BANK OF ISRAEL

Office of the Spokesperson and Economic Information

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Press release

Research Department Staff Forecast, April 2017

Abstract

This document presents the forecast of macroeconomic developments compiled by the Bank of Israel Research Department in April 2017. The forecast was presented to the Monetary Committee on April 5, 2017, during its meeting prior to the decision on the Bank of Israel interest rate on April 2017. According to the staff forecast, gross domestic product (GDP) is projected to increase by 2.8 percent in 2017 (although the basic growth rate[1] is expected to be higher) and by 3.3 percent in 2018. The rate of inflation over the next year (ending in the first quarter of 2018) is expected to be 0.7 percent. The Bank of Israel interest rate is expected to remain at its current level of 0.1 percent during the coming year, and to increase gradually from the second quarter of 2018.

Forecast

The Bank of Israel Research Department compiles a staff forecast of macroeconomic developments on a quarterly basis. The staff forecast is based on several models, various data sources, and assessments based on economists' judgment. The Bank's DSGE (Dynamic Stochastic General Equilibrium) model developed in the Research Department—a structural model based on microeconomic foundations—plays a primary role in formulating the macroeconomic forecast.[2] The model provides a framework for analyzing the forces which have an effect on the economy, and allows the integration of information from various sources into a macroeconomic forecast for real and nominal variables, with an internally consistent "economic story".

a. The global environment

Our assessments of expected developments in the global economy are based mainly on projections by international institutions (the International Monetary Fund and the OECD) and by foreign investment houses. These institutions revised their forecasts for growth in advanced economies and for world trade slightly upward. Our forecasts are for growth in advanced economies of 1.9 percent in 2017 and 2.0 percent in 2018.

[1] The growth rate net of the fluctuations in vehicle imports.

[2] A Discussion Paper on the model is available on the Bank of Israel website, under the title: "MOISE: A DSGE Model for the Israeli Economy," Discussion Paper No. 2012.06.

As for the world trade, we assume growth of 3.6 percent in imports to the advanced economies in 2017 and growth of 3.8 percent in 2018 (in line with the IMF forecast from January).

Based on assessments derived from the capital market (assessments based on interest rate futures contract prices), the US federal funds rate is expected to increase to around 1.3 percent at the end of 2017 and to around 1.7 percent at the end of 2018. (The median assessment of the members of the Federal Open Market Committee is that the interest rate will increase more rapidly—to 1.4 percent at the end of 2017 and 2.1 percent at the end of 2018.) In contrast, the interest rate on deposits with the central bank in Europe is expected to increase very moderately from its current level of -0.4 percent, and to remain negative at -0.2 percent at the end of 2017 and -0.1 percent at the end of 2018.

Global inflation is expected to continue increasing gradually. In accordance with the forecasts of the international financial institutions, our assessment is that inflation in the advanced economies will reach 1.8 percent in 2017 and 2 percent in 2018. Oil prices declined recently to about $51 per barrel[3], and we assume that they will remain at this level (compared with $54 that we assumed in the previous quarter).

b. Real activity in Israel

GDP is expected to grow by 2.8 percent in 2017 and by 3.3 percent in 2018 (Table 1). The revision relative to the previous forecast derives mainly from the extent to which vehicle purchases influenced GDP.[4] According to the last estimate published by the Central Bureau of Statistics, vehicle purchases increased in 2016 at a rate higher than our assessment in the previous forecast. This is apparently mainly due to purchases being brought forward because of the changes in vehicle taxation that took effect in January 2017. As such, it is expected that vehicle purchases will have a moderating effect on GDP growth in 2017. Further changes in vehicle taxation are expected in January 2019, and our assessment is that they will also lead to purchases being brought forward, which will increase the growth rate in 2018. It is worth emphasizing that the decline expected in growth in 2017 relative to 2016 is to a large extent a result of the fluctuations in vehicle purchases, and to a lesser extent a result of moderation in the basic growth rate.[5]

The expected development of uses reflects a gradual transition to growth that is based less on domestic uses and more on exports. The growth rate of private consumption is expected to moderate after a long period in which it was more rapid than the growth of other uses and of GDP. In contrast, the growth rate of exports is expected to increase gradually with the expected recovery of world trade.

[3] According to the average of the last two weeks of March.

[4] According to the National Accounts recording rules, taxation on imported vehicles is included in GDP. These imports also contribute to GDP through their effect on importers' added value.

[5] Our estimate for the effect of vehicle imports on GDP growth is about 0.5%. That is, we estimate that the growth rate net of this effect was 3.5%. In 2017 we estimate that the growth rate net of the effect of vehicle imports will be 3.2%, and in 2018, 3.0%.

Table 1
Economic Indicators
Research Department Staff Forecast for 2017 to 2018

(rates of change, percent, unless stated otherwise. Previous forecast in parentheses.)

	Figures for 2016	Bank of Israel forecast 2017	Bank of Israel forecast 2018
GDP	4.0	2.8(3.2)	3.3(3.1)
Civilian imports (excluding diamonds, ships, and aircraft)	8.5	2.0(3.8)	8.0(3.0)
Private consumption	6.3	3.0(4.0)	3.5(3.2)
Fixed capital formation (excluding ships and aircraft)	10.3	0.0(1.6)	9.0(3.0)
Public sector consumption (excluding defense imports)	3.6	4.2(4.2)	1.5(1.5)
Exports (excluding diamonds and start-ups)	2.5	3.5(2.9)	4.0(4.3)
Unemployment rate[a]	4.1	3.6	3.6
Inflation rate[b]	-0.3	0.8(1.0)	1.5(1.5)
Bank of Israel interest rate[c]	0.10	0.10(0.25)	0.50(0.50)

a) Annual average. Starting with this publication, the reported figure is unemployment in the primary working ages (24–65). In previous publications, the reported figure related to the entire working-age population (age 15+).

b) Average CPI reading in the final quarter of the year compared with the final-quarter average in the previous year.

c) End of the year.

Source: Bank of Israel.

c. Inflation and interest rate estimates

In our assessment, the inflation rate in the four quarters ending in the first quarter of 2018 will be 0.7 percent and in 2018 it will be 1.5 percent. The prices of imported products are expected to increase at a higher rate than that of the past two years, as inflation expectations worldwide continue to increase. In contrast, domestic prices are expected to continue increasing moderately in the next two years, a result of the fact that moderating forces—including increased competition—are expected to remain. The fact that the labor market is near full employment is expected to continue supporting increased wages, which may lead to an increase in domestic inflation. Expected inflation in the next year is 0.5 percentage points lower than in the previous forecast, mainly due to the appreciation of the shekel in terms of the effective exchange rate since the previous forecast.

Table 2
Forecasts for inflation rate and interest rate for the coming year

(percent)

	Bank of Israel Research Department	Capital markets[a]	Private forecasters[b]
Inflation rate[c]	0.7	-0.1	0.4
(range of forecasts)			(-0.4–1.0)
Interest rate[d]	0.1	0.2	0.15
(range of forecasts)			(0.1–0.25)

a) Daily average for the month of March (up to the 21st). Seasonally adjusted inflation expectations.
b) Inflation and interest rate forecasts are those published after the publication of the CPI reading for February.
c) Inflation rate over the next year (Research Department: in the four quarters ending in the first quarter of 2018).
d) The interest rate in one year (Research Department: the interest rate in the first quarter of 2018). Capital markets forecast derived from Telbor rates.

Source: Bank of Israel.

According to the Research Department's assessment, the Bank of Israel interest rate is expected to be 0.1 percent until the first quarter of 2018, and to start increasing in the second quarter of 2018. The interest rate is expected to remain at its current level in the coming year, in order to support the return of inflation to within the target range and growth in economic activity. The interest rate is expected to increase in the second quarter of the 2018, to 0.25 percent, against the background of an expected gradual increase in the inflation rate and continued growth of GDP at a rate of around 3 percent. We expect an additional increase in the fourth quarter 2018, to 0.5 percent. The expectation of an increase in the interest rate is delayed by two quarters relative the previous forecast due to the decline in the inflation forecast.

Table 2 indicates that the forecast compiled by the Research Department regarding the interest rate in the coming year is similar to projections of private forecasters and expectations derived from the capital markets. However, with regard to inflation, the Research Department's forecast is higher than that of the professional forecasters and expectations derived from the capital market.

d. Balance of risks in the forecast

Several factors may lead to the domestic economy developing differently than in the baseline forecast. These include uncertainty concerning tax reductions (whether there will be any and to what extent), and uncertainty concerning both the future development of the exchange rate and the extent to which the appreciation of the shekel thus far will roll over to prices.

Regarding the global environment, there is uncertainty regarding the pace of recovery of growth and of world trade, among other things against the background of strengthening voices calling for pulling out of trade agreements and for implementing isolationist economic policies, which was reflected in recent political developments in the UK and the US.

Figures 1 to 3 present fan charts around the inflation rate, interest rate and GDP growth forecasts. (The broken line represents the baseline forecast from December.) The width of the fan is derived from the estimated distributions of the shocks in the Research Department's DSGE model.

Figure 1
Actual Inflation and Fan Chart of Expected Inflation
(Cumulative increase in prices in previous four quarters)

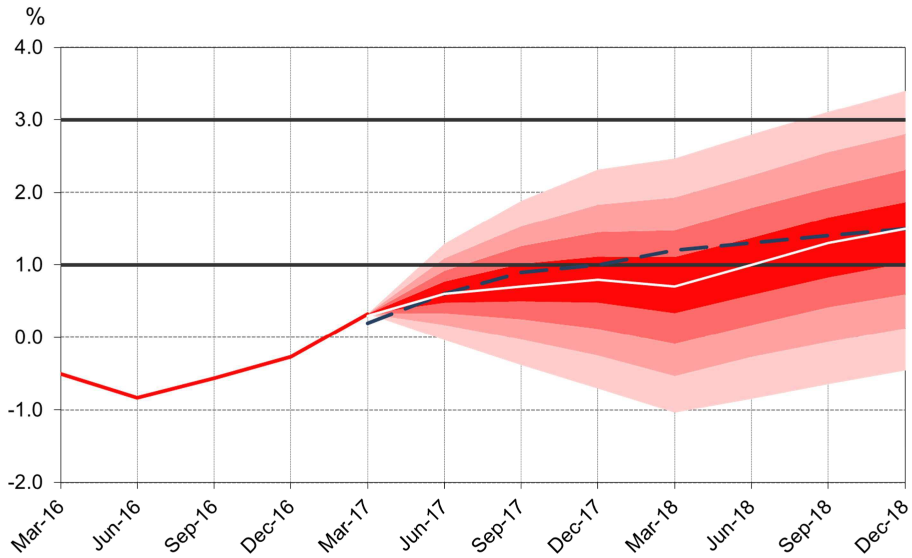


Figure 2
Actual Bank of Israel Interest Rate and Fan Chart of Expected Interest Rate

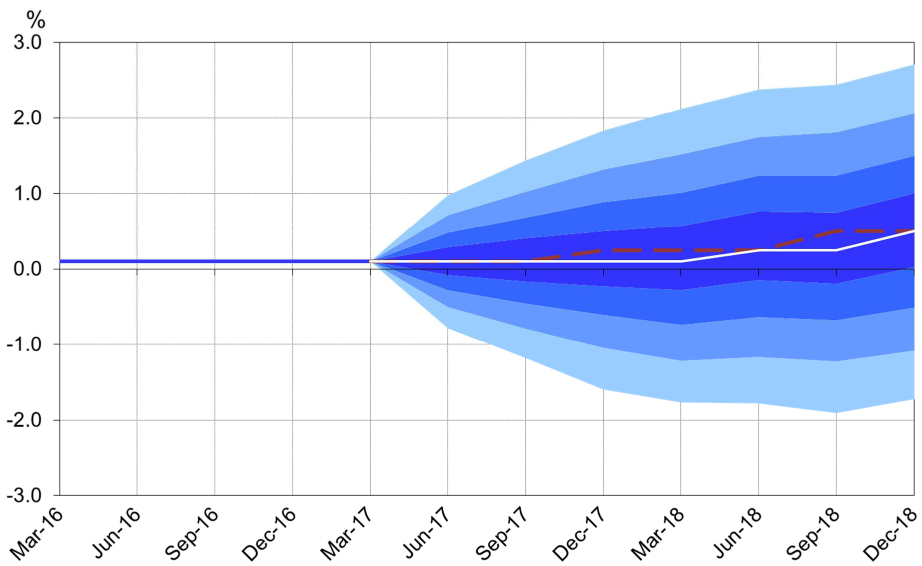
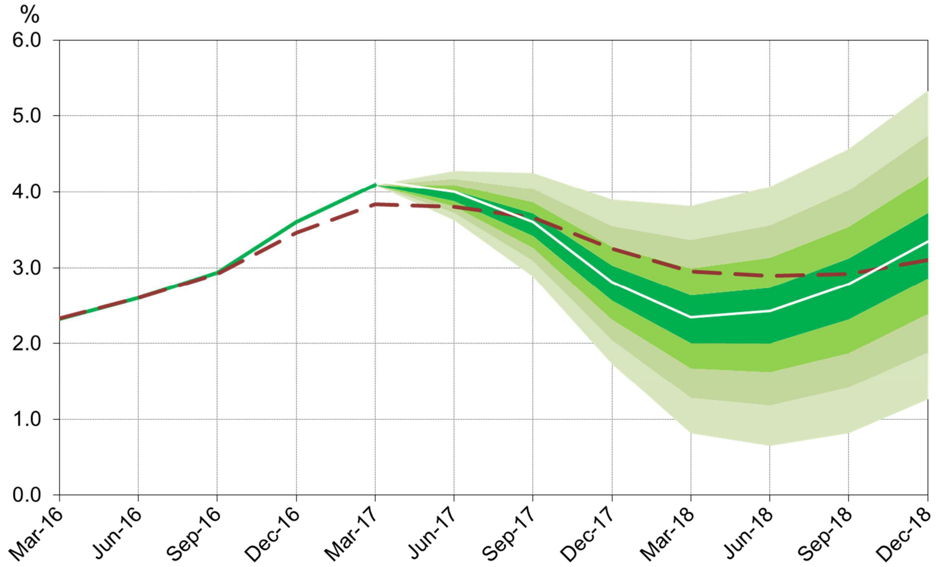


Figure 3
Actual GDP Growth Rate in the Past Four Quarters and Fan Chart of Expected Growth Rate
(Total GDP over the past four quarters relative to GDP in the preceding four quarters)



The center of the fan chart (the white line) is based on the Bank of Israel Research Department assessment. The width of the fan is based on the Department's medium-scale DSGE (dynamic stochastic general equilibrium) model. The full fan covers 66 percent of the expected distribution. The dotted line corresponds to the previous staff forecast (published in December 2016). In terms of GDP growth (Figure 3), until December 2016, the dotted line reflects the data and estimates that were known at the time when the previous forecast was formulated, while the solid line reflects the updated data and estimates (the difference between them derives from new and data and revisions by the Central Bureau of Statistics to the data).
SOURCE: Bank of Israel Research Department.