1	0.25	1.25	2.85	3.2
August	0.0	4.1	0.25	1.50	2.6	3.7
September	0.0	4.1	0.25	1.75	2.35	3.8
October	0.0	4.1	0.0	1.75	2.35	3.4
November	0.0	4.1	0.25	2.00	2.1	3.2
December	–0.2	3.9	0.25	2.25	1.65	2.7
2005 January	–0.2	3.7		2.25 [c]	1.45 [d]	

[a] The rate of interest set in the previous month's monetary program for the month indicated in the table.
[b] The risk premium as measured in the 5-year CDS market amounted to 41 base points in November compared with 45 in the previous month.
[c] The yield spread between the yields on 10-year unindexed government bonds and the yields on US government bonds for the same term.
[d] The US central bank's FOMC committee is due to convene on February 2 for its regular discussion on interest rate policy.

Appendix Table 3
The Bank of Israel Nominal and Real Rates of Interest, and the Yield on Treasury Bills and on CPI-Indexed and Unindexed Government Bonds, 1998–2004

(monthly average, percent)

		Headline rate (simple)[a]	Bank of Israel rate of interest		Yield on 12-month Treasury bills	Yield on unindexed 10-year bonds	Real yield on 10-year bonds[d]
			Effective[b]	Real[c]			
2002	December	9.1	9.6	7.2	8.3	5.7	10.9
2003	January	8.9	9.4	6.5	8.1	5.9	11.4
	February	8.9	9.4	5.4	8.8	5.8	11.7
	March	8.9	9.4	6.1	8.6	5.7	10.7
	April	8.7	9.2	7.2	8.1	5.4	9.5
	May	8.4	8.8	7.5	7.6	5.0	8.5
	June	8.0	8.4	6.8	7.1	4.6	7.9
	July	7.5	7.9	5.4	6.7	4.4	8.0
	August	7.0	7.4	5.4	6.6	4.7	8.6
	September	6.5	6.7	5.2	6.2	4.6	8.3
	October	6.1	6.4	4.7	5.8	4.4	7.6
	November	5.6	5.8	4.7	5.4	4.2	7.3
	December	5.2	5.4	4.6	4.9	4.1	7.0
2004	January	4.8	5.0	4.1	1.7	4.0	7.0
	February	4.5	4.7	3.5	4.8	4.1	7.4
	March	4.3	4.5	3.3	4.7	4.2	7.4
	April	4.1	4.3	2.7	4.8	4.3	7.6
	May	4.1	4.3	2.3	5.2	4.4	7.9
	June	4.1	4.3	2.5	5.0	4.3	7.8
	July	4.1	4.3	2.8	4.8	4.3	7.8
	August	4.1	4.3	2.4	4.8	4.3	7.9
	September	4.1	4.3	2.3	4.7	4.2	7.7
	October	4.1	4.3	2.2	4.8	4.2	7.6
	November	4.1	4.3	2.3	4.7	4.2	7.4
	December	3.9	4.1	3.1	4.3	4.1	7.2

[a] Announced interest rate in simple annual terms (excluding compound interest).
[b] Calculated as the daily compound interest rate, based on the interbank rate.
[c] The real rate of interest is the effective rate of interest *less* inflation expectations derived from the capital market.

Appendix Table 4
The Differential between Yield on Treasury Bills and Government Bonds and the Bank of Israel Interest Rate, 1998–2004

		Differential between yields on 12-month Treasury bills and the effective Bank of Israel interest rate	Differential between the yields on unindexed 10 year bonds and the effective Bank of Israel interest rate	Differential between the yields on CPI-indexed 10-year bonds and the Bank of Israel real interest rate
2002	December	–1.3	1.3	–1.5
2003	January	–1.3	2.0	–0.6
	February	–0.6	2.3	0.4
	March	–0.8	1.3	–0.4
	April	–1.1	0.3	–1.8
	May	–1.2	–0.3	–2.5
	June	–1.3	–0.5	–2.2
	July	–1.2	0.1	–1.0
	August	–0.8	1.2	–0.7
	September	–0.5	1.6	–0.6
	October	–0.6	1.2	–0.3
	November	–0.4	1.5	–0.5
	December	–0.5	1.6	–0.5
2004	January	–0.3	2.0	–0.1
	February	0.1	2.7	0.6
	March	0.2	2.9	0.9
	April	0.5	3.3	1.6
	May	0.9	3.6	2.1
	June	0.7	3.5	1.8
	July	0.5	3.5	1.5
	August	0.5	3.6	1.9
	September	0.4	3.4	1.9
	October	0.5	3.3	2.0
	November	0.4	3.1	1.9
	December	0.2	3.1	1.0