



**Bank of Israel**

# **MONETARY POLICY REPORT**

First Half of 2018

**49**

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According to the Bank of Israel Law, 5770–2010, the Bank of Israel has three objectives: (1) to maintain price stability, as its central goal; it was established that price stability is defined as an annual inflation rate of between 1 percent and 3 percent; (2) to support other objectives of the Government’s economic policy, especially growth, employment and reducing social gaps, provided that this support shall not prejudice the attainment of price stability; and (3) to support the stability and orderly activity of the financial system. In order to attain these objectives, the Bank of Israel employs various tools, chief among them the decision on the appropriate level of the short-term interest rate.<sup>1</sup> In addition, the Bank intervenes in the foreign exchange market.

Section 55(a) of the Bank of Israel Law, 5770–2010, establishes the publication of this report, which is submitted to the government and the Knesset Finance Committee twice a year. The report surveys the economic developments that took place during the period covered by the report. It also surveys the policy required, in the view of the members of the Bank of Israel’s Monetary Committee—the forum in which monetary policy decisions are reached—for the inflation rate to be within the range set by the government and to achieve the other objectives of the government’s economic policy. A survey of financial stability appears in the Bank of Israel’s Financial Stability Report for the period covered.

In accordance with Section 55(b) of the Law, this report explains why the inflation rate deviated from the target range set by the government for more than six consecutive months, from the publication (on July 15th, 2014) of the Consumer Price Index (CPI) for June 2014 until the publication of the CPI for May 2018. The rate of inflation during this period declined to below the lower bound of the target range, and explanations appear in Section 1 (The Background Conditions to Monetary Policy) inside.

The Monetary Policy Report for the first half of 2018 was prepared by economists in the Research Department, within guidelines set by the Bank of Israel Monetary Committee. This report is based on data that were published up to the interest rate decision reached on July 9, 2018.

<sup>1</sup> Starting in April 2017, the Monetary Committee moved from 12 decisions per year to eight.

## SUMMARY OF RECENT ECONOMIC DEVELOPMENTS

**Monetary policy:** This report reviews the first five interest rate decisions made in 2018—on January 10, February 26, April 16, May 28, and July 9. In these five decisions, the Monetary Committee left the interest rate at the historic low of 0.1 percent that was set in March 2015, continuing the accommodative monetary policy. The decisions were set against the background of low inflation, accommodative monetary policy in most leading economies, the relative stability of the shekel in terms of the effective exchange rate, moderation in the housing market, and improved economic activity in Israel and abroad. As part of its forward guidance, the Monetary Committee declared that monetary policy would remain accommodative as long as necessary in order to entrench the inflation environment within the target range. During the reviewed period, the Bank of Israel continued to intervene in the foreign exchange market, and beginning in February, it intervened as part of the program to offset the effects of natural gas production.

**Actual inflation and inflation expectations:** During the reviewed period, most indicators pointed to a moderate increase in the inflation environment. The annual rate of inflation has been in an upward trend since July 2017, and at the end of the reviewed period, it is 1.3 percent, having entered the target range for the first time in four years. Annual inflation excluding energy, vegetables and fruit, and government-initiated price reductions also entered the target range at the end of the reviewed period. The increase in the inflation environment was reflected in the increase in the rate of price changes in the most recent index readings<sup>2</sup> and in the fact that short- and medium-term inflation expectations reached the lower bound of the target range. The assessment of the Monetary Committee members was that the low inflation environment in Israel does not reflect weakness in domestic demand, but mainly developments on the supply side.

**Real domestic activity:** The positive data on real activity received during the reviewed period led the Monetary Committee to the assessment that the economy is growing at close to its potential growth rate. The data showed that the composition of growth continues to move toward greater balance, since it is tending more toward exports and less toward private consumption. Economic strength was also reflected in the continuation of the tight labor market that has been evident the past two years, with a high level of job vacancies alongside a low unemployment rate, a record high employment rate, and a significant increase in wage levels, led by the business sector.

**The exchange rate:** During the reviewed period, the shekel was relatively stable in terms of the effective exchange rate, following stability during the second half of 2017 as well. Despite the stability in the past year, the assessment of most members of the Monetary Committee was that the real exchange rate remains over-appreciated, due to the continued and significant appreciation in recent years.

<sup>2</sup> Seasonally adjusted.

**The housing market:** After home prices increased for about a decade, the increases were halted from mid-2017 until January 2018, and housing prices declined during that period by a cumulative 2.5 percent. Between February and April, prices were stable. The assessment of the Monetary Committee was that the decline was a result of both moderating demand and expanded supply in recent years.

**The global economy:** During most of the reviewed period, global real economic activity and world trade continued to improve. International economic organizations revised their forecasts of global real economic activity upward, but toward the middle of the period, risks to continued improvement increased due to the increasing concerns of a trade war between the US and China. Inflation in most leading economies remains below 2 percent, but in the US it increased to above 2 percent. The Fed increased the federal funds rate twice, to 1.75–2 percent, and the market expects two further increases until the end of 2018. The ECB maintained its negative interest rate policy, but began reducing its quantitative easing, and even declared that at the beginning of 2019 it will stop the program completely.

**Research Department staff forecast:** According to the latest forecast by the Research Department, compiled in July 2018, GDP is expected to grow by 3.7 percent in 2018 and by 3.5 percent in 2019. Annual inflation is expected to remain within the target range during the second half of 2018, and to total 1.2 percent at the end of the year. Inflation in 2019 is expected to be 1.5 percent. The forecast for the Bank of Israel interest rate remained unchanged in the first half of the year. The rate is expected to remain at its current level until the third quarter of 2018, and to increase to 0.25 percent in the fourth quarter.

In accordance with Section 55(b) of the Bank of Israel Law, Section 1 of this report explains why the inflation rate has deviated from the target range set by the government for more than six consecutive months, and the background conditions that prevailed at the time the interest rate decisions were made. Section 2 outlines the policy adopted by the Monetary Committee to return the inflation rate to within the target range.

## 1. THE BACKGROUND CONDITIONS TO MONETARY POLICY

**During the reviewed period, the Monetary Committee decided to leave the interest rate at its low level (0.1 percent), thereby continuing its accommodative monetary policy. Its decisions were made against the background of a number of main developments in Israel and abroad:** (1) The inflation environment is below the target, even though it has increased recently; (2) the real exchange rate of the shekel is, in the assessment of most Committee members, over-appreciated despite the slight depreciation that has taken place in the past year; (3) home prices have declined since mid-2017, and the annual rate of growth has drawn close to negative territory; and (4) most of the leading economies are still following accommodative monetary policies. **However, a few factors supported a less accommodative monetary policy:** (1) The Committee members' assessment was that the low inflation in Israel does not reflect domestic weakness, but mainly developments on the supply side; (2) during the reviewed period, inflation continued the upward trend it has shown since July 2017; and (3) for most of the reviewed period, GDP grew at a rate close to its potential growth rate.

Toward the end of the reviewed period, the Committee's assessment was that the current growth rate of the economy is slightly higher than the potential growth rate (about 3 percent), since GDP growth accelerated in the first quarter of 2018 and the data for 2017 were revised upward.

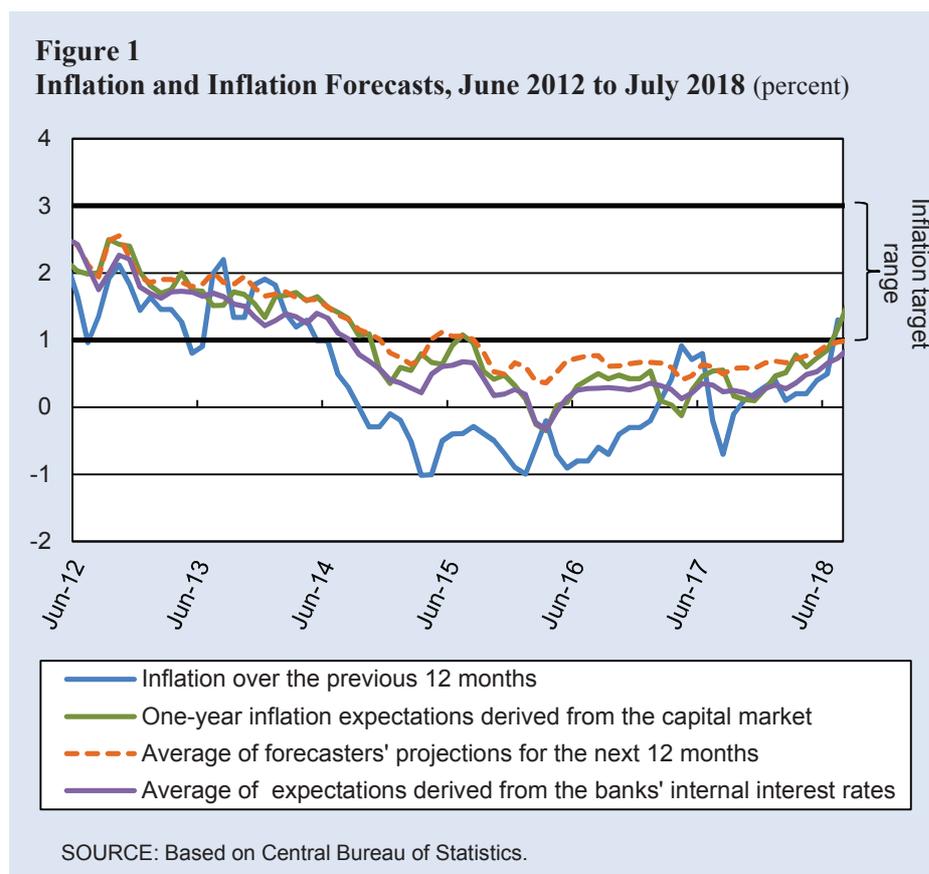
**In addition to the Monetary Committee leaving the interest rate at its low level, it continued to use forward guidance.** Since April 2017, the Committee has noted in the interest rate announcements that it intends to leave the accommodative monetary policy in place as long as necessary in order to entrench the inflation environment within the target range. In the decision made at the beginning of July, the Committee made two comments concerning this. First, the inflation target is between 1 and 3 percent, and when the Committee discusses entrenchment within the range, it does not mean specifically the middle. However, since inflation tends to be volatile, a situation where the expected inflation environment is very close to the lower bound of the target range does not constitute entrenchment of inflation within the range. Second, in order to establish that the inflation environment has become entrenched within the target range, the Committee will want to be as certain as possible that the return of inflation to within the target range will not be for only a few months.

Alongside the use of the interest rate and forward guidance tools, the Bank of Israel intervened in the foreign exchange market during the reviewed period, at a relatively low volume. In January it purchased about \$1.8 billion in order to offset the forces that were acting at the time for a relatively sharp appreciation of the exchange rate. During the first half of the year, the Bank only intervened as part of the program intended to offset the effect of natural gas production on the current account surplus.

**1. The following are details of the main developments considered by the Monetary Committee during the first half of 2018:**

**a. The inflation environment**

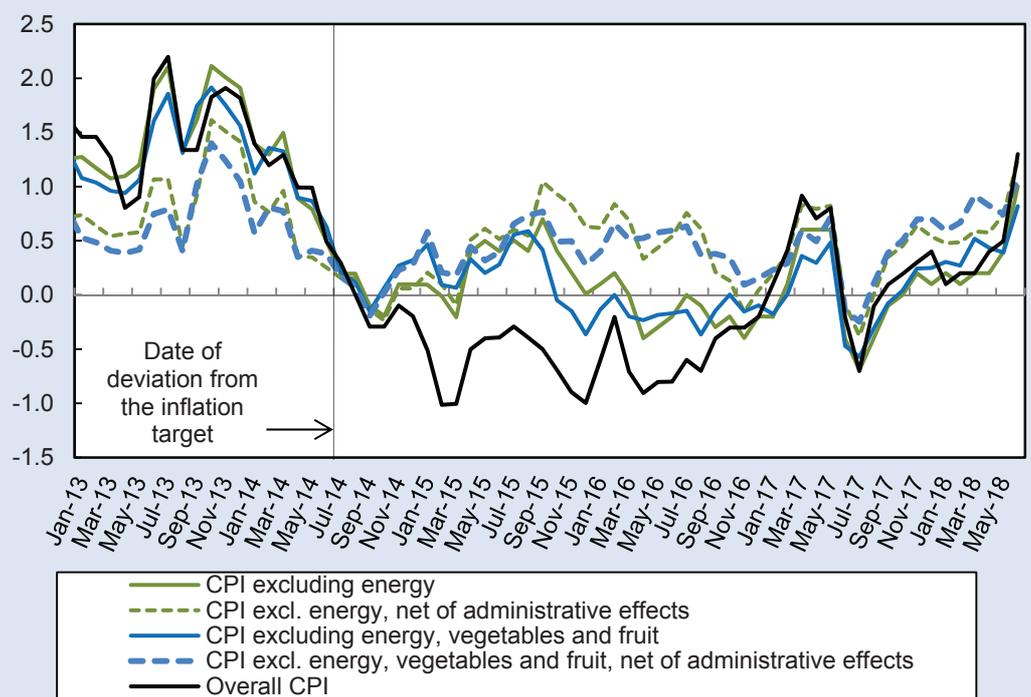
**The inflation environment in Israel continued to increase during the reviewed period, but its level remained low.** Inflation over the past 12 months was -0.7 percent in July 2017. In January 2018 it reached 0.1 percent, and in May 2018 it was 0.5 percent. In June 2018, it was 1.3 percent, entering the target range for the first time in four years (Figure 1). The significant increase between May and June 2018 is mainly the result of the fact that the index reading for June 2017, which was -0.7 percent, came out of the calculation of 12-month inflation.



The upward trend in the inflation environment was also reflected in three other indicators: (a) the development of the index that serves as an indicator of core inflation<sup>3</sup> (the CPI excluding energy, vegetables and fruit, and government-initiated price reductions)—where the rate of change in the past 12 months was 0.6 percent at the beginning of the reviewed period and 1.1 percent in June (Figure 2); (b) one-year inflation expectations from the various sources—expectations of the professional forecasters and of the banks drew close to the lower bound of the target range, and expectations

<sup>3</sup> There is no formal index of core inflation in Israel.

**Figure 2**  
**Actual Inflation in the Past 12 Months, Overall CPI and Partial Indices,**  
**January 2013 to June 2018 (percent)**



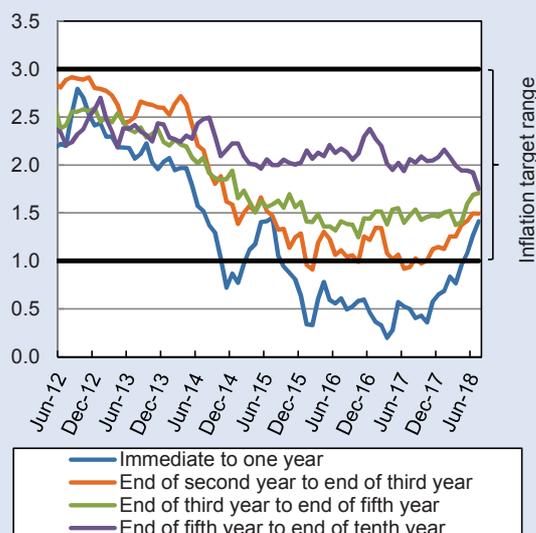
SOURCE: Based on Central Bureau of Statistics.

derived from the capital market are within the target range; and (c) short- and medium-range forward expectations (one-year forward in two years and two-year forward in three years) increased and became entrenched within the target range (Figure 3), and long-range expectations are stable near the midpoint of the target range. The increase in the inflation environment was also reflected in the seasonally adjusted index (Figure 4).<sup>4</sup>

Despite the increase in the inflation environment, inflation remains low. In the assessment of the members of the Monetary Committee, the low inflation environment does not reflect weakness in domestic demand, but rather developments on the supply side, mainly increased competition in the economy, government-initiated price reductions (administrative effects), and low global inflation. The Committee members noted that in the reviewed period, there were also factors acting to increase inflation: nominal and real wage increases, higher global energy prices, the continued increase in rent prices, and the moderate depreciation of the shekel in terms of the effective exchange rate.

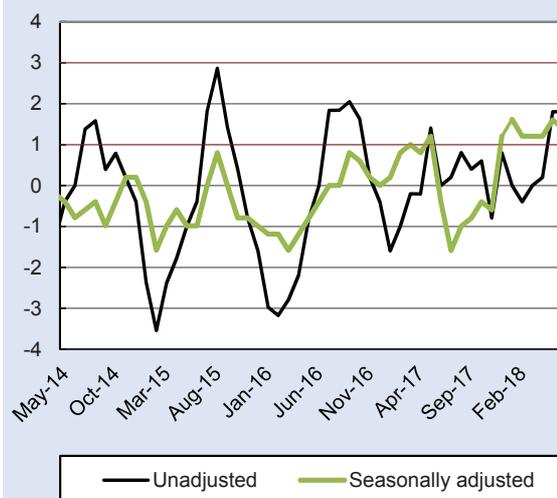
<sup>4</sup> It is worth noting that there is no consensus on how to measure seasonality, and caution is required in interpreting this data.

**Figure 3**  
**Forward Inflation Expectations Derived from the Capital Market, June 2012 to July 2018 (percent)**



SOURCE: Bank of Israel.

**Figure 4**  
**Inflation in the Past 6 Months in Annual Terms, May 2014 to June 2018 (monthly data, percent)**



SOURCE: Based on Central Bureau of Statistics.

The following is a description of the factors that had an impact on inflation in the reviewed period.

**The factors that led inflation to remain low during the reviewed period:**

- **Increased competition in the economy, mainly in the tradable sector**—Competition increased against the background of increased Internet purchases, particularly from foreign websites<sup>5</sup>;
- **Government-initiated price reductions**—During the reviewed period, the government continued to take measures to lower the cost of living. It lowered electricity prices<sup>6</sup> and launched the “Net Price Reductions” program that cancelled customs duties on imported products.<sup>7</sup> According to estimations, these measures lowered the Consumer Price Index by 0.1–0.2 percent;
- **Low global inflation**—Global inflation has an effect on the prices of imported products, and in the reviewed period, the low level of global inflation had a moderating effect. Annual inflation in the eurozone ranged close to 1 percent for most of the period (core inflation there was at a similar level), and (average) annual inflation in the small advanced<sup>8</sup> economies was also relatively low—below 2 percent;

<sup>5</sup> A broad discussion on increased competition and Internet purchases can be found in the Bank of Israel Annual Reports for 2016 and 2017 (Chapter 3).

<sup>6</sup> The lower electricity prices were a result of an adjustment made to the Israel Electric Corporation’s expenses, and of changes in electricity consumption and in the shekel-dollar exchange rate (see press releases published by the Israel Electric Corporation).

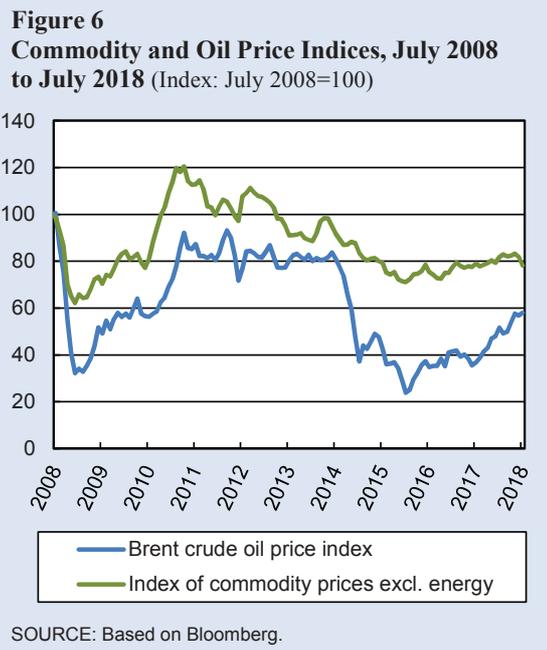
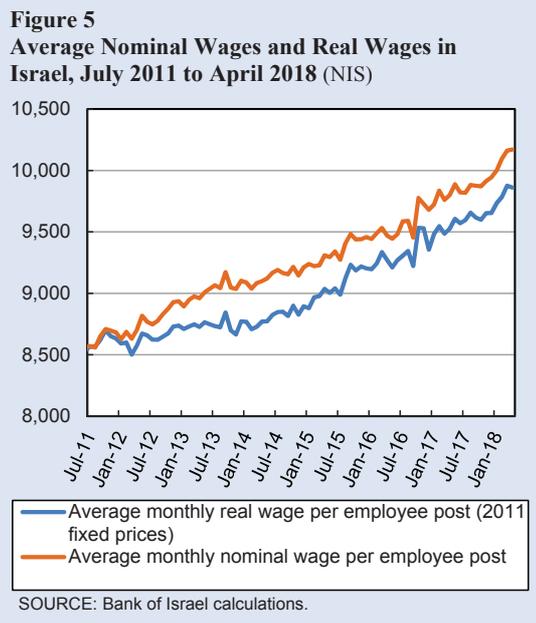
<sup>7</sup> The types of products and rates of reduction of customs and purchase tax on them can be found on the Ministry of Finance’s website at <http://mof.gov.il/Releases/Pages/neto-hozalot.aspx> (in Hebrew).

<sup>8</sup> These countries include Canada, Switzerland, Sweden, Denmark, Norway, Czech Republic, Finland, South Korea and New Zealand.

- **Expected low inflation**—One-year inflation expectations were below the target range for most of the reviewed period, which also created a moderating effect on actual inflation.<sup>9</sup>

**The factors that led inflation to increase during the reviewed period:**

- **The increase in nominal wages**—The nominal wage per employee post increased due to the continued tightening of the labor market. In 2017, it increased by 3 percent (Figure 5).<sup>10</sup> At the same time, GDP per employee increased by just 0.7 percent, so the unit labor cost increased by about 2.3 percent.<sup>11</sup> In the first four months of the reviewed period<sup>12</sup>, wages continued to increase strongly relative to the same four months in the previous year—3.4 percent;
- **The increase in global energy and commodity prices**—Global energy and commodity prices have an effect on inflation in Israel mainly through their effect on the prices of tradable goods. During the reviewed period, the price of Brent crude oil increased by about 18 percent in dollar terms, and commodities prices (excluding energy) increased by about 4 percent after taking the shekel’s depreciation against the dollar into account. This increase took place after the prices declined in the second half of 2017 by 26 percent and 2.3 percent respectively (Figure 6);
- **The slight depreciation of the shekel in terms of the effective exchange rate**—Following the trend of appreciation of the shekel in terms of the effective exchange rate, there was a moderate depreciation of 1.2 percent during the reviewed period, similar to the depreciation in the second half of 2017 (Figure 7). Since the exchange



<sup>9</sup> The argument that inflation expectations influence actual inflation relies, for instance, on New-Keynesian theory.  
<sup>10</sup> Nominal wages and real wages increased at similar rates.  
<sup>11</sup> The unit labor cost serves as an indicator of the pressure applied by the labor market on inflation, and is defined here as the ratio between nominal wages and real GDP.  
<sup>12</sup> Thus far, only the data regarding the first four months have been published.

rate also affects prices with a lag (gradual pass-through), the depreciation in the second half of 2017 made a positive contribution to inflation in the reviewed period as well;

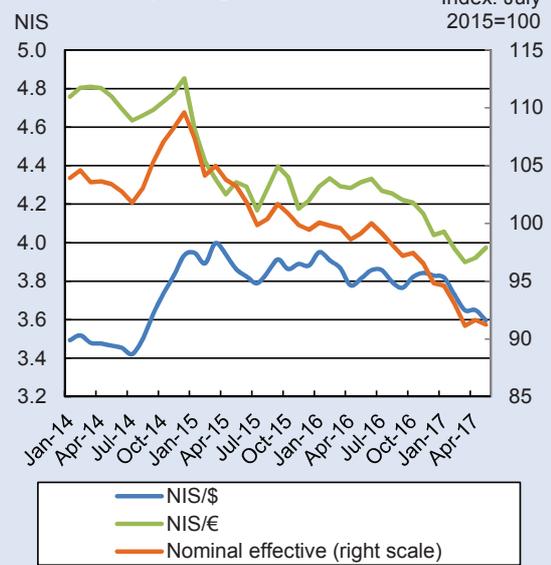
- **The continued increase in rents**—The annual rate of increase in rents, which is measured by the existing stock of rental contracts, moderated slightly in recent months, but it remains high at 1.4 percent. In contrast, the increase in the owner-occupied housing services index, which is measured by new and renewing contracts, accelerated to 3.3 percent at the end of the reviewed period (Figure 8).

Against the background of the increase in energy and commodity prices and the relative stability of the effective exchange rate, the annual rate of decline of tradable goods prices continued to moderate in the reviewed period, and in June 2018 the prices of tradable goods increased for the first time since 2013. In July 2017 inflation in the index of tradable goods prices was -2.7 percent. Thereafter, the rate increased constantly, to 0.2 percent in June 2018. In contrast, the annual inflation rate of nontradable goods prices declined slightly compared with 2017, but toward the end of the reviewed period, it increased to 1.9 percent. Most of the positive contribution to the index of nontradable goods prices came from the rents component. In recent years, rents made a stable (and positive) contribution to the index of nontradable goods prices—about one percentage point—and contributed about 0.6 percentage points to the overall CPI.

## b. Global real economic activity

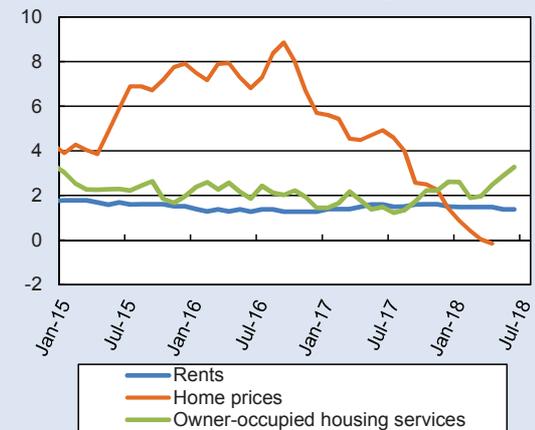
**During the first half of 2018, global economic data improved and the International Monetary Fund revised its growth forecast upward** (Figure 9).<sup>13</sup> In particular, the 2018 forecast for advanced economies was revised from 1.9 percent in mid-2017 to 2.5 percent in April 2018. The forecast for 2019 remained unchanged at 2.2 percent. In the US, the economic improvement encompassed most

**Figure 7**  
Selected Exchange Rates, January 2014 to July 2018 (monthly average)



SOURCE: Bank of Israel.

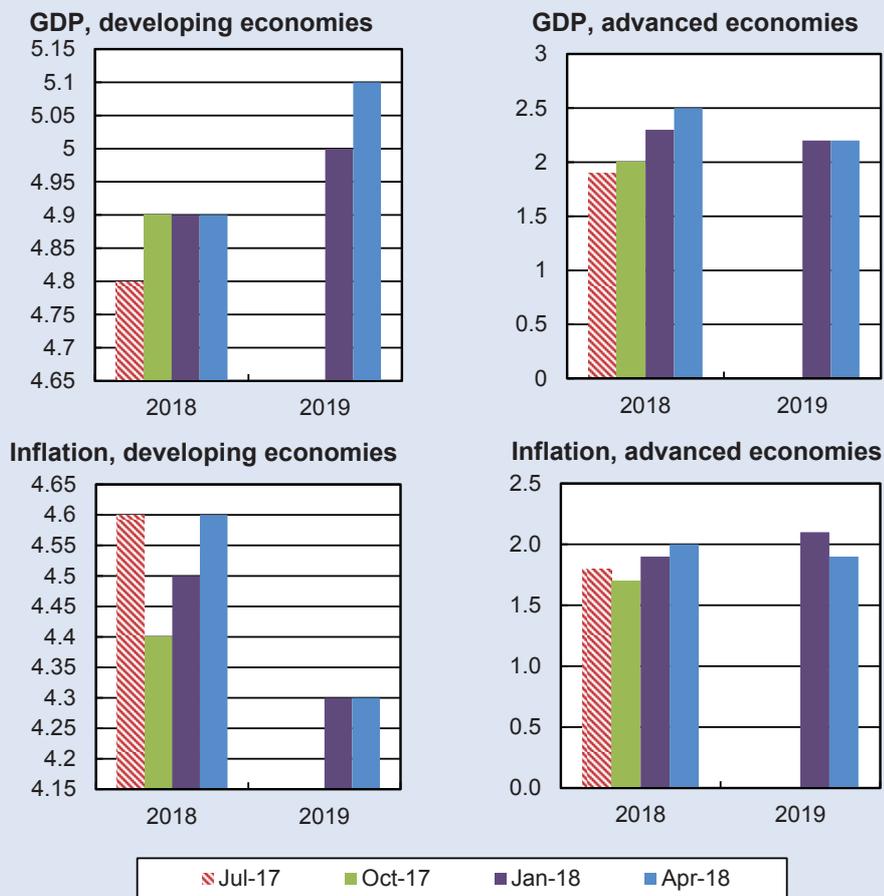
**Figure 8**  
Rates of Change in Home Prices, Owner-Occupied Housing Services, and Rents over the Preceding 12 months, January 2015 to June 2018 (percent)



SOURCE: Based on Central Bureau of Statistics.

<sup>13</sup> The OECD also revised its forecast of global real economic activity upward.

**Figure 9**  
**IMF Forecast of Growth and Inflation Rates in Advanced and Developing Economies, for 2018 and 2019 (percent)**



SOURCE: International Monetary Fund.

sectors of the economy, and a strong growth rate is expected in the coming years. According to assessments, the American economy is close to full employment. The tax reform that was approved there is expected to support economic activity in the short term and to increase the deficit and debt in the coming years. There was also a marked improvement of economic activity in Europe. In 2017, growth was 2.5 percent—the highest growth rate in the past decade. In Japan, the economic expansion continues for the ninth consecutive quarter. There was also improved economic activity among the developing economies, and the growth rate in those economies is expected to exceed 5 percent (Figure 9). However, toward the middle of the period, the risks to continued economic improvement increased, mainly in view of the increasing concern of a trade war between the US and China and the imposition of customs duties on imports from China.

The members of the Monetary Committee believed that overall, the recovery in global economic activity is expected to benefit the economy, since it is expected to increase demand for Israeli exports, and that for now, it seems that the trade war between the US and China is having a limited impact on global activity.

**Table 1****Development of GDP, imports and uses**

(seasonally adjusted data, quantitative rates of change compared to previous period, in annual terms)

	2015	2016	2017	2016:Q4	2017:Q1	2017:Q2	2017:Q3	2017:Q4
GDP	2.6	4.0	3.3	4.7	0.7	2.9	4.3	4.5
Business sector product	2.7	4.2	3.4	5.7	-0.4	3.2	4.9	4.6
Imports excluding defense, ships, aircraft and diamonds	1.6	8.1	6.9	-1.1	-1.0	8.7	18.5	10.1
Private consumption	3.9	6.1	3.3	0.8	0.8	6.2	6.6	2.6
<i>of which</i> : private consumption excluding durable goods	4.3	4.9	4.4	1.0	4.3	4.1	6.9	4.1
Public consumption	3.2	3.9	3.2	2.4	1.6	4.7	-2.9	12.2
<i>of which</i> : public consumption excluding defense imports	3.8	4.0	4.3	3.0	6.0	4.9	-2.5	13.0
Gross domestic investment	2.4	8.1	4.8	10.2	-20.7	16.7	10.7	4.7
<i>of which</i> : in fixed assets	-0.8	11.9	2.8	1.6	-4.5	7.2	6.4	-1.7
Exports excluding diamonds	-0.8	2.2	5.4	5.8	9.9	-0.3	12.1	8.9
<i>of which</i> : exports excluding diamonds and startups	-0.9	1.1	5.7	4.3	5.9	7.1	8.4	12.5

SOURCE: Based on Central Bureau of Statistics.

**Table 2****National Accounts - data available in the months during the reviewed half-year\***

(seasonally adjusted data, quantitative rates of change compared to previous period, in annual terms)

Month		January	February	March	April	May	June	July
GDP	2017:Q3	3.5	3.5	3.9	4.0	4.3	4.3	4.3
	2017:Q4			3.6	3.6	4.1	4.4	4.5
	2018:Q1						4.2	4.5
Business sector product	2017:Q3	3.8	3.8	4.5	4.5	4.9	4.9	4.9
	2017:Q4			3.7	3.1	3.8	4.6	4.6
	2018:Q1						5.2	5.4
Private consumption	2017:Q3	7.6	7.4	6.9	7.0	7.1	6.6	6.6
	2017:Q4			1.3	1.0	1.7	2.5	2.6
	2018:Q1						10.0	9.7
Fixed capital formation	2017:Q3	5.3	5.2	2.3	2.6	6.6	6.7	6.4
	2017:Q4			-5.5	-4.4	-3.1	-0.3	-1.7
	2018:Q1						20.3	14.2
Exports excluding diamonds and startups	2017:Q3	-0.4	0.1	7.4	9.2	8.6	8.5	8.4
	2017:Q4			9.3	12.2	12.0	12.9	12.5
	2018:Q1						11.4	9.5
Civilian imports excluding ships, aircraft, and diamonds	2017:Q3	15.9	15.9	16.3	17.5	18.5	18.6	18.5
	2017:Q4			9.0	11.0	10.8	10.6	10.1
	2018:Q1						6.4	5.2

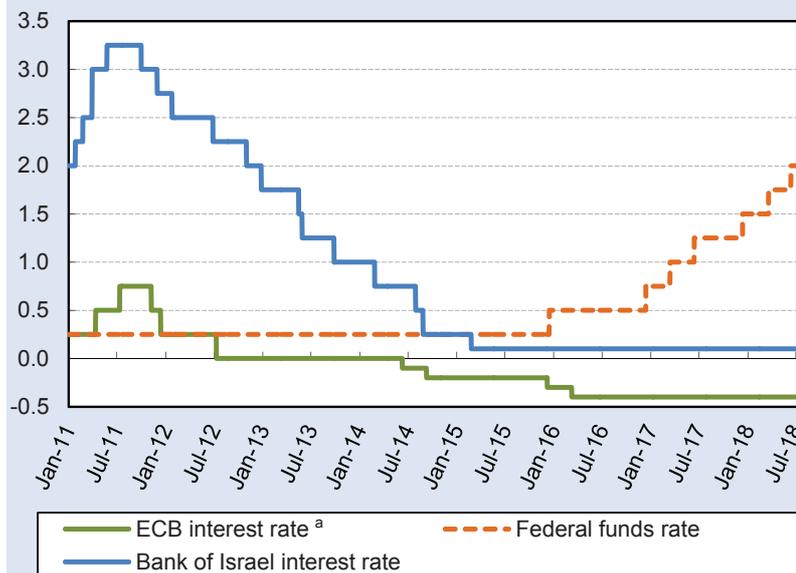
\* The data include vehicle imports, which had a significant impact during the reviewed half.

SOURCE: Based on Central Bureau of Statistics.

### c. Monetary policy abroad

The global monetary environment remained very accommodative in the reviewed period, but some countries tended toward less accommodative policy. The Federal Reserve raised its interest rate twice during the reviewed period—by 0.25 percentage points each time, in line with expectations—to 1.75–2 percent (Figure 10). The capital market expects two more increases during the second half of 2018. In Europe, there was a marked improvement in real economic activity, and as a result, the ECB lowered the volume of asset purchases at the beginning of 2018 from €60 billion to €30 billion per month. In addition, the ECB announced that in the fourth quarter of 2018, it would lower the volume further, to €15 billion per month, and in 2019 it will completely stop the purchasing policy. At the same time, the ECB announced that it expects the interest rate to remain at its current level of -0.4 percent at least until the summer of 2019. Central banks in advanced economies such as Canada and the Czech Republic increased their monetary interest rates during the reviewed period—by 0.25 percentage points—due to the increase in the inflation environment and the improved economic situation. In contrast, the Bank of Japan left its interest rate at -0.1 percent, and repeated its commitment to continuing its very accommodative policy. The developing economies that increased their interest rates in the reviewed period include Mexico, Argentina and Turkey. The latter two took the dramatic step of increasing their interest rates by 9.75 and 9 percentage points, respectively (Figure 11), against the background of the serious currency crises enveloping those countries.

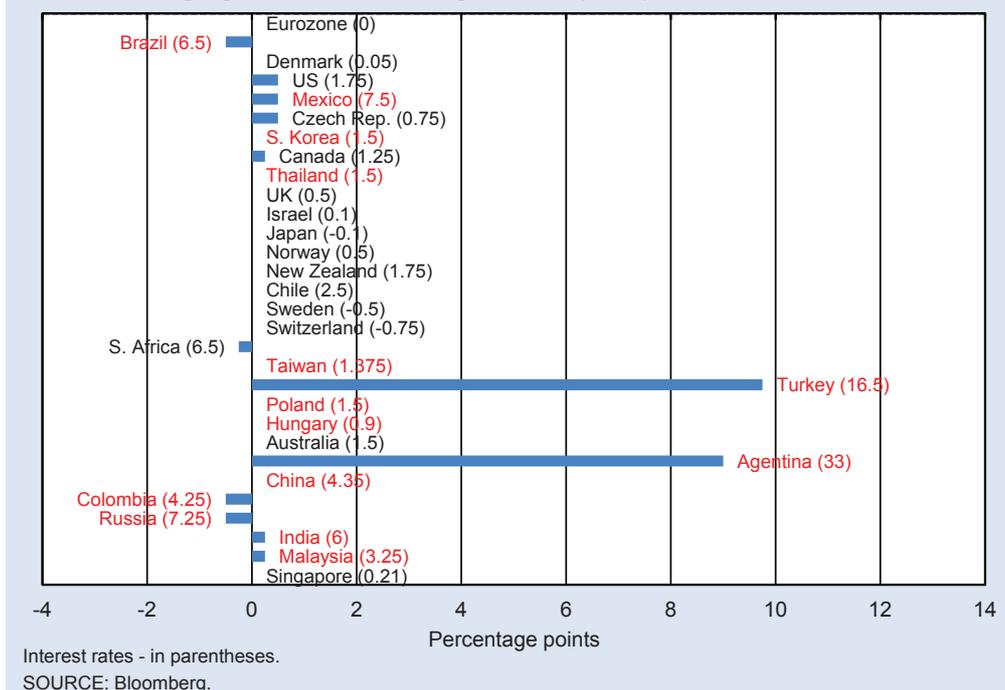
**Figure 10**  
**Central Bank Interest Rates: Israel, US and ECB<sup>a</sup>, January 2011 to July 2018 (percent)**



<sup>a</sup> The interest rate on surplus balances of the commercial banks.

SOURCE: Bank of Israel.

**Figure 11**  
**Central Bank Interest Rates<sup>a</sup> and Changes in Them in the OECD Countries (in black)**  
**and in Developing Economies (in orange), January–July 2018**



#### d. The development of the exchange rate of the shekel

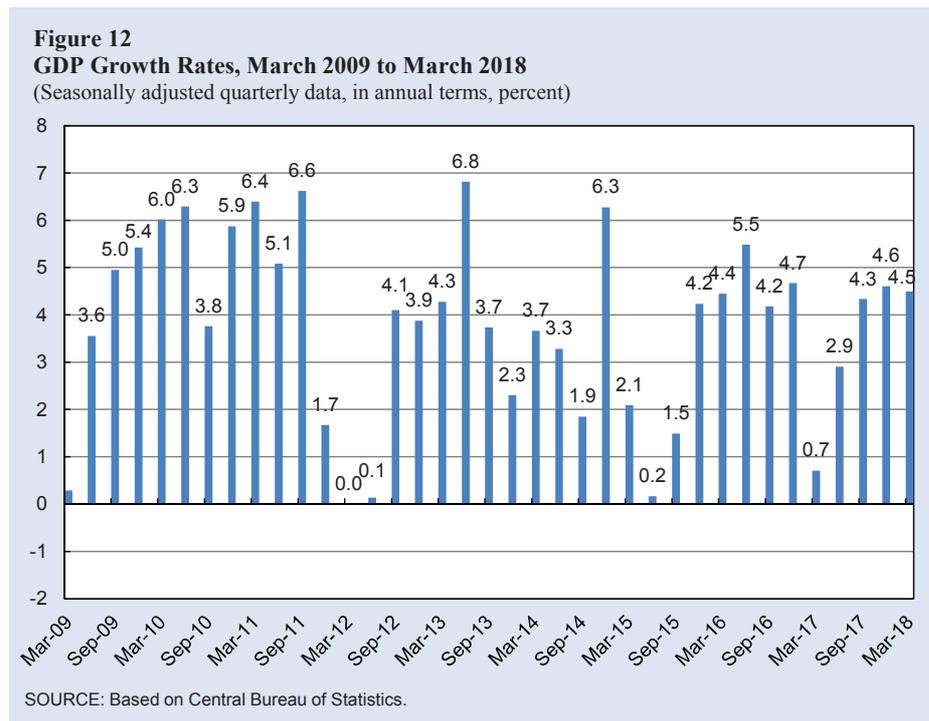
**During the reviewed period, the nominal effective exchange rate of the shekel was characterized by volatility around a relatively stable level.** From December 2017 until June 2018, there was a depreciation of 1.2 percent in the rate. The shekel depreciated against the dollar by 2.9 percent and against the euro by 1.5 percent (Figure 7). The moderate depreciation in the reviewed period was a continuation of the moderate depreciation in the second half of 2017 (1 percent), bringing a halt to the appreciation of recent years. The depreciation against the dollar during the reviewed period came against the background of the two increases in the federal funds rate during the period, and forecasts that there would be further increases in the second half of the year, which would expand the interest rate gap between the US and Israel. The depreciation against the euro came against the ECB's reduction of its quantitative easing and the improved state of the European economy. The decline in the current account surplus in the balance of payments also contributed to the moderate depreciation of the shekel.

From January to April 2018, the shekel appreciated and depreciated alternately, with the most significant depreciation (about 3 percent) coming in February. However, in the last two months of the period, the shekel strengthened by about 1.5 percent, which gave rise to concern among the members of the Monetary Committee that there would be a slowdown in the return of inflation to the target range.

Despite the relative stability of the effective exchange rate in the past year, most members of the Monetary Committee agreed that the shekel is still over-appreciated. Against the background of the sharp appreciation in January, the Bank of Israel purchased \$1.8 billion in that month in addition to the purchases that are part of the program to offset the effect of natural gas production—purchases that were made almost every month during the reviewed period (about \$750 million cumulatively). The volume of purchases (outside the gas program) during the reviewed period is higher than during the second half of 2017, but lower than during the first half of that year (Figure 15).

### e. Real economic activity in Israel

The data on real activity published at the beginning of the reviewed period led the members of the Monetary Committee to the assessment that the economy is growing at a rate close to its potential growth rate<sup>14</sup>, but toward the end of the period, the Committee’s assessment was that the current growth rate is slightly higher than the potential growth rate. At the beginning of the reviewed period, the first estimate of National Accounts data showed that the economy grew by 3 percent in 2017, similar to the potential growth rate (about 3 percent). The second estimate was published in the middle of the period, and indicated higher growth—3.4 percent (Figure 12). This positive revision was accompanied by data regarding the first quarter of 2018, which—as other indicators, including the Composite State of the Economy Index and the Business Tendency Survey—showed the possibility that the economy is growing at a rate slightly higher than potential growth.



<sup>14</sup> The potential growth rate is derived from multi-year growth trends of various production factors and of productivity.

The data on real economic activity showed that the composition of growth continues to move toward greater balance, since it is tending more toward exports (mainly due to services exports) and less toward private consumption. In 2017, private consumption grew by 3.3 percent, after growth of 6.1 percent in 2016, while exports<sup>15</sup> grew by 5.7 percent in 2017, following growth of just 1.1 percent in 2016.

While the growth rate of most uses increased greatly in 2017, the growth rate of investment in residential construction increased very moderately (close to 1 percent). Moreover, between the second quarter of 2017 and the first quarter of 2018, there was a persistent cumulative decline of 10 percent in such investment.<sup>16</sup> According to the Committee members' assessment, this decline was mainly a result of a decline in demand in the housing market.

The strength of economic activity was also reflected in the continued tightening of the labor market. The job vacancy rate continued to increase, reaching a new high of 3.8 percent, and the unemployment rate continued to decline, reaching a new low of 3.2 percent. The robustness of the labor market was also reflected in the record high of 80 percent set by the participation rate, the increase in the employment rate to 77.4 percent, and the strong increases of about 3 percent in wages in the overall economy and wages in the business sector in the past two years (Figure 5). An analysis of growth in 2017 showed that overall productivity made a relatively large contribution, increasing by about 0.7 percent<sup>17</sup> while having increased by just 0.1 percent and 0.6 percent in the previous two years.

In 2017, public consumption supported economic activity. Public consumption (excluding defense imports) increased by 4.3 percent in real terms, more than the increase in GDP. In the reviewed period as well, expansionary fiscal policy continued, and public consumption increased at a high rate. Transfer payments also contributed to economic activity. They increased in 2017, and according to a number of indicators, they continued to increase during the reviewed period as well. High one-off tax revenues during the second half of 2017 led the overall deficit (excluding the provision of credit) for the 12 months ending in June to be relatively low, about 2 percent of GDP. However, the deficit for 2018 is expected to be higher—about 3 percent of GDP.

## **f. The housing market**

**After housing prices increased for about a decade, the increase was halted from mid-2017 until January 2018, and prices declined during that period by a cumulative 2.5 percent** (Figure 8). Between February and April 2018, home prices stabilized, and as a result, the annual rate of increase moderated significantly, even declining in April to -0.1 percent. The assessment of the Monetary Committee was that home prices decline during that period because supply expanded in recent years and demand declined. On the supply side, building starts increased continuously in recent years, reaching a peak of about 55,000 residential units (the cumulative number in the preceding 12 months)

<sup>15</sup> Excluding startups and diamonds.

<sup>16</sup> The decline in investment in residential construction may be the result of a large stock of new unsold homes. However, this hypothesis cannot be confirmed, since the Central Bureau of Statistics stopped publishing this data.

<sup>17</sup> The increase in labor inputs contributed about 1.3 percent to GDP growth in 2017, and the increase in the stock of physical capital contributed about 1.5 percent. The contributions were calculated based on the Cobb-Douglas production function, which assumes that the elasticity of GDP relative to labor input is 0.6, and that its elasticity relative to the stock of capital is 0.4.

in 2016–17 (Figure 13). Against this background, the number of units completed also reached a peak in mid-2017. However, from the middle of 2017, building starts declined significantly, and in the first quarter of 2018 they reached about 43,000 residential units. In parallel, the number of units completed also declined.

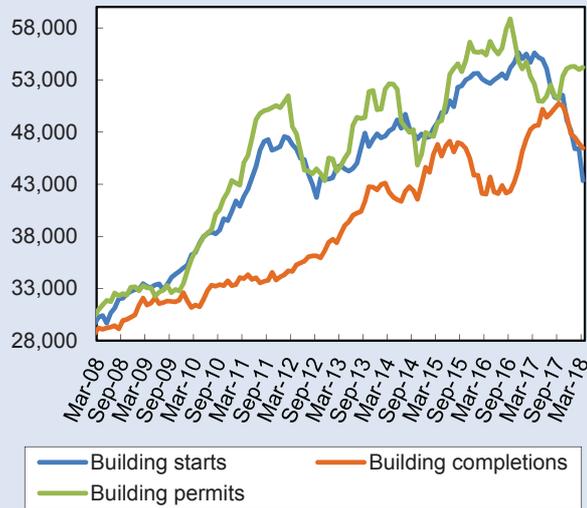
On the demand side, the decline began in mid-2016, and was halted at the end of 2017, as reflected in the decline in the volume of transactions made by all market participants—investors, home upgraders, and first-time homebuyers. The decline in demand for homes was also reflected in a decline in the volume of new mortgages, which was in a constant decline from mid-2015 until mid-2017 due to the persistent increase in the average interest rate on mortgages during that period (Figure 16). However, recent data indicate some awakening in demand. There was an increase in the number of transactions by first-time homebuyers and home upgraders, and a parallel increase in the volume of new mortgages. It should be noted that developments on the supply side and on the demand side have an impact on home prices with a lag.

In terms of the future development of home prices, the Committee expressed concern that the sharp decline in building starts in mid-2017 and the relative stability in the number of building permits may lead to a renewed increase in home prices.

**g. Developments in the capital market**

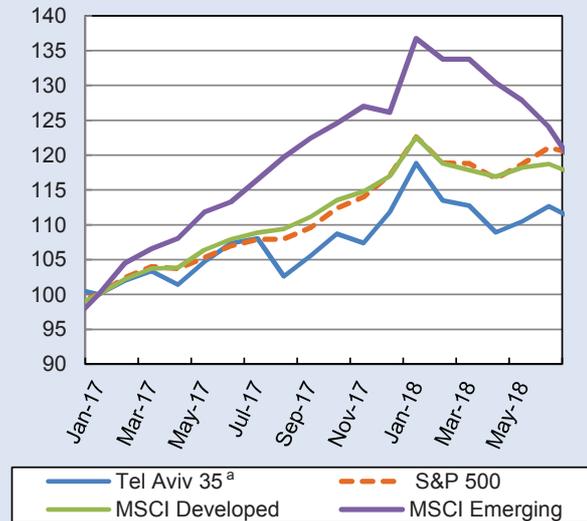
**During the reviewed period, the financial markets in Israel showed relative stability.** According to the TA-VIX index, the capital market in Israel showed a low level of uncertainty relative to previous years. The Tel Aviv 35 stock index increased by about 3.6 percent, and the Tel

**Figure 13**  
**Building Permits, Starts and Completions, Past 12 Months, March 2008 to March 2018**  
(residential units)



SOURCE: Bank of Israel.

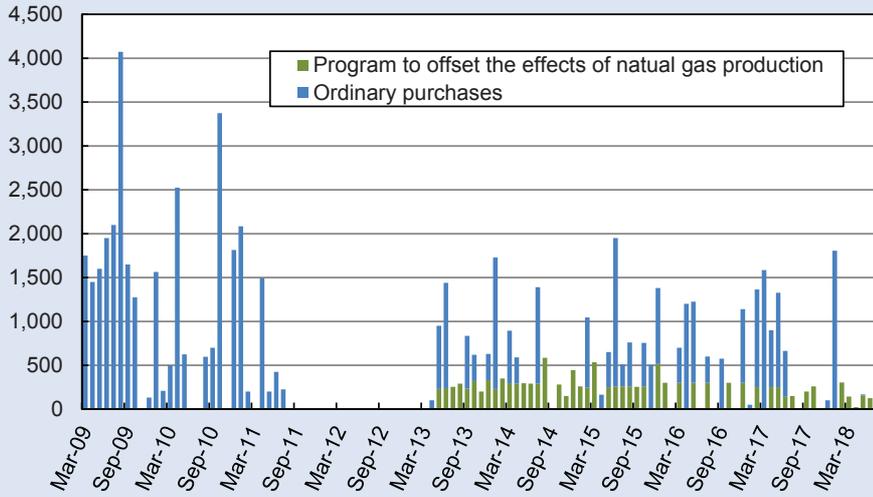
**Figure 14**  
**Global Stock Indices in Dollar Terms, January 2017 to July 2018** (monthly averages)



<sup>a</sup> Until February 2017—Tel Aviv 25.

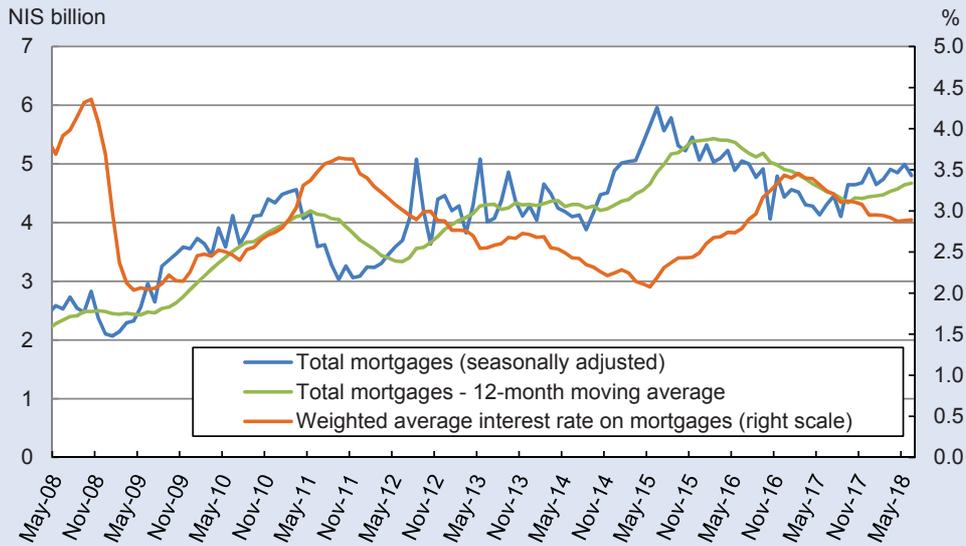
SOURCE: Bloomberg.

**Figure 15**  
**Bank of Israel Interventions in the Foreign Exchange Market, March 2009 to June 2018 (\$ million)**



SOURCE: Bank of Israel.

**Figure 16**  
**Total Mortgages and the Interest Rate<sup>a</sup> on Mortgages, May 2008 to June 2018**



<sup>a</sup> Weighted average by purpose of credit.

SOURCE: Based on Central Bureau of Statistics.

Aviv 125 increased by 3.2 percent<sup>18</sup>—rates of increase that were similar to the S&P 500 index in the US (Figure 14). In contrast, the SX5P index of European stocks declined by 3.7 percent. The spreads between CPI-indexed corporate bonds rated A and AA and parallel government bonds widened by about 0.2 percentage points since the beginning of 2018, but remained low at 1.3 percent for A-rated bonds and 1.9 percent for bonds rated AA. The Committee members expressed concern that the corporate bond spreads do not fully reflect the risks, and that the risks are underpriced due to the low interest rate and the search for yields. The spreads for bonds rated BBB increased significantly since the beginning of the year—by about 3 percentage points—and are at levels similar to those in mid-2016. This increase reflects a significant correction in the market’s risk perception after having previously under-assessed the risk.

#### **h. The Research Department’s forecast**

During the reviewed period, the Bank of Israel Research Department published a staff forecast three times—with the interest rate announcements in January, April and July. The forecasts from January and April predicted that GDP would grow by 3.4 percent in 2018 and by 3.5 percent in 2019, that inflation in 2018 would be 1.1 percent, and inflation in 2019 would be 1.4 percent. However, the forecast in July was that GDP would grow at a higher rate in 2018—3.7 percent<sup>19</sup>—because data received regarding the first quarter of 2018 were stronger than expected, and because the continued improvement of global economic activity raised the forecast of exports for 2018. The inflation forecast was also revised slightly upward—to 1.2 percent in 2018 and 1.5 percent in 2019—against the background of the depreciation of the shekel in terms of the effective exchange rate and the increase in oil and commodity prices. Despite the revision of the forecasts, the expected path of the interest rate did not change. The Research Department forecasted that the interest rate will increase to 0.25 percent in the fourth quarter of 2018. The forecast published in July regarding inflation in the coming year is close to expectations derived from the capital market and about 0.4 percentage points higher than the average of the professional forecasters. However, the differences in terms of the interest rate forecast are more marked. The capital market and the professional forecasters predicted that the interest rate would increase only in the first half of 2019, while the Research Department’s forecast is that it will increase in the fourth quarter of 2018.

## **2. MONETARY POLICY**

In the reviewed period, monetary policy remained very accommodative. The Monetary Committee left the interest rate unchanged at the very low level of 0.1 percent, with the aim of returning inflation to the target range, entrenching it within the range, and supporting real economic activity. The Bank of Israel continued to intervene in the foreign exchange market, at low volumes due to the relative stability of the shekel in terms of the effect exchange rate. In view of the current conditions in the economy, and particularly the fact that the inflation environment was lower than the target range for most of the reviewed period, most Committee members believed that the interest rate should be left at its current level (0.1 percent), since raising it before the inflation environment increases could lead to an appreciation of the shekel, moderate the public’s inflation expectations, and weaken domestic

<sup>18</sup> The June 2018 average compared with the December 2017 average.

<sup>19</sup> The expectation regarding 2019 did not change.

demand. These, in turn, could delay the return of inflation to a level that is in line with the target. The assessment of the Committee was that in view of the interest rate increases in the US, both actual and expected, leaving the rate unchanged would increase the interest rate gap between Israel and the US, and thereby create forces for depreciation of the shekel and support the return of inflation to its target.

The Committee members noted various factors for why inflation in Israel has deviated downward from the target range since June 2014 (Figure 1). Some of them argued that it is a result of price levels in Israel that are higher than global prices to begin with, and we have recently been witnessing a “correction”, with price levels in Israel converging toward global price levels. The assessment of the Committee was that positive developments on the supply side are contributing to this process, mainly increased competition in the economy and measures taken by the government to lower the cost of living, and that it is not weakness in domestic demand.

## APPENDIX TABLES

**Table A.1**  
**Developments in the Domestic Asset Markets**

	01/18	02/18	03/18	04/18	05/18	06/18
<b>Yield to maturity (monthly averages, percent)</b>						
3-month <i>makam</i>	0.1	0.1	0.1	0.1	0.1	0.1
1-year <i>makam</i>	0.1	0.1	0.1	0.1	0.2	0.2
Unindexed 5-year notes	0.8	1.0	0.9	1.0	1.1	1.2
Unindexed 20-year bonds	2.8	2.9	2.8	2.9	3.0	3.0
CPI-indexed 1-year notes	-0.4	-0.6	-0.5	-0.6	-0.6	-1.0
CPI-indexed 5-year notes	-0.3	-0.2	-0.2	-0.2	-0.2	-0.3
CPI-indexed 10-year bonds	0.2	0.4	0.4	0.4	0.5	0.5
Yield spread between government bonds and corporate bonds rated AA (percentage points) <sup>a</sup>	0.9	1.1	1.1	1.1	1.1	1.1
Yield spread between government bonds and unrated corporate bonds excluding real estate (percentage points) <sup>b</sup>	4.2	4.5	5.5	5.9	6.6	6.8
<b>Stock market (rate of change during the month)</b>						
General shares index	3.3	-3.0	-3.8	1.1	2.9	0.7
Tel Aviv 35 Index	2.5	-3.0	-4.3	2.0	3.2	0.3
<b>Foreign exchange market (rate of change during the month)</b>						
NIS/\$	-1.8	2.3	0.8	2.1	-0.6	2.4
NIS/€	2.1	0.4	1.6	0.2	-4.0	2.2
Nominal effective exchange rate	0.5	1.3	1.0	0.8	-2.6	1.4
<b>Risk indices derived from trading in shekel-dollar options (monthly averages, percent)</b>						
Implied volatility	6.7	7.8	7.4	7.2	7.6	7.1
Probability of depreciation greater than 5%	0.6	1.0	0.9			
Probability of appreciation greater than 5%	0.6	1.2	1.0			

<sup>a</sup> The calculation was changed to CPI-indexed bonds, excluding convertible bonds, with a yield of up to 60 percent and a duration of more than 6 months.

<sup>b</sup> The yield spread relates to spreads between all series of corporate bonds and CPI-indexed government bonds (formerly "Galil" bonds) with the relevant duration.

SOURCE: Bank of Israel calculations.

**Table A.2****The inflation and interest rate environment**

(monthly averages)

	01/18	02/18	03/18	04/18	05/18	06/18
<b>Inflation environment indicators (percent)</b>						
Monthly change in CPI	-0.5	0.1	0.3	0.4	0.5	0.1
publication of CPI)	-0.4	0.0	0.2	0.4	0.5	-0.1
12-month change in CPI	0.1	0.2	0.2	0.4	0.5	1.3
One-year inflation expectations derived from the capital market	0.5	0.8	0.6	0.7	0.8	1.2
Forecasters' one-year inflation predictions	0.7	0.7	0.8	0.8	0.9	1.0
<b>Inflation expectations for various terms<sup>a</sup></b>						
Forward inflation expectations for the short term (for the second year and	1.1	1.2	1.2	1.3	1.4	1.5
Forward inflation expectations for the medium term (for the fourth through	1.8	1.7	1.6	1.6	1.7	1.8
Forward inflation expectations for the long term (for the seventh through	2.2	2.1	2.0	1.9	1.9	1.9
<b>Interest rates and interest rate differentials</b>						
Bank of Israel interest rate	0.10	0.10	0.10	0.10	0.10	0.10
Derived real interest rate	-0.39	-0.6	-0.5	-0.6	-0.6	-1.0
Short-term interest rate differential between Israel and the US	-1.40	-1.40	-1.49	-1.65	-1.65	-1.80
Short-term interest rate differential between Israel and the eurozone	0.10	0.10	0.10	0.10	0.10	0.10
Forecasters' predictions of change in the Bank of Israel interest rate for next month (average forecast, prior to the decision)	0.0	0.0	-	0.0	0.0	0.0
Telbor interest - 3-month forward rate in 9 months	0.2	0.2	0.2	0.2	0.2	0.3
Forecasters' predictions of the interest rate a year hence	0.1	0.1	0.2	0.2	0.2	0.3
Long-term (10-year) nominal interest rate differential between Israel and the US	-0.7	-0.8	-0.9	-0.9	-0.9	-0.7
Long-term (10-year) real interest rate differential between Israel and the US	-0.3	-0.3	-0.3	-0.3	-0.4	-0.3

<sup>a</sup> Inflation expectations are measured by the difference between yields on local currency unindexed and CPI-indexed bonds. These expectations include an element of risk premium, which rises with the length of the term to which the expectations relate.

SOURCE: Based on Central Bureau of Statistics data and private forecasters' reports.