

BANK OF ISRAEL

Office of the Spokesperson and Economic Information

October 23, 2023

**Research Department Staff Forecast, October 2023**

**Abstract**

This document presents the macroeconomic staff forecast formulated by the Bank of Israel Research Department in October 2023[[1]](#footnote-1) concerning the main macroeconomic variables—GDP, inflation, and the interest rate. This forecast was formulated in the midst of the “Swords of Iron” War, which broke out on October 7, 2023 with the cruel attack by terrorist organizations from Gaza. This period features a high amount of uncertainty with regard to the development of the war and its economic impacts. The forecast includes an assessment of the economic costs of the war based on the information available up to this point, assuming that the majority of the war will be concentrated on the southern front. The forecast naturally features a particularly high level of uncertainty, partly in view of the uncertainty with regard to the duration, scope, and nature of the war.

Prior to the outbreak of the war, the level of economic activity was higher than our assessment in the previous forecast from July 2023. Given this starting point, as well as our assessment of the war’s macroeconomic impact, our assessment is that in 2023, GDP will grow by 2.3 percent, and that in 2023 it will grow by 2.8 percent (compared with growth of 3 percent in each year in the previous forecast). The inflation rate in the coming four quarter (ending in the third quarter of 2024) is expected to be 2.9 percent. According to the forecast, the interest rate in the third quarter of 2024 is expected to be 4.0/4.25 percent.

**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—a structural model developed in the Research Department and based on microeconomic foundations—plays a prime role in formulating the macroeconomic forecast.[[2]](#footnote-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”.

The formulation of the current forecast and risk assessment focused particularly on an analysis of security events from the past in order to formulate estimates of the economic impact of the current war. The analysis was based on the DSGE model and on assessments by the Bank of Israel Research Department concerning the scope of the impact on the supply side, derived from an absence of employees during the combat period and the security restrictions on activity.

1. **The global environment**

Our assessments of expected developments in the global economy are based mainly on projections by international financial institutions and foreign investment houses. Accordingly, we assume that growth in the advanced economies will be 1.2 percent in 2023 and 0.8 percent in 2024 (compared with 0.9 percent in each year in the July forecast). Forecasts of world trade were lowered, and our assumption is that it will grow by 0.9 percent in 2023 and 3.5 percent in 2024 (compared with 1.6 percent and 3.8 percent in the July forecast. The inflation forecasts for the advanced economies for 2023 were revised upward. Accordingly, our assessment is that inflation in those countries will total 3.4 percent in 2023 (compared with 3.1 percent in the July forecast) and 2.4 percent in 2024 (similar to the July forecast). Investment houses’ forecasts of average inflation in the advanced economies increased slightly. Accordingly, we assume that the average interest rate in the advanced economies will be 4.9 percent at the end of 2023 and 3.9 percent at the end of 2024 (compared with 4.7 percent in 2023 and 3.6 percent in 2024 in the July forecast). The price of Brent crude oil increased to about $90 per barrel (compared with $76 when the previous forecast was prepared in July).

1. **Real activity in Israel**

GDP is expected to grow by 2.3 percent in 2023, and by 2.8 percent in 2024 (Table 1).

Prior to the outbreak of the war, there was a high level of economic activity, and the growth rate was in a slightly moderating trend. National Accounts data for the second quarter of 2023 pointed to growth of 3.0 percent, which was higher than our forecast, and growth data for the previous quarters were revised upward. The main contributor to growth in the second quarter was the investments component, while private consumption and exports grew at only a moderate pace. The labor market was tight, and featured a high (although moderating) level of job vacancies. The employment rate in the prime working ages was high, and the unemployment rate was low relative to the levels that were prominent prior to the COVID-19 crisis. Had it not been for the outbreak of the war, these developments would have supported an increase in the growth forecast for 2023 and a decline in the unemployment forecast for both 2023 and 2024.

The forecast in Table 1 is based on the assumption that most of the war’s direct impact on the economy will be in the fourth quarter of 2023. Accordingly, our assessment is that the war will reduce 0.5–1.0 percentage points from GDP growth in each of the years 2023 and 2024.[[3]](#footnote-3) The impact is expected to be reflected in a further weakening of private consumption, due to the decline in demand for consumption and supply-side restrictions. These restrictions are due to the absence of workers as a result of emergency mobilizations and the closure of educational institutions, as well as damage to physical capital and the ability to work in combat areas and threatened areas. These are also creating some disruption to the manufacturing and supply chains. Industrial investment is expected to be harmed due to uncertainty and the increase in financing costs, as reflected in the increase in yields in the corporate bond market. In addition, investment in construction is expected to be harmed due to restrictions on the entry of laborers from Judea and Samaria and due to the complete cessation of employment of workers from Gaza. The export of tourism services is also expected to suffer, where experience from previous security incidents shows that this impact is expected to be prolonged. In view of the decline in demand, imports are also expected to decline. In view of these developments, our assessment is that unemployment in the prime working ages will increase during the first part of 2024, before resuming its decline.[[4]](#footnote-4)

|  |
| --- |
| **Table 1****Research Department Staff Forecast for 2022–2024**(rates of change, percenta, unless stated otherwise) |
|  | 2022Actual | Forecast for 2023 | Change from the July forecast | Forecast for 2024 | Change from the July forecast |
| **GDP** | **6.5** | **2.3** | **-0.7** | **2.8** | **-0.2** |
| Private consumption | 7.7 | 0.5 | -2.5 | 1.5 | -2.0 |
| Fixed capital formation (excl. ships and aircraft) | 10.7 | 4.0 | -0.5 | 0.0 | -3.0 |
| Public consumption (excl. defense imports) | 1.0 | 2.5 | 0.5 | 6.5 | 3.5 |
| Exports (excl. diamonds and startups) | 9.7 | -0.5 | -2.0 | 4.0 | 1.5 |
| Civilian imports (excl. diamonds, ships, and aircraft) | 12.4 | -6.0 | -7.5 | 2.0 | -2.0 |
| Unemployment rate (average for the year, age 25–64) | 3.3 | 3.2 | -0.5 | 3.6 | -0.5 |
| Employment rate (average for the year, ages 25–64) | **78.6** | **79.1** | **1.2** | **78.8** | **1.6** |
| Government deficit (percent of GDP) | -0.6 | 2.3 | 1.0 | 3.5 | 2.0 |
| Debt to GDP ratio (percent) | 60.5 | 62.0 | 2.0 | 65.0 | 6.0 |
| Inflation (percent)b | 5.1 | 3.5 | 0.0 | 2.5 | 0.1 |
| a In the forecast of National Accounts components, the rate of change is rounded to the nearest half percentage point.b 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. |

1. **The State Budget and fiscal policy**

**The debt-to-GDP ratio is expected to increase to 65 percent at the end of 2024** (Table 1).

Building a forecast for the State Budget at this time is exposed to significant uncertainty with regard to the effect of the war and the government’s decisions on how to deal with the military and civilian needs derived from it. The uncertainty mainly involves three factors. The first is the volume of the increase in defense expenditures, their division between domestic expenditures and defense purchases, and the extent of their coverage through assistance from the US government. The second factor is government decisions with regard to assistance to residents of the combat areas, victims and survivors from the Gaza region, and businesses and the public in the rest of the country. This is alongside the extent to which the government will act to offset part of this growth in expenditures by reducing other expenditures. The third factor is the extent of the decline in tax revenue due to the war’s effect on the economy, and the pace of its recovery. Beyond these, there is also some uncertainty regarding payments dates and the method of recording some expenditures, which will have an impact on the division of the war’s effects between the 2023 and 2024 budgets.

In building this forecast, our assessment is that the impact on economic activity will lead to a decline in tax revenues in the fourth quarter of 2023, but mainly in 2024. Our assessment is that a significant portion of the increase in direct civilian expenditures will be spent in 2023, but that there will be some overflow into 2024, while recovery expenses will increase in 2024. In addition, our assessment in this forecast is that the government will, to some extent, reduce its other expenditures in order to offset some of the expenses and the increase in debt deriving from the war. Furthermore, we assume that most of the defense expenditures in 2023 will be covered by allocations from within the Budget and some use of assistance from the US government, but that starting in 2024, the defense budget will increase, which will result in an increase in the budget deficit.[[5]](#footnote-5) All of these are expected to be reflected in an increase in the budget deficit totaling 2.3 percent of GDP in 2023 and 3.5 percent of GDP in 2024. Beyond that, the government has additional expenses that will be financed from the Compensation Fund and will not be included in the budget deficit.[[6]](#footnote-6) In view of this, government debt is expected to increase to 62 percent of GDP at the end of 2023 and 65 percent of GDP at the end of 2024. If the government decides to further increase expenditures and/or to avoid reducing other expenditures, the deficit and debt are expected to increase further accordingly.

1. **Inflation and interest rates**

According to our assessment, **inflation in the next four quarters (ending in the third quarter of 2024) is expected to be 2.9 percent** (Table 2(. Since the publication of the previous forecast in July, and to a greater extent since the outbreak of the war, the shekel has been in a trend of depreciation, which is contributing to the increase in inflation. The increase in dollar oil prices is also expected to contribute to increased inflation. In addition to these, goods and services may become more expensive in view of supply-side disruptions as a result of the war. These include restrictions on the supply of labor in view of the emergency mobilization and the closure of educational institutions, impaired production capabilities, and disruptions in the supply chains. Our assessment is that these forces will work to increase inflation in the short term. However, inflation is expected to moderate later on as these effects on the supply of goods and services dissipate, and due to lower consumer sentiment and demand for consumption. In contrast, the moderation of inflation later on is expected to be partly offset by an increase in demand for housing outside the confrontation areas.

**The interest rate is expected to be 4.0 or 4.25 percent in the third quarter of 2024** (Table 2). The interest rate level during the forecast period will help stabilize inflation and economic activity. This comes together with the program of intervention in the foreign exchange market that the Bank of Israel announced, the aim of which is to moderate the volatility of the exchange rate and provide the necessary liquidity for continued proper functioning of the markets.

Table 2 shows that the Research Department’s staff forecast regarding inflation is slightly higher than expectations derived from the capital market and the average of the private forecasters’ projections. Regarding the interest rate, the staff forecast is also higher than expectations from both sources.[[7]](#footnote-7)

| **Table 2** |
| --- |
| **Inflation forecast for the coming year and interest rate forecast for one year from now** |
| (percent) |
|  | Bank of Israel Research Department | Capital marketsa | Private forecastersb |
| Inflation ratec | 2.9 | 2.7 | 2.7 (2.0–3.3) |
| (range of forecasts) |  |  |  |
| Interest rated | 4.0/4.25 | 3.7 | 3.7 |
| (range of forecasts) |  |  | (3.25–4.00) |
| a) Inflation expectations are seasonally adjusted (as of October 22, 2023).b) The average of forecasts published following the publication of the Consumer Price Index for September 2023.c) Research Department: the inflation rate during the four quarters ending in the third quarter of 2024.  |
| d) Research Department: the average interest rate in the third quarter of 2024. Expectations derived from the capital market are based on the Telbor market (as of October 20, 2023).SOURCE: Bank of Israel. |

1. **Main risks to the forecast**

The basic forecast that we have presented estimates the costs of a war assuming that the main part of it will be on one front against the terrorist organizations in Gaza, and will be mainly in the current quarter—the fourth quarter of 2023. A change in the duration, scope, or intensity of the war will obviously have a material impact on actual economic developments.

In terms of financial risks, the measures taken by the Bank of Israel and the government are expected to ease the financial situation of households and businesses. In addition, war scenarios have been tested a number of times as part of the uniform macroeconomic stress scenarios for the banking system, and in these scenarios, the banking system is expected to maintain its robustness and its stability. Despite this, there are financial risks in the real estate and construction industries, in which increased risk in the bond market was already priced in before the war. The restrictions on the entry of Palestinian laborers in the industry in view of the war, are expected to hamper the performance of construction and real estate companies. In contrast, future demand, partly for the reconstruction of buildings and infrastructure that have been damaged in the war, may actually benefit the industry in the longer term.

1. The forecast was presented to the Bank of Israel Monetary Committee on October 22, 2023, prior to the decision on the interest rate made on October 23, 2023. [↑](#footnote-ref-1)
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. [↑](#footnote-ref-2)
3. Table 1 shows the change in the growth forecast relative to the July forecast. This change is comprised of a positive contribution to the forecast derived from data revisions since July, and a negative contribution due to the war’s impact. [↑](#footnote-ref-3)
4. The downward revision of the unemployment forecast that appears in Table 1 was influenced by unemployment data received since the previous forecast. [↑](#footnote-ref-4)
5. We assume that from 2024, similar to previous wars and campaigns, the Knesset will approve a one-time increment to the expenditure ceiling in order to compensate the defense establishment for the costs of the war in 2023, and in order to finance some of the civilian and rehabilitation expenditures. The increase in expenditures in 2024 will represent only part of the overall costs, which will be spread out over a number of years. [↑](#footnote-ref-5)
6. Compensation in respect of direct and indirect damages are not considered expenditures in the State Budget, but rather as extra-budgetary expenditures based on the Property Tax and Compensation Fund Law, 5721–1961. Because this compensation is unfunded, its costs do not increase the budgetary deficit. However, the government will be required to finance them by raising debt. [↑](#footnote-ref-6)
7. It should be noted that during periods of great uncertainty such as the current period, yields in the capital market may be greatly affected by the risk and liquidity premia. [↑](#footnote-ref-7)