Survey of the Banking System – First Half of 2019

Introduction

During the reviewed period, the banking system continued to improve its performance, maintain its level of resilience and stability, and support economic activity. These results were directly attributable to the efficiency measures carried out by the banking system in recent years, which have included a major reduction in manpower, savings in real estate costs, and the improvement of internal processes, alongside the assimilation of technologies in customer and operational interfaces. In short, there has been an improvement in the banking production function without any major adverse effects during the reviewed period. Among other things, the banking groups' performance reflects developments in the housing market, the increase in the CPI, and the appreciation of the shekel, as well as the separation of the credit card companies from the two largest banking groups.[1]

The streamlining of the banking system in recent years led S&P Global Ratings to raise the classification of the Israeli banking system to the higher-quality Risk Group 3 category, which includes such countries as the US, UK, France, Australia, and Holland. This change in classification provides a higher anchor for the ratings of the banks in Israel (the starting point for rating). Among the factors leading to this decision according to the rating agency are the supportive economic environment in which the banks operate, a stable financing base that relies on core retail deposits, and the high level of banking supervision and regulation in Israel.

The business results of the banking groups showed improvement in most indices, which was reflected in an adequate return on equity level (10.7 percent) and an improvement in the efficiency ratio to 58 percent (expense to income ratio), a very low level relative to recent years. Net interest revenue contributed significantly to the increase in net profit for all the banking groups, which was the result of stronger core activity and the expansion of credit to the public (the "quantity effect"). The separation of the credit card companies had both positive and negative effects on net profit, which tended to offset one another. Thus, while revenue from fees fell sharply this year, other financing income rose as a result of the proceeds from the sale. On the cost side, there was a slight improvement as a result of the reduction in past provisions for investigations by the US authorities, the separation of the credit card companies, and the continuing streamlining in the system. In this context, the efficiency ratio declined significantly this year and converged to a level of 58 percent, compared to 67 percent in 2016.

[1] As part of the implementation of the Increasing Competition and Reducing Concentration in the Israeli Banking System Law (the "Strum Law").

Total credit to the public continued to grow this year, and facilitated the continued expansion of economic activity. It grew by 3.8 percent this year, which is similar to the average in recent years and slightly higher than the economy's rate of growth. The developments in the credit portfolio are similar to those observed last year, reflecting developments in the housing market, with steady provision of banking credit to home buyers and to construction and real estate companies (for further details on mortgages, see Box 1), and in the banks' policy to increase exposure to the business sector (which is weighted by higher risk weights) once they had reached their capital targets. Credit to private individuals remained unchanged following several years of growth[2], in view of various measures introduced by the Banking Supervision Department in this context with the goal of ensuring fair practices in the marketing of credit.

All of the Israeli banks recorded an improvement this year in the Common Equity Tier 1 Capital ratios and they exceed the capital targets set by the Banking Supervision Department. The achievement of the capital targets is a direct result of the banks' ongoing implementation of measures to improve their capital ratios, as part of the lessons learned from the Global Financial Crisis and the requirements and measures introduced by the Banking Supervision Department. The Common Equity Tier 1 Capital ratios of the banking groups increased again this year, to 11.3 percent. This increase during the reviewed period was affected by one-off events, including the separation of the credit card companies, which worked to reduce the quantity of risk-weighted assets, and the temporary halt in the distribution of dividends among some of the banking groups.

The quality of the banking groups' credit portfolio remained high, reflecting the stable economic situation. The rate of impaired credit remains low in historical terms and the coverage ratio remains high, evidence of an improved ability to absorb losses. Nonetheless, the rate of credit losses grew somewhat, as a result of the drop in collection from midsized and large businesses.

The bank share indices continued to reflect over-performance relative to the Tel Aviv 125 Index, and also relative to the bank share indices in the US and Europe, an indication of investors' continued confidence in Israeli banks. This is based on healthy profitability, high levels of equity, and the high quality of the credit portfolio. At the same time, there was a downward trend in the spreads on the banks' bonds, as there was among corporate bonds in other industries, with the spreads on the banks' bonds remaining much narrower than other industries. In this context, and in view of the fact that real yields on government bonds have been trending downward since the end of 2018, and were even negative since the beginning of 2019, the index of real yields on the banks' bonds reached negative levels during the year. This resulted in the first bond issued by an Israeli bank (First International) with a negative real yield (-0.1 percent).

[2] Not including the separation of the credit card companies from the largest banks. If this effect is included, there was a large decline, although it is technical in nature.

The banking system continued to increase its readiness for changes in technology, the business and competitive environment in which they operate, and consumer preferences. In addition to the conventional financial risks, including credit, market, and liquidity risks, the banks have to deal with new and growing risks, chiefly cyber and technology risks. These risks have been realized in many organizations abroad, and involve data breaches, a threat to business continuity, regulatory fines for the violation of privacy, etc. There is also the risk arising from increasing competition from nonbank entities, including the possible entry of technological giants into the banking services market in Israel. Looking to the future, and in addition to the technological risks that may materialize, the changes in the global macroeconomic environment due to the trade war, an increase in economic uncertainty, and an increase in the volatility of the financial markets may affect the banks' results. An analysis carried out by the Banking Supervision Department indicates that the banks are prepared for various stress scenarios from the standpoints of equity and liquidity.

1. Business results and efficiency

The net profit of the five largest banking groups grew significantly during the first half of 2019 relative to the same period last year (Table 2). **The banks continued to show adequate profitability and the return on equity stood at about 10.7 percent (in annual terms), the highest level since the last financial crisis in 2008** (Figure 1). The business results of the banking system during the first half of 2019 were a result of growth in net interest income (8.5 percent) and a decline in operating expenses (of about 3 percent). On the other hand, there was a drop in revenue from fees (of about 7 percent), alongside an increase in credit losses (of about 33 percent), although its proportion of expenses remained relatively low from a long-term perspective (for further details, see the section on credit).

The increase in net interest income encompassed all of the banking groups, and was primarily the result of an increase in the volume of credit that the banks provided to the public, as well as growth in income from other interest-bearing assets, including bonds, which contributed to a moderate increase in the financial spread (Table 3 and Figure 2). Similarly, **interest income grew even though the proportion of income from credit activity remained basically unchanged in the various activity segments (and even fell somewhat in the business segments). The interest rate gap[3] declined relative to the same period last year**, due to the growth in the banks’ rate of expenses on the public’s deposits, which was higher than the increase in the banks’ rate of income from credit to the public (Figures 3 and 4).

Noninterest financing income grew by about 2.5 percent relative to the same period last year, and was positively affected by the sale of shares by Leumi group, and negatively affected by a drop in income from fees (of about 7 percent), due to the separation of Leumi

[3] The gap between the rate of interest income on credit to the public and the rate of interest expenses on the public’s deposits.

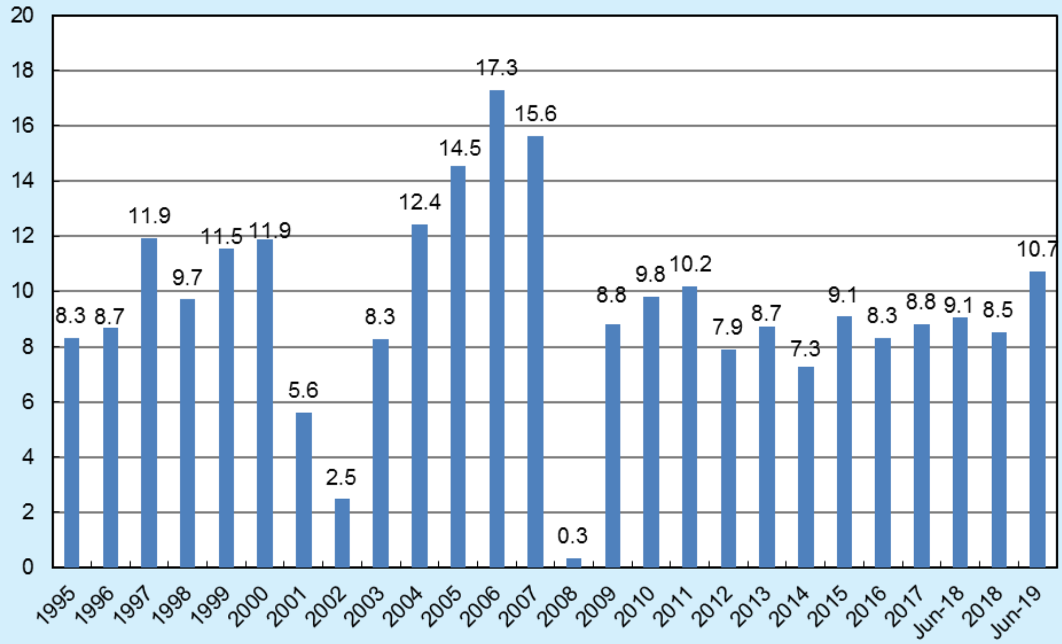
Card from the Leumi group. Net of this effect, income from fees remained basically unchanged (a drop of 0.8 percent). **Operating expenses fell by about 3 percent relative to the same period last year, a decline that encompassed most of the banking groups.** The decline in operating expenses is due to a one-off expense for investigations in the US recorded by the Mizrahi group last year[4], as well as the sale of Leumi Card by the Leumi group. Net of these one-off effects, operating expenses increased by about 2 percent relative to the same period last year. Salary and related expenses increased slightly (1.4 percent), due mainly to the positive results of the banking groups during the reviewed period.

Operating efficiency indices for the five largest banking groups continued to improve this year and were positively affected by factors that influenced the banking system's results. The operating efficiency ratio[5] declined from about 64 percent[6] to about 58 percent and the cost of a unit of output[7] fell from about 2.01 percent to about 1.82 percent (Table 5 and Figure 5). The improvement in the efficiency ratios encompassed all five banking groups and, as in previous years, was due to the more rapid growth in the banks' income than in their costs (Figure 6). The improvement in the efficiency indices is a result of the streamlining by the banking system in recent years with the encouragement of the Banking Supervision Department, which began with the Banking Supervision directive on streamlining in 2016. During the reviewed period, these results were highlighted by the absence of excessive negative effects.

[4] During the same period last year, the Mizrahi group recorded a provision of NIS 425 million due to the investigation by the US Department of Justice.
[5] The ratio between total operating and other expenses and total net interest and noninterest income (cost to income ratio).
[6] Excluding provisions by the Hapoalim and Mizrahi-Tefahot groups last year, the operating efficiency ratio stood at about 61.8 percent in June 2018.
[7] The ratio between total operating and other expenses and total average assets (average cost ratio).

The return on equity increased during the reviewed period.

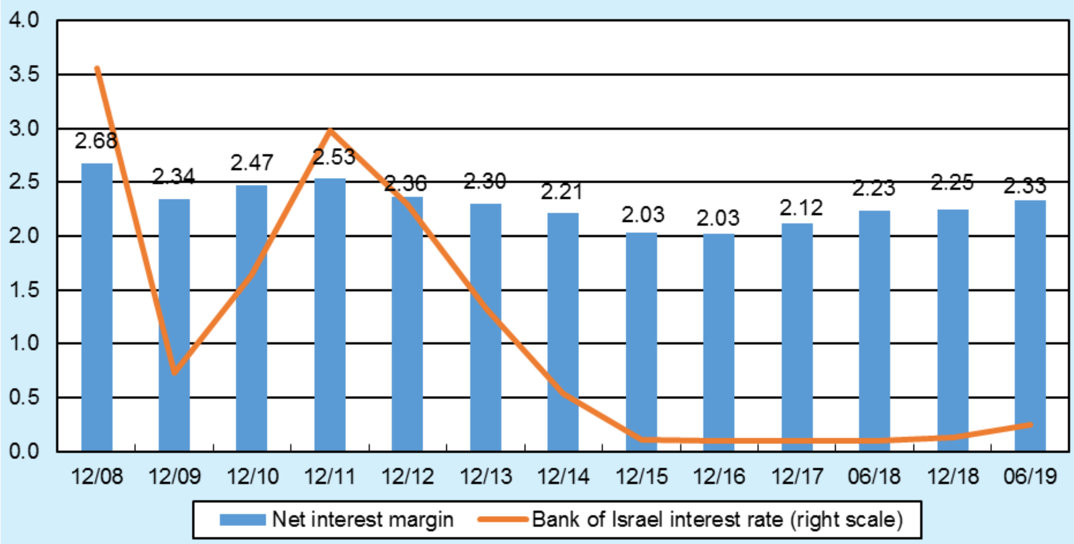
Figure 1
Return on Equity (ROE) After Tax, the Five Banking Groups, 1995–June 2019
(percent)



SOURCE: Based on published financial statements.

The net interest margin increased slightly, mainly as a result of growth in income from interest-bearing assets.

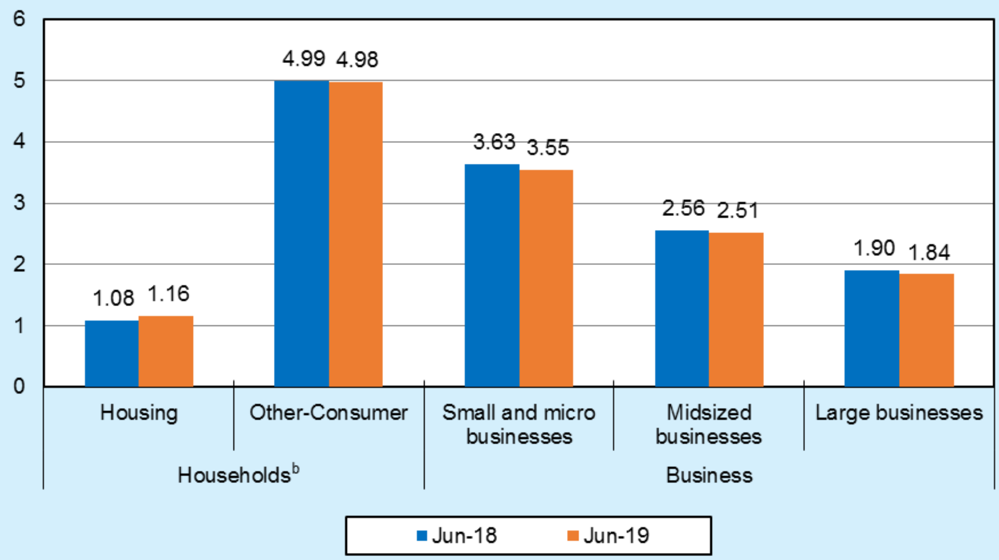
Figure 2
Net Interest Margin[a] and the Bank of Israel Interest Rate[b], the Five Banking Groups, 2008–June 2019 (percent)



[a] The ratio between net interest income and total monetary assets that generate financing income.
[b] Yearly average. The data for June are calculated as a 3-month average.
SOURCE: Based on published financial statements.

The rate of income from credit activity remained virtually unchanged in the various activity segments.

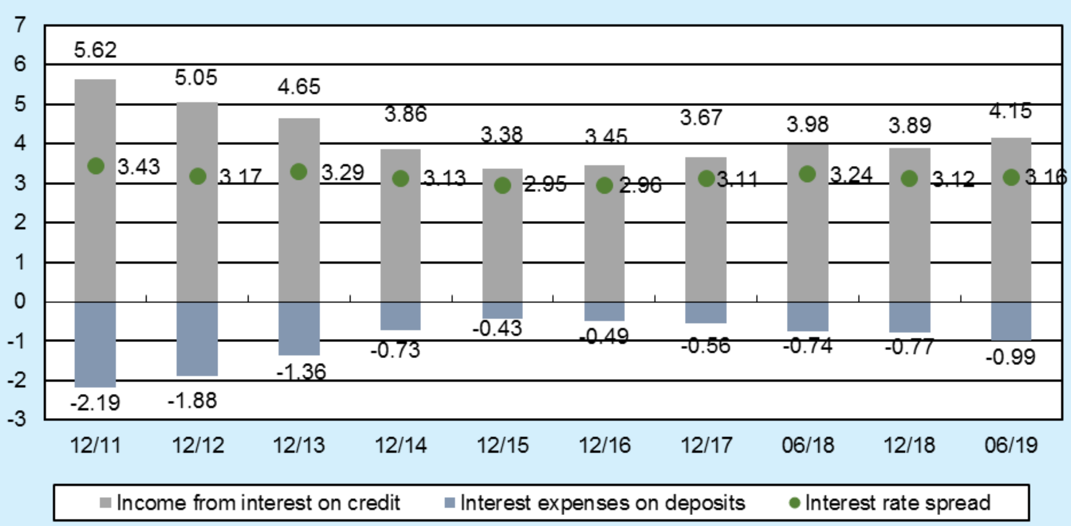
Figure 3
The Credit Operating Margin Relative to the Average Balance of Credit to the Various Activity Segments[a], the Five Banking Groups, June 2018 Compared with June 2019 (percent)



[a] The data relate to activity in Israel, and do not include the financial management segments, others, or adjustments.
[b] "Households" does not include private banking.
SOURCE: Based on published financial statements.

The interest rate gap narrowed relative to the same period last year.

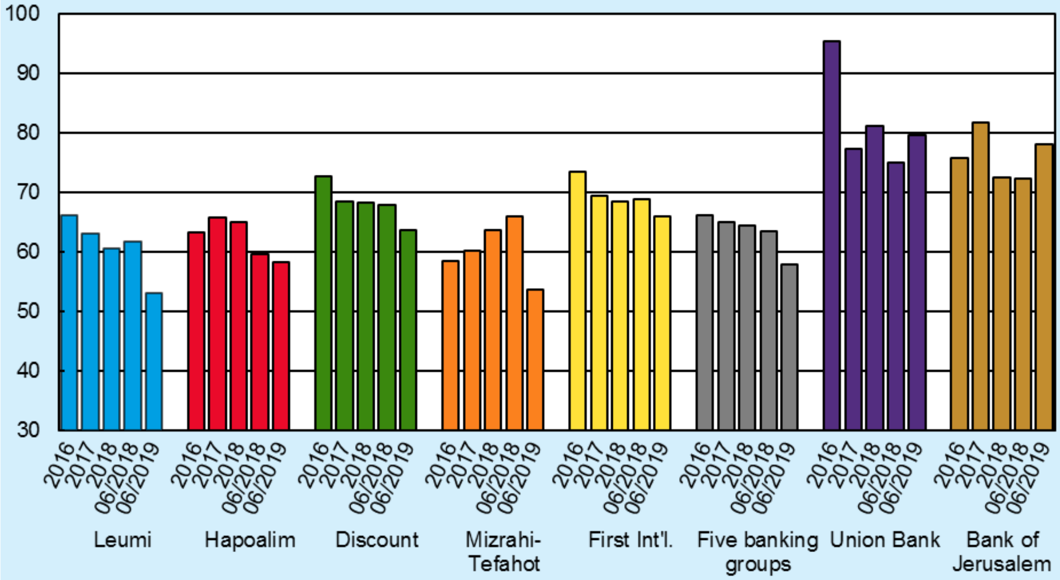
Figure 4
Income from Interest on Credit to the Public, Interest Expenses on the Public's Deposits, and the Interest Rate Spread, the Five Banking Groups, 2011–June 2019 (percent)



SOURCE: Based on published financial statements.

The banks are continuing the trend of improving the efficiency ratios that has characterized recent years.

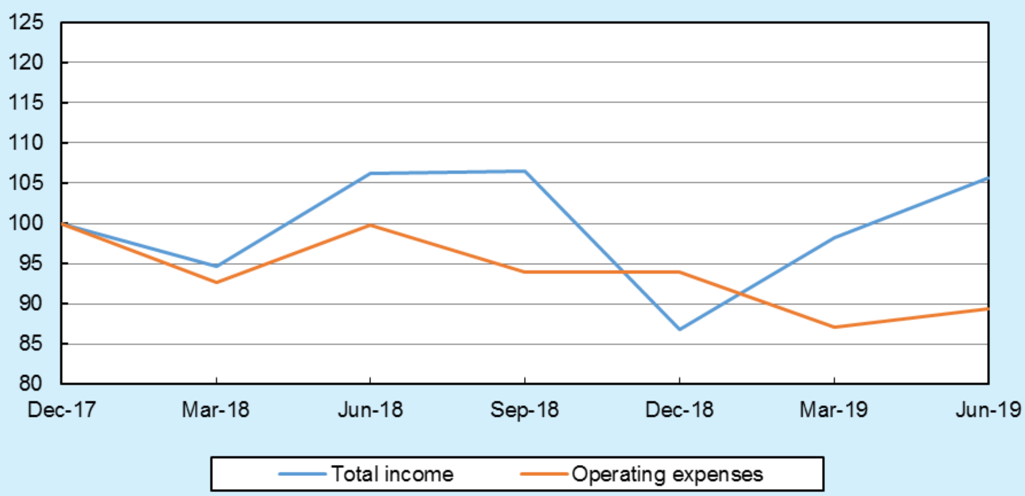
Figure 5
Efficiency Ratio[a] in the Banking System, 2016–June 2019 (percent)



[a] The ratio between total operating and other expenses and total net interest and noninterest income (cost to income).
SOURCE: Based on published financial statements and reports to the Banking Supervision Department.

The improvement in the efficiency ratios was due to an increase in income as well as a continued decline in operating expenses.

Figure 6
Development of Income and Operating Expenses[a], the Five Banking Groups, 2017–June 2019 (index: December 2017=100)



[a] The income side includes net interest income and noninterest income. The expenses side includes total operating and other expenses (excluding loan loss provisions).
SOURCE: Based on published financial statements.

2. Risks to the banking system

The banking system, by its nature, faces a number of risks that have been evolving in recent years. Overall, the banking system's risk level has declined in recent years, due to its strengthening of capital buffers, liquidity, and profitability, factors that are important during periods of recession and crisis. However, at the same time, new risks are developing. Thus, financial/business risks in banking are on a downward trend, both in Israel and abroad, in view of the lessons learned from the last global financial crisis and the years that followed it, during which the Banking Supervision Department devoted major attention to these risks in the analysis and formulation of regulations designed to strengthen their management. These include credit risk, market risk, and liquidity risk, as well as the risk involved in cross-border activity, compliance risk, legal risk, and operational risk. At the same time, new risks due to changes in the banks' operating environment are emerging and growing in intensity, including those in the business and competitive environment, technological innovation, and consumer preferences and behavior. These risks include cyber risk, technological risk, business model risk, and conduct risk. The Banking Supervision Department is working to evaluate and improve the way in which the banking system deals with these risks. In recent years, it has emphasized requirements and measures to strengthen cyber risk management, including by means of strengthening the connection of the Banking Supervision Department and the banks to the National Cyber Directorate; by reinforcing requirements to monitor digital activity resulting from new innovations, in order to reduce cyber fraud; by reinforcing the management of conduct risk, particularly with respect to the marketing of credit to households, with the goal of ensuring that it is done fairly and with responsibility toward the customer ("responsible credit"); and by reinforcing compliance risk management, which involves completing the learning process from the investigation by the US authorities of banks in Israel and worldwide for tax evasion.

The credit portfolio and credit risk

During the first half of 2019, the balance-sheet credit portfolio of the five largest banking groups grew by about 3.8 percent[8] (and by about 4.9 percent excluding the effect of the shekel's appreciation against the basket of foreign currencies), to a total of about NIS 1,036 billion (Table 6). Similar to last year, **the expansion of the credit portfolio was concentrated in the business sector, which grew by about 6.9 percent[9], and in housing credit, which grew by about 7.2 percent (about 6.5 percent excluding the effect of the rise in the CPI[10]),** which occurred in parallel to the continuing decline in the size of the banking system's consumer credit portfolio. **The credit quality indices continue to**

[8] The rates of change are calculated in annual terms.
[9] Excluding the effect of the separation of the credit card companies from the largest banks. If this effect is included, business credit grew by 9.7 percent, although part of that increase is only technical in nature.
[10] Since the beginning of the year, the CPI rose by about 0.9 percent. About 38 percent of housing credit is indexed to the CPI, such that changes in the CPI have a particularly large impact in this segment.

indicate good portfolio quality (Table 7). Similarly, the separation of the credit card companies continued to affect the credit portfolio during the reviewed period, with respect to both the allocation of credit and accounting treatment.[11]

During the reviewed period, the portfolio of household credit grew by about 4.8 percent[12], although the growth was not uniform. Thus, while credit for mortgages grew at a high rate of about 7.2 percent (an increase of about NIS 12 billion), consumer credit remained basically unchanged (a decline of about 0.7 percent in total consumer credit during the reviewed period; Figure 7).

Similarly, **there was an increase in the quality of the household credit portfolio, and particularly that of the consumer credit portfolio,** which was manifested in a decline in loan loss provisions as a share of total balance-sheet credit to the public to about 0.6 percent (compared to 0.81 percent at the end of 2018; Figure 8), and the ratio of net write-offs to total balance-sheet credit to the public declined by about 0.64 percent (compared with 0.69 percent at the end of 2018; Figure 9). **The improvement in the quality of the banks' consumer credit portfolio was a result of both the separation of the credit card companies from the large banking groups and the steps to improve the quality of underwriting for credit to individuals taken by some of the banking groups** (which led to a drop both in credit losses and in write-offs).

As of mid-2019, the credit card companies had more than a 10.6 percent share of the consumer credit market and during the reviewed period they increased their consumer credit portfolio by about 8 percent. The core of the credit card companies' activity is the provision of consumer credit (accounting for about 54 percent of the portfolio), which is characterized by a high level of risk relative to the banks' consumer credit portfolio, as reflected in the various quality indices of quality (the rate of loan loss provisions stands at about 1.93 percent, the rate of net write-offs at about 1.73 percent, and the weight of impaired credit and nonimpaired credit in arrears of 90 days or more at about 0.47 percent, as of mid-2019). Nonetheless, the credit data sharing register, which began operating during 2019, is meant to assist the banks and nonbank entities in managing consumer credit risk, among other things, as part of a holistic approach to the customer within the financial system as a whole, and thus to improve the quality of credit underwriting overall. The initial reactions from users indicate that the rollout of the credit data register has been successful, but it is too early to determine its effect on credit underwriting and risk management in the banking system. Nonetheless, a large number of customers have submitted queries to the banks on information they receive in the credit report.

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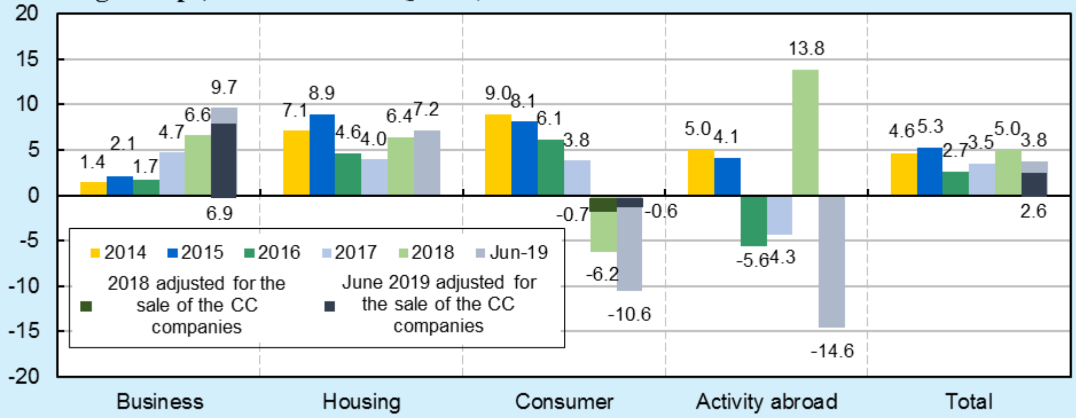
[11] The separation of the credit card companies affected the accounting treatment of the analysis of balances in the consumer credit industry and in the financial services industry. The analysis was carried out without taking these effects into account.

[12] Excluding the effect of the separation of the credit card companies from the largest banks. If this effect is included, credit to households grew by about 0.86 percent.

The expansion of the credit portfolio was concentrated in the business sector and in housing credit, while outstanding consumer credit remained unchanged.

Figure 7
Annual Change in Outstanding Balance-Sheet Credit to Principal Segments, the Five Banking Groups, 2014–June 2019 (percent)

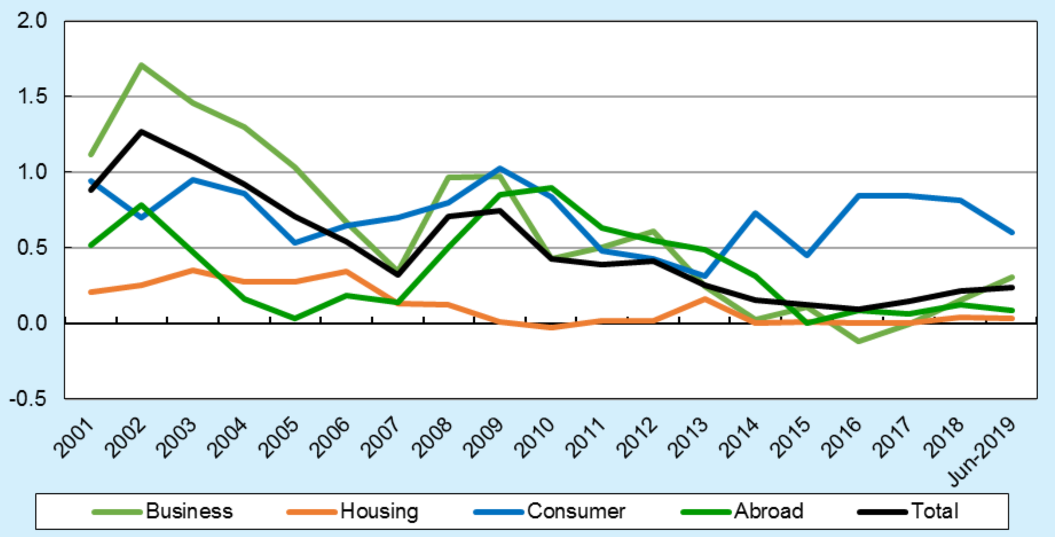


[a] The decline in consumer credit at the end of 2018 is due to a retroactive correction of the sale of the "Max" credit card company from Leumi Group.

SOURCE: Based on published financial statements and reports to the Banking Supervision Department.

There was a marked decline in credit loss provisions in the consumer credit segment.

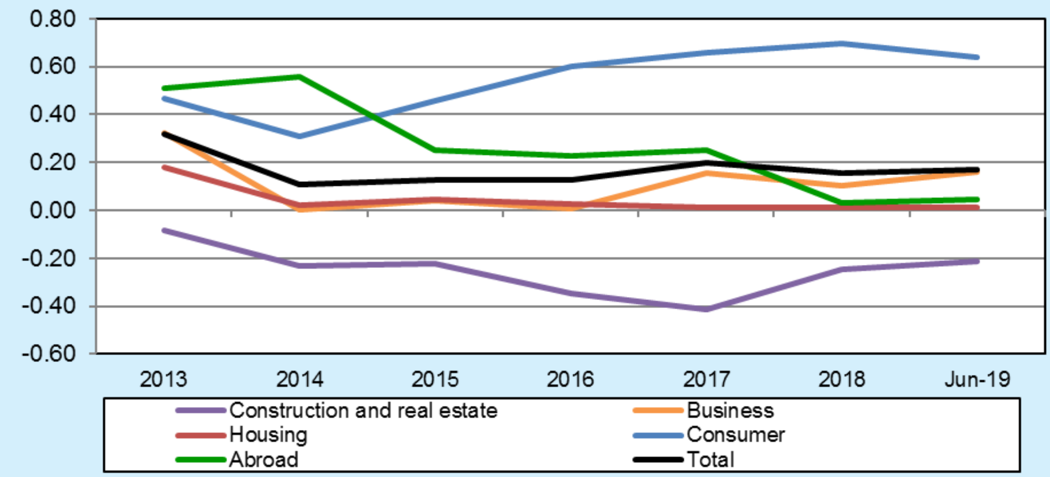
Figure 8
Loan Loss Provisions as a Share of Total Balance-Sheet Credit to Principal Segments, the Five Banking Groups, 2001–June 2019 (percent)



SOURCE: Based on published financial statements.

There was a slight improvement in the net write-down ratio in the consumer credit segment following the separation of the credit card companies from the banks.

Figure 9
Net Accounting Write-Downs as a Share of Balance-Sheet Credit to Principal Segments, the Five Banking Groups, 2013–June 2019 (percent)

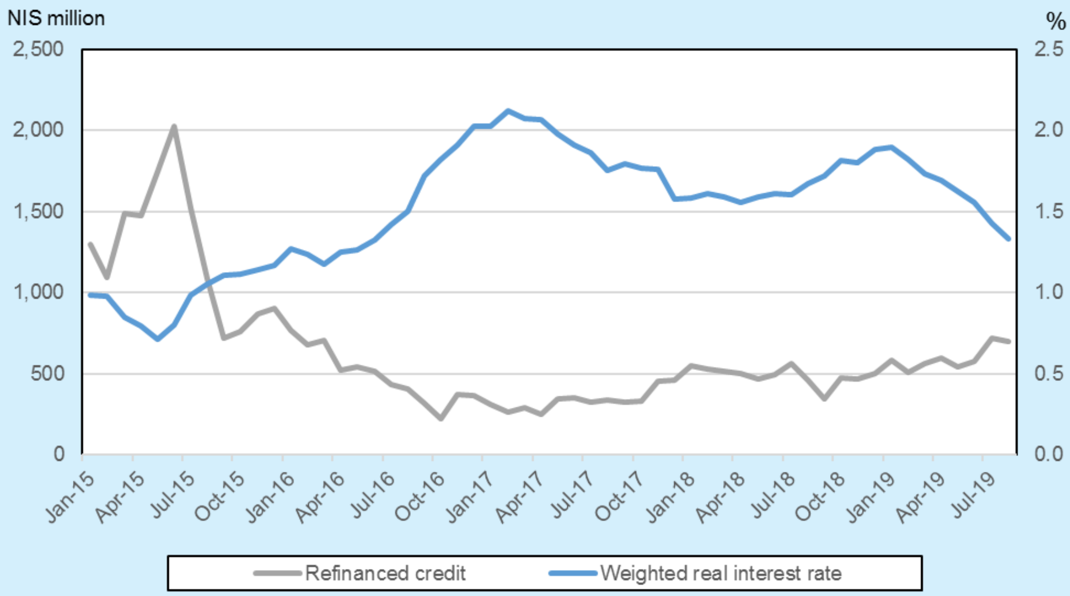


[a] Business credit includes credit to the Construction and Real Estate industry.
SOURCE: Based on published financial statements and reports to the Banking Supervision Department.

During the past year, the balance of housing credit has grown by about 7.2 percent (compared to 6.9 percent in 2018), due to an increase in mortgages provided. This is a continuation of the trend that began in mid-2017, following two years of decline in the monthly quantity of mortgages provided. **The annual average of monthly loans provided for housing reached its highest level since 2015, at NIS 5.6 billion** (Figure 1 in Box 1). The figure for August was about NS 6 billion (NIS 5.5 billion seasonally adjusted). The increase in mortgages provided since the beginning of the year was influenced primarily by developments in the housing market, chiefly the increase in home purchases by first-time buyers, particularly new homes (Figure 2 and 3 in Box 1). Similarly, the upward trend in loans with high loan-to-value (LTV) rates (of between 60 and 75 percent) continued (Figure 9 in Box 1), which can be attributed to the loosening of restrictions by the Banking Supervision Department at the beginning of 2018 with regard to the weighting of the banks' risk assets due to mortgages with high LTVs. This increase, which came at the expense of low-LTV loans, may have even contributed to the slowdown in the demand for consumer credit (for further details, see Box 1). Despite the increase in the provision of mortgages and the slight increase in LTV rates, the ratio of housing credit to GDP in Israel remained very low compared with other countries (27 percent; Figure 13 in Box 1), and the quality of the banks' mortgage portfolio remained high. At the same time, there was a decline in the real weighted interest rate on mortgages, due to the decrease in the cost of the banks' sources (following the fall in the yields of long-term government bonds). In view of the lower interest rates on mortgages, there was an increase in mortgage refinancing, as is expected during periods in which interest rates are declining (Figure 10), since borrowers are seeking to improve the terms of loans provided to them. In this context, during the first eight months of 2019, total refinancing stood at about NIS 4.8 billion (as opposed to about NIS 4.1 billion during the same period last year). However, since there was also a large increase in mortgages provided, there was only a slight increase in the ratio of mortgage refinancing to total mortgages provided (10.7 percent compared with 10.1 percent during the same period last year). The increase in refinancing represents the continuation of a trend that began in 2017. At the beginning of that year, the interest rate on mortgages reached a peak, and from that point onward there has been a downward trend.

The volume of refinancing increased in view of the continued decline in the real weighted interest rate on mortgages.

Figure 10
Refinanced Credit and the Weighted Real Interest Rate on Mortgages[a], January 2015–July 2019



[a] The weighted interest rate is calculated assuming an inflatoin rate of 2 percent.
SOURCE: Based on reports to the Banking Supervision Department.

During the reviewed period, the acceleration in the growth rate of business credit continued, as reflected in growth of about 6.9 percent, excluding the effect of the separation of the credit card companies from the two largest banks[13] (compared to an annual average growth rate of about 5.7 percent during the years 2017–8 and about 6.3 percent during the same period last year; Figure 7). If this effect is included, then business credit grew by about 9.7 percent, following an increase in credit to the financial services industry as a result of the change in the accounting treatment of the financing sources of the credit card companies that were separated from the largest banking groups. This development began once all of the banking groups had achieved the capital targets set by the Banking Supervision Department at the end of 2017, which allowed them to change

[13] According to Banking Supervision Department estimates.

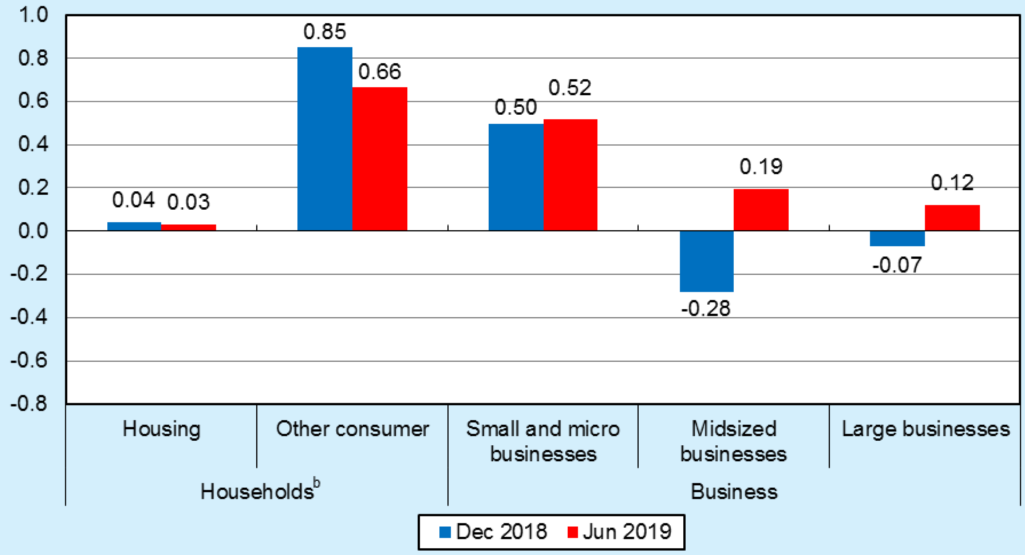
the mix of their credit portfolio in favor of credit weighted with higher risk weights and primarily credit to the business sector. Credit to the construction and real estate industry continued to grow in the reviewed period, as was the case last year (about 40 percent of the growth in business credit since the beginning of the year).

Credit to large businesses grew by about 8.7 percent during the reviewed period, not including credit provided to the credit card companies that were separated from the largest banking groups (compared to about 8 percent during the same period last year), which is an indication of the continuing shift in credit toward large businesses that began in 2018 (Table 9). Such credit now constitutes about 70 percent of the total growth in business credit (as opposed to 46 percent in 2018). Apart from the First International group, all of the banking groups increased their activity in this segment during the reviewed period. In the small and micro business segment, the slowdown in the rate of growth continued (3.4 percent compared to 4.9 percent during the same period last year), and it contributed about 28 percent of the total growth in business credit (in contrast to a contribution of about 40 percent in 2018).

An examination of the credit quality indices shows a slight deterioration in the quality of business credit, as seen in the loan loss provision rate, with the most noticeable deterioration in the midsized and large business segments, where the loan loss provision rate relative to total credit rose to about 0.19 percent and about 0.12 percent, respectively (compared to negative rates of about 0.28 percent and about 0.07 percent, respectively, at the end of 2018; Figure 11). This was partly due to the continuing decline in total collection of written-off debts in the midsized and large business segments. Nonetheless, this is still a low rate of loan loss provisions.

Credit loss provisions increased in all business activity segments, alongside a decline in the consumer segment.

Figure 11
Loss Provisions on Credit in the Various Activity Segments[a], the Five Banking Groups, December 2018–June 2019 (end-of-period balance, percent)

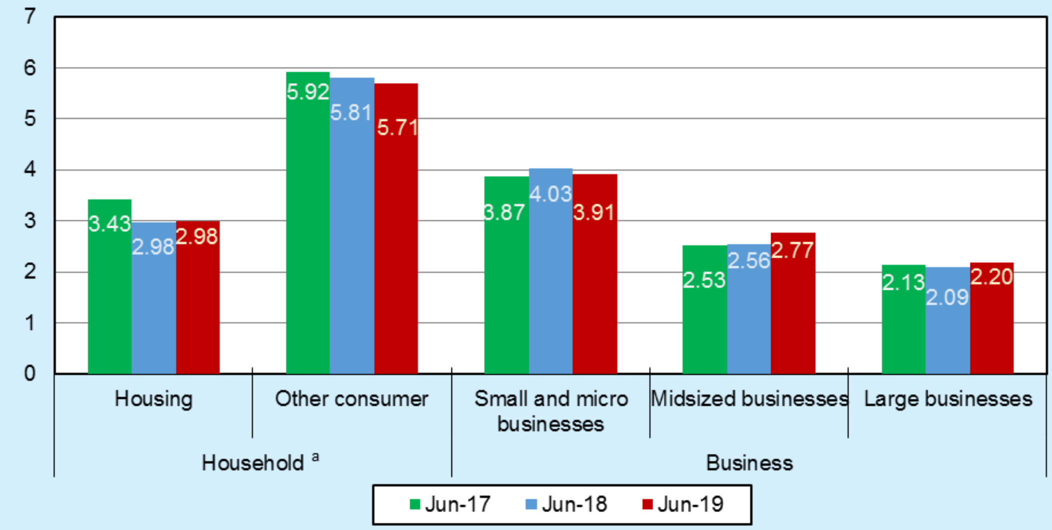


[a] The data relate to activity in Israel, and do not include the financial management segment, others, or adjustments.
[b] "Households" includes private banking.
SOURCE: Based on published financial statements.

The average interest rates on new credit provided in most activity segments remained almost unchanged compared to the same period last year (Figure 12). In the large business segment, the interest rate rose to about 2.2 percent, compared to 2.09 percent in the same period last year, as opposed to the consumer segment in which the average interest rate continued the downward trend that began in 2017. The average interest rates in the retail activity segments (excluding housing credit) remained higher than in the midsized and large business segments. However, this difference was due to a number of factors, including higher operating costs in the consumer segment and in the small and micro business segments relative to the midsized and large business segments. This is due to the fact that servicing the former requires an extensive network of branches that require high infrastructure and manpower costs, while serving the latter involves much lower costs since their activity is mostly concentrated in a few locations and the size of transactions and the credit provided to them are much larger. In addition, the risk in consumer credit is higher on average than it is in business credit. The risk that the banks identify in providing retail credit has even grown in recent years relative to the large and midsized business segment, as a result of some increase in the leverage of households and changes in legislation.

The average interest rate on new credit issued this year remained virtually unchanged.

Figure 12
Average Interest Rate on Credit Issued to the Public in the Various Activity Segments, the Five Banking Groups, June 2018 and June 2019 (percent)



[a] "Households" includes private banking.
SOURCE: Based on published financial statements.

The credit quality indices continued to indicate high levels of portfolio quality. Loan loss provisions as a share of total balance-sheet credit to the public increased slightly to about 0.24 percent (compared with 0.21 percent at the end of 2018 and about 0.14 percent on average during the period from 2014 to 2018; Table 8). The ratio of net write-offs to total balance-sheet credit to the public rose slightly to 0.17 percent (compared to 0.15 percent at the end of 2018 and during the same period last year) due to the drop in collection relative to previous years. Loan loss provisions as a share of total balance-sheet credit to the public and the coverage ratio[14] remained almost unchanged and currently stand at about 1.18 percent and about 94.9 percent, respectively (compared to 1.18 percent and 95.4 percent at the end of 2018), although the latter is much higher than its average value of about 80.5 percent during the 2014–2018 period.

The effect of changes in the exchange rate between the shekel and the basket of foreign currencies was also significant during the reviewed period, and in this context the portfolio of credit for activity abroad declined by about 14.6 percent, primarily due to the appreciation of the shekel against the basket of foreign currencies. Net of this effect, credit for activity abroad declined by about 4.7 percent (Figure 7; compared to growth of about 13.8 percent in 2018, which was primarily due to the depreciation of the shekel.Net of that effect, credit for activity abroad grew by about 6.1 percent).

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[14] This is also known as the ratio of the loan loss provision to impaired credit to the public and unimpaired credit to the public in arrears of 90 days or more.

Cyber risk

During the reviewed period, there was an upward trend **in the number of cyber incidents both in Israel and worldwide, which has affected not only the banking system. This trend has been manifested in the types of incidents, their number and complexity, the entities attacked, the goals of the attacks, and the scale and types of damage caused** (breaching of information, financial theft, embezzlement and fraud, disruption of the supply chain, harm to cloud computing services, threats to business continuity, and so forth). Along with the emphasis on prevention of cyber incidents, a great deal of attention has also been devoted to the banks' ability to identify the incident and deal with it quickly and efficiently.

Cyber risks worldwide are among the most serious risks facing the financial system. The **damage** from a cyber incident in the global banking system is primarily manifested in the theft of money, the breach of sensitive information, damage to reputation, and disruption of customer service (harm to business continuity). The **goals of the attacks** have become more diverse, and include in the trade of sensitive information, embezzlement and fraud, the theft of money (such as by means of the payment and ATM system) and others. The **level of sophistication** shown in the attacks has risen in recent years, and is reflected in fake websites and breach attempts into the servers of large organizations and companies.

The Banking Supervision Department continued its determined efforts during the reviewed period to improve the management of cyber risk in the banking system. Among the most important efforts in which the department has taken a leading role during this period are **the signing of a memorandum of understanding (MOU) with the National Cyber Directorate**, which sets out the principles for cooperation on a routine basis and in an emergency. **Cyber simulations have been carried out among the banks** in order to improve their preparedness and their ability to deal with the various cyber threats and scenarios. One of the goals of these simulations is to verify that in a major event the bank will be able to contain the attack within a reasonable amount of time and with a minimum of damage. In January, a cyber exercise was carried out on a critical business process, and in September, the CAPS 2019 exercise[15] initiated by FS-ISAC[16] was carried out.

Box 2 presents a long list of incidents that have taken place worldwide during the reviewed period. The following insights emerge from the variety of incidents that have occurred:

1. **The motive varies from one attack to the next** – starting with criminal activity, the theft of money and the creation of chaos for its own sake, and ending with threats to national security. In many cases, the attacker's identity and abilities (**a**

[15] Cyber-Attack Against Payment Systems.
[16] Financial Services Information Sharing & Analysis Center, an organization whose goal is sharing and analysis of information related to cyber and physical incidents among organizations that provide financial services throughout the world.

lone hacker, a group of hackers, a country/superpower, activists, organized crime, etc.) is an indication of the attack's motive, which also has implications for the **type and intensity of the attack** (breach of information, theft of money, fraud, obtaining information, disruption of service, etc.).

2. **Cyber attacks are diverse and sophisticated**. The methods we have identified include masquerading as customers, the increasing use of phishing for various purposes (obtaining information, etc.), attempts to exploit known vulnerabilities in systems, attempted deceptions and diversions of IP addresses from reliable sources of information to "fake" addresses, and more. **A cyber attack can be either ongoing or localized in time.** There are situations in which a particular attack can serve as a future "trigger" **for advanced and successive attacks.**
3. **It is not always possible to "quantify" the future effects** of a cyber incident. For example, it is doubtful whether an organization can quantify the actual damage caused **as a result of the exposure/publication of sensitive customer information (credit card details and other types of financial information)** in real time. Examples include the attacks on Equifax and Facebook.

Apart from the aforementioned, there is an upward trend in the imposition of heavy fines on organizations worldwide that have experienced major cyber incidents and have violated the instructions and directives of regulators and government authorities, including the EU countries (GDPR[17]). For example, in July 2019 the US authorities negotiated a settlement with **Equifax[18]** that involved a fine of $675 million. The fine is divided into a payment to the federal authorities, a payment to various countries, and a remaining amount for compensation to customers.

Liquidity risk

The banks in Israel feature a high level of liquidity that even exceeds regulatory requirements. The liquidity coverage ratio (LCR)[19] remained stable during the first half of 2019, although its aggregate value fell somewhat, from 128 percent last year to about

[17] The General Data Protection Regulation is a European regulation that is meant to provide a framework for information security in the EU. The regulation went into effect in May 2018, and applies to companies that collect information on private individuals in the EU countries. Its enforcement measures include fines for companies that violate privacy and information security standards that appear in the regulation.

[18] One of the three largest information agencies for consumer credit ratings in the US.

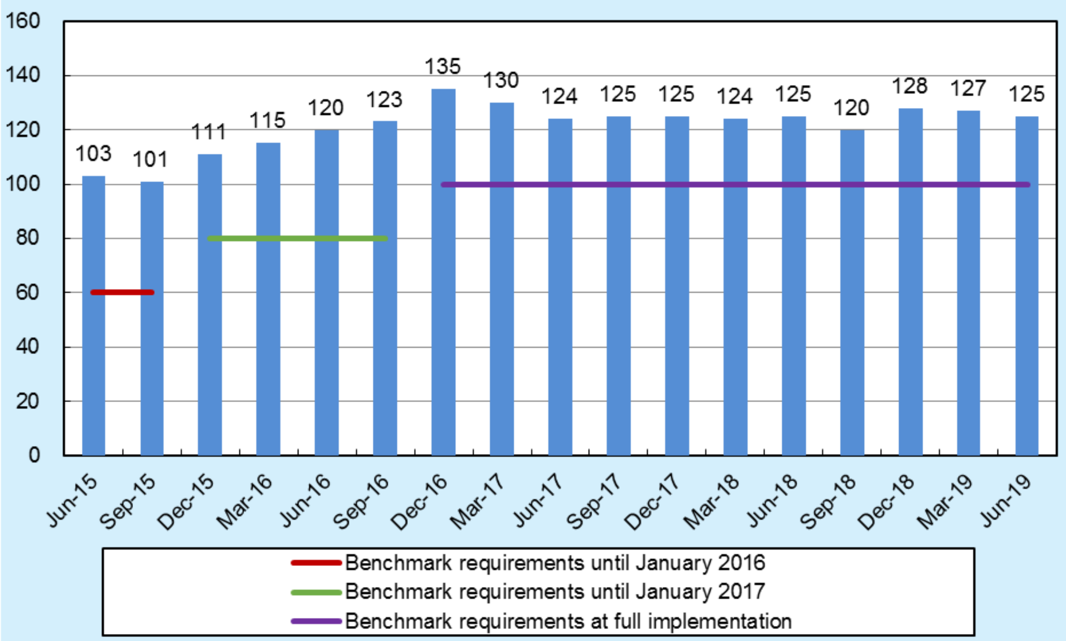
[19] The LCR, developed by the Basel Committee to enhance the short-term resilience of banking corporations' liquidity profiles, is a measure of the quantity of HQLA (High Quality Liquid Assets) that corporations must hold in order to withstand a significant stress scenario that lasts thirty calendar days. The LCR is composed of two elements. The first, on the numerator side, is the inventory of HQLA (High Quality Liquid Assets), which is comprised of two levels of assets. Level 1 includes high quality assets that may be held in unlimited amounts, and Level 2 is composed of assets that are limited to a maximum aggregate holding of 40 percent of the HQLA inventory. (This level is divided into two sublevels: 2A and 2B. At the latter level, the share of assets that may be held is limited to 15 percent.) The second element, on the denominator side, is the total net cash outflow, i.e., the expected total cash outflow less the expected total cash inflow in the stress scenario. The expected total cash outflow is calculated by multiplying the balances of different categories or types of balance-sheet and off-balance-sheet liabilities by their expected runoff or drawdown rates. The total expected cash inflow is calculated by multiplying outstanding contractual receivables by the rates at which they are expected to be received in the scenario, up to a cumulative 75 percent of the predicted total cash outflow.

125 percent this year (Figure 13). The slight drop in the value of the ratio occurred following a long upward trend, during which the banks improved their liquidity and converged to the regulatory minimum, which has been gradually increased over the years. The trend in the ratio this year varied among the banks, with some showing improvement while others showed a slight decline. Nonetheless, the value of the ratio (total activity on a consolidated basis) rose to above 100 percent for all of the banks, which represents the full implementation of the Banking Supervision Department's directive (Figure 14).

The drop in the value of the aggregate ratio is occurring despite the increase in HQLA level 1 assets. This followed a decline last year in favor of an increase in credit to the public, and is the result of a sharp increase in net outflows due to the increase in wholesale deposits from financial institutions (after they were adversely affected by Amendment 28 to the Trust Investments Law, which went into effect last year).

The liquidity coverage ratio remained stable during the first half of the year at a level higher than the regulatory requirement.

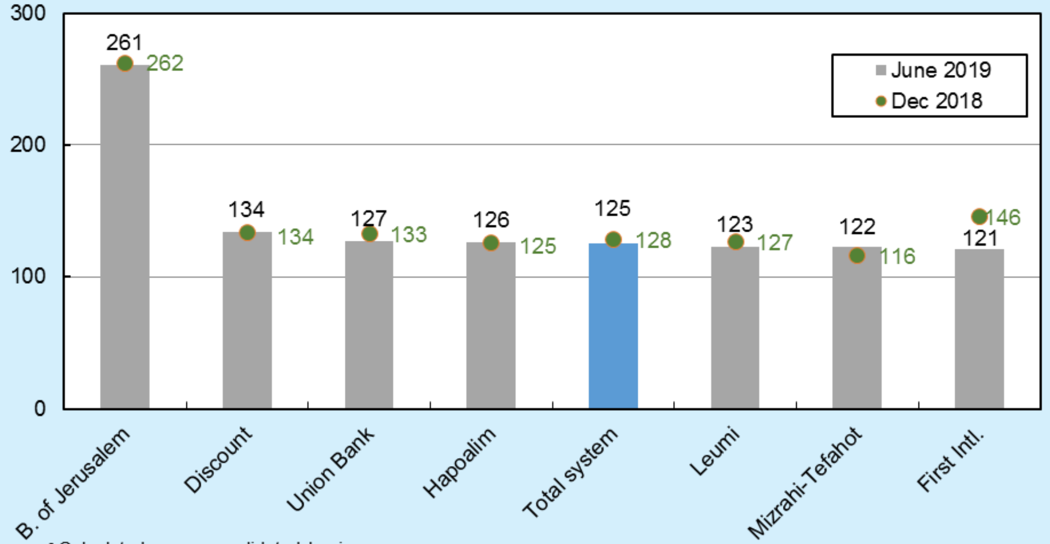
Figure 13
Liquidity Coverage Ratio (LCR), Total Banking System[a], June 2015 to June 2019 (percent)



[a] Calculated on a consolidated basis.
SOURCE: Based on published financial statements.

All the banks meet the minimum requirement set out by the Banking Supervision Department (100%).

Figure 14
Liquidity Coverage Ratio (Total Activity)[a], Total Banking System, December 2018 and June 2019 (percent)



[a] Calculated on a consolidated basis.
SOURCE: Based on reports to the Banking Supervision Department.

4. Capital and capital adequacy

Following a long process in which the banks improved their capital adequacy in recent years, all of the banking groups meet the capital requirements set by the Banking Supervision Department (which are based on the stringent standard approach to the calculation of capital adequacy). During the reviewed period, there was an additional increase in the Common Equity Tier 1 Capital ratio in all the banking groups, and its aggregate value stood at about 11.3 percent, compared to about 10.8 percent at the end of 2018 (Figure 15 and Table 10). The increase in the value of the ratio varied somewhat between the banking groups, and follows the stability in its value last year and a number of years in which it gradually improved as a result of the Banking Supervision Department's directives on this issue. The factors that led to the increase include a long list of developments that worked to increase the volume of accumulated equity and led to a slight increase in the volume of risk-weighted assets. These factors affected the banking groups as a whole and each one separately, and in some cases were temporary.

Total Common Equity Tier 1 Capital grew during the reviewed period by about 9.8 percent (in annual terms; Table 11**) relative to the moderate increase of about 4 percent last year and the average increase of about 6 percent during the past five**

years. Among the factors that had a positive effect on equity are the improvement in business results, which was reflected in an increase in the banks' profitability, and the effect of revaluation of the securities in the available-for-sale portfolio, in view of the price increases that have been typical of most the bond indices. Nonetheless, in some of the banking groups the increase was also the result of temporary effects, including the decision to temporarily suspend the payment of dividends by the Hapoalim and Mizrahi-Tefahot groups[20] and the temporary permit granted by the Banking Supervision Department to the Leumi group with respect to the method for calculating the discount rate for the valuation of liabilities due to employee compensation.[21]

The risk-weighted assets of the banking groups increased only slightly this year (by about 0.8 percent in annual terms; Table 11**), which was less than the average rate of increase during the past five years (about 4.7 percent).** The development of risk-weighted assets featured a high level of variation over time and a mixed trend among the banking groups. It was affected on a one-off basis by the separation of the credit card companies during the course of the year (as part of the implementation of the Law to Increase Competition), which worked to reduce the level of risk-weighted assets in the two largest banking groups, and by developments in the housing market, which worked to increase their level in all the banking groups. The latter were reflected in an increase in demand and in the volume of outstanding housing credit, and an increase in the volume of credit provided to the construction and real estate industry in all the banking groups. In the two largest banking groups, the average risk weight in the credit portfolio either remained unchanged or fell simultaneously with this change, while in the two midsized banking groups (Discount and Mizrahi-Tefahot) the average risk weight rose slightly.

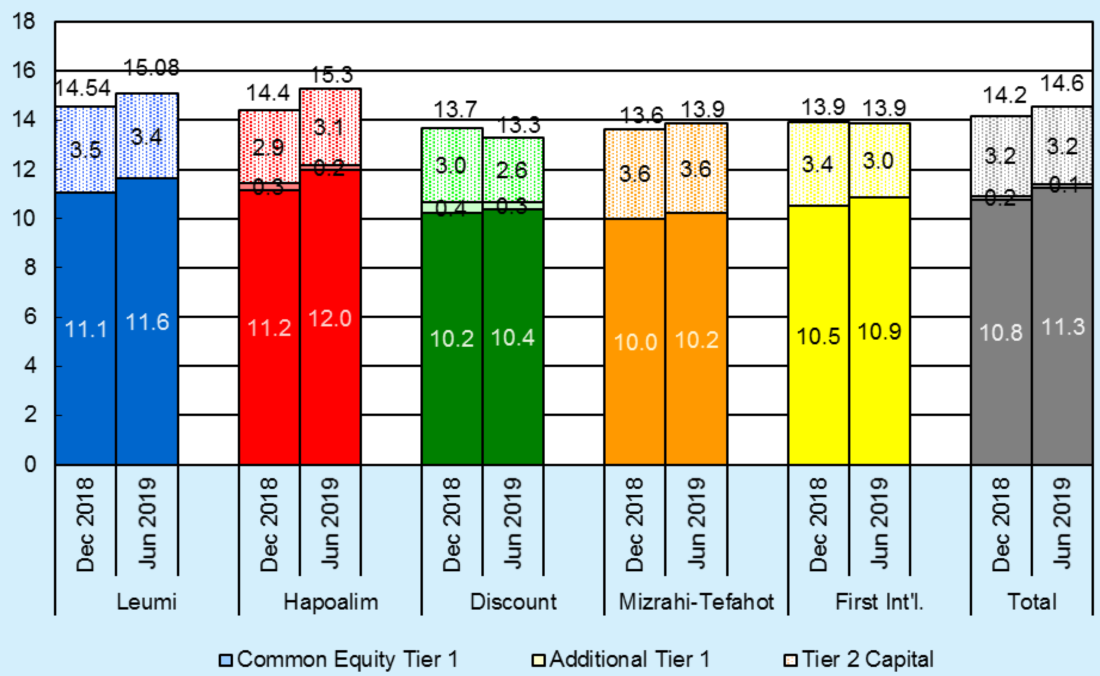
The overall equity ratio of all the banking groups increased less than the Common Equity Tier 1 Capital ratio, and stood at about 14.6 percent, compared to about 14.2 percent last year (Figure 15 and Table 11). The lower rate of increase is explained by the continuing erosion in other Common Equity Tier 1 Capital components and in the components of Common Equity Tier 2 Capital, which are not eligible to be included in the regulatory equity base. The drop in Common Equity Tier 2 Capital was offset by new issues of debt instruments with a built-in loss absorption mechanism[22] by three of the five banking groups.

At the same time, the leverage ratio also recorded a similar increase this year, to about 7.0 percent this year, compared to about 6.8 percent last year (Table 11). The increase in the value of the ratio is explained by the same aforementioned factors.

[20] The suspension of dividend distribution by these two groups did not involve any change in the dividend distribution policy, which places a limit of 40 percent on each of them. In August of this year, the Mizrahi-Tefahot Board of Directors declared a dividend from the profits for the first half of 2019 (40 percent).
[21] In July 2016, the Bank of Israel granted permission to the Leumi group to change its method of calculating the discount rate for valuation of liabilities due to employee compensation in the calculation of equity. The permission remains valid until December 2020, and its objective is to moderate fluctuations in equity due to changes in the discount rate.
[22] Contingent Convertible capital instruments (CoCos).

The Common Equity Tier 1 capital ratio improved in all the large groups during the reviewed period.

Figure 15
Risk-Based Capital Ratios, December 2018 and June 2019 (percent)



SOURCE: Based on published financial statements.

5. The balance sheet

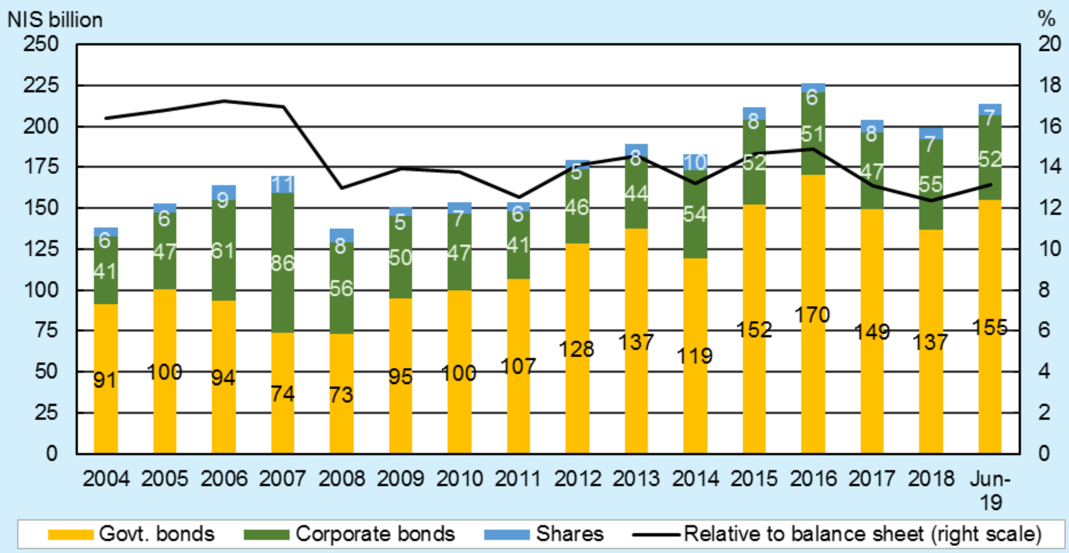
The banking system's aggregate balance sheet grew by about 1.4 percent (in annual terms) during the first half of 2019, to a total of about NIS 1,626 billion (Table 12). The development of the balance sheet was negatively affected by the appreciation of the shekel against foreign currencies, primarily the dollar and the euro (about 5 percent), and also by the separation of the credit card companies from the largest banking groups as part of the implementation of the Law to Increase Competition in the Credit Market. Net of the exchange rate effect, the banking system's balance sheet grew by about 3.1 percent.

On the assets side, net credit to the public continued its upward trend of recent years (at a rate of about 4 percent, and about 5 percent excluding the effect of the shekel's appreciation). The growth of credit during the first half of 2019 was primarily the result of the increase in business credit, which grew at a particularly high rate relative to recent years (about 6.9 percent excluding the effect of the separation of the credit card companies from the two largest banking groups), and in housing credit, whose rate of growth (of about 7.2 percent) slightly exceeded that of recent years. (For further details see the section on "The credit portfolio and credit risk".) The securities portfolio increased by about 15 percent[23] (about 20 percent net of the exchange rate effect (Table 13)), and its share of the total balance sheet therefore grew to about 13 percent by the end of the first half of 2019 (compared to about 12 percent at the end of 2018; Figure 16). The increase on the asset side was slightly offset by the drop in total cash (about 5 percent net of the effect of the exchange rate) and in deposits with the Bank of Israel (about 3 percent net of the effect of the exchange rate), and also by the significant decline in investment in subsidiaries of Hapoalim Group, following the separation of the Isracard company, which was offset on the liabilities side due to discontinued activity.

On the liabilities side, the upward trend in the public's deposits continued (at a rate of about 3 percent; about 6 percent net of the effect of the exchange rate) in view of the increase in deposits of the financial institutions (primarily deposits of over NIS 500 million), which was partly offset by the decline in deposits from banks. An examination of the composition of deposits points to an increase in total short-term deposits, while current deposits remained basically unchanged, after having grown at high rates in recent years. Additionally, the trend of equity accumulation in all of the banking groups continued (at a rate of about 8 percent net of the effect of the exchange rate; for further details, see the section on "Equity").

The banks' securities portfolio increased in the first half of the year in view of the increase in government bond holdings.

Figure 16
The Total Securities Portfolio[a] of the Israeli Banking System[b]—Size and Composition, 2004–June 2019



[a] Excluding consolidated companies.
[b] Including the five banking groups (Leumi, Hapoalim, Discount, First International, and Mizrahi-Tefahot), as well as Union Bank, Bank of Jerusalem, and Municipal Bank.
SOURCE: Based on published financial statements.

[23] The increase is mainly due to the purchase of tradable Israel government bonds and US Treasury bonds in Hapoalim Group's portfolio available for sale.

Market indices

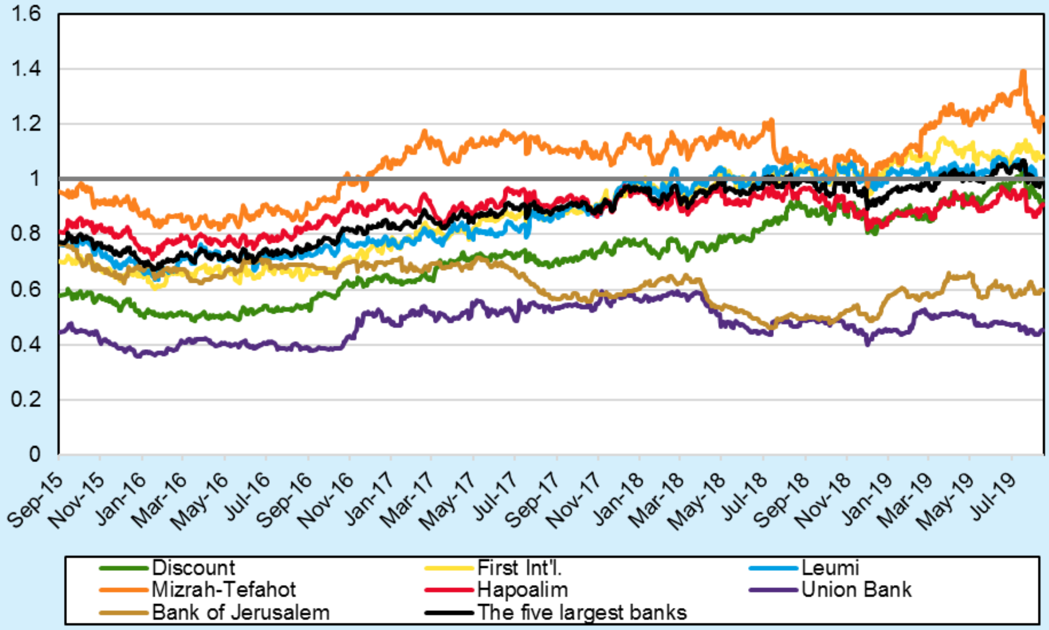
The banks' business results during the first half of the year, chiefly their profitability, are also reflected in the continuing upward trend in the market value of bank shares (Figure 17). The market value to book value ratio (MV/BV) of the five largest banks rose by about 9.6 percent since the start of 2019 to a level of 1.02 (as of September 21, 2019). In July, four banks had an MV/BV ratio that exceeded one (with Bank Discount crossing that threshold for the first time; Figure 18). Nonetheless, starting in mid-August there were slight declines among all the bank shares (Figure 19), which led to a situation in September 2019 in which only three of the banks had an MV/BV ratio of more than one (Mizrahi, First International, and Leumi) while Discount Bank was slightly under that. Overall, however, the MV/BV ratio of the banks in Israel is much higher than in the past.

In this context, from the start of 2019 until the end of September, the Bank Shares index rose by about 18 percent, while the Tel Aviv 125 index rose by about 14 percent., This reflects investor confidence in the banks in Israel, which stems from healthy profitability, high levels of equity and the high quality of the credit portfolio. The increase in the prices of the Israeli bank shares reflects superior performance relative to their counterparts abroad. Thus, the bank shares index in the US rose by about 16 percent during this period and the European bank share index even dropped somewhat (by about 2 percent (Figure 19)).

With respect to the spreads on the banks' bonds, during the first half of 2019 there was a narrowing of spreads, as there was among all corporate bonds. Additionally, the spreads on the banks' bonds have remained very narrow relative to corporate bonds in other industries, which reflects the low risk that investors attribute to the banks in Israel (Figure 20). In this context, the real yields on government bonds have been in a downward trend since the end of 2018, and have even been negative since the start of 2019. The index of real yields on the banks' bonds was also negative during the year. This led to the first issue of a bond with a negative real yield (-0.1 percent) by an Israeli bank (First International). Overall, the drop in real yields on the banks' bonds has led to lower costs of financing for the banks, which is expected to increase their supply of credit.

The MV/BV ratio of the five large banks increased during the reviewed period.

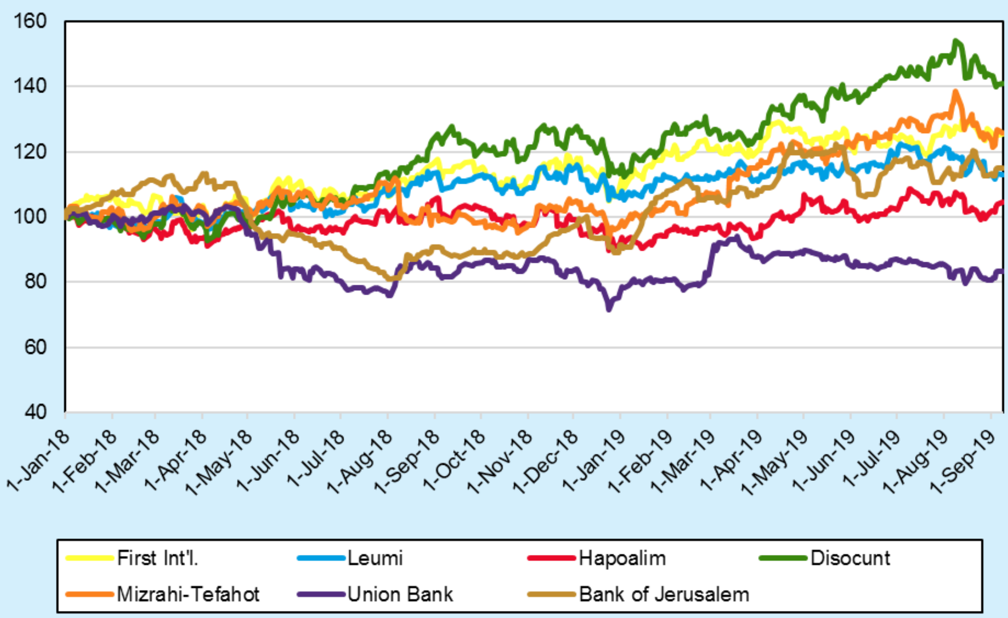
Figure 17
Market Value over Book Value (MV/BV), Israel's Banks[a], September 2015–Sept. 8, 2019



SOURCE: Tel Aviv Stock Exchange and reports to the Banking Supervision Department.

All the banks meet the minimum requirement set out by the Banking Supervision Department (100%).

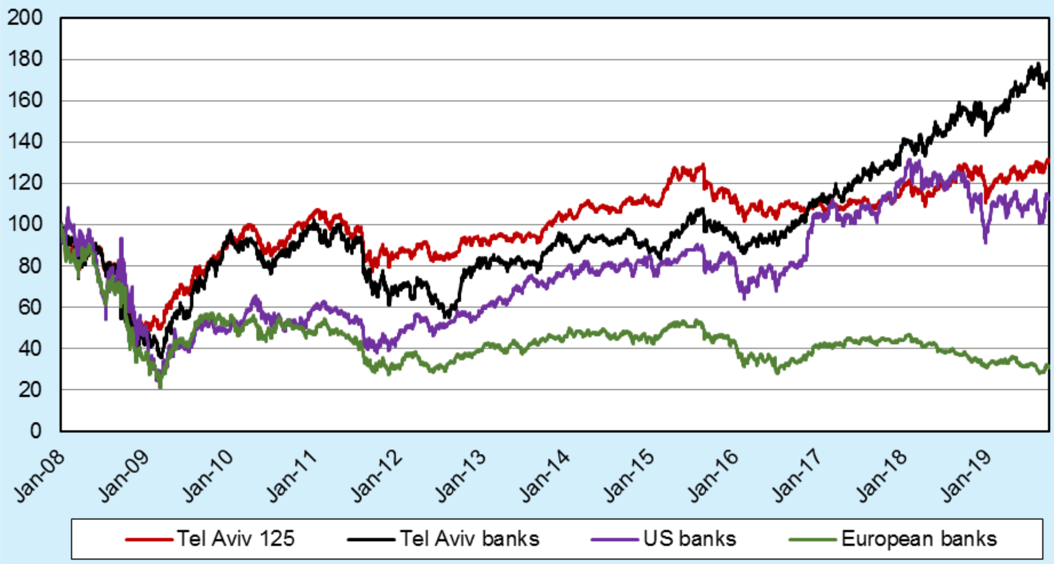
Figure 18
Bank Shares Index, 2018–September 8, 2019 (index: Jan. 1/18=100)



SOURCE: Based on Tel Aviv Stock Exchange.

The upward trend in the bank shares index in Israel is not necessarily typical of what is happening in the rest of the world.

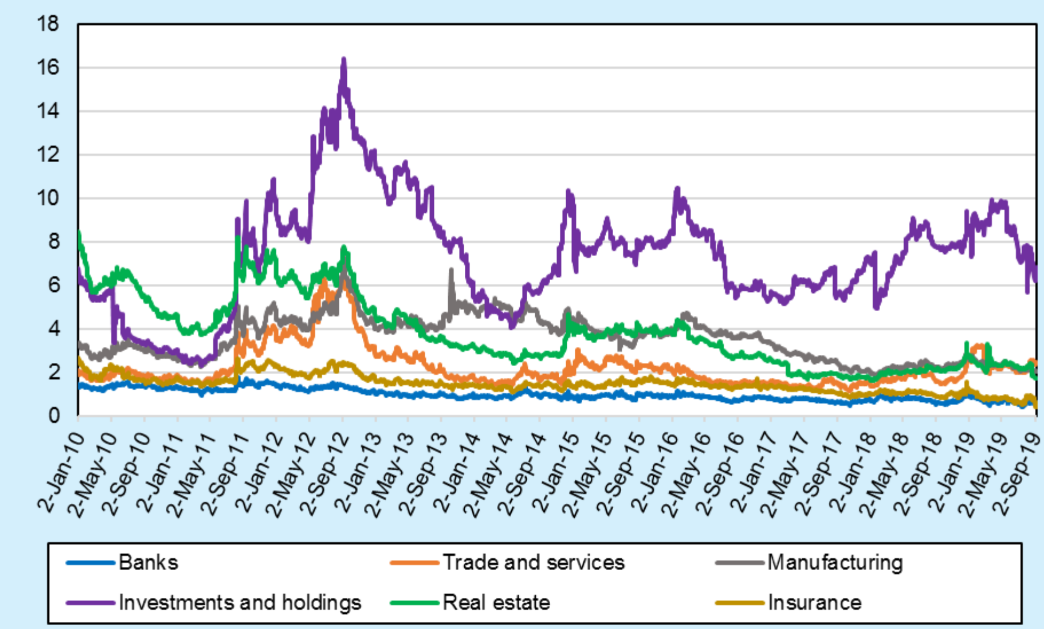
Figure 19
Tel Aviv 100/125 Index, and Bank Shares Indices in Israel, Europe and the US, January 1, 2008 to September 6, 2019 (index: Jan. 1/08=100)



[a] For days on which there was no trading, the previous figure is used.
SOURCE: Data on Israel—Tel Aviv Stock Exchange. Data on the US and Europe—Bloomberg.

Corporate bond spreads declined during the first half of 2019.

Figure 20
Spreads between CPI-Indexed Government Bonds and CPI-Indexed Corporate Bonds in Various Industries, 2010 to September 8, 2019



SOURCE: Tel Aviv Stock Exchange.

Box 1: Analysis of the growth in new mortgage borrowing

- In the past year, there has been an increase in new mortgage borrowing, further to the trend that began in early 2018 after two previous years of declines in new mortgage borrowing. The yearly average of new mortgage borrowing on a monthly basis reached a post-2015 high of about NIS 5.35 billion per month in 2019, peaking at NIS 6.7 billion in July (NIS 5.5 billion seasonally adjusted). The increase in new mortgage borrowing since the beginning of the year was mainly influenced by developments in the housing market, led by the increase in first home purchases, particularly new homes. Despite the increase in new mortgage borrowing and a slight increase in the average LTV (loan-to-value) ratio, the ratio of housing credit to GDP in Israel remains low by international comparison (27 percent), and the quality of the banks' mortgage portfolio remains high.
- New home purchases as a share of all first-time home purchases increased. This increase is explained by an increase in the volume of transactions as part of the "Buyer's Price" program, which reached about 40 percent of total new home purchases in December 2018. Investors' share of home purchases continued to decline moderately.
- Mirroring the developments in the housing market, most of the growth in new mortgage borrowing comes from loans for the purchase of a first home. Thus, loans issued to finance the purchase of a first home comprised about 48.4 percent of all loans issued for residential purposes during the second quarter of 2019, compared to 43.9 percent in the first quarter of 2017.
- In terms of housing loans issued as part of the Buyer's Price program, while there was just a moderate increase in total new loan volume, there was a sharp increase in the number of loans (45 percent in three months). This difference is apparently due to the fact that there is a gap between the date a contract is signed as part of a Buyer's Price project and the date the mortgage is taken out and payments begin. This is because the purchaser does not have to pay out the full amount of the mortgage upon signing the deal, but must gradually do so as construction progresses until occupancy. This hints that in the next one-to-two years, a further increase in new mortgage borrowing is expected to result from Buyer's Price projects as construction progresses on more apartments assigned as part of the project.
- In parallel with the increase in new mortgage borrowing, there was also an increase in the share of mortgages with high financing rates (LTV of between 60 and 75 percent). This was due both to the increasing share of borrowers purchasing a home as part of the Buyer's Price program, who are generally characterized a higher LTV rate than other mortgage borrowers, as shown by Banking Supervision Department data, and due to more lenient capital requirements published by the Banking Supervision Department for loans at such LTV rates.
- Despite the increase in LTV rates, the average LTV rate remains low, at 52 percent. In general, the credit of the banks' housing credit portfolio is good, as shown by other risk indices including a low payment-to-income (PTI) of 26.4 percent on average, near zero loss rates, and more. The high portfolio quality is the result of a series of measures adopted by the Banking Supervision Department over the years, which led in prudential terms to an improvement of the housing credit portfolio on the banks'

balance sheets, and in consumer terms to reduced borrower sensitivity to potential changes in the economic environment. The improvement of the portfolio is also reflected in stress tests conducted every year in the banking system, which show that the risk in the housing credit portfolio remains lower than in other credit segments, and that its quality has improved in recent years.

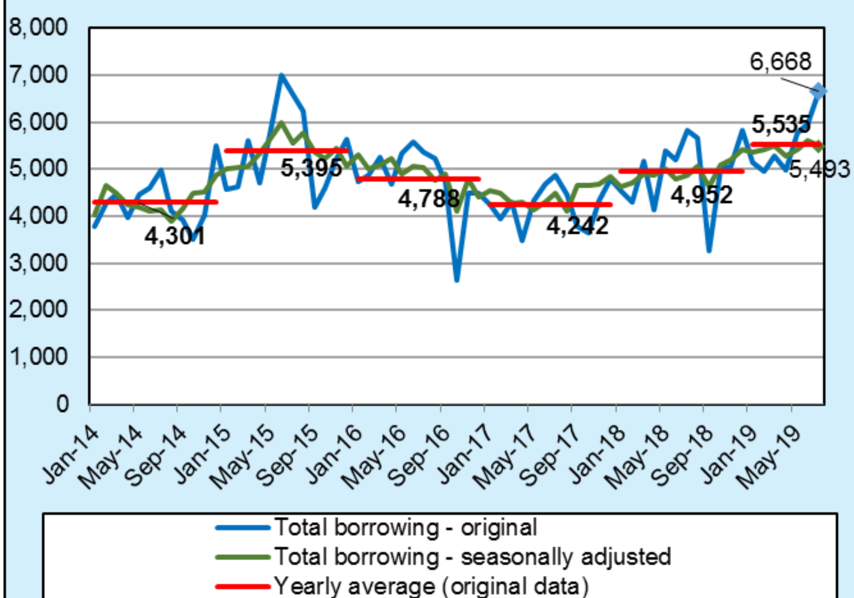
- Despite the increase in demand for housing loans, we are seeing a significant decline in the interest rates on such loans (about 0.5 percentage points since the beginning of the year), which makes it easier for mortgage borrowers. This decline is due to the significant decline in long-term interest rates in the economy, which influence the cost of raising sources for the banks in the medium-long term (long-term government bond yields declined by about 0.8 percentage points during this period).
- The increase in demand for mortgages was accompanied by an increase in the supply of housing loans by the banks. Thus, some of the banks defined the market as a strategic target for growth, partly due to the convergence of capital ratios that were higher than regulatory capital requirements, a lower risk perception than in other activity segments, and the increased profitability of the segment (despite the decline in interest rates).

Background

In the first half of the year, there was a sharp increase in new mortgage borrowing, which reached NIS 6.7 billion[1] in July 2019 (NIS 5.5 billion seasonally adjusted), a direct continuation of the two previous months in which new mortgages totaled about NIS 5.8 billion per month. The increase in recent follows an upward trend in mortgage borrowing that began in mid-2017, which follows two years of declines. Monthly housing loan borrowing has averaged about NIS 5.35 billion so far in 2019, compared with about NIS 4.9 billion in 2018, and about NIS 4.2 billion in 2017 (Figure 1).

New mortgages reached their highest level since 2015.

Figure 1
Monthly Borrowing for Residential Loans, and Yearly Averages, Total Banking System, January 2014 to July 2019 (NIS million)



SOURCE: Based on reports to the Banking Supervision Department.

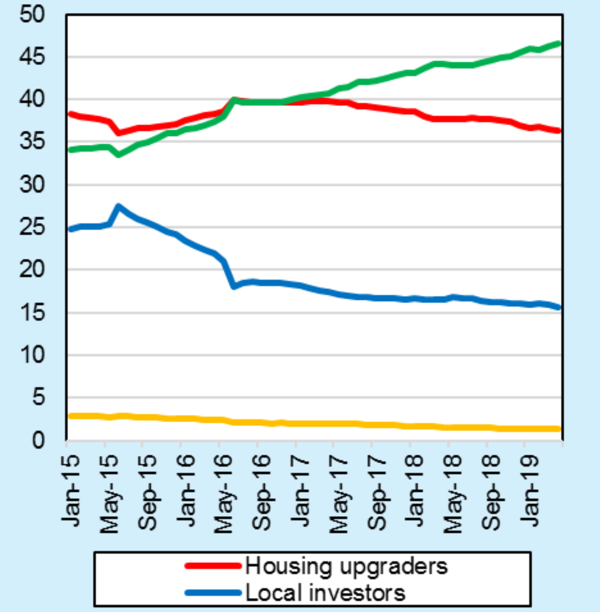
[1] July generally features higher mortgage borrowing than other months.

The housing market

The changes in the mortgage market have to a large extent been influenced by developments in the housing market. We are witnessing an upward trend in total first-time home purchases, which strengthened in the third quarter of 2017 (growth of about 10 percent during that period). This trend has reached the point where **first-time home purchases in the past 12 months have accounted for about 45 percent of total home purchases** as of May 2019 (Figure 2). In particular, there is an increase in the purchase of new homes among those purchasing a first home (Figure 3). The increase in the purchase of new homes features an acceleration in the number of transactions between September and December 2018, which is mainly due to transactions as part of the Buyer's Price program. At the end of 2018, **Buyer's Price transactions reached about 40 percent of total new home transactions.**[2] It should be noted that at the beginning of 2019, the number of new home transactions declined, but remained high (Figure 4).

First home buyers account for most home purchase transactions.

Figure 2
Distribution of total home purchases in the past 12 months by Group of Purchasers, 2015 to April 2019 (percent)

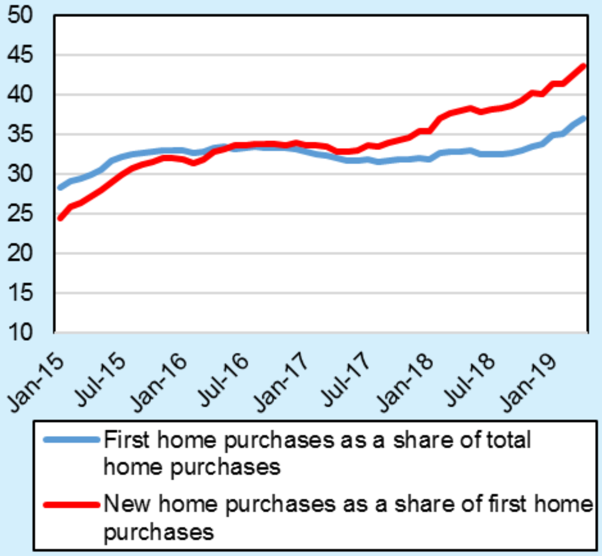


SOURCE: Israel Tax Authority.

[2] "Survey of the Residential Real Estate Industry, 2019", weekly economic survey, Chief Economist Division, Ministry of Finance (July 9, 2019)
https://mof.gov.il/chiefecon/economyandresearch/doclib/skiracalcalit_07072019.pdf (in Hebrew)

New home purchases have increased, particularly among those purchasing a first home.

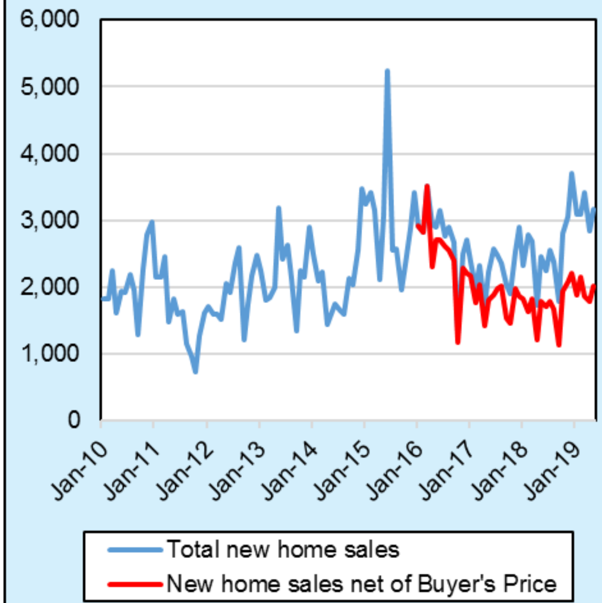
Figure 3
First Time Home Purchases in the Past 12 Months as a Share of Total Home Purchases and New Home Purchases as a Share of Total First Home Purchases, 2015 to April 2019
(percent)



SOURCE: Israel Tax Authority.

"Buyer's Price" purchases are leading the increase in new home sales.

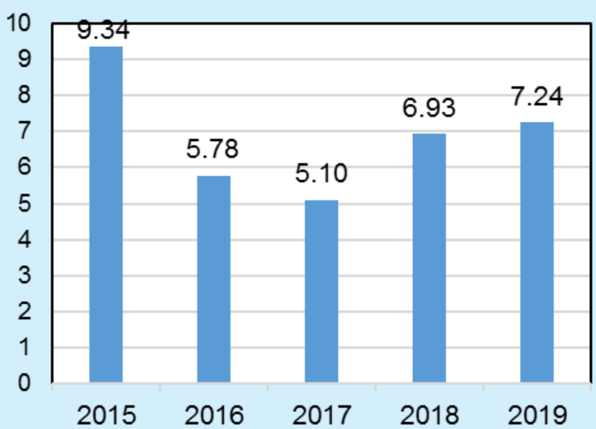
Figure 4
New Home Sales, Total and Net of "Buyer's Price" Sales, 2010–2019



SOURCE: Survey of the residential real estate industry, Chief Economist, Ministry of Finance, May 2019.

The annual growth rate of outstanding housing loans is increasing.

Figure 5
Annual Growth Rate of Outstanding Housing Loans, Total Banking System, 2015–2019
(percent)



SOURCE: Based on reports to the Banking Supervision Department.

In recent months, there has been a significant increase in new mortgage borrowing, which constitutes an increase of about 8 percent in total residential loan borrowing in the last quarter. As part of this, outstanding housing credit increased by about 7.24 percent since the beginning of 2019 (in annual terms; Figure 5).

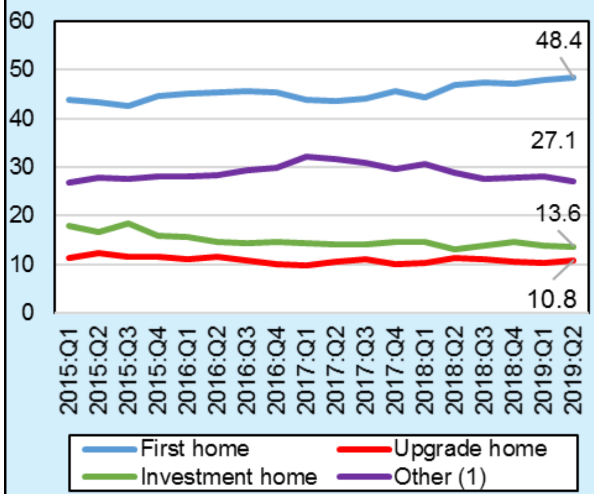
Most of the housing loans were issued for the purchase of a first home, and this share increased during the past year. Thus, the share of loans issued for the purchase of a first home was about 48.4 percent of total loans issued for residential purposes during that period, compared with 43,9 percent in the first quarter of 2017 (Figure 6). In other words, **most of the growth in mortgage borrowing comes from loans for the purchase of a first home.** In addition, about one-quarter of the loans for the purchase of a first home are loans issued to "Buyer's Price" purchasers (constituting 12 percent of total loans issued for residential purposes).

This upward trend in mortgage borrowing is partly due to recent trends observed in the housing market, as described above, and particularly the increasing share of first-time home purchases since the beginning of 2018.

Total borrowing for loans to finance transactions **as part of the Buyer's Price program** increased in the last quarter at a slightly slower pace than the rest of the residential loan portfolio, but **there was a significant increase in the number of transactions made as part of the program, with total monthly transactions at the end of the second quarter increasing by 45 percent compared with the end of the previous quarter.**

Most of the increase in new residential loans is due to the increase in loans for a first home.

Figure 6
Distribution of Residential Borrowing by Purpose, Total Banking System, 2015–2019:Q2 (percent)



[1] Other residential loans where the bank is not required to obtain a declaration from the borrower (loans issued with an LTV of lower than 50 percent).

SOURCE: Based on reports to the Banking Supervision Department.

This difference between the significant increase in the number of loans and the more moderate increase in total borrowing as part of the Buyer's Price program is due to the terms of the program that set out fixed payments dates as a function of progress in construction, similar to new home purchases. As such, borrowing is dependent on the progress of construction.[3] As a result, it is likely that **we don't see the full expected amount of the loans**, but only the amount borrowed thus far. **This, together with the fact that the number of new home purchases in the open market has also increased significantly, hints that we are no longer seeing the full growth of mortgage borrowing among these transactions, and the increase in borrowing is expected to continue.**

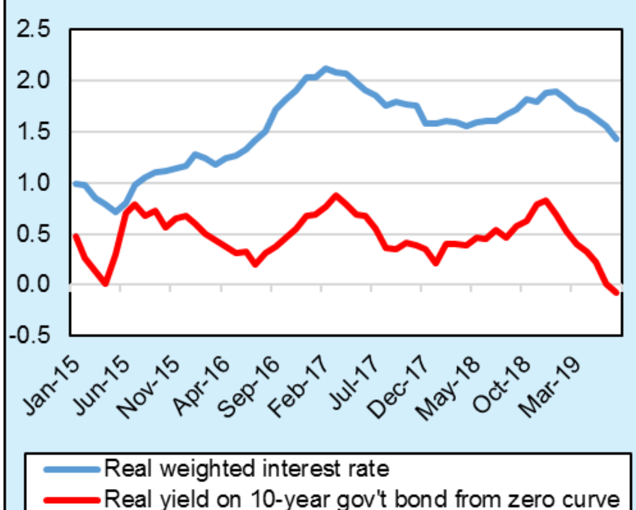
[3] When the transaction is signed, the purchaser pays only a partial amount, which is generally paid from that purchaser's equity. As construction progresses, and prior to occupancy, the purchaser continues to make additional payments, and at these stages, purchasers begin taking out housing loans from the bank.

Interest on loans to the public

Despite the significant increase in demand for housing loans, we see a decline in the interest rates on these loans, which shows an increase in supply. Thus, since the beginning of 2019, there has been a decline of about 0.5 percentage points in the weighted interest rate on mortgages (as of July 2019; Figure 7). This decline is noticeable across all interest tracks (Figure 8) **and is due to the decline in the cost of raising sources for the medium-to-long term, led by the decline in the yield on long-term government bonds** (which have declined by about 0.8 percentage points since the start of 2019). Despite the decline in the interest rates on mortgages, the profitability of the housing credit segment continues to increase[4], as shown by the credit provision activity spread (1.15 percent in the first quarter of 2019, compared with 1.11 percent at the end of 2018).

Mortgage interest rates have declined sharply since the beginning of 2019.

Figure 7
Real Weighted Interest Rate[a] on Mortgages, and Real Yield on 10-Year Government Bonds from the Zero Curve, 2015–July 2019 (percent)

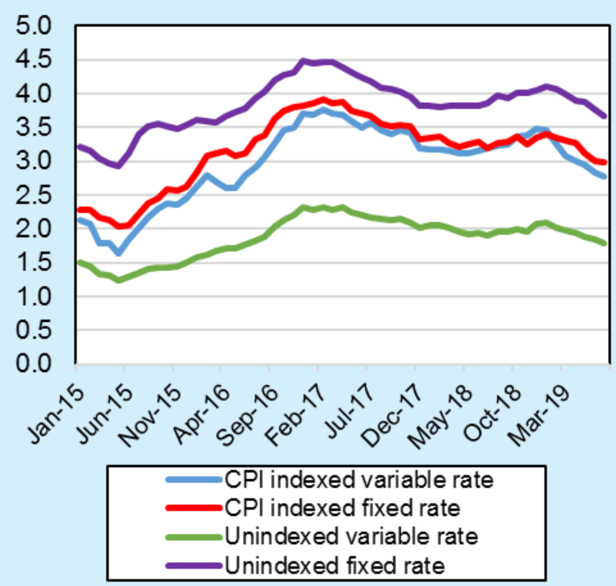


[a] The weighted interest rate is calculated assuming inflation of 2 percent.

SOURCE: Based on reports to the Banking Supervision Department.

There has been a marked decline in all interest rate tracks.

Figure 8
The Interest Rate on New Mortgages byIndexation Type and Interest Type, Current Month, 2015–July 2019 (percent)



SOURCE: Based on reports to the Banking Supervision Department.

[4] Although, the increase in credit spreads may be due to some increase in the risk of the housing credit portfolio, partly due to the increase in leverage rates.

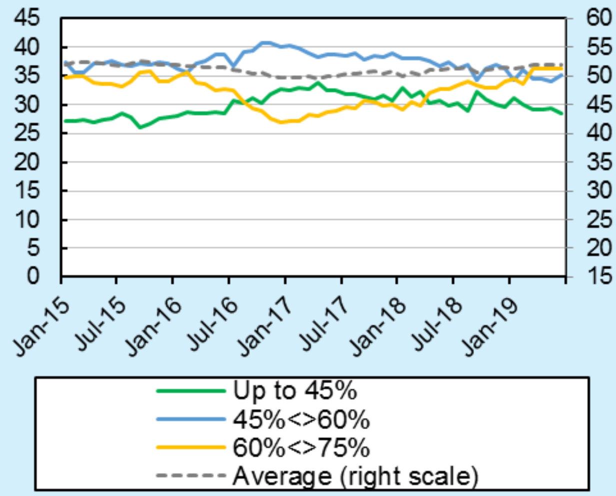
The quality of the credit portfolio

New borrowing is characterized by an increase in the share of loans with high LTV rates (60 to 75 percent). This trend has led to a situation where about 35 percent of housing loans issued in recent months are at high LTV rates (Figure 9), compared with just 27 percent at the beginning of 2017. This increase is reflected in a decline in the share of loans with medium LTV rates (between 45 and 60 percent), which may indicate that borrowers with similar characteristics could not take out mortgages at the maximum leverage rates in the past.

There are a number of factors that explain this increase. First, the mix of borrowers changed during the period. **Buyer's Price borrowers account for a greater percentage of total loans.** These borrowers have slightly different characteristics than other mortgage borrowers purchasing a first home, as they are mostly young middle-class couples. In particular, **loans with high LTV rates account for a much higher percentage of Buyer's Price mortgages** (Figure 10). In addition, **the average loan amount for Buyer's Price borrowers is higher than for other borrowers for a first home** (about NIS 864,000 among Buyer's Price borrowers compared with about NIS 747,000 among other borrowers for first time homes). At the same time, **the value of the mortgaged property is lower among Buyer's Price borrowers** (about NIS 1.4 million, compared to about NIS 1.6 million among borrowers purchasing a first home). In parallel, the risk asset weighting leniency in respect of mortgages that was published in early 2017 led to a situation where the cost of allocating capital to credit at high LTV rates declined, thereby increasing the supply of housing credit at high LTV rates. Despite the increase in the share of mortgages with LTV rates, the average LTV rate is 52 percent, which is not high.

Loans with high LTV rates have increased, affected by Buyer's Price borrowers.

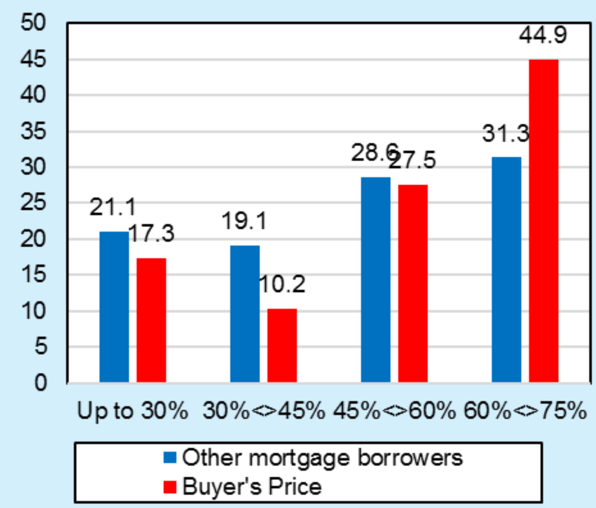
Figure 9
Distribution of Residential Borrowing by LTV Rate, Total Banking System, January 2015–June 2019 (percent)



SOURCE: Reports to the Banking Supervision Department.

Buyer's Price borrowers generally have high LTV rates.

Figure 10
Distribution of Mortgages by LTV Rate, Buyer's Price vs Other First Home Buyers
(percent)



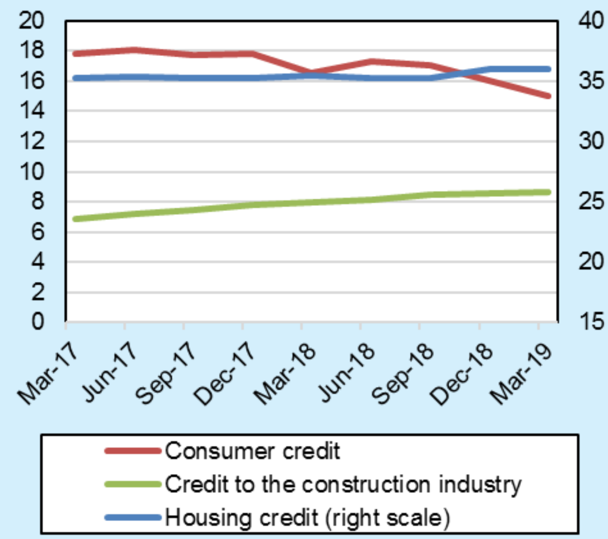
SOURCE: Based on reports to the Banking Supervision Department.

The increase in the LTV rates on mortgages may attest to some increase in the risk of the housing credit portfolio, in view of the increase in leverage rates. **However, that increase may actually reflect a decline in the credit risk of households, since the increase in LTV rates may be accompanied by a reduction in consumer loans taken to complete the equity for taking out a mortgage.** In general, since the beginning of 2018, **there has been a significant decline in the share of consumer credit**, for which loss rates are higher than in other credit segments, especially the housing credit segment. This decline comes alongside a slight increase in the share of housing credit and an increase in the share of business credit (mainly credit to the construction industry). As such, **the change in the mix of the banks' credit portfolio alone has led to an increase in its quality** (Figure 11). However, given the increase in both the housing credit portfolio and credit to the construction industry, which together comprise a significant exposure to real estate (about 51 percent of credit to the public in Israel is to the housing segment or to the construction and real estate industry), and the high correlation between them, this exposure remains a source of considerable risk for the banks.

Other indices of the quality of the housing credit portfolio show good portfolio quality. The PTI rate, which is a main variable in assessing a borrower's likelihood of becoming insolvent, remains stable at the low level of about 26.4 percent (Figure 12), the term to repayment remained stable (about 22 years), and housing debt relative to GDP remains low

Consumer credit as a share of total credit to the public has declined in Israel.

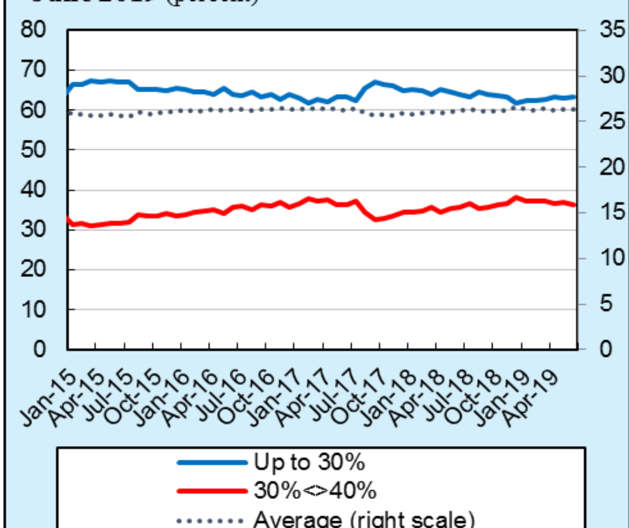
Figure 11
The Main Segments' Share of Total Credit to the Public, Total System, 2017–2019:Q1
(percent)



SOURCE: Based on reports to the Banking Supervision Department.

Consumer credit as a share of total credit to the public has declined in Israel.

Figure 12
Distribution of Residential Borrowing by PTI Rate, Total Banking System, January 2015–June 2019 (percent)

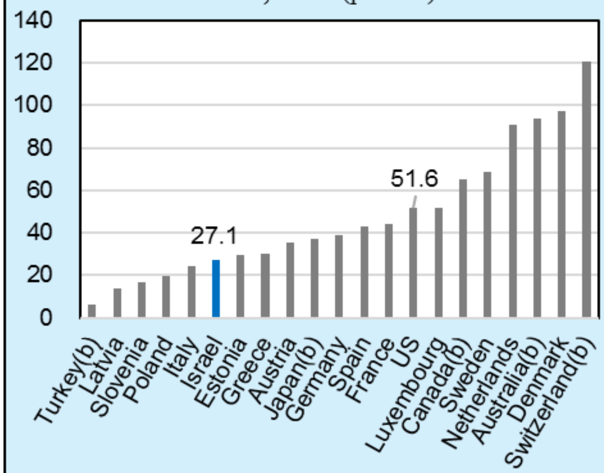


SOURCE: Reports to the Banking Supervision Department.

by international comparison (Figure 13). The rate of credit in arrears more than 90 days increased slightly in the last quarter (June 2019), but remained near zero. (The rate of credit in arrears more than 90 days as a share of total housing credit was about 0.013 percent in June, compared with 0.009 percent at the end of 2017.) However, it is important to note that the rates of credit in arrears more than 90 days is an index of risk for past borrowing, and cannot indicate the quality of new borrowing in the portfolio.

Housing credit as a share of GDP in Israel is low by international comparison.

Figure 13
International Comparison of Housing Credit[a] as a Share of GDP, 2018 (percent)



[a] In Israel, including only housing debt (not debt for other purposes backed by a residential dwelling).
[b] Data relate to 2017.
SOURCE: Foreign countries - OECD; Israel - Bank of Israel.

The good quality of the housing credit portfolio is the result of a series of measures adopted by the Banking Supervision Department over the years, which led in prudential terms to an improvement of the housing credit portfolio on the banks' balance sheets, and in consumer terms to reduced borrower sensitivity to potential changes in the economic environment. These include measures that led to a decline in the PTI rate, and particularly to the fact that the rate of borrowers with PTI rates higher than 40 percent is near zero; limiting the maximum LTV rate for a first home to 75 percent; lowering the public's sensitivity to interest rate changes by limiting the variable-rate portion of the loan; and more. These measures have also proven themselves in stress tests conducted every year in the banking system, which show that the risk in the housing credit portfolio remains lower than in other credit segments, and that its quality has improved in recent years.[5]

Other than these measures, the Credit Sharing System that recently began operating is expected to contribute to the quality of the housing credit portfolio by improving the banks' underwriting at the time the loan is provided.

As such, in view of the good credit quality in the housing portfolio and the increasing profitability of this segment, and in view of the convergence to capital ratios higher than the minimum capital requirements, some of the banks defined the market as a strategic target for growth, which contributed to the increased supply of housing loans on the part of the banks.

[5] For more information on the results of the housing stress test conducted in 2018, see Box 1.2 in the Banking Supervision Department Annual Report *Israel's Banking System* for 2018.

Box 2: A survey of global cyber events

The following is a survey of some of the cyber incidents that occurred around the world **during the first half of 2019**. These incidents illustrate the types of risk, their characteristics and their effects.

1. **Data breaches:**
   - **The Capital One information breach incident (July 2019) –** The data breach at Capital One (the tenth largest bank in the US) occurred in the AWS S3 service (provided by Amazon) due to a "misconfiguration". Although events of this type have occurred a number of times in recent years, this time the profile of the attack was different (i.e. its execution, the breach of information, the retrieval of data from Amazon servers and the use of methods to cover up the hacker's tracks). From the information that was released, it appears that the attack was carried out by one of Amazon's former employees, who succeeded in accessing the relevant servers and stealing information. **The stolen information included sensitive financial information on about 100 million US citizens and about 6 million Canadian citizens.** The attack occurred in March 2019 (and also included dozens of other organizations) and was uncovered in July 2019 when data on Capital One customers appeared on the Internet.
   - **The Collection #1 incident – January 2019 –** A security investigator located a huge database containing about 773 million email addresses and passwords of users from all over the world. The information was discovered at a cloud storage site based in New Zealand. The creators of the database, whose identity is unknown, referred to it as "Collection #1". The database was accessible from various forums on the Dark Web. The combination of passwords and email addresses provided a tool that could be used to penetrate various online services and to exploit access for a variety of purposes – from the gathering of information to masquerading, the theft of cash and blackmail. Later on in the year, it was discovered that this was only one part of a much larger quantity of information that had been divided into seven parts and distributed.
   - **A data breach incident that affected half of the residents of Delhi – February 2019 –** Personal information on about half a million residents of the city of Delhi was exposed on the Internet as the result of a database being left exposed on the Internet without a password. This sensitive information included personal identification details.
   - **Breach of data on half a billion Facebook users – April 2019 –** Security investigators discovered information on more than half a billion Facebook users, which had been gathered by a third party and stored unencrypted on Amazon servers and was accessible to everyone. The exposed database was gathered by a Mexican media company called Cultura Colectiva and included details such as user name, comments and likes. The information was taken from Facebook prior to the Cambridge Analytics affair, when the company was still

providing developers with broad access to user information. As a result of the incident, Facebook severely limited the information that external developers could access.

- **Data breach involving 60 million LinkedIn users – April 2019 –** Eight databases were discovered, containing information on close to 60 million LinkedIn users. The information was stored with a third party supplier who carried out an aggregation into a number of data sources, including LinkedIn.
- **Breach incidents among antivirus manufacturers – May 2019 –** According to reports, a group of Russian hackers managed to breach the networks of the MacAfee, Trend Micro and Symantec antivirus manufacturers. The hackers stole and offered to sell 30 TB of information, including the source code of the companies' antivirus engines.
- **The American Medical Collection Agency incident – June 2019 –** AMCA, an American payments site, was breached and sensitive information on 20 million customers was exposed. As a result of the incident, the company filed for bankruptcy.

2. Phishing

- **A global phishing campaign called "smart kangaroo" –** The campaign included an attack on the customers of financial institutions in Israel and other countries. The attackers managed to circumvent a strong mechanism for identifying the customer by means of SMS. Apparently, an Eastern European criminal group was responsible. The attack occurred in Israel in April and became global at a later stage. It expanded to include VodaPhone, Paypal, and ScotiaBank among others.
- **Fraud by means of Business Email Compromise (BEC) –** In recent months, masquerading software using artificial intelligence has been used to help attackers masquerade as a senior executive in an organization or in a third-party supplier in order to execute financial transactions. The damage in these attacks is estimated in the billions of euros (on a global level). Recently, there has been an increase in incidents of this sort and in their complexity.

Table 1

Principle banking system indices, December 2001 to June 2019

	Ratio of market value to book value[a] (MV/BV)	Average yield spread between bonds of the banks and government bonds[b] (percentage points)	Ratio of credit to GDP[c,d] (percent)	Rate of change in balance-sheet credit to the public[d,e] (percent)	Annual loan loss provision to total credit to the public[e,f] (percent)	Liquidity coverage ratio[d,g] (percent)	Ratio of credit[f,h] to deposits	Common Equity Tier 1 capital ratio[f,i] (percent)	Equity to total balance-sheet assets[f] (percent)	Leverage ratio[f,j] (percent)	ROE[f] (percent)
2001	0.91	0.7	109.3	17.9	0.84		0.81		4.9		5.6
2002	0.56	0.8	104.6	-1.1	1.32		0.83		4.9		2.5
2003	0.85	0.7	102.8	-1.7	1.12		0.82		5.3		8.3
2004	1.06	0.7	98.5	0.1	0.92		0.80		5.5		12.4
2005	1.45	0.7	99.7	6.7	0.69		0.82		5.4		14.5
2006	1.33	0.6	94.6	2.0	0.52		0.80		5.9		17.3
2007	1.21	0.9	94.6	7.7	0.28		0.85		6.1		15.6
2008	0.56	2.0	98.8	10.3	0.72		0.90		5.7		0.3
2009	1.11	1.6	93.0	-1.4	0.75		0.86	7.9[k]	6.3		8.8
2010	1.06	1.0	92.6	7.2	0.41		0.91	8.2	6.7		9.8
2011	0.69	1.3	89.7	3.7	0.39		0.89	8.0	6.2		10.2
2012	0.78	1.0	86.4	2.1	0.41		0.87	8.7	6.6		7.9
2013	0.84	0.9	82.0	1.1	0.25		0.87	9.3	6.7		8.8
2014	0.72	0.9	80.7	3.2	0.16		0.84	9.2[l]	6.7		7.3
2015	0.74	0.9	80.6	5.1	0.12	111[l]	0.83	9.6	6.9	6.4[l]	9.1
2016	0.83	0.7	78.6	2.6	0.09	135	0.80	10.7	7.0	6.6	8.3
2017	0.96	0.6	78.2	3.2	0.13	125	0.80	10.9	7.2	6.7	8.8
2018	0.91	0.9	79.4	6.2	0.21	128	0.83	10.8	7.4	6.8	8.5
06-19	1.02	0.6	78.8	4.0	0.24	125	0.83	11.3	7.6	7.0	10.7

[a] In calculating the MV/BV ratio, the book value (BV) of the five major banks is calculated with a delay of one quarter after the market value (MV). As of December 2014, the book value includes the effect of employee rights and software expenses.

[b] Average for December of that year.

[c] Measured in relation to gross credit.

[d] Measured in relation to the entire banking system.

[e] Until December 2010—net credit to the public; from December 2011—gross credit to the public.

[f] Measured in relation to the five banking groups.

[g] Calculated on a consolidated basis, and based on end-of-period balances.

[h] Calculated in relation to net credit.

[i] Until December 31, 2013, the banking corporations presented the Core Tier 1 capital ratio, in accordance with Basel II principles. From January 1, 2014, they present the Common Equity Tier 1 capital ratio, in accordance with Basel III principles.

[j] Calculated as the ratio between Tier 1 capital and total exposures, in accordance with Basel III principles.

[k] Calculated in accordance with Basel II principles.

[l] Calculated in accordance with Basel III principles in accordance with the transition directives.

SOURCE: Banking Supervision Department based on Central Bureau of Statistics, Tel Aviv Stock Exchange, Bank of Israel, published financial statements, and reports to the Banking Supervision Department.

Table 2

Main items in consolidated profit and loss statements of the five banking groups, June 2018, December 2018, and June 2019

(NIS millon, at current prices)

	Leumi				Hapoalim				Discount			
	Dec-18	Jun-18	Jun-19	% change June 2019 compared with June 2018	Dec-18	Jun-18	Jun-19	% change June 2019 compared with June 2018	Dec-18	Jun-18	Jun-19	% change June 2019 compared with June 2018
Interest income	11,346	5,609	6,235	11.2	11,672	5,802	6,555	13.0	7,053	3,419	3,956	15.7
Interest expenses	2,456	1,189	1,649	38.7	2,766	1,414	1,812	28.1	1,527	725	940	29.7
Net interest income	**8,890**	**4,420**	**4,586**	**3.8**	**8,906**	**4,388**	**4,743**	**8.1**	**5,526**	**2,694**	**3,016**	**12.0**
Loan loss provisions	519	116	270	132.8	613	306	440	43.8	540	241	277	14.9
Net interest income after loan loss provisions	**8,371**	**4,304**	**4,316**	**0.3**	**8,293**	**4,082**	**4,303**	**5.5**	**4,986**	**2,453**	**2,739**	**11.7**
Noninterest income	**4,871**	**2,241**	**2,749**	**22.7**	**4,868**	**2,306**	**1,891**	**-18.0**	**3,494**	**1,654**	**1,850**	**11.9**
of which: Noninterest financing income	680	140	998	612.9	1,445	589	255	-56.7	586	249	402	61.4
of which: Stocks[a]	479	123	504	309.8	403	76	250	228.9	107	9	81	800.0
Bonds[b]	-35	-1	97		180	98	53	-45.9	108	81	83	2.5
Activity in derivative instruments[c]	2,484	1,584	-867		2,324	1,491	-903		1,265	774	-556	
Exchange rate differentials	-2,246	-1,566	1,262		-1,518	-1,134	854		-900	-621	787	
of which: Fees	4,121	2,045	1,626	-20.5	3,318	1,670	1,589	-4.9	2,851	1,389	1,439	3.6
Total operating and other expenses	**8,337**	**4,109**	**3,896**	**-5.2**	**8,960**	**3,999**	**3,869**	**-3.3**	**6,148**	**2,948**	**3,100**	**5.2**
of which: salaries and related expenses	4,544	2,293	2,261	-1.4	4,097	2,106	2,061	-2.1	3,385	1,656	1,704	2.9
Pre-tax profit	**4,905**	**2,436**	**3,169**	**30.1**	**4,201**	**2,389**	**2,325**	**-2.7**	**2,332**	**1,159**	**1,489**	**28.5**
Provision for tax on profits	1,619	783	1,120	43.0	2,009	1,037	890	-14.2	789	397	524	32.0
After tax profit	**3,286**	**1,653**	**2,049**	**24.0**	**2,192**	**1,352**	**1,435**	**6.1**	**1,543**	**762**	**965**	**26.6**
Net profit attributed to shareholders	**3,257**	**1,633**	**2,015**	**23.4**	**2,595**	**1,548**	**1,692**	**9.3**	**1,505**	**742**	**950**	**28.0**
Total after-tax ROE (percent)	**9.50**	**9.90**	**11.40**		**7.06**	**8.74**	**9.01**		**9.30**	**9.60**	**11.10**	
Total ROA (percent)	**1.41**	**1.45**	**0.87**		**1.13**	**1.37**	**0.74**		**1.26**	**1.29**	**0.79**	

Table 2 (cont'd)

Main items in consolidated profit and loss statements of the five banking groups, June 2018, December 2018, and June 2019

(NIS millon, at current prices)

	Mizrahi-Tefahot				First International				The five groups			
	Dec-18	Jun-18	Jun-19	% change June 2019 compared with June 2018	Dec-18	Jun-18	Jun-19	% change June 2019 compared with June 2018	Dec-18	Jun-18	Jun-19	% change June 2019 compared with June 2018
Interest income	7,359	3,686	4,333	17.6	3,001	1,473	1,638	11.2	40,431	19,989	22,717	13.6
Interest expenses	2,437	1,260	1,559	23.7	515	274	338	23.4	9,701	4,862	6,298	29.5
Net interest income	**4,922**	**2,426**	**2,774**	**14.3**	**2,486**	**1,199**	**1,300**	**8.4**	**30,730**	**15,127**	**16,419**	**8.5**
Loan loss provisions	310	172	175	1.7	166	81	59	-27.2	2,148	916	1,221	33.3
Net interest income after loan loss provisions	**4,612**	**2,254**	**2,599**	**15.3**	**2,320**	**1,118**	**1,241**	**11.0**	**28,582**	**14,211**	**15,198**	**6.9**
Noninterest income	**1,967**	**967**	**950**	**-1.8**	**1,637**	**825**	**749**	**-9.2**	**16,837**	**7,993**	**8,189**	**2.5**
of which: Noninterest financing income	445	219	146	-33.3	231	87	112	28.7	3,389	1,284	1,913	49.0
of which: Stocks[a]	17	6	38	533.3	79	3	22	633.3	1,085	217	895	312.4
Bonds[b]	7	3	14	366.7	9	6	9	50.0	269	187	256	36.9
Activity in derivative instruments[c]	1,502	984	-620	-163.0	582	367	-250		8,157	5,200	-3,196	
Exchange rate differentials	-1,081	-774	714	-192.2	-439	-289	331		-6,184	-4,384	3,948	
of which: Fees	1,475	725	756	4.3	1,325	663	635	-4.2	13,090	6,492	6,045	-6.9
Total operating and other expenses	**4,384**	**2,237**	**1,997**	**-10.7**	**2,819**	**1,392**	**1,351**	**-2.9**	**30,648**	**14,685**	**14,213**	**-3.2**
of which: salaries and related expenses	2,407	1,126	1,284	14.0	1,696	835	821	-1.7	16,129	8,016	8,131	1.4
Pre-tax profit	**2,195**	**984**	**1,552**	**57.7**	**1,138**	**551**	**639**	**16.0**	**14,771**	**7,519**	**9,174**	**22.0**
Provision for tax on profits	922	404	531	31.4	408	199	238	19.6	5,747	2,820	3,303	17.1
After tax profit	**1,273**	**580**	**1,021**	**76.0**	**730**	**352**	**401**	**13.9**	**9,024**	**4,699**	**5,871**	**24.9**
Net profit attributed to shareholders	**1,206**	**550**	**980**	**78.2**	**733**	**356**	**407**	**14.3**	**9,296**	**4,829**	**6,044**	**25.2**
Total after-tax ROE (percent)	**8.50**	**8.10**	**13.30**		**9.30**	**9.30**	**10.20**		**8.51**	**9.19**	**10.72**	
Total ROA (percent)	**0.94**	**0.89**	**0.75**		**1.09**	**1.06**	**0.60**		**1.20**	**1.28**	**0.78**	

[a] Includes the profits/losses from investments in shares available for sale, profits from the sales of shares of affiliated companies, dividends and profits/losses from adjustments to fair value of tradable shares.

[b] Includes the profits/losses from investments in bonds held to maturity and available for sale and income/expenses realized and not yet realized from adjustments to fair value of tradable bonds.

[c] Includes derivative instruments not intended for hedging purposes (ALM instruments) and other derivative instruments.

SOURCE: Based on published financial statements.

Table 3

The effect of quantity[a] and price[b] on interest income and expenses, Israel and abroad, the five banking groups, June 2018 to June 2019

(change compared with the same period the previous year, NIS million)

	Quantity effect			Price effect			Net change		
	Assets side	Liabilities side	Net	Assets side	Liabilities side	Net	Assets side	Liabilities side	Contribution to net interest income
June 2019									
Credit to the public / deposits of the public in Israel	930	141	789	603	770	-167	1,533	911	622
Credit to the public / deposits of the public abroad	167	49	118	148	204	-56	315	253	62
Total credit to the public / deposits of the public	1,097	190	907	751	974	-223	1,848	1,164	684
Other interest-bearing assets / liabilities in Israel	15	96	-81	692	203	489	707	299	408
Other interest-bearing assets / liabilities abroad	23	-10	33	90	-17	107	113	-27	140
Total other interest-bearing assets / liabilities	38	86	-48	782	186	596	820	272	548
Total interest income / expenses	1,135	276	859	1,533	1,160	373	2,668	1,436	1,232
June 2018									
Credit to the public / deposits of the public in Israel	843	71	772	340	432	-92	1,183	503	680
Credit to the public / deposits of the public abroad	-48	-27	-21	267	162	105	219	135	84
Total credit to the public / deposits of the public	795	44	751	607	594	13	1,402	638	764
Other interest-bearing assets / liabilities in Israel	16	-160	176	146	34	112	162	-126	288
Other interest-bearing assets / liabilities abroad	-134	-40	-94	168	11	157	34	-29	63
Total other interest-bearing assets / liabilities	-118	-200	82	314	45	269	196	-155	351
Total interest income / expenses	677	-156	833	921	639	282	1,598	483	1,115
December 2018									
Credit to the public / deposits of the public in Israel	1,842	120	1,722	1,469	1,290	179	3,311	1,410	1,901
Credit to the public / deposits of the public abroad	65	-38	103	509	428	81	574	390	184
Total credit to the public / deposits of the public	1,907	82	1,825	1,978	1,718	260	3,885	1,800	2,085
Other interest-bearing assets / liabilities in Israel	16	-101	117	647	345	302	663	244	419
Other interest-bearing assets / liabilities abroad	-221	-70	-151	324	2	322	103	-68	171
Total other interest-bearing assets / liabilities	-205	-171	-34	971	347	624	766	176	590
Total interest income / expenses	1,702	-89	1,791	2,949	2,065	884	4,651	1,976	2,675

[a] The quantity effect is calculated as the change in the balance-sheet balance (current year versus previous year) multiplied by the price during the current period, divided by 1000.

[b] The price effect is calculated as the change in price (current year versus previous year) multiplied by the balance-sheet balance for the same period in the previous year, divided by 1000.

SOURCE: Banking Supervision Department based on published financial statements.

Table 4

Average balances, interest income and expense rates, and interest rate gap in respect of assets and liabilities, the five banking groups, June 2018 to June 2019 (NIS million, percent, in annual terms)

June 2019

Assets	Average yearly balance (NIS million)	Interest income	Income rate (%)	Liabilities	Average yearly balance (NIS million)	Financing expenses	Expense rate (%)	Interest rate gap
Credit to the public	988,047	20,306	4.15	Deposits of the public	857,528	-4,219	-0.99	3.17
Deposits at banks	22,195	207	1.88	Deposits from banks	15,626	-1,978	-0.82	1.06
Deposits at central banks	189,687	431	0.46	Deposits from central banks	597	-64	-2.36	-1.90
Bonds	197,384	1,728	1.76	Bonds	91,160	-1,978	-4.39	-2.63
Other assets[a]	12,681	135	2.14	Other liabilities[a]	3,698	-32	-1.72	0.42
Total interest-bearing assets	1,409,994	22,807	3.26	Total interest-bearing liabilities	968,609	-6,300	-1.31	1.95
Net yield on interest-bearing assets (net interest margin)[b]	1,409,994	16,507	2.36					

June 2018

Assets	Average yearly balance (NIS million)	Interest income	Income rate (%)	Liabilities	Average yearly balance (NIS million)	Interest expenses	Expense rate (%)	Interest rate gap
Credit to the public	936,204	18,458	3.98	Deposits of the public	821,899	-3,055	-0.74	3.24
Deposits at banks	20,965	145	1.39	Deposits from banks	15,593	-1,694	-0.73	0.66
Deposits at central banks	196,428	202	0.20	Deposits from central banks	229	-57	-0.88	-0.68
Bonds	190,986	1,234	1.30	Bonds	86,161	-1,694	-3.97	-2.67
Other assets[a]	10,168	100	1.98	Other liabilities[a]	5,093	-57	-2.23	-0.25
Total interest-bearing assets	1,354,751	20,139	3.00	Total interest-bearing liabilities	928,975	-4,864	-1.05	1.95
Net yield on interest-bearing assets (net interest margin)[b]	1,354,751	15,275	2.27					

December 2018

Assets	Average yearly balance (NIS million)	Interest income	Income rate (%)	Liabilities	Average yearly balance (NIS million)	Interest expenses	Expense rate (%)	Interest rate gap
Credit to the public	953,103	37,063	3.89	Deposits of the public	823,885	-6,372	-0.77	3.12
Deposits at banks	20,830	277	1.33	Deposits from banks	16,826	-119	-0.71	0.62
Deposits at central banks	192,091	465	0.24	Deposits from central banks	423	-10	-2.37	-2.13
Bonds	190,430	2,724	1.43	Bonds	87,931	-3,069	-3.49	-20.60
Other assets[a]	11,244	219	1.95	Other liabilities[a]	4,965	-136	-2.74	-0.79
Total interest-bearing assets	1,367,698	40,748	2.98	Total interest-bearing liabilities	934,030	-9,706	-1.02	1.96
Net yield on interest-bearing assets (net interest margin)[b]	1,367,698	31,042	2.27					

[a] Other liabilities and assets also include credit to the government and government deposits, and securities loaned or borrowed in repurchase agreements, among other things.

[b] The net interest margin is the ratio between net interest income and total interest-bearing assets. The margin is shown in percent.

SOURCE: Banking Supervision Department based on published financial statements.

Table 5

Unit output cost[a] and efficiency ratio[b] of the banking corporations in Israel, December 2018 to June 2019

(percent)

	Unit output cost			Efficiency ratio		
Bank	Jun-18	Dec-18	Jun-19	Jun-18	Dec-18	Jun-19
Leumi	1.82	1.83	1.68	61.7	60.6	53.1
Hapoalim	1.77	1.96	1.69	59.7	65.1	58.3
Discount	2.61	2.67	2.56	67.8	68.2	63.7
Mizrahi-Tefahot[c]	1.84	1.76	1.53	65.9	63.6	53.6
First International	2.06	2.09	2.01	68.8	68.4	65.9
Five banking groups	**1.95**	**2.01**	**1.82**	**63.5**	**64.4**	**57.8**
Union	2.07	2.25	2.07	74.3	81.1	77.0
Jerusalem	2.89	3.01	2.87	72.8	72.4	70.4
Municipal	0.67	0.67	0.69	45.2	53.2	40.8
Total banking system	**1.95**	**2.02**	**1.83**	**63.8**	**64.9**	**58.3**

[a] The ratio between total operating and other expenses and the average balance of assets (average cost).

[b] The ratio between total operating and other expenses and total net interest and noninterest income (cost-to-income)

SOURCE: Based on published financial statements.

Table 6

Outstanding credit to the public, by principal industries, the five banking groups, December 2018 and June 2019

	Total balance of credit risk[a]					Balance-sheet credit[b] (debts)				
	Balance		Distribution of credit to the public		Change in credit[c]	Balance		Distribution of credit to the public		Change in credit[c]
	Dec-18	Jun-19	Dec-18	Jun-19	Jun-19	Dec-18	Jun-19	Dec-18	Jun-19	Jun-19
	(NIS million)		(percent)		(percent)	(NIS million)		(percent)		(percent)
Construction and real estate - construction	174,862	184,198	11.8	12.3	10.7	79,293	83,503	7.8	8.1	10.6
Construction and real estate - real estate activity	73,170	76,692	4.9	5.1	9.6	62,746	64,706	6.2	6.2	6.2
Financial services	102,739	114,964	6.9	7.7	23.8	49,106	57,662	4.8	5.6	34.8
Other Commerce						255,077	261,890			
Total Commerce	**716,607**	**747,476**	**48.4**	**49.8**	**8.6**	**446,222**	**467,761**	**43.9**	**45.1**	**9.7**
Private individuals - housing loans	354,240	369,561	23.9	24.6	8.7	334,075	346,078	32.8	33.4	7.2
Private individuals - other	253,244	236,302	17.1	15.7	-13.4	148,995	141,129	14.6	13.6	-10.6
Total borrowers' activity in Israel	**1,324,091**	**1,353,339**	**89.4**	**90.2**	**4.4**	**929,292**	**954,968**	**91.4**	**92.1**	**5.5**
Total borrowers' activity abroad	**156,278**	**147,708**	**10.6**	**9.8**	**-11.0**	**87,902**	**81,481**	**8.6**	**7.9**	**-14.6**
Total	**1,480,369**	**1,501,047**	**100.0**	**100.0**	**2.8**	**1,017,194**	**1,036,449**	**100.0**	**100.0**	**3.8**

[a] Includes balance-sheet and non-balance-sheet credit risk.

[b] Includes credit to the public, excludes bonds and securities borrowed or purchased under reverse repurchase agreements.

[c] In annual terms.

SOURCE: Banking Supervision Department based on published financial statements.

Table 7
Indices of credit portfolio quality of the five banking groups, 2013 to September 2018
(percent)

	Year	Year	Leumi	Hapoalim	Discount	Mizrahi-Tefahot	First International	The five groups
Annual loan loss provision as a share of total balance-sheet credit to the public[a]	2014	31/12/2014	0.18	0.16	0.13	0.12	0.13	0.15
	2015	31/12/2015	0.08	0.17	0.15	0.13	0.02	0.12
	2016	31/12/2016	-0.05	0.10	0.33	0.12	0.10	0.10
	2017	31/12/2017	0.06	0.11	0.38	0.11	0.15	0.14
	2018	31/12/2018	0.18	0.21	0.32	0.16	0.19	0.21
	Jun-19[b]	30/06/2019	0.19	0.30	0.32	0.18	0.14	0.24
Net write-offs as a share of total balance-sheet credit to the public	2014	31/12/2014	0.12	0.06	0.24	0.10	0.05	0.11
	2015	31/12/2015	0.20	0.08	0.12	0.09	0.14	0.13
	2016	31/12/2016	0.00	0.20	0.27	0.09	0.09	0.12
	2017	31/12/2017	0.14	0.23	0.39	0.09	0.17	0.20
	2018	31/12/2018	0.09	0.19	0.25	0.11	0.16	0.15
	Jun-19[b]	30/06/2019	0.19	0.15	0.25	0.13	0.09	0.17
Allowance for credit losses as a share of total balance-sheet credit to the public	2014	31/12/2014	1.55	1.56	1.68	0.90	1.25	1.44
	2015	31/12/2015	1.38	1.56	1.59	0.87	1.12	1.36
	2016	31/12/2016	1.32	1.49	1.50	0.83	1.08	1.29
	2017	31/12/2017	1.20	1.36	1.40	0.81	1.03	1.19
	2018	31/12/2018	1.24	1.31	1.36	0.80	1.02	1.18
	Jun-19	30/06/2019	1.20	1.37	1.33	0.80	1.03	1.18
Problematic loans as a share of total balance-sheet credit to the public	2014	31/12/2014						
	2015	31/12/2015	3.14	3.43	3.54	1.38	2.39	2.91
	2016	31/12/2016	2.90	2.77	3.55	1.44	2.29	2.64
	2017	31/12/2017	2.48	2.36	2.80	1.39	1.78	2.23
	2018	31/12/2018	2.46	2.30	2.23	1.52	1.89	2.15
	Jun-19	30/06/2019	2.21	2.50	2.25	1.66	1.81	2.16
Impaired loans and non-impaired loans 90 days or more past due as a share of total balance-sheet credit to the public	2014	31/12/2014	2.23	2.74	2.69	1.20	1.54	2.22
	2015	31/12/2015	1.83	2.19	2.60	1.14	1.36	1.89
	2016	31/12/2016	1.75	1.76	2.37	0.95	1.04	1.64
	2017	31/12/2017	1.41	1.27	1.68	1.02	0.95	1.30
	2018	31/12/2018	1.36	1.23	1.24	1.23	0.83	1.24
	Jun-19	30/06/2019	1.25	1.30	1.23	1.28	0.89	1.24
Allowance for credit losses as a share of impaired loans and non-impaired loans more than 90 days past due	2014	31/12/2014	69.6	56.9	62.4	75.4	81.6	64.7
	2015	31/12/2015	75.5	71.3	61.1	76.5	82.6	71.7
	2016	31/12/2016	75.0	84.9	63.4	87.7	104.3	78.8
	2017	31/12/2017	85.3	107.5	83.2	79.8	108.5	91.8
	2018	31/12/2018	91.4	106.5	110.0	65.2	122.3	95.4
	Jun-19	30/06/2019	95.4	105.2	107.6	62.5	115.3	94.9
Impaired loans and non-impaired loans 90 days or more past due, net, as a share of total equity	2014	31/12/2014	6.1	10.0	9.0	3.8	2.7	7.3
	2015	31/12/2015	4.1	5.4	9.6	3.5	2.4	5.1
	2016	31/12/2016	3.7	2.1	8.3	1.5	-0.5	3.2
	2017	31/12/2017	1.7	-0.7	2.7	2.6	-0.8	1.0
	2018	31/12/2018	0.9	-0.6	-1.2	5.5	-1.9	0.5
	Jun-19	30/06/2019	0.4	-0.5	-0.9	5.9	-1.4	0.5

[a] Until December 2010, net credit to the public was used. From 2011, gross credit to the public.
[b] In annual terms.
SOURCE: Based on published financial statements.

Table 8
Supervisory Activity Segments[a,b] - Balance-Sheet Balances and Performance Indices, the Five Banking Groups, March 2018, December 2018, and March 2019

	Households			Business[c]				
	Housing	Other consumer	Total household	Small and micro businesses	Medium businesses	Large businesses	Total business	Total activity in Israel[d]
June 2019								
(NIS million)								
Outstanding credit to the end of the reporting period	335,308	110,386	477,335	197,374	79,998	206,008	483,380	968,697
Balance of deposits to the end of the reporting period	--	453,825	453,846	196,792	79,043	141,284	417,119	1,163,547
Balance of risk assets to the end of the reporting period	195,348	105,864	330,818	194,052	99,763	246,804	540,619	980,669
Net profit	875	-243	811	1,209	571	1,242	3,022	5,811
(percent)								
Outstanding impaired debt and debt more than 90 days past due divided by outstanding credit	1.01	1.43	1.05	1.78	1.13	1.04	1.36	1.24
Return on assets (net profit divided by the average balance of assets)[e]	0.53	-0.44	0.35	1.25	1.47	1.25	1.28	0.81
Net interest margin (net interest income divided by the average balance of assets and liabilities)[e]	2.34	2.65	2.58	4.00	3.02	2.34	3.19	2.15
Loan loss provisions divided by the credit balance to the end of the period[e]	0.03	0.66	0.20	0.52	0.19	0.12	0.29	0.24
December 2018								
(NIS million)								
Outstanding credit to the end of the reporting period	323,937	111,648	474,100	194,117	79,725	191,606	465,448	961,083
Balance of deposits to the end of the reporting period	--	449,805	449,899	189,612	79,284	146,183	415,079	1,140,384
Balance of risk assets to the end of the reporting period	189,303	106,028	329,047	190,059	97,726	233,379	521,164	973,217
Net profit	1,502	-751	1,235	2,243	1,248	2,585	6,076	9,817
(percent)								
Outstanding impaired debt and debt more than 90 days past due divided by outstanding credit	0.93	1.39	0.98	1.66	1.08	1.21	1.38	1.18
Return on assets (net profit divided by the average balance of assets)[e]	0.97	-0.68	0.27	1.20	1.66	1.41	1.37	0.70
Net interest margin (net interest income divided by the average balance of assets and liabilities)[e]	2.25	2.65	2.58	3.99	2.94	2.37	3.18	2.06
Loan loss provisions divided by the credit balance to the end of the period[e]	0.04	0.85	0.28	0.50	-0.28	-0.07	0.13	0.20
June 2018								
(NIS million)								
Outstanding credit to the end of the reporting period	313,286	111,819	462,767	187,377	74,119	185,237	446,733	930,466
Balance of deposits to the end of the reporting period	--	430,524	430,618	182,220	72,238	135,303	389,761	1,115,807
Balance of risk assets to the end of the reporting period	181,155	105,372	320,946	181,926	95,430	237,700	515,056	962,553
Net profit	720	-368	603	1,083	639	1,202	2,924	4,625
(percent)								
Outstanding impaired debt and debt more than 90 days past due divided by outstanding credit	1.02	1.43	1.06	1.79	0.87	1.13	1.36	1.24
Return on assets (net profit divided by the average balance of assets)[e]	0.47	-0.66	0.27	1.17	1.81	1.33	1.34	0.66
Net interest margin (net interest income divided by the average balance of assets and liabilities)[e]	2.20	2.58	2.51	3.96	2.88	2.32	3.14	2.05
Loan loss provisions divided by the credit balance to the end of the period[e]	0.03	0.80	0.26	0.50	-0.48	0.00	0.13	0.20

[a] Beginning with the financial statement for the first quarter of 2016, the banks are required to prepare disclosures for the supervisory activity segments according to the new rules adapted to the new, uniform and comparable definitions set out by the Banking Supervision Department, which are mainly based on the classification of customers by their volume of activity. There are also additional requirements for separate disclosure for the institutional investors segment and for the financial management segment, as well as for disclosures of balance-sheet balances to the end of the reporting period (credit and deposits) and balances of impaired credit and nonimpaired credit 90 days past due. The implementation of the Directive had no material effect on the banks' financial statements, other than the manner of presentation and

[b] Activity in Israel only.

[c] Micro business - Volume of activity totaling less than NIS 10 million; Small business - Volume of activity totaling between NIS 10 million and NIS 50 million; Medium business - Volume of activity totaling between NIS 50 and NIS 250 million; Large business - Volume of activity totaling over NIS 250 million.

[d] Including institutional entities, the financial management segment, and the "others" segment.

[e] In annual terms.

SOURCE: Based on published financial statements and reports to the Banking Supervision Department.

Table 9

Credit and spreads by supervisory activity segments, business sector[a,b], the five banking groups, March 2018, December 2018, and March 2019

	Credit balances to the end of the reporting period															
	Small and micro businesses				Medium-sized businesses				Large businesses				Total			
	Dec-18	Jun-19	Difference	Rate of change	Dec-18	Jun-19	Difference	Rate of change	Dec-18	Jun-19	Difference	Rate of change	Dec-18	Jun-19	Difference	Rate of change
	(NIS million)			(percent)	(NIS million)			(percent)	(NIS million)			(percent)	(NIS million)			(percent)
Leumi	60,578	59,928	-650	-2.15	27,290	28,009	719	5.27	61,899	63,897	1,998	6.46	149,767	151,834	2,067	2.76
Hapoalim	64,672	65,831	1,159	3.58	29,882	28,510	-1,372	-9.18	59,059	62,028	2,969	10.05	153,613	156,369	2,756	3.59
Discount	33,595	35,079	1,484	8.83	10,068	10,330	262	5.20	37,156	39,668	2,512	13.52	80,819	85,077	4,258	10.54
Mizrahi-Tefahot	19,324	20,408	1,084	11.22	6,669	7,307	638	1,913.00	16,440	17,307	867	10.55	42,433	45,022	2,589	12.20
First Int'l.	15,948	16,128	180	2.26	5,816	5,842	26	0.89	17,052	17,008	-44	-0.52	38,816	38,978	162	0.83
The five groups	194,117	197,374	3,257	3.36	79,725	79,998	273	0.68	191,606	199,908	8,302	8.67	465,448	477,280	11,832	5.08

	Net interest margin															
	Small and micro businesses				Medium-sized businesses				Large businesses				Total			
	Jun-18	Jun-19	Difference	Rate of change	Jun-18	Jun-19	Difference	Rate of change	Jun-18	Jun-19	Difference	Rate of change	Jun-18	Jun-19	Difference	Rate of change
	(NIS million)			(percent)	(NIS million)			(percent)	(NIS million)			(percent)	(NIS million)			(percent)
Leumi	3.64	3.76	0.12	3.43	2.46	2.61	0.15	6.12	2.34	2.51	0.17	7.41	2.89	3.02	0.12	4.26
Hapoalim	3.82	3.80	-0.02	-0.45	3.03	3.12	0.09	3.06	2.18	2.08	-0.10	-4.37	3.10	3.05	-0.05	-1.49
Discount	4.21	4.17	-0.04	-1.05	3.50	3.56	0.06	1.70	2.52	2.52	0.00	0.15	3.46	3.45	-0.01	-0.29
Mizrahi-Tefahot	5.16	5.12	-0.04	-0.75	3.46	3.75	0.29	8.33	2.50	2.37	-0.14	-5.43	3.72	3.74	0.03	0.73
First Int'l.	3.70	3.75	0.04	1.10	3.01	3.21	0.20	6.49	2.04	2.11	0.06	3.16	2.94	3.06	0.12	3.93
The five groups	3.96	4.00	0.05	1.16	2.88	3.02	0.15	5.07	2.32	2.85	0.53	22.97	3.14	3.14	0.05	1.44

[a] Small and micro businesses - activity of less than NIS 50 million; Medium-sized businesses - activity of between NIS 50 million and NIS 250 million; Large businesses - activity equal to or more than NIS 250 million.

[b] The data relate to activity in Israel, and do not include institutional investors, the financial management or "others" segments, and adjustments.

SOURCE: Based on published financial statements.

Table 10
Main capital indices of the five banking groups, December 2014 to June 2019
(percent)

	Year	Leumi	Hapoalim	Discount	Mizrahi-Tefahot	First Int'l.	Five Groups
Common Equity Tier 1 capital ratio[a]	2014	9.1	9.3	9.4	9.1	9.7	9.2
	2015	9.6	9.6	9.5	9.5	9.8	9.6
	2016	11.2	11.0	9.8	10.1	10.1	10.7
	2017	11.4	11.3	10.0	10.2	10.4	10.9
	2018	11.1	11.2	10.2	10.0	10.5	10.8
	June-19	11.6	12.0	10.4	10.2	10.9	11.3
The ratio between credit risk assets and total exposure to credit[c]	2014	66	68	60	56	56	63
	2015	63	66	60	55	54	61
	2016	57	59	60	51	53	57
	2017	57	58	61	52	51	57
	2018	59	61	61	52	52	58
	June-19	57	61	62	53	52	58
Leverage ratio[e]	2015	6.3	7.1	6.5	5.3	5.4	6.4
	2016	6.8	7.2	6.6	5.3	5.5	6.6
	2017	6.9	7.4	6.8	5.5	5.5	6.7
	2018	7.1	7.5	6.9	5.4	5.8	6.8
	June-19	7.1	7.9	7.1	5.7	5.9	7.0
The ratio between equity and total balance sheet assets	2014	6.6	7.8	6.3	5.7	6.0	6.7
	2015	7.0	7.7	6.6	5.9	5.8	6.9
	2016	7.2	7.6	6.8	5.8	5.9	7.0
	2017	7.4	7.9	7.3	6.0	5.9	7.2
	2018	7.8	8.2	7.4	6.0	6.3	7.4
	June-19	7.7	8.7	7.6	6.2	6.4	7.6

[a] In Basel III, in accordance with the transition directives.

[b] Calculated as the ratio between credit risk assets and the value of exposure after conversion to credit.

[c] Calculated as the ratio between Common Equity Tier 1 capital and total exposures, in accordance with the Basel III rule

SOURCE: Based on published financial statements and reports to the Banking Supervision Department.

Table 11

Distribution of capital and capital ratios at the five banking groups[a], December 2018 and June 2019

	Leumi		Hapoalim		Discount		Mizrahi-Tefahot		First International		The five groups	
	Dec-18	June-19	Dec-18	June-19	Dec-18	June-19	Dec-18	June-19	Dec-18	June-19	Dec-18	June-19
						(NIS million)						
Equity[b]	36,161	36,253	37,656	39,549	17,669	18,668	15,390	16,482	8,413	8,705	115,289	119,657
Common Equity Tier 1 capital[c]	35,190	36,644	38,004	39,852	17,504	18,505	15,172	16,220	8,321	8,593	114,191	119,814
Tier 1 capital[c]	35,190	36,644	38,981	40,585	18,216	19,039	15,172	16,220	8,321	8,593	115,880	121,081
Tier 2 capital[c]	11,033	10,794	10,042	10,261	5,140	4,707	5,515	5,783	2,713	2,370	34,443	33,915
Total capital base	46,223	47,438	49,023	50,846	23,356	23,746	20,687	22,003	11,034	10,963	150,323	154,996
Total balance sheet	460,657	467,880	460,926	454,247	239,176	244,313	257,873	264,223	134,120	135,067	1,552,752	1,565,730
Credit risk	288,837	286,197	312,900	305,381	154,522	161,360	140,572	146,566	71,847	71,934	968,678	971,438
Market risks	6,295	5,223	3,429	3,578	3,412	3,497	1,494	2,214	889	715	15,519	15,227
Operational risk	22,713	23,212	24,268	24,032	12,987	13,595	9,561	9,846	6,401	6,440	75,930	77,125
Total risk-weighted assets	317,845	314,632	340,597	332,991	170,921	178,452	151,627	158,626	79,137	79,089	1,060,127	1,063,790
						(Percent)						
ratio	**11.07**	**11.65**	**11.16**	**11.97**	**10.24**	**10.37**	**10.01**	**10.23**	**10.51**	**10.86**	**10.77**	**11.26**
Tier 1 capital ratio	11.07	11.65	11.44	12.19	10.66	10.67	10.01	10.23	10.51	10.86	10.93	11.38
Tier 2 capital ratio	3.47	3.43	2.95	3.08	3.01	2.64	3.64	3.65	3.43	3.00	3.25	3.19
Total capital adequacy ratio	**14.54**	**15.08**	**14.39**	**15.27**	**13.66**	**13.31**	**13.64**	**13.87**	**13.94**	**13.86**	**14.18**	**14.57**

[a] The banking corporations allocate capital in accordance with Basel III rules, as per the transition directives.

[b] Including minority interest according to the groups' balance sheets.

[c] After deductions.

SOURCE: Based on published financial statements and reports to the Banking Supervision Department.

Table 12

Balance sheet of the total Israeli banking system[a], December 2017 to June 2019

	In current prices				Rate of change in the past 12 months	Rate of change in the first 6 months of 2019	Distribution	
	Dec-17	Jun-18	Dec-18	Jun-19			Dec-18	Jun-19
	(NIS million)				(Percent)	(Percent in annual terms)	(Percent)	
Assets								
Cash and deposits at banks	290,372	265,235	277,653	270,690	2.1	-5.0	17.2	16.6
Securities	204,856	210,081	199,412	214,210	2.0	14.8	12.4	13.2
Securities borrowed or bought under reverse repurchase agreements	4,504	3,075	4,196	4,620	50.2	20.2	0.3	0.3
Credit to the public	**1,007,674**	**1,021,868**	**1,056,290**	**1,077,600**	**5.5**	**4.0**	**65.4**	**66.3**
Allowance for credit losses	11,988	11,992	12,441	12,639	5.4	3.2	0.8	0.8
Net credit to the public	995,687	1,009,876	1,043,849	1,064,961	5.5	4.0	64.7	65.5
Credit to governments	5,631	6,815	7,876	7,678	12.7	-5.0	0.5	0.5
Investments in subsidiary and affiliated companies	1,760	15,591	16,616	2,392	-84.7	-171.2	1.0	0.1
Premises and equipment	11,699	11,221	11,552	11,252	0.3	-5.2	0.7	0.7
Intangible assets and goodwill	498	491	503	491	0.0	-4.8	0.0	0.0
Assets in respect of derivative instruments	29,691	32,110	32,300	28,424	-11.5	-24.0	2.0	1.7
Other assets	21,216	20,769	20,527	21,408	3.1	8.6	1.3	1.3
Total assets	**1,565,913**	**1,575,263**	**1,614,483**	**1,626,126**	**3.2**	**1.4**	**100.0**	**100.0**
Liabilities and equity								
Deposits of the public	**1,229,257**	**1,239,395**	**1,263,523**	**1,282,532**	**3.5**	**3.0**	**78.3**	**78.9**
Deposits from banks	17,907	15,098	20,305	16,317	8.1	-39.3	1.3	1.0
Deposits from governments	2,052	2,289	2,248	1,453	-36.5	-70.7	0.1	0.1
Securities lent or sold under repurchase agreements	2,902	2,296	1,667	1,509	-34.3	-19.0	0.1	0.1
Bonds and subordinated notes	95,341	96,542	100,436	101,294	4.9	1.7	6.2	6.2
Liabilities in respect of derivative instruments	29,949	29,891	30,466	30,128	0.8	-2.2	1.9	1.9
Other liabilities	76,495	73,715	76,548	69,012	-6.4	-19.7	4.7	4.2
Total liabilities	**1,453,903**	**1,459,226**	**1,495,193**	**1,502,244**	**2.9**	**0.9**	**92.6**	**92.4**
Minority interest	1,933	2,434	2,515	2,085	-14.3	-34.2	0.2	0.1
Shareholders equity	110,077	113,603	116,775	121,797	7.2	8.6	7.2	7.5
Total equity	112,010	116,037	119,290	123,882	6.8	7.7	7.4	7.6
Total liabilities and equity	**1,565,913**	**1,575,263**	**1,614,483**	**1,626,126**	**3.2**	**1.4**	**100.0**	**100.0**

[a] On a consolidated basis. Includes the five banking groups (Leumi, Hapoalim, Discount, First International and Mizrahi-Tefahot), and the three independent banks (Union Bank, Bank of Jerusalem and Municipal Bank).

SOURCE: Banking Supervision Department based on published financial statements.

Table 13

Securities portfolio of the total banking system, December 2018 and June 2019

		Bank Leumi				Bank Hapoalim				Bank Discount			
		December 2018		June 2019		December 2018		June 2019		December 2018		June 2019	
		Book value	Distribution	Book value	Distribution	Book value	Distribution	Book value	Distribution	Book value	Distribution	Book value	Distribution
		(NIS million)	(Percent)	(NIS million)	(Percent)	(NIS million)	(Percent)	(NIS million)	(Percent)	(NIS million)	(Percent)	(NIS million)	(Percent)
	Of Israeli government	38,584	51.7	36,721	45.5	32,639	58.2	45,308	63.7	23,989	63.3	22,692	64.0
	Of foreign governments	5,956	8.0	14,781	18.3	10,489	18.7	13,425	18.9	768	2.0	783	2.2
	Of Israeli financial institutions	119	0.2	111	0.1	512	0.9	360	0.5	107	0.3	66	0.2
Securities	Of foreign financial institutions	9,839	13.2	10,642	13.2	8,273	14.7	7,583	10.7	1,356	3.6	1,088	3.1
	Asset-backed or mortgage-backed securities[a]	11,300	15.2	10,383	12.9	-	-	-	-	7,383	19.5	7,506	21.2
	Other - Israeli	532	0.7	248	0.3	141	0.3	20	0.0	210	0.6	245	0.7
	Other - foreign	4,683	6.3	4,300	5.3	2,541	4.5	2,633	3.7	3,046	8.0	2,161	6.1
	Stocks	3,558	4.8	3,577	4.4	1,521	2.7	1,787	2.5	1,039	2.7	929	2.6
	Total securities, all types	**74,571**	**100**	**80,763**	**100**	**56,116**	**100**	**71,116**	**100**	**37,898**	**100**	**35,470**	**100**

		Mizrahi-Tefahot				First International				Total system[b]			
		December 2018		June 2019		December 2018		June 2019		December 2018		June 2019	
		Book value	Distribution	Book value	Distribution	Book value	Distribution	Book value	Distribution	Book value	Distribution	Book value	Distribution
		(NIS million)	(Percent)	(NIS million)	(Percent)	(NIS million)	(Percent)	(NIS million)	(Percent)	(NIS million)	(Percent)	(NIS million)	(Percent)
	Of Israeli government	8,625	77.8	6,355	72.1	7,692	61.1	6,271	59.2	116,182	58.3	122,334	57.1
	Of foreign governments	1,862	16.8	2,028	23.0	2,050	16.3	1,886	17.8	21,462	10.8	33,189	15.5
	Of Israeli financial institutions	-	-	-	-	159	1.3	126	1.2	1,455	0.7	1,205	0.6
Securities	Of foreign financial institutions	484	4.4	307	3.5	630	5.0	366	3.5	20,806	10.4	20,193	9.4
	Asset-backed or mortgage-backed securities[a]	-	-	-	-	436	3.5	398	3.8	19,182	9.6	18,353	8.6
	Other - Israeli	-	-	-	-	602	4.8	683	6.5	2,359	1.2	1,993	0.9
	Other - foreign	18	0.2	-	-	799	6.3	580	5.5	11,306	5.7	9,930	4.6
	Stocks	92	0.8	126	1.4	227	1.8	277	2.6	6,661	3.3	7,013	3.3
	Total securities, all types	**11,081**	**100**	**8,816**	**100**	**12,595**	**100**	**10,587**	**100**	**199,412**	**100**	**214,210**	**100**

[a] Mortgage-backed securities (MBS) issued by US government agencies (FNMA, FHLMC and GNMA) are included in the "Asset-backed or mortgage-backed" item whether there is a government guarantee for them or not.

[b] Including the five banking groups as well as Union Bank, Bank of Jerusalem, and Municipal Bank.

SOURCE: Banking Supervision Department based on published financial statements.