Chapter 4

Development of financing sources for the nonfinancial private sector

- » Amid its resilience and stability, the financial system continued this year to support economic activity and the recovery of the economy, despite the complex challenges facing the Israeli economy.
- » The private debt-to-GDP ratio increased slightly this year, both in the business sector and among households, but remains low by international standards.
- » Corporate bond spreads in the business sector decreased to levels lower than those before the war, similar to the global trend.
- » Construction companies increased their use of bank financing and bonds to support ongoing activities and compensate for the decline in cash flows from developers, particularly in the first quarter of the year.
- Outstanding household credit grew by 6.6 percent this year, higher than the
 2.3 percent growth in 2023, driven by housing credit.
- » The volume of new mortgages grew by approximately 30 percent this year, with increased use of "bullet" loans as part of contractors' financing campaigns, and a rise in the risk indices of mortgages.
- » The growth in the public's asset portfolio was higher this year than in previous years. There were significant increases across all components, notably in equities and bonds, both domestic and international.

1. INTRODUCTION AND MAIN DEVELOPMENTS

This chapter focuses on the funding sources for the nonfinancial private sector (households and businesses) in Israel. Financing is crucial for both household consumption and business investment, underscoring its significant role in economic activity. The chapter outlines the key changes in private sector financing in 2024, against the backdrop of the intensification and prolongation of the Swords of Iron War.

Developments throughout the year were not uniform. Inflation accelerated in the first half of the year but began to decline towards the end, reaching 3.2 percent, similar to its level at the end of 2023. The Bank of Israel reduced the monetary interest rate in January from 4.75 percent to 4.5 percent, maintaining this level until the end of the year. This contrasts with the trend in most developed countries, where inflation declined and central banks began reducing interest rates (see Chapter 3 for more details). The country's risk premium, as reflected in government bond yield spreads and CDS prices, was influenced by the war's progression and intensity. It peaked during the first few months of the year and declined significantly in the last quarter, yet remained above prewar levels (see Chapter 1 for more details).

The Israeli stock market was characterized by underperformance relative to the global markets during the first three quarters of the year. This trend was a direct continuation of the underperformance seen in 2023, amid uncertainty surrounding legislative changes regarding the judicial system and the outbreak of the Swords of Iron War in October. In the fourth quarter, alongside a ceasefire agreement in the north and economic recovery, the local capital market experienced significant price increases, which were particularly notable compared to global stock indices.

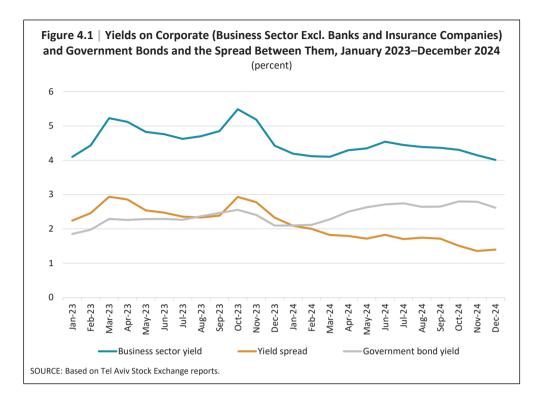
Corporate bond spreads (excluding banks and insurance companies) fell in 2024 to below prewar levels. This decline reflected an increase in investors' risk appetite, which was also reflected by high net new investment rates in mutual funds specializing in corporate bonds. The narrowing of spreads was accompanied by rising government bond yields, partly due to an increase in the risk premium (Figure 4.1). A similar trend of narrowing bond spreads occurred in other advanced economies.

The volume of stock issuances increased moderately in 2024 compared to 2023, but remained low relative to the average in previous years. After only one company conducted an initial public offering (IPO) in 2023, there was a slight recovery in new issuances in 2024, with five companies issuing shares, valued at NIS 832 million. However, the number of new issuances remains significantly lower than between 2017 and 2022, when the average was 28 issuances per year, valued at an average of NIS 4.2 billion per year.²

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- ¹ The increase in the risk premium was also reflected in the lowering of Israel's credit rating by the international credit rating agencies during the year. Some agencies attached a negative outlook to their rating, meaning that they foresaw the possibility of a further decline in the credit rating. For more discussion, see the Financial Stability Reports for the first and second half of 2024.
- ² Even excluding 2021 and 2022, which were outlier years, the number of new issuances was higher—an average of 12 at a value of NIS 2.3 billion per year.

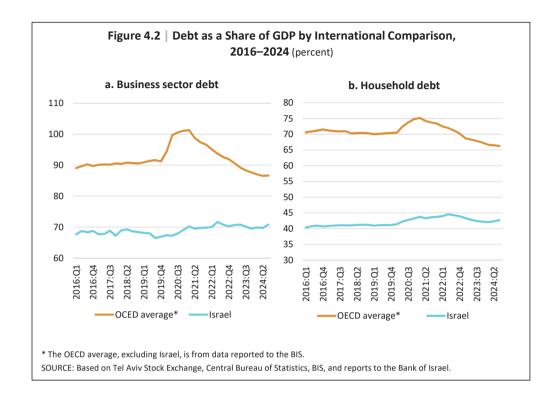


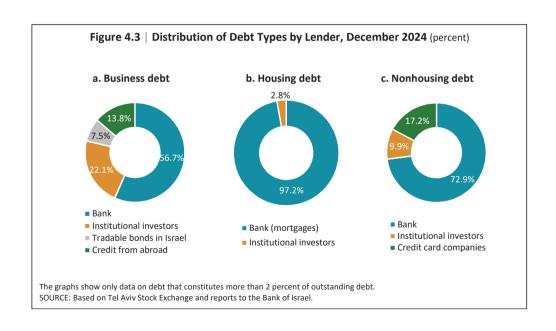
Following peak levels of funding sources in 2021, there was a significant decline in investment levels in high-tech companies in Israel and globally starting in the first half of 2022. In 2023, the decline in fundraising volume for high-tech companies from venture capital funds, which are a major source of financing for the Israeli high-tech sector, was greater than in other countries. The downward trend in fundraising was halted in 2024, and the growth rate in the volume of fundraising in Israel was slightly higher than in other countries. (For more information, see Chapter 2.)

The private debt-to-GDP ratio increased slightly this year, both in the business sector (from 69.5 percent to 70.3 percent) and in the household sector (from 42.1 percent to 42.2 percent), but remains low by international standards. This increase contrasts with the trend in most OECD countries, where the ratio continued to decline after rising during the COVID-19 period (Figure 4.2). The current level of the private debt-to-GDP ratio in Israel is very similar to levels observed in previous years and may reflect the government's budget functioning as a "shock absorber" during the COVID-19 pandemic and the current war.

Nonfinancial private credit is composed of business debt and household debt, with outstanding balances at the end of 2024 amounting to approximately NIS 1.4 trillion for business debt and NIS 845 billion for housing debt. Household debt is divided into housing debt, which accounts for 72 percent, and nonhousing debt, which makes up 28 percent. Figure 4.3 illustrates the distribution of debt by lender.

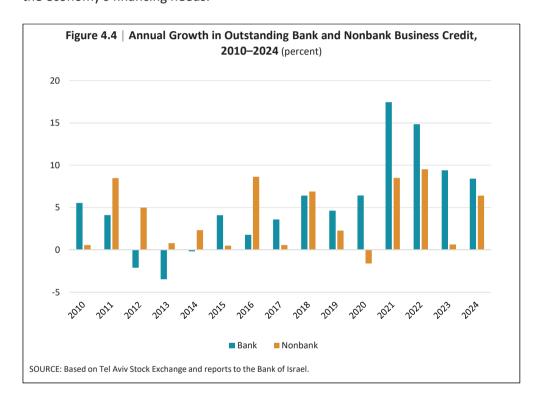
The private debt-to-GDP ratio increased slightly this year, in both the business sector and the household sector, but remains low by international standards.





Business credit in Israel continued to grow in 2024 (Figure 4.4), and similar to the past five years, the growth of bank credit outpaced that of nonbank credit. This increase aligns with reports from all business groups indicating a reduction in both bank and nonbank financing difficulties, as noted in the Central Bureau of Statistics Business Tendency Survey. The fact that most of the credit growth occurred in the second half of the year suggests that it may have resulted from business recovery rather than liquidity distress during the war. However, an analysis of credit development patterns across different business segments indicates heterogeneity, necessitating a distinction between various subgroups for a deeper understanding of the economy's financing needs.

Business credit in Israel continued to grow in 202, and similar to the past five years, the growth of bank credit outpaced that of nonbank credit.



Credit to the financial services industry contributed about 40 percent to the growth of bank credit to the business sector this year, more than any other industry. Regulated credit providers within this industry provide nonbank credit to small and micro businesses in the construction and real estate industries³, as well as to households, with a focus on car loans. The significant growth in the financial services industry is reflected in the accelerated growth rate of outstanding credit provided by these entities this year. The construction industry, which constitutes a substantial portion of both bank and nonbank business credit portfolios, remained one of the

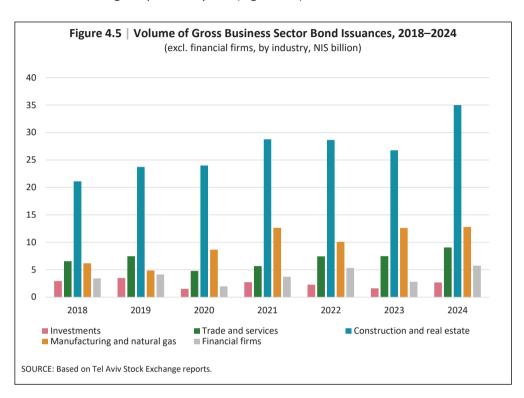
Credit to the financial services industry contributed about 40 percent to the growth of bank credit to the business sector this year, more than any other industry.

³ Based on the financial statements of the public nonbank credit card companies.

In parallel with the continued growth of bank credit, large businesses across all industries issued bonds at a significantly higher volume than in previous years.

primary beneficiaries of credit expansion, despite the continued slowdown in its growth rate (for further details, see the Construction Financing section).

In parallel with the continued growth of bank credit, large businesses across all industries issued bonds at a significantly higher volume than in 2023, and even above the annual average of previous years (Figure 4.5).⁴



Alongside the acceleration in bond issuances, there was also a significant increase in the balance of nonbank loans, both from local lenders⁵ and nonresidents. The balance of foreign credit (adjusted for exchange rate effects), which consists of loans from nonresidents and bonds issued abroad, and accounts for about 14 percent of total business sector credit, grew this year, reversing its previous downward trend, although it has not yet returned to prewar levels.

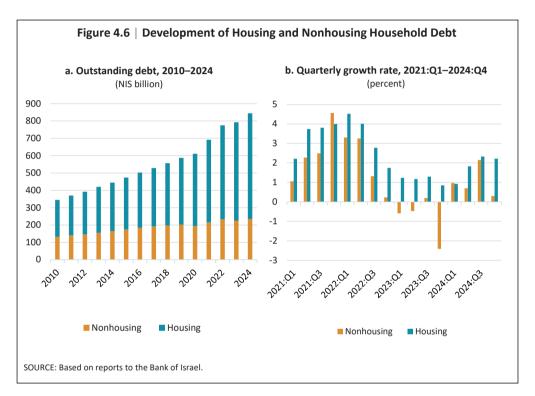
In 2024, the ratio of private consumption to disposable income rose above its prewar level. Concurrently, household debt continued to grow, albeit at a slower pace than the average of previous years. The growth in household credit was primarily driven by an increase in housing credit, but consumer credit also increased (Figure 4.6a). A quarterly analysis (Figure 4.6b) shows that after a gradual moderation in the growth rate of housing credit, which began with interest rate hikes in 2022,

Concurrent with the increase in the ratio of private consumption to disposable income, household debt continued to grow, led by housing credit.

⁴ The significant growth is also notable in total net issuances.

⁵ Other than earmarked credit from the government, which accounts for just 0.02 percent of the total, and which declined by about 15 percent this year.

the pace accelerated starting from the first quarter of 2024. Nonhousing credit also experienced a recovery. After contracting throughout most of 2023, its growth resumed in 2024, returning to the level seen at the end of 2022. The increase in outstanding household credit was accompanied by a moderate decline in interest rates, primarily in the first half of the year, following the Bank of Israel's quarterpoint rate cut in early January. Throughout 2024, bank interest rates declined by about 0.3 percentage points on housing credit and by about 0.5 percentage points on nonhousing credit.⁶

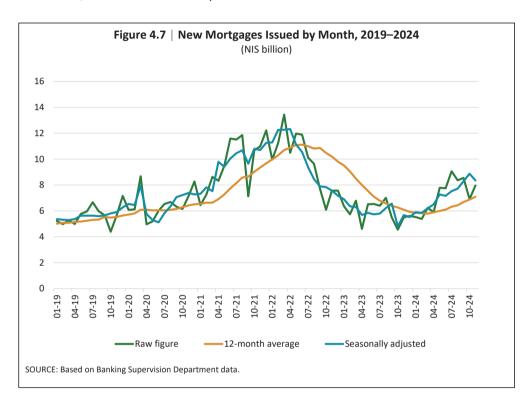


The volume of new mortgages began to rise in the first quarter of the year, offsetting a significant portion of the decline since mid-2022 (Figure 4.7), despite the higher interest rate environment. This growth was driven by a combination of an increase in the number of transactions and the average size of mortgages, against the backdrop of rising housing prices. (For more details, see Chapter 8). Notably, there was a significant increase in "bullet" loans, particularly as part of contractors'

The volume of new mortgages returned to its mid-2022 level, despite the higher interest rate environment.

⁶ For nonhousing credit, the interest rate on unindexed variable rate credit, which accounts for about 95 percent of such bank credit. For housing credit, the weighted nominal interest rate on all types of credit, assuming that the inflation rate is 2 percent.

sales campaigns.⁷ According to the retail credit database, the volume of mortgages increased across all socioeconomic clusters, with the rate of increase being greater as the socioeconomic ranking decreases. Mortgage risk indices remain elevated. The proportion of mortgages with financing above 60 percent and those with a payment-to-income (PTI) ratio greater than 30 percent continued to rise, approaching peak levels of 44 percent and 43 percent, respectively. By the end of 2024, about a quarter of new mortgages had both financing and PTI ratios that were high according to these definitions, an increase from 21 percent at the end of 2023.



Segmented by credit provider, there was a notable increase in consumer credit from nonbank credit companies and credit card companies.

Consumer credit also expanded, after contracting in the previous year, with significant differences observed across various population segments. (For further details, see the section on nonhousing credit by socioeconomic status). Segmented by credit provider, there was a notable increase in credit from nonbank credit companies and credit card companies, while credit from institutional entities continued to decline.

⁷ The developer signs a deal with the bank and refers its customers to obtain loans from the bank. These loans are taken out by purchasers as housing loans, and in most cases, the contractor pays the interest. When the home is delivered, the fund is paid off by the purchasers in one payment, apparently by replacing it with an ordinary mortgage. The advantages and risks of these loans are discussed in the *Financial Stability Report* for the first half of 2024, Spotlight 3.

Table 4.1 | Distribution of nonfinancial private sector debt, 2022-2024

(end-of-period balance, current prices, NIS billion)

	2022	2023	2024	Mar-2024	Jun-2024	Sep-2024	Dec-2024
	End of period balance			Quarter-end balance			
Nonfinancial private sector debt (1+2)	2,015	2,099	2,249	2,131	2,151	2,209	2,249
1. Business sector debt	1240	1306	1404	1330	1338	1378	1404
Credit from banks	658	720	781	726	732	758	781
Domestic nonbank credit	383	401	431	412	412	427	431
of which: Tradable bonds in Israel	263	278	305	287	286	300	305
Nontradable bonds and nonbank loans	119	122	126	125	126	127	126
Credit from abroad	199	185	192	193	194	194	192
2. Household debt	775	793	845	800	812	831	845
Housing credit	543	568	610	573	583	597	610
Nonhousing credit	233	225	235	227	229	234	235
	Change during the period (percent)			Change during the quarter (percent)			
Nonfinancial private sector debt (1+2)	12.2	4.1	7.2	1.5	0.9	2.7	1.8
1. Business sector debt	12.3	5.3	7.5	1.9	0.6	3.0	1.9
Credit from banks	14.8	9.4	8.4	0.8	0.9	3.5	3.0
Domestic nonbank credit	9.9	4.8	7.6	2.8	0.1	3.5	1.0
of which: Tradable bonds in Israel	11.9	5.8	9.6	0.8	0.9	3.5	3.0
Nontradable bonds and nonbank loans	5.9	2.5	3.0	3.0	-0.3	4.7	1.9
Credit from abroad	8.7	-7.3	4.0	4.4	0.7	-0.2	-1.0
2. Household debt	12.0	2.3	6.6	0.9	1.5	2.3	1.7
Housing credit	13.7	4.6	7.5	0.9	1.8	2.3	2.2
Nonhousing credit	8.3	-3.3	4.2	1.0	0.7	2.2	0.3

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

2. FINANCING OF THE CONSTRUCTION INDUSTRY

Credit to the construction industry, which constitutes about a quarter of bank business credit, continued to be a key component of the expansion of bank credit, despite the ongoing slowdown in its growth rate. The growth in credit to this industry was predominantly concentrated (94 percent) among large construction companies.

The development of bank credit to the construction industry, which accounts for approximately 90 percent of total credit to the industry, can be understood by examining the mix between balance-sheet debt and off-balance-sheet guarantees—specifically, Sale Law guarantees that banks provide to homebuyers. These guarantees, required by law for any buyer payment exceeding 7 percent of the property's price, are intended to ensure the completion of construction or the refund of payments in the event of project failure. The volume of Sale Law guarantees largely reflects the cash flow of contractors from home sales: the more homes a construction company sells, the less credit it requires to advance construction. However, this increases the volume of Sale Law guarantees that the bank provides to the company, representing off-balance-sheet exposures of the bank to the contractor.

An analysis of the credit components (Figure 4.8) reveals that from the end of 2021 until the first quarter of 2024, the issuance of guarantees slowed, while the volume of debts continued to grow. This situation reflects a disruption in developers' cash flow from home sales, alongside a continued need for credit to finance construction.

The continued growth of building developers' debts in the first quarter of 2024, alongside the slowdown in the issuance of guarantees issued for projects under construction, reflects a decline in developers' cash flow.

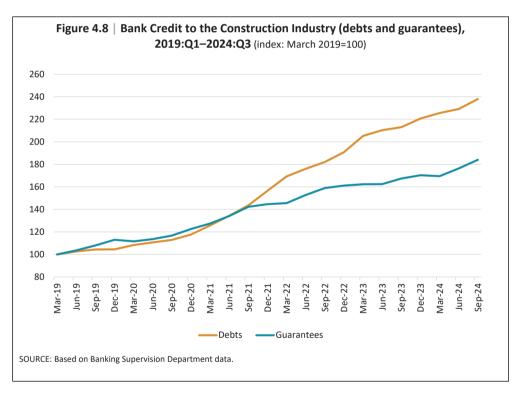
The construction industry continued to be a key component of the expansion of bank credit, despite the ongoing slowdown in its growth rate.

⁸ Sale (Homes) (Ensuring Homebuyer's Investments) Law, 5735–1974.

This trend is driven by two main factors: the sharp rise in interest rates at the beginning of the period, which negatively impacted new home sales, and developer promotions from late 2023 that included deferring most payments until occupancy. These promotions led developers to rely more on credit rather than proceeds from home sales.

The situation worsened with the outbreak of the war. The shortage of labor due to the ban on the entry of Palestinian laborers from the start of the war led to extended construction times¹⁰, delays in project completions, and consequently, delays in receiving payments and releasing guarantees for previous payments. As a result, construction companies increasingly relied on bank financing and bonds for ongoing projects under construction. This trend aligns with the decline in construction investments, as detailed in Chapter 2. In the second and third quarters of 2024, the trend reversed, with the volume of guarantees growing faster than the volume of debts. This change likely resulted from an increase in home purchase transactions during this period.

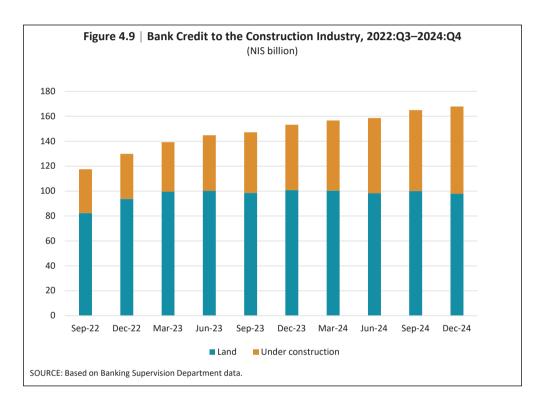
In the second and third quarters of 2024, the volume of guarantees grew faster than the volume of debts.



⁹ For more discussion, see Spotlight 3 in the Financial Stability Report for the first half of 2024.

¹⁰ According to Central Bureau of Statistics calculations, the shortage of workers extends the duration of residential construction by an average of 6–8 months (press release 407/2024, Central Bureau of Statistics).

An analysis of the distribution of bank credit to the construction industry by type of collateral—credit for undeveloped land versus credit for construction processes—provides additional insight (Figure 4.9). Credit for undeveloped land has remained almost unchanged since the beginning of 2023. This stability reflects two offsetting trends: the transfer of credit from the undeveloped land category to the construction processes category for projects that have moved to the construction phase and received bank financing; and the entry of new lands following purchases by developers. These acquisitions were likely made at lower prices than in the past, due to the reduced cost of land marketed by the Israel Land Authority. 11



The stability in the volume of credit for land under these circumstances suggests that the amount of undeveloped land purchased this year exceeded the amount of land that transitioned to construction processes. Additionally, credit for projects in the construction phase (both residential and commercial) continuously increased¹² throughout the period, primarily due to extended construction timelines and deferred customer payments.

¹¹ According to the Israel Land Authority, the volume of land sales, in quantitative terms, did not change in 2024 relative to 2023, but Authority revenue declined due to lower prices for the land that was sold. (For more discussion, see Chapter 8 of this Report.)

 $^{^{12}}$ An increase of about 85 percent between the first quarter of 2022 and the third quarter of 2024.

3. NONHOUSING CREDIT BY SOCIOECONOMIC STATUS

In localities ranked low on the socioeconomic index, the trend of increasing consumer debt continued in 2024, with the intensity of the increase growing as the socioeconomic ranking decreases.

Borrowers from localities in the higher clusters lowered their credit volumes in the first half of the year, and increased them in the second half.

The development of consumer credit¹³ by socioeconomic cluster¹⁴ (Figure 4.10) indicates differences among population groups, each exhibiting distinct behavioral patterns.¹⁵ In localities ranked low on the socioeconomic index, the trend of increasing consumer debt continued in 2024, with the intensity of the increase growing as the socioeconomic ranking decreases. In contrast, borrowers from localities ranked in the higher clusters (8–10) displayed a different pattern—reducing credit volume in the first half of the year¹⁶ and increasing it in the second half, resulting in a moderate annual increase.

The trend in the first half of the year aligns with a pattern that began about three years ago. Since the Bank of Israel started raising interest rates in April 2022, individuals with consumer loans residing in localities with high ratings on the socioeconomic index have had a greater tendency to avoid taking on new debt and to repay existing debts. Meanwhile, those living in localities with low ratings on the socioeconomic index, who typically have fewer resources, have continued to take on additional debt. (For more details, see Box 4.2 in the Bank of Israel's Annual Report for 2023.)

The growth observed in the second half of the year was significant and quite similar across the clusters, exceeding 3 percent. This growth reflects the recovery in consumer credit, which aligns with the increase in private consumption during the same period.

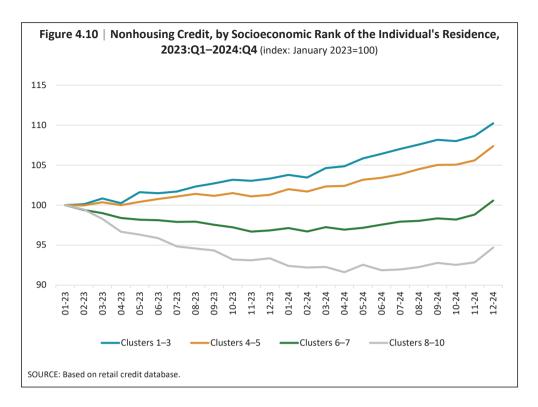
When breaking down the sources of credit, a difference is noted between the clusters only in bank credit—there was a moderate increase in Clusters 1–5, compared to stability in Clusters 6–10. Across all clusters, there was a significant decline in credit from institutional investors, alongside a substantial increase in credit from regulated credit providers and credit card companies.

¹³ According to the retail credit database.

¹⁴ The socioeconomic status of the individual's place of residence is measured according to a ranking of socioeconomic clusters, provided by the Central Bureau of Statistics. This ranking ranges for each local council or municipality on a scale from 1 to 10. A ranking of 1 indicates the worst socioeconomic conditions, while a ranking of 10 indicates the best.

¹⁵ Box 4.2 in this Report analyzes the war's consequences on the debt burden of confrontation line residents, while distinguishing between two groups—evacuees that were eligible for financial assistance from the government, and those who remained in their homes.

¹⁶ The volume of consumer credit for these clusters is the lowest among the clusters shown in the figure.



4. THE PUBLIC'S ASSET PORTFOLIO

The public's asset portfolio¹⁷ grew significantly in 2024, increasing by approximately 15 percent, which amounts to NIS 812 billion (about 42 percent of the 2023 GDP), reaching approximately NIS 6.2 trillion¹⁸ (Figure 4.11). In monetary terms, there were increases across all components—an increase of NIS 313 billion in the volume of local equities and bonds¹⁹, and a rise of NIS 221 billion in investments by Israeli residents abroad. The proportion of cash and deposits in the portfolio continued to decline this year, reaching about 35 percent.²⁰ The share of domestic equities and bonds remained unchanged, while the share of foreign equities and bonds increased by about one percent.

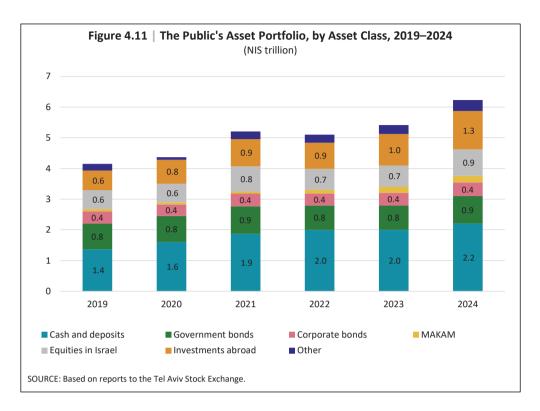
The public's asset portfolio grew significantly in 2024, increasing by about 15 percent, to about NIS 6.2 trillion.

¹⁷ The public includes households and businesses, and does not include the government, the Bank of Israel, or investments by nonresidents or by commercial banks, including mortgage banks. Assets in Israel do not include ETFs, certificates of deposit, or structured bonds.

¹⁸ About 5 percent of this increase was due to increases in asset prices during the year.

¹⁹ An increase of about NIS 97 billion in government bonds, and an increase of about NIS 159 billion in corporate bonds and domestic equities.

²⁰ As of November 2024, the volume of cash and demand deposits (excluding interest-bearing current accounts) declined by about NIS 11 billion, and the volume of other deposits increased by about NIS 185 billion.



The behavior of savers can also be examined through net new investment (the total money entering minus the money exiting) in various institutional investors, which increased significantly in 2024 compared to previous years. The growth rate in net new investments was particularly notable in mutual funds, which saw a 77 percent increase²¹, and in continuing education funds, which grew by 32 percent.²² In pension funds, which serve as long-term savings instruments, the increase was more moderate at 9 percent.²³

Figure 4.12 shows the volume of net new investments in the domestic market and abroad by different savings channels—pension funds, advanced training funds, and provident funds, which serve as medium- to long-term savings instruments. In 2024, the volume of net new investments in the domestic market was positive across all savings instruments and significantly higher than in previous years. This contrasts with the net new investments in the three foreign savings channels, which contracted in 2024 compared to previous years.

In money market funds (both shekel and foreign currency), net new investments declined by 31 percent (NIS 4.8 billion) this year, primarily in the fourth quarter, in contrast to 2023, when it grew significantly due to local uncertainty and savers' desire

²¹ 13.6 percent of total mutual fund assets at the end of 2023.

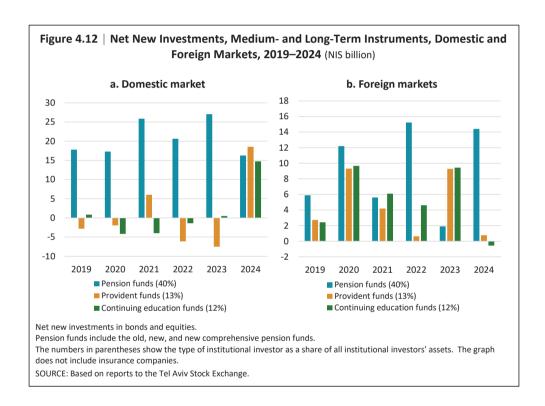
²² 4.3 percent of total continuing education fund assets at the end of 2023.

²³ 3.5 percent of total pension fund assets at the end of 2023.

to invest in liquid and low-risk savings channels. This change may indicate increased investor confidence and a search for higher returns.

The growth in the public's asset portfolio in 2024, despite being a year of war, reflects an improvement in the financial resilience of households and strengthens their ability to withstand economic shocks. The increase in capital gains contributed to the rise in disposable income, which was reflected in increased private consumption (detailed in Chapter 2) through the wealth effect.²⁴ At the macroeconomic level, the growth in the asset portfolio contributed to economic growth not only by increasing private consumption, but also by expanding the volume of investments in the capital market and increasing state revenues from capital gains taxes.

The growth in the public's asset portfolio in 2024 reflects an improvement in the financial resilience of households and strengthens their ability to withstand economic shocks.



²⁴ See Arnon Barak (2017), "The Private Consumption Function in Israel," Discussion Papers Series 2017.04, Bank of Israel Research Department. The paper found that short-term changes in private consumption are mainly explained by changes in the financial asset portfolio.

BOX 4.1: DEVELOPMENTS IN MORTGAGE PRICING IN ISRAEL

- In the past two years, mortgage profit margins in Israel have decreased due to several developments: the rise in the Bank of Israel's interest rate, consumer reforms aimed at increasing information transparency and competition in the mortgage market, and the Swords of Iron War.
- Approximately a quarter of the reduction in margins can be attributed to increased competition
 in the market, while the remainder is explained by the narrowing of margins following the interest
 rate hike and a decline in demand for mortgages.

1. BACKGROUND

Mortgage margins in Israel have declined sharply in recent years (Figure 1). The mortgage margin, as illustrated in Figure 1, is the difference between the interest rate on the mortgage track and the benchmark rate, which is calculated based on the zero-coupon yield curve of government bonds, according to the relevant linkage (nominal or real) and duration. This margin represents the additional cost paid by the borrower over the alternative interest rate available to the bank when granting the loan. The size of the margin is influenced by several factors, including the borrower's risk, the operational costs associated with providing the loan (such as underwriting and risk management), and potentially an additional premium related to the bank's market power. Generally, for borrowers with identical risk profiles and mortgage characteristics, a smaller margin results in lower profitability for the bank from the mortgage.

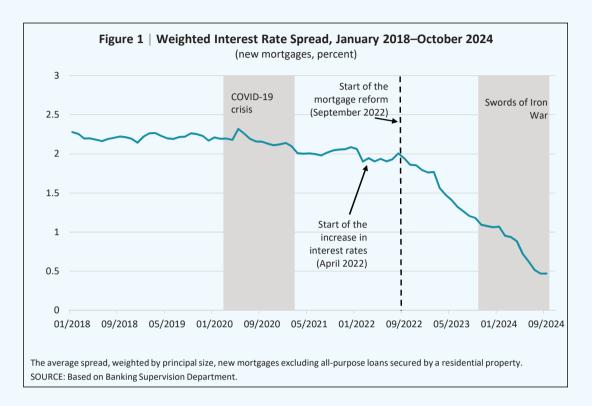
The decline in mortgage margins occurred in view of several significant developments in Israel's mortgage market. First, starting in the second quarter of 2022, there was a sharp decline in mortgage activity due to the rise in the Bank of Israel's interest rate. Generally, an increase in interest rates raises the marginal cost for banks to provide credit, effectively reducing the supply of mortgages. In such a scenario, banks may choose to absorb part of the increase to prevent an even sharper decline in mortgage activity, leading to narrower market margins.

Second, in September 2022, the Bank of Israel initiated a consumer reform aimed at enhancing information transparency and competition in the mortgage market.² This was achieved by improving borrowers' ability to compare offers from different banks and streamlining the process of obtaining preliminary mortgage approval. The start of the reform (September 2022) is marked by a dashed line in Figure 1. The figure shows that before the reform, the margin was on a slight downward trend, and in

¹ The margin between mortgage interest rates and the zero-coupon yield curve based on government bonds does not necessarily represent the margin over the cost of funding sources for the banking system. Instead, it reflects the alternative cost, which is the return the bank would receive on another asset with the same duration and type of indexation, rather than on the mortgage.

As part of the reform, banks were required to provide customers with a standardized preliminary approval format. This format includes not only the mortgage package they offer but also three standardized packages, the composition of which is determined by the Bank of Israel. For each package, the projected total interest rate, the estimated total payments over the entire mortgage period, and the highest expected monthly payment according to forecasts are presented. Additionally, the time required to issue the preliminary approval was reduced to just a few days, and banks were mandated to allow the application submission and approval process to be conducted online. For more details on the reform measures, please visit https://mashboi.org.il.

September 2022, it began to decline consistently. This trend continued even after the Bank of Israel's interest rate stabilized in June 2023 and with the recovery of the mortgage market starting in the second quarter of 2024.

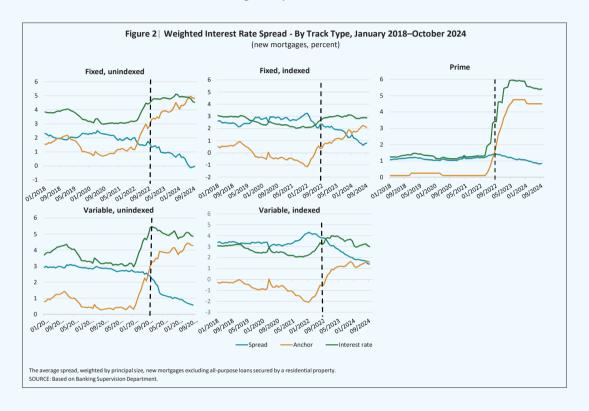


The rest of this box examines whether the reduction in margins was due to the credit supply side, influenced by the reform that increased competition for customers, or from a decline in demand due to the increase in the Bank of Israel's interest rate.

To provide an indication of the impact of the rising interest rate environment on margins, Figure 2 presents the development of mortgage interest rates and the benchmark rate for each of the five most common mortgage tracks in Israel.³ The figure shows that in most tracks, the initial rise in the benchmark rate was accompanied by a decrease in margins, regardless of the reform's start date. For example, in the fixed-rate unindexed track, the benchmark yield began to rise as early as January 2022, and almost immediately, the margin in this track began to decrease. It appears that in most tracks, the increase in the zero-coupon yield curve was partially accompanied by an increase in mortgage interest rates, causing a reduction in the margin. In contrast, for the prime rate track, the interest rate increase that began in April 2022 was not immediately followed by a decline in the margin. The margin in the prime rate track only began to decline in September 2022, after nearly six months during which the interest

³ Foreign currency-linked tracks accounted for a negligible portion of the mortgages during the period under review, and are not included in the current analysis.

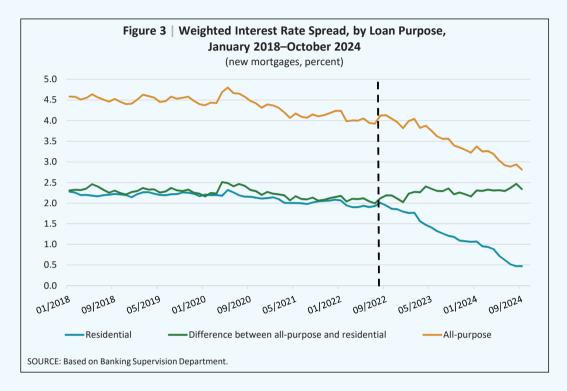
rate in this track even rose slightly, in view of the Bank of Israel's interest rate increase. Additionally, it seems that the downward trend in the margin for the variable unindexed rate track (excluding prime) significantly strengthened after September 2022. Therefore, the intensified margin reduction from September reflects a combination of continued margin decline in some tracks due to rising yields and interest rate environment, a change in trend in the prime rate track, and a stronger decline in the margin in the variable unindexed rate track starting in September 2022.



2. IDENTIFYING THE REFORM'S EFFECT

In this section, we aim to isolate the reform's specific impact on mortgage margins by examining the development of margins in different types of loans—residential mortgages and all-purpose loans secured by residential property. The underlying assumption is that although the reform applies to both types of loans, its impact on all-purpose loans will be weaker. This is because all-purpose loans are typically taken by customers who already have a mortgage on the property (in about 80 percent of cases). In such situations, the additional loan is almost always taken from the same bank where the existing mortgage is held, to avoid new collateral and underwriting procedures. This means that for customers with an existing mortgage who wish to take an additional all-purpose loan secured by residential property, there are operational constraints that limit their ability to conduct effective price comparisons. Therefore, it can be assumed that the reform's impact on competition in this segment will be relatively limited.

Figure 3 shows the development of mortgage margins, divided between residential and all-purpose loans. The figure shows that, in general, the margin on all-purpose loans is higher than that of residential mortgages. This is due to the aforementioned lower competition in these loans and the higher risk associated with loans taken for consumption purposes.



The figure also illustrates the difference between the series and the slight increase in the margin gap after September 2022. It shows that the decline in residential mortgage margins was stronger than that of all-purpose loan margins. Figure 3 does not account for differences in mortgage characteristics, which could be related to varying effects of the interest rate increase. Table 1 presents the average and median characteristics of the different mortgages. It shows that residential mortgages tend to be significantly larger than all-purpose loans, offer more tracks, and have higher payment-to-income and loan-to-value ratios.

To quantify the causal impact of the reform, we will use the "Difference-in-Differences" (DiD) method, which examines the change in pricing of residential mortgages compared to all-purpose loans. This analysis was conducted by estimating the following regression:

$$Spread_{ijt} = \alpha_j + \gamma_t + \sum_{t=-12}^{12} \beta^t D_t * treat_i + \theta X_{it} + \epsilon_{ijt}$$

Table 1 | Characteristics of New All-Purpose Loans and Residential Mortgages, September 2021–August 2023

	Reside	ential	All-Purpose		
	Average	Median	Average	Median	
Spread (percent)	1.93	1.88	4.17	4.25	
Number of borrowers	1.79	2.00	1.84	2.00	
Net income per househonds (NIS thousand)	25.05	19.96	22.97	19.77	
Principal amount (NIS thousand)	959	850	290	220	
Period to repayment (months)	294	312	250	240	
Number of tracks in the loan	4.04	4.00	2.88	3.00	
Payment to income (PTI) ratio (percent)	25.34	26.00	15.45	13.00	
Loan to value (LTV) ratio (percent)	54.23	56.72	36.16	39.00	
Portion of the loan linked to the CPI (percent)	29.07	27.78	35.97	33.33	
Portion of the loan at fixed interest (percent)	40.9	34.79	39.38	34.11	

Excluding mortgages indexed to foreign exchange and bullet/balloon tracks.

SOURCE: Based on Central Credit Register.

where $Spread_{ijt}$ is the weighted mortgage i spread of mortgage I issued by bank j in month t. treat is a binary mortgage that obtains the value 1 for a residential mortgage and 0 for an all-purpose loan secured by a residential property. X is a vector of specific characteristics for each mortgage: the size of the mortgage, the weighted average term to maturity of all tracks within the mortgage, the number of tracks, the loan-to-value ratio (LTV), the payment-to-income ratio (PTI), the log of household disposable income, the proportion of the mortgage at a fixed interest rate, and the proportion of the mortgage indexed to inflation. Additionally, the regression includes fixed variables for time, the lending bank, the location of the purchased property, and the purpose of the loan. The standard errors in the regression are clustered by mortgage purpose and month. D is a binary variable that takes the value of 1 for each month between September 2021 and August 2023, with the coefficient for August 2022 normalized to zero. The estimation shows the development of the difference between the margin on residential mortgages and that on all-purpose loans, excluding the influence of other factors, relative to the base month of August 2022.

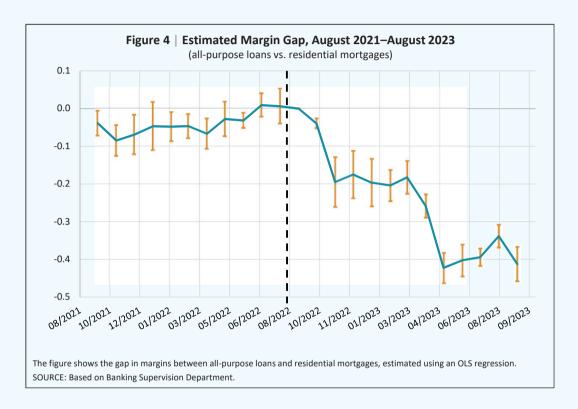
Figure 4 presents the coefficients β^h for each month, including a 95 percent confidence interval. The figure illustrates the change in interest rate margins over time. After the start of the reform (indicated by a dashed line), there is a noticeable decline of up to approximately 40 basis points in the margins on residential mortgages compared to all-purpose loans. The lack of statistical significance before the reform indicates parallel trends in both types of loans until the reform, and the sharper decline in residential mortgage margins compared to all-purpose loans after the reform provides evidence of its impact—enhancing competition and reducing margins.⁵

⁴ The selection of fixed and control variables in the regression is based on the analysis conducted by Presman and Tzur-llan (2019).

To mitigate concerns about selection bias and endogeneity in the comparison between all-purpose and residential mortgages, the robustness of the results was tested using the Propensity Score Matching (PSM) approach. This method reduces bias arising from differences between the treatment and control groups. The estimation results from the PSM sample align with those of the simple linear regression, reinforcing the assumption that the different characteristics of the mortgages do not skew the results.

Specifically, the analysis suggests that about 0.4 percentage points of the reduction in residential mortgage margins can be attributed to the reform's impact, equivalent to approximately NIS 260 per month for an average mortgage taken in September 2024.

REFERENCES



Presman, N. and N. Tzur-Ilan (2019). "Does Location Matter? Evidence on Differential Mortgage Pricing in Israel", Discussion Papers Series 2019.14, Bank of Israel Research Department.

⁶ A 30-year mortgage of NIS 1 million, based on the average interest rate and indexation distributions for that month.

BOX 4.2: THE WAR'S EFFECT ON THE DEBT BURDEN OF CONFRONTATION LINE RESIDENTS

- This box examines the impact of the conflict on the debt burden of residents in conflict zones by analyzing three main parameters: overdrafts, consumer loan balances, and credit card expenditures, distinguishing between localities that were evacuated and those that were not or were partially evacuated.
- Residents of conflict zone localities that were not evacuated experienced an increase in debt burden similar to borrowers in the rest of the country. In contrast, borrowers from evacuated localities reduced their consumer debt balances and overdrafts, possibly indicating the effectiveness of government assistance in alleviating the burden on evacuees. The impact was more pronounced in localities that were almost fully evacuated.
- The positive correlation between bank loans as a share of total consumer loans and the likelihood of reducing payment burdens suggests the effectiveness of banking relief measures in assisting the evacuee population.

This analysis examines the war's effect on confrontation line residents' debt¹, distinguishing between residents eligible for evacuation², who received economic assistance from the state³, and those who remained in their homes without receiving aid.⁴ The study is based on monthly data from the retail credit database⁵, and focuses on three key variables: overdraft balances from current accounts, consumer debt balances, and credit card expenditures (excluding interest). Examining these variables allows for an assessment of changes in household consumer debt and whether these changes resulted from shifts in current expenditures, which serve as an indicator of immediate private consumption, or from other effects of the conflict. The focus is on consumer debt, which is more dynamic, and does not include mortgages due to their relatively long-term and stable nature.

For the analysis, localities are divided into three geographic regions (according to the Home Front Command's definition): the north (Galilee, Golan, Haifa, and the Valleys), the south (Gaza Envelope, Lachish, Southern Negev and Central Negev, Eilat, the Jordan Valley, and the Arava), and the rest of the country. In the northern and southern regions, localities are classified into three categories based on the percentage of the population evacuated: localities/councils with no evacuation (0 percent), councils with partial evacuation (22–50 percent), and localities/councils that were almost fully evacuated (90–

¹ Overdraft balances from current accounts, and consumer credit.

² Residents received an instruction or recommendation from the government to evacuate.

The State provided evacuees with housing solutions, mainly using hotels, or grants for those who self-evacuated, alongside a response to other needs such as education and welfare. (For more discussion, see Chapter 7 in the Bank of Israel *Annual Report* for 2023.) We do not have a precise number of residents from areas that were not evacuated, who chose to self-evacuate. (This type of evacuation does not entitle residents to assistance from the government.)

Other than businesses that were harmed by the war, which received compensation (Property Tax and Compensation Fund for Businesses Regulations).

⁵ The calculations were based on data at the individual transaction level, and borrowers are private customers and sole proprietorships. The borrower's place of residence is determined based on the loan records, which are not necessarily consistent with the borrower's actual location during the war.

100 percent).⁶ This results in seven categories. Due to database limitations, which define a separate locality only for locations with over two thousand residents, smaller localities are included within the regional councils to which they belong. Therefore, evacuation rates for these localities are calculated at the regional council level.

As of September 2023, the database included approximately 5.2 million customers with consumer loans, overdrafts, or credit card expenditures, with about 700,000 (13 percent) in the south and about 1.2 million (24 percent) in the north. Borrowers residing in evacuated localities constitute about 6 percent of borrowers living in the southern and northern regions. Appendix A presents the average, median, and standard deviation of each target variable according to the seven categories before the conflict (September 2023). It appears that before the conflict, debt levels in evacuated localities were higher than in those that were not evacuated, corresponding to the socioeconomic level of residents in these areas, which will be discussed further. Partial evacuation areas were particularly notable, with debts 13–19 percent higher than in areas that were not evacuated. In fully evacuated areas, the values were more moderate—only 5–8 percent higher than in nonevacuated areas. Overall, debt levels in the south were higher than in the north. However, the proportion of borrowers with overdrafts was not higher in evacuated localities.

Evacuation areas are characterized by a unique socioeconomic composition, with a high proportion of rural localities, especially kibbutzim and moshavim, whose socioeconomic indicators—including academic education rates, employment, and income from salaried work—are stronger than those of urban localities.⁷ These differences affect debt patterns and credit usage, as observed, for example, in response to interest rate hikes since April 2022: residents of more affluent localities tended to reduce new debts and repay existing ones, while residents of weaker localities took on additional credit.⁸

To neutralize the impact of socioeconomic differences on the analysis of target variables (overdrafts, consumer debt, and credit card expenditures), we first control for the influence of socioeconomic differences between localities using an OLS regression, where the observations are transactions of all types for the period from January 2023 to September 2023, reported monthly. The dependent variable is one of the three target variables, and the explanatory variable is the socioeconomic index in interaction with an indicator of whether the borrower is a household or a sole proprietorship. After neutralizing the influence of the socioeconomic index using the regression coefficients, we divided the data into the seven defined categories and normalized them relative to January 2023 as a reference

⁶ According to the Knesset Research and Information Center (December 2023), about 84 percent of residents who lived in northern localities that were included in the evacuation programs were actually evacuated.

⁷ For more discussion, see Chapter 7 of the Bank of Israel *Annual Report* for 2023.

For more discussion, see Box 4.2 of the Bank of Israel *Annual Report* for 2023.

⁹ Excluding outlier observations (99.5 percent and 0.5 percent).

¹⁰ The socioeconomic state is measured using the socioeconomic clusters assigned for each locality by the Central Bureau of Statistics. The clusters range from 1 (worst socioeconomic conditions) to 10. We define x as an ordinal variable based on this index for each borrower.

¹¹ The results of the three regressions indicate a statistically significant link at a significance level above one percent. The results of the coefficients for households are: 0.013 (consumer loans), 0.019 (overdraft), and 0.056 (credit card payments). For sole proprietorships, the results are: 0.020 (consumer loans), -0.007 (overdraft), and 0.05 (credit card payments.

point. Figure 2 presents the development of the normalized indices from January 2023 to December 2024, divided into the northern region (top graphs) and the southern region (bottom graphs).

From the onset of the war until December 2024, there was a continuous increase in consumer debt among nonevacuated conflict zone residents. In the north, debts grew by 2.3 percent until October¹², and in the south, they increased by 2.8 percent, higher than the 1.3 percent increase in other parts of the country. Overdrafts showed a different pattern: decreases at the beginning of the conflict, followed by increases in the second half of the year, especially in the south (4.8 percent compared to 2.8 percent in the north). Credit card expenditures generally trended upwards, with declines at two points in time—at the start of the conflict (mainly in the north) and in the third quarter of 2024, when fighting intensified in the north.

In contrast to residents who remained in conflict zones, the debt balances of the evacuated population declined after the conflict began. In the north, consumer loan balances of residents from almost fully evacuated localities dropped by 5.4 percent, compared to a more moderate 3.5 percent decrease in partially evacuated localities¹³, with these declines spread throughout the year. There was a similar pattern with regard to overdrafts—a 29 percent decline in fully evacuated localities compared to a 21 percent decline in partially evacuated ones, again throughout the year, but more pronounced in the early months of the conflict. Among borrowers with overdrafts before the war, a significant portion—17 percent in fully evacuated localities and 12 percent in partially evacuated ones—exited this status during the conflict (Appendix B). Both groups of evacuees showed similar reductions of about 5 percent in credit card expenditures over the period.

There was a similar pattern in the south: The extent of the decline in overdrafts and consumer loans in almost fully evacuated localities was more significant than in partially evacuated ones, despite similar patterns in credit card expenditures. This phenomenon highlights the differential impact of the extent of evacuation on debt burden, beyond its effect on current consumption patterns. However, unlike in the north, there was a turning point in the south in the middle of the year. The debt burden of evacuated residents began to rise again, likely due to their gradual return home. ¹⁴ Such a turning point was not observed in the north, where most residents had not yet returned home. ¹⁵

The findings indicate a significant difference between the financial state of the evacuated population and those who remained in conflict zones. While those who stayed increased their debt burden, similar to other areas of the country, evacuees managed to significantly reduce their consumer debts and overdrafts. Based on the available data, it is difficult to assess the relative contribution of factors leading to the reduction in debt burden among evacuees—reduced private consumption, government assistance provided to them, and whether they were able to continue their regular work.¹⁶

¹² A ceasefire agreement in the north was signed in November 2024.

¹³ In the group of localities where 22–50 percent of residents were evacuated, the rate of decline in consumer loans began even before the start of the war—as was the case in the "rest of the country"—but at higher rates.

¹⁴ As of January 2025, most southern localities that had been evacuated were defined as "nothing preventing their return". For 13 localities, the return of residents is still prevented for security or reconstruction reasons.

¹⁵ As of January 2025, according to an Information and Knowledge Center report, all northern localities that were evacuated are still defined as evacuated. The assessment is that 25 percent of these evacuees have returned to their homes.

¹⁶ We do not have data on the percentage of evacuees that continued their normal work.

First-degree residents¹⁷ received assistance from the banking system as well—loan deferrals without interest and fees, exemption from most banking fees for three months, and zero interest on overdrafts up to 10,000 shekels. Some banks even extended this framework.¹⁸ By the end of 2023, repayments were deferred for about 5 percent of consumer loans and about 10 percent of mortgages. By November 2024, these rates had significantly declined to 0.8 percent and 2 percent, respectively. The link between payment deferrals and debt burden relief is underscored by the finding that about 32 percent of borrowers in evacuated localities (fully or partially) who reduced their total debts (consumer + overdraft)¹⁹ took advantage of the option to defer payments on consumer and/or housing credit, compared to about 20 percent of borrowers from nonevacuated localities who reduced their debts.

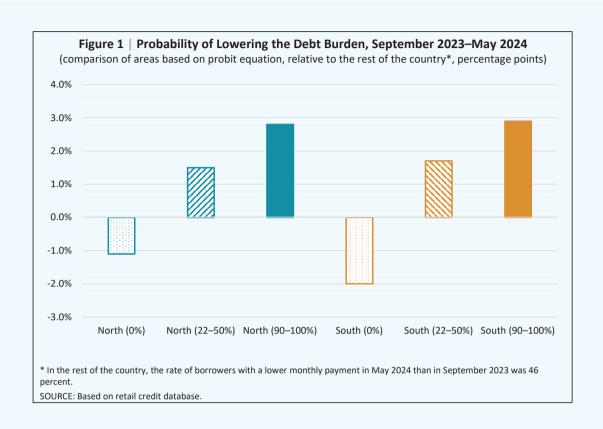
To reinforce our findings, we estimated the probability of reducing the monthly payment on consumer loans between September 2023 and May 2024 using a probit regression model.²⁰ The average marginal effects derived from this regression indicate a positive and significant relationship between the evacuation rate and the likelihood of payment reduction: the higher the evacuation rate in a community, the greater the likelihood of reducing the monthly payment. Another significant factor that we found was the proportion of bank loans as a share of total consumer loans. A one percentage point increase in the proportion of loans taken from banks increased the likelihood of reducing the current payment burden by 0.32 percentage points. This finding supports our conclusion regarding the significant contribution of banking relief measures to reducing the debt burden among the evacuated population.

¹⁷ Those defined as living or working within 30 km of the Gaza Strip, and in northern localities within 5 km of the border, residents evacuated from their homes by an official state agency, people mobilized for reserve military service, or those who are first-degree relatives of war victims or hostages or missing individuals.

 $^{^{18}}$ For more discussion, see Section 4 in Chapter 4 of the Bank of Israel Annual Report for 2023.

¹⁹ Between September 2023 and May 2024 (the month in which the turnaround in the volume of debt took place).

The probit equation is : $(P(Y=1|X)=\Phi(\beta 0+\beta 1X)$, where the dependent variable Y denotes whether the monthly payment was lower in May 2024 than in September 2023 (Y=1). The explanatory variables X include the percentage of bank loans as a share of the borrower's total consumer loans, the locality's socioeconomic index, and an evacuation area category, where $\Phi(.)$ denotes the cumulative function of the normal distribution. The model was estimated on a sample of about 1.66 million observations, weighted by the debt balance in September 2023. All of the coefficients were found to be statistically significant at a level above 1 percent.





Appendix Table 1 | Theoretical statistics of outstanding consumer loans, overdraft balances, and credit card payments (excl. interest), by region, Sept. 30, 2023

	Region	Evacuation status	Average	Median	Standard deviation
Outstanding consumer loans per customer	North	Not evacuated	109,171	70,100	117,871
	South	22-50% evacuated	119,805	74,800	131,052
		90-100% evacuated	112,571	72,215	119,723
		Not evacuated	105,159	67,200	115,266
		22-50% evacuated	131,230	86,600	135,435
		90-100% evacuated	119,290	79,850	121,921
	Rest of country		106,163	66,057	118,969
	North	Not evacuated	16,373 (38%)	6,800	29,995
Overdraft balance per		22-50% evacuated	18,064 (29%)	8,550	29,491
customer (rate of	South	90-100% evacuated	16,723 (40%)	8,000	28,492
borrowers with		Not evacuated	15,514 (37%)	6,800	27,479
overdrafts appears in parentheses in the		22-50% evacuated	18,020 (32%)	9,600	28,063
"average" column)		90-100% evacuated	16,956 (34%)	8,250	28,710
average column)	Rest of country		15,956 (30%)	6,780	28,347
Credit card payments (excl. interest) per customer	North	Not evacuated	21,727	15,100	21,305
	South	22-50% evacuated	27,045	20,835	22,903
		90-100% evacuated	21,497	16,100	19,487
		Not evacuated	22,402	16,160	21,076
		22-50% evacuated	29,519	22,735	24,922
		90-100% evacuated	24,626	18,935	21,415
	Rest of country		27,402	20,240	24,702

Appendix Table 2 | Rate of borrowers by the state of overdraft in their account, compared to two time points (Sept. 30, 2023 and May 31, 2024), where 0 is a lack of overdraft, and 1 is the existence of an overdraft

Region	Evacuation status	From 0 to 0	From 1 to 0	From 1 to 1	From 0 to 1		
North	Not evacuated	51.5%	9.5%	27.3%	8.0%		
	22-50% evacuated	63.2%	11.8%	16.9%	5.8%		
	90-100% evacuated	52.2%	16.9%	21.8%	4.9%		
South	Not evacuated	53.2%	9.4%	25.8%	7.6%		
	22-50% evacuated	60.0%	11.5%	20.0%	6.2%		
	90-100% evacuated	59.2%	14.6%	17.7%	5.0%		
Rest of country		60.6%	8.5%	20.3%	7.7%		

BOX 4.3: DEVELOPMENT OF THE SECURITIZATION MARKET IN ISRAEL (IN VIEW OF THE SUBMISSION OF THE PROPOSED BILL)

- Securitization is a process where illiquid assets—such as mortgages, consumer loans, commercial debts, auto loans, and more, owned by an originator (banks, nonbank entities, and companies)—are pooled together and converted into tradable securities through a "special purpose vehicle" (SPV). This is done in exchange for cash, transferring credit risks to investors—both institutional and the general public—and freeing up capital for other activities of the originator.
- Securitization is a key financial tool for increasing liquidity and reducing credit risks. In the United States, the securitization market is well-developed and extensive, particularly in mortgages and consumer loans. In Europe, the market is gradually expanding, focusing on the securitization of mortgages and auto loans.
- Israel lacks a comprehensive legal framework for securitization, leading to regulatory uncertainty, hindering market development, and restricting the expansion of nonbank credit.
- In 2024, a securitization bill was proposed to the government, inspired by European regulation (SECR 2017), aiming to regulate the market and create a clear legal framework while maintaining financial stability.
- The bill is based on a draft proposed by an interministerial team (2015) with representatives from the Bank of Israel, the Ministry of Justice, the Securities Authority, the Tax Authority, and the Ministry of Finance. This team recommended a comprehensive legislative solution regarding securitization transactions and the securitization market as a whole.¹ The development of this market is intended to promote competition in the financial system and make funding sources more accessible and affordable, particularly for small and medium businesses and households.²

In 2024, a securitization bill was proposed to the government, aiming to "provide the legal and economic certainty required to ensure the proper functioning of the securitization market in Israel, thereby improving resource allocation in the economy and enhancing the efficiency and competitiveness of credit markets, all while maintaining the stability of Israel's financial system." Given the potential inherent in the securitization market and its expected impact on both the credit and capital markets, this Box presents the basic concepts in the field of securitization and highlights how the proposed regulation in Israel addresses the risks associated with its development, in light of international experience.

Securitization transactions are a financial process in which illiquid assets such as loans, mortgages, commercial debts, and even municipal tax payments—referred to as "backing assets"—are pooled together by an originator (banks, nonbank entities, and companies) and converted into tradable debt securities (bonds). This is done through a "special purpose vehicle" (SPV) for the securitization process (as illustrated in the Figure). The use of an SPV is intended to allow investment where the risk is limited

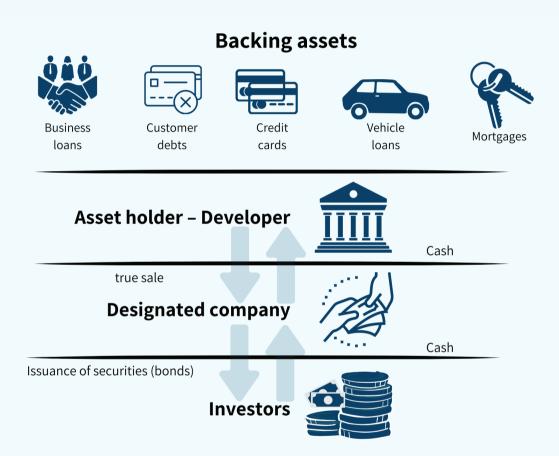
¹ The current bill incorporates principles from the European Union's Securitization Regulation (Regulation (EU) 2017/2402), resulting from a comprehensive learning process and the application of lessons from the Global Financial Crisis (GFC) of 2008.

² For more on the securitization markets' potential implications for the financial system, see Box 4.2 in Chapter 4 of the Bank of Israel Annual Report for 2014.

³ https://www.gov.il/he/pages/dec2097-2024 (in Hebrew).

to the backing assets alone, without the risk associated with investing in the originator itself, as would be the case with corporate bonds. For this purpose, the securitization transaction must be conducted as a full "true sale" of the backing assets, legally and financially separate from the originator. This process enables originators to convert illiquid assets on their balance sheets into cash, thereby freeing up capital for other activities and reducing their credit risks, while transferring these risks to investors—institutional or the general public—according to their demand.

The proper existence and development of the securitization market can contribute to creating an attractive funding source for the real economy. Through securitization transactions, individuals and



commercial entities (including small and medium businesses) seeking loans may gain access to credit under more favorable conditions than they would receive in the absence of a securitization market. This is due to the potential for broader distribution of credit risks by lenders in financial markets. Securitization also allows for the pooling of numerous exposures into a single instrument, creating standardization

and risk diversification within the issued instrument, thereby expanding the demand from potential financiers.⁴

Global experience in securitization, based on two main models—the American and the European—supports these arguments and demonstrates the many advantages of a regulated and supervised securitization market, which is built gradually and in a controlled manner.⁵

In the US: Modern securitization began to develop in the 1970s in response to the growing need for housing finance. The market gradually expanded to various asset classes, such as auto loans, credit card loans, student loans, commercial assets, and even future flow securitization. While securitization significantly reduced financing costs and improved access to housing credit, it also had its failures. Securitization played a significant, albeit indirect, role in the 2008 Global Financial Crisis (GFC). Following the default of subprime loans, the widespread sale of mortgage-backed securities (MBS) triggered liquidity crises, leading to bank failures in the US and beyond. Complex securitization processes and a lack of transparency in transaction structures exacerbated the risk, as many investors were unaware of their full exposure to problematic assets. This experience showed that while securitization as a financing technique is not inherently risky, selecting flawed or overly complex backing assets and a lack of transparency can make it a catalyst for crises.

However, from a perspective of about two decades since the GFC, securitization remains an important tool in financial markets. Its volume in the US (as of 2023) is estimated at about 50 percent of GDP, second only to US Treasuries (98 percent of GDP). The crisis did change how securitization transactions are conducted, with an emphasis on risk management and increased regulation in the US (supported by the government)⁷ and especially in Europe, where legislation has served as a foundation for the proposed legislation in Israel.

In Europe: Securitization began to gain momentum in Europe only in the late 1980s, and unlike in the US, it progressed at a slower pace, primarily due to legal and regulatory variations across different countries. The 2008 Global Financial Crisis had a significant impact on securitization processes in Europe. This impact was reflected in 2017 with the introduction of comprehensive regulation (SECR), aimed at creating a reliable and transparent securitization market. The regulation included a new mechanism to distinguish between simple, transparent, and standardized (STS) products, which are traditional backing assets (mortgages, auto loans, and commercial loans) that received preferential treatment in financial institutions' capital requirements and were incentivized as high-standard investment instruments for the public—versus complex and nonhomogeneous products (such as CMBS). Within this framework, clear rules were defined for recommended risk management in securitization transactions—tranching requirements⁸ in the issuance of debt securities, prohibition of resecuritization, risk retention

⁴ See the 2020 report by the Israel Securities Authority.

⁵ For more discussion, see "Effects of the securitization market on the financial system" in Box 4.2 of Chapter 4 of the Bank of Israel Annual Report for 2014.

⁶ G. Gorton and A. Metrick (2013).

⁷ L. Schwarcz (2015).

⁸ In securitization issuances, the securities can be divided into tranches, which reflect various mixes of yield and risk as a result of the order of payments that must be received from the backing assets.

requirements for originators to address moral hazard issues, limiting the investor population to "qualified" investors only, and increasing transparency and reporting requirements.

The securitization market in Europe is steadily developing, but its scale is still much smaller than in the US: only 6 percent of GDP by the end of 2023. This is likely due to the gradual adaptation to the regulatory framework or the influence of structural and macroeconomic factors.

Residential mortgages dominate the European securitization market (54 percent, compared to 81 percent in the US), with auto loans (16 percent), loans to small and medium enterprises (15 percent), and consumer loans (12 percent) following. Most securitizations in Europe are held by banks (about 84 percent), unlike in the US, where about 70 percent of securitization certificates are held by institutional investors. Beyond the regulatory framework differences, two main factors underlie the differences between Europe and the US. First, the debt structure (a smaller weight of the corporate bond market and a preference for retaining consumer credit exposures on European banks' balance sheets, alongside extensive use of covered bonds¹0) reduces the incentives for securitization by the banking system. Second, the extensive activity of the US securitization market is based on and supported by public guarantee programs, which play a much more significant role than in Europe: government-supported entities (GSEs) like Fannie Mae and Freddie Mac are responsible for about 81 percent of securitization transactions. In contrast, the European Investment Fund (EIF) guarantees for securitized products average about €2−3 billion per year (2013–2023), which is only about 1−2 percent of the total transaction volume.

In Israel: The prevailing view regarding the desired development of the securitization market in Israel—shaped over the past two decades and influenced by the European market's characteristics (absence of government guarantees)—led to the conclusion that a regulated, transparent, and simple securitization market, based on a regulatory framework that helps investors understand the risks and opportunities involved in relevant transactions, could significantly contribute to resource allocation in the economy and the local capital market.

Currently, Israel lacks a comprehensive legal framework governing the field. This situation creates legal, accounting, and tax uncertainties, which have been a major barrier to the development of a proper securitization market. Efforts to regulate and promote the securitization market began as early as 2005 with the "Haimovitz-Asher" committee, which highlighted the urgent need for legal regulation to provide certainty and reduce barriers to market development. However, only in 2024, based on the draft proposed by the interministerial team (2015), was a bill introduced to the government (Ministerial Committee for Legislation). According to the bill, a securitization transaction in Israel would be defined as a transaction where the originator transfers backing assets to a special purpose vehicle (SPV), which issues debt securities backed by these assets and, in return, transfers the funds received from their issuance to the originator. The securities can be issued as a public offering or to specific purchasers, and must be issued in at least two different transhes. The current draft separates securitization transactions in Israel from other asset transfer transactions, such as syndication deals (approximately NIS 154 billion),

⁹ For more discussion on the concentration of issuances and the heterogeneity between EU countries in the basis of the backing assets, see the ESMA report of December 2023, and the SUERF 2024 report.

¹⁰ Collateral-backed bonds. These are securities in which the issuers (governments and companies) give investors liens at various collateral levels, from deposits to loans and mortgages at various risk levels. The volume of covered bonds in Europe was about €3 trillion at the end of 2024.

loan sales (NIS 15 billion), or synthetic transactions¹¹ (currently relatively negligible) and allows both markets to coexist. The bill draws significant inspiration from the European Securitization Regulation (EU 2017/2402), including defining the identity of potential originators, investors, the requirement for tranching, separation between transactions in simple backing assets and complex, nonhomogeneous transactions, risk retention requirements by originators, transparency, and more, while adapting the legislative tools to the local reality and addressing the lessons of the crisis.

To date, experience in the field of securitization in Israel is very limited. In the past, there were a few initiatives to issue municipal bonds¹² by local authorities to raise credit from institutional investors such as pension funds and insurance companies. These issuances received limited response, mainly due to the complexity of the process and concerns about reorganizing the local budget. The few securitization transactions that have been conducted in Israel have focused on leasing and income-producing real estate and were based on specific legal opinions without comprehensive regulation. However, in recent years, there has been some change. Nonbank financing companies have begun to engage in activities similar to securitization, but on a small scale and in a manner that does not yet comply with the regulatory rules intended to come into effect. These processes reflect the growing need for an advanced capital market in Israel and indicate the potential development of the securitization field following the enactment of the proposed legislation. In particular, securitization can bridge the funds held by institutional investors, which are rapidly expanding, with the sectors and areas in need of credit, while integrating the capabilities of banks and nonbank credit providers in operations and interactions with borrowers.

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¹² Schwartz (2018).

¹¹ Synthetic securitization is a process in which credit risk is transferred to investors through financial instruments such as derivatives or guarantees, while the assets themselves remain under the ownership of the issuer (the originatgor).