# Chapter 4

# Development of Financing Sources for the Nonfinancial Private Sector

- The increase in the Bank of Israel interest rate led to higher financing costs in the economy. As a result, there was a slowdown in the growth of business credit and household credit, which intensified in the fourth quarter of the year against the backdrop of the outbreak of the Swords of Iron War.
- In the context of business debt to the banks, different patterns were observed between large and small businesses during the year: although the growth of credit to large businesses moderated, it remained high, while credit to small and micro businesses did not grow and even contracted.
- The moderation in the growth of bank credit to large businesses was accompanied by some moderation in the amount of capital raised in the capital market; nonetheless, it remained at a high level in historical terms.
- The construction and real estate industry continued to lead the growth in the bank credit portfolio and in the volume of capital raised in the capital market. Against the background of a decrease in home sales, the construction companies had greater financing needs.
- The volume of share issues declined markedly this year. Furthermore, after several years with high volumes of new issues (IPOs), only one company issued shares to the public in 2023. Meanwhile, the contraction in high-tech companies' raising of capital from venture capital funds in Israel and abroad continued, a trend that was also observed in the world's leading markets.
- Housing credit grew this year at a moderate rate, alongside a decrease in the number of home-purchase transactions, while consumer credit contracted following a continuous increase since the beginning of 2021. The decrease in consumer credit was mainly reflected in the contraction of credit from institutional lenders, particularly in the case of new credit, and an increase in redemptions of existing loans due to the interest rate increase.
- To mitigate the economic impact of the Swords of Iron War on the business sector and households and to support credit supply, the government and the Bank of Israel took several steps to encourage the providing of credit and easing of credit terms.

## 1. INTRODUCTION AND MAIN TRENDS

This chapter analyzes changes in the financing sources of households and businesses (the nonfinancial private sector) in Israel. Financing is used by households and the business sector for consumption and investment, which explains its critical importance to economic activity. This chapter describes the main changes that occurred in the private sector's debt in 2023 against the backdrop of the Bank of Israel interest rate hikes, the uncertainty surrounding the judicial reform process and the eruption of the Swords of Iron War in the fourth quarter of the year.

In 2023, the Bank of Israel continued to raise the monetary interest rate, from 3.25 percent at the end of 2022 to 4.75 percent in June[1], where it remained until the end of the year.[2] Most advanced economies increased monetary interest rates (see Chapter 3), a situation that led to the tightening of financial conditions both in Israel and globally.

After worldwide declines in financial asset prices in 2022 due to rising interest rates and geopolitical fears stemming from the Russia-Ukraine war, 2023 saw a correction that increased prices, despite the continued monetary tightening. The Israeli stock market underperformed compared to the rest of the world, amidst uncertainty due to the judicial reform and the outbreak of the Swords of Iron War in October. In 2023, stock prices in Israel increased by about 4 percent, in contrast to double-digit increases in most of the world's major stock indices. The domestic corporate bond market saw relatively high annual price increases compared to the past, even higher than those of the equity indices. Compared to the rest of the world, this market also underperformed.

The Bank of Israel interest rate hike translated into increased debt costs and affected financing sources in the economy: total credit of small and micro businesses contracted and the growth rate of credit to large businesses slowed, though it remained at a high level. The contraction of credit supply for small businesses was reflected in the Business Tendency Survey, which pointed to an increase in the difficulty experienced by small businesses in obtaining bank and nonbank credit. In contrast, large businesses did not report any increase in difficulty over the course of the year. The difference in debt trends between large and small businesses may also derive from the stability of demand for credit. Large businesses typically manage long-term projects, and therefore their activity is less sensitive to changes in prices, number of employees, etc., which apparently reduces their flexibility in determining their level of financing.

The rise in the interest rate in the economy, which increased the cost of credit for companies, was accompanied by a slowdown in the growth of investment in the economy relative to previous years (as described in Chapter 2). The interest rate increase also reduced consumption demand and increased saving demand, contributing to the particularly slow growth of private consumption and the decrease in credit to

[1] Following the sharp rise in the interest rate from 0.1 to 3.25 percent in 2022, which began in April.
[2] In January 2024, the Bank of Israel reduced the interest rate to 4.5 percent.

finance consumption. This incentive to increase savings, along with the continued growth of disposable income, explains the continued growth in private saving.

Due to the increased cost of credit and the rise in the debt service burden, the growth rate of housing credit was particularly low relative to previous years, and the number of home purchases also declined. This was accompanied by an increase in the stock of homes under construction and a decrease in home prices (see Chapter 8), supporting the view that the decrease in transactions was a result of a slowdown in housing demand. In parallel to the slowdown in housing credit growth, there was a contraction in nonhousing credit. Thus, apart from avoiding additional debt to finance consumption, some households also reduced existing debt through early redemption (whether in full or in part) of past debts (for further details, see Box 4.2).

The Swords of Iron War, which broke out at the beginning of the fourth quarter, intensified the trends described above: there was a low growth rate in credit to medium-sized businesses, as was the case in the third quarter; credit to large businesses contracted after a gradual moderation in its growth rate during the year; and the decline in credit to small and micro businesses deepened. In addition, and in parallel to the increase in spreads as a result of the war, a significant decline in bond issues was observed, primarily lower-rated bonds. The trend of moderation in credit to households also intensified—in both housing credit and nonhousing credit. To mitigate the economic effect of the war on the business sector and households, the government and the Bank of Israel took a number of steps to encourage the providing of credit and the easing of credit conditions.[3] Against the backdrop of these measures, businesses and households postponed debt payments, and businesses (especially small and micro businesses) obtained credit from state-guaranteed funds, in addition to bank credit. Through various aid programs, small and micro businesses were granted credit totaling about NIS 10 billion by the end of February 2024, which constituted about 9 percent of the total provided to them from November 2023 to February 2024. As a result of these programs, which encouraged the providing of low-interest credit, the interest rate on credit for small and micro businesses also declined.

[3] For further details, see Section 4.

**Table 4.1**
**Distribution of nonfinancial private sector debt, 2021–23**
**End of period balances, NIS billion, current prices**

| | End of period balance | | | Quarter-end balance | | | |
|---|---|---|---|---|---|---|---|
| | **2021** | **2022** | **2023** | **31/03/2023** | **30/06/2023** | **30/09/2023** | **31/12/2023** |
| **Nonfinancial private sector debt (1+2)** | **1,794** | **2,016** | **2,103** | **2,052** | **2,084** | **2,104** | **2,103** |
| **1. Business sector debt** | **1102** | **1240** | **1310** | **1271** | **1298** | **1310** | **1310** |
| Credit from banks | 573 | 658 | 721 | 690 | 702 | 709 | 721 |
| Tradable bonds in Israel | 235 | 263 | 278 | 265 | 273 | 278 | 278 |
| Nontradable bonds and nonbank loans | 112 | 119 | 121 | 118 | 122 | 122 | 121 |
| Domestic nonbank credit | 348 | 383 | 400 | 383 | 396 | 400 | 400 |
| Credit from abroad | 181 | 199 | 189 | 199 | 201 | 201 | 189 |
| **2. Household debt** | **692** | **775** | **793** | **781** | **786** | **794** | **793** |
| Housing credit | 477 | 543 | 568 | 549 | 556 | 563 | 568 |
| Nonhousing credit | 215 | 233 | 226 | 231 | 230 | 231 | 226 |
| | **Change during the period (percent)** | | | **Change during the quarter (percent)** | | | |
| **Nonfinancial private sector debt (1+2)** | **12.9** | **12.3** | **4.3** | **1.8** | **1.6** | **0.9** | **0.0** |
| **1. Business sector debt** | **12.7** | **12.5** | **5.6** | **2.5** | **2.1** | **0.9** | **0.0** |
| Credit from banks | 17.5 | 14.8 | 9.5 | 4.8 | 1.7 | 1.1 | 1.7 |
| Tradable bonds in Israel | 10.8 | 11.9 | 5.8 | 4.8 | 1.7 | 1.1 | 1.7 |
| Nontradable bonds and nonbank loans | 0.3 | 6.2 | 1.7 | 0.6 | 3.2 | 1.8 | 0.1 |
| Domestic nonbank credit | 7.2 | 10.0 | 4.5 | 0.1 | 3.3 | 1.2 | -0.1 |
| Credit from abroad | 9.2 | 10.0 | -5.2 | -0.4 | 1.2 | -0.1 | -5.9 |
| **2. Household debt** | **13.3** | **12.0** | **2.3** | **0.7** | **0.7** | **1.0** | **0.0** |
| Housing credit | 14.5 | 13.7 | 4.6 | 1.2 | 1.2 | 1.3 | 0.8 |
| Nonhousing credit | 10.8 | 8.3 | -3.0 | -0.6 | -0.5 | 0.2 | -2.2 |

## 2. DEVELOPMENTS IN BUSINESS CREDIT

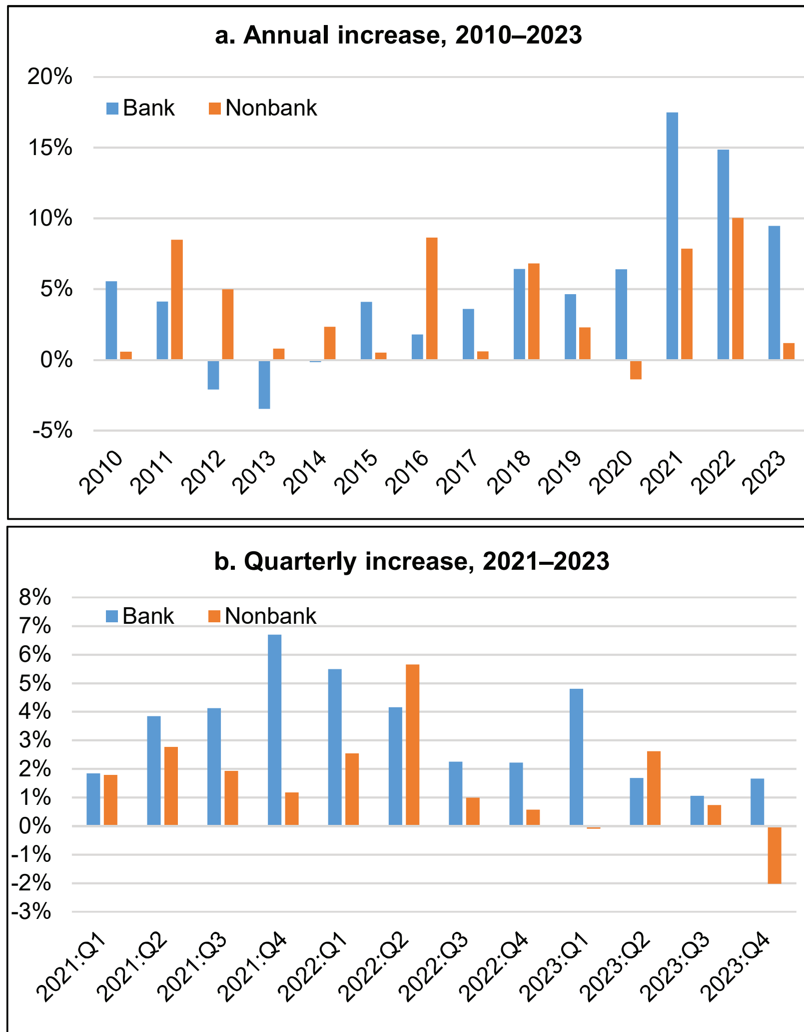
Total business sector debt reached NIS 1.3 trillion in 2023, and the ratio of business debt to GDP stood at 70.2 percent, the same as its level in the previous year and low relative to other countries.[4] The growth rate of business credit in 2023 was 5.6 percent—about half of its growth rate in the years 2021–22, though still high historically.[5] The slowdown in the growth rate was observed in both bank credit (which constitutes about 55 percent of total business credit) and nonbank credit (Figure 4.1a),[6] although the situation of higher growth in bank credit than in nonbank credit continued. A breakdown into quarters (Figure 4.1b) shows that the moderation in nonbank credit intensified during the fourth quarter, likely due to the war.

[4] For further details on the ratio of business debt to GDP relative to other countries, see Box 4.1 in the Bank of Israel Report for 2021.

[5] Since about 25 percent of business debt is CPI-indexed and about 21 percent is denominated in foreign currency (mainly dollars), over a third of the increase in its total reflects the rise in the CPI and the depreciation of the shekel during 2023.

[6] This includes tradable corporate bonds, nontradable corporate bonds, nonbank loans, and credit from abroad.

**Figure 4.1**
**Increase in the Outstanding Bank and Nonbank Business Credit** (percent)




SOURCE: Based on Tel Aviv Stock Exchange and reports to the Bank of Israel.

### a. Bank credit to businesses

Bank credit to businesses grew by about 9.5 percent in 2023, a historically high rate, but significantly lower than in 2021–22 (16 percent on average). The growth rate of credit was in fact higher during the period of Bank of Israel interest rate increases, which were reflected in the higher interest rate on bank credit to businesses in the first half of the year, though not in the second half, during which the interest rate on bank credit rose at a more moderate pace for medium-sized and large businesses, and even decreased for small and micro businesses. This might have been the result of demand dominance in the first half of the year.

The trend in business debt to the banks shows a differentiation between large and small businesses during the year: growth in credit to large businesses slowed, but remained high, while credit to small and micro businesses did not grow and even declined.

With respect to bank credit, there was a notable difference between large and small businesses (Figure 4.2): bank credit for large businesses grew by about 14 percent in 2023, half the rate in the previous year, but similar to the average rates in previous years. There was a different picture in other categories: among medium-sized businesses, growth rates were moderate—about 4 percent, a third of the rate in 2022; among small businesses, there was no change; and among micro businesses, total credit even decreased (by 3.5 percent). The difference between large and small businesses may stem from a difference in the stability of the demand for credit, a result of differences in the nature of their activity: large businesses typically manage long-term projects and therefore are less sensitive to changes in prices, number of employees, etc., which likely reduces their flexibility with respect to levels of financing.

The Swords of Iron War, which erupted in the beginning of the fourth quarter, intensified the trends described above. A breakdown by quarter (Figure 4.2b) indicates that in the fourth quarter (at the beginning of which the war broke out), there was a low growth rate in credit to medium-sized businesses, as was the case in the third quarter, following a gradual slowdown throughout the year. In other businesses, the fourth quarter was characterized by a contraction of credit: among large businesses, this followed a gradual decline in the quarterly growth rate throughout the year;[7] among small businesses, the decline began already in the third quarter and intensified in the fourth; and in micro businesses, the contraction that occurred was a direct continuation of the trend that prevailed during most of the year.

With the intention of increasing the credit supply of businesses and enabling them to cope with cash flow difficulties and to meet working capital needs, the State provided guarantees for loans to the business sector starting in November, by means of a state-guaranteed fund.[8] The Bank of Israel also offered low-interest monetary loans to the banks, on condition that they would be passed on as credit to small and micro businesses. Through various aid programs, small and micro businesses were provided with credit totaling about NIS 10 billion by the end of February 2024—about 9 percent of the credit provided to them from November 2023 to February 2024.

The construction and real estate industry—with credit accounting for about 40 percent of the banks' total credit to businesses—continued to lead the expansion of the credit portfolio, but its rate of growth was lower than in previous years.

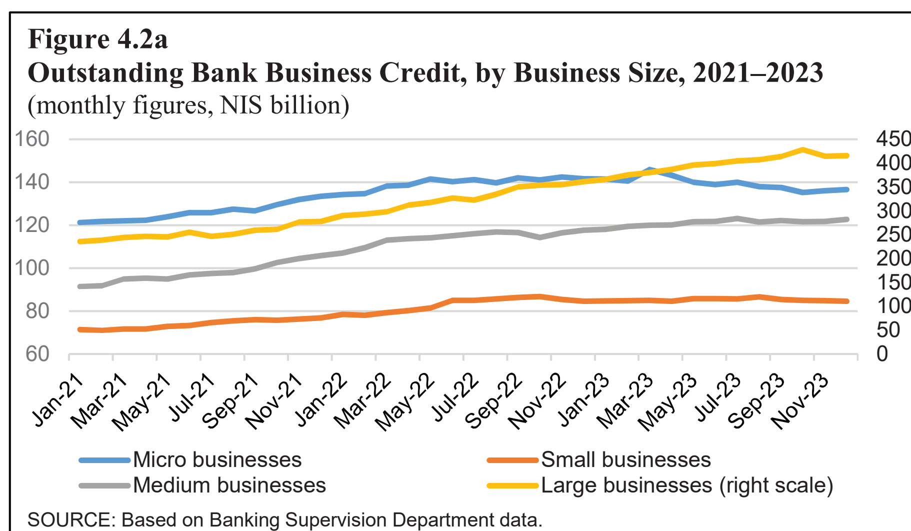
The slowdown in the growth rate of credit relative to previous years encompassed most industries.[9] The construction and real estate industry, which accounts for about 40 percent of total bank credit to businesses, continued to lead the expansion of the credit

[7] In October, the first month of the Swords of Iron War, credit increased significantly; however, in the following month, it decreased almost by the same magnitude. This probably does not indicate immediate utilization of credit lines but primarily the transfer of securities (considered to be credit to the public) due to losses in derivatives activity. At the beginning of the COVID-19 crisis, large businesses significantly increased their total debt, but unlike in the current crisis, they appear to have done so by means of immediate utilization of credit lines. (For further details, see Chapter 4 in the Bank of Israel Report for 2020.) In December, a moderate increase in credit was recorded.

[8] For further details on government and Bank of Israel programs to support credit activity, see Section 4.

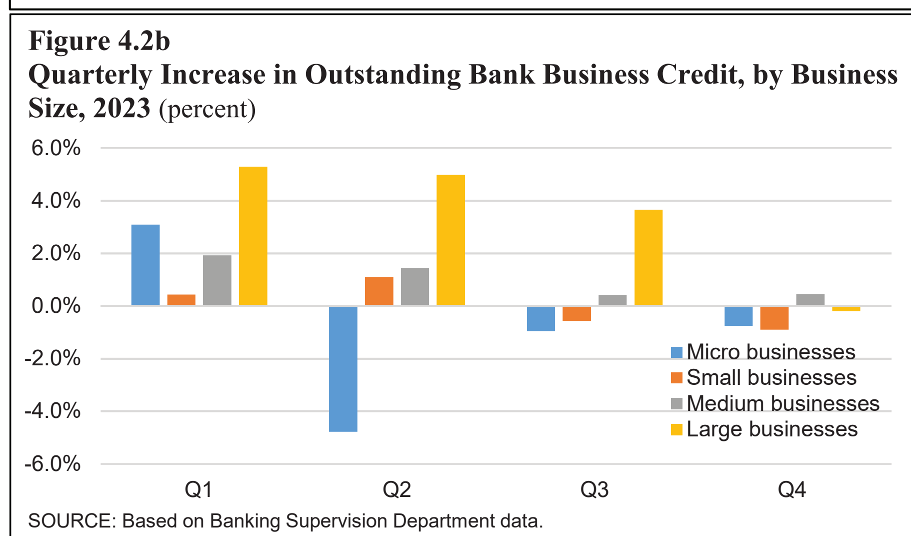
[9] Only in the following industries was there higher growth in 2023: provision of electricity, gas, steam and air conditioning, water supply, sewage services, waste management and purification services.

**Figure 4.2a**
**Outstanding Bank Business Credit, by Business Size, 2021–2023**
(monthly figures, NIS billion)




SOURCE: Based on Banking Supervision Department data.

**Figure 4.2b**
**Quarterly Increase in Outstanding Bank Business Credit, by Business Size, 2023** (percent)




SOURCE: Based on Banking Supervision Department data.

portfolio, although its growth rate was lower than in previous years.[10] This is against the backdrop of continued high-volume activity, mainly in existing projects, in which investment began before the interest rate increase in many cases, and the slowdown in home purchases, which required construction companies to use bank financing and bonds.[11,12] Among the sectors in which the growth of debt slowed significantly in 2023 was the financial services industry[13], which includes, among others, the

[10] For a description of the credit channels used by the construction and real estate industry, see Figure 2.8 and 2.9 in the 2023 Statistical Bulletin.

[11] Bank credit to the construction industry consists of two main sources—debt and Sale Law guarantees which the bank provides to homebuyers. If a construction company sells fewer homes, it needs more credit to proceed with construction; however, at the same time, it needs fewer off-balance-sheet guarantees.

[12] The volume of construction activity according to the National Accounts grew during the year.

[13] The total of which accounts for about 15 percent of total bank credit to businesses.

regulated credit institutions—entities that provide nonbank credit to small businesses and households. This follows a more than 30 percent increase in the industry's total credit in 2022. This moderation is reflected in the lower growth rate of total credit provided by the regulated credit entities this year, as will be described below.

The raising of the Bank of Israel interest rate up until June was manifested in interest rate increases on the bank deposits and credit of all businesses, regardless of their size and industry. This is evidence of the strong transmission from the Bank of Israel interest rate.

The Bank of Israel interest rate hikes up until June were reflected in interest rate increases on credit and bank deposits for all businesses, regardless of their size, and across all sectors – evidence of strong transmission from the Bank of Israel interest rate. Figure 4.3 presents the increase in the interest rate on credit and bank deposits before the war (January to September, Figure 4.3a) versus the period including the war (January to December, Figure 4.3b).[14] It can be seen that for medium-sized and large businesses, the interest rate increased in the fourth quarter of the year, while for small and micro businesses, it decreased—apparently as a result of the assistance programs, which encouraged the providing of low-interest credit to these businesses.

For 2023 as a whole, the interest rate on credit for small and micro businesses increased less than the Bank of Israel interest rate did, while for medium and large businesses (which account for the overwhelming majority of the credit), it increased more than the Bank of Israel interest rate did. At the same time, the interest rate on deposits of the business sector rose at a similar rate to the Bank of Israel interest rate and this was the case for all businesses. This followed the only partial transmission from the Bank of Israel interest rate to deposit interest rates in 2022[15] (unlike the stronger transmission to credit interest rates) (Figure 4.3c). The change in transmission might reflect trends in bank liquidity, which continued to decrease during 2023 (from 23 percent at the end of 2022 to 16 percent in the third quarter of 2023).[16] Although the banks' liquidity ratio is still high from a historical perspective, the continuation of this rapid contraction might have been among the factors strengthening the transmission to deposit interest rates during the year.[17]

**b. Nonbank business credit**

Nonbank business credit is raised through the issue of corporate bonds, which is the main channel for raising debt, and through loans (from institutional entities, nonbank entities, i.e., regulated credit providers and credit card companies, and nonresidents). This year, a slowdown was also observed in this type of credit, which partly resulted from the increase in its cost.

[14] The interest rates described in Figure 4.3 are the rates on credit and on bank deposits in the unindexed variable interest segment, which accounts for about 70 percent of business credit and about 40 percent of the deposits of the business sector.

[15] While the transmission from the monetary interest rate to the interest rates on bank credit was strong during this period. For further details, see Box 4.2 in the Bank of Israel Report for 2022.

[16] The liquidity ratio, i.e., the ratio of cash and bank deposits at the Bank of Israel to the total assets of the banking system.

[17] For further details, see Box 4.2 in the Bank of Israel Report for 2022.

**Figure 4.3**
**Increase in the Interest Rate on Credit and Bank Deposits for the Business Sector**
(percentage points)

* For new bank credit and deposits in the unindexed variable rate track.
SOURCE: Based on Banking Supervision Department data.

*i. Bonds*

During the course of the year, there was a moderate decrease in spreads, except following the presentation of the judicial reform legislation (in February and March) and the outbreak of the Swords of Iron war (in October) when they increased.

Corporate bond spreads (excluding those of the finance industry), which widened in 2022, remained more or less the same for the year 2023 overall (Figure 4.4a),[18] while they fell globally (Figure 4.4b).[19] During the course of the year, there was a moderate decrease in spreads, except during two episodes: the introduction of legislation for the judicial reform (in February and March) and the outbreak of the Swords of IronWar (in October). The most significant decrease in spreads was observed in the real estate and construction industry (0.4 percentage points)[20], the bonds of which account for about 58 percent of the total in the nonfinancial business sector. At the same time, splitting those bonds between those of the construction companies and those of the real estate companies shows that the spreads in the construction industry, where the risk level increased during the period (see Chapter 8), increased somewhat in 2023, particularly during the first two months of the war. The war's impact in increasing the spreads in the nonfinancial business sector occurred primarily during the first month of the war and with greater intensity for lower-rated bonds. These increases were the result of, among other things, the high level of redemptions by mutual funds that specialize in corporate bonds. Starting in November, the spreads declined—to even lower than they were in most industries before the war.

In the months of October and November and simultaneous with the increase in spreads due to the war, there was a significant decline in issues, primarily in ratings lower than AA-.

In parallel to the continuing (though more moderate) growth in bank credit, large businesses raised slightly less debt than in 2021–22[21] but at a higher rate than the annual average in previous years. According to the breakdown by sector (Figure 4.5a), there was a decrease of about 8 percent in issues by the real estate and construction industry (which accounts for more than half of the issues of the nonfinancial business sector[22]), which encompassed both parts of the industry.

In October and November, and in parallel to the increase in spreads due to the war, there was a significant decline in issues, particularly in the case of ratings below AA-, an indication of some constraint on credit supply and perhaps difficulties experienced by less resilient companies in raising debt capital. This development is consistent with the familiar phenomenon of an increase in risk aversion during a crisis and a tendency toward credit being allocated more to lower-risk businesses (public companies with high ratings) and less to small businesses and public companies with low ratings. Issues recovered in December, and companies returned to a level of issuing that was significantly higher than the monthly average before the war. Net issues (net of principal redemption) paint a more negative picture (see Figure 4.5b), in which the total net issues of nonfinancial companies in 2023 was only about a third of the

[18] They decreased on average by about 0.2 percentage points.

[19] Figure 4.4b compares the spreads of the Tel Bond shekel-denominated bonds to the spreads on US investment-grade corporate bonds with a maturity of 5–7 years.

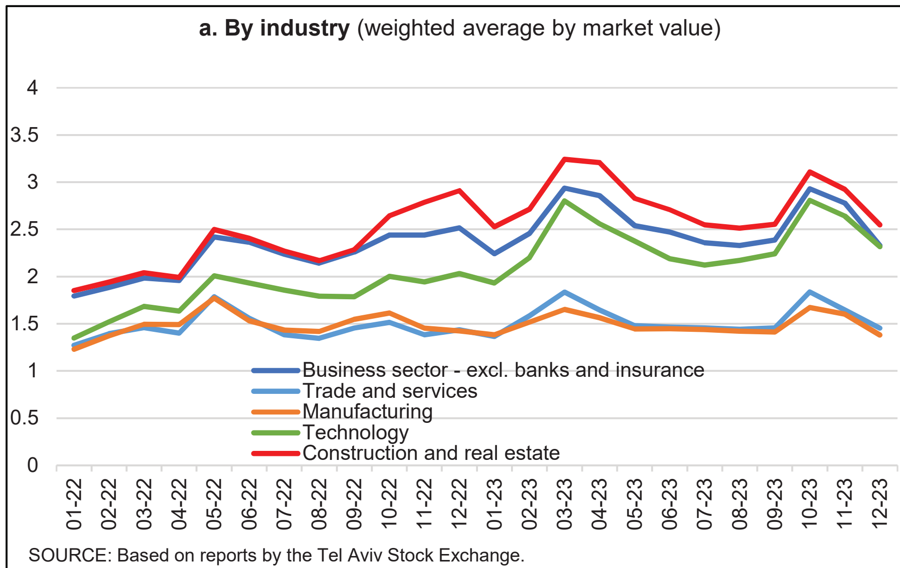
[20] This is in parallel to a particularly large increase in the real estate and construction share index relative to other industries in 2023.

[21] By about 2 percent.

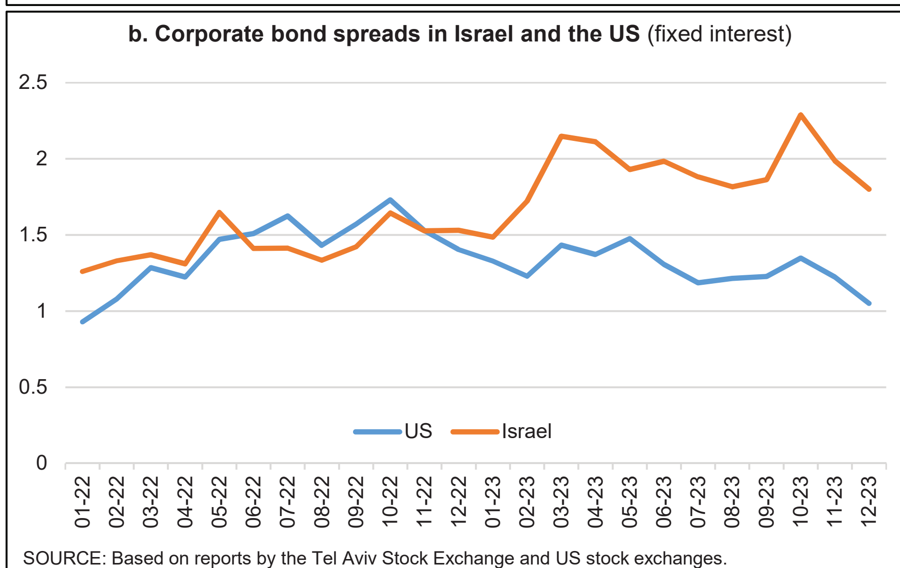
[22] The proportion of real estate and construction within total issues is similar to that in previous years (i.e., 58 percent).

average during the previous three years, and the decrease encompassed all sectors, except oil and gas. Net raising of debt capital in investment and holding, trade and services and manufacturing was even negative. This decrease in the volume of net debt capital raised during a time of rising interest rates is likely to be among the reasons for the non-widening of spreads this year, even though they would have been expected to widen given the events.

**Figure 4.4**
**Average Spread between Corporate and Government Bonds, 2022–2023**
(monthly average, percentage points)

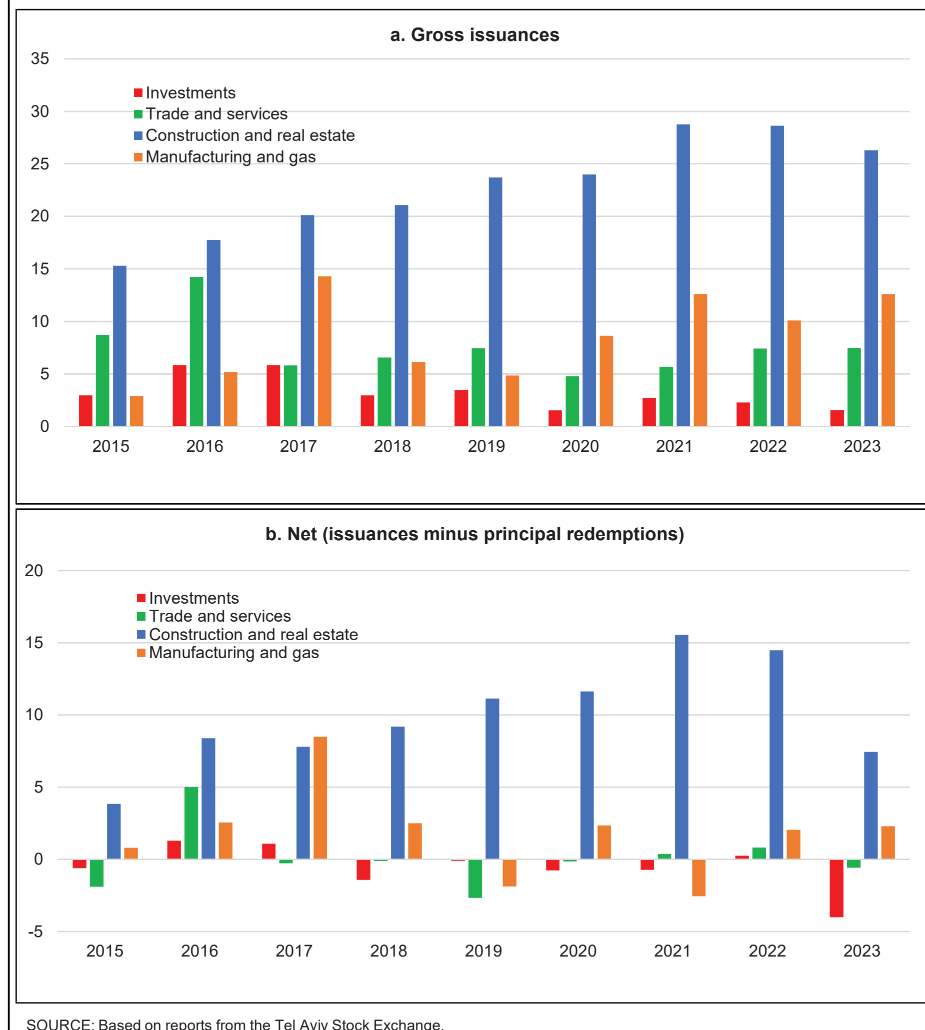



SOURCE: Based on reports by the Tel Aviv Stock Exchange.




SOURCE: Based on reports by the Tel Aviv Stock Exchange and US stock exchanges.

**Figure 4.5**
**Volume of Business Sector Bond Issuances, Excl. Financial Firms, by Industry, 2015–2023**
(NIS billion)




SOURCE: Based on reports from the Tel Aviv Stock Exchange.

### *ii. Nonbank loans*

In parallel to the moderation in issues and bank loans, the growth in nonbank loans from domestic lenders also slowed (as of November).[23] After three years of high growth in the volume of credit provided by regulated credit providers (about 130 percent since the end of 2019), total credit in the first three quarters of 2023 grew at a relatively moderate rate, reaching about NIS 20 billion (which is still only a negligible 1.5 percent of total business credit).[24] Total credit from abroad, which

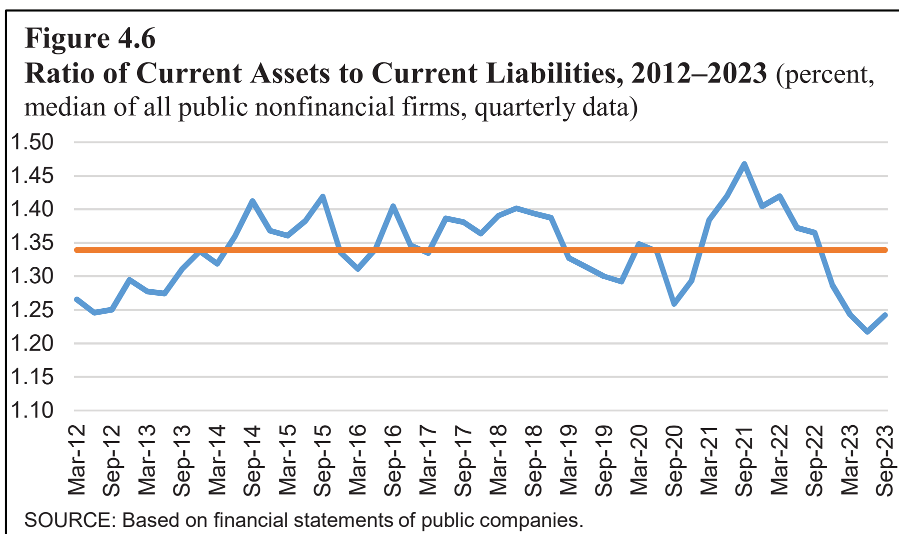
[23] Excluding loans from credit card companies whose share of total credit to the business sector is only about half a percent. Its rate of growth was similar to those in previous years (27 percent).
[24] This is against the backdrop of decreases in credit obtained by the finance industry as a whole, both from the banks and by way of corporate bond issues.

consists of loans from non-residents and bonds issued abroad (which constitute about 16 percent of total credit to the business sector) decreased this year (after accounting for exchange rate changes).

*iii. The liquidity of public companies*

Companies can finance their investments by obtaining credit or raising capital or by making use of their liquidity. The current ratio of public companies shows that this last component reached a peak in the third quarter of 2021.[25] Since then, it has gradually declined, and in the second and third quarters of 2023, it even reached a historical low (Figure 4.6). For the purpose of comparison, the current ratio was below one among 20 percent of the nonfinancial public companies in the third quarter of 2020, whereas that rate reached 28 percent in the third quarter of 2023. This implies that public companies in the economy do not enjoy the level of liquidity they did in the past, and as a result, they are more sensitive to changes in the cost of credit financing. A breakdown by industry shows that the Current Ratio in 2023 was low in historical terms in most industries, including companies in real estate and construction, which account for a dominant share of bank credit to businesses and are categorized as large and medium-sized businesses. In parallel to the decrease in the current ratio, the average maturity of bank debt to businesses has shortened. This suggests that businesses may be reducing the credit used for investment but are continuing to obtain shorter-term credit, which is mainly used for operations (working capital). This hypothesis aligns with the fact that there has not been a significant change in the median leverage ratio (liabilities/assets) of public companies from the start of the interest rate hikes until the third quarter of 2023.

**Figure 4.6**
**Ratio of Current Assets to Current Liabilities, 2012–2023** (percent, median of all public nonfinancial firms, quarterly data)




SOURCE: Based on financial statements of public companies.

[25] The ratio of current assets (cash and cash equivalents) to current liabilities.

### c. Raising of capital

Total issues of equities in 2023 decreased by about 60 percent relative to 2020–22, during which issues were at a particularly high level and market sentiment was highly positive.[26] The volume of issues in 2023 was similar to the average for 2010–19. In 2023, only one new company issued its shares to the public, a sharp decline relative to 2017–22 when the number of new issues (IPOs) averaged 28, with a value of NIS 4.2 billion per year.

With the increase in interest rates and the slowing of activity and following the peaks in the raising of capital in 2021, there was a significant decline in investment in high tech companies in Israel and abroad starting in the first half of 2022; the decline was more pronounced in Israel than in other countries.

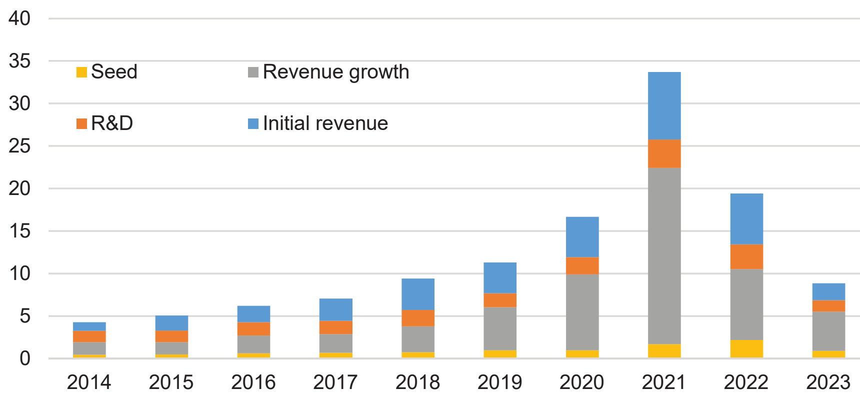
With the increase in interest rates and slowdown in activity and following the peaks in raising of capital in 2021, a significant decline was observed in investment by high-tech companies both in Israel and worldwide[27] starting from the first half of 2022, with a larger decline in Israel than in other countries (Figure 4.7c).[28] Figure 4.7 presents the raising of funds by high-tech companies from venture capital funds in Israel and globally. These funds are a primary source of financing in the high tech industry in Israel.[29] The amount raised decreased by about 70 percent in 2023 relative to 2022, to a level similar to that of more than five years ago, a situation that characterized all investment stages (Figure 4.7a). The decrease was reflected in both the number of financings and their volumes. A breakdown by quarter (Figure 4.7b) shows that the decrease in volume began already in the first quarter of 2022 and continued until the fourth quarter of 2023, in which an especially low volume was recorded.

With respect to the period of the war, the Start-Up Nation Policy Institute (SNPI) conducted an analysis based on 600 requests for capital submitted to one of the private emergency funds established to assist Israeli companies during the war.[30,31] The analysis shows that both veteran start-up companies (established before 2017) and those that had raised significant amounts before the war reported difficulties in raising capital. Young companies employing up to 10 employees and having raised less than $5 million reported not only difficulties but even a cessation of investment, both by foreign and domestic investors. Over 20 percent of the companies reported an impact on their activities due to the drafting of employees into reserve duty, and a similar proportion reported an impact on their current operations in Israel. Many companies are reporting that the cessation of flights to Israel by foreign airlines at the beginning of the war affected their ongoing operations.

[26] See Box 4.1 in the Bank of Israel Report for 2022.
[27] For further information, see Chapter 1 in the Bank of Israel Annual Report for 2022, and also E. Demalach, M. Haran-Rosen, Y. Friedmann, and T. Ramot-Nyska (2022), Assessing the implications of the declines in the capital market for the stability of the Israeli high-tech sector, Bank of Israel. [Hebrew]
[28] Thanks go to the Israel Innovation Authority, which provided us with the comparison data between Israel and other countries, based on PitchBook data.
[29] For further details on the high-tech sector, see Chapter 2.
[30] https://snpi.org/he/insight/the-war-impact-on-israeli-startups-he-pdf/
[31] The report relates to companies that submitted a request to the fund. Although these include hundreds of companies, they do not necessarily represent all Israeli start-ups. It is reasonable to assume, for example, that start-ups that did not need financing during this period or those that did need financing but received it from their existing investors did not submit a request to the fund.

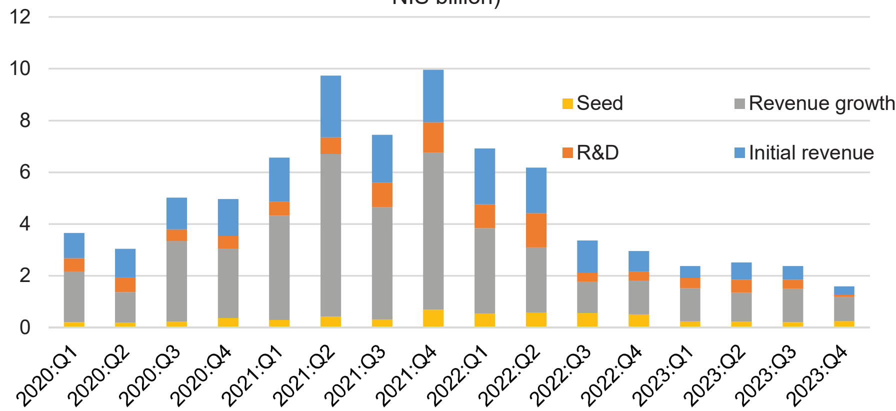
**Figure 4.7**
**Capital Raised**

**a. Capital raised in Israel by investment stage, 2014–2023** (annual data, NIS billion)



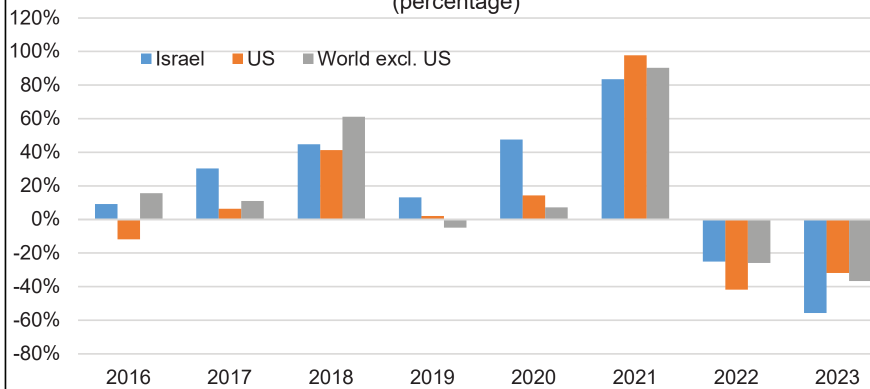

SOURCE: Based on IVC data.

**b. Capital raised in Israel by investment stage, 2020:Q1–2023:Q4** (quarterly data, NIS billion)




SOURCE: Based on IVC data.

**c. Annual change in capital raised in Israel, US, and world, 2016–2023** (percentage)




SOURCE: Israel Innovation Authority comparison data based on Pitchbook.

## 3. DEVELOPMENTS IN CREDIT TO HOUSEHOLDS

Total household debt reached 793 billion shekels in 2023 (as of November), such that the household debt to GDP ratio stands at 42.5 percent (compared to 44 percent in the previous year). Household debt grew by NIS 18.1 billion shekels during 2023, which represents 2.3 percent of total debt[32], a particularly low growth rate in comparison

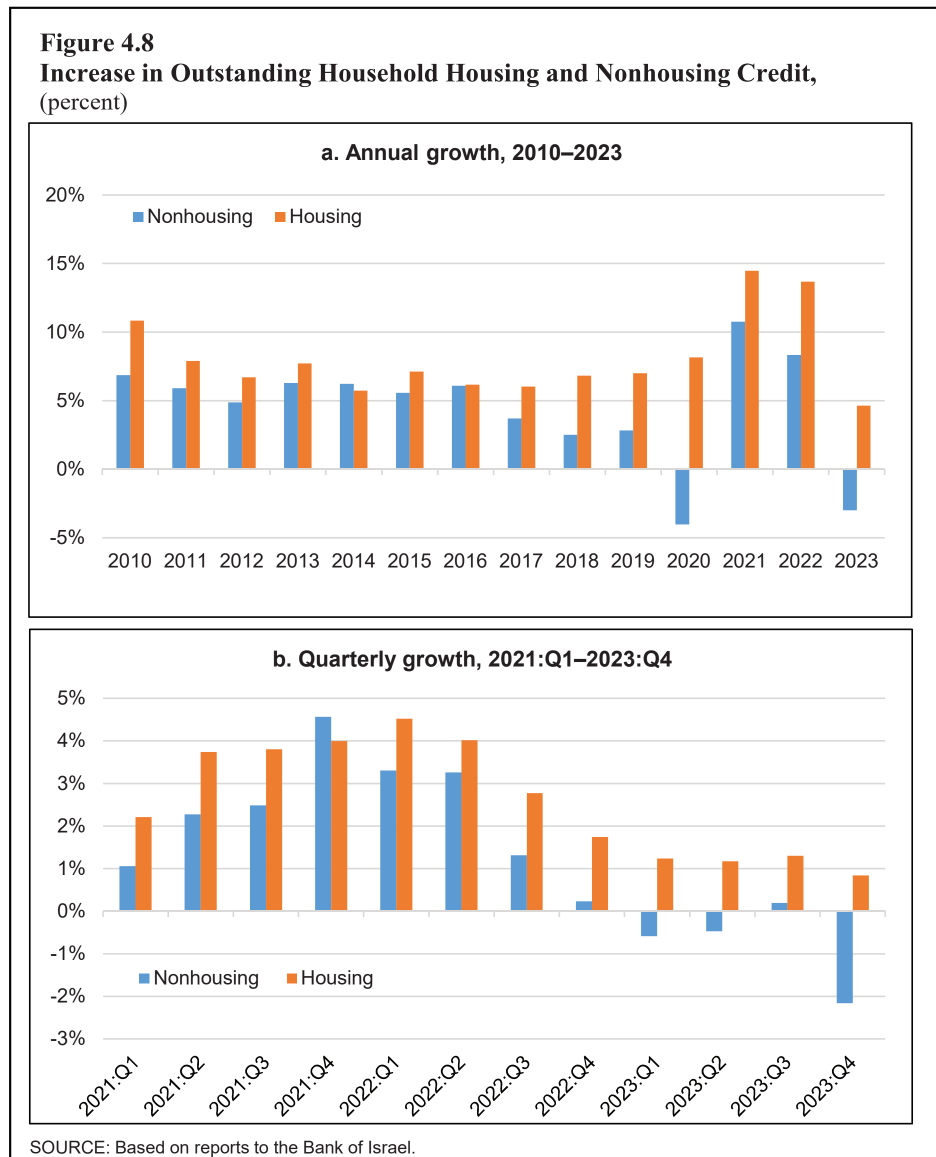



**Figure 4.8**
**Increase in Outstanding Household Housing and Nonhousing Credit,**
(percent)

SOURCE: Based on reports to the Bank of Israel.

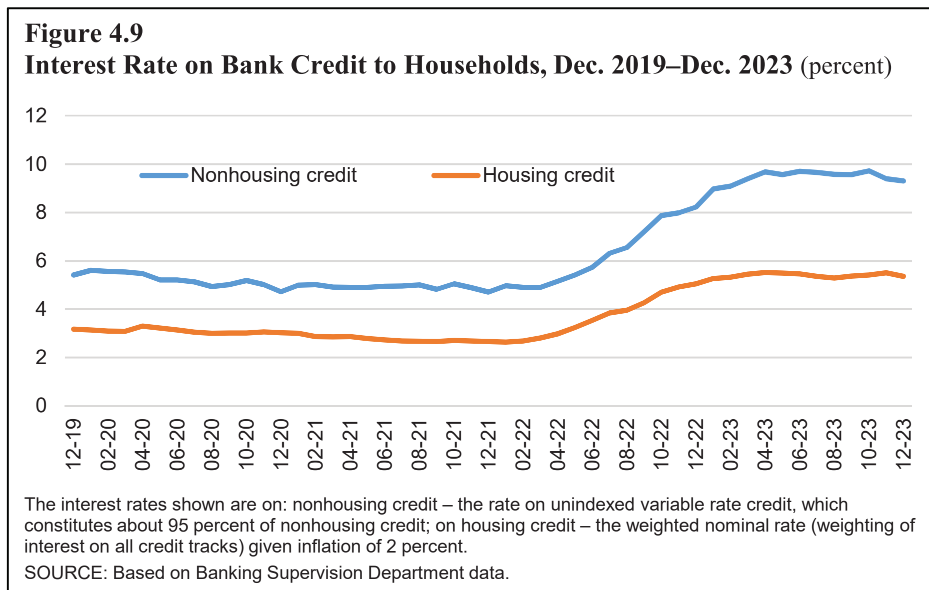
[32] About a third (32 percent) of household debt is indexed to the CPI, such that more than half of the increase was due to the rise in the CPI during 2023.

both to previous years[33] and the business sector. The growth was solely in housing credit, while nonhousing credit contracted (Figure 4.8a). A breakdown by quarters (Figure 4.8b) shows that the slowdown in the growth rate of housing credit and the contraction of nonhousing credit intensified in the fourth quarter of the year, during which the war broke out.

The background to the moderation in credit to households is the rise in interest rates. During 2023, the bank interest rates on nonhousing credit increased by 1.1 percentage points (Figure 4.9). The increase in interest rates on housing credit was more moderate: 0.3 percentage points on average, with the highest increase (0.6 percentage points) in the unindexed variable rate track, as a result of the continuing upward trend in the Bank of Israel interest rate.

The slowing in the growth of housing credit and the shrinking of nonhousing credit intensified in the fourth quarter of the year, during which the war began.

**Figure 4.9**
**Interest Rate on Bank Credit to Households, Dec. 2019–Dec. 2023** (percent)




The interest rates shown are on: nonhousing credit – the rate on unindexed variable rate credit, which constitutes about 95 percent of nonhousing credit; on housing credit – the weighted nominal rate (weighting of interest on all credit tracks) given inflation of 2 percent.

SOURCE: Based on Banking Supervision Department data.

### a. Nonhousing credit

Consumer credit for households is obtained from banks (71 percent), institutional entities (11 percent), credit card companies (16 percent) and the government (2 percent). In contrast to the increase in housing debt in 2023, there was a contraction in nonhousing credit (consumer debt). This contraction began early in the year and intensified in the fourth quarter (Figure 4.10), following a continuous increase since the beginning of 2021. Apart from avoiding additional debt to be used for consumption of any kind, some households even redeemed, whether in full or in part,

[33] The average growth rate of debt during the period 2010–22 was 7.2 percent (and 6.2 percent if the years 2021-22, which were years of particularly high growth, are excluded).

their existing debt.[34] (For further details, see Box 4.2.) The decrease in the number of transactions in non-housing bank credit[35,36]—which intensified in the fourth quarter of the year against the backdrop of the war, during which consumption declined—was accompanied by a 10 percent decline in the number of transactions. The average loan amount and repayment period did not change significantly.

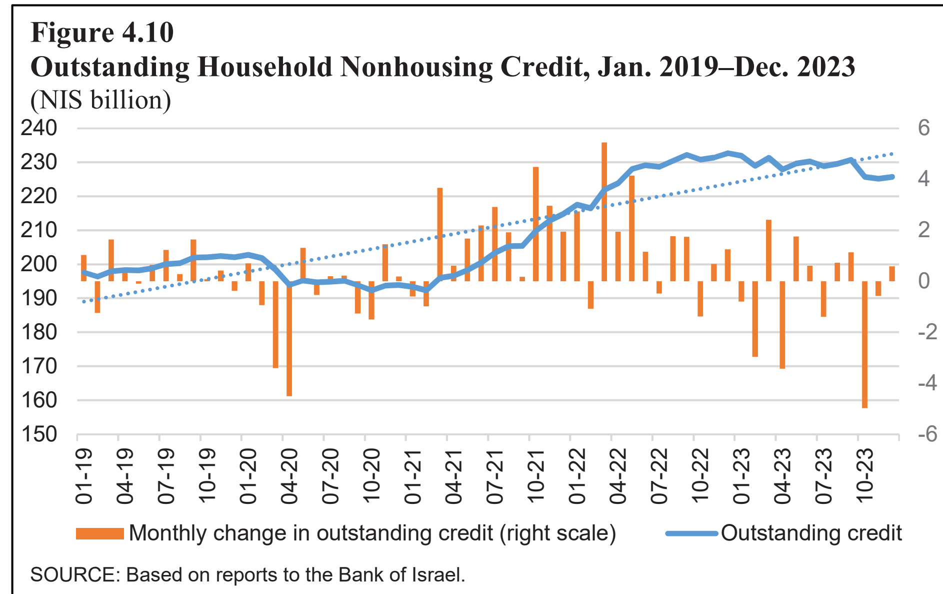



**Figure 4.10**
**Outstanding Household Nonhousing Credit, Jan. 2019–Dec. 2023**
(NIS billion)

SOURCE: Based on reports to the Bank of Israel.

The decline in consumer credit to households was almost entirely due to the drop in total consumer credit from institutional providers, which contracted by 32 percent starting in August 2022.

A breakdown by credit provider (Figure 4.11[37]) shows that nearly all of the decline in consumer credit to households stemmed from the reduction in credit provided by institutional entities, which has contracted by 32 percent since August 2022.[38] Meanwhile, bank credit increased by about 1 percent (NIS 1 billion) and credit from credit card companies increased by about 18 percent (NIS 6 billion) during the same period. This difference—between the volume of bank credit and the volume of credit provided by credit card companies—was particularly noticeable during the months of the war (October to December 2023), during which there was no change in credit from credit card companies, while bank credit contracted (by 2.5 percent).

[34] Ninety-five percent of this credit is not indexed, and therefore it is almost unaffected by changes in inflation.

[35] The contraction was in nonhousing loans, which constitute about 82 percent of this credit, while in the case of all-purpose loans in which a residence serves as collateral and which have lower interest rates, the upward trend continued at rates similar to those of the previous years.

[36] In parallel to the decrease in transactions, there was an increase in redemptions throughout the year.

[37] The graph does not include government-earmarked credit, which constitutes about two percent of nonhousing credit.

[38] The loans from institutional entities decreased in the case of consumer credit but not in the case of housing loans, which grew this year by a rate of 6 percent.

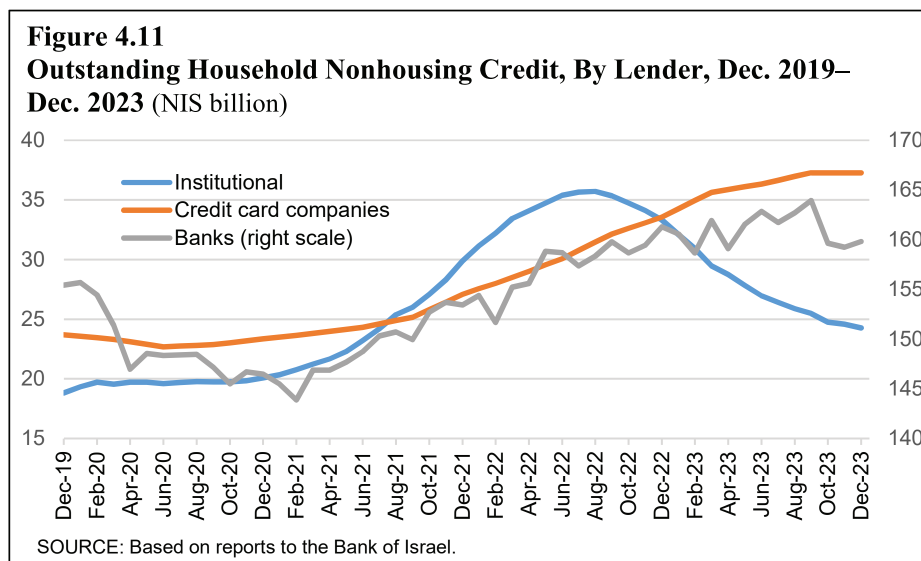



**Figure 4.11**
**Outstanding Household Nonhousing Credit, By Lender, Dec. 2019–Dec. 2023** (NIS billion)

The aforementioned decline in consumer loans from institutional bodies[39] was for the most part due to decreased demand for new credit and the redemption of existing loans as a result of the increase in the Bank of Israel interest rate. It is likely that the large volume of consumer loans from institutional entities and their relatively low cost imply that they also served as complementary loans for home purchases,[40] a hypothesis that aligns with the contraction of those loans in parallel to the slowdown in the providing of new mortgages (see the section on households' housing debt).

The decrease in nonhousing credit from institutional entities began in the third quarter of 2022 and was the result of loans from pension funds and advanced study funds (34 percent) and from insurance companies (38 percent), which together account for about 86 percent of total non-housing loans from institutional entities. In the case of loans against pension funds, the trend of high growth (37 percent) continued during this period.[41] Credit from institutional entities to households is typically characterized by large loans, which are provided against securities (such as the borrower's pension fund) and at relatively low interest rates (usually the prime rate plus some percentage).[42] Therefore, they are less expensive than loans from credit card companies and the all-purpose loans provided by banks.

[39] Which, as noted, constitutes about 11 percent of the non-housing credit provided to households and about 3 percent of the total credit provided to households.

[40] See Chapter 4 in the Bank of Israel Report for 2021.

[41] The main reason for the increase is apparently due to a technological innovation by one of the companies, which made the loans more accessible to the public.

[42] There are funds that also offer loans at fixed interest rates, but these are generally higher than the variable interest rates offered by those same funds.

### b. Housing credit

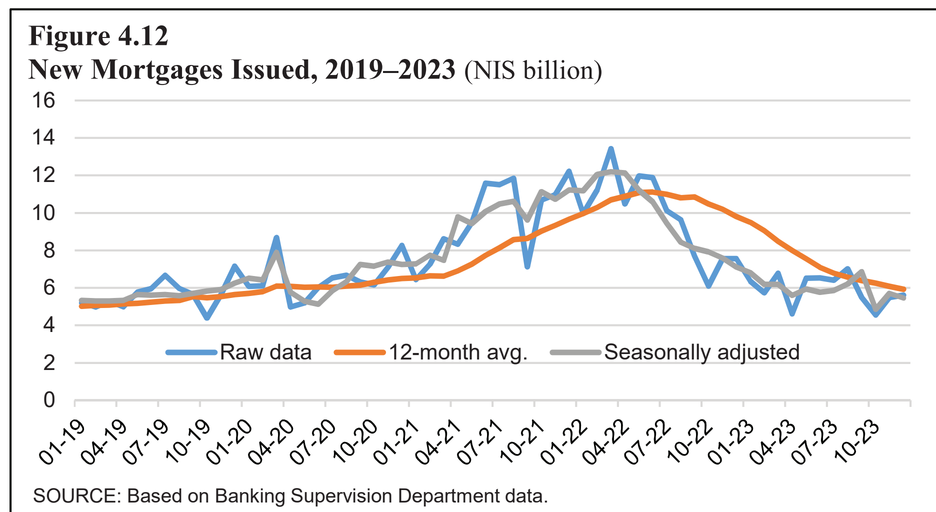
The majority of housing credit is provided by the banks. (A negligible portion is provided by institutional entities and nonbank credit providers.) Total housing credit continued to grow at a moderate pace in 2023, a trend that began in the last quarter of 2022. The rate of increase in total mortgages was about a third of the average during the previous three years. This slowdown was accompanied by a continuing increase in interest rates across all tracks, which, as noted, is partly due to the continuing increase in the Bank of Israel interest rate.

The increase in the interest rate in the economy since April 2022 was accompanied by a prolonged decline in total new mortgages.

The increase in interest rates in the economy starting from April 2022 was accompanied by a continuous decline in new mortgage volume – from a peak of NIS 12.3 billion in March 2022 to NIS 5.6 billion (seasonally adjusted) in April 2023. The volume of mortgages stabilized starting from May 2023 and even increased slightly; however, following the outbreak of the war, it again declined (Figure 4.12). The decline in the volume of mortgages in 2023 was also accompanied by a significant decrease (40 percent[43]) in the number of mortgage transactions compared to 2022.

A breakdown of new mortgages reveals that borrowers preferred fixed interest rates over variable rates; they took fewer indexed mortgages and more unindexed mortgages. This shift towards fixed interest rates may be related to a regulatory consideration in addition to consumer considerations. Thus, at the time of signing, borrowers are required not to exceed a maximum payment to income (PTI) ratio and increasing the fixed portion at the expense of the variable portion worked to reduce that ratio this year.

**Figure 4.12**
**New Mortgages Issued, 2019–2023** (NIS billion)




SOURCE: Based on Banking Supervision Department data.

[43] The decline was particularly notable in the fourth quarter of the year.

From the fourth quarter of 2022 until June 2023, there was an increase in the total amount of refinancing[44] and early redemptions. Since the mortgage market interest conditions are less favorable than in previous years, it is reasonable to assume that the purpose of refinancing was to lower the borrower's mortgage payments. The extension of the repayment period for those refinancing their mortgage at their bank indicates that refinancing was intended to spread out monthly payments and thus reduce their size.

**c. The public's asset portfolio**

Given the increase in the interest rate during the first half of the year, the transition from checking accounts to time deposits (which began in 2022) continued until midyear.

The public's asset portfolio[45] grew at a moderate rate in 2023,[46] reaching about NIS 5 trillion. Its composition reveals that the proportion of cash and deposits, which grew significantly in 2022, decreased slightly in 2023, to about 40 percent. Although total cash and deposits increased,[47] it was at a slower rate than the asset portfolio and as a result its proportion of the portfolio declined. Despite this, the proportion is still higher than in the years prior to 2022. Furthermore, and against the backdrop of interest rate hikes in the first half of the year, the shift from checking accounts to time deposits,[48] which began in 2022, continued until the middle of the year. In parallel, and against the background of domestic uncertainty, the proportion of domestic shares and bonds in the portfolio declined, while the proportion of foreign shares and bonds increased. The asset composition by indexation type shows that the portion of the portfolio indexed to foreign currency rose, while the portion indexed to the CPI remained unchanged.

The behavior of savers can also be examined by way of net accumulation (total inflows less total outflows) in the various institutional entities. Figure 4.13 shows the rates of net accumulation by saving vehicle, i.e., mutual funds, advanced study funds, and provident funds, which serve as saving instruments for the short to medium term.[49] It can be seen that in 2023, the rate of net accumulation in mutual funds was higher than in previous years (except for 2021). The increased accumulation primarily took place in funds specializing in foreign equities and bonds and in money market funds. The growth in money market funds was presumably due to rising interest rates, domestic uncertainty, and the desire of savers to invest money that had been "parked" in checking accounts and was available for immediate transfer to a liquid and/or conservative saving vehicle.

[44] The main increase during the period was in refinancing at the same bank rather than at a different bank. Therefore it did not affect the mortgage transactions described above (which include refinancing at a different bank though it constituted only 6 percent of mortgage transactions).
[45] The public includes both households and businesses (companies).
[46] 3.9 percent in nominal terms, up until November.
[47] Total cash increased by about 8 percent, total checking accounts decreased by about 21 percent, and total other deposits increased by about 8 percent (an increase of about NIS 9.3 billion, a decrease of about NIS 103 billion and an increase of about NIS 21 billion, respectively).
[48] See Table 3.3 in Chapter 3.
[49] Excluding insurance companies.

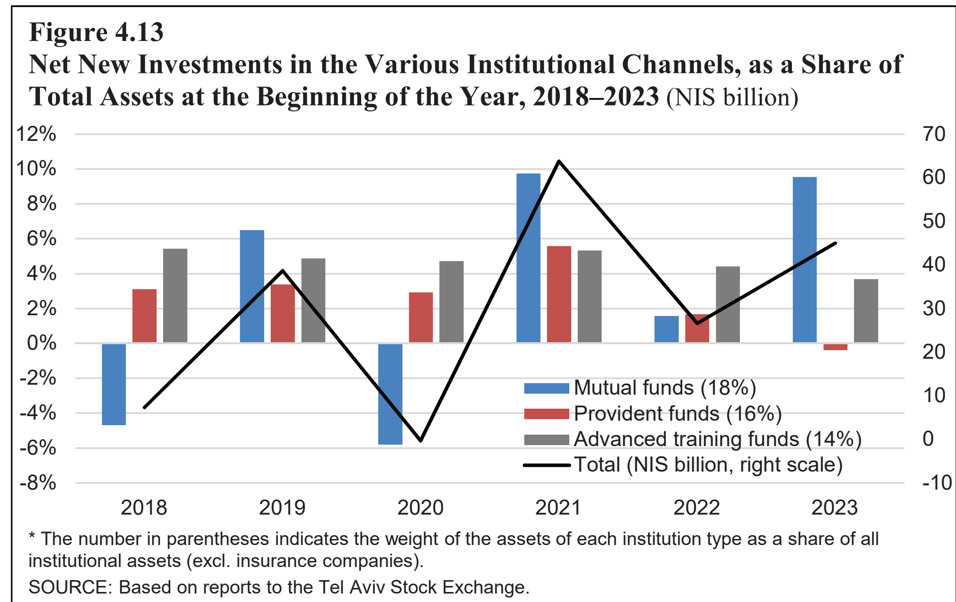



**Figure 4.13**
**Net New Investments in the Various Institutional Channels, as a Share of Total Assets at the Beginning of the Year, 2018–2023** (NIS billion)

* The number in parentheses indicates the weight of the assets of each institution type as a share of all institutional assets (excl. insurance companies).
SOURCE: Based on reports to the Tel Aviv Stock Exchange.

During the first two business days of the war, NIS 700 million were redeemed from mutual funds—a modest amount relative to previous crises—and that primarily involved domestic equities and bonds. In the following days, accumulation again became positive. The intensity and duration of the response were significantly less than during major shocks in the past, such as the pandemic and the 2008 crisis. In contrast to mutual funds, the accumulation rate in study funds was lower than in the past and was even negative in pension funds.[50] In both pension funds and study funds, the decline in 2023 was the result of a drop in deposits and, to a greater extent, an increase in withdrawals. The increase in the redemption of savings may have been intended to repay debts whose cost had increased. This possibility is consistent with the findings reported in Box 4.2, according to which some borrowers managed to mitigate the impact of rising interest rates on their monthly payments by reducing their debt through early redemption.

[50] In shekels, net accumulations fell in 2023 relative to 2022 by NIS 7.5 billion in the case of provident funds and by about NIS 3 billion in the case of study funds.

## 4. GOVERNMENT AND BANK OF ISRAEL PROGRAMS TO SUPPORT CREDIT ACTIVITY

To mitigate the economic impact of the war on the business sector and households and to support the supply of credit, the government and the Bank of Israel[51] took several steps to encourage the granting of credit and to ease the existing credit conditions,[52] including the establishment of funds to provide state-guaranteed loans, monetary loans, repo transactions for nonbank credit entities, regulatory relief and a program for deferring loan payments.

To mitigate the economic harm of the war to the business sector and households and to support the supply of credit, the government of Israel and the Bank of Israel implemented a number of measures to encourage the providing of credit and to ease credit conditions.

As during the COVID-19 crisis, the state provided guarantees for loans through a government-backed fund to increase credit supply to businesses, thus helping them cope with cash flow difficulties and meet the need for working capital that might arise due to the war. The programs are intended for businesses with an annual sales turnover of up to one billion shekels in the year preceding the application. As part of the Swords of Iron track, the State guarantees up to NIS 1.2 billion, against which loans of up to NIS 10 billion will be granted (up to NIS 8 billion for medium, small, and micro enterprises and up to NIS 2 billion for large businesses).[53] The new tracks are intended for businesses across the country that were affected by the war and suffer from a shortfall in cash flow. The loans are provided through designated funds, by means of seven banks and three nonbank entities.[54] The loan repayment period is set at five years, with an option to defer the repayment of the principal and interest for up to 12 months for medium, small, and micro businesses and up to 3 months for large businesses.[55] In addition to the new tracks that were opened as a result of the war,[56] the government-backed loan fund also offers relief for existing loans.[57]

[51] See Chapter 1 for details of additional steps that were taken.

[52] For further details, see Box 1 in the Financial Stability Report for the second half of 2023.

[53] The State provides a guarantee of 60 percent of the loans for large businesses and 85 percent for small businesses.

[54] The average interest rate on loans provided by the credit provider will have a spread that does not exceed 1.5 percent above the prime rate. There is a different rule for certain nonbank credit providers: the average interest rates on loans provided by Gamma Management and Clearing and B2B will have spreads that do not exceed 3.25 percent and 4 percent above the prime rate, respectively.

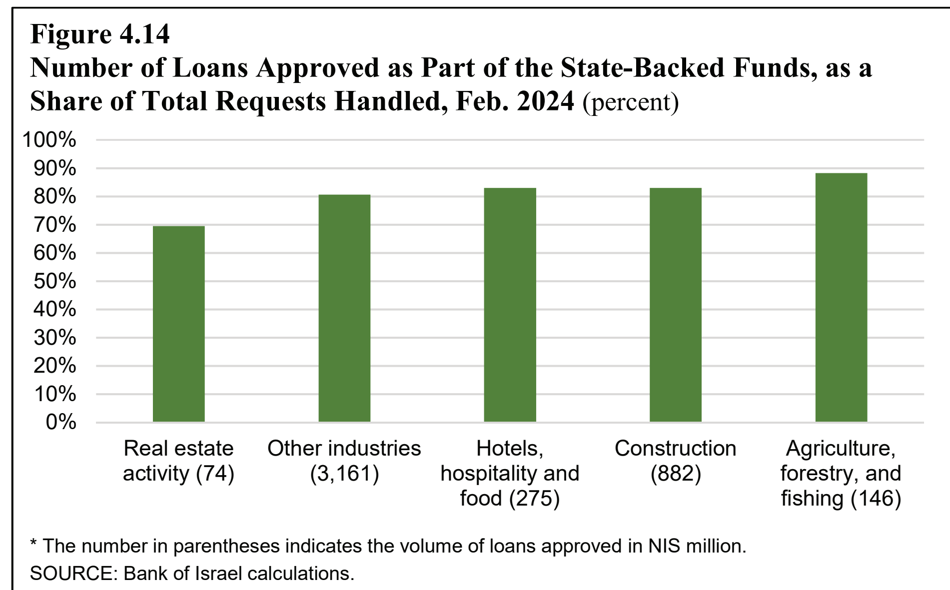
[55] Large businesses are defined as having a turnover of between NIS 100 million shekels and one billion shekels

[56] In January, a track with about 1 billion shekels was added which was intended to provide a solution for reservists who own businesses. In this track, the average interest rate on loans provided by the credit provider will not exceed the prime rate, and the State will bear the interest cost of the first repayment year.

[57] Businesses that belong to the first circle (as defined in footnote 65) and businesses belonging to the second circle (i.e., all other businesses) with a turnover of up to NIS 25 million are entitled to defer principal and interest payments for up to three months. A business that deferred principal and interest payments for a period of 3 months up until December 31, 2023 will be eligible to apply for an additional three-month deferral. The maximum deferral period will be 6 months. (Businesses belonging to the second circle with a turnover of more than NIS 25 million are entitled to defer only the principal payments.)

As of February 29, 2024, about 36,000 loan applications had been submitted, with a value of about NIS 19.1 billion (of which about NIS 16 billion were requested by small and micro businesses, which account for about 60 percent of the monthly average of credit transactions carried out by these businesses). Out of the applications processed by the end of February (68 percent of the requests), 78 percent were approved, with a value of NIS 7.1 billion, and about NIS 6 billion shekels were actually distributed by the end of February. In terms of the number of applications, the majority of the requests (98 percent) were submitted by small and micro businesses, 18 percent of which were from the construction (15 percent) and real estate (3 percent) industries. Figure 4.14 shows that about 85 percent of the credit that was distributed was designated for agriculture, which was the most severely affected industry.

**Figure 4.14**
**Number of Loans Approved as Part of the State-Backed Funds, as a Share of Total Requests Handled, Feb. 2024** (percent)




* The number in parentheses indicates the volume of loans approved in NIS million.
SOURCE: Bank of Israel calculations.

In addition to government funds, the Bank of Israel offered monetary loans to the banking system at a variable interest rate, i.e., the Bank of Israel interest rate minus 1.5 percentage points, against loans that the banks would provide until January 2024 to small and micro businesses that suffered a redemption impairment due to the war at a rate of at least 25 percent,[58] provided that the average interest rate on those loans does not exceed the prime interest rate. The scope of the plan is up to NIS 10 billion.

As of the end of January, the banks had provided loans in the amount of about NIS 6.3 billion to approximately 9,030 small and micro businesses that meet the program's criteria;[59] approximately 30 percent of the credit had a repayment period of between half a year and two years, while the rest had a repayment period of over two years. A

[58] In either October, November or December 2023.
[59] At the same time, the banks did not issue bonds in November either, as in the preceding months.

breakdown by industry shows that most of the credit was provided to companies in construction and real estate and in trade (34 percent and 25 percent, respectively) and to manufacturing (13 percent). About 35 percent of the loans were provided as part of the government's guarantee program.

As an additional and complementary tool to the monetary program, the Bank of Israel offered repo transactions[60] to the nonbank credit providers supervised by the Bank of Israel (credit card companies) or by the Capital Market Authority.[61] The scope of that part of the program was up to NIS 1 billion.[62] The repo transactions were also meant to be conducted only under the condition that the credit is provided to small and micro businesses between November 21, 2023 and the end of January 2024.[63]

The assistance to households and businesses in the context of the war included, among other things, a plan to defer payments on loans[64] both from the banking system and from credit card companies. The framework applies to mortgages, consumer credit (including overdrafts on checking accounts) and business credit.[65] As of the first month of the war, about a third of the loans whose repayment was deferred from the date the Bank of Israel's plan went into effect belonged to the "first degree",[66] which was directly affected by the war. Starting from the outbreak of the war (until the end of December), payments of about 308,000 loans were deferred, most of them (about 70 percent) owned by households (30 percent were housing loans and 40 percent were non-housing loans). About 25 percent of the deferrals were by micro businesses.

[60] In a repo transaction involving securities (usually bonds), the seller sells them to another party, with a commitment to repurchase them at a predetermined date and price. Thus, the owner of the securities receives financing for a fixed period, and the securities serve as collateral.

[61] Entities that received a license from the Capital Market, Insurance and Savings Authority to engage in extended providing of credit, as defined in the Control of Financial Services (Regulated Financial Services) Law, 5776-2016.

[62] The interest rate in this transaction will be variable: the Bank of Israel's interest rate minus 1.5 percentage points.

[63] This program also targets small and micro businesses whose revenue was impaired by at least 25 percent, provided that the average interest rate on the credit provided does not exceed the prime rate. The repayment periods in tracks A and B are identical to those in the monetary program. The Bank of Israel will allow three additional periods of six months each in track A and five additional periods of six months each in track B, under the same conditions. In the repo transactions, the Bank of Israel received negotiable collateral (government bonds, makam and corporate bonds) based on specific criteria.

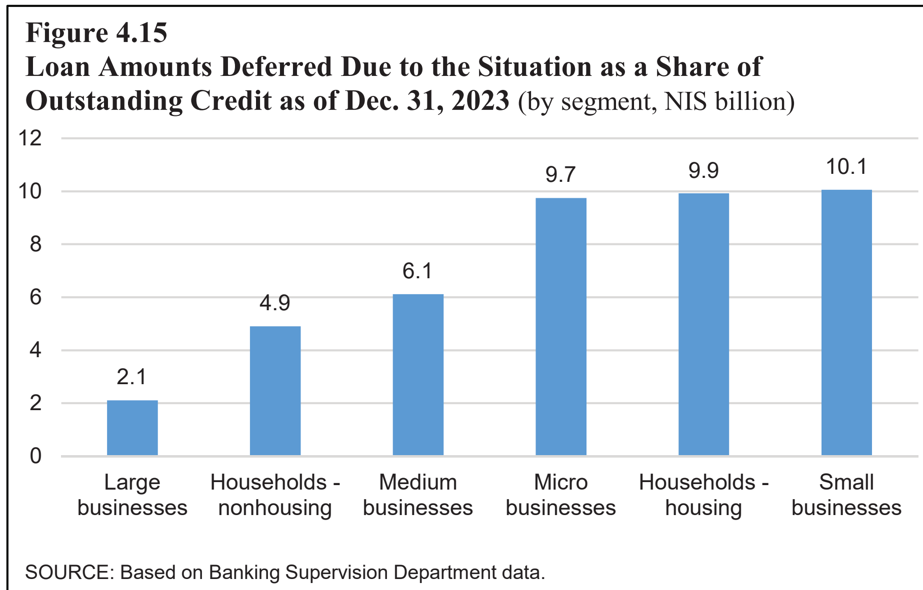
[64] Box 4.1 presents the background, advantages, and risks of the Payment Deferral Law, which was intended to mitigate the negative impact to populations affected by the war.

[65] First degree customers includes individuals residing and working within a 30 km radius of the Gaza Strip and in the northern settlements that are within a 5 km radius of the northern border, residents who were evacuated from their homes by an official government authority, reservists who were drafted by an Order 8 or those who are first-degree relatives of war casualties, abductees or missing persons. The payments on the loans will be deferred and will not bear interest nor will they involve any fees. For the rest of the bank's customers, there is an option to defer payments on the loans for 3 months; the deferred payments will bear interest not exceeding the rate in the loan agreement, and the payments will be added at the end of the loan period. The deferral will be carried out without charging any fees. The program specified the minimum conditions for deferral of loan payments, and each bank has the option of expanding them in order to benefit its customers and at their request.

[66] For details on the customers belonging to the first circle, see footnote 65.

As of the end of December 2023, the total deferred payments were about NIS 5.6 billion, most of which (65 percent) was in the business sector. The number and total of deferred payments nearly tripled since the end of October, and payments were deferred on loans totaling about NIS 102 billion, which constitutes about 6 percent of the total credit to all industries. In a breakdown by industry (Figure 4.15), it can be seen that the highest rates (around 10 percent) are in housing loans and loans to small and micro businesses The Bank of Israel's program for those belonging to the first circle also included an exemption from fees for transactions carried out by customers[67] for a period of 3 months and an interest rate of 0 percent on the credit card debt balance of households up to NIS 10,000. Some banks extended the framework in various directions.

**Figure 4.15**
**Loan Amounts Deferred Due to the Situation as a Share of Outstanding Credit as of Dec. 31, 2023** (by segment, NIS billion)




SOURCE: Based on Banking Supervision Department data.

Since the outbreak of the war, several regulatory exemptions have been implemented, including easing the criteria for obtaining an all-purpose loan with a residence as collateral; regulations according to checks that were returned because of insufficient funds during the month of October will not be included in the list of checks leading to the imposition of restrictions on the checking accounts from which they were drawn; and extending the period required before reporting loan payment arrears (60 days instead of 30). This is in order to allow borrowers sufficient time to reschedule their payments to the credit providers and to prevent reporting of arrears on loan payments that are due to various technical reasons.

[67] Excluding foreign exchange transactions, securities, foreign trade and diamonds.

**Box 4.1**
**Change in the status of contractual obligations during the Swords of Iron War**

- This box examines the background, benefits and risks of the Payments Deferral Law, the goal of which is to mitigate the harm to populations affected by the war by allowing them to defer payments to government authorities and private individuals.
- The Law is exceptional in that it constitutes governmental intervention in contracts signed between private individuals and businesses. Such intervention can disrupt the smooth operation of the economy, make contracts more costly and adversely affect the economic situation of those relying on the contract.
- In January 2024, a limiting amendment was introduced that reflected an approach that is more balanced—between the need to take into consideration extended military service, captives and prisoners, and thousands of evacuees who have not yet returned home, and, at the same time, the need to maintain the reliability of contracts between private entities.

**1. Deferral of payments in the initial legislation during the Swords of Iron war**

Since the beginning of the Swords of Iron War on October 7, 2023, the routines of individuals in some populations have been severely disrupted, and as a result, they are unable to meet their legal obligations. Against this background, the Payments Deferral Law (Swords of Iron – Temporary Directive), 5784-2023, (hereafter: the "Law") was enacted. The Law allows for the deferral of payments stipulated in a contract or by law, except for alimony and employment contracts. Initially, the Law was enacted as a temporary provision for a period of one month starting from October 7, 2023; subsequently, it was extended until December 31, 2023. The Law applied to a broad range of beneficiaries.[1] On January 1, 2024, the Law was extended until February 29, 2024,[2] and the list of beneficiaries eligible for payment deferral was shortened to some extent while at the same time an exception was added for a payment transaction in which the asset or service has already been provided in full to the payer.[3]

[1] List of those eligible: Individuals who, during the specified period, in whole or in part, served as soldiers, police officers, prison guards or firefighters; were absent, kidnapped, or captive; individuals who prior to the war resided in a settlement that was evacuated; individuals who were hospitalized for at least seven days due to injury caused by the hostilities; employees or volunteers in a rescue organization; spouses of any of the aforementioned; a company with no more than five shareholders, if a shareholder in it is a person included in the aforementioned categories and holds at least 50 percent of the controlling shares, or a registered partnership in which a person included in the aforementioned categories participates in the management of its business and controls at least 50 percent of its assets.

[2] In the case of a payment deadline to the authority (as defined in the Law), the deferral extends to the month of March. Regarding periodic municipal tax bills with payment deadlines in January and February 2024, the deferral is for 31 days.

[3] The Payments Deferral Law (Swords of Iron Temporary Directive) (Contract, Court Ruling or Payment to an Authority) (Amendment) (Deferral of payment during the Second Determining Period), 5784-2023. The category of displaced persons was limited to that which existed at the beginning of the first specified period; the category of hospitalized individuals has been removed; and soldiers have been separated into the categories of compulsory service, reserve duty and professional service, Israeli police officers, prison guards and firefighters. The legislation continues to apply to the missing, kidnapped individuals and captives, the spouses of any of the aforementioned, companies with a small number of shareholders and partnerships.

A quick survey conducted in December among accounting firms[4] indicated that the main beneficiaries of the Payments Deferral Law are soldiers (79 percent of responses) and those who resided in evacuated settlements (31 percent of responses). The most common application of the Law (70 percent of responses) was related to payments to government authorities. Although the survey was limited in scope and is not statistically representative, it provides an indication of how the Law is being applied.

**Background**: The first such law in Israel was the Extension of Payment Deadlines Law – 1957. This law provided relief for long-serving reserve soldiers after the Kadesh Operation, and it was also applied in the Six Day War. In the case of the Yom Kippur War, time extensions were required in order to implement it, and therefore emergency directives were enacted, and the Extension of Payment Deadlines Law, 1974 was amended in order to address the needs of reservists, while differentiating them from the general population.[5] Although the question of implementing the Law was discussed prior to the Swords of IronWar (including during Operation Defensive Shield and Operation Cast Lead and the Second Lebanon War), Israeli governments tended not to implement it.

**2. The complexity in expanding the justification for delaying payments in the initial legislation**

It is customary to add a "force majeure"[6] clause to contracts, which obligates the parties to demonstrate that the contractual obligations cannot be fulfilled, and there is no other way to fulfill them. In Israel, it is customary, according to contract law, to make reference to an "unforeseen event".[7] In contrast, the use of debt deferral mechanisms is not the norm since a free market is characterized by voluntary transactions, and the idea that commitments must be fulfilled is a fundamental principle in that context. Parties to a contract also attach importance to compliance with a contract's commitments and therefore avoid violating the trust others have placed in them. Government intervention may undermine these mechanisms and also the tendency to act altruistically during times of crisis (Teichman, Zamir and Farkash, 2016). Therefore, the question arises as to the extent to which governmental intervention in contracts by means of specific laws is desirable. The recommendation in the literature is to maintain the element of surprise when such steps are taken and to allow governmental intervention only in the event of extreme crises. This is to avoid moral hazard in the signing of contracts that involves reliance on a possible rescheduling of payments (Bolton and Rosenthal, 2002).[8] However, even unexpected intervention entails potential harm. For example, the recovery ability of the party relying on the contract may be adversely affected

[4] The survey was conducted in cooperation with the Institute of Certified Public Accountants and the Banking Association. 48 accounting firms completed the survey.

[5] With regard to the general population, the court adopted a restrictive interpretation of the "unforeseen event" clause in the Contracts Law in a 1979 verdict (Katz vs. Nitzchonei Mizrahi Ltd.), and ruled that due to the unique geopolitical conditions in the State of Israel (i.e., the frequent wars and ongoing threats), the Yom Kippur War does not constitute an unforeseen event that justifies breach of contract.

[6] "Act of G-d" – "Force Majeure": this section is likely to refer to events such as pandemics, natural disasters, wars, sanctions, riots, etc.

[7] In Israel, it is customarily referred to as an "unforeseen event". Section 18 of the Contracts Law (Remedies for Breach of Contract), 1970.

[8] This question arose with respect to the option provided by the US government to defer land debt payments during the agricultural crisis in 1819. It was found that the arrangements were more common in border areas, where the debtors had greater political influence.

due to non-implementation of the commitment made to such party. Similarly, the mere possibility of governmental intervention in favor of the debtor may be implicit and will influence the price of contracts. In the aforementioned law, the legislature sought to moderate this effect by conditioning the deferral of a payment on the submission of a request by the debtor.

**3. An alternative approach – Regulatory programs in partnership with the supervised system**

During the Swords of Iron War, the banking system implemented a framework initiated by the Bank of Israel to ease the burden imposed by credit and fees. The program included an across-the-board deferral of loan payments (overdrafts in checking accounts, mortgages and consumer and business credit) in order to ease the credit burden on households and businesses (hereafter: the "Banking Framework ").[9] The mechanism of deferring interest payments and loan redemptions was decided on together with the banking system. A similar program was implemented both in Israel and other countries during the COVID-19 lockdowns,[10] and therefore the current program benefited from past experience.[11] This is in line with the approach that outlier events call for unconventional regulatory measures.[12] The Banking Framework does not impose any changes in agreements or contract violations but rather focuses on voluntary exemptions to be provided by the banking system in general and will serve as a base that can be expanded on as part of the bank's relationship with its customers. Thus, the plan is flexible and can be adapted to circumstances.

The banking framework has many advantages over the Payments Deferral Law; however, it may be that such a scheme, which is feasible in an industry with a small number of businesses, is not feasible on the level of the economy as a whole. In practice, dozens of cities were included in the Banking Framework, which were not included under the Payments Deferral Law, such as Kiryat Gat, Ofakim, Ashdod and Ashkelon. In contrast, while the Law applies to all contracts, court rulings, and decisions, it is more limited geographically and in terms of eligible groups, due to the need for precise and objective conditions.

The Swords of Iron War represents an extreme scenario, in which the burden on some of the affected populations was not addressed by the assistance plan of the banks and the deferral of payments to some infrastructure providers and government authorities. In response to these challenges, the Payments Deferral Law was enacted, thus allowing affected populations to defer payments that are part of private contracts. The Law did provide immediate relief; yet at the same time, it allowed for governmental intervention in contracts, thus increasing uncertainty in both new and existing contracts and potentially impacting business risk premiums in Israel. The limitation of the Law in addressing an extreme emergency scenario and the amendment introduced in January 2024 reflect a balanced response to an exceptional wartime

[9] At the same time, a program was formulated and implemented for customers of credit card companies, which was tailored to the customer's activity with those companies.

[10] During the COVID-19 lockdown period, the option to defer loan payments involved an interest charge. In the Swords of Iron War, a significant proportion of the target audience (the first degree) was given the option to defer loan payments without any interest charge or fees.

[11] Another example is the Federal Reserve's addition of the practice to the Main Street Lending Program (MSLP), and previously, during World War II, as part of the Defense Production Act. https://www.elibrary.imf.org/view/journals/024/1953/001/article-A003-en.xm

[12] https://www.ecb.europa.eu/home/search/coronavirus/html/index.en.html

event, which involves prolonged reserve duty by a large population, thousands of evacuees unable to return home and hostages.

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**Box 4.2**
**Heterogeneity in changes in households’ debt burden due to the increase in the Bank of Israel interest rate**

- Since the Bank of Israel began raising the interest rate, in April 2022, borrowers living in localities with a high socioeconomic index ranking repaid parts of their mortgage (particularly the portion on the Prime track) more often than mortgage borrowers living in localities with a low socioeconomic index ranking.
- In the same period, consumer loan borrowers living in localities with a high socioeconomic index ranking had a greater tendency to avoid taking on new debt and to repay existing debts, while those living in localities with a low socioeconomic index ranking took on additional debt.

**1. Background**

This box analyzes households’ debt burden and the impact of the monetary tightening on this burden, and examines the differences in how borrowers dealt with the tightening, based on their demographic and debt characteristics. The box focuses on mortgages and consumer loans and compares the characteristics of households’ debt before the beginning of the monetary tightening (April 2022) and its characteristics in September 2023.[1]

The increase in the interest rate had a direct impact on many households carrying variable-rate debt, particularly in the Prime track. However, some of the borrowers succeeded in moderating the impact of interest rate increase on their monthly payment in various ways:

1. Reducing existing debt by early repayment (in whole or in part)

[1] The analysis is as of September 2023, since the box focuses on the effect of monetary tightening, and avoids the potential effects of the war that broke out in October 2023.

2. Changing the terms of their credit, so that their monthly payment would be smaller—for instance by extending the debt's term to repayment, without changing the principal amount.[2]

To clarify, these measures reduced the impact of the interest rate increases on the monthly repayment in the short term, but we cannot know whether they reduced the overall debt burden throughout the term of the loan. This partly depends on the development of inflation and the Bank of Israel interest rate over the coming years.

The economic literature finds that a household's tendency to take each of these steps to reduce the debt burden (or to avoid increasing it) when the interest rate increases is correlated with its socioeconomic situation, its financial state, its financial literacy, and its bargaining power vis-à-vis the lender.

Beraja et al. (2019), Di Maggio et al. (2017), and Keys et al. (2014) found that a decline in the nominal interest rate led households to refinance their mortgages at a fixed rate, and that the impact differed between regions in the US. Kramer et al. (2024) found that households with low incomes did not refinance their mortgages during low interest rate periods, contrary to the trend among more established populations.

**2. The existence of different types of debt**

In April 2022, about 62 percent of the people listed in the Credit Data Register[3] had debt (mortgage, consumer loan, utilization of lines of credit, and overdrafts in current accounts).[4] Until September 2023, in parallel with the increase in the interest rate, the share of consumer debt borrowers declined by about 3 percentage points, and the rate of mortgage borrowers declined by about 1 percentage point.[5]

An examination of the socioeconomic rating of individuals' place of residence[6] found that the tendency to take on consumer debt or to utilize overdrafts declines as the socioeconomic rating of the borrower's place of residence increases. These differences are notable both in April 2022 and at the time of the changes that took place in September 2023. In contrast, the shares of borrowers with a mortgage and

[2] Another way is to exchange debt with a variable (prime-linked) interest rate with debt that carries a fixed rate or a variable rate that changes at lower frequency (the level of which during the reviewed period was lower). Borrowers can also reduce their monthly payments by taking out a "bullet" or "balloon" loan (where the principal balance is repaid in full at the end of the period, while the interest is paid over the life of the loan or at the date of repayment, respectively).

[3] The analysis is based on about 5.67 million individuals regarding whom there were reports in the Register in April 2022, and about 5.96 million individuals regarding whom there were reports in the Register in September 2023. The Register includes all those who have a deferred payment card and/or a current account credit facility and/or a negative balance in their current account (even if they do not have a credit facility). A person may choose to be removed from the Register, and in such a case, there would be no data about him. However, the vast majority of people do not make such a request, such that the coverage rate is very high.

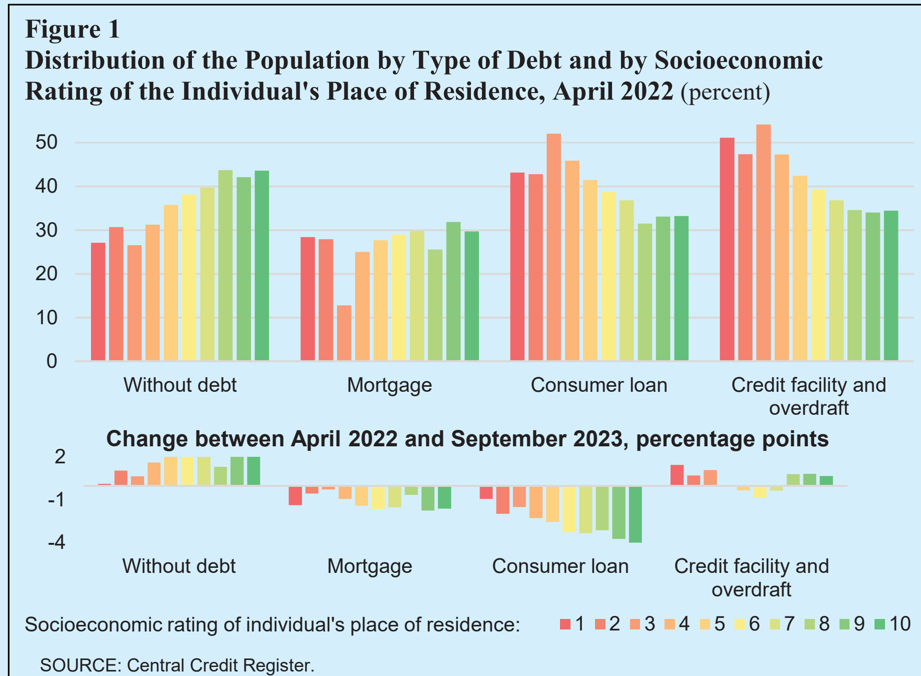
[4] Since most borrowers are exposed to the prime track, the analysis focuses on the changes that took place in accordance with the rate of exposure to prime.

[5] Those changes do not characterize the parallel period that was examined, such that between April 2021 and April 2022, the rate of those without debt remained unchanged, 38 percent, the rate of those with mortgages in those two months were 26.4 percent and 26.5 percent, respectively, the rates of those with consumer debt were 38.6 percent and 38.1 percent, respectively, and the rates of those with overdrafts were about 39.4 percent and about 40 percent, respectively.

[6] The socioeconomic rating of the locality in which the borrower lives obtains values from 1 (low) to 10 (high) according to a rating by the Central Bureau of Statistics. Small localities for which information was deleted from the database due to the Central Credit Register's confidentiality requirements were omitted from the analysis. Due to high variance within the localities with low socioeconomic ratings, particularly in Jerusalem, the figures presented in the box according to socioeconomic crating omit Jerusalem.

people who have no debt (overdraft, consumer loan, or mortgage) increase with the socioeconomic rating of the borrower's place of residence (Figure 1).[7] It is notable that the decline in the share of those with consumer debts during the period in which the interest rate increased is greater among households with a high socioeconomic rating (Figure 2). No such trend is observed during the periods that preceded the monetary tightening[8].

**Figure 1**
**Distribution of the Population by Type of Debt and by Socioeconomic Rating of the Individual's Place of Residence, April 2022** (percent)




SOURCE: Central Credit Register.

### 3. Mortgages[9]

This segment examines the change in the debt burdens of households with mortgages according to the measures they took to change their debt level and characteristics. The analysis includes about 1.2 million mortgage borrowers who did not take on new debt tracks after April 2022, and who still had mortgages in September 2023.[10] We track these borrowers and compare their payments and debt volumes between the two periods. Figure 2 shows that from the beginning of the monetary tightening, the average monthly

[7] For more discussion on the types of debt that borrowers take out according to the socioeconomic rating of their place of residence, see Appendix A.

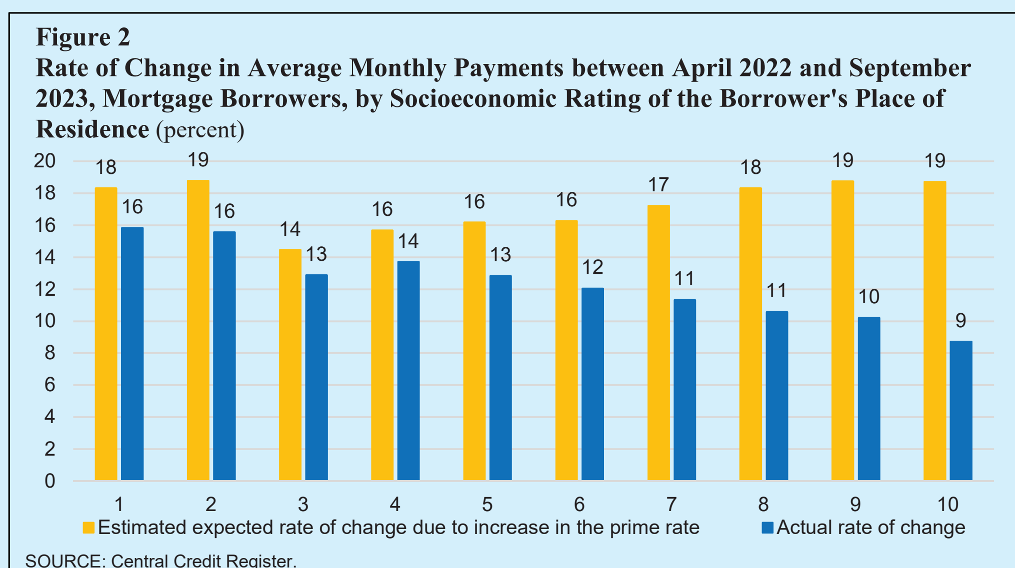
[8] Between April 2021 and April 2022, there was a decline in most deciles of about one percentage point, and a greater decline for those living in localities with medium socioeconomic ratings (5–7).

[9] The analysis relates to mortgages issued by the banking system, which include nonresidential loans secured by a residential property, minus observations that exceed the 99.5 percentile in the distribution of debt levels (principal, current balance, and monthly payment).

[10] This population group was chosen in order to neutralize the impact of mortgages that were taken out gradually over the period, with the principal amount of the loans increasing over time. Since most of the population has just one mortgage, the absence of discussion of households that increased their debt by taking out a second mortgage does not significantly affect the results.

payments in respect of those mortgages increased markedly, and that the rate of increase is greater as the socioeconomic rating of the borrower's place of residence is lower. The blue columns show actual monthly payments, which were impacted by the increase in the interest rates but also by measures that households took to lower the payments (such as early repayment or extending the term to payment). The yellow columns show the average rate of change of the payment that would have been required had the borrowers not made changes to the terms of their loans and the only change would have been the increase in the prime interest rate. Without additional changes to the loan amount and its characteristics, the rate of increase of the monthly payment for borrowers living in localities with a high socioeconomic rating was higher. The main reason for this is their higher exposure to the prime component in April 2022[11], but it is clear that they actively dealt with this risk and lowered their exposure when it was realized—when the prime rate increased.

**Figure 2**
**Rate of Change in Average Monthly Payments between April 2022 and September 2023, Mortgage Borrowers, by Socioeconomic Rating of the Borrower's Place of Residence** (percent)




SOURCE: Central Credit Register.

We now focus on about 902,000 borrowers who, according to the terms of their mortgages in April 2022, would not be paying off their mortgages (or part thereof) until at least September 2023. About 8 percent of these borrowers reduced the total volume of their mortgage between April 2022 and September 2023, and their share of all borrowers increases as the socioeconomic rating of their place of residence increases, from 5 percent to 12 percent. This means that more borrowers living in localities with high socioeconomic ratings advanced the payment of part of their mortgages. Most of the debt that was paid off was in the prime track.

[11] The rate of exposure to the prime rate in April 2022 increased with the socioeconomic rating of the borrower's place of residence, from about 24 percent for ratings 3–4 to about 37 percent for ratings 8–10. The rate of exposure to the prime rate of those residing in localities with a socioeconomic rating of 1–2 was also high—about 30 percent.

Based on these findings, using a statistical model, we checked whether the probability that a borrower would pay off a mortgage early, particularly the prime track, was greater among borrowers living in localities with higher socioeconomic ratings or among borrowers who are wealthier (using indications such as mortgage size and total credit card expenditures[12]), given the individuals' observed characteristics such as age and place of residence as well as characteristics of the debt. To do so, we estimated a probit equation that links the probability of lowering the total mortgage during the period, particularly the part on the prime track, with overserved characteristics of the borrower and the loan. We conducted two estimations. In the first, the dependent variable obtains the value of 1 if a borrower's total loans in the prime track declined between April 2022 and September 2023. In the second, the dependent variable obtains the value of 1 only if there was a decline in both the borrower's total loans (not just the prime component) and his total loans in the prime track. The second estimation enables us to focus on borrowers that made an effective repayment (their total debt declined), as opposed to borrowers who paid off their prime component but increased other debt in its place.

The data used for the estimations are at the borrower level (for all mortgages borrowed), and for each borrower, the principal amounts on all prime tracks (for the first estimation) and on all tracks (for the second estimation) were totaled. The average period to repayment of the loan[13] was calculated, and we controlled for the current balance at the base period. Another explanatory variable that is used as an index of the borrower's financial strength—credit card expenditures—is calculated as the sum of the borrower's credit card expenditures during the base period.

Table 1 shows that more established households are more likely to reduce their exposure to the prime component. This is reflected in coefficients of the socioeconomic rating variable and the coefficient of the variable relating to total credit card expenditures (excluding interest). We also found that the higher the debt balance was prior to the monetary tightening, and the greater the expected impact of the monetary tightening, the greater the probability that the borrower will reduce exposure to an interest rate increase. In addition, the longer the period remaining to repayment is, the less likely the borrower will repay the debt.

We now examine the effect of the repayment on the level of the monthly payment. Figure 3a shows that the rate of those paying off their mortgages early began to increase only about 10 months after the start of the interest rate increases, and even then, the change in the average rate of repayments was not great. Figure 3b shows that the effect of the early repayments that were made after the start of monetary tightening on the monthly repayments was stronger than the effect of the repayments made before then, and that those made between October 2022 and July 2023 led to an average decline in the monthly repayment of about NIS 1,400. The greater the timespan between the repayment and the end of the interest rate increases, the greater the underestimation of its impact on the monthly repayment. The figure also shows that borrowers (households) who made early repayments during the monetary tightening period made higher monthly payments than those who made the early repayments before the monetary tightening. In both periods, those who made early repayments on their mortgages had higher monthly payments than the average of all mortgage borrowers, meaning they had relatively high financial strength.

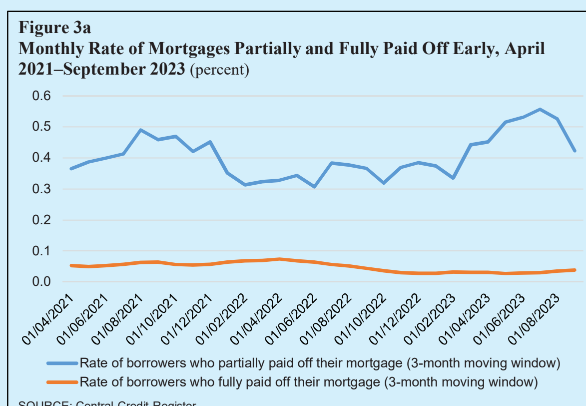
[12] Non-interest-bearing expenses.
[13] Weighted average according to current balance in each track. Calculated for all tracks, and separately for the prime track.

**Table 1**
**Probability of early repayment of part of the mortgage, between April 2022 and September 2022**

| | Decline in prime balance | Decline in overall and prime balance |
|---|---|---|
| | 0.008*** | 0.025*** |
| Socioeconomic ranking - borrower's residence | (0.002) | (0.001) |
| | 0.017*** | 0.011*** |
| Credit card expenditures | (0.001) | 0.001*** |
| | 0.481*** | 0.443*** |
| Log of balance to repay | (0.005) | (0.004) |
| | ***-0.003 | ***-0.006 |
| Average term to repayment | (0.00004) | (0.00004) |
| | ***-8.314 | ***6.767 |
| Intercept | (0.07) | (0.055) |
| Observations | 859,464 | 902,411 |

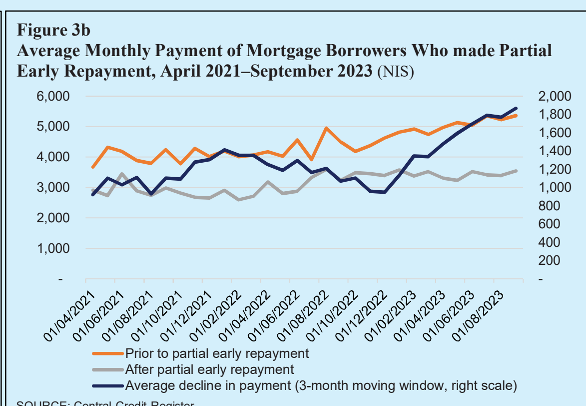
Note: ***p<0.01, **p<0.05, *p<0.1
Standard deviations in parentheses.
SOURCE: Credit Data Register.

**Figure 3a**
**Monthly Rate of Mortgages Partially and Fully Paid Off Early, April 2021–September 2023** (percent)




SOURCE: Central Credit Register.

**Figure 3b**
**Average Monthly Payment of Mortgage Borrowers Who made Partial Early Repayment, April 2021–September 2023** (NIS)

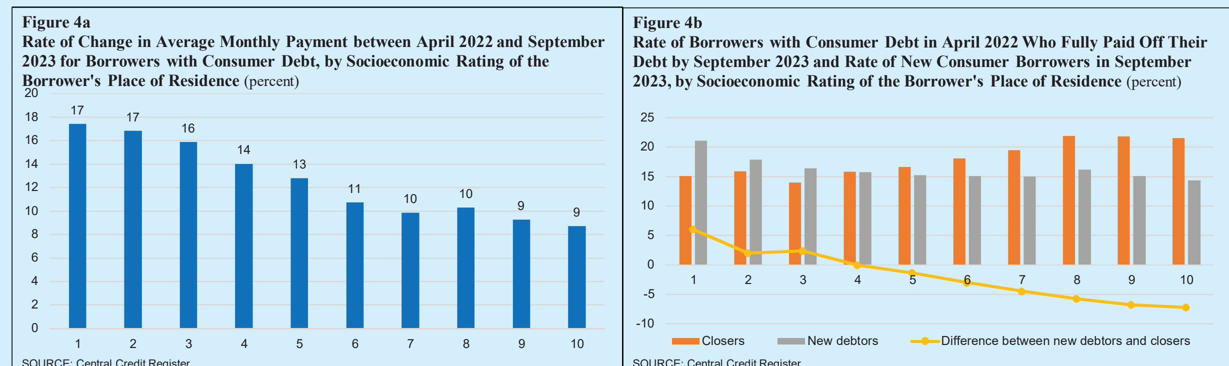



SOURCE: Central Credit Register.

## 4. Consumer credit

In contrast to mortgages, consumer debt is short and dynamic (borrowed for an average of about 5.5 years rather than 23 years for mortgages in April 2023). Therefore, a considerable part of how consumer borrowers deal with increased monthly payments in respect of the increase in interest rates is reflected in the decision not to take out new debt (for instance, to avoid taking out car loans). These borrowers, like mortgage borrowers, can repay their existing debt (in whole or in part) early.

In April 2022, there were about 2.2 million people with consumer debt, compared with about 2.1 million in September 2023. About 18 percent of those with such debt in April 2022 repaid their debt in full during the reviewed period ("closers"), and about 16 percent of those with debt in 2023 were borrowers who did not have such debt in April 2022 ("new debtors"). Figure 4a shows that the rate of closers increases with the socioeconomic rating of the borrower's place of residence, and the rate of new debtors declines with the increase in that rating. An analysis of the group of borrowers who had consumer debt in both April 2022 and September 2023 ("continuers") shows that the share of borrowers who increased their debt during the period declines with the increase in socioeconomic rating of the borrower's place of residence. Figure 4b shows the monthly repayments of the continuers. The figure relates to actual repayments of those borrowers, after the effects of both the increase in the interest rates (which worked to increase monthly payments of existing and new borrowers) and the measures taken by households—taking on additional debt or repaying existing debt. The figure shows that the rate of increase in actual monthly payments declines with the increase in the socioeconomic rating of the borrower's place of residents, partly because borrowers living in localities with a low socioeconomic rating did not markedly change their behavior. They increased their debt on average, similar to the increase during previous periods, which led to an increase in their monthly payments. In contrast, borrowers living in localities with high socioeconomic ratings did not increase their debt, or even lowered it (in contrast with previous periods). Residents of localities with low socioeconomic ratings extended the average term to repayment of their debt, which slightly moderated the effect of increasing the debt on payments.[14]




In conclusion, we can see significant variance between wealthy households, which acted to reduce their monthly payments by repaying loans and avoiding taking out new credit, and households with fewer means, some of which increased their debt burden and pay their monthly payments in respect of it even beyond the increase that would have been derived solely from the increase in the interest rate.

[14] The picture where more established borrowers did not lower their debt and less established borrowers increased it is not obtained when comparing April 2021 with April 2022.

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## Appendix A
## Distribution of the Population by Type of Debt and Socioeconomic Rating

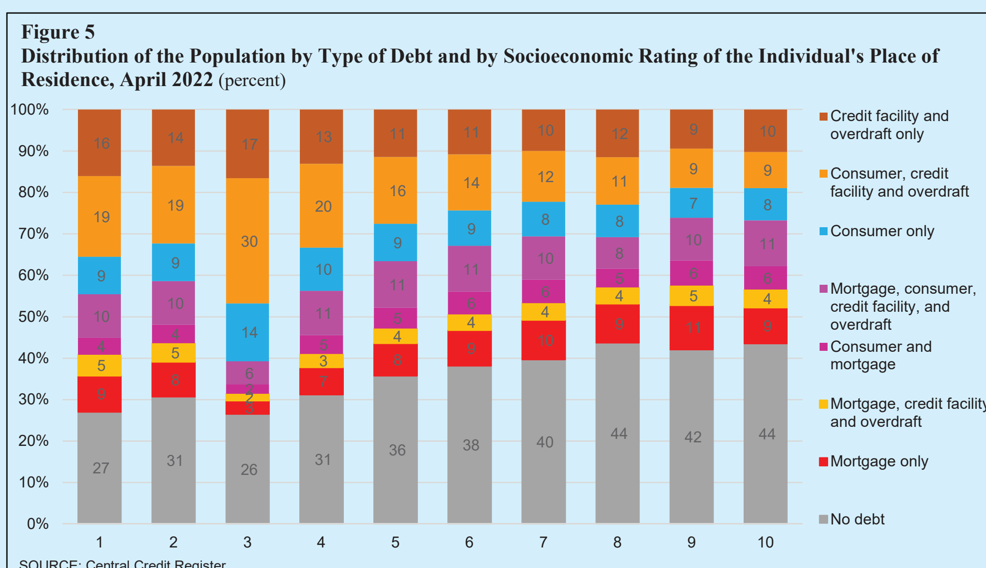


**Figure 5**
**Distribution of the Population by Type of Debt and by Socioeconomic Rating of the Individual's Place of Residence, April 2022** (percent)

SOURCE: Central Credit Register.