



BANK OF ISRAEL

Office of the Spokesperson and Economic Information

September 24, 2015

Press Release

Research Department Staff Forecast, September 2015

Abstract

This document presents the forecast of macroeconomic developments compiled by the Bank of Israel Research Department in September 2015. The forecast was presented to the Monetary Committee on September 21, 2015, during its meeting prior to the decision on the Bank of Israel interest rate for October 2015. According to the staff forecast, gross domestic product (GDP) is projected to increase by 2.6 percent in 2015, and by 3.3 percent in 2016. The rate of inflation over the next year (ending in the third quarter of 2016) is expected to be 0.6 percent. The Bank of Israel interest rate is expected to remain at its current level of 0.1 percent until the first quarter of 2016, and to increase gradually from the second quarter of 2016.

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.¹ The Bank's medium scale 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

The current assessments of expected developments in the global environment are based mainly on projections by international institutions (the International Monetary Fund and the OECD) and of foreign investment houses. The current projections regarding the global economic recovery reflect some worsening compared to the projections from June. It seems that the rate of recovery in the advanced economies is slower than expected, and that there has been a worsening of the economic slowdown in the developing economies. The concerns regarding the pace of global recovery, which arose to a large extent due to concerns relating to the state of the economy in China, have amplified the uncertainty in the markets and are reflected in the high level of volatility of commodities prices and share prices, and in price declines.

Due to the worsening of projections regarding the global economy we have revised our projections downward regarding the growth rate of imports to the OECD

¹ An explanation of the staff macroeconomic forecast, and an overview of the models on which it is based, can be found in Inflation Report 31 for the second quarter of 2010, section 3-C.

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.

countries by about 1 percentage point for each of 2015 and 2016, so that our current projection is for growth of 3.5 percent in 2015 and 4.5 percent in 2016.

Since the publication of the previous staff forecast in June, oil prices declined sharply with a high level of volatility. The average price of Brent crude oil during the third quarter (until mid-September) is about 25 percent lower than the price assumed by the previous staff forecast for the same period. Commodities prices excluding energy and global food prices also declined markedly. Due to these developments, it is expected that inflation in the G4 economies will be lower than assumed in the previous staff forecast, and we project it to total 0.4 percent in 2015, about 0.4 percentage points lower than our projection in June. The effect of the declines in energy and commodity prices is expected to dissipate in 2016, and together with a recovery in growth, there is expected to be an increase in inflation to 1.7 percent.

b. Real activity in Israel

GDP growth is expected to be 2.6 percent in 2015, 0.4 percentage points lower than the previous staff forecast in June. Most of the revision is the result of the negative surprise—relative to previous assessments—in the exports component of the National Accounts data for the first half of the year, such that we now project that exports will contract by 2.6 percent this year. The decline in exports is, to a great extent, the result of temporary factors, chiefly work interruptions in the chemicals industry during the first half of the year, as well as a decline in global demand as reflected in the weakness of global trade. According to data available so far, the decline in exports (and as a result in total uses) was partly reflected in a low GDP growth rate, and partly in increased inventory (which is part of raw investment).³

GDP growth in 2015 is expected to be led by private consumption, which is expected to experience high growth, among other things as a result of the low interest rate and due to the income effect of the decline in energy prices.

The growth forecast for 2016 was revised to 3.3 percent, from 3.7 percent in the June forecast. This negative revision is mainly attributed to the expected stabilization in the growth of inventory. (Therefore, the decline in exports during the first half of 2015 is expected to have an effect on GDP growth partly in 2015 and partly in 2016.) The revision is also the result of the lower global trade forecast and of the accommodative effect of the VAT and corporate tax reductions.

Growth in 2016 is expected to be higher than in 2015, due to an increase in the growth rate of exports: Exports are expected to return to growth rates similar to those of imports to the OECD countries, and even to slightly exceed them, as a correction to the low growth in 2015.

Investment in 2016 is expected to increase rapidly, mainly due to investment in a large company (which will almost completely be imputed to the import of machines and equipment). The growth rate of private consumption is expected to moderate in 2016, due among other things to an expected increase in interest rates.

³ It is important to note that the quarterly data on change in inventory and on exports are exposed to significant revisions.

Table 1: Economic Indicators
Research Department Staff Forecast for 2015 to 2016

(rates of change, percent, unless stated otherwise)

	Actual 2014	Bank of Israel forecast 2015	Bank of Israel forecast 2016
GDP	2.6	2.6	3.3
Civilian imports (excluding diamonds, ships, and aircraft)	3.3	2.0	8.0
Private consumption	3.7	5.0	4.2
Fixed capital formation	-1.3	-2.2	6.9
Public sector consumption (excluding defense imports)	2.9	1.9	3.2
Exports (excluding diamonds and start-ups)	4.9	-2.6	5.4
Unemployment rate ^a	6.0	5.1	5.1
Inflation rate ^b	-0.2	-0.8	1.4
Bank of Israel interest rate ^c	0.25	0.10	0.5

a) Annual average.

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, inflation during the four quarters ending in the third quarter of 2016 is expected to be 0.6 percent.

This forecast is lower than the previous forecast in June, and is affected mainly by the decline in global energy and commodity prices, the effect of which on inflation is expected to dissipate during 2016, and by the decline in electricity prices. The forecast is also affected by one-time price declines—lowering the VAT by 1 percent (which is expected to come into force in October), and cancellation of the television broadcast fee. These price reductions do not reflect a prolonged decline in inflation, but rather one-time price adjustments. Our assessment is that by the end 2016—when the effect of the one-time price reductions will no longer be felt—the inflation rate will be 1.4 percent.

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 2016, and to begin increasing in the second quarter of 2016. Our assessment is that the monetary interest rate will remain at its current level until the first quarter of 2016, and will gradually rise starting in the second quarter of 2016, to an average of 0.5 percent in the fourth quarter of 2016, against the background of expected strengthening of growth in real activity, and an increase in inflation and in inflation expectations. It is worth emphasizing that this forecast is conditioned on the expected increase in the interest rate in the US and in other advanced economies. Assessments from the capital market (as derived from interest rate futures contracts) are that the Federal Funds Rate is expected to rise to 0.2 percent by the end of 2015, and to about 0.8

percent by the end of 2016.⁴ The European Central Bank interest rate is expected to remain near zero in 2016.

Regarding the path forecast in June, our assessment is that the interest rate will begin increasing slightly later (in the second quarter of 2016 instead of in the first quarter), and at a slower pace (with its level in the fourth quarter of 2016 being 0.75 percentage points lower than in our June forecast).

Table 2 shows that **the Research Department's forecast of inflation and the interest rate in the next year are slightly higher than expectations derived from the capital market and than the projections of professional forecasters.**

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	0.6	0.4	0.4
(range of forecasts)			(-0.1–0.7)
Interest rate ^d	0.25	0.10	0.30
(range of forecasts)			(0.0–0.75)

a) Average for the month of September (through September 17). Seasonally adjusted inflation expectations.

b) Inflation and interest rate forecasts are after the publication of the CPI reading for August.

c) Inflation rate over the next 12 months (Research Department: in the next four quarters).

d) Research Department: the interest rate in the third quarter of 2016. Forecasters and capital markets: the interest rate one year from now. Capital markets forecast derived from Telbor rates.

Source: Bank of Israel.

d. Balance of risks in the forecast

This forecast is based on the assumptions detailed above. Developments different than those assumptions may lead to developments in the domestic economy that are different than those in the baseline forecast (Table 1). In particular, the interest rate path in Israel is dependent on actual developments, mainly in the global environment, and on the interest rates of central banks around the world.

A prominent source of risk to the forecast is the global economy. The risks to the pace of global recovery are derived from the advanced economies and from the developing economies. While the former have thus far recovered at a slower pace than our assessment in June, there has been a worsening of the slowdown in the latter. These risks have increased in the recent period, which is reflected in the fact that prices in the capital and commodities markets have declined with high volatility. These phenomena do not only reflect increased risk to the economy, but may in and of themselves negatively impact recovery.

⁴ The assessment of senior officials at the Federal Reserve is that the interest rate will increase more rapidly.

This forecast presents our assessments that global growth will continue to recover during 2016, and that commodities and energy prices will stabilize at their current levels, and that their moderating effect on inflation will therefore dissipate during the next year. Accordingly, our assessment is that the interest rate in the US will begin increasing in the last quarter of 2015, and will increase gradually. However, if the concerns over moderation in the global recovery are realized, it is expected to be reflected in a negative impact on global trade. It may also be reflected in a slower recovery of inflation globally, and in a slower increase in the interest rate in the US. These factors are expected to act to moderate activity and inflation in Israel, and to delay the timing of interest rate increases.

Other risk factors to the forecast are derived from the domestic environment. This forecast presents our assessment that the low growth rate in the first half of 2015 is derived to a large extent from temporary factors. However, it is possible that the slowdown reflects factors with a longer-lasting nature. Other risk factors from the domestic environment include security incidents that may have a negative impact on the domestic economy, domestic developments that may affect the exchange rate, and changes in fiscal policy.

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 June 2015.) 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)

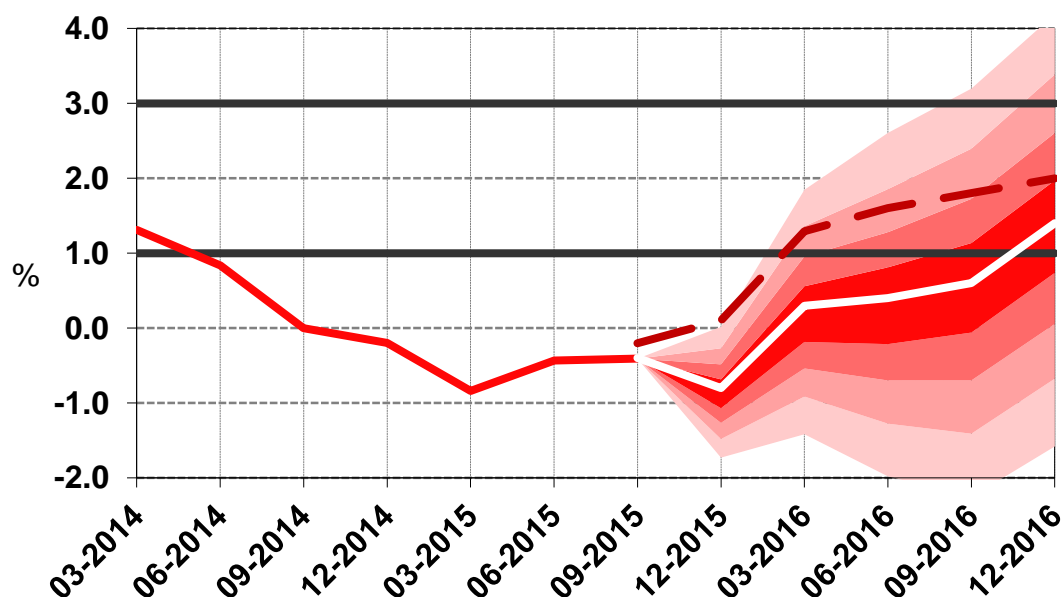
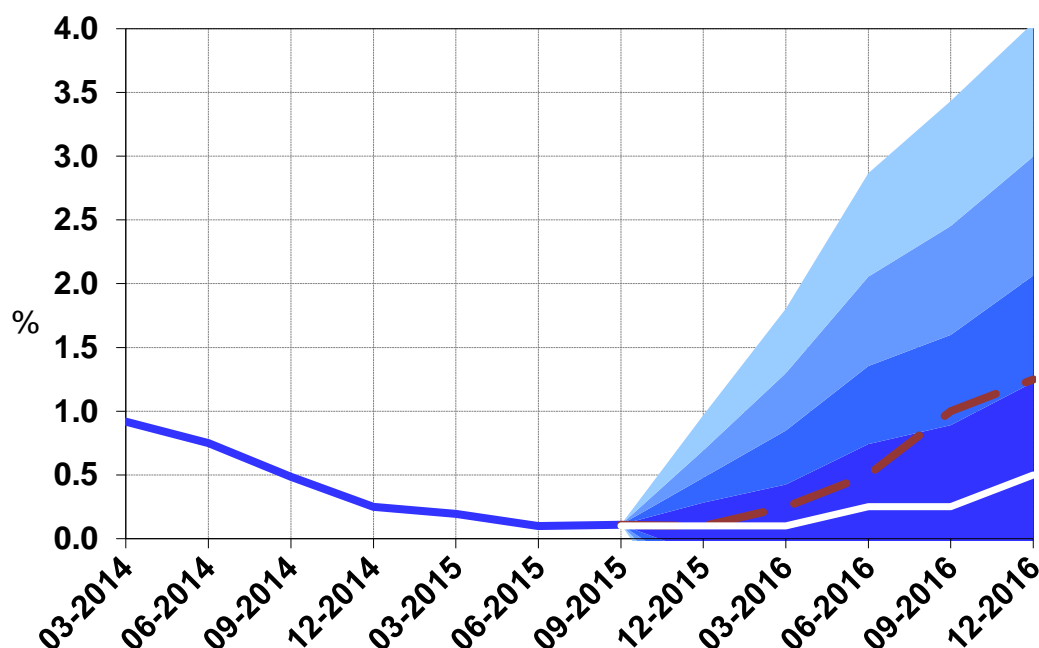


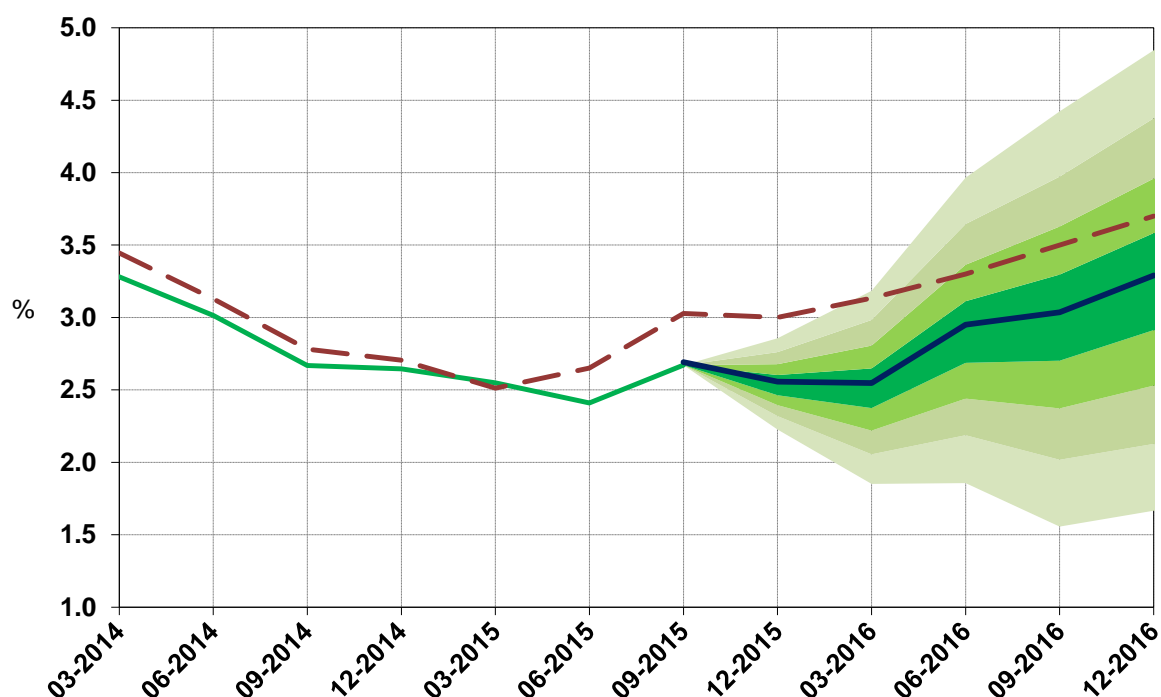
Figure 2
Actual Bank of Israel Interest Rate and Fan Chart of Expected Interest Rate



The center of the fan charts (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 June 2015).

Source: Bank of Israel.

Figure 3
The Actual GDP Growth Rate in the Past Four Quarters, According to Assessments in the Previous Quarter, and Fan Chart of Expected Growth Rate



The growth rate is calculated as the change in the average GDP over the past four quarters relative to the average GDP in the four quarters of the previous year. The center of the fan chart (the blue 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 June 2015). SOURCE: Bank of Israel.