BANK OF ISRAEL
Office of the Spokesperson and Economic Information

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Research Department Staff Forecast, January 2022

Abstract

This document presents the macroeconomic staff forecast formulated by the Bank of Israel Research Department in January 2022[1] concerning the main macroeconomic variables—GDP, inflation, and the interest rate.

According to the forecast, GDP is expected to grow by 5.5 percent in 2022, similar to the previous forecast. Growth in 2023 is expected to be 5.0 percent. The inflation rate in the coming four quarters (ending in the fourth quarter of 2022) is expected to be 1.6 percent, similar to the previous forecast, and inflation in 2023 is expected to be 2 percent. According to the forecast, the monetary interest rate is expected to be 0.10/0.25 percent one year from now.

The 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 that have an effect on the economy, and allows information from various sources to be combined into a macroeconomic forecast of 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 foreign investment houses. In view of the assessment that the delays in the global supply chains will last until the second half of 2022, the forecast for growth of imports to advanced economies in 2022 was lowered to 5.0 percent, and the forecast for 2023 is for growth of 4.5 percent. Accordingly, we assume that GDP growth in the advanced economies will be slightly more moderate than in our previous forecast—3.9 percent in 2022 and 2.5 percent in 2023. The inflation rate in the advanced economies is forecast to be 4.4 percent in 2022 and 3.1 percent in 2023—higher than in the previous forecast, in view of the perception that the increase in inflation is less temporary. Accordingly, the average interest rate of the central banks is expected to increase slightly more than in the previous forecast, to about 0.3 percent by the end

[1] The forecast was presented to the Bank of Israel Monetary Committee on January 2, 2022, prior to the decision on the interest rate made on January 3, 2022.
[2] A Discussion Paper on the DSGE 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.

of 2022 and 0.6 percent at the end of 2023. The average price of Brent oil was about $79 per barrel in the fourth quarter, about 9 percent higher than the average price in the third quarter.

b. Real activity in Israel

Our assessment is that **GDP will increase by 5.5 percent in 2022, similar to our previous forecast, and 5.0 percent in 2023** (Table 1). Average GDP in 2023 is expected to be about 0.6 percent below the GDP trend prior to the COVID-19 crisis. Compared with the previous forecast, the forecasts of private consumption and imports in 2022 were revised slightly upward, in view of the assessment that outgoing tourism will increase in 2022 while incoming tourism will recover only in 2023. The forecasts of exports and investments in 2022 were revised downward in view of the assessment that delays in the supply chains will continue in 2022, and influenced by our assessment regarding tourism.

Regarding fiscal policy, the passage of the State budget and the increase in tax revenue supported a downward revision of the deficit-to-GDP and debt-to-GDP ratio forecasts. In addition, our assessment is that in 2023, gradual steps will be taken to reduce the structural deficit. In particular, **the deficit forecast for 2022 was revised downward to 3.6 percent of GDP, and the debt forecast for 2022 was revised downward to 69 percent of GDP**. In 2023, the deficit is expected to be 3.4 percent of GDP, and debt is expected to remain unchanged at 69 percent of GDP. The path of the adjusted employment rate was raised by about 1.0 percentage point relative to the previous forecast, and the rate is expected to be 60.5 percent at the end of 2022 and 60.7 percent at the end of 2023.

Table 1
Research Department Staff Forecast for 2022–2023

(rates of change, percent[a], unless stated otherwise)

	2020	Forecast for 2021	Change from the October forecast	Forecast for 2022	Change from the October forecast	Forecast for 2023
GDP	**-2.2**	**6.5**	**-0.5**	**5.5**	**--**	**5.0**
Private consumption	-9.2	10.5	-1.0	8.0	1.0	5.0
Fixed capital formation (excl. ships and aircraft)	-2.6	8.5	1.5	6.0	-0.5	8.0
Public consumption (excl. defense imports)	2.7	2.5	-1.5	2.5	--	3.0
Exports (excl. diamonds and startups)	1.1	8.5	1.0	3.0	-1.0	5.5
Civilian imports (excl. diamonds, ships, and aircraft)	-7.3	15.5	0.5	8.0	0.5	6.5
GDP deviation from the precrisis trend (percent)	**-5.8**	**-3.3**	**0.3**	**-1.7**	**0.4**	**-0.6**
Broad unemployment rate[b] (average for the year)	15.9	10.2	-0.2	5.4	-0.4	4.5
Broad unemployment rate[b] (fourth quarter)	**16.1**	**6.7**	**-0.4**	**4.8**	**-0.4**	**4.4**
Adjusted employment rate[b] (average for the year)	53.3	57.0	0.2	60.2	0.9	60.6
Adjusted employment rate[b] (fourth quarter)	52.7	59.8	0.8	60.5	1.0	60.7
Government deficit (percent of GDP)	11.4	4.5	-1.9	3.6	-0.4	3.4
Debt to GDP ratio	72	69	-5.	69	-3	69
Inflation[c]	-0.7	2.4	-0.1	1.6	0.0	2.0

[a] In the forecast of National Accounts components, the rate of change is rounded to the nearest half percentage point.
[b] The broad unemployment rate and the adjusted employment rate among those aged 15+. In accordance with the Central Bureau of Statistics definition, the broad unemployment rate includes the unemployed under the normal definition (someone who has not worked, wanted to work, was available for work, and looked for work), as well as employees temporarily absent for an entire week for reasons having to do with COVID-19 (including those on furlough), and those not participating in the labor force for reasons having to do with COVID-19. The adjusted employment rate does not include employees temporarily absent for an entire week for reasons having to do with COVID-19.
[c] The average of the Consumer Price Index in the last quarter of the year compared with the average in the last quarter of the previous year.

c. Inflation and interest rates

According to our assessment, **inflation in the next four quarters (ending in the fourth quarter of 2022) is expected to be 1.6 percent** (Table 2), **similar to our previous assessment. Inflation in 2023 is expected to be 2.0 percent**. The shekel's 4 percent appreciation in terms of the nominal effective exchange rate since the previous forecast (fourth quarter average compared with the third quarter average) supports a downward revision of the inflation forecast for 2022. However, other factors are expected to contribute to an increase in inflation and to offset the effects of the appreciation. These factors are reflected in imported inflation being higher than our assessment from the previous forecast in both 2022 and 2023. Imported inflation is expected to increase in view of revised assessments that the high inflation is less transitory than previously assumed. The assessment of delays in the global supply chain was revised, and the delays are now expected to very likely last until the end of 2022.

In addition, the forecast of domestic inflation for 2022 was revised upward in view of government decisions that accompanied the passage of the budget, such as the tax on sweetened beverages that took effect at the beginning of 2022 and the increase in electricity prices, and in view of the upward revision of our assessment of expected housing prices and the increase in housing prices' expected contribution to domestic inflation for the years 2022 and 2023.

Our assessment is that **the interest rate will be 0.1/0.25 percent in one year** (Table 2). The dissipation of the effects of the appreciation, and the increase in actual and expected inflation such that the low real interest rate reflects stronger monetary accommodation than in the past, together with the expected continued improvement in the labor market, are all expected to lead the interest rate to start climbing gradually.

Table 2 shows that the Research Department's staff forecast regarding inflation in one year is similar to the average of the private forecasters' projections and lower than expectations derived from the capital market. However, net of the estimated inflation risk premium, market expectations are also within the inflation environment of the Research Department's forecast and those of the professional forecasters.[3]

[3] For more information on the methodology used for estimating inflation risk premia, see Daniel Nathan (2021), "Decomposing the Israeli Term Structure of Interest Rates", working paper, Bank of Israel Research Department.

Table 2
Inflation forecast for the coming year and interest rate forecast for one year from now

(percent)

	Bank of Israel Research Department	Capital markets[a]	Private forecasters[b]
Inflation rate[c] (range of forecasts)	1.6	2.5	1.7 (1.2–2.4)
Interest rate[d] (range of forecasts)	0.1/0.25	0.25	0.25 (0.0–0.5)

a) Average following the publication of the Consumer Price Index for November. Inflation expectations are seasonally adjusted.
b) The average of forecasts published following the publication of the Consumer Price Index for November.
c) Inflation rate in the coming year. Research Department: in the four quarters ending in the fourth quarter of 2022.
d) The interest rate one year from now. (Research Department: in the fourth quarter of 2022.) Expectations derived from the capital market are based on the Telbor market.
SOURCE: Bank of Israel.

d. Main risks to the forecast

The risks to the forecast in the context of the COVID-19 pandemic remain, and are brought into sharper relief in view of the fifth wave, but thanks to the high vaccination levels in Israel, they have declined relative to last year. It seems that the effect of the restrictions and of morbidity on activity is subsiding as the economy adapts itself to the situation of activity alongside the pandemic, together with the improvement in the vaccination rates and in care for patients.

Developments in the exchange rate pose a significant risk to the forecast. Insofar as the trend of appreciation of the shekel continues, it is expected to have an effect mainly on inflation, providing support for a further decline in 2022.

Upward risks to the inflation forecast through imported inflation may be due to the extension of delays in the supply chain into 2023, and the continuation of high inflation globally, for instance as a result of fiscal dominance mainly in the US. Upward risks to the inflation forecast due to domestic inflation may develop as a result of further increases in housing prices.