Chapter 1

The Economy and Economic Policy During Social Crisis and War

- Economic developments in Israel were markedly affected this year by two significant domestic events: the legislative process led by the government with regard to the judicial system, which led to public protests, and the Swords of Iron War that broke out on October 7.
- In 2023, the global environment was relatively stable, and featured a decline in inflation rates, moderate growth, stability of interest rates, and a sharp increase in equity prices.
- GDP grew by 2.0 percent in 2023—near-zero growth per capita—with a decline in the pace of growth of most uses. Until the outbreak of the war, inflation moderated and the positive output gap narrowed, with growth that was lower than the economy's long-term pace. This process is referred to as a "soft landing". In the fourth quarter, GDP declined by 5.6 percent, influenced by the war.
- Until the outbreak of the war, the labor market remained at full employment, and featured an accelerated increase of nominal wages, a low unemployment rate, and a high job vacancy rate, which moderated during the year.
- The pace of annual inflation moderated during the year, influenced by tight monetary policy, from 5.4 percent at the beginning of the year to 3 percent at the end—the upper bound of the inflation target. The process of raising the Bank of Israel interest rate, which began in April 2022, continued in the first half of 2023, when it was raised by 1.5 percentage points to 4.75 percent, with an increase in the real interest rate.
- The interest rate increases prior to the war increased the costs of financing, and led to restrained demand and an increase in individual savings. The growth of business credit moderated, with a decline in credit to micro businesses, while consumer credit declined.
- The slowdown in the housing market continued. Until the war, home prices declined. The increase in rental prices accelerated until the middle of the year, and then began to moderate. Since the outbreak of the war, many construction companies have suffered from a shortage of manpower due to the prohibition of employing Palestinian laborers, and the industry has been operating at partial capacity.
- Until the war, fiscal policy was conservative. There was a measured increase in the cumulative annual deficit, mainly due to the dwindling of irregular revenues such as were recorded in previous years. The original two-year budget for 2023–2024 that was approved at the end of May included almost no important reforms to support sustainable long-term economic growth.
- The necessary budgetary increment required in 2023 and 2024 due to the war has already reached NIS 100 billion. With the outbreak of the war, Israel's risk premium rose sharply, and then moderated slightly thereafter. The shekel depreciated sharply at the beginning of the war, but then appreciated relative to its prewar level.
- When the war began, the Bank of Israel immediately announced a program to sell up to $30 billion in foreign exchange, swap transactions totaling up to $15 billion, and a repo program in order to provide liquidity to the domestic market. The government and the Bank of Israel took a number of policy measures in the credit field, focused on small businesses and households that were impacted by the war.
- The consequences of the war are expected to continue into the medium term. Due to the long-term nature of the increased defense and rehabilitation costs, it is important that they be accompanied by budgetary adjustments of a similar scale in order to prevent an increase in the debt to GDP ratio over time and the damage that would come with it.

The war that broke out on October 7 split the year into two periods—before the war and during the war. These two periods essentially differ in terms of economic developments as well. As such, this chapter discusses the developments in each period separately.

The first part of the chapter outlines the economic background conditions at the beginning of the year. The second reviews the main economic developments in 2023 until the war, including the stance of monetary and fiscal policy. The third discusses the economic impacts of the war, and the fourth section deals with the challenges that the economy is expected to face in the medium term due to the war.

1. ECONOMIC BACKGROUND CONDITIONS

a. The economic situation prior to 2023

In 2023, Israel experienced two significant events—the legislation that the government led from the beginning of the year with regard to the judicial system, which was accompanied by mass protests and a deep social crisis, and the Swords of Iron War that broke out on October 7, with the worst terrorist attack in the country's history. The background conditions of the economy, which was strong and stable at the beginning of the year, provided important security buffers that supported the economy in dealing with these events.

At the beginning of 2023, the state of the Israeli economy was good. The level of economic activity was high, the labor market was tight, inflation was higher than the target but lower than in other countries, and the financial system was strong.

Prior to the start of the year, the Israeli economy was at full employment, inflation was higher than the target, GDP was higher than the long-term trend, the debt to GDP ratio had declined to its pre-COVID-19 level and a downward path was expected, and there was a surplus in the government budget (Table 1.1). The current account surplus stabilized at about 3.5 percent of GDP, and the country's foreign exchange reserves equaled about 40 percent of GDP. The shekel was appreciated from a long-term perspective, even though it had weakened somewhat in 2022. The strength and robustness of the economy were reflected in the stability of the financial system as a whole, particularly that of the banking system. This robustness enabled the Bank of Israel to soften the war's financial impact on the population.

This situation was a result of the economy's rapid recovery from the COVID-19 crisis. The growth rate in 2021 and 2022 was much faster than the economy's long-term pace, including a rapid growth in labor productivity. The output gap (the difference between GDP and its long-term trend, which is an estimate of potential GDP) became positive, after it had been very negative during the pandemic.

These developments were accompanied by a rapid recovery of demand, alongside supply limitations such as the interruptions in the global supply chains and the war between Russia and Ukraine that followed. These limitations, in view of the very accommodative monetary and fiscal policies adopted in Israel and abroad during the pandemic, led to a sharp increase in inflation rates above the inflation targets.

During 2022, central banks and governments, including in Israel, began adopting less accommodative policies out of concern over high and sticky inflation.

b. The main global developments in 2023

Following concern over a significant moderation in economic activity and a prolonged period of downward revisions of growth forecasts, global growth forecasts were increased at the beginning of 2023. This was in view of a decline in concerns over an energy crisis in Europe, the reopening of China with the removal of COVID-19-related restrictions, and better-than-expected economic activity data in the US. The inflation environment remained high, but there was a moderating trend in many countries. This was influenced by monetary policy, which became tighter, and by the easing in the supply chains and declines in global shipping prices. However, the trend in the core indices was mixed.

These developments posed a challenge to monetary policy makers with regard to the process of halting inflation with a "soft landing"—a gradual slowing of the growth rate toward its trend, a measured release of the tight labor market, and moderation of the high inflation rate toward the target. In practice, the growth rates in most economies remained moderate and interest rates continued to increase, although at a more moderate pace.

As the months passed, the inflation environment continued to moderate, although in most economies it remained higher than the targets, particularly the core indices. Growth moderated relative to the previous year, mainly due to monetary restraint, and the likelihood of a "soft landing" increased.

2023 was characterized globally by a "soft landing". The inflation environment moderated alongside economic growth that was moderate but better than expected.

Toward the end of 2023, there were increasing assessments that the interest rate increases were close to being exhausted. However, some of the central banks emphasized in their forward guidance that the interest rate was expected to remain high over time, and the Chairman of the Federal Reserve and the President of the European Central Bank noted that further tightening was possible if necessary. Despite the cautious policy, at the end of the year the markets priced in interest rate declines in 2024.

2. MAIN ECONOMIC DEVELOPMENTS UNTIL THE WAR

a. Legislative processes

2023 began with government-initiated legislative changes regarding the judicial system, which were accompanied by a deep social crisis.

At the beginning of 2023, the new government presented a comprehensive plan of legislative changes with regard to the judicial system. This process ignited widespread and prolonged public protests. The advancement of the legislative changes led to a number of flashpoints during the year, which were mainly accompanied by reactions in the financial markets when they happened.

Moody's lowered its credit rating forecast for Israel in April 2023, due to concern over damage to government institutions and their quality, which would be accompanied by a decline in foreign investments and higher cost of debt, and in view of geopolitical risks.

The economic literature indicates medium- and long-term risks as a result of structural changes that are perceived as harming the quality or independence of institutions, or their reliance on the rule of law.[1] Such changes may deter domestic and foreign investors and make debt more expensive. Internalizing the expected effects of these changes in the markets raises the risks in the short-term as well.

International agencies, including the International Monetary Fund[2] and the OECD, warned of the potential negative implications of the legislative changes. At the beginning of the year, the large credit rating agencies expressed concern over harm to the economy due to these processes, and indicated an increase in the risk of lowering the credit ratings if the planned changes in the judicial system would harm the existing checks and balances.[3] In April, Moody's lowered its rating outlook for Israel from "positive" to "stable". Alongside this, the ratings agencies and international agencies emphasized Israel's high resilience and the strength of the domestic financial system (see the background terms above), and the spreads, the volume of lines of credit, and the volume of problematic debts did not materially change. In addition, the security buffers accumulated by households and businesses following the support grants paid during the COVID-19 crisis increased their resilience in the face of potential shocks.

The legislative process with regard to the judicial system and the resulting atmosphere in Israel were reflected in the financial markets during the period. The shekel depreciated and the Israeli capital market underperformed.

The program of legislative changes and the resulting atmosphere in Israel were reflected during the period in the financial markets. Throughout the year, in view of the milestones in the process, the shekel depreciated markedly, and the Israeli capital market, as well as Israeli companies trading abroad, underperformed other countries. In addition, venture fund investment data showed underperformance in capital raised for startup companies. In contrast, during periods in which the legislative reforms were not advanced, the financial shocks were less intense. An analysis of the development of the exchange rate shows an over-depreciation of the shekel by 10–15 percent, which delayed the convergence of inflation to the target range. This was part of the considerations taken into account by monetary policy. (For more discussion, see Chapter 3 of this Report.)

In view of these processes, there was concern that their continuation would be reflected in an increase in the country's risk premium, a negative impact to exports, and declines in domestic investment and in demand for private consumption. The

[1] Beazer and Blake (2018), "The Conditional Nature of Political Risk: How Home Institutions Influence the Location of Foreign Direct Investment", AJPS; Carlin et al., (2009), "Public Trust, The Law, and Financial Investment", JFE; L. Guiso (2010), "A Trust-Driven Financial Crisis. Implications for the Future of Financial Markets", EIEF; C. Agustin, (2023), "The Value of Trust"; Stix (2013), "Why do People Save in Cash? Distrust, Memories of Banking Crises, Weak Institutions, and Dollarization", JoBF; M. Del Angel and G. Richardson (2022), "Independent Regulators and Financial Stability", NBER, WP29938; OECD Economic Surveys: Israel 2023. See also the Chief Economist's position paper on the implications of the judicial reform, April 2023 (in Hebrew).

[2] https://www.imf.org/en/News/Articles/2023/05/10/israel-staff-concluding-statement-of-the-2023-article-iv-mission

[3] https://www.reuters.com/business/finance/sp-sees-israeli-judicial-reforms-downside-risk-credit-/rating-2023-01-12

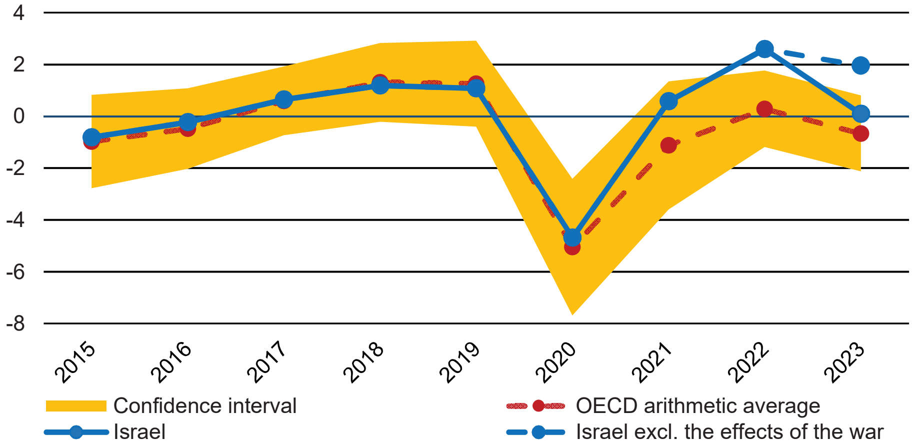
range of the potential impact of these effects was estimated at an average decline of between 0.8 and 2.8 percent of GDP, for each of the coming three years. (For more discussion, see the Research Department's macroeconomic staff forecast from April 2023.)

Until the war, GDP grew more slowly than in previous years, as the pace of expansion of uses moderated.

b. Real developments until the war

The pace of GDP growth in the first three quarters of the year was slower than in previous years (the blue dotted line in Figure 1.1). In addition, the pace of expansion of uses moderated. Private consumption per capita declined slightly, exports increased but only slightly, and investment in the economy, which had grown at a particularly high pace in recent years, was the only component of uses outside the public sector that grew—thanks to investment in construction. Yet even that was at a lower pace than in recent years. The moderation of the pace of growth is also shown by the quarterly growth rates (each quarter compared with the previous quarter, in annual terms), which were lower than 3.0 percent in each of the first three quarters of the year (Figure 2.2 in Chapter 2 of this Report).

Figure 1.1
Deviation from the GDP Trend, Israel and the OECD Average, 2015–2023 (percent)



SOURCE: Based on OECD and Central Bureau of Statistics.

Until the war, full employment restricted the expansion of GDP in response to increased demand. As a result, there were price and wage pressures that were reflected in an acceleration of the pace of wage increases. These trends moderated gradually in view of the tight monetary policy that the Bank of Israel adopted, as interest rate increases, which began in April 2022, left their mark through reduced demand.

Aggregate supply in the economy continued to grow in 2023, but with a different composition than in 2022. The full employment environment limited the expansion

The tight labor market and the full employment environment limited the expansion of labor inputs and its contribution to growth.

of labor input and reduced the latter's contribution to the expansion of economic activity. The stock of physical capital continued to increase, at an even higher pace than in recent years, thanks to massive rates of investment in the previous year. As a result, labor productivity (real GDP per work hour) in the business sector continued to increase rapidly relative to previous years, but the pace of growth of total factor productivity (TFP) slowed.

The current account surplus in the first three quarters totaled 3.6 percent of GDP, similar to its weight in the previous year, due to the stability of gross investment and national savings as a share of GDP, with an increase in private savings, and a decline in public savings. The stability in the current account despite the excess real depreciation in 2023 reflected the sharp decline in demand for Israeli exports as a result of the moderation of global demand and the stagnation in trade volumes.

The clear slowdown in the growth rates of uses was supported by a number of main factors:

1. The decline in global demand and the slowdown in economic activity abroad, in view of monetary tightening that was intended to moderate the high inflation rates, moderated global demand for Israeli exports. (The red line in Figure 1.1, which shows the OECD average.)
2. The tight monetary policy in Israel contributed to a moderation of private consumption and a slowdown in the growth of investments. The increase in the interest rate directly reduced disposable income for private consumption, and moderated the growth of consumer credit. Business credit increased by 5.6 percent, about half of its pace of growth in 2021 and 2022, but still historically high. (For more discussion, see Chapter 4 of this Report.) The small rate of increase in the public's asset portfolio (including stability, and even a slight decline in home values) also contributed to the decline in per capita private consumption, partly due to the underperformance of the Israeli financial markets.
3. The depreciation of the shekel made imports and consumption of durable goods more expensive.

The tight monetary policy moderated demand and private consumption. Until the war, the growth in consumer and business credit moderated.

The dwindling trend of private consumption, particularly of services, since the COVID-19 crisis was not unique to Israel. It was happening in other advanced economies, which were also affected by the aforementioned factors.

The labor market continued to tighten, to the point where it was even tighter at the end of the third quarter than it was before the COVID-19 crisis. The participation and employment rates were slightly higher, and the unemployment rate was lower, than at that time. Demand for new workers, as reflected in the job vacancy rate, remained high in 2023, although it declined relative to its exceptional level in 2022, and the demand that had accumulated was absorbed by a relatively slow increase in

Table 1.1
Main developments, 2019–23*

	2019	2020	2021	2022	2023	2023 (Q1–Q3 avg.)	2023:Q4
Population (yearly average, million)	9.0	9.2	9.3	9.5	9.6	-	-
Nominal GDP (NIS billion, current prices)	1,435	1,423	1,578	1,756	1,868	-	-
Per capita GDP (NIS thousand, current prices)	157.4	153.8	168.9	184.7	191.5	-	-
GDP (real rate of change, percent)[a]	3.8	-1.5	9.3	6.5	2.0	0.6	-5.6
Per capita GDP (real rate of change, percent)[a]	1.8	-3.1	7.5	4.3	-0.3	-0.1	-6.0
Private consumption (real rate of change, percent)[a]	4.0	-7.4	11.5	7.4	-0.7	-0.1	-7.5
Fixed Capital Formation (real rate of change, percent)[a]	3.6	-2.6	12.2	9.6	-3.0	0.2	-24.0
Public consumption (real rate of change, percent)[a,b]	2.8	2.5	4.6	1.0	7.6	1.4	17.1
Goods and services exports (annual rate of change, percent)[a,c]	4.2	0.6	12.2	9.7	0	0.6	-5.2
Goods and services imports (annual rate of change, percent)[a,d]	3.5	-7.0	18.7	12.4	-7.2	2.3	1.2
Current account of the balance of payments (surplus, $ billion)	15.0	22.7	21.4	19.8	25.3	5.0	1.1
Overall government deficit (percent of GDP)[e]	4.4	11.4	5.2	1.6	6.7	1.5	4.1
Gross Public debt (percent of GDP, end of year)	59.2	70.9	67.8	60.5	62.0	59.3	62.0
Employed Israelis aged 15+ (yearly average, rate of change compared to the previous period)	1.6	-1.3	1.1	5.8	3.3	0.9	-0.7
Nominal wage per employee post (yearly average, percent rate of change)	2.9	6.5	2.5	2.8	6.2	1.4	4.9
Unemployment rate, aged 15 and up (yearly average, percent)	3.8	4.4	5.0	3.8	3.4	3.5	3.2
Job vacancy rate (yearly average, percent)	3.5	2.4	4.5	4.8	3.8	3.9	3.5
Inflation (December compared to the previous December, percent)	0.6	-0.7	2.8	5.3	3.0	4.5	3.4
Bank of Israel interest rate (yearly average, percent)	0.3	0.1	0.1	1.2	4.25	4.4	4.8
Bank of Israel interest rate (last figure in the period, percent)	0.25	0.25	0.10	0.10	4.75	4.50	4.75
Real one-year interest rate (yearly average, percent)	-0.8	0.1	-1.9	-1.4	1.6	1.6	1.1
Real one-year interest rate (last figure in the year, percent)	-0.7	-0.2	-2.4	1.0	1.1	1.6	1.1
Nominal yield on 10-year government bonds (yearly average, percent)	1.6	0.8	1.2	2.6	3.9	3.8	1.1
Real yield on 10-year government bonds (yearly average, percent)	0.0	-0.5	-0.8	0.1	1.2	1.1	1.7
Real effective exchange rate (yearly average, percent rate of change)[f]	-2.5	-3.6	-4.9	-0.8	9.6	8.9	10.7
NIS/$ exchange rate (yearly average)	3.6	3.4	3.2	3.4	3.7	3.6	3.8
Tel Aviv 125 index[g]	21.3	-3.0	31.1	-11.8	4.1	-1.0	4.1
World trade (percent rate of change)	1.2	-7.8	10.9	5.2	0.4	-	-

* Quarterly data are are the average rates of change in quarterly terms.
[a] Average rate of change.
[b] Excluding defense imports.
[c] Excluding diamonds and startups.
[d] Excluding defense imports, ships, aircraft, and diamonds.

[e] The broad gdovernment is comprised of the government itself, the National Insurance Institute, the national institutions, the local authorities, and nonprofit organizations whose income is main source of income is the government. Its activity is measured in accordance with National Accounts definitions, which differ from those used in the State budget.
[f] Relative to the same period in the previous year, (-) refers to depreciation of the shekel.
[g] Nominal rate of change - last day of December compared with the last day of the previous December.
SOURCE: Based on Central Bureau of Statistics and International Monetary Fund.

the number of employee posts. The rate of part-time positions also increased, another indication of the maximization of the economy's production potential.[4]

As a result of all these, as well as of the increase in the pace of inflation (See Chapter 3 of this Report), the growth rate of nominal wages per employee post in the business sector accelerated from around 4 percent per year at the beginning of the year to around 6 percent at the end, and the wage per hour worked increased even more. However, due to the increase in prices, real wages grew by slightly less than 2 percent, which is consistent with the long-term pace of growth of GDP per worker.

4 A. Brender and L. Gallo (2009), "The Effect of Changes in Wages, GDP, and Workers' Demographic Characteristics on Working Hours", Israel Economic Review, 7(1): 143–176.

Exports grew slowly in the first three quarters of the year, even though high-tech services exports (excluding startup companies) grew rapidly. Goods exports declined, mainly due to the decline in global demand.

The high-tech sector led GDP and employment growth in recent years, and its main contribution to growth came from the services industry and not from manufacturing.[5] Between 2017 and 2022, the high-tech sector was responsible for 32 percent of the growth in economic output, its share of GDP increased from 14 percent to 17 percent, and the number of people employed in the high-tech services increased from 200,000 to almost 300,000. This rapid growth was also reflected in the intensified shortage of workers who are appropriate for technological professions in the sector, which was reflected in a high rate of job vacancies and in sharp wage increases in 2022.

In 2023, even prior to the war, the rapid growth rate that had characterized the high-tech sector in recent years all over the world, and even more so in Israel, slowed. In the first three quarters of the year, the number of people employed, the number of employees, and total labor input in the sector did not grow, and the job vacancy rate as a share of total employees in the industry declined to below the rate prior to the COVID-19 crisis. Total high-tech exports (goods and services) remained at the high level it reached in past years, but did not continue to grow, while revenue (in fixed prices) in the industry ranged around its year-end-2022 level until the war, and then declined. Alongside this, nominal wage per employee post in the sector increased by almost 7 percent—an accelerated rate relative to the previous year, and an indication that the development of the high-tech sector in 2023 showed a shortage of appropriate workers, and not just a demand crisis. (For details of the developments in the industry, see Figure 1.2.)

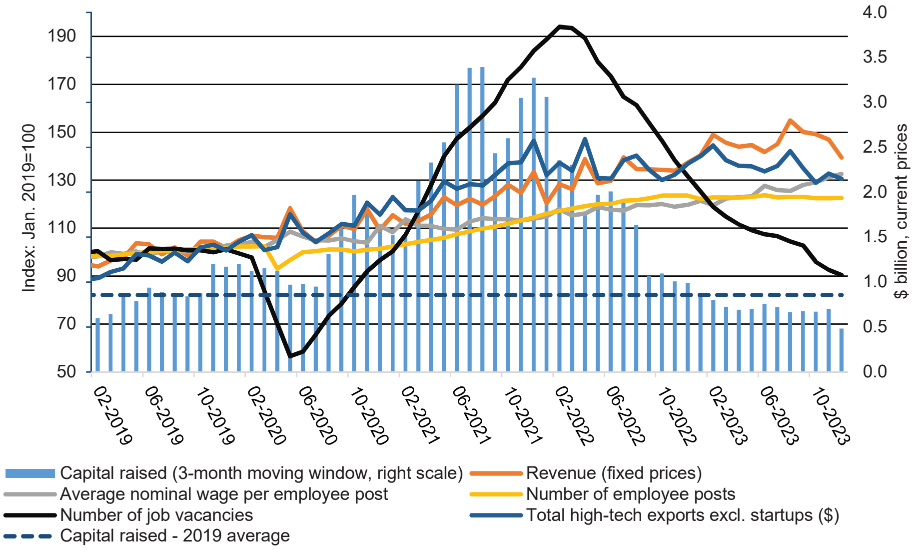
There are a number of reasons for the moderation in the pace of expansion of the high-tech sector in the first three quarters of the year. The main reason is a halt to the particularly rapid growth of global demand for technological services and innovations, which was due to the expanded digitalization during the COVID-19 pandemic. In addition, the monetary tightening around the world was accompanied by a global decline in investment in startup companies, and a decline in the NASDAQ index. These developments contributed to a global decline in activity and capital raising in the high-tech industry. However in Israel, capital raising declined even more sharply, as Israeli capital raising as a share of total global capital raised returned to its pre-COVID-19 level of about 1.2 percent. This followed a prolonged upward trend that began even prior to 2019, and reached a peak of 1.7 percent in 2022. The increase in the risk attributed to the Israeli business environment also had an effect on concerns among high-tech investors, thereby contributing to a sharp decline in the rate of capital raised by startup companies through venture capital funds. (See Figure 2.7 in Chapter 2 of this Report.)

[5] For additional information on the development of the high-tech sector in recent years, see the Bank of Israel Annual Report for 2021, Chapter 1.

The output of startup companies declined markedly even before the war, and the volume of capital raised by high-tech companies from venture capital funds in Israel and abroad declined by about 70 percent relative to the 2022 volume, to a level similar to what it was more than five years ago. The underperformance of the industry in 2023 was also prominent in the markets. Equity prices of Israeli companies on the NASDAQ index, most of which are high-tech companies, increased by only about 0.5 percent in 2023, compared with an increase of 43 percent for the index as a whole. This followed two years in which the equities of Israeli firms performed better.

Startup companies' output and the volume of capital raising by high-tech companies declined markedly in 2023, as the underperformance of the high-tech industry was pronounced.

Figure 1.2
Indicators of the Development of the High-Tech Sector, Jan. 2019–Dec. 2023 (montly data)



SOURCE: Based on Central Bureau of Statistics and Israel Innovation Authority.

c. Inflation

The inflation rate in Israel moderated in 2023, affected by the tight monetary policy and the anticyclical fiscal policy which reduced excess demand, and due to the slowdown in activity and inflation globally. Annual inflation in Israel declined from 5.4 percent in January—the highest rate in a decade and a half—to 3.8 percent in September and to 3 percent in December (Figure 1.3), the upper bound of the inflation target (1–3 percent).

The annual inflation rate in Israel declined from 5.4 percent at the start of the year to 3 percent at the end, influenced by restrictive monetary policy, conservative fiscal policy, and the moderation of inflation abroad.

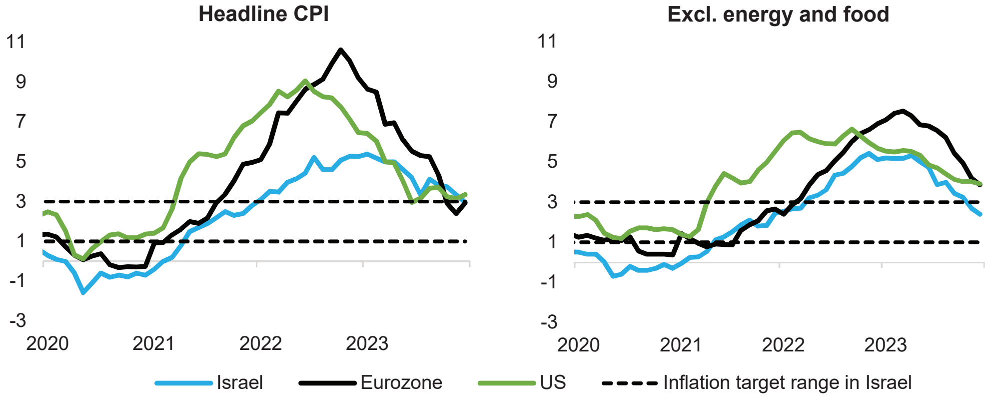
The high level of inflation at the beginning of the year was further to its increase since 2021, which was part of a worldwide occurrence. (For more discussion, see the first section of this chapter.) However, inflation in Israel was lower than in other countries, largely thanks to Israel's energy independence, which led to the relative stability of domestic energy prices. (For more discussion, see Chapter 1 of the Bank of Israel *Annual Report* for 2022.) The low impact of energy prices on prices in

Israel also explains why inflation in Israel declined more slowly in 2023 than inflation abroad, as energy prices declined sharply (Figure 1.3).

The high inflation during the year remained broad, and encompassed a wide range of CPI components. An average of 70 percent of the CPI components increased by more than 3 percent, despite the moderation of inflation during the year. (For more discussion, see Chapter 3.)

The high rate and broadness of inflation were important considerations in the determination of policy, mainly in order to prevent the entrenchment of the high inflation environment and the loss of the anchor of expectations. The increase in inflation also intensified public attention to it (Box 3.1 in this Report, and Box 1.2 in the Bank of Israel *Annual Report* for 2022). One way this is expressed is in the entrenchment of the correlation between actual price development and households' one-year inflation expectations.

Figure 1.3
Consumer Price Index and Index Excluding Energy and Food, Israel, US, and Eurozone, 2020–2023 (percent)



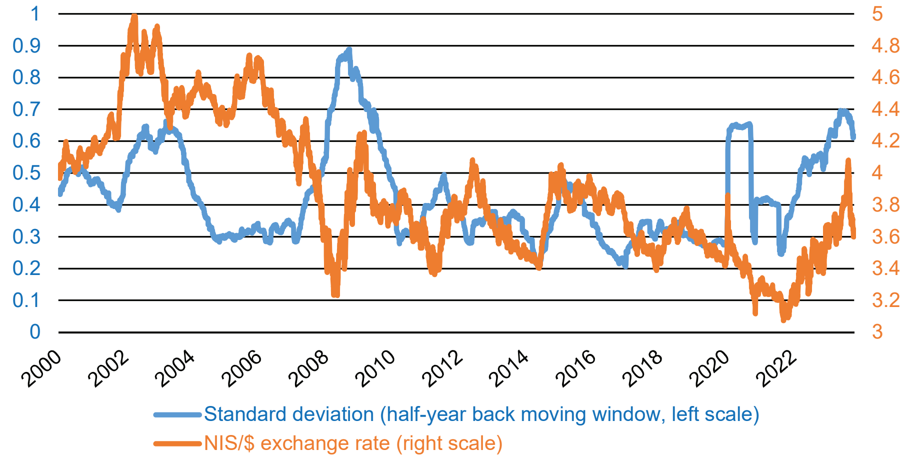
SOURCE: Based on Central Bureau of Statistics and Bloomberg.

d. The exchange rate until the war

The shekel's depreciation against the US dollar in 2023 was mostly due to domestic factors, in contrast with the dominant influence of the strengthening dollar around the world in 2022.

The trend of shekel depreciation, which began in 2022 following many years of appreciation, continued in the first nine months of 2023, with an increase in exchange rate volatility (Figure 1.4). The depreciation in the past two years delayed the moderation of inflation and its convergence to the target, and various models strengthened the assessment regarding over-depreciation at the beginning of the second half of 2023. An analysis of the exchange rate shows that from the end of 2022, around the time of Israel's elections, and during 2023, the depreciation was mainly driven by domestic factors, in contrast to the depreciation earlier in 2022, which was driven by the strengthening of the US dollar worldwide. (For more discussion, see Chapter 3.) The dynamic of the exchange rate was not uniform during the year, and there were significant changes around the times of advancement of the government's programs with regard to legislative changes concerning the judicial system and the responses to it.

Figure 1.4
NIS/$ Exchange Rate, Level and Standard Deviation of Daily Change, 2000–2023



SOURCE: Bank of Israel.

The shekel's depreciation took place in parallel with net foreign exchange purchases by Israelis, and continued foreign exchange purchases by the institutional investors. In contrast with the past, institutional investors also reduced the volume of currency exposure of their investments abroad, apparently based on the assessment that the trend of depreciation would continue.

e. The financial markets

The underperformance of equities in Israel at the beginning of 2023 was pronounced, after price declines in 2022 were similar to those abroad.

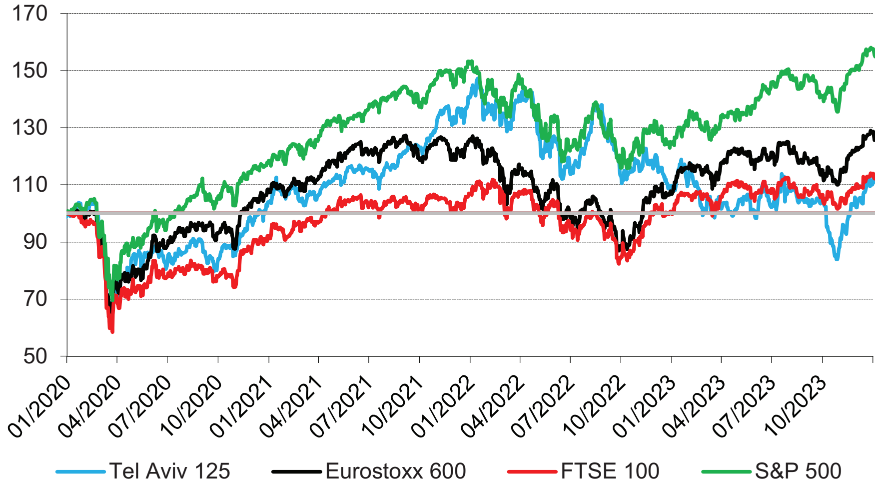
In contrast with the marked increases on the global equity markets, equity prices in Israel increased only slightly in 2023 (Figure 1.5). In parallel, the volume of IPOs declined drastically, with only one company holding an IPO. (For more discussion, see Chapter 4.) The underperformance of the Israeli market in 2023 was particularly prominent, in that it followed a similar decline of Israeli equity prices relative to global prices in 2022.

Similar to the development of the exchange rate, the dynamic of the development of equity prices during the year was not uniform. In the first four months of the year, equity prices in Israel declined in view of the uncertainty regarding the implications of the legislative changes and the reactions to them, while global equity prices increased. The decline of equity prices in Israel was accompanied by an increase in the demanded risk premium.[6]

[6] This premium is estimated using the ratio between total net profit in the past year and the market capitalization of the equities, minus the yield on 10-year indexed government bonds. For more discussion, see the Bank of Israel's *Financial Stability Report* for the first half of 2023.

From the end of April until the outbreak of the Swords of Iron War, equity prices increased at a rate similar to the rates on most equity indices around the world, but the gap that had opened at the beginning of the year remained.

Figure 1.5
Selected Equity Indices in Israel and Abroad, Jan. 2020–Dec. 2023
(dollar terms, index: 1.1.2020=100)



SOURCE: Based on Bloomberg.

f. The housing market

The cooling of the housing market, which began in early 2022, continued in 2023. (For more discussion, see Chapters 4 and 8 in this Report.) The increase in home prices following the COVID-19 crisis, which lasted until the beginning of 2023, led to a diversion of demand to home rentals and the increase in rents accelerated until June. The number of purchase transactions declined by about one-third in 2023, mainly in Tel Aviv and the center of the country, and home prices declined by 0.6 percent over the year as a whole, alongside a decline of about one-quarter in the volume of new mortgage borrowing. Despite the decline in demand, the supply of homes continued to increase due to the preparation for construction of land that was marketed in the previous two years, and because the increase in interest rates made it more expensive to hold land over time without developing it.

Until the war, fiscal policy was conservative and the budget deficit grew due to the winding down of anomalous tax revenues collected during the exit from the COVID-19 crisis. Had it not been for the war, the deficit was expected to total about 2 percent of GDP, and the debt to GDP ratio was expected to fall below 60 percent.

g. Fiscal policy before the war

In the first three quarters of the year, fiscal policy was anticyclical, such that the structural deficit remained in place. There were no major changes to statutory taxes. Had it not been for the war, the deficit was expected to total about 2 percent of GDP, and the debt to GDP ratio was expected to decline to below 60 percent. Following the high state revenues from taxes with the rapid exit from the COVID-19 crisis, the main channel that led to the increase in the deficit in 2023 was a decline in state revenues from taxes, which mainly reflected the winding down of anomalous revenues from real estate taxes and taxes on the activity of the high-tech sector, such that the structural deficit remained similar to what it was in 2022. (For more discussion, see Chapter 6.) This neutral policy helped stabilize inflation.

An important component of the government's cautious policy is the public sector wage agreement that was signed in 2023—about 7 years after the previous agreement was signed.[7] Despite the sharp wage erosion in the public sector relative to the private sector, the agreement includes a nominal wage increase of 16 percent, and up to 3 percent more set aside for unique groups within the public sector. The agreement is spread out over 5 years, so that the nominal annual rate of increase is 3 percent, which is lower than the expected growth of business sector wages. In addition, one-third of the increment is attributed to the reduction of work hours, a channel that increases public expenditure less than the increase in the monthly wage. Another point in this context relates to the wage mix. A high percentage of the increment planned in the agreement is at shekel value, rather than as a percent of wages.[8] As a result, the percentage increase in wages is smaller for employees with higher wages.

While this structure in the wage agreement contributes to lowering inflationary pressures derived from the fiscal side and narrows wage inequality, over time it does harm the public sector's ability to compete with the private sector for human capital, meaning the ability to recruit select manpower to the public sector.

The original budget for 2023 and 2024 included almost none of the necessary growth-supporting macroeconomic reforms.

The original 2023–2024 budget contributed to stabilizing the economy. However, contrary to the Bank of Israel's recommendation, it did not include the necessary medium- and long-term macroeconomic reforms: encouraging core curriculum, advancing planning and budgeting for infrastructure such as the Metro project, streamlining the public sector, advancing an alternative for fuel taxation, taxing negative externalities (such as bringing back the sugar tax), and more.

h. Monetary policy before the war

In the past two years, the main challenge facing central banks, including the Bank of Israel, has been lowering high inflation without moderating activity too much—striving for a "soft landing". Accordingly, central banks changed direction and moved from very accommodative monetary policies adopted during the COVID-19 period to less accommodative—and then restrictive policies.

[7] The previous framework agreement was signed in 2016, and covered the years 2013–2017. Negotiations over a new agreement were frozen during the COVID-19 crisis.

[8] Y. Mazar (2009). "An Examination of the Wage in the Public and Private Sectors, and Self-Selection of Employees Moving from One to the Other, 1995–2005", Discussion Papers Series 2009.09, Bank of Israel Research Department; Y. Mazar (2018). "Differences in Skill Levels of Educated Workers Between the Public and Private Sectors, the Return to Skills, and the Connection Between Them: Evidence from the PIAAC Surveys", Discussion Papers Series 2018.01, Bank of Israel Research Department.

The sharp and continued interest rate increases by the Bank of Israel, from 0.1 percent in March 2022 to 4.75 percent at the end of May 2023, restrained demand by raising the cost of financing consumption and business activity.

The Bank of Israel adopted a determined monetary policy even by international comparison. The sharp and continued interest rate increases, from 0.1 percent in March 2022 to 4.75 percent at the end of May 2023, restrained demand by increasing the cost of financing consumption and business activity. (For more discussion, see Chapter 2.) Increasing the interest rate also reduces downward pressure on the shekel by attracting capital flows to the economy, and thereby moderates the increase in prices of tradable goods.

The higher interest rate environment increased the debt burden on businesses and households. While business credit increased by 5.6 percent, a high rate by historical comparison, it was about half of the pace of increase in 2021 and 2022, and credit to micro businesses declined. Consumer credit also declined. (For more discussion, see Chapter 4 of this Report.) A Research Department analysis indicated an increase in the debt burden and a worsening among borrowers from localities with a low socioeconomic standing relative to those from localities with a high socioeconomic standing in 2023. Those who could do so made adjustments and reduced loans that were indexed to the prime rate. (For more discussion, see Box 4.2 in this Report.) Another analysis showed that for households with mortgages, each increase of 1 percentage point in the weight of the prime-indexed track was accompanied by a decline of about 3 basis points in private consumption. For households paying a mortgage, each increase of one shekel in the monthly payment due to the interest rate increases led to a decline in consumption of about 45 agorot per month.

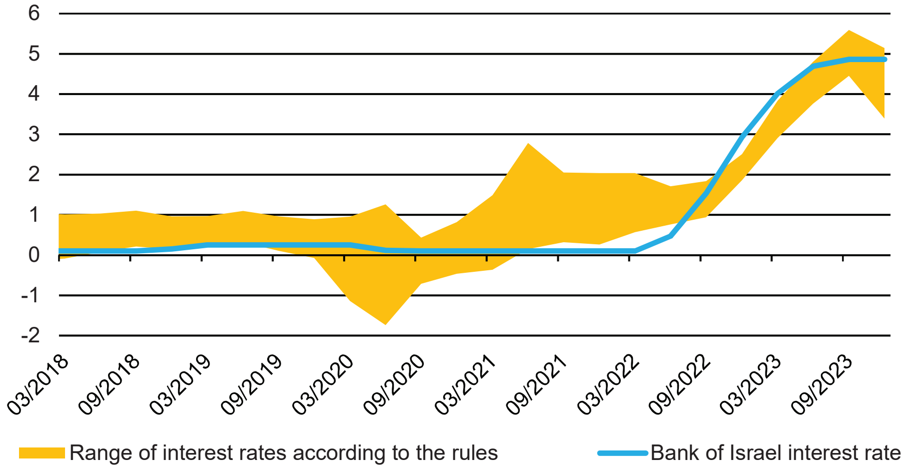
In order to examine the response of the Bank of Israel interest rate to the various developments, we relate to a theoretical path of the interest rate as derived from the economy's characteristics. Figure 1.6 shows the Bank of Israel interest rate and the range of interest rates derived from Taylor Rules for the Israeli economy.[9,10] The Taylor Rules are an indicator of the interest rate path that is consistent with the central bank's previous behavior, and may show the path that is consistent with the state of the economy.

[9] The rules described here are Taylor-type Rules, where the central bank interest rate reacts to the inflation gap—the gap between the inflation environment and the midpoint of the target range—as well as the output gap and the natural rate of interest. In some of the rules, the interest rate also reacts to the real exchange rate gap. In all of the rules, the interest rate reacts gradually, such that the rules include an element of interest rate smoothing. For more discussion regarding the estimate of the natural rate of interest, see: D. Elkayam and G. Segal (2018). "Estimated Natural Rate of Interest in an Open Economy: The Case of Israel", Discussion Papers Series 2018.05, Bank of Israel Research Department; A. Ilek and G. Segal (2022). "A Simple Theory-Based Estimate of the Real Natural Rate of Interest in Open Economies", Discussion Papers Series 2022.06, Bank of Israel Research Department.

[10] A similar figure appears frequently in the Federal Reserve's Monetary Policy Reports. See: https://www.federalreserve.gov/monetarypolicy/publications/mpr_default.htm, box: Monetary Policy Rules in the Current Environment. For a similar analysis see: https://www.stlouisfed.org/from-the-president/speeches-and-presentations/2022/getting-into-the-zone-louisville.

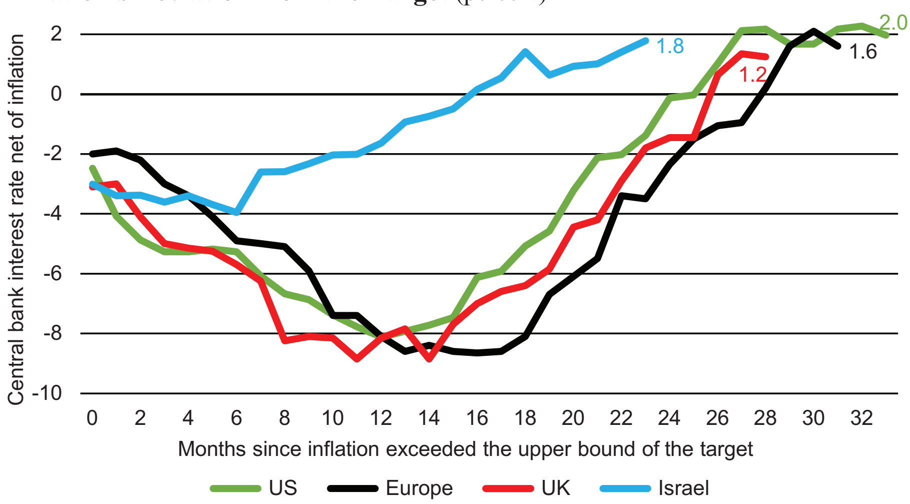
Since monetary policy, particularly the interest rate, affects demand with a lag, and through it inflation, some of the increase in inflation, which reached its highest point in a decade and a half at the beginning of 2023, is attributed to the timing of the change in policy.

Figure 1.6
Bank of Israel Interest Rate and Range of Rates Derived from Various Taylor Rules for the Israeli Economy, Mar. 2018–Dec. 2023



SOURCE: Bank of Israel.

Figure 1.7
Central Bank Interest Rates Net of Inflation, Relative to the Timing of Inflation's Deviation from the Target (percent)



SOURCE: Based on Central Bureau of Statistics.

The interest rate increases in 2023 were in line with the nature of past monetary policy, and came somewhat earlier.

According to Figure 1.6, the process of raising the Bank of Israel interest rate in response to the increase in inflation began slightly later than previous monetary policy responses, and in relation to what is derived from the Taylor Rules, but then was consistent with, and even earlier than, what was derived from those rules in the second half of 2023. For the process as a whole, the policy that was adopted contributed to the convergence of inflation to its target during 2023, without a sharp impact to economic activity. In other words, it contributed to a "soft landing". An international comparison of the central bank actions, as reflected in the interest rates minus the actual inflation rates, shows that the interest rate in Israel reacted to the increase in inflation more rapidly than in other countries (Figure 1.7).

The restrictive monetary stance contributed to the "soft landing" and to the convergence of inflation to its target during 2023.

The natural rate of interest

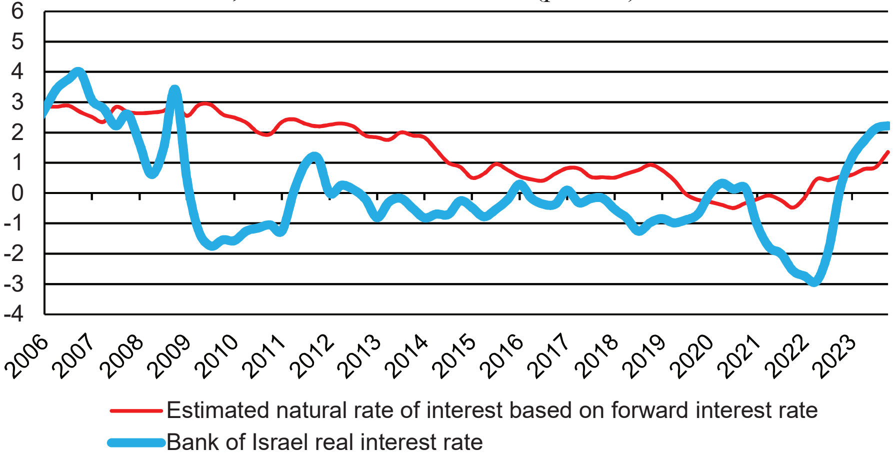
The (real) natural rate of interest is a theoretical (unobserved) interest rate that is reconciled with the equilibrium of price stability and activity at the level of the economy's potential GDP.* Even though the natural rate of interest is not observed, it is used as an important indicator for monetary policy makers. When the real monetary interest rate (the central bank interest rate minus inflation expectations) is lower than the natural rate of interest, it means that policy supports demand and is working to expand activity (output gap) and increase inflation, and vice-versa. As such, when the natural rate of interest increases, a higher monetary interest rate is necessary in order to prevent an acceleration of inflation, and vice-versa.

* In an open economy, another condition for such an equilibrium is that the real exchange rate must be at a level that is in line with the fundamental factors of its development.

A common indicator of the extent of accommodation or restriction in monetary policy (the monetary stance) is the gap between the real (actual) interest rate and the natural rate of interest.[11] (For more discussion, see Chapter 1 of the Bank of Israel *Annual Report* for 2019.) Since the natural rate of interest rate is unobserved, it must be estimated.

[11] See, for instance, K. Holston, T. Laubach, and J.C. Williams (2017), "Measuring the Natural Rate of Interest: International Trends and Determinants", *Journal of International Economics*, 108, Supplement 1, S59–S75.

Figure 1.8
Real 1-Year Interest Rate* and Estimate of the Natural Rate of Interest in Israel, Mar. 2006–Dec. 2023 (percent)



* Bank of Israel interest rate net of 1-year inflation expectations derived from the capital market.
SOURCE: Bank of Israel.

Figure 1.8 shows the real Bank of Israel interest rate (the Bank of Israel interest rate minus inflation expectations) and an estimate of the natural rate of interest in Israel.[12] The interest rate gap shows that the accelerated process of increases in the monetary interest rate that began in April 2022 (Figure 1.6), after subtracting the expansion programs adopted during the COVID-19 program, reflects a turnaround of monetary policy, as it gradually tightened at the beginning of 2023. This was alongside an upward trend of the natural rate of interest, as estimated on the basis of the forward interest rate.

[12] The estimate of the natural rate of interest is based on the average real 3–10-year forward interest rate. See, for instance, M. Beenstock and A. Ilek (2010) and Clarida (2009). In particular, the forward interest rate is multiplied by an estimated coefficient that is smaller than 1, approximating an average deduction of the premium in line with Elkayam and Segal (2018). Additional estimates of the natural rate of interest also show the gradual transition from accommodative policy at the exit from the COVID-19 crisis to a restrictive policy in 2023.
M. Beenstock and A. Ilek (2010). "Wicksell's Classical Dichotomy: is the Natural Rate of Interest Independent of the Money Rate of Interest", *Journal of Macroeconomics* 32(1): 366–377; R.H. Clarida (2009). "Reflections on Monetary Policy in the Open Economy", in J. Frankel and C. Pissarides (eds.), *NBER International Seminar on Macroeconomics 2008*, National Bureau of Economic Research, pp. 121–141; D. Elkayam and G. Segal (2018). "Estimated Natural Rate of Interest in an Open Economy: The Case of Israel", Discussion Papers Series 2018.05, Bank of Israel Research Department.

3. THE ECONOMIC IMPACTS OF THE WAR

a. The macroeconomic environment

The Swords of Iron War began on October 7, 2023, with a surprise terrorist attack on communities and IDF bases in the western Negev (South of Israel). As a result, the IDF went to war, including broad military maneuvers in the Gaza Strip. The following day, lower-intensity combat began along the Lebanese border. Communities along the confrontation lines in both the north and south were evacuated. (For more discussion on the evacuation of populations in the north and the south, see Chapter 7 of this Report.)

The war had an impact on both the supply of labor and demand. The effect on supply was reflected in the absence of workers due to the broad mobilization of the military reserves; the shutdown of the education system during the initial weeks of the war, which made it difficult for parents to physically go to work; the evacuation of residents along the confrontation lines; the absence of workers due to Homefront Command instructions; and the reduction of the non-Israeli labor force. Part of the impact was limited to the short- and medium-term, and is expected to subside rapidly once the war is over. However, the war may continue to affect other areas even after it is over, depending on how it progresses. These include changes to the country's security perception and its deterrent capabilities, concern over returning to live in border communities, the high likelihood of an increase in the defense budget, changes in the supply of non-Israeli laborers, a continued impact on the tourism industry, implications for Israel's risk premium and credit rating, social implications, sharing the defense burden, and more.

This section reviews the developments and short-term economic implications of the war, and the next section discusses the medium- and long-term implications, while presenting some of the challenges facing the economy in that range.

The difficult and long war impaired both the supply of labor and demand, and GDP contracted by 5.6 percent in the fourth quarter of 2023, with a sharp decline in investment and in private consumption.

Previous security altercations resulted in a limited macroeconomic impact of up to half a percentage point of GDP, and the recovery from them was rapid. However, the current war is more difficult and longer. In the fourth quarter of 2023, when the war started and was at its peak, GDP contracted by 5.6 percent (in quarterly terms), led by a sharp contraction of investment—which declined by an unprecedented rate—and private consumption. In contrast, when the war started, the economy was more robust than during the previous incidents. The debt to GDP ratio was lower by international comparison, and on a downward path; the public deficit was low, although some tax receipts were temporary in nature; the national savings rate was high; the unemployment rate was low and the economy was in full employment; Israel's foreign exchange reserves were at an all-time high of 40 percent of GDP; and the current account surplus was high and stable. In contrast with the Yom Kippur War—a comparable security incident—the Israeli economy is currently in a different place from all standpoints. It is a modern, developed, and open economy. Real GDP has almost doubled relative to its level during the Second Lebanon War, and per

Table 1.2
Economic Data One Year Before and After Main Security Incidents in Israel

(percent)

Periods before and after the war	Examined year	Debt to GDP ratio	Public deficit as a Share of GDP	Current account surplus as a share of GDP	Defense consumption as a share of GDP	Public expenditures as a share of GDP	Unemployment rate	GDP growth rate	Inflation rate	Nominal short-term interest rate	Real short-term interest rate	Rate of change in the exchange rate in the past year
Yom Kippur War	1972	~90	n/a	-12.9	31.9	15.7	2.7	8.6	12.9			4.2 liras to the US dollar (1971–1974)
	1974	~140	n/a	-22.6	76	27.3	3	2.4	39.7			
First Lebanon War	1981		16.1	-4.3	23	72.8	5.1	2.8	101.5			106.9
	1983	260.4	5.9	-5.9	19.9	64.4	4.5	1.3	190.7			208.2
Second Intifadah	2000	77.4	1.2	-1.3	6.7	44.3	8.8	5.7	0	9.3	9.3	-2.7
	2003	89.7	5.2	0.6	7.3	46	10.7	-0.39	-1.9	7.4	9.3	-6.4
Second Lebanon War	2005	85.4	3.0	3.1	6.6	43	9.0	2.3	2.45	3.7	1.3	6.2
	2007	70.9	0.7	2.9	6.1	40.8	7.3	4.1	3.4	3.9	0.5	-7.1
Swords of Iron War	2022	60	1.6	3.9	4.3	39.1	3.8	4.4	5.3	1.2	-4.1	10.2
	Bank of Israel forecast for 2024*	67	~8	-	-	-	5.3	2	2.4	3.75–4	1.35–1.6	-

* Based on the Research Department's macroeconomic staff forecast from January 2024, other than deficit and debt figures, which are up-to-date as of the publication date of this Report.
SOURCE: Based on statistical reports.

capita GDP has also grown greatly. These characteristics provide the economy with a security buffer for dealing with a situation that will last longer and be more expensive (Table 1.2).

Nevertheless, the Swords of Iron War had serious impacts on the labor market and on the housing market, in contrast to the weak and short-term impact of security incidents in the recent past (see Chapters 5 and 8), particularly in the confrontation areas. This is due to its level of intensity, particularly in the first month, its long duration, and the evacuation of residents from the confrontation lines. The sharpest impact was in the southern and northern districts, but it was felt to a lesser extent throughout the country.

At the beginning of the war, the supply of workers declined significantly, mainly due to the closure of the education system in the first weeks of the war.[13] Nonemployment expanded significantly due to the broad mobilization of reserve soldiers and the evacuation of residents from the western Negev (up to 7 kilometers from the Gaza Strip) and communities up to 3.5 kilometers from the Lebanese border. More than half of the direct economic cost as a result of the absence of workers during the first month of the war was due to the closure of the education system. The cost was due to parents' absences, and less so to the decreased efficiency of parents working from home while caring for their children. The very high daily cost of shutting down the education system makes it necessary to prepare in advance for operating it rapidly during future crises, including prioritization of reinforcing educational buildings as part of the government's protection efforts.

The Bank of Israel responded immediately at the outbreak of the war, and with the support of its actions, the depreciation of the shekel moderated and the markets stabilized, but volatility in the foreign exchange market remained high.

When the war began, the shekel depreciated significantly, as a result of foreign investors and nonresidents selling shekels. (For more discussion, see Chapter 3 of this Report and the Bank of Israel's *Financial Stability Report* for the second half of 2023.) On Monday, October 9, even before the first trading day following the start of the war began, the Bank of Israel announced a program to sell foreign exchange totaling up to $30 billion in order to moderate exchange rate volatility, and a SWAP program of up to $15 billion. As part of these programs, the Bank of Israel sold foreign exchange totaling $8.2 billion in October, and about $340 million in November. The Bank also announced a program of repo loans to institutional investors and mutual funds against government and corporate bonds in order to provide shekel liquidity and moderate volatility in the markets. The volume of loans actually borrowed was small, totaling about $100 million in October. As a result of these actions, the shekel's depreciation moderated, and the markets stabilized, but volatility in the foreign exchange markets remained high (Figure 1.4). Israel's risk premium, as measured by the spreads of dollar-denominated debt and/or insurance on that debt, remained much higher than in the past. At the end of 2023, the shekel had appreciated relative to its prewar level.

[13] "Special Analysis by the Bank of Israel Research Department: The Economic Cost of Absence from Work During the Swords of Iron War", November 9, 2023. https://www.boi.org.il/en/communication-and-publications/press-releases/a09-11-23/

In the initial days of the war, there were sharp declines in financial asset prices—equities, corporate bonds, and government bonds—and liquidity in the financial markets declined. The Bank of Israel acted immediately to ensure the continuation of banking services and the continuity and stability of the payment systems. (For more discussion, see Box 1 in the Bank of Israel's *Financial Stability Report* for the second half of 2023.) During the first three weeks of the war, the Tel Aviv 125 index fell sharply (by 13.5 percent). However, since the end of October, with the progress of the war and after assessments of a parallel war in the north declined, the equity indices changed direction and climbed to levels that were even higher than their prewar levels (Figure 1.4). This took place as global equity prices rose markedly. In total, equity prices in Israel rose by a moderate rate of about 4 percent in 2023 (Table 1.1), which was much lower than in most advanced economies. The price trend on the bond market was similar.

With the outbreak of the war, the prices of financial assets—equities, corporate bonds, and government bonds—declined sharply, and asset liquidity declined. The shekel depreciated significantly, and the economy's risk premium increased sharply.

In the real estate industry, the war cut off the slight recovery that had begun in the third quarter, and the number of transactions declined to a very low level—similar to the level during the first lockdown of the COVID-19 crisis. (For more discussion on the development of the real estate industry this year, see Chapter 8 of this Report.) As a result of the war, about 100,000 Palestinian laborers in the construction industry—about one-third of the workforce in the industry—could not enter Israel. It seems that some of the problems in the labor supply constraint due to the government's decisions will not be solved in the near future, and that the long-term policy of employing Palestinian laborers must be rethought.

In the initial weeks of the war, construction sites were closed due to instructions by the Homefront Command and the local authorities. Toward the end of 2023, about 28 percent of residential construction sites (weighted by the number of units at each site) remained closed. The high financing costs, alongside the decline in revenues of construction companies increased risk in the industry. (For more discussion, see the Bank of Israel's *Financial Stability Report* for the second half of 2023.)

Alongside the large shock to the supply of labor, the war also had an impact on demand. The decline in demand was reflected in a very sharp drop in private consumption—as shown in the estimate of credit card use—and a sharp increase in the broad unemployment rate[14], which reached almost 10 percent in October.

The war also had a unique impact on Israeli Arabs (Box 5.2). Broad unemployment in that segment of the population jumped in October to over 15 percent, and the effective employment rate (those actually employed, excluding absentees) among Arab men was hampered even more than among Jewish men. This was not only because many Arabs are employed in the construction industry, but also due to the decline in demand for the output of the service industries—in which Arabs have a relatively high representation. According to indications presented in Box 5.2 of this Report, the impact to employment is also explained by concern over interactions between Arabs and Jews. However, the employment gaps between workers from Arab and Jewish

Broad unemployment among Israeli Arabs skyrocketed in October to more than 15 percent, and the actual employment rate among Arab men suffered a more significant impact than among Jewish men.

[14] The unemployed plus the employed who were absent from their jobs for economic reasons.

society narrowed quickly, and returned to almost their previous levels toward the end of the year.

The increase in broad unemployment reflected demand constraints, which spread rapidly throughout the economy, mainly to the leisure industries. It was reflected in the unemployment of furloughed employees who could collect benefits as a result of greater flexibility in the conditions for doing so, similar to the policy that was in place during the COVID-19 crisis.[15]

Tourism, particularly incoming tourism, suffered a significant impact. Most international airlines stopped flying to and from Israel for a number of months, due to the sharp increase in insurance costs because of the war, and due to a sharp decline in demand for flights to and from Israel. Some of the impact in the hotels industry was offset by the placement of evacuated residents in tourism hotels at the government's expense, but those residents do not consume tourism services the way tourists do. The industry is expected to continue suffering significantly from the impact over time as residents return to their homes, as previous experience shows that tourism recovers slowly following security crises, and the current war is more serious than security incidents in the past.

The agriculture industry, a large part of which is concentrated in the confrontation areas, absorbed a supply calamity due to the temporary departure of more than 10,000 foreign workers—more than a third of the foreign workers in agriculture. (For more discussion, see Box 5.1 in this Report.) The manufacturing industry dealt with the closure of plants due to a shortage of labor and due to security risks in the confrontation areas.

Households and small businesses were greatly affected economically by the war. Credit to households, which declined moderately even before the war (by 0.9 percent), declined even more so in October following the outbreak of the war, and then stagnated until the end of the year. Due to the impairment of income of small businesses and some households, the Banking Supervision Department launched a program at the beginning of the war, which was adopted by the banking system, to defer loan repayments for 3 months without interest or fees for residents living within 30 kilometers of the Gaza Strip, evacuates, families of those killed, and reserve soldiers. A similar deferral, bearing interest at the loan's original rate but without fees, was granted to loans of other interested residents. This program was extended by an additional three months at the end of the year. By the end of 2023, payments on more than 300,000 loans were deferred, about 30 percent of which were part of the program for those directly impacted by the war. (For more discussion, see the Bank of Israel's *Financial Stability Report* for the second half of 2023.)

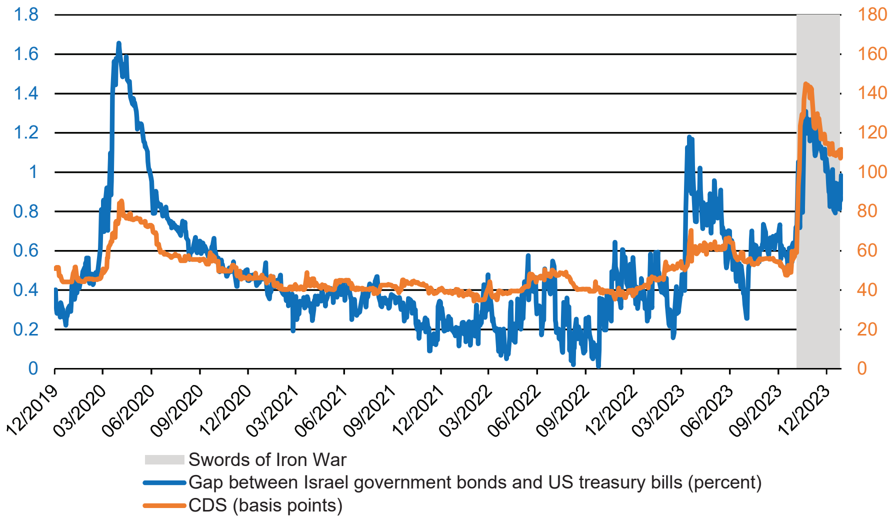
In view of the serious impact to economic activity and the sharp increase in government expenditures, various risk indices rose, including the yield gap between Israeli government bonds and US Treasuries, and the CDS spread (Figure 1.9). Two

[15] For more discussion on the labor market, see Chapter 5 of this Report, as well as surveys published by the Ministry of Labor and by the National Insurance Institute.

of the leading rating agencies put Israel's credit rating on "negative rating watch", and the S&P ratings agency lowered its ratings outlook. In view of the increasing uncertainty regarding the duration of the war—the timing and nature of its end and the risk of its expansion—the Moody's ratings agency lowered Israel's credit rating and its credit outlook in February 2024. This was also due to the war's effect on the availability of the government and of the Knesset to deal with core economic and social issues and the change in the fiscal situation. In contrast, Moody's emphasized in its announcement that the macroeconomic and monetary policy frameworks in Israel are strong.

At the beginning of 2024, Moody's lowered Israel's credit rating.

Figure 1.9
10-Year Dollar Yield Gaps Between Israel and the US and the Risk Premium According to the 5-Year CDS, Dec. 2019–Dec. 2023

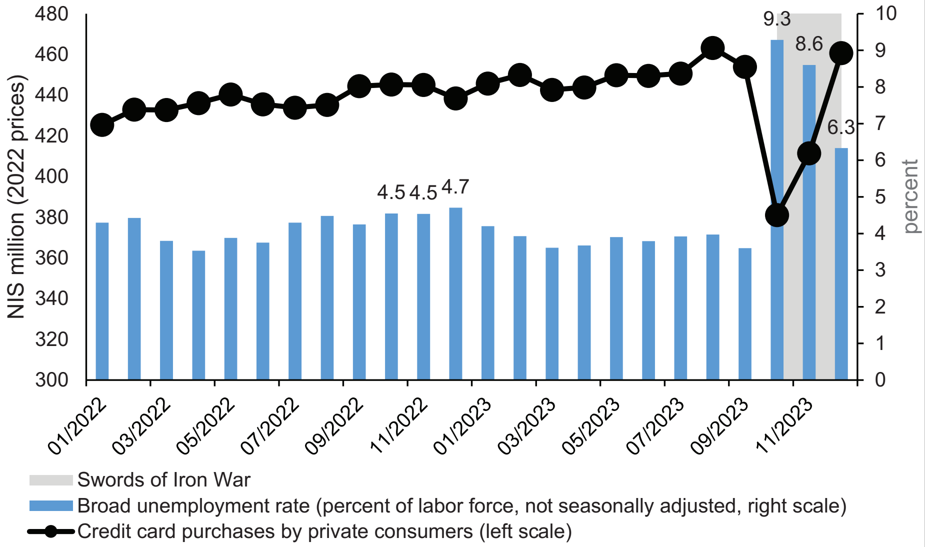


SOURCE: Based on Bloomberg.

The lowering of Israel's credit rating validated the concern over credit risks. Israel's credit spreads and risk premium increased even before the rating was lowered. Over time, the lowering of the credit rating may impair investments in the economy due to the decline in foreign institutions' holdings of Israeli government bonds as a result of regulatory rules on international financial institutions that restrict the volume of their holdings of sovereign or corporate bonds that are under a certain ratings level. In such a case, the gap in yields-to-maturity between domestic government bonds and foreign bonds is expected to increase, capital raising by the government and by domestic institutions and companies is expected to become more expensive, and there may even be a reduction in nonresidents' direct investments in the economy.

However, following the initial shock, the shekel appreciated and the equity indices increased, providing indications of stabilization. In December 2023, the nominal effective exchange rate was 1.8 percent lower than its September level, the shekel-dollar rate was 3.9 percent lower, and equity prices were just 1.1 percent lower (Tel Aviv 125) than they were in December, after falling by 7.6 percent in October, which was almost double the decline on global indices (Figure 1.5). Credit card expenditures, an indicator of private consumption, recovered, and returned to its prewar trend (Figure 1.10). Public transit traffic also returned to its previous levels. The labor market showed strength, and the broad unemployment rate declined to around 6.3 percent (Figure 1.10), without significantly affecting the participation rates.

Figure 1.10
Credit Card Purchases and Broad Unemployment Rate, Jan. 2022–Dec. 2023



SOURCE: Based on Central Bureau of Statistics.

b. Fiscal policy and government measures

Following the terrorist attack on October 7, the government decided to go to all-out war in Gaza, including a widespread mobilization of reserve soldiers. In parallel, in view of the fighting in the areas surrounding the borders with Lebanon and Gaza, the government decided for the first time since the establishment of the State to evacuate tens of thousands of residents from their homes for security reasons. The evacuation and the serious impact to residents of the Gaza border and northern areas required the government to advance assistance programs that would provide a response to those harmed. These responses were partly delayed for various reasons, some of them objective, considering the abnormal situation. In parallel, various civil society groups organized to provide alternative responses in a variety of areas.

Due to the war, the government's policy became very expansionary.

Alongside the handling of those directly harmed by the terrorist attack and the evacuations, many parts of the country were exposed to rocket and missile attacks in the first weeks of the war. This situation limited civilian activity and the opening of workplaces, particularly where there is no appropriate protection. As a result of all this, the government formulated programs to make it easier for the affected population. At first, the programs related to those directly affected, and later on they were extended to businesses and individuals who were indirectly affected by the war throughout the country. These decisions formed the basis for the civilian economic costs and the government's measures in the following months.

The expected growth of the structural deficit and the concern over additional crises in the future made it necessary for the government to make budgetary adjustments.

The fiscal safety buffers that were accumulated prior to the war support fiscal resilience during the war, but the war had a significant impact on the government budget, its financing needs, and the markets' reaction. (For details on the government budget, see Chapter 6.) The increase in debt raised during the first three months of the war was reflected in a moderate increase in yields on new government bonds during the issuance on the domestic market. However, the moderate reaction of yields was largely supported by a decline in yields on global markets, and the (negative) yield gaps between Israeli government bonds and US Treasuries was erased by the end of the year. In contrast, the cost of raising debt abroad increased greatly. Alongside this, the expected growth of the structural deficit and the possibility of other crises coming to pass later on, made it necessary for the government to make budgetary adjustments in order to maintain fiscal responsibility and the credibility of fiscal policy among the markets and the public, but these adjustments were made only partially.

The direct budgetary cost of the war can be financed through a combination of various ways—raising taxes, reducing other expenses, and/or temporarily increasing the debt. Each of these methods of financing has economic implications. Financing through taxation, particularly direct taxation, will be imposed especially on the working population, and may have a negative impact on incentives to work. Financing through reducing transfer payments will be imposed mainly on the lower deciles of households. Financing through increasing the deficit will transfer the burden to the public in the coming years and will impair the economy's resilience. Financing through reducing civilian consumption will impair government services, and may narrow programs that support future growth engines—meaning that it will impair growth and the standard of living of all Israelis. As such, it is necessary to be cautious when increasing expenditures—particularly those that are prolonged. They should be allocated in a way that supports sustainable growth, with informed selection of the measures taken to finance them while balancing the various sources.

In order to deal with the additional expenditures necessary in 2023, the government approved a budgetary increment of about NIS 26 billion in the revised budget for that year[16], of which about NIS 12 billion was to finance the government's additional civilian expenditure due to the war. The largest component of this was about NIS 3.5 billion for items connected with the evacuations, including payment to hotels

[16] About NIS 29 billion was added to the budget, while about NIS 3 billion was cut from other items.

where the evacuees were put up, the provision of health and education services at the hotels, occupancy grants, and extending the wage compensation to business owners for evacuee employees. Other significant expenses included assistance to high-tech firms (about NIS 1.5 billion), a budget increment to the Ministry of National Security, for instance for police reinforcement (about NIS 1.5 billion), and a budget increment to the Ministry of Health (about NIS 1 billion).

The government implemented an employment model similar to the one that was developed during the COVID-19 crisis, with options to furlough workers, and added immediate compensation to employers whose revenue dropped by more than 25 percent.

Beyond the increase in the budget, the government took a number of additional measures to ease conditions for the business sector and households. During October, the Ministry of Finance published policy measures that were intended to aid economic activity in the economy as a whole and in the business sector in particular. The most rapid of them was the deferral of VAT payments, which led to a deferral of NIS 3.5 billion in revenue by the end of the year. The government also used the property compensation fund to finance direct and indirect assistance totaling about NIS 5 billion to businesses by the end of the year. NIS 1 billion was spent from the National Insurance Institute budget due to increased unemployment benefit payments.

As part of the assistance, the government implemented a compensation model for businesses whose revenue dropped by more than 25 percent, which also covered wages actually paid. This channel was supposed to be an incentive for employers to maintain their employees, but it seems that the structure of grants combined with easier eligibility conditions for unemployment benefits for furloughed employees were not sufficient incentive to meet the need. (For more discussion of the furlough model, see Chapter 5, and for more discussion of the government's policy and measures, see Chapter 6.)

c. Monetary policy and Bank of Israel measures

The Bank of Israel used special tools in response to the war. Table 1.3 details the Bank's actions in the fourth quarter of 2023, during the war. In view of the war and its rapid consequences on the markets, the Monetary Committee focused on maintaining stability in the markets, with an emphasis on the foreign exchange market, in order to prevent harm to financial stability, which may lead to prolonged damage to the economy.[17] Prior to the war, annual inflation had moderated but remained above the target range, at 3.8 percent in September. In view of this, the Monetary Committee members noted in the monetary policy announcements of July and September, prior to the outbreak of the war, that, "… (the Committee) sees a real possibility of having to raise the interest rate in future decisions, if the inflation environment does not continue to moderate as expected."

Since the outbreak of the war, the Bank of Israel has focused on stabilizing the financial markets, particularly the foreign exchange market, and reducing uncertainty, through the use of various policy tools. Therefore, with the decline in uncertainty surrounding the potential expansion of the war, the markets calmed significantly.

With the outbreak of the war (on Saturday October 7), the risk premium increased sharply, and the shekel depreciated strongly in premarket trading abroad. The Bank's measures focused on stabilizing the financial markets, primarily the foreign exchange

[17] https://www.federalreserve.gov/newsevents/speech/bernanke20130510a.htm; https://www.brookings.edu/articles/should-monetary-policy-take-into-account-risks-to-financial-stability; https://www.elibbrary.imf.org/display/book/9781484325940/ch006.xml

market, and on reducing uncertainty, while using various policy tools (Table 1.3). These measures contributed to calming the markets in the midst of high market volatility. As time passed, the shekel appreciated to a level higher than its prewar level.

Table 1.3
Bank of Israel Actions During the Swords of Iron War

Monetary policy	Banking, credit and payments	Economic advice to the government
• **Program to sell up to $30 billion in foreign currency, and actual sale of $8.5 billion.** • **Swap transactions of up to $15 billion.** • **Repo transaction mechanism with institutional investors and mutual funds against government and corporate bonds.** • **Lowering the Bank of Israel interest rate by 0.25 percentage points in January 2024.**	• **Agreed program to defer payments and cancel or defer fees on loan repayments.** • **Program to ease credit conditions for small businesses totaling up to NIS 10 billion.** • **Easing credit reporting.** • **Easing the restriction on bank accounts.** • **Guidance that enabled the transition to remote banking and service from other bank branches.** • **Handling the misuse of credit cards belonging to victims of the security situation.**	• **Publication and revision of the macroeconomic forecast of economic activity in view of the war.** • **Analyses and economic assessments of activity in the various industries.** • **Constant work with relevant government ministries to advance assistance programs and programs to deal with the needs arising from the war.**

The Bank of Israel presented a program to ease credit conditions for households and businesses.

In order to ease the conditions of credit for small and micro businesses that were harmed by the war, in November the Bank of Israel announced a monetary program totaling NIS 10 billion, which ended at the end of January 2024. The program offered the banks loans at subsidized interest in exchange for providing loans with an interest rate that would not exceed the prime rate. By the end of 2024, loans totaling NIS 6.3 billion were approved, 45 percent of which were in the south and north of the country. The average rate of decline in loan redemptions was slightly higher than 50 percent.

The inflation environment declined at the beginning of the war.

Since the outbreak of the war, one-year inflation expectations from various sources remained virtually unchanged relative to their prewar levels—within the target range and in the upper portion of the range. At the same time, the expected interest rate path declined. The Consumer Price Index for October was slightly (0.1 percentage points) higher than expected, but the index readings for November and December were 0.4 percentage points lower than expected in total. These developments are consistent with empirical findings obtained regarding the Israeli economy, according to which military confrontations have a deflationary impact on the economy in the short term, due to the dominant decline in demand alongside a significant decline in activity due to a supply-side impact. (For more discussion, see Box 3.2 in this Report.)

Following the entrenchment of stability in the financial markets and the decline in the inflation environment, the Monetary Committee lowered the Bank of Israel interest rate on January 1, 2024 by 0.25 percentage points to 4.5 percent.

In view of the entrenchment of stability in the financial markets, the multiplicity of indicators that the inflation environment was moderating toward the target range, the significant impact to economic activity and employment, and the expectations at the time of a turnaround in interest rate policies abroad—particularly in the US and in the eurozone, which had signaled expected interest rate decreases—the Bank of Israel Monetary Committee decided on January 1, 2024 to lower the interest rate to 4.5 percent. This was the first interest rate reduction since the beginning of the COVID-19 pandemic in March 2020.

4. THE CHALLENGES FACING THE ECONOMY FOLLOWING THE WAR

Due to the war, the Israeli economy faces significant challenges and extended costs. The Swords of Iron War is a security event on a different scale than previous rounds of combat in the past two decades—on the economic side as well. In addition, it differs greatly from the COVID-19 crisis on a number of significant fronts.

The war in Gaza is a crisis that is unique to Israel. As such, the global markets are less tolerant of the increase in Israel's debt than they were during the COVID-19 crisis when all countries adopted very expansionary fiscal policies. This was reflected, for instance, in the credit rating agencies' attitudes toward developments in Israel. Moreover, the recovery from the COVID-19 crisis was very rapid, and had almost no negative connotations for the medium–long term. This was partly due to the sharp growth of global demand for technological services, an industry in which Israel has a relative advantage. In contrast, the current crisis is expected to have material implications in the medium–long term as well, which makes the recovery more challenging, particularly in view of the social divide in Israel during the period that preceded the war and its implications for the ability to manage policy with a long-term view.

The change in the defense perception and the increase required in the defense budget may impair potential economic growth.

The continuing implications, particularly on the supply side, include:

1. A change in the defense perception. This will apparently lead to a significant, permanent increase in the defense budget and in the budgets that accompany it. As part of the budget agreements for 2024, the defense establishment was already given authorization to commit to charges on the order of NIS 10 billion per year for 8 years for force building as an interim step until a professional committee can formulate the desired size of the defense budget in the medium term.

   It is important to regularly examine the volume of the increase in the defense budget against its civilian and economic significance—both temporary and permanent. Additional defense expenditure will require an increase in the government's revenue sources or a blow to civilian expenditures in Israel, which in any case are very low by international comparison. These two things may weigh down upon the economy's potential growth. For instance, a cessation of public infrastructure projects will involve a long-term impact to labor productivity. Cutting the five-

The expected growth in the defense burden makes adjustments and changes in government policy necessary.

year plan for the Arab sector, the objective of which is to increase the sector's integration in the Israeli economy, will harm education and infrastructure in Arab society, and thereby impair the growth of national revenue over time. Extending the period of compulsory military service will delay young people's entrance into the labor market, and increasing the number of reserve duty days will also impair the supply of labor in the business sector.[18]

In addition to these, the economy's risk premium may increase, which would result in higher financing costs for the government and the business sector, if the increase in defense expenditures is not accompanied by offsetting fiscal measures. These pose an additional significant risk to growth, since it is likely that they will lead to a decline in business investments, and thereby to a weakening of the path of development of labor productivity and GDP. In contrast, the large investment of the defense establishment and military industries in the development of technological improvements in the battlefield may enable an expansion of defense exports in view of the geopolitical tensions elsewhere in the world. Such investment may, as we have seen in the past, lead to technological developments that also provide civilian benefit in the medium–long term.

2. Finding suitable alternatives to Palestinian laborers.[19] As of October 2023, Palestinian laborers account for about one-third of those employed in the construction industry, which needs a suitable alternative solution. Increasing the number of foreign workers may provide the economy with flexibility in the supply of labor in the construction and agriculture industries, and may serve as a stabilizing factor during periods of security tension. However, the presence of foreign laborers requires domestic resources for housing and healthcare solutions for those laborers, and may create social difficulties. This issue must also be examined through security and regional geopolitical lenses, since any solution will have significant implications for the Palestinian economy as well.

Reducing the employment of Palestinians in the construction and agriculture industries makes it necessary to find a fitting alternative solution.

3. The need to enable the return of confrontation area residents to their homes, and to rehabilitate dwellings and infrastructure that were damaged, while upgrading services in accordance with the policy the government will determine. As this process advances, residents will become more reacclimated and it will be easier for them to better reintegrate to the jobs they held before the war.
4. One of the insights that has become apparent due to the war is the increase in the IDF's manpower needs. This increase will greatly intensify the burden on those who serve, as illustrated, for instance, by the marked increase in the number of service days that reserve soldier are expected to serve each year, and in the proposal to extend the duration of compulsory service. Extending the individual's military service, whether compulsory or reserve impairs his civilian economic output, and this intensifies to an increasing extent as his military service is extended.

[18] In February 2024, the Reserve Duty Law was submitted to the Knesset for first reading. The law will significantly increase the annual quota of service days for reserve soldiers, and raise the age at which exemptions from reserve duty are given.

[19] This issue is discussed at length in Box 5.1 of this Report.

Moreover, prolonged reserve duty also has an impact on the employment of the soldiers' spouses. (For more discussion, see Chapter 5, Section 4a.) Therefore, as the burden of military service is divided among a higher number of soldiers among military service candidates, the economic impact on each of them declines, as does the aggregate impact on the economy. Expanding the circle of military personnel to include the Haredi (ultra-Orthodox) population, as part of an agreed-upon outline with regard to the nature of the process, will therefore make it possible to answer the increasing defense needs while moderating the impact to personnel and to the economy.[20]

In addition to these, we must not lose sight of the challenges facing the economy and the reforms that were necessary even before the war in order to deal with long-term fundamental problems. These challenges, which are inter-related, have been raised in the past by the Bank of Israel, and by other economic institutions and international organizations:

1. Labor productivity that is lower than the average of the developed economies, particularly in the nontradable industries.
2. The low level of basic skills among workers and the high level of inequality between those with various skills.
3. Employment rates are particularly law among Arab women and Haredi men.
4. There is a lack of basic knowledge required for integration into the labor force, due to the lack of core curriculum studies in schools for Haredi men.
5. There is a need to upgrade and expand physical infrastructure, particularly mass transit infrastructure.
6. The poverty rate is double the OECD average.
7. The population is growing at the highest rate among OECD countries (about 2 percent per year, compared with an average of 0.6 percent in the OECD), which provides an even greater challenge for fiscal policy. Alongside its future contribution to economic growth, population growth leads to particularly high needs in the fields of education, healthcare, and welfare, higher demand for housing, overloaded physical infrastructure, and high population density, which will increase in the coming years, particularly in high-demand areas.

In response to these changes, the Bank of Israel submitted a comprehensive and detailed report in 2019, which included concrete recommendations with regard to processes that the government must initiate to improve labor productivity and the standards of living in Israel in the long term.[21] Following on from that, additional

[20] The issue of military recruitment also arouses social and legal questions with regard to equal burden in the country for the entire population. However, the discussion in this chapter focuses solely on the economic aspects of the country's defense needs.

[21] "Research Department Special Report: Raising the Standard of Living in Israel by Increasing Labor Productivity" (2019).

reports were submitted in 2021 and in 2023.[22] The cost of implementing the recommendations is about 3 percent of GDP per year, and the expected return on those processes in terms of growth is very high—more than 20 percent of GDP in the medium–long term. The analysis in the report shows that the proposed measures can be financed only partially by increasing the structural deficit without the debt to GDP ratio increasing to high levels. Therefore, implementing such a program requires fiscal decisions that are not simple with regard to reducing other government expenditures—that do not support long-term growth—and/or increasing the tax burden to finance the investment. These measures will impair the public's disposable income in the short term, but will enable sustainable growth and a higher standard of living in the following years.

It seems that the challenges facing the Israeli economy have not declined since the publication of the initial report in 2019, but have come into sharper focus. The heavy defense burden that is expected to be imposed on the public will apparently require considerable public resources, and the increase in Israel's geopolitical risks, as perceived by the world, is raising financing costs.

In view of these challenges, the government must ensure that the budgets in the coming years are directed toward the most important needs facing the economy. Moreover, it is important to reduce budgets that may impair incentives to integrate new population groups in the labor market and other long-term objectives. To the extent that government budgets reflect these rules, they will help the economy in the medium–long term, and sources will be freed up to reduce the increases in the tax burden, the deficit, and the debt. Moreover, the markets in Israel and abroad, as well as international economic and financial organizations that examine Israel, will respond to a responsible budget that is adjusted to the macroeconomic targets with greater tolerance than to an inefficient budget that includes items that do not support growth. The government must exploit the favorable economic conditions that were in place when the war broke out to stabilize and lead the economy, in its recovery from the war, to broad and sustainable growth.

[22] "Four Recommended Pillars of Strategic Government Action to Accelerate Economic Growth and A Fiscal Framework for Financing Them" (2021); "Recommended Strategic Pillars of Action for the Government" (2023).