CHAPTER 1

DEVELOPMENTS IN THE BANKING SYSTEM

- During 2014, the Israeli banking system maintained its resilience and its stability. The stability of the banking system is supported by the high liquidity level, continued accumulation of capital and the setting capital targets that are in line with the risk profile, and the results of stress tests carried out by the Banking Supervision Department during the year.
- The Common Equity Tier 1 capital ratio of the five banking groups remained 9.3 percent in December 2014. On January 1, 2014, the banks began to implement the Basel III framework, and this transition negatively impacted the ratio, although this impact totaled just 0.2 percentage points. In contrast, the banks' capital increased in 2014 as a result of the accumulation of profits and an increase in the value of the securities portfolio. In the next few years, the banking system is expected to continue the process of building capital and strengthening capital adequacy.
- The net profit of the five banking groups contracted markedly in 2014—by about 9 percent—to about NIS 6.4 billion, and the return on capital declined from 8.7 percent in 2013 to 7.3 percent in 2014. This development reflected the effects of the decline in the interest rate in Israel and of the low interest rate environment in Israel and in western countries, as well as the reduction in business opportunities in the business sector due to the stabilization of the GDP growth rate at a low level. The development of profit was also affected by non-recurring factors, including high expenses due to the investigations carried out by the tax authorities in the US due to contraventions of tax law, and expenses due to streamlining measures.
- The banking corporations' total aggregate balance sheet increased during the year by 6.4 percent, and the balance of assets totaled about NIS 1.4 trillion. The increase encompassed all of the banking corporations, and took place entirely in the second half of the year. The development of the balance sheet was influenced to a large extent by the volume of new sources raised, mainly deposits from the public, and by the low interest rate environment and developments in the housing market, factors that acted to continue the increase in the credit portfolio to individuals. It was also affected by the sharp depreciation of the shekel against the dollar during the second half of the year.
- The balance-sheet credit portfolio expanded by about 5 percent in 2014, as a result of the continued growth in credit to households and a moderate increase (about 2 percent) in business credit, particularly business credit to small borrowers. The expansion of the credit portfolio was also affected by the depreciation of the shekel against the dollar. The developments in the credit portfolio led to a continued decline in the concentration of the bank credit portfolio by borrower size, although the concentration is still high. The improvement in credit quality indices also continued. With that, the bank credit risk, particularly the business credit risk, increased due to the low interest rate environment that has been prevalent in the economy over time.

- The banks' exposure to the construction and real estate industry increased by 3 percent in 2014: Credit to the construction industry grew by 3 percent, while credit to the real estate industry remained unchanged against the background of new financing raised through nonbank channels. About 48 percent of the banks' credit portfolio is exposed to developments in the domestic real estate market, both directly and through exposure to other credit backed by real estate assets (including mortgages). The risk of firms in the construction and real estate industry remains high relative to that of firms in other industries.
- In 2014, the decline in the risk characteristics of new residential loans continued, but the housing credit portfolio continued to expand, and the volume of new residential loans remained high. Further to the measures adopted by the Supervisor of Banks in the past, he published a directive this year requiring the banking corporations to increase their Common Equity Tier 1 capital target by the equivalent of 1 percent of their outstanding housing credit portfolio.
- In recent years, consumer credit (nonhousing credit to private individuals) expanded at an increasing rate. This year it grew by 9 percent. Against this background, and in order to ensure a cautious and conservative level of allowance buffers allocated against this credit, the Supervisor of Banks published a new directive: As of the published financial statements for 2014, the rate of qualitative adjustments to the calculation of the group loan loss allowance in respect of nonproblematic consumer credit shall be no less than 0.75 percent.
- The banks' high level of exposure to credit to the construction and real estate industry, to housing credit and to consumer credit, and the existing correlations between these types of credit, constitute a risk to the banking system.
- The Israeli banking system continued to maintain a relatively high level of liquidity in 2014. With that, there was a decline this year in the rate of retail deposits as a share of short-term deposits, and an increase in the share of deposits by large businesses and deposits by institutional investors, which are characterized by a higher level of liquidity risk. In April 2015, a new Proper Conduct of Banking Business directive came into force regarding the liquidity coverage ratio (LCR) as part of the overall implementation of the Basel III framework.
- The operational efficiency of most of the banking groups declined in 2014 because operational expenses increased (due, among other things, to the fine paid to the American authorities and the increase in voluntary retirement expenses), and due to the decline in net interest income. The operational efficiency of the groups remains low by international comparison.

Table 1.1
Principal banking system indices,
December 2001 to December 2014

Year	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)	Ratio of liquid assets[g] to liquid liabilities[f,h]	Ratio of credit[f,i] to deposits	Capital adequacy ratio[f] (percent)	Common Equity/Core Tier 1 capital ratio[f,j] (percent)	Equity to total balance-sheet assets[f] (percent)	ROE[f] (percent)
2001	0.91	0.7	110.3	17.9	0.84		0.81	9.4		4.9	5.6
2002	0.56	0.8	105.7	-1.1	1.32	0.42	0.83	9.9		4.9	2.5
2003	0.85	0.7	104.0	-1.7	1.12	0.41	0.82	10.3		5.3	8.3
2004	1.06	0.7	99.5	0.1	0.92	0.41	0.80	10.7		5.5	12.4
2005	1.45	0.7	100.6	6.7	0.69	0.42	0.82	10.7		5.4	14.5
2006	1.33	0.6	95.7	2.0	0.52	0.38	0.80	10.8		5.9	17.3
2007	1.21	0.9	95.8	7.7	0.28	0.29	0.85	11.0		6.1	15.6
2008	0.56	2.0	99.9	10.4	0.72	0.27	0.90	11.2		5.7	0.3
2009	1.11	1.6	93.4	-1.4	0.75	0.38	0.86	13.7[k] 13.6[l]	7.9[l]	6.3	8.8
2010	1.06	1.0	93.0	7.2	0.41	0.32	0.91	14.0	8.2	6.7	9.8
2011	0.69	1.3	90.8	3.7	0.39	0.37	0.89	14.0	8.0	6.2	10.2
2012	0.78	1.0	86.4	2.1	0.41	0.39	0.87	14.9	8.7	6.6	7.9
2013	0.84	0.9	82.6	1.1	0.25	0.38	0.87	14.7 14.2[m]	9.3 9.1[m]	6.9	8.7
2014	0.72	0.9	83.1	4.3	0.15	0.35	0.85	14.2[m]	9.3[m]	7.0	7.3

[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).

[b] Average for December of that year.

[c] Measured using 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] The five banking groups.

[g] Liquid assets include government bonds and cash as well as deposits at the Bank of Israel and at other banks with up to 3 months to maturity.

[h] Liquid liabilities include total deposits with up to 3 months to maturity.

[i] Calculated in relation to net credit.

[j] 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.

[k] Calculated in accordance with the Basel I principles.

[l] Calculated in accordance with Basel II principles.

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

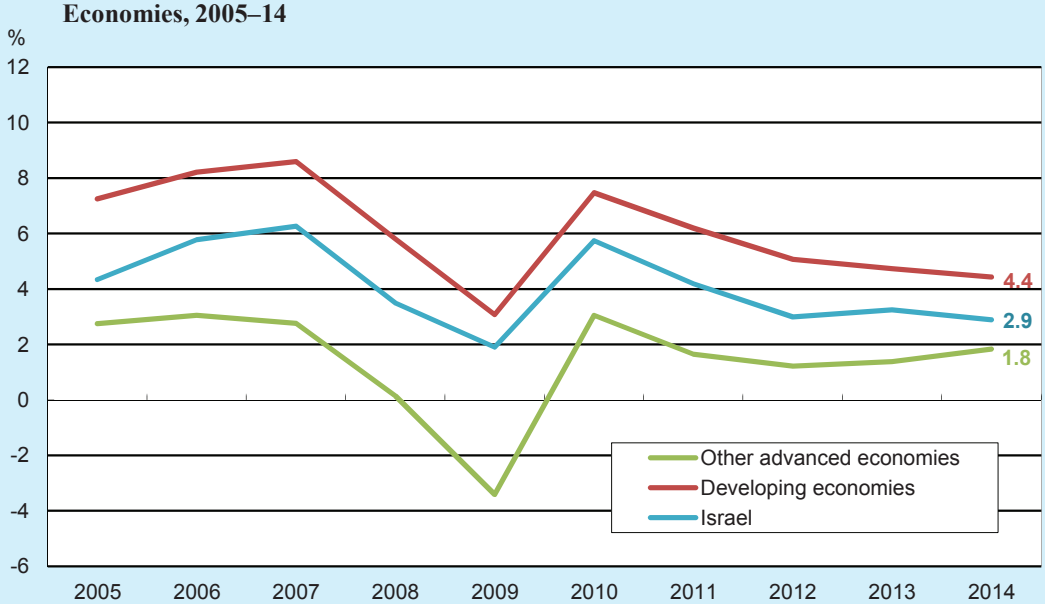
SOURCE: Banking Supervision Department based on Central Bureau of Statistics, Bank of Israel, published financial statements, and reports to the Banking Supervision Department.

1. MACROECONOMIC DEVELOPMENTS IN THE ISRAELI ECONOMY

a. The global economy

The growth rate of the advanced economies improved slightly in 2014 relative to 2013, but it remained low, totaling 1.8 percent growth. In contrast, the growth rate of developing economies was lower than in previous years, totaling 4.4 percent growth. The growth rate of global trade—a main channel for the effect of global economic activity on all aspects of the Israeli economy—remained low in 2014.

Figure 1.1
Annual Rates of Change in GDP—Israel[a], Other Advanced Economies and Developing Economies, 2005–14



[a] In 2006, the Central Bureau of Statistics made a change in the GDP calculation methodology.
SOURCE: Foreign countries—International Monetary Fund; Israel—Based on Central Bureau of Statistics.

Further to the trend that became apparent at the end of 2013, economies around the world developed in a nonuniform manner in 2014, and there was a marked disconnect between the business cycles, particularly those of the US and Europe. The American economy continued to grow and to recover, while the eurozone remained in recession. There are a number of indicators of this disconnect, among the most prominent of which is the unemployment rate. The unemployment rate in the US has been in a downward trend in recent years, and it declined markedly in 2014, to 5.8 percent. The rate in the eurozone declined slightly, but remained at a high level—above 10 percent—with significant differences between the countries. Further evidence of the disconnect between the business cycles is provided by the gap in the development of

government bond yields. Expectations of interest rate increases in the US, particularly for the medium term, increased in 2014 as the assessments regarding the recovery in the US increased and with the tapering of quantitative easing. In contrast, there was a downward trend in nominal yields for medium-range interest rates in most countries, and this decline points to expectations of continued, and even increased, monetary accommodation. The disconnect between the two large economic blocs was reflected in the revised growth forecasts by the international agencies in 2014. The revisions for the US economy were positive, while those for the eurozone were negative.

Since economic activity moderated, mainly in Europe, the global inflation rate declined. Inflation in 26 out of the 34 OECD member countries was lower than 1 percent in 2014, and in 13 of them—including Israel—it was even negative. The slowdown in inflation and moderating economic activity led to the continuation of accommodative monetary policy in 2014, including low—and sometimes negative—monetary interest rates, and—excluding policy in the US—quantitative easing. The European Central Bank (ECB) lowered its short-term interest rate to a new all-time low (0.05 percent), and the interest rate on the banks' surplus reserves to negative levels. In addition, it declared a new quantitative easing program that will be spread out over the next two years. Toward the end of the year, concerns in Europe grew that the decline in demand would continue. This development took place due, among other things, to the decline in global trade, and the International Monetary Fund consequently revised its growth forecasts for 2014 and 2015 downwards.

b. The Israeli economy

GDP grew by 2.8 percent in 2014 (similar to previous years, growth was based on private consumption and public consumption). Net of the effects of one-time factors—the start of natural gas production from the Tamar reservoir and Operation Protective Edge, the growth rate over the past three years stabilized at a rate lower than potential, between 2.5 and 3 percent. The moderation of activity in Israel can be attributed mainly to the continued slowdown in demand from abroad and to its effect on exports and on investment in the economy. Despite the moderate growth rate, the unemployment rate continued to fall, and reached a low level of 5.9 percent.

There was a marked decline in the inflation rate in 2014, and for the first time since 2006, inflation was negative—about -0.2 percent. The moderation in the inflation rate became apparent back in mid-2011, and is prominent mainly in view of the low monetary interest rate, stability of the growth rate, the increase in private consumption, and the low unemployment rate. The factors that contributed to the decline in inflation include the prolonged appreciation of the shekel until July 2014, the sharp decline in the price of oil during the second half of the year, price declines in the communications market, and the dissipation of the effect of the increase in VAT that took place in 2013. In an attempt to deal with the decline in inflation and the prolonged slowdown in activity, the Bank of Israel lowered the short-term interest rate during the course of 2014 to an historically low level of 0.25 percent[1], and continued intervening in the foreign exchange market.[2] The reductions in the interest rate supported domestic demand and reduced the interest rate gap between the Bank of Israel and the central banks of the eurozone and the US, and also helped reduce appreciation pressures.

1 In 2015, the Bank of Israel continued lowering the interest rate, reducing it to 0.1 percent in February.

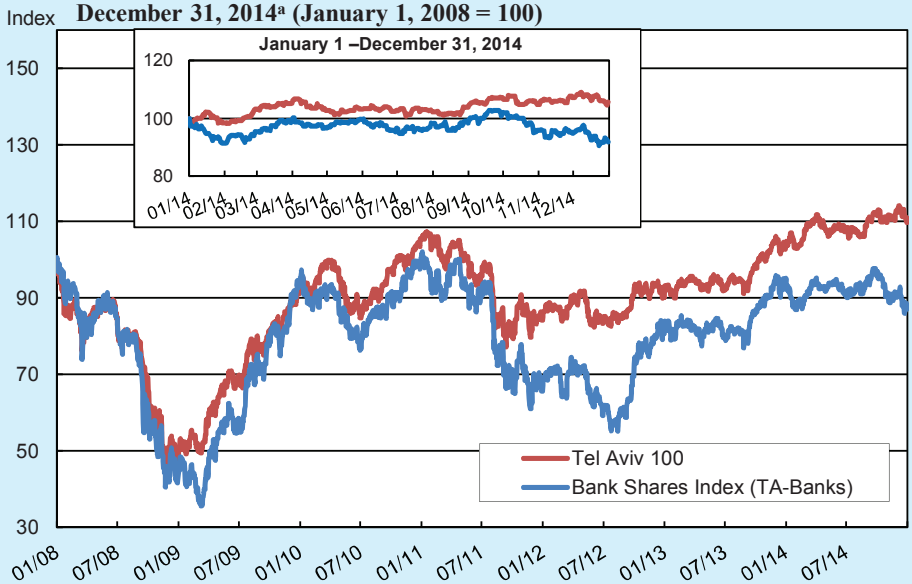
2 These interventions were in addition to the foreign exchange purchases intended to offset the effect of natural gas production on the balance of payments.

The nominal effective exchange rate continued to appreciate in the first half of 2014, continuing a trend that began back in 2008. But in the second half of the year, there was a sharp depreciation, and the nominal effective exchange rate depreciated by 3.7 percent over the year as a whole. The depreciation was mostly the result of the strengthening dollar, a development that took place due to the recovery of the US economy—even though domestic factors exerted pressure on the shekel to appreciate. These factors included the high surplus in the basic account and the relatively good state of the economy. Monetary measures such as interest rate reductions and continued foreign exchange purchases in the second half of the year managed to stop the continued pressure for appreciation of the shekel for some time.

Monetary policy therefore acted in an inflation environment lower than the target range. Fiscal policy strove in the past two years to reduce the structural deficit, which had expanded until 2012. This policy was based mainly on raising taxes while reducing expenditures and increasing VAT.

Home prices continued to increase for the seventh consecutive year, with the increase totaling 4.7 percent in real terms, after totaling 65 percent between 2008 and 2013. During the year, the public waited for the implementation of the Zero VAT plan for new homes, and against this background, the number of transactions declined and the increase in home prices moderated to a certain extent. After the Zero VAT plan was taken off the agenda, demand again increased, and the price increases accelerated somewhat, but over the course of the year, prices increased at a slower pace than the average in the previous two years. The increase in home prices can mainly be attributed to the fact that there is a lack of homes in the economy relative to the population's needs, and to the fact that alternative yields declined. These factors supported demand for housing for both residential and investment purposes.

Figure 1.2
Tel Aviv 100 Index and Bank Shares Index in Israel, January 1, 2008 to December 31, 2014[a] (January 1, 2008 = 100)



[a] For days on which there was no trading, the previous day's figure is used.
SOURCE: The Tel Aviv Stock Exchange.

Share prices in Israel showed mixed results in 2014. There was an increase among the shares of large companies (included in the Tel Aviv 25 index), and a decline in the prices of shares of medium and small companies (included in the Tel Aviv 75 and the Yeter 50 indices). As a result, the Tel Aviv 100 index increased to a moderate extent (about 6 percent), while it increased sharply in 2013. Accordingly, the average daily trading volume in shares on the Tel Aviv Stock Exchange declined by about 5 percent in 2014 compared with 2013, totaling NIS 742 million.[3] The Bank Shares Index declined by about 8 percent in 2014, after increasing by about 12 percent in 2013.

There were price increases for all types of bonds in 2014. The various government bonds were prominent, led by fixed-interest indexed bonds, which showed an increase of 8 percent. In contrast, corporate bonds increased by only about 1.5 percent during the year. In 2013, the trend was the opposite: Corporate bonds increased by 9 percent and government bonds increased by 4 percent. The financial system is exposed to the underpricing of risk in the corporate bond market, due to the surplus liquidity created by the low interest rates in Israel and abroad, which affects pricing in the asset markets as a whole.

2. THE STRUCTURE OF THE BANKING SYSTEM IN ISRAEL

a. Description of the system

The banking system in Israel is made up of three parts: (a) The five banking groups—Leumi, Hapoalim, Discount, Mizrahi-Tefahot and First International—which account for about 94 percent of commercial bank assets; (b) Three small independent banks (Union Bank, Bank of Jerusalem and Dexia Israel Bank); (c) Four branches of foreign banks—Citibank, HSBC, Barclays Capital and State Bank of India. These banks create slight competition for the Israeli banks in some areas of operation, and have a low volume of activity (Table 1.2 and Figure 1.3).[4] There are also representative offices of foreign financial institutions operating in Israel, but they do not provide credit in parallel with receiving deposits.

The banking corporations provide a wide range of financial services, including corporate and commercial banking and retail banking. In addition, they are active in the capital market in securities trading, both on behalf of customers and for their own portfolios (nostro), credit card activity, and providing pension and investment advisory services. The banks' activity in insurance is limited, as dictated by law.[5]

The Israeli banking system employs about 48,500 people (compared to about 49,100 in 2013) and has about 1,270 branches located throughout the country and abroad (compared to about 1,300 in 2013). There are about 19 branches per 100,000 adult residents in Israel, lower than the average in OECD countries (Figure 1.4). In addition, there are about 7,470 automated teller machines (ATM), of which 5,230 are cash withdrawal machines[6] and about 2,240 are machines that provide information and enable customers to

[3] Excluding the volume of trading outside the Stock Exchange and the trading volume of ETNs on the stock market.

[4] Their credit provision activity is small both in absolute terms (about 0.4 percent of total activity in the system) and in relation to their total assets (about 21 percent). In the area of deposits, their activity is more lively, constituting about 1.6 percent of total activity in the system.

[5] The banks market property insurance and life insurance as part of their mortgage activity.

[6] 3,563 of which are machines of nonbank corporations, including machines belonging to Shva (Hebrew acronym for Automatic Bank Services).

carry out financial activities and other banking instructions. There are 128 ATMs for every 100,000 adult residents in Israel, higher than the average among OECD countries (Figure 1.5). In addition to branches and ATMs, the banks also maintain staffed call centers and provide advanced and secure Internet services as well as services via mobile devices.

The large Israeli banks are also active abroad through branches and subsidiaries (representative offices). However, this activity has not succeeded in creating significant and stable profit centers for the banks, despite their widespread deployment abroad and the notable investment made in such activity. Moreover, there are inherent risks to activity through representative offices abroad, including cross-border compliance risks. In view of this, there has been a trend in recent years to reduce the proportion of the assets of their representative offices abroad out of total banking system assets, although in 2014, this rate remained unchanged at about 11 percent. In particular, in July 2014, Bank Leumi signed an agreement to sell its activity in Switzerland to the Julius Barr bank, and decided to stop its activity in Luxembourg and in Latin America. In December 2014, Discount Bank announced its intention to sell its representative office in Uruguay, and in parallel, it is advancing the closure of its branch in London and examining alternatives to its activity in Switzerland. In June 2014, the First International Bank sold FIBI London.

Apart from Discount Bank and Bank Leumi, all of the banks are controlled by a controlling core. On December 3, 2013, the process of dispersing the controlling core of Discount Bank began, in accordance with the holding permit granted to them by the Governor of the Bank of Israel. The dispersal of the controlling shares proceeded in accordance with the principles published by the Banking Supervision Department in July 2013, which were intended to ensure that former controlling shareholders do not continue to control the bank during the transition period even if they still hold a significant proportion of the means of control in the bank. The process was completed in 2014. The former controlling shareholders sold most of their holdings to the public, and at the end of the year they were no long considered parties at interest in the bank.

The ownership structure of some of the banks may undergo additional changes as a result of the passing of the Promotion of Competition and Reduction of Concentration Law in December 2013. The new law requires a separation between significant financial and nonfinancial corporations.[7] An entity which prior to the passing of the law controlled both a significant nonfinancial corporation and a significant financial corporation will be permitted to continue doing so for a maximum period of 4–6 years and then will be required to sell one of them.[8]

An examination of the volumes of activity in the banking system relative to the volume of economic activity, comparing Israel to the European Union, shows that there is a high ratio in the European countries between the assets of the banking system and GDP (247 percent), while the ratio is relatively low in Israel (128 percent). The value of the ratio increased by about 4 percentage points in 2014, because assets increased more than GDP. Notwithstanding this increase, the level in Israel is demonstrably similar to that which is typical of the banking systems in the developing economies of Europe rather than the advanced

[7] Significant financial entities include mutual funds, banking corporations, etc., with assets exceeding NIS 40 billion. Significant nonfinancial corporations include construction companies, supermarket chains, mobile phone companies and various manufacturing companies, with sales of NIS 6 billion or more, or NIS 2 billion in the case of a monopoly. The list of significant financial and nonfinancial corporations was drawn up by the Committee for Reducing Concentration, headed by the by the Director General of the Israel Antitrust Authority.

[8] The controlling owners of Bank Mizrahi-Tefahot and of First International Bank are affected by the law, and the ownership structure of those banks may therefore undergo a change.

Table 1.2
Banking system structure, December 2014[a]

Bank	Balance-sheet data						Direct holdings[b]			Size data		
	Share of total banking system assets	Share of total bank credit	Total assets	Credit to the public	Total deposits	Equity	Holdings by parties at interest[c]	Institutional holdings[d]	Public holdings	Number of branches	Number of employee posts[e]	Number of automatic banking machines[f]
	(Percent)		(NIS million)				(Percent)					
The five banking groups												
Leumi[g]	28.1	28.3	369,134	256,468	303,397	28,433	6.0	0.0	94.0	313	12,999	1,013
Hapoalim	28.9	29.5	407,794	268,160	297,230	31,611	21.8	6.2	72.0	295	12,964	1,304
Discount	14.7	13.5	206,946	122,172	152,903	13,641	0.0	0.0	100.0	242	9,646	813
Mizrahi-Tefahot	14.1	16.4	198,564	148,912	152,379	11,500	44.6	0.0	55.4	176	5,820	356
First International	8.3	7.7	117,743	69,833	95,155	7,211	57.6	0.0	42.4	180	5,117	357
Total for the five banking groups	**94.0**	**95.4**	**1,327,181**	**865,545**	**1,001,064**	**92,396**				**1,206**	**46,546**	**3,843**
The independent banks												
Union Bank of Israel	2.9	2.4	40,853	21,959	31,498	2,376	74.7	0.6	24.7	36	1,264	66
Bank of Jerusalem	1.0	1.1	14,077	9,674	10,977	745	91.6	0.0	8.4	22	593	0
Dexia Israel Bank	0.7	0.7	9,419	6,346	5,698	839	65.3	0.0	34.7	1	45	
Total for the independent banks	**4.6**	**4.2**	**64,349**	**37,979**	**48,173**	**3,961**				**59**	**1,902**	**66**
Total of foreign bank branches	**1.4**	**0.4**	**19,195**	**4,007**	**16,648**					**6**		
Total for banking system	**100.0**	**100.0**	**1,410,725**	**907,531**	**1,065,885**	**96,357**				**1,271**	**48,448**	**3909**

[a] Financial data for the five banking groups is presented on a consolidated basis, and the numbers of branches and of employee posts include all banks belonging to the group.

[b] Based on reports to the Stock Exchange, as of the end of 2014.

[c] A "party at interest" is defined as someone holding five percent or more of the issued share capital of a corporation or of voting rights in the corporation. In addition, the reporting on holdings of parties at interest includes the holdings of the CEO and of Directors.

[d] As defined in Regulation 33(i) of the Securities Regulations (Periodic and Immediate Reporting), 5730–1970.

[e] On a monthly average basis.

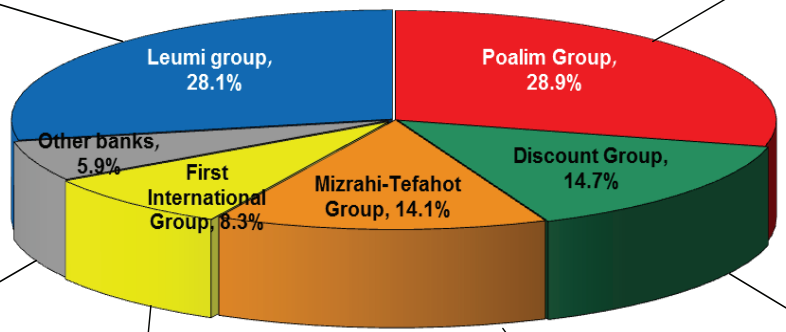
[f] Including cash withdrawal machines and machines for providing information and issuing instructions, belonging to banking corporations. Not including machines of nonbank corporations (Shva - Automatic Bank Services), Casponet Ltd., and Inkas Pay Tech).

[g] Bank Leumi is the only banking corporation in the system where there is still a government holding (about 6 percent of the bank's capital).

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

Figure 1.3
The structure of Israel's banking system and investments in main investee companies[a], December 2014

Total assets: NIS 1,411 billion
Herfindahl index: HHI = 0.21
Weight of the 2 largest groups in total assets: CR_2 = 57%



Bank Leumi Group

A. Banking and finance in Israel
Bank Leumi Le-Israel Ltd. (1)
Arab Israel Bank Ltd. (1)
Leumi Tech Ltd. (3)
Leumi Finance Company Ltd. (4)
Leumi Real Holdings Ltd. (7)
B. Banking and finance abroad (6)
Bank Leumi USA
Bank Leumi UK plc
Leumi Private Bank S.A.
Bank Leumi Luxembourg
Bank Leumi Romania

C. Capital market and financial services
Leumi Card Ltd. (5)
Leumi Capital Market Services Ltd. (9)
Bank Leumi Le-Israel Trust Co. Ltd. (9)
Leumi Partners Ltd. (7)(9)
D. Nonbanking corporations (affiliates)
Israel Corporation Ltd.
SuperPharm (Israel) Ltd.
AvGol Industries 1953 Ltd.
Nilit B.V.

Bank Hapoalim Group

A. Banking and finance in Israel (1)
Bank Hapoalim Ltd.
B. Banking and finance abroad (6)
Bank Hapoalim (Switzerland) Ltd.
Banque Hapoalim (Luxembourg) S.A.
Bank Hapoalim (Cayman Islands) Ltd.[2]
Hapoalim (Latin America) S.A.
Bank Pozitif Kredi Ve Kalkinma Bankasi A.S. (with a holding in JSC Bank Pozitiv)
C. Capital market and financial services
Isracard Ltd. (5)
Poalim Express Ltd. (5)
Poalim Capital Markets Ltd. (8)
Poalim Sahar Ltd. (9)
Bank Hapoalim Trust Company Ltd. (9)
Poalim Asset Management (9)
Poalim Securities Ltd. (9)
Peilim Investment Portfolio Management Ltd. (9)

[2] In January 2015, Bank Hapoalim relinquished its license in the Cayman Islands.

Other banking corporations

A. Banking and finance in Israel (1)
Union Bank of Israel Ltd.
Bank of Jerusalem Ltd.
Dexia Israel Bank Ltd.
B. Foreign banks operating in Israel
Citibank N.A.
HSBC Bank plc
State Bank of India
Barclays Bank plc
C. Financial institutions
"Hesech" Kupat Hisachon Lehinuch Ltd.
D. Joint service companies owned by the five major banking groups
Automated Clearing House (Masav) Ltd.
Automatic Banking Services (Shva) Ltd.

Definitions
(1) Commercial banks
(2) Mortgage banks
(3) Investment finance banks
(4) Financial institutions
(5) Credit card companies
(6) Subsidiaries abroad
(7) Consolidated holding companies
(8) Investment house
(9) Capital market companies, including companies supplying operating services to institutions, and underwriting, trust, leasing, insurance, and asset management companies.

First International Bank Group

A. Banking and finance in Israel (1)
The First International Bank of Israel Ltd.
Poalei Agudat Israel Bank Ltd.
U-Bank (Israel) Ltd.
Otsar Hahayal Bank Ltd.
Bank Massad Ltd.
B. Banking and finance abroad (6)
FIBI Bank (Switzerland) Ltd.
C. Capital market and financial services
First International Leasing Ltd. (9)
First International Unique Investment Management Ltd. (9)
U-Bank Investments and Holdings Ltd. (9)
U-Bank Trust Company Ltd. (9)
CAL (Cartisey Ashrai Le'Israel)–Israel Credit Cards Ltd. (5)

Mizrahi-Tefahot Bank Group

A. Banking and finance in Israel (1)
Mizrahi-Tefahot Bank Ltd.
Bank Yahav for Government Employees Ltd.
B. Banking and finance abroad (6)
Mizrahi Tefahot Bank (Switzerland) Ltd.
C. Capital market and financial services
Etgar Portfolio Management Ltd. (4)
Mizrahi-Tefahot Issuing Company Ltd. (9)
Mizrahi-Tefahot Trust Company Ltd. (9)
Tefahot Insurance Agency Ltd. (9)
Rosario Capital Ltd. (9)
Mustang Mezzanine Fund Limited Partnership (credit provider)
Plenus Technologies Fund (credit provider)
D. Nonbanking corporations (consolidated companies)
Psagot Jerusalem Ltd.

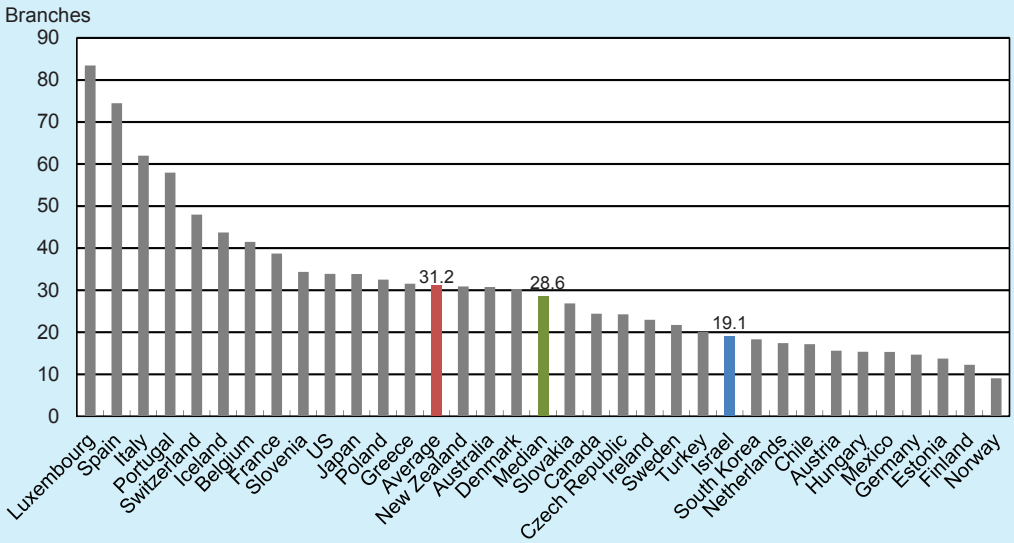
Israel Discount Bank Group

A. Banking and finance in Israel (1)
Israel Discount Bank Ltd.
Mercantile Discount Bank Ltd.
First International Bank of Israel Ltd.[3]
B. Banking and finance abroad (6)
Discount Bancorp, Inc.
Israel Discount Bank of New York
Discount Bank (Latin America)
IDB (Swiss) Bank Ltd.
C. Capital market and financial services
Discount Manpikim (9)
Discount Underwriting and Issuances Ltd. (9)
Israel Discount Capital Markets and Investments Ltd. (9)
Tafnit Discount Asset Management Ltd. (9)
CAL (Cartisey Ashrai Le'Israel)–Israel Credit Cards Ltd. (5)
Diners Club Israel Ltd. (5)
Discount Trust Ltd. (9)

[3] Discount's holdings of First International declined to below 10 percent in 2015.

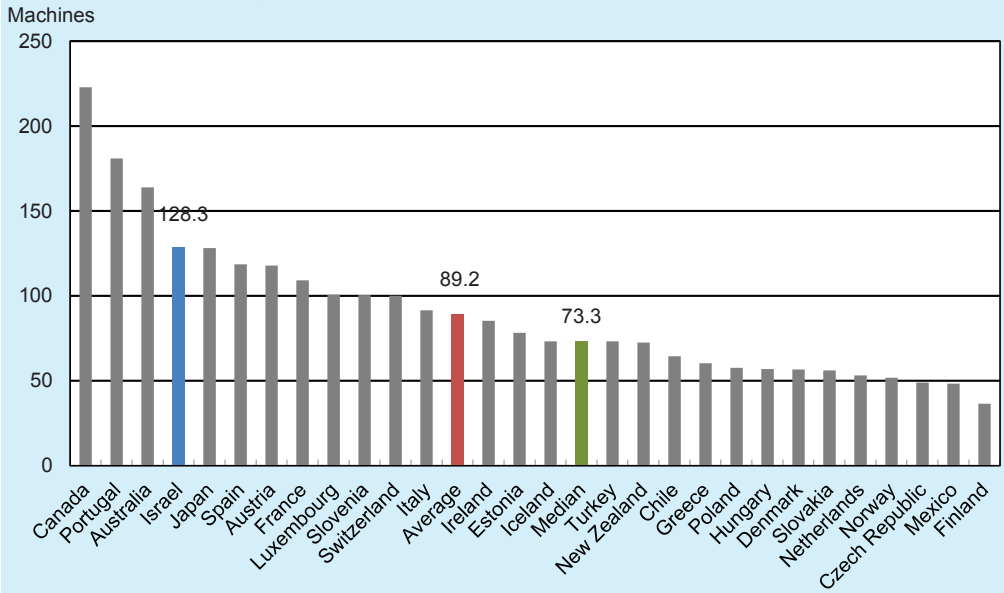
[a] Groups on consolidated basis. The calculation is based on total assets.
SOURCE: Based on published annual reports.

Figure 1.4
International Comparison: Number of Commercial Bank Branches per 100,000 Adults[a], OECD Countries[b], 2013–14[c]



[a] The ratio is calculated in accordance with the International Monteray Fund's definitions.
[b] The UK is excluded due to a lack of data.
[c] Data on foreign countries are correct as of 2013. Data for Israel are correct as of December 2014.
SOURCE: Foreign countries—International Monetary Fund; Israel—Based on published financial statements.

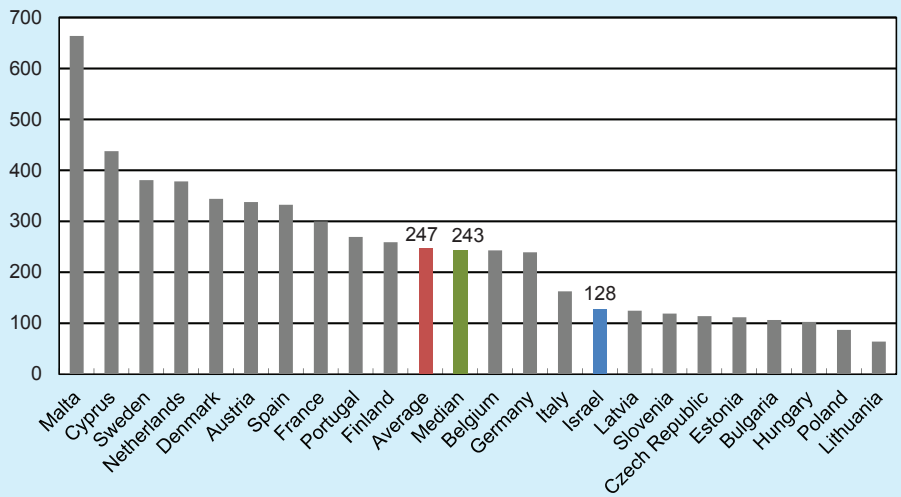
Figure 1.5
International Comparison: Number of ATM Machines per 100,000 Adults[a], OECD Countries[b], 2013 to 2014[c]



[a] The ratio is calculated according to International Monetary Fund definitions.
[b] Belgium, Germany, South Korea, Sweden, the UK and the US were excluded due to a lack of data.
[c] Data for foreign countries are correct as of 2013. Data for Israel are correct as of December 2014.
SOURCE: Foreign countries—International Monetary Fund; Israel— Based on published financial statements.

ones (Figure 1.6). Even though a high ratio should indicate the depth of the banks' financial agency, levels that are too high may increase the domestic economy's exposure to the risk that the authorities will not be able to provide assistance to the large banking corporations or to the banking system as a whole if necessary (meaning a risk that the banking system is Too Big to Save if necessary).

Figure 1.6
International Comparison of Total Banking System Assets[a] Relative to GDP, Israel[b] and EU Countries[c], 2013



[a] Total assets are calculated on a consolidated basis and include all banking groups and independent banks active in the domestic economy, as well as subsidiaries and banking branches controled by foreign corporations and active in the domestic economy.
[b] The figure for Israel is correct as of December 2014.
[c] In Luxembourg (which does not appear in the Figure), the ratio is 1,586. Greece, Ireland, UK, Slovakia and Romania were excluded due to a lack of data.
SOURCE: Data on foreign countries—European Central Bank (ECB) and Eurostat; Data on Israel—published financial statements and Central Bureau of Statistics.

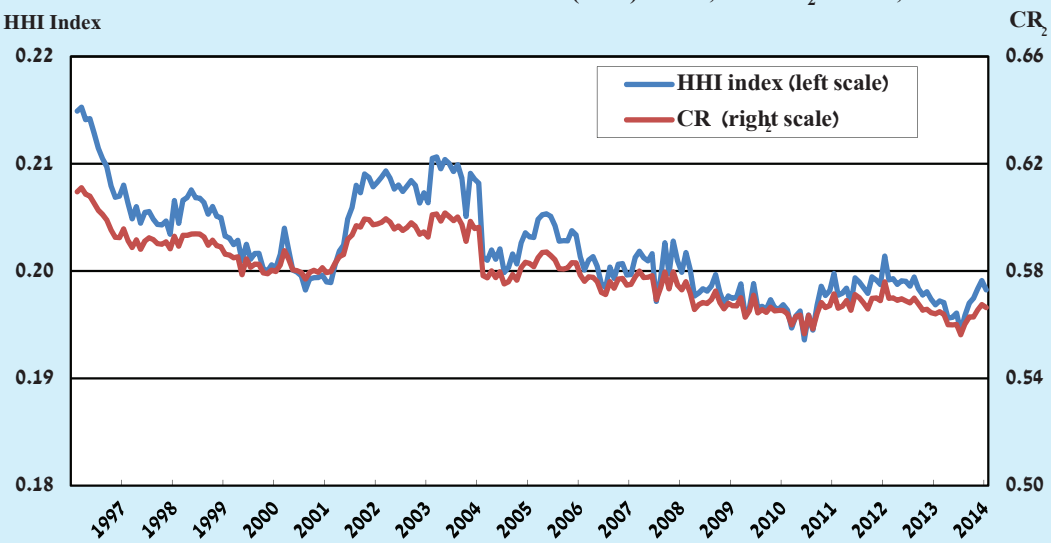
b. Concentration and competition in the banking system

Concentration in the banking system is one of the factors that impact on its level of competition[9], and it can be measured using two indicators: the Herfindahl-Hirschman Index (HHI)[10], which sums the square of the ratio between the market share of each bank and total assets of the banking system; and the concentration ratio (CR2), which measures the market share of the two largest banks (Leumi and Hapoalim) within the system's total assets. During 2014, there was no significant change in either of the indices, with the HHI remaining at 0.20, and the CR2 reaching 0.57 (Figure 1.7). An international comparison of the Herfindahl Index shows that the concentration of the Israeli banking system is significantly higher than the EU average (Figure 1.8).

[9] According to the Structure Conduct Performance (SCP) approach, there is a connection between the structure of the banking system and a bank's conduct and performance. The greater the level of concentration in the banking system, the greater the market power of the banks will be and the better their performance will be. Other approaches claim that such a connection does not necessarily exist.

[10] $\sum_{i=1}^{n}\left(\frac{y_i}{y}\right)^2 = H$ where y_i = the output of bank i (total assets) and y = total output of the banking industry.

Figure 1.7
Concentration Indices[a]: Herfindahl-Hirschman (HHI) Index, and CR_2 Index[b], 1997–2014[c]



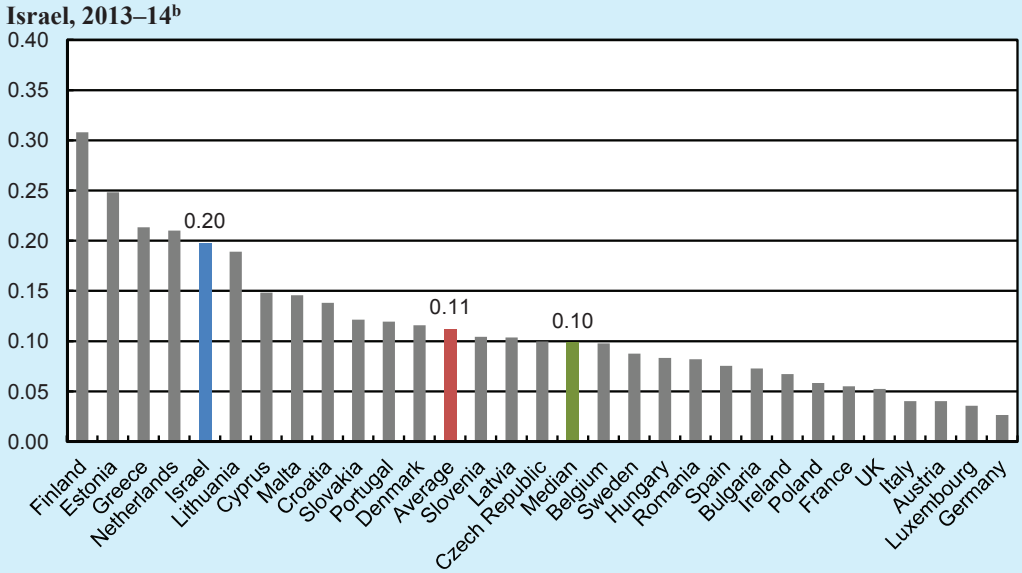
[a] Both indices are calculatd on the total assets of the commercial banks.

[b] $\sum_{i=1}^{n}\left(\frac{y_i}{y}\right)^2 = H$ = The Herfindahl-Hirschman Index of industry concentration, where y_i = output of bank i (total assets) and y = the industry's output. CR_2 = The market share of the two largest banks in the system.

[c] In 2012, the indices were affected, *inter alia*, by the completion of the mergers of Discount Mortgage Bank and Leumi Mortgage Bank into their parent banks.

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

Figure 1.8
International comparison: The Herfindahl-Hirschman (HHI) Index[a] in EU countries and Israel, 2013–14[b]



[a] Calculated based on total assets.

[b] The figure for Israel is for December 2014, is calculated based on the total assets of the commercial banks, and does not include activity of foreign banks in Israel. Figures for other countries are for December 2013, and include activity of foreign banks in each country.

SOURCE: Foreign countries–ECB; Israel–based on published financial statements.

3. MAIN DEVELOPMENTS IN BALANCE-SHEET AND OFF-BALANCE-SHEET ACTIVITY

a. Balance-sheet activity

The aggregate balance sheet of the banking corporations in Israel[11] grew during 2014 by about 6.4 percent (about NIS 84 billion), and the balance of assets totaled about NIS 1,392 billion (Table 1.3). The increase encompassed all of the banking corporations, and took place entirely in the second half of the year (about 7.2 percent), following a decline of about 1.8 percent (in annual terms) in the first half of the year. The development of the balance sheet was influenced to a large extent by the volume of new sources raised, mainly deposits from the public. The decline in the volume of deposits from the public in the first half of the year (about 1 percent), together with the increase in the volume of uses as reflected in the continued trend of increase in the credit portfolio, acted to erode the other components of the balance sheet, leading to its overall decline. In the second half of the year, deposits from the public again increased, together with uses. In addition to sources, other factors affecting the development of the balance sheet were (a) the low interest rate environment and developments in the housing market, which acted to continue the increase in the credit portfolio to individuals, and (b) the sharp depreciation of the shekel against the dollar during the second half of the year, which contributed about 2 percentage points to the increase in the balance of assets. Among the changes in the balance-sheet items, the increase in the volume of cash and deposits at the Bank of Israel (about 20 percent; Table 1.3), and the contraction in the securities portfolio (about 3.4 percent; Table 1.3) were prominent.

The banking groups' balance-sheet composition maintained its conservative posture in 2014, relaying mostly on classic credit allocation and deposit taking. Even though credit to the public as a share of total assets declined in 2014 (from about 66 percent in 2013 to about 65 percent), the mix of the asset portfolio remains conservative, and there was an increase in other low-risk balance-sheet items.

This decline took place despite the increase in outstanding credit to the public, and is the result of the fact that the increase in the other components of the balance sheet (mainly the cash and deposits in the banks item) was sharper. The ratio of net credit to deposits from the public declined slightly in 2014, to about 85 percent (compared with 87 percent in 2013), due to the fact that the gap between the rate of increase in credit was lower than the rate of increase in deposits from the public[12] (Figure 1.9).

On the assets side, there was a marked increase in the rate of growth of the credit portfolio to the public. Following two years in which there was a slowdown, it grew by 4.3 percent in 2014 (Table 1.3), and excluding the effect of the depreciation of the shekel against the US dollar (about 12 percent), it increased at a more moderate rate of about 3.1 percent.

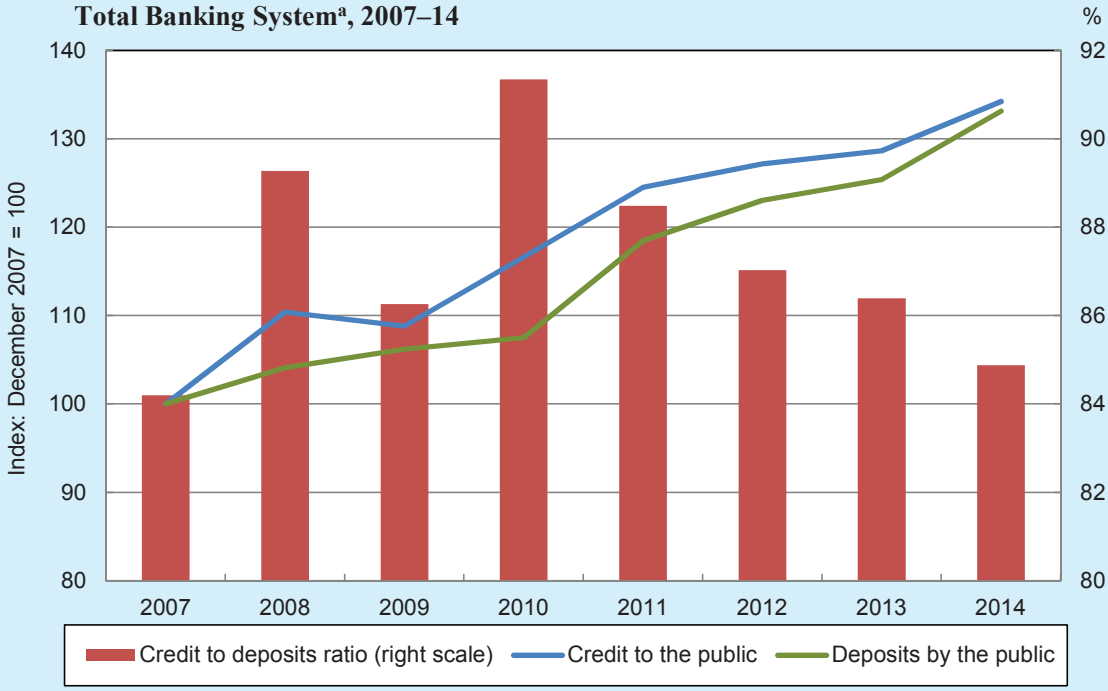
The aggregate credit portfolio increased in 2014 as a result of further expansion of the housing credit portfolio—a development that was influenced by the continuing trends in the housing market[13]—and as a result of expansion of the portfolio of other consumer credit. The portfolio was negatively affected by the decline in the volume of credit to the business segments, which was resulted from the stabilization of the GDP growth rate at a relatively low level, and the fact that the banking groups aimed to minimize their credit

[11] The five banking groups (Leumi, Hapoalim, Discount, First International and Mizrachi-Tefahot) and the three independent banks (Union Bank, Bank of Jerusalem, and Dexia).

[12] Excluding the effect of the exchange rate, they were both similar (about 3 percent).

[13] More information appears in the Bank of Israel Annual Report for 2014.

Figure 1.9
Ratio of Credit to Deposits and Development of the Components Over Time, Total Banking System[a], 2007–14



[a] Including the five banking groups (Leumi, Hapoalim, Discount, First International and Mizrahi-Tefahot), as well as Union Bank, Bank of Jerusalem and Dexia Bank.

SOURCE: Based on published financial statements.

exposure to this segment. An examination of the credit portfolio by activity sector shows a shift between credit to the retail segments (housing, private banking, small businesses) and credit to the business segments (corporate and commercial). The former continued to increase while the latter continued to decline. In the retail segments, the increase in credit was mainly the result of housing credit and consumer credit, although it was also the result of credit to small businesses to a lesser extent. There was an overall decline in credit to the business segments, but the share of commercial credit—a segment that is characterized by business customers with lower volumes of activity and indebtedness—increased.[14]

A breakdown of credit by indexation segments shows a slight increase in the volume of credit indexed to and denominated in foreign currencies. Credit in this segment would have declined had it not been for the sharp depreciation of the shekel against the dollar in the second half of the year. There was also a decline in the volume of CPI-indexed credit, which took place despite the stability in housing credit of this type and the increase in unindexed shekel-denominated credit. These two developments are explained by the low inflation environment and the decline in demand for business credit.

In addition, there was an increase during the year in the volume of cash and deposits in the banks (about 20 percent: Table 1.3), and a decline in the volume of unindexed government bonds. These items provide

[14] The analysis in this section does not reconcile with the analysis provided in the chapter on the credit portfolio and credit risk, mainly because this section includes the small business segment as part of the retail segments.

Table 1.3
Balance sheet of the total Israeli banking system[a], 2012–14

	In current prices			Rate of change during	Rate of change during	Distribution		
	2012	2013	**2014**	2013	2014	2012	2013	2014
	(NIS million)			(Percent)		(Percent)		
Assets								
Cash and deposits at banks	184,764	182,276	218,731	-1.4	20.0	14.4	13.9	15.7
Of which:								
Cash[b]	158,085	155,487	183,643	-1.6	18.1	85.6	85.3	84.0
Deposits at commercial banks	26,517	26,790	35,088	1.0	31.0	14.4	14.7	16.0
Securities	180,084	189,946	183,515	5.5	-3.4	14.1	14.5	13.2
Of which:								
Securities provided as collateral to lenders	15,369	15,688	16,855	2.1	7.4	8.5	8.3	9.2
At fair value	152,849	162,147	148,336	6.1	-8.5	84.9	85.4	80.8
Securities borrowed or bought under reverse repurchase agreements	3,076	3,090	3,708	0.5	20.0	0.2	0.2	0.3
Credit to the public	**856,942**	**866,149**	**903,524**	**1.1**	4.3	**66.9**	**66.2**	**64.9**
Allowance for credit losses	13,230	12,627	12,930	-4.6	2.4	1.0	1.0	0.9
Net credit to the public	843,712	853,522	890,594	1.2	4.3	65.9	65.3	64.0
Of which:								
Unindexed local currency	490,922	518,832	563,847	5.7	8.7	58.2	60.8	63.3
Local currency indexed to the CPI	203,564	205,443	194,492	0.9	-5.3	24.1	24.1	21.8
Foreign-currency indexed and denominated	148,336	128,089	130,901	-13.7	2.2	17.6	15.0	14.7
Of which: In dollars	103,159	91,398	99,240	-11.4	8.6	69.5	71.4	75.8
Nonmonetary items	890	1,158	1,353	30.1	16.8	0.1	0.1	0.1
Credit to governments	3,256	3,890	4,887	19.5	25.6	0.3	0.3	0.4
Investments in subsidiary and affiliated companies	4,417	3,936	2,949	-10.9	-25.1	0.3	0.3	0.2
Premises and equipment	13,777	13,185	13,221	-4.3	0.3	1.1	1.0	1.0
Intangible assets	1,050	756	616	-28.0	-18.6	0.1	0.1	0.0
Assets in respect of derivative instruments	30,023	33,468	46,910	11.5	40.2	2.3	2.6	3.4
Other assets	16,728	23,470	26,400	40.3	12.5	1.3	1.8	1.9
Total assets	**1,280,888**	**1,307,538**	**1,391,530**	**2.1**	**6.4**	**100**	**100**	**100**
Liabilities and equity								
Deposits of the public	969,485	987,926	1,049,237	1.9	6.2	75.7	75.6	75.4
Of which:								
Unindexed local currency	572,707	597,437	628,747	4.3	5.2	59.1	60.5	59.9
CPI-indexed local currency	95,698	95,714	85,686	0.0	-10.5	9.9	9.7	8.2
Foreign-currency indexed and denominated	299,926	293,348	333,323	-2.2	13.6	30.9	29.7	31.8
Of which: In dollars	223,611	219,795	260,321	-1.7	18.4	74.6	74.9	78.1
Deposits from banks	17,814	18,143	17,938	1.8	-1.1	1.4	1.4	1.3
Deposits from governments	2,878	2,711	2,411	-5.8	-11.1	0.2	0.2	0.2
Securities lent or sold under repurchase agreements	7,575	4,538	6,070	-40.1	33.8	0.6	0.3	0.4
Bonds and subordinated notes	103,124	100,749	100,714	-2.3	0.0	8.1	7.7	7.2
Liabilities in respect of derivative instruments	36,279	36,520	47,175	0.7	29.2	2.8	2.8	3.4
Other liabilities	59,688	67,697	71,630	13.4	5.8	4.7	5.2	5.1
Of which: Allowance for credit losses in respect of off-balance-sheet credit instruments	1,367	1,340	1,441	-2.0	7.6	2.3	2.0	2.0
Total liabilities	**1,196,844**	**1,218,283**	**1,295,174**	**1.8**	**6.3**	**93.4**	**93.2**	**93.1**
Minority interest	1,555	1,606	1,747	3.3	8.8	0.1	0.1	0.1
Shareholders equity	82,489	87,649	94,610	6.3	7.9	6.4	6.7	6.8
Total equity	84,044	89,255	96,357	6.2	8.0	6.6	6.8	6.9
Total liabilities and equity	**1,280,888**	**1,307,538**	**1,391,530**	**2.1**	**6.4**	**100**	**100**	**100**

[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 Dexia Bank).
[b] Including deposits at the Bank of Israel.

SOURCE: Banking Supervision Department based on published financial statements.

the banks with an alternative to investing in makam, and the total growth in these items took place due to the increase in the volume of unindexed deposits raised by the banks (about 5.2 percent, Table 1.3). There was also a decline of about 3.4 percent in the securities portfolio (about NIS 6.4 billion), to about NIS 184 billion, compared with about NIS 190 billion in the same period of the previous year (Figure 1.10; Table 1.4). The contraction in the securities portfolio was the result of the realization of assets totaling about NIS 7.4 billion, and the offsetting of about NIS 1 billion of that amount as a result of adjustments to fair value.

The decline in the volume of the securities portfolio was accompanied by a change in its composition, primarily the sharp decline in the volume of Israel government bonds (about 16 percent) and an increase in components characterized by a higher risk level. The change that took place in the composition of the portfolio in 2014 was apparently mainly the result of developments in the government bond market, and due to an increase in the banking groups' risk preference. While the increase in shares encompassed four of the five banking groups, it was mainly influenced by changes made in the Discount Group once the First International Bank was no longer an affiliated member of the group.[15] As a result of these developments, the government bonds component in the securities portfolio declined from 73 percent to 65 percent, while the non-government bonds component increased to about 30 percent, and the shares component increased to about 5 percent (Table 1.4).

On the liabilities side, there was an increase in the volume of deposits from the public (about 6.2 percent) and an increase in the volume of equity of the banking corporations (about 8 percent; Table 1.3). The increase in the volume of deposits from the public was stronger in 2014 than in the previous two years, and it took place in its entirety during the second half of the year (about 7.2 percent). This development took place despite the low interest rate environment, and was mainly the result of an increase in the volume of current deposits by business customers (about 14 percent) and less the result of an increase in retail activity (about 1 percent). A breakdown of deposits by size supports this finding, indicating a sharp increase in the volume and rate of large deposits (more than NIS 10 million) out of total deposits, from about 40 percent in 2013 to about 42 percent in 2014. These developments are a continuation of the development seen in 2013, and it seems that private customers continue to divert assets from the banks to investment channels with greater returns, particularly makam and capital markets abroad. (More information appears in Chapter 4 of the Bank of Israel Annual Report for 2014.) The sharp depreciation of the shekel against the dollar in the second half of the year also acted to increase deposit balances, through an increase in the value of deposits indexed to and denominated in foreign currency (about 13.6 percent; Table 1.3). The composition of deposits from the public was influenced in 2014 by negative inflation (inflation of -0.2 percent). Similar to previous years, it acted to divert deposits from the indexed segment to the unindexed shekel-denominated segment. Total deposits from the public in foreign currency increased in 2014 (by about 4 percent) even excluding the effect of the depreciation of the shekel against the dollar, and it seems that this development matched expectations of a depreciation in the exchange rate that were formulated during the year. Deposits from the public in foreign currency were also influenced by the fact that nonresidents withdrew deposits[16], with these deposits declining by about 13 percent (about NIS 7 billion) during the year.

[15] At the end of the first quarter of 2014, Discount Bank lost any material influence on First International Bank. As such, Discount Bank's remaining holdings of First International Bank are presented as shares available for sale in the securities portfolio.

[16] Activity in Israel.

Table 1.4

Securities portfolio of the total banking system, 2013 and 2014

		Bank Leumi				Bank Hapoalim				Bank Discount			
		2013		2014		2013		2014		2013		2014	
		Book value (NIS million)	Distribution (Percent)	Book value (NIS million)	Distribution (Percent)	Book value (NIS million)	Distribution (Percent)	Book value (NIS million)	Distribution (Percent)	Book value (NIS million)	Distribution (Percent)	Book value (NIS million)	Distribution (Percent)
Securities	Of Israeli government	37,840	59.4	22,205	42.6	48,486	79.6	39,920	67.9	25,689	62.2	19,391	51.9
	Of foreign governments	4,871	7.6	5,220	10.0	2,845	4.7	3,541	6.0	335	0.8	1,557	4.2
	Of Israeli financial institutions	432	0.7	439	0.8	875	1.4	1,328	2.3	716	1.7	634	1.7
	Of foreign financial institutions	5,396	8.5	5,942	11.4	2,677	4.4	5,437	9.3	2,821	6.8	2,005	5.4
	Mortgage-backed / asset-backed securities[a]	7,625	12.0	9,125	17.5	-	-	-	-	8,072	19.5	9,059	24.3
	Other - Israeli	1,130	1.8	1,226	2.4	1,570	2.6	2,304	3.6	782	1.9	809	2.2
	Other - foreign	2,522	4.0	3,262	6.3	2,205	3.6	3,635	6.2	2,045	4.9	2,206	5.9
	Stocks	3,919	6.1	4,694	9.0	2,254	3.7	2,613	4.4	865	2.1	1,692	4.5
	Total securities, all types	**63,735**	**100.0**	**52,113**	**100.0**	**60,912**	**100.0**	**58,778**	**100.0**	**41,325**	**100.0**	**37,353**	**100.0**

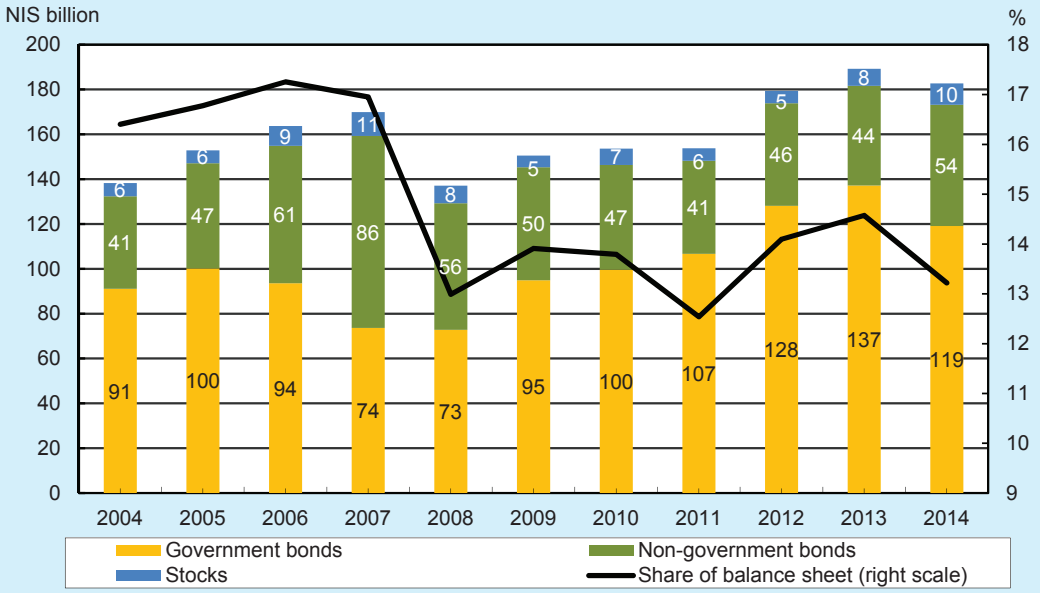
		Mizrahi-Tefahot				First International				Total system[b]			
		2013		2014		2013		2014		2013		2014	
		Book value (NIS million)	Distribution (Percent)	Book value (NIS million)	Distribution (Percent)	Book value (NIS million)	Distribution (Percent)	Book value (NIS million)	Distribution (Percent)	Book value (NIS million)	Distribution (Percent)	Book value (NIS millon)	Distribution (Percent)
Securities	Of Israeli government	6,340	90.6	13,631	95.6	6,587	61.0	7,817	62.3	129,269	68.1	108,783	59.3
	Of foreign governments	82	1.2	115	0.8	501	4.6	128	1.0	8,634	4.5	11,149	6.1
	Of Israeli financial institutions	124	1.8	123	0.9	238	2.2	611	4.9	3,140	1.7	3,965	2.2
	Of foreign financial institutions	224	3.2	219	1.5	1,477	13.7	1,670	13.3	12,744	6.7	15,365	8.4
	Mortgage-backed / asset-backed securities[a]	-	-	-	-	567	5.3	633	5.0	16,319	8.6	18,904	10.3
	Other - Israeli	23	0.3	1	-	1,000	9.3	1,289	10.3	5,268	2.8	6,483	3.5
	Other - foreign	109	1.6	66	0.5	71	0.7	95	0.8	6,965	3.7	9,322	5.1
	Stocks	98	1.4	104	0.7	358	3.3	311	2.5	7,607	4.0	9,544	5.2
	Total securities, all types	**7,000**	**100.0**	**14,259**	**100.0**	**10,799**	**100.0**	**12,554**	**100.0**	**189,946**	**100.0**	**183,515**	**100.0**

[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 Dexia Israeli Bank.

SOURCE: Banking Supervision Department based on published financial statements.

Figure 1.10
The Total Securities Portfolio[a] of the Israeli Banking System[b]—Size and Composition, 2004–14



[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 Dexia Bank.
SOURCE: Based on published financial statements.

The volume of bonds and subordinated debt notes remained stable in 2014, totaling about NIS 101 billion, after showing some volatility during the year. The stability of this item was the result of the fact that one of the banking groups issued debt in view of beneficial financing terms that were prevalent in the market, and due to the fact that there was a decline in the other banking groups.

Total equity continued to increase during the year (by about 8 percent), to about NIS 96 billion (Table 1.3). This is a direct continuation of the trend of increase in recent years, and is the result of an initiated increase based on retained earnings. This increase derives from the banking corporations' preparations for the implementation of the Supervisor of Banks' directives regarding minimum capital ratios, which are part of the ongoing process of implementing the Basel III requirements within the Israeli banking system. Retained profits were partly offset because some of the banking groups distributed dividends. (More information appears in the chapter on capital adequacy.)

b. Off-balance-sheet activity

Total guarantees and commitments to provide credit increased sharply by about 11 percent in 2014, to a total of about NIS 521 billion, which accounts for about 37 percent of total balance-sheet activity. The volume of this activity increased during the year despite the moderate growth of GDP and the stability in the overall volume of transactions belonging to this area (documentary credit and credit guarantees), and despite moderation in the growth of guarantees to homebuyers (about 6 percent; Table 1.5). The latter was a result of the decline in the rate of new home buyers—a direct result of public expectations for the beginning of government assistance programs. The main factor in the increase was therefore growth in credit facilities

(about 15.7 percent), credit facilities on credit cards (about 4.2 percent), and irrevocable commitments to provide credit (about 15.8 percent; Table 1.5).

Table 1.5
Transactions in off-balance-sheet financial instruments where the par value reflects credit risk, total banking system[a], 2013 and 2014

	End of year balance		Rate of change	Distribution	
	2013	2014		2013	2014
	(NIS million)		(percent)	(percent)	
Documentary credit	4,859	5,049	3.9	1.0	1.0
Credit guarantees	18,672	18,359	-1.7	4.0	3.5
Guarantees for home purchases	51,047	53,987	5.8	9.8	10.4
Other guarantees and liabilities	52,087	60,056	15.3	10.0	11.5
Unused credit card facilities	96,190	100,275	4.2	18.5	19.3
Unused credit facilities to the public	114,270	132,200	15.7	21.9	25.4
Irrevocable commitments to provide credit that has not yet been extended	87,045	100,755	15.8	16.7	19.4
Commitments to issue guarantees	45,298	49,978	10.3	8.7	9.6
Total	**469,468**	**520,660**	**10.9**	**90**	**100**

[a] The five banking groups, Union Bank, Bank of Jerusalem and Dexia Israel Bank.

SOURCE: Banking Supervision Department based on published financial statements.

Banking corporations' activity in derivatives grew by about 27 percent this year in notional amounts, to NIS 2.5 trillion (Table 1.6). This encompassed all types of instruments, but exchange rate contracts were particularly prominent, increasing from about NIS 740 billion to about NIS 1 trillion. Most of the change in these contracts took place in the second half of the year, affected by the depreciation of the shekel against the dollar and because the banks and their customers hedged the exchange rate risk.

Table 1.6
Distribution of the balance of derivative instruments, Israeli banking system[a], 2014 compared with 2013

(NIS million)[b]

	By type of instrument		Rate of change compared with 2013	By type of transaction			Rate of change compared with 2013
	2013	2014			2013	2014	
Interest rate contracts	903,503	1,108,035	22.6	Hedging derivatives[d]	22,262	25,013	12.4
Exchange rate contracts	740,051	1,043,213	41.0	ALM derivatives[d,e]	1,642,331	2,139,849	30.3
Other contracts[c]	322,789	354,277	9.8	Other derivatives[f]	301,749	340,663	12.9
Total	**1,966,342**	**2,505,525**	**27.4**	**Total**	**1,966,342**	**2,505,525**	**27.4**

[a] Includes the five banking groups and the independent banks (Union, Jerusalem and Dexia).
[b] In notional amounts, at current prices.
[c] Contracts in respect of shares, commodity contracts and other contracts.
[d] Excluding credit derivatives.
[e] Derivatives constituting part of the bank's assets and liabilities, which were not designated for hedging purposes.
[f] Including credit derivatives and currency swaps.

SOURCE: Banking Supervision Department based on published financial statements.

4. THE CREDIT PORTFOLIO AND CREDIT RISK[17]

Credit risk is the main financial risk to which the banks are exposed in their operations, and it is affected by the size of the credit portfolio, its quality and its level of diversification. During 2014, indices of credit portfolio quality continued to improve, as did credit concentration by borrower size although its level still remained high. The rapid growth of credit to households also continued, mainly nonhousing credit (consumer credit). The high level of the banking corporations' exposure to the construction and real estate industry, housing credit and consumer credit, and the existing correlations between these types of credit, constitute a risk to the banking system. The banking credit risk, and particularly the business sector credit risk, is growing stronger against the background of the low interest rate environment prevailing in the economy. A low interest rate environment over time encourages investors to take larger risks in searching for returns, and increasing the risk of over-leveraging of borrowers. It may therefore lead to an increase in asset prices and perhaps even to the underpricing of the risks inherent in them.[18] In particular, the low spreads between corporate and government bonds apparently reflect the underpricing of risk in the corporate bond market (Figure 1.15).

a. Main developments in the banks' credit portfolio

In 2014, the total credit portfolio[19] of the five banking groups increased by 6 percent, to a total of NIS 1,341 billion. Total balance-sheet credit[20] increased by 5 percent to NIS 866 billion (Table 1.7). About 75 percent of the increase in balance-sheet credit was the result of credit to households, which grew by 8 percent, with its share of the portfolio reaching 46 percent in December 2014. Total balance-sheet credit to the business sector increased by 2 percent. Some of the expansion of the balance-sheet credit portfolio was the result of the depreciation of the shekel vis-à-vis the dollar during the second half of the year.[21]

Business credit

Business credit increased by 2 percent in 2014 to NIS 385 million, following two years of decline (Table 1.7; Figure 1.11). The increase was influenced by the shekel's depreciation against the dollar and by the expansion of business credit to small borrowers. Credit to large borrowers continued to contract.

Credit to the large borrowers has contracted in recent years due to a number of factors. On the supply side, the contraction was influenced by the Banking Supervision Department's activity to reduce the banking system's exposure to credit concentration by borrower size, and by the banks striving to moderate the growth of credit risk assets by lowering credit to large borrowers—credit that generally has a risk weight that is higher than the weight of other types of credit. Against this background, the banks have focused in recent years on credit to households and credit to small business borrowers. On the demand side,

[17] The analysis in this section is based on data of the five major banking groups.

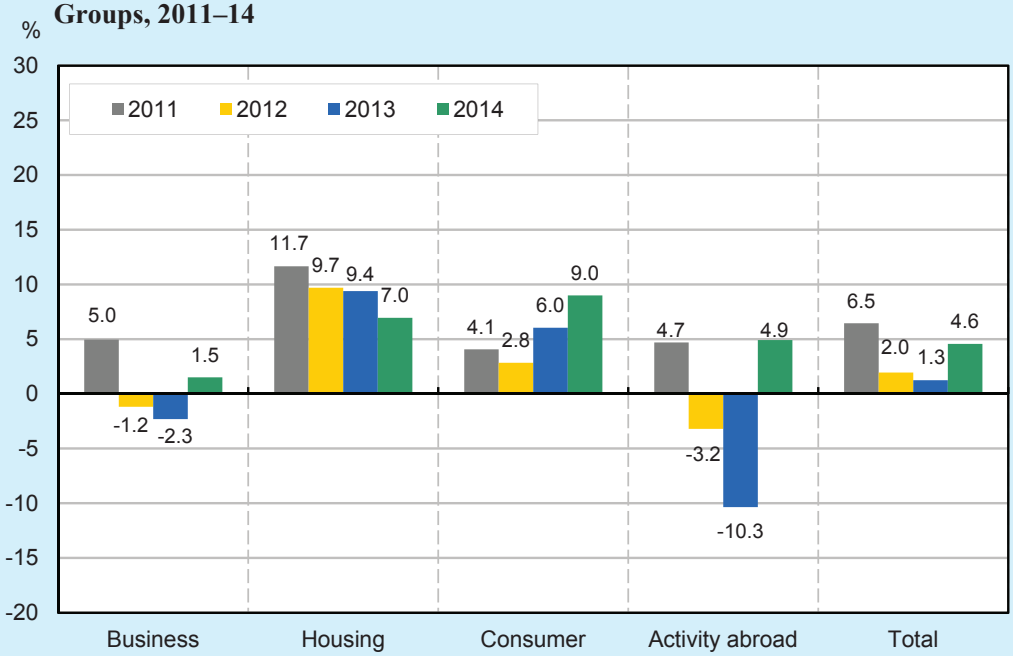
[18] More information appears in the Financial Stability Report, Bank of Israel, December 2014.

[19] The total credit portfolio includes total balance-sheet credit to the public, bonds, other assets in respect of derivative instruments, and the credit risk from off-balance-sheet financial instruments, as calculated for the purpose of limitations on a borrower's indebtedness.

[20] Total balance-sheet credit (debt) includes credit to the public, apart from bonds and securities borrowed or purchased under reverse repurchase agreements.

[21] During 2014, there was a depreciation of 12 percent in the value of the shekel against the dollar, which contributed 1.3 percentage points to the increase in the total balance-sheet credit portfolio.

Figure 1.11
Annual Change in Balance-Sheet Credit to Principal Sectors, the Five Banking Groups, 2011–14



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

it seems that some of the large corporations lowered demand for credit, among other things in view of their desire to reduce their leverage. This possibility is supported by the fact that total nonbank credit increased only moderately, despite the low spreads on the corporate bond market and continued growth of sources of institutional investors, and by the fact that Companies Survey data indicate a decline in companies' financing difficulties.

In contrast to credit to large borrowers, business credit to small borrowers increased during the year. This was a result of the banks' adoption of a policy aimed at increasing credit in this activity segment, and of the fact that the Government Fund for Small and Medium Businesses made bank loans available to these borrowers under government guarantees.[22]

An analysis of business credit by industry indicates continued growth of credit to the trade industry (7 percent) and of credit to the construction industry (5 percent), and continued contraction of credit to the financial services industry (6 percent; Table 1.7). Credit to borrowers whose main activity is located abroad increased by 5 percent, in contrast to the trend in recent years. This development is a result of the depreciation of the shekel against the dollar, and after adjusting for this effect, credit to these borrowers declined.

[22] According to data from the Bank of Israel Annual Report for 2014, the Fund for Small and Medium Businesses provided credit totaling NIS 2 billion in 2013, and NIS 1.4 billion in 2014 (until September).

Table 1.7
Distribution of outstanding credit to the public, by principal industries, the five banking groups, 2013 and 2014

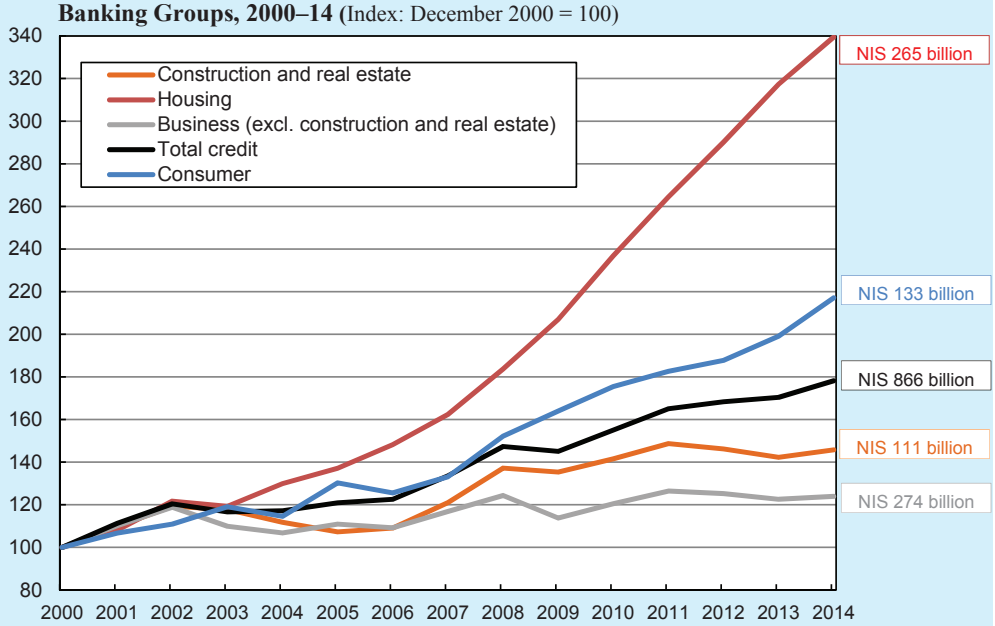
	Total balance of credit risk[a]					Balance-sheet credit[b] (debts)				
	Balance		Distribution of credit to the public		Change in credit	Balance		Distribution of credit to the public		Change in credit
	2013	2014	2013	2014	2014	2013	2014	2013	2014	2014
	(NIS million)		(percent)		(percent)	(NIS million)		(percent)		(percent)
Borrower activity in Israel	**1,118,874**	**1,181,800**	**88.3**	**88.1**	**5.6**	**749,423**	**783,410**	**90.5**	**90.5**	**4.5**
Business sector	**631,660**	**659,218**	**49.9**	**49.1**	**4.4**	**379,573**	**385,310**	**45.9**	**44.5**	**1.5**
Agriculture	7,243	7,520	0.6	0.6	3.8	5,796	5,955	0.7	0.7	2.7
Manufacturing	107,746	113,817	8.5	8.5	5.6	64,250	63,640	7.8	7.4	-0.9
Construction and real estate	205,065	215,891	16.2	16.1	5.3	108,462	111,131	13.1	12.8	2.5
Of which: construction	139,017	149,205	11.0	11.1	7.3	51,405	53,903	6.2	6.2	4.9
real estate	66,048	66,686	5.2	5.0	1.0	57,057	57,228	6.9	6.6	0.3
Electricity and water	21,528	21,492	1.7	1.6	-0.2	11,872	10,661	1.4	1.2	-10.2
Commerce	84,351	89,234	6.7	6.7	5.8	62,903	67,017	7.6	7.7	6.5
Tourism	14,535	17,009	1.1	1.3	17.0	12,662	14,361	1.5	1.7	13.4
Transport and storage	20,129	20,658	1.6	1.5	2.6	15,723	16,264	1.9	1.9	3.4
Communications and computer services	20,090	19,049	1.6	1.4	-5.2	14,001	12,780	1.7	1.5	-8.7
Financial services	93,985	94,145	7.4	7.0	0.2	41,008	38,646	5.0	4.5	-5.8
Other business services	35,656	37,383	2.8	2.8	4.8	26,186	27,390	3.2	3.2	4.6
Public and community services	21,332	23,020	1.7	1.7	7.9	16,710	17,465	2.0	2.0	4.5
Private individuals	**487,214**	**522,582**	**38.5**	**39.0**	**7.3**	**369,850**	**398,100**	**44.7**	**46.0**	**7.6**
Of which: housing loans	258,014	279,107	20.4	20.8	8.2	247,452	264,677	29.9	30.6	7.0
nonhousing loans	229,200	243,475	18.1	18.2	6.2	122,398	133,423	14.8	15.4	9.0
Borrowers' activity abroad	**147,882**	**159,585**	**11.7**	**11.9**	**7.9**	**78,283**	**82,135**	**9.5**	**9.5**	**4.9**
Total	**1,266,696**	**1,341,385**	**100.0**	**100.0**	**5.9**	**827,706**	**865,545**	**100.0**	**100.0**	**4.6**

[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.

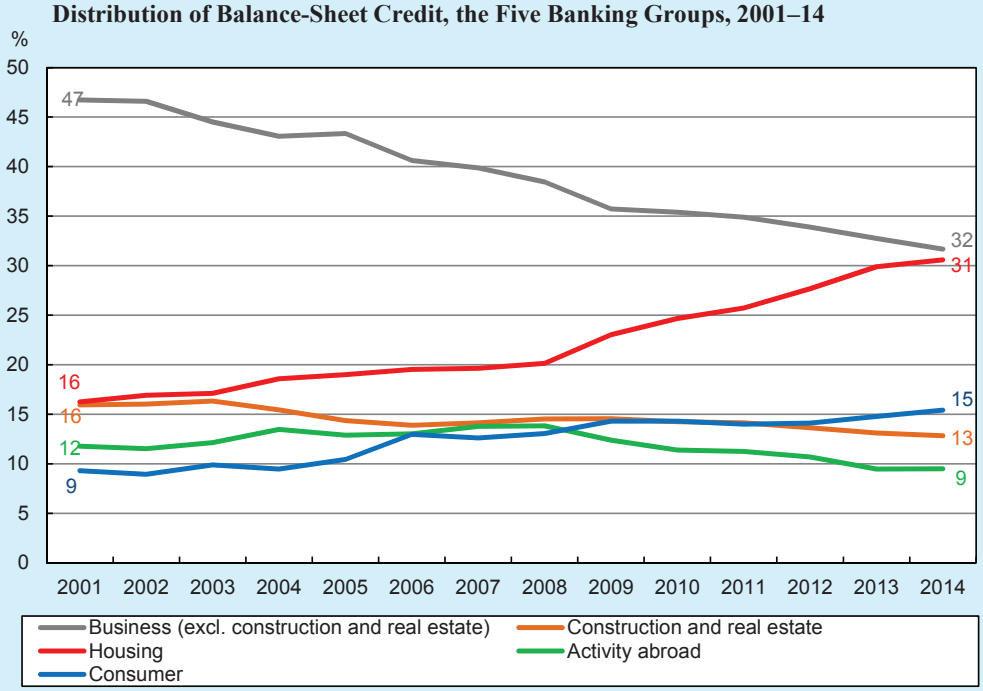
SOURCE: Banking Supervision Department based on published financial statements.

Figure 1.12
Development of Balance-Sheet Credit in the Principal Sectors, the Five Banking Groups, 2000–14 (Index: December 2000 = 100)



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

Figure 1.13
Distribution of Balance-Sheet Credit, the Five Banking Groups, 2001–14

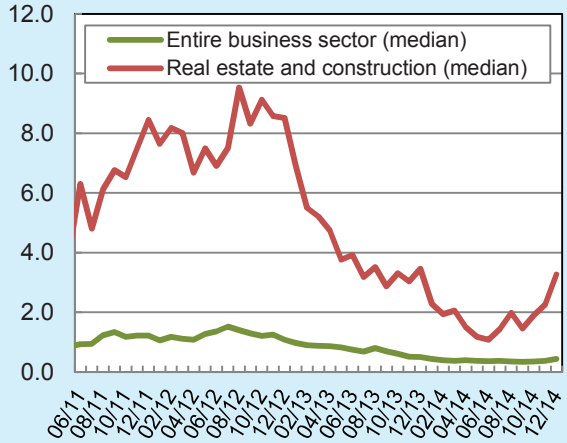


SOURCE: Published financial statements and reports to the Banking Supervision Department.

Credit to the construction and real estate industry accounts for 29 percent of the banks' business credit portfolio. During 2014, it increased by 3 percent to NIS 111 billion (Table 1.7). The increase was the result of expanded credit to the construction industry.[23] In contrast, credit to the real estate industry[24] remained virtually unchanged. Credit to the real estate industry mainly includes financing for income-producing real estate, which is characterized by long periods and sensitivity to changes in the interest rates. The low interest rate environment increases the concern of over-valuing income-producing real estate and of the capitalization of the receipts expected from it.

In recent years, the construction and real estate industry's reliance on nonbank sources of financing, including the issuance of bonds and shares, loans from institutional investors, and financing from nonresidents, has increased. For instance, the net volume of bond offerings by firms from the construction and real estate industry averaged NIS 4 billion over the past three years, and gross offerings by firms in the industry constituted an average of 44 percent of total gross corporate bond offerings in the domestic market.

Figure 1.14
The EDF[a] Index of Construction and Real Estate Companies and of Israeli Corporations, June 2011 to December 2014



[a] EDF (Expected Default Frequency) reflects the expected likelihood of default. The median EDF for construction and real estate companies is calculated on the basis of 29 publicly traded Israeli companies. The median EDF for all companies in the business sector is calculated on the basis of 289 publicly traded Israeli companies.

SOURCE: Based on Moody's-KMV.

Credit to the construction and real estate industry constitutes 13 percent of the credit portfolio to the public (Table 1.7), and 73 percent of it is collateralized by real estate properties in Israel.[25] There are other types of credit that are collateralized by real estate properties in Israel: Housing credit, which accounts for 31 percent of the credit portfolio, and additional credit from other industries, which accounts for 4 percent of the portfolio. As such, about 48 percent of the banks' credit portfolio is directly or indirectly exposed to developments in the domestic real estate market through borrowers' potential difficulty repaying their debts or through the potential erosion of the value of collateral provided to banks against credit.

The high risk in the construction and real estate industry is also reflected in the fact that the EDF[26] level of firms in the industry is higher than the level of all firms in the economy, and this difference shows that firms in the construction and real estate industry are more likely to default (Figure 1.14). There was also an

[23] For which the main activity is construction (development work at construction sites; construction of entire buildings or parts of buildings; carpentry and metalwork; installation of water, electricity and air conditioning systems; finishes; renovations and repairs to structures; creation, assembly and erection of prefab buildings) and civil engineering work (earthworks; paving and infrastructure; other engineering work; and the rental of construction or demolition equipment with an operator).

[24] For which the main activity is trade and intermediation in real estate, rentals, management and maintenance, rent collection and related activities.

[25] About one-third of real estate assets in Israel that serve as collateral are residential real estate properties, while the rest are commercial or industrial.

[26] Expected Default Frequency, which reflects the expected likelihood of default.

Table 1.8
Credit quality indices, by principle industry, the five banking groups, 2013 and 2014

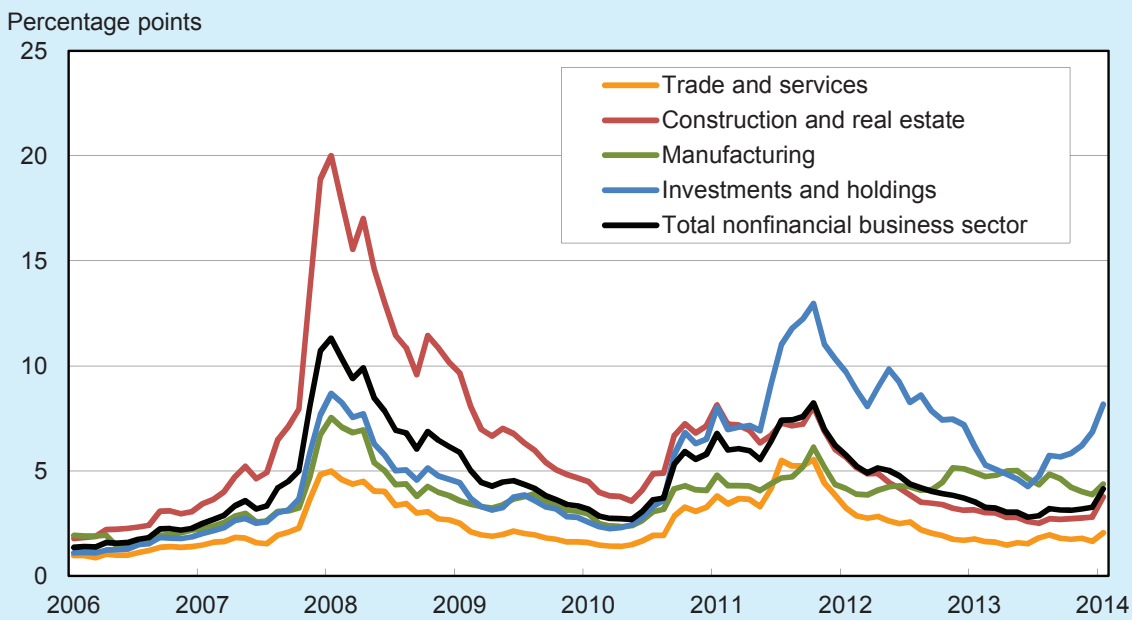
	Impaired loans to total balance-sheet credit to the industry		Loan loss provisions to total balance-sheet credit to the industry		Net write-offs to total balance-sheet credit to the industry		Allowance for credit losses to total balance-sheet credit to the industry		Coverage ratio: Allowance for credit losses to impaired loans to the industry	
	2013	2014	2013	2014	2013	2014	2013	2014	2013	2014
					(percent)					
Borrowers' activity in Israel	**2.36**	**1.84**	**0.23**	**0.14**	**0.30**	**0.05**	**1.59**	**1.59**	**67.4**	**86.8**
Business	**4.36**	**3.46**	**0.25**	**0.02**	**0.32**	**-0.02**	**2.16**	**2.15**	**49.6**	**61.9**
Agriculture	2.24	1.86	-0.22	-0.17	-0.07	0.32	1.62	1.18	72.3	63.1
Manufacturing	4.98	4.19	0.87	-0.20	0.37	0.27	2.98	2.53	59.8	60.4
Construction and real estate	5.89	4.37	0.06	-0.27	-0.20	-0.24	2.57	2.51	43.6	57.4
Of which : Construction	5.85	3.70	-0.07	-1.50	-0.20	-0.90	3.04	2.45	51.9	66.1
Real estate	5.92	5.00	0.17	0.88	0.02	0.38	2.15	2.57	36.3	51.3
Electricity and water	0.75	0.11	-0.11	0.01	0.03	0.02	0.15	0.67	20.2	591.7
Commerce	3.69	2.66	0.50	0.80	0.56	0.32	2.14	2.55	58.1	96.2
Tourism	8.33	5.59	-0.02	-0.29	0.19	-0.24	1.22	1.03	14.6	18.4
Transportation and storage	2.82	3.47	-0.11	-0.25	0.31	0.24	1.60	1.17	56.8	33.6
Communications and computer services	5.58	7.61	1.06	-0.72	0.71	0.35	2.64	2.63	47.2	34.5
Financial services	3.42	2.19	-0.42	0.40	0.60	-0.28	2.07	2.22	60.5	101.2
Other business services	2.27	1.91	0.32	0.25	1.16	0.07	1.20	1.19	52.9	62.4
Public and community services	0.81	1.19	-0.07	-0.29	0.08	-0.54	0.57	0.90	70.6	75.8
Private individuals	**0.31**	**0.26**	**0.21**	**0.25**	**0.18**	**0.12**	**1.00**	**1.06**		
Of which: Housing loans	0.01	0.01	0.16	0.00	0.18	0.02	0.78	0.72		
Nonhousing loans	0.92	0.76	0.31	0.73	0.47	0.31	1.45	1.75		
Borrowers' activity abroad	**4.72**	**2.98**	**0.49**	**0.31**	**0.51**	**0.68**	**2.10**	**0.68**		

SOURCE: Banking Supervision Department based on published financial statements.

increase in the EDF of firms in the industry during the second half of the year, indicating an increase in the industry's risk. Indices calculated according to the banks' financial statements show that the risk in credit to the real estate industry is higher than the risk in credit to other principal industries, and that there was a worsening in some of the indices during the year. For instance, the proportion of impaired credit out of total balance-sheet credit to the real estate industry was 5 percent in December 2014—higher than the rate in the portfolio as a whole (3.5 percent; Table 1.8). Furthermore, more than half of the firms that entered debt restructuring arrangements since 2008 belong to the construction and real estate industry, due among other things to their activity in eastern Europe during the 2008 financial crisis.

Leveraged lending includes credit to holding companies and credit issued to finance the purchase of the means of control of a corporation[27], among other things. The high risk inherent in this type of credit is reflected, for example, in the fact that the spreads on bonds in the holding companies industry are higher than the spreads on bonds in other principal industries (Figure 1.15), and in the fact that the debt of firms in the investments and holdings industry accounted for a significant portion of debt restructuring arrangements in the Israeli economy between 2008 and 2014 (about 35 percent of outstanding debt in the arrangements).

Figure 1.15
Yield Spread Between Corporate Bonds[a] and CPI-indexed Government Bonds, by Industry, 2006–14 (monthly average)



[a] Bonds traded on the Tel Aviv Stock Exchange, excluding convertible bonds and structured bonds.
SOURCE: Bank of Israel.

[27] The ability to repay the credit issued to finance the purchase of the means of control of a corporation is based mainly on the purchased corporation, and is sometimes non-recourse credit. In cases where the borrower's ability to repay relies on shares of the purchased company, a negative impact to the company's value leads to the erosion of the value of the collateral and to an increase in credit risk.

In recent years, the Banking Supervision Department has worked with the banking corporations to reduce their exposure to leveraged loans, and the proportion of credit for the purchase of the means of control of a corporation out of the total business credit portfolio declined from 7 percent in December 2008 to 3 percent in December 2014. In 2014, this type of credit contracted by about NIS 3.5 billion, to about NIS 10 billion.

In November 2014, the Committee Examining the Procedure for Debt Settlement Implementation in Israel (the Andorn Committee) published its final report. Among other things, the committee recommended that the supervisory authorities instruct the corporations under their supervision to set internal limitations on credit to leveraged borrowers, strengthen the standards for managing leveraged transactions, and set a format for obtaining information on debt restructuring proceedings they have conducted. As a result, the Supervisor of Banks published Proper Conduct of Banking Business Directive 327, "Managing Leveraged Lending", in May 2015. This directive sets out the minimal standards concerning the underwriting, management, tracking and reporting of these loans. The quantitative limitations on financing capital transactions included in Directive 323 were accordingly revised.[28] In addition, Directive 311, "Credit Risk Management" was amended, revising requirements on various issues, including: quantitative limitations on leveraged loans and leveraged borrowers, obtaining information on the controlling owner of a borrowing corporation, and making decisions on the implementation of debt restructuring. At the same time, the Supervisor of Banks published Reporting to the Banking Supervision Department Directive 811, according to which a banking corporation will be required to submit a quarterly report to the Banking Supervision Department regarding problematic debts that have been restructured.

Nonbank credit to the business sector constitutes about half of the supply of credit to the business sector in Israel, and is comprised of a number of types: tradable and nontradable bonds in the domestic market, loans from institutional investors, and credit from nonresidents.[29] Nonbank credit expanded by just 4 percent in 2014, totaling NIS 430 billion. The volume of net offerings of local bonds by companies in the nonfinancial sector was negligible during the year, despite the low spreads prevailing in the corporate bond market. Similar to the previous year, a significant proportion of offerings was concentrated in the construction and real estate industry. Credit from nonresidents increased by NIS 23 billion in 2014, but this growth was mainly the result of the depreciation of the shekel in the second half of the year. Excluding the effects of the exchange rate and the price, this type of credit contracted. The only nonbank channel to grow in 2014 was direct loans provided by institutional investors. This channel increased rapidly in recent years, and its proportion of nonbank credit to the business sector increased from 3 percent in December 2008 to 11 percent in December 2014. During the year, this type of credit increased by NIS 6 billion—an increase of 13 percent.

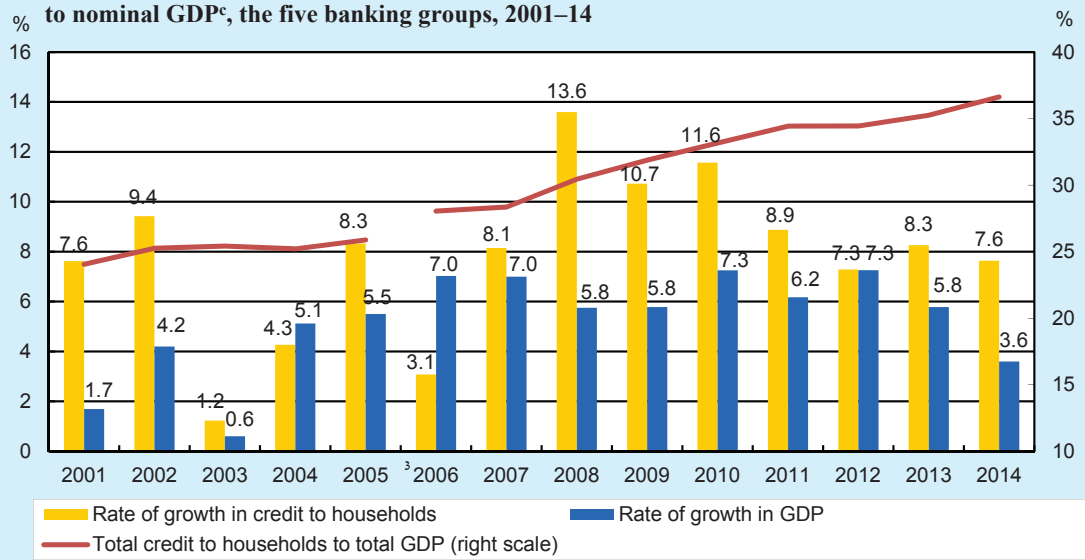
Credit to households

Credit to private individuals (housing and nonhousing) increased by 8 percent in 2014, to NIS 398 billion (Table 1.7). Between 2007 and 2014, the average growth rate was 10 percent, and its share of the bank credit portfolio increased from 32 percent to 46 percent (Figure 1.13). During this period, there was a market

[28] Until this directive was revised, the quantitative limitations related to credit for the purchase of the means of control of a company.

[29] Including loans from nonresidents and corporate bonds traded abroad.

Figure 1.16
Growth rate of nominal GDP[a] and of credit to households[b], and ratio of credit to households to nominal GDP[c], the five banking groups, 2001–14



[a] During 2013, the Central Bureau of Statistics changed the method of calculation of the National Accounts, and revised all of the data series dating back to 2006. The level of GDP over the period from 2001 to 2006 was reclaculated according to the rate of change.
[b] Until December 2010, net balance-sheet credit was used. From 2011, gross credit to the public was used.
[c] Until 2005, open credit card transactions were recorded as non-balance-sheet credit, and from 2006, they were recorded as balance-sheet credit.
SOURCE:Based on published financial statements and reports to the Banking Supervision Department.

increase in household leverage: The ratio between credit to private individuals and GDP increased during this period from 28 percent to 37 percent (Figure 1.16), and the ratio between credit to private individuals and disposable income in the economy increased from 44 percent to 54 percent (Figure 1.17). However, the level of household leverage in Israel is still lower than in other advanced economies. Credit to households increased in recent years against the background of the low interest rate environment, increasing demand for homes, and increased private consumption. On the supply site the banks are competing over this market sector, and there is also increasing competition on the part of nonbank entities, although their share of financing credit to households remains negligible.

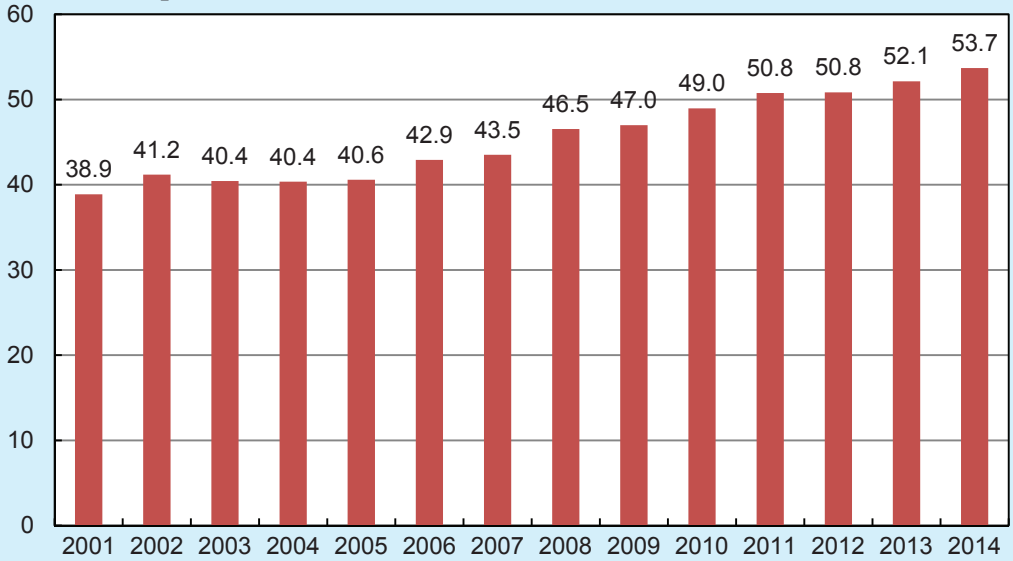
Housing credit[30] increased by 7 percent in 2014, to NIS 265 billion (Table 1.7; Figure 1.11). While this rate is lower than the growth rate of housing credit between 2007 and 2013—an average of 12 percent—it is still high. The volume of new residential loans taken out remains high—an average of NIS 4.3 billion per month, similar to the previous year (Table 1.9; Figure 1.18).

The risk characteristics of new residential loans continued to decline in 2014, as a result of the measures taken by the Supervisor of Banks in the housing credit area in recent years (Figure 1.19). By way of illustration, the share of new loans with an LTV ratio of more than 60 percent declined from 37 percent to 34 percent on average, and the share of new loans with a PTI ratio of more than 30 percent declined

[30] Credit for residential purposes and credit for any purpose that is secured by a residence.

from 40 percent to 36 percent on average. There was also a marked decline in risk on outstanding housing credit. The share of housing credit with an LTV ratio of more than 60 percent declined from 44 percent to 41 percent, and the rate of loans in arrears more than 90 days out of total residential loans declined from 2.1 percent in December 2011 to 1.1 percent in December 2014—a result of expanded housing credit and a decline in the volume of loans in arrears (Figure 1.20).

Figure 1.17
The Ratio Between Total Credit to Households in the Five Banking Groups and Disposable Income[a], 2004–14[b,c]

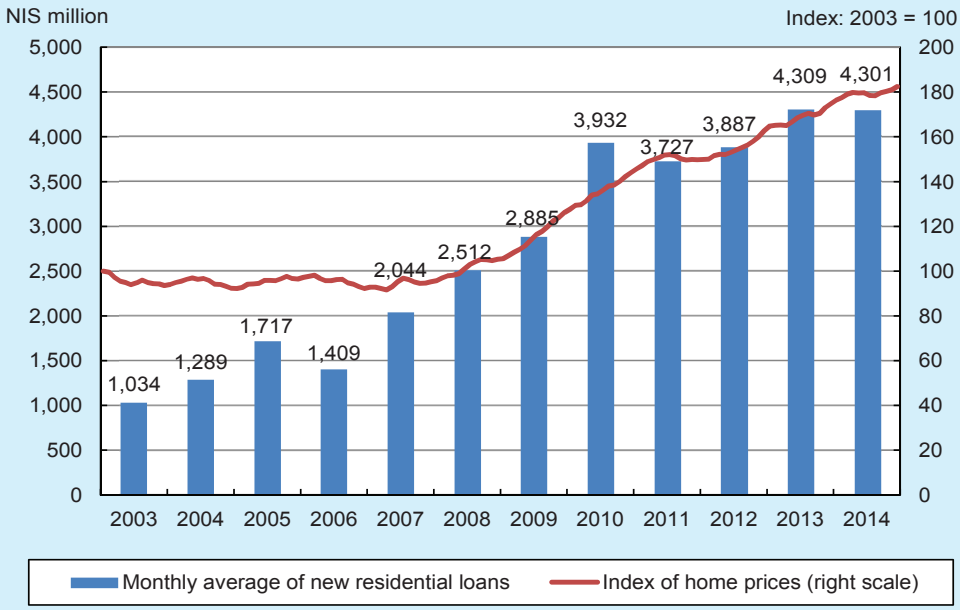


[a] Net private disposable income in Israel from all sources.
[b] Until December 2010, net balance-sheet credit was used. From 2011, gross credit to the public was used.
[c] During 2013, the Central Bureau of Statistics made methodological adjustments to the calculation of National Accounts data, and revised all of the data series dating back to 2006.
SOURCE:Based on published financial statements.

Even though the risk characteristics in the housing credit portfolio continued to decline, the continuing increase in such credit and in its share of the total bank credit portfolio—alongside the correlation that exists between the risks inherent in it and the risks in the credit portfolio to the construction and real estate industry and in the consumer credit portfolio—emphasized the need to strengthen the banking system's ability to absorb unexpected losses by increasing capital buffers. As a result, the Supervisor of Banks published a directive in September 2014 that requires the banking corporations to increase their Tier 1 capital target by a rate that is the equivalent of 1 percent of the outstanding housing credit portfolio.

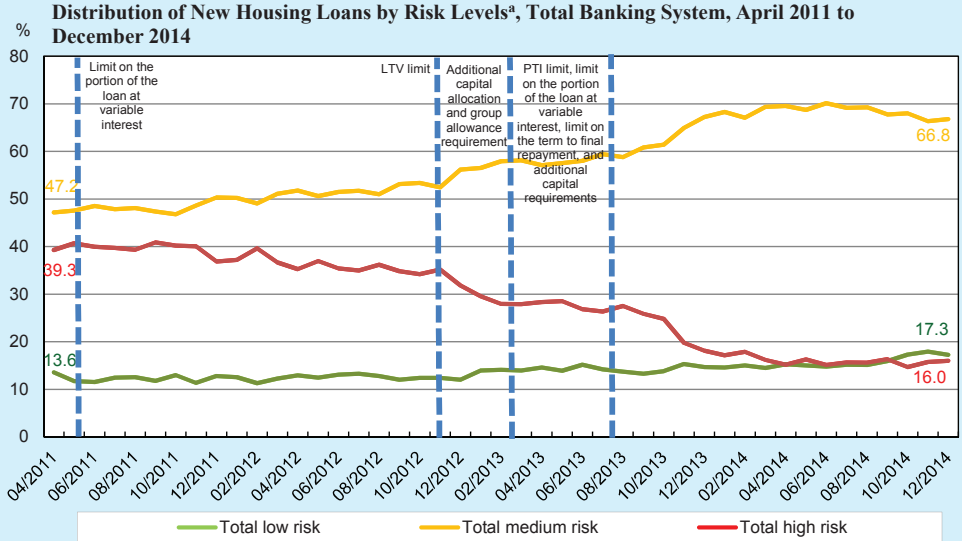
In 2014 as well, the Banking Supervision Department carried out a stress test on the banking system based on a uniform scenario. (More information appears in Section 9.) The stress scenario that was examined included a serious domestic shock as a result of a decline in Israel's geopolitical situation, alongside a global shock initiating in Europe. The scenario led, among other things, to unemployment increasing to 12.4 percent, home prices declining by 25 percent, and the Bank of Israel interest rate remaining near zero.

Figure 1.18
Monthly Average of New Housing Loans Granted, Total Banking System, and Index of Home Prices, 2003–14



SOURCE: Based on reports to the Banking Supervision Department.

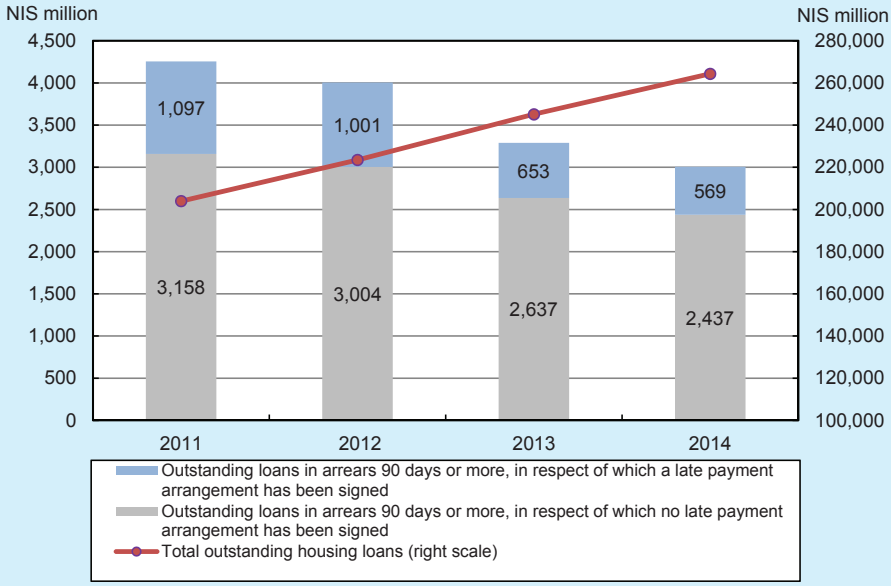
Figure 1.19
Distribution of New Housing Loans by Risk Levels[a], Total Banking System, April 2011 to December 2014



[a] The risk levels are set by the loan-to-value (LTV) and payment-to-income (PTI) rates.
The risk is low if (PTI ≤ 20% and LTV ≤ 60%).
The risk is medium if (20% < PTI ≤ 40% and LTV < 60%) or (PTI ≤ 30% and 60% < LTV ≤ 75%) or (PTI ≤ 10% and LTV > 75%).
The risk is high if (PTI > 40%) or (30% < PTI ≤ 40% and LTV > 60%) or (10% < PTI ≤ 30% and LTV > 75%).

SOURCE: Based on reports to the Banking Supervision Department.

Figure 1.20
Outstanding Housing Loans and Outstanding Housing Loans 90 Days or More Past Due[a], Total Banking System, 2011–14



[a] Loans for which the allowance is calculated by the duration past due.
SOURCE: Published financial statements and reports to the Banking Supervision Department.

An examination of the effect of this scenario on the housing credit portfolio showed that it would lead to a significant negative impact on borrowers. The probability of default (PD) of mortgage borrowers reaches 7.3 percent, or 53,000 borrowers at the end of the scenario. The results of the test show that the average loss in the housing credit portfolio reaches 1.1 percent, or NIS 10 billion before tax. The calculation of the loss to banks took into account the realization of some of the properties that serve as collateral, and reaching restructuring arrangements with borrowers who defaulted. In order to examine the sensitivity of the housing credit portfolio to an increase in the interest rate, the Banking Supervision Department also examined the effect of an increase of 3 percentage points in the level of the interest rate included in the stress scenario. The sensitivity analysis showed that the PD at the end of the scenario reaches 8.6 percent—about 63,000 borrowers—and the average loss in the housing credit portfolio reaches 1.4 percent (about NIS 12 billion).

Table 1.9
Principal housing loan market indicators, total banking system, 2005–14

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Year-end balance of housing loans (NIS million)	124,189	126,057	136,994	154,123	172,033	200,237	224,756	246,590	268,547	287,336
Rate of change		2%	9%	13%	12%	16%	12%	10%	9%	7%
Year-end balance of loans for the purchase of residential property (NIS million)	110,734	111,710	122,210	138,491	155,843	180,145	203,960	223,519	245,092	264,216
Rate of change		1%	9%	13%	13%	16%	13%	10%	10%	8%
Year-end balance of loans secured by a residential property[a] (NIS million)	13,455	14,347	14,784	15,632	16,191	20,093	20,796	23,071	23,455	23,120
Rate of change		7%	3%	6%	4%	24%	3%	11%	2%	-1%
Average monthly volume of new loans for the purchase of residential property (NIS million)	1,717	1,409	2,044	2,512	2,885	3,932	3,727	3,887	4,309	4,301
Floating-rate unindexed segment (NIS million)	374	436	725	1,202	1,737	1,980	1,376	1,169	1,557	1,504
Fixed-rate unindexed segment (NIS million)	2	13	20	14	22	70	183	396	638	958
Floating-rate indexed segment (NIS million)	273	341	452	776	678	1,229	1,476	1,618	1,418	810
Fixed-rate indexed segment (NIS million)	909	474	740	448	336	464	490	584	598	951
Floating rate foreign currency segment (NIS million)	158	145	100	60	110	189	200	116	96	77
Average weighted interest rate on loans for the purchase of residential property	4.5%	5.4%	4.6%	4.1%	2.2%	2.5%	3.3%	3.0%	2.7%	2.4%
Floating interest rate in the unindexed segment	4.8%	6.2%	4.8%	4.4%	1.7%	2.6%	3.8%	3.4%	2.7%	1.9%
Fixed interest rate in the unindexed segment	6.9%	7.2%	6.6%	7.1%	5.4%	5.5%	5.7%	4.8%	4.2%	3.8%
Floating interest rate in the indexed segment	4.2%	5.0%	4.4%	3.7%	2.7%	2.2%	2.8%	2.6%	2.1%	2.1%
Fixed interest rate in the indexed segment	4.3%	4.8%	4.2%	3.8%	3.1%	2.6%	2.8%	2.4%	2.2%	2.3%
Floating interest rate in the foreign currency segment	5.1%	6.1%	6.3%	5.0%	2.8%	2.8%	3.0%	3.0%	2.7%	2.6%
Average monthly number of loans granted for the purchase of residential property						7,060	6,593	6,642	7,196	7,175
Average loan size in shekels						557,842	565,800	582,263	597,509	599,165

[a] Not for residential purposes.

SOURCE: Based on reports to the Banking Supervision Department.

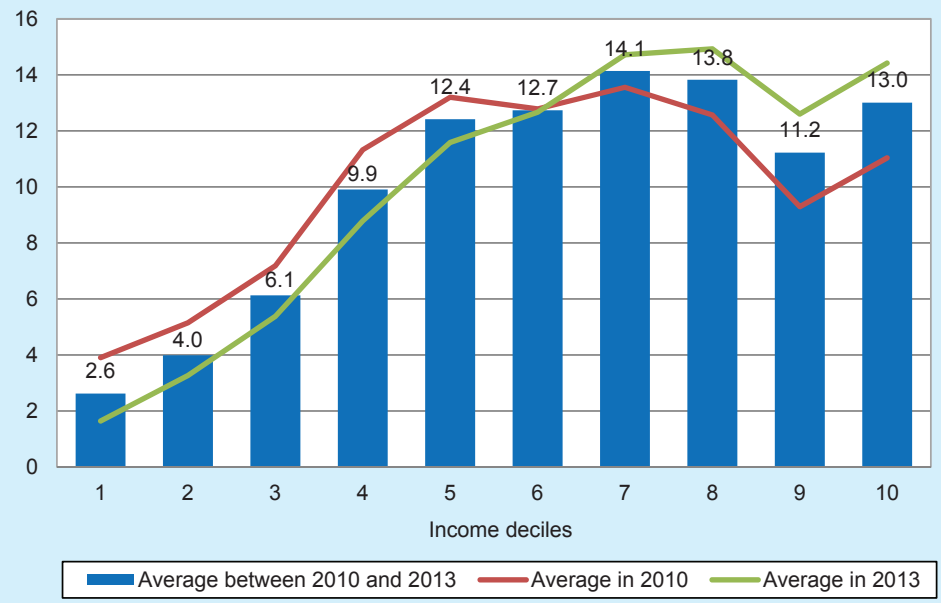
Box 1.1: Housing loans issued between 2010 and 2013—Analysis by income deciles and geographic regions

This box presents the main characteristics of housing loans issued by the seven largest banks between January 2010 and December 2013, constituting 58 percent of outstanding housing credit at the end of 2014 (about 309 thousand loans totaling about NIS 153 billion). Data on these loans serve the Banking Supervision Department in its analysis of housing credit as part of the macroeconomic stress test, based on a bottom-up scenario, that it conducts on the banking system.

The main data obtained from a breakdown by income levels

The individual data on borrowers provide information on household income[1], and are classified into (net) income deciles in accordance with the income survey on households with a salaried head of household that was conducted by the Central Bureau of Statistics in 2011.[2]

Figure 1
Number of Loans: Distribution According to Income Deciles, 2010–13

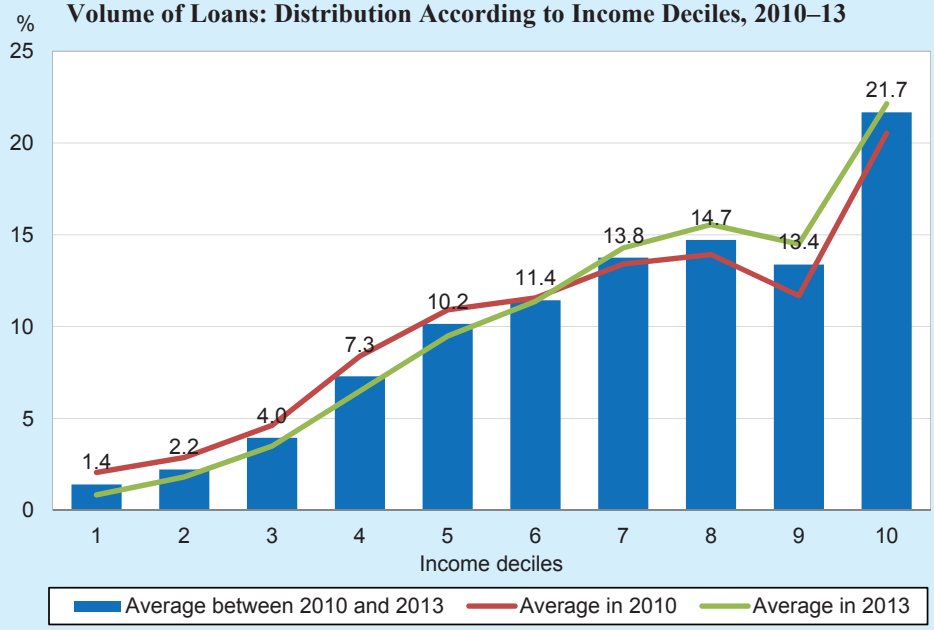


[1] Total income for the purpose of calculating the mortgage repayment ratio—includes net monthly income plus other income/expenditure for the purpose of calculating income.

[2] The Central Bureau of Statistics uses net monthly household income. The deciles according to income ranges are: the lowest decile—up to NIS 5,174; the second decile—between NIS 5,174 and NIS 6,811; … and the upper decile above NIS 25,408.

An examination of how the **number** (Figure 1) and **volume** (Figure 2) **of loans** is distributed among the income deciles shows that the three highest deciles received about 38 percent of the loans during the reviewed period, and the volume of these loans accounted for about half of housing credit. The middle (fourth through seventh) deciles received 50 percent of the loans, accounting for 43 percent of housing credit, and the three lowest deciles received 13 percent of the loans, accounting for 7.5 percent of the volume of housing credit. We can also see that this distribution was brought into sharper relief over the period between 2010 and 2013. More loans were issued to the higher deciles in 2013, both in terms of the number of loans and in terms of their volume, and the lowest deciles received a very small share of the total number of housing loans and of the volume.

Figure 2
Volume of Loans: Distribution According to Income Deciles, 2010–13



The average number of monthly salaries necessary for a household from the lowest quintile[3] to purchase the home they purchased with a mortgage—about 130—is twice as high as the number of monthly salaries necessary for a household from the highest quintile—about 65 (see Figure 3). Figure 4 also shows that during the reviewed period, there was an increase in the number of monthly salaries necessary to purchase a home, particularly among the lowest deciles. The data show that the

[3] The lowest quintile includes the two lowest deciles. The second quintile includes the third and fourth deciles, and so forth.

Figure 3
Number of Monthly Salaries Necessary for a Household to Purchase a Home: Average by Income Deciles, 2010–13

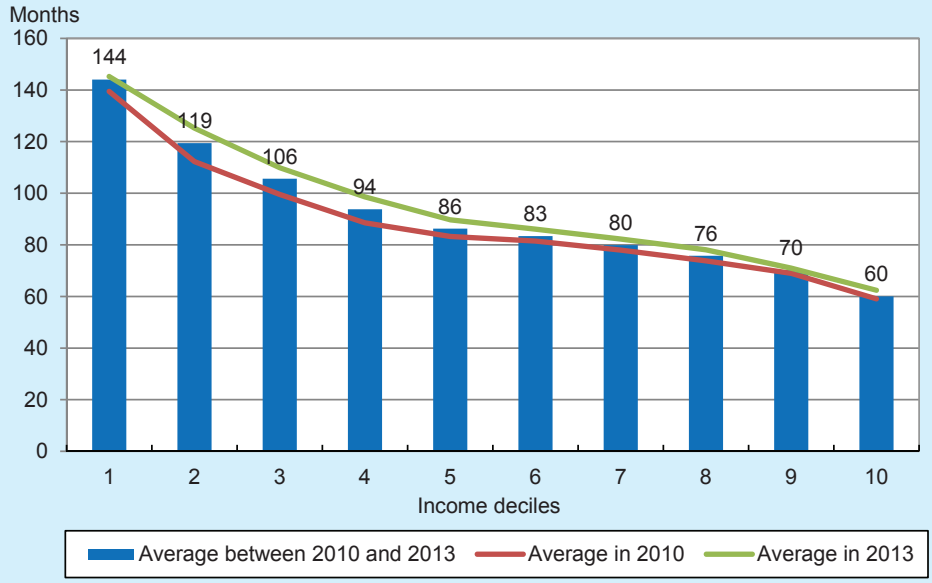
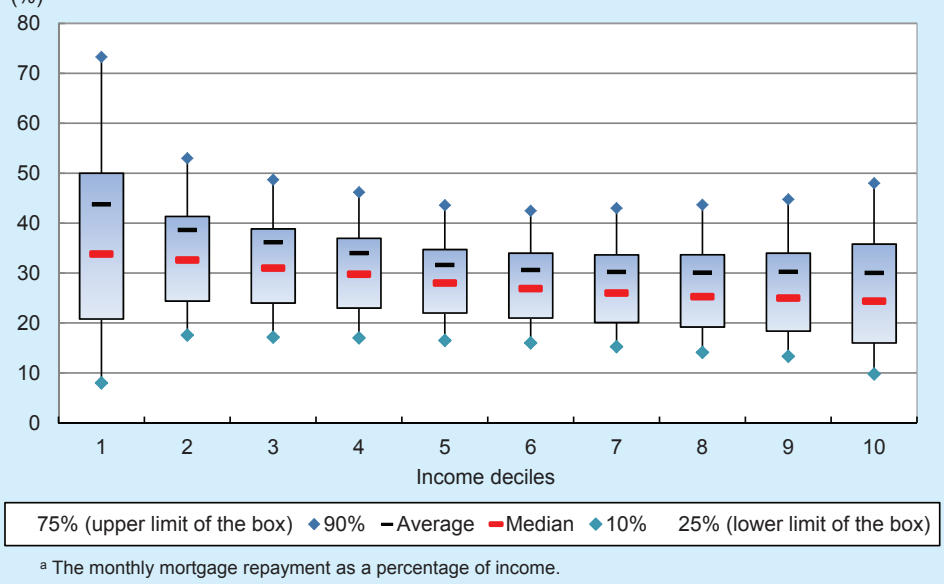


Figure 4
Payment-to-Income (PTI)[a]: Distribution Within Each Income Decile, 2010–13



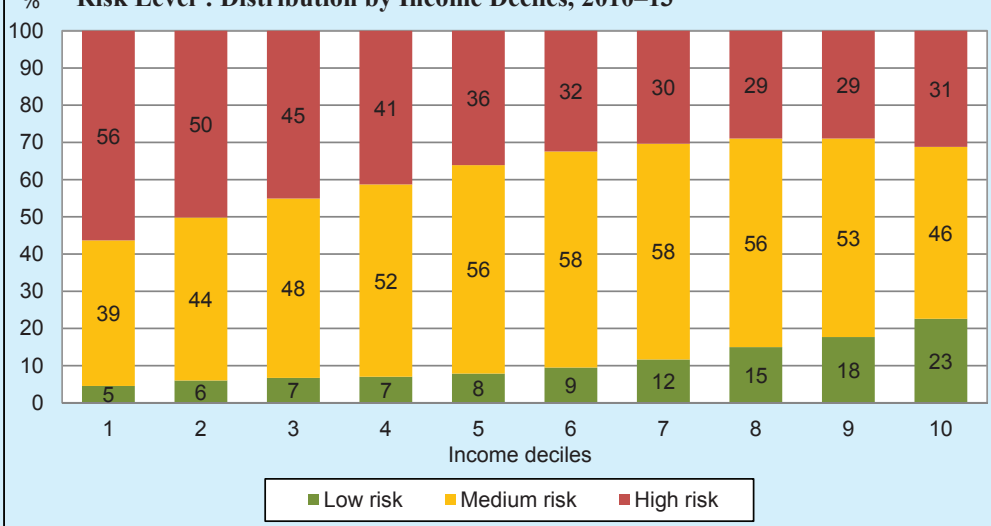
[a] The monthly mortgage repayment as a percentage of income.

debt burden increases with a decline in income (Figure 4). In the highest quintile **the PTI ratio** was an average of about 30 percent during the period, while in the lowest quintile, the rate was close to 40 percent. In terms of the **risk level** of the loans (Figure 5), the percentage of high risk borrowers declines with an increase in income decile, and the percentage of low-risk borrowers increases.

The lowest deciles are therefore characterized by a high payment to income ratio, and the number of monthly salaries necessary to buy a home is much higher than the number of monthly salaries necessary for the highest deciles. The burden that they take upon themselves is therefore higher than the burden taken on by the highest deciles, and the same is true for their risk level.

An examination of how **the prices of homes** financed by a mortgage are distributed by income deciles (Figure 6) shows that there is a positive correlation between home price and the borrower's income level, and that the variance increases with the income level. A similar picture is obtained when examining how the **loan level** is distributed within each decile (Figure 7). Since the **LTV ratio** of the loans is equal to the ratio between the approved framework of the loan and the value of the asset, it is distributed equally in all income deciles (although there is larger variance in the lowest decile; see Figure 8).[4] Furthermore, the average LTV ratio in the entire sample declined over the period from 54 percent to 52 percent.

Figure 5
Risk Level[a]: Distribution by Income Deciles, 2010–13



[a] Low risk: PTI ≤ 20% and LTV ≤ 60%.
Medium risk: (20%<PTI≤40% and LTV<60%) or (PTI≤30% and 60%<LTV≤75%) or (PTI≤10% and LTV>75%).
High risk: (PTI>40%) or (30%<PTI≤40% and LTV>60%) or (10%<PTI≤30% and LTV>75%).
PTI (Payment to Income) - The monthly mortgage repayment as a percentage of income.
LTV (Loan to Value) – The ratio between the approved loan and the value of the property.

[4] The LTV ratio provides an indication of the level of leverage of those taking out mortgages.

Figure 6
The Prices of Purchased Homes: Distribution Within Each Income Decile, 2010–13

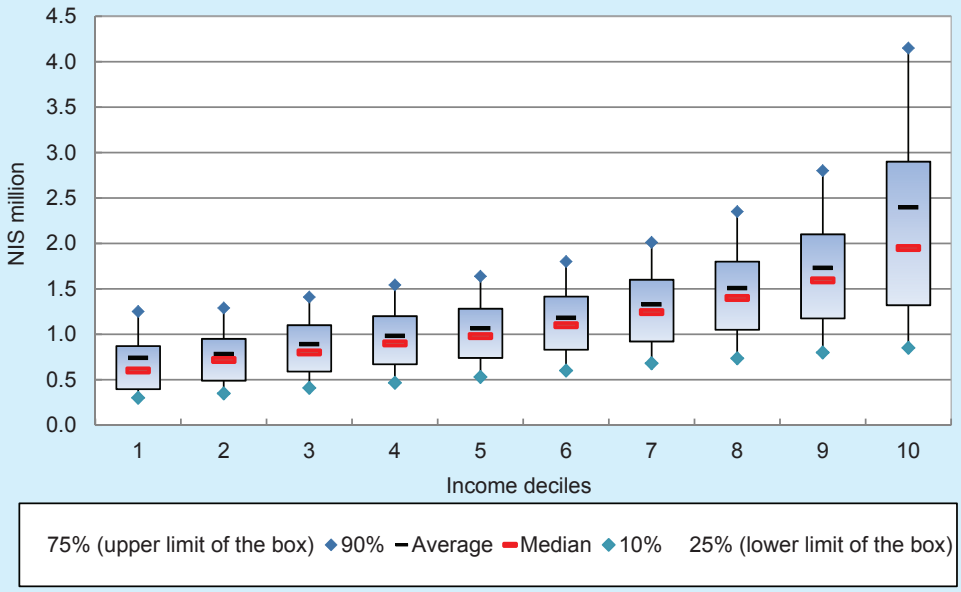
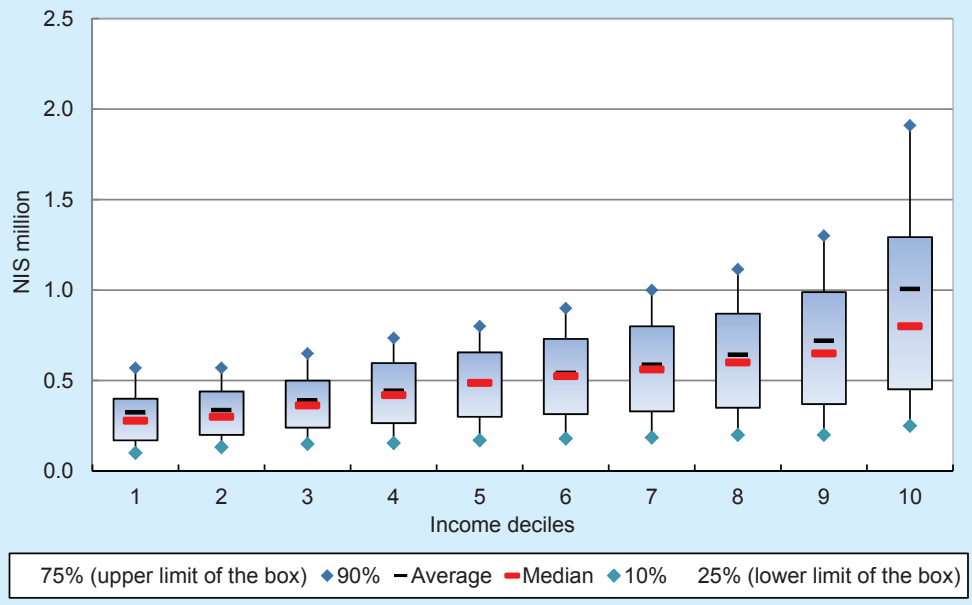


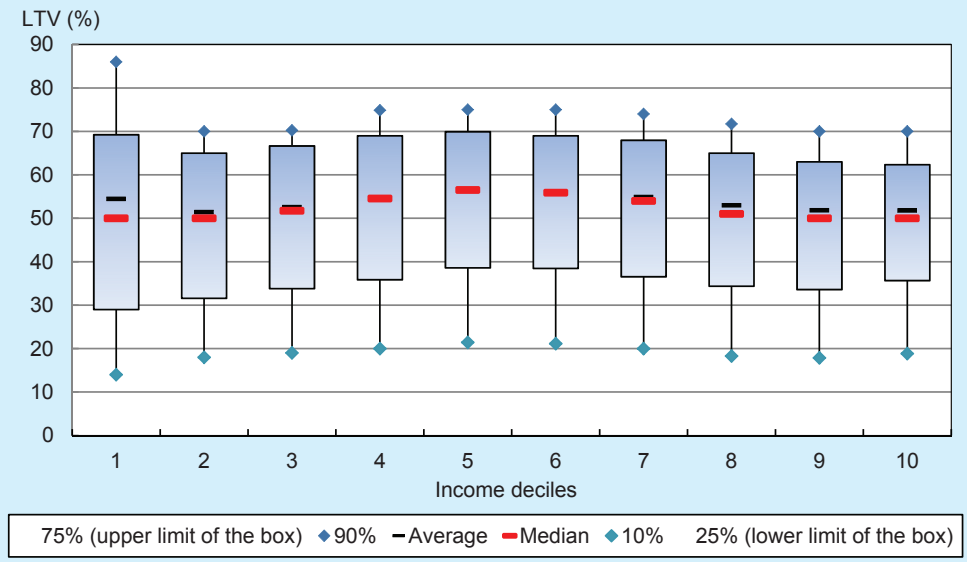
Figure 7
Loan Amount: Distribution Within Each Income Decile, 2010–13



The main data obtained from a breakdown by geographic regions

The individual data on borrowers provides information on the location of the asset.[5] We classified them by region according to the Central Bureau of Statistics definition of regions.[6]

Figure 8
Loan-to-Value (LTV)[a]: Distribution Within Each Income Decile, 2010–13



[a] Loan to Value – The ratio between the approved loan and the value of the property.

An analysis by region shows that the highest **home prices** were registered in Tel Aviv, and in the surveyed period, they averaged NIS 2.23 million per home (Figure 9). Relatively high prices were also estimated in the Center, Sharon, Gush Dan and Jerusalem regions. The **payment to income** ratio is distributed similarly by region (Figure 10). The highest figure was recorded in the Tel Aviv region (36 percent), followed by the Center, Sharon, Gush Dan and Jerusalem regions, which ranged from 31 percent to 33 percent). The highest **LTV ratio** was recorded in the South, Krayot, North and Haifa regions, with the average ranging from 58 percent to 59 percent (Figure 11). In the rest of the regions, the average LTV ratio was slightly lower, ranging from 53 percent and 54 percent.

5 As opposed to the location in which the mortgage was taken out.

6 In order to examine the housing field, the Central Bureau of Statistics defines nine regions: South, North, Haifa, Krayot, Jerusalem, Tel Aviv, Gush Dan, Sharon and Center. In order to examine the fields of income, unemployment and so forth, the Central Bureau of Statistics uses a slightly different definition of regions.

Figure 9
Home Prices: Distribution by Region, 2010–13

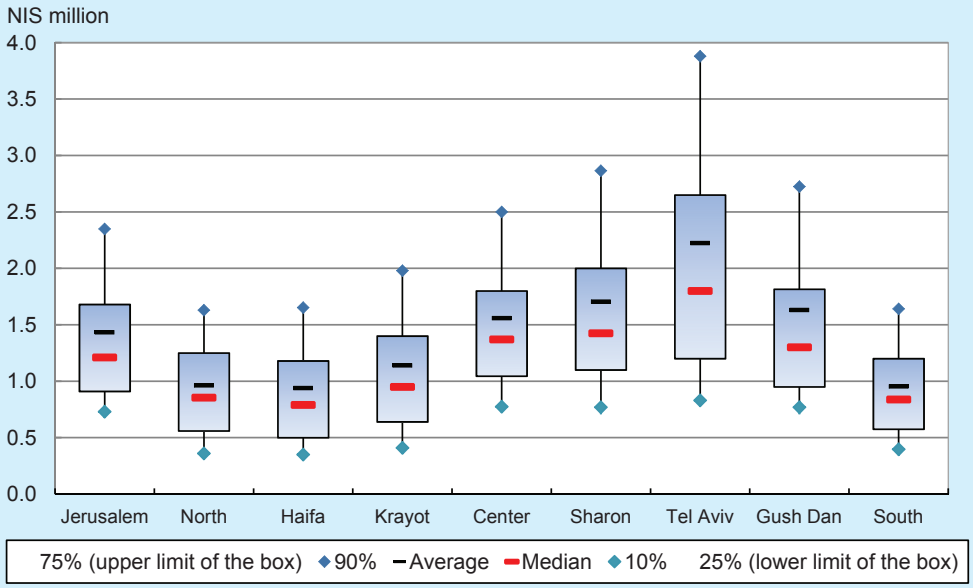
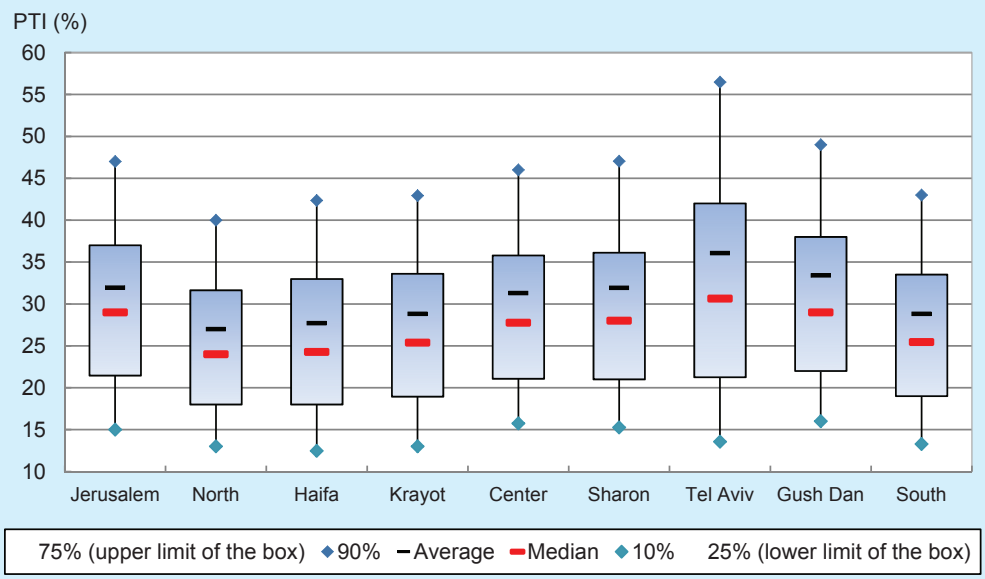
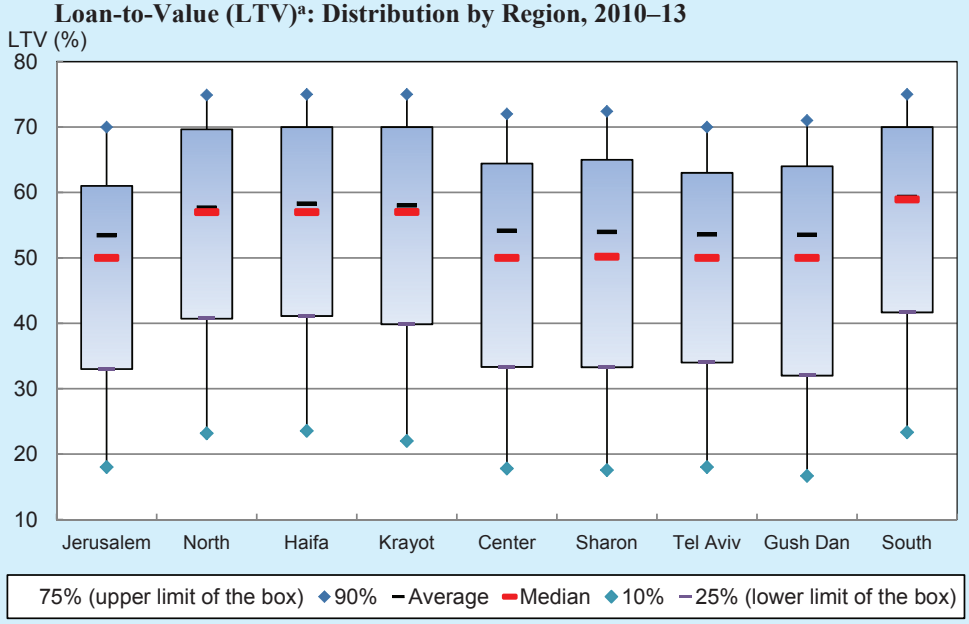


Figure 10
Payment-to-Income (PTI)[a]: Distribution by Region, 2010–13



[a] PTI (Payment to Income) - The monthly mortgage repayment as a percentage of income.

Figure 11
Loan-to-Value (LTV)[a]: Distribution by Region, 2010–13



[a] Loan to Value - The financing rate. The ratio between the approved loan and the value of the property.

Consumer credit (nonhousing credit to private individuals) increased by 9 percent in 2014—higher than the increase of housing credit—to NIS 133 billion (Table 1.7; Figure 1.11). In recent years, there has been a marked trend of expansion of such credit. Between 2007 and 2014, consumer credit has increased at an average annual rate of 7 percent, and its share of the bank credit portfolio has increased from 13 percent to 15 percent (Figure 1.13).

About 8 percent of consumer credit—about NIS 11 billion—comes from credit issued by the credit card companies. This is made up of debts in respect of credit cards due to the performance of a transaction, and loans offered to all households that do not necessarily require them to possess a credit card. This credit expanded by 18 percent in 2014.

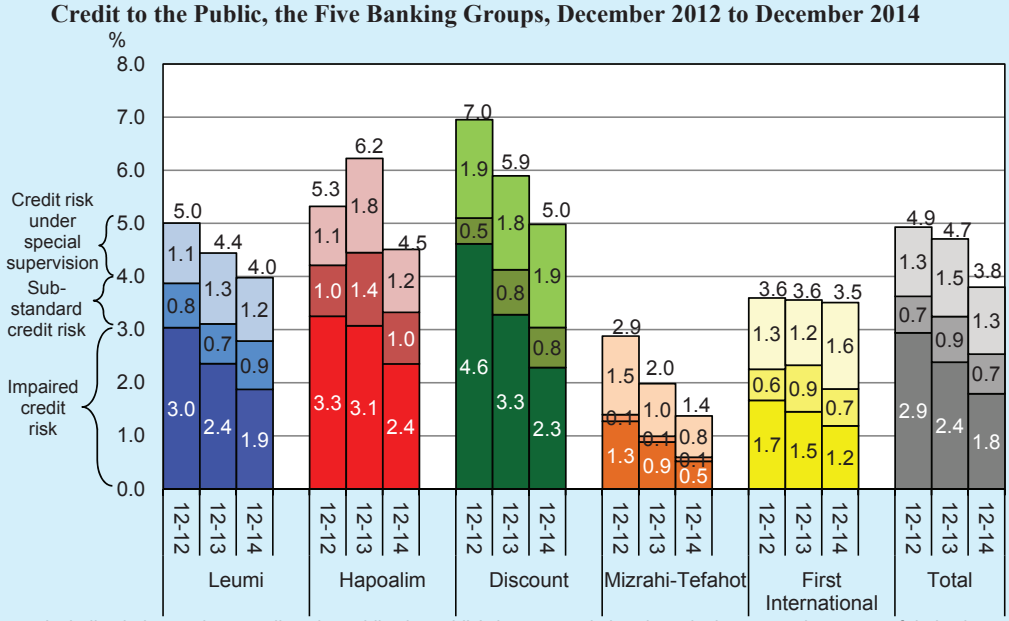
Since the volume of consumer credit expanded rapidly over the past few years, it became necessary to ascertain that the loan loss allowances in respect of it are sufficiently conservative. Accordingly, the Supervisor of Banks published a directive in January 2015 setting out that as of the published financial statements for 2014, the rate of qualitative adjustments included in the group loan loss allowance in respect of consumer credit shall be no less than 0.75 percent. The implementation of the directive led to an increase of about half a billion shekels in the group allowance of the five banking groups in the last quarter of 2014, and the outstanding loan loss allowance out of total consumer credit increased to 1.75 percent after declining to 1.30 percent in September 2014 (Table 1.8).

b. The quality of the banks' credit portfolio

The indices calculated from the financial statements continued to point to an improvement of the quality of the banks' credit portfolio in 2014.

Problematic balance-sheet credit contracted by about NIS 6 billion, and its rate out of total balance-sheet credit to the public declined by 0.8 percentage points to 3.8 percent (Table 1.10). Most of the contraction took place in problematic business sector credit, and derived mainly from the repayment of credit through the issuance of shares and bonds and through the realization of assets, among other things. The contraction of problematic credit encompassed all of its components: impaired credit, substandard credit, and credit under special supervision credit (Figure 1.21). In particular, the proportions of impaired credit and nonimpaired credit 90 days or more past due, components that represent the riskiest portion of problematic credit[31], contracted, and their total proportion of balance-sheet credit declined to 2.2 percent—lower than the median level in OECD countries (Table 1.10; Figure 1.22). The sharp decline in these components led to continued improvement in the ratio of loan loss allowance to impaired credit and nonimpaired credit 90 days or more past due, and in the ratio of impaired credit and nonimpaired credit 90 days or more past due, net, to total equity (Table 1.10). The improvement in these ratios indicates an increase in the banking system's ability to absorb losses through allowance buffers and capital buffers.

Figure 1.21
Outstanding Problematic Balance-Sheet Credit Risk[a] Out of Total Balance-Sheet Credit to the Public, the Five Banking Groups, December 2012 to December 2014

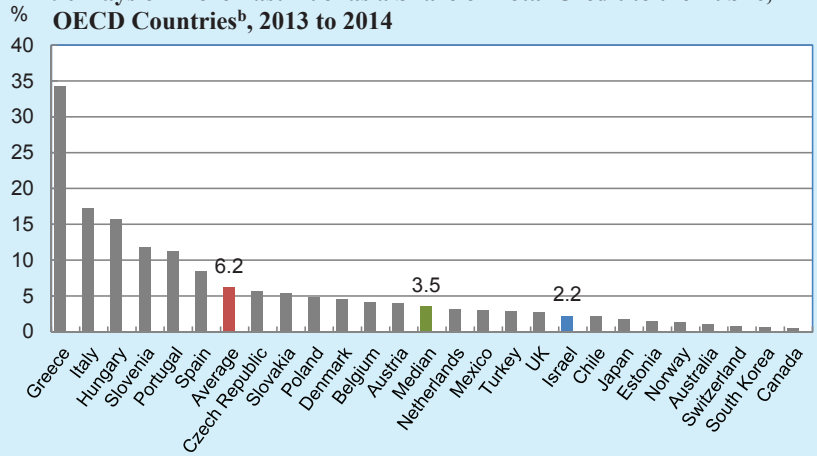


[a] Including balance-sheet credit to the public, the public's investment in bonds and other assets in respect of derivative instruments.

SOURCE: Based on published financial statements.

[31] This credit is commonly referred to as Non-Performing Loans (NPL).

Figure 1.22
International Comparison of Impaired Credit and Unimpaired Credit in 90 Days or More Past Due[a] as a Share of Total Credit to the Public, OECD Countries[b], 2013 to 2014



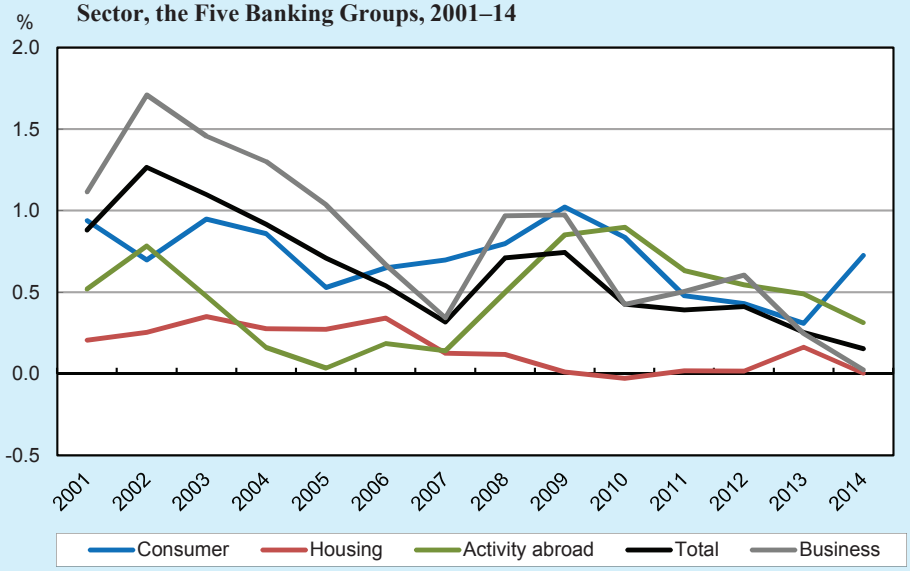
[a] Such credit is commonly referred to as NPL (Nonperforming Loans).
[b] The US, Sweden, Luxembourg, Ireland, Germany, France and Finland are excluded due to a lack of data. Data for Switzerland are as of December 2013. Data for Belgium, the Czech Republic, Italy, South Korea, Norway, Portugal and the UK are as of June 2014. Data for Austria, Canada, Chile, Denmark, Estonia, Greece, Japan, Poland, Slovakia and Turkey are as of September 2014. Data for Australia, Hungary, Mexico, Netherlands, Slovenia, Spain and Israel are as of December 2014.

SOURCE: Foreign countries—International Monetary Fund; Israel—based on published financial statements.

Loan loss provisions as a share of total balance-sheet credit to the public continued to decline in 2014, reaching 0.15 percent—an historically low level (Table 1.10). The low amount of loan loss provisions this year was mainly the result of the collection of debts that had been written off in the past, and of a reduction in the individual loan loss allowances recorded in previous years. There was a particularly large decline in the rate of loan loss provisions out of total business sector credit, which reached near-zero levels (Figure 1.23). In contrast, there was a large increase in consumer loan loss provisions as a result of the Supervisor of Banks' directive on group allowances for individuals. As a result, the rate of loan loss allowances out of total consumer credit increased by 0.4 percentage points, to 0.7 percent (Figure 1.23).

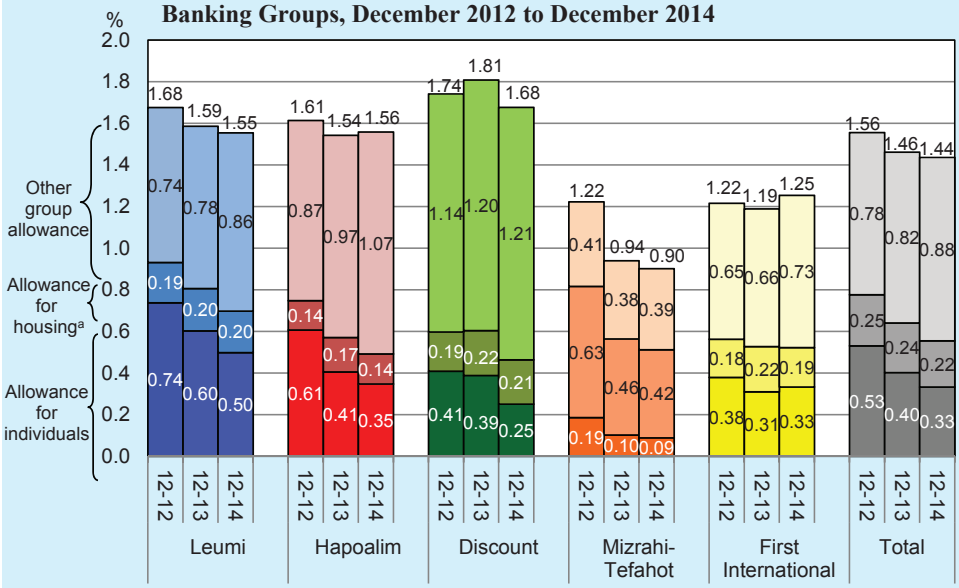
The rate of loan loss allowances out of total balance-sheet credit to the public declined by 0.02 percentage points in 2014, to 1.44 percent (Table 1.10; Figure 1.24). From December 2010 to December 2014, this rate declined by about half a percentage point. The decline in 2014 was mostly the result of the contraction of the allowance calculated on an individual basis. With that, the total loan loss allowance expanded by 3 percent, against the background of the Supervisor of Banks' directive on group allowances for individuals, and the rate of group-based loan loss allowance out of total balance-sheet credit to the public increased from 0.82 percent to 0.88 percent.

Figure 1.23
Ratio of Loan Loss Provisions to Total Balance Sheet Credit by Principal Sector, the Five Banking Groups, 2001–14



SOURCE: Based on published financial statements.

Figure 1.24
Allowance for Credit Losses to Total Credit to the Public, the Five Banking Groups, December 2012 to December 2014



[a] Including the allowance for housing calculated according to the depth of arrears.
SOURCE: Based on published financial statements.

Table 1.10
Indices of credit portfolio quality of the five banking groups, 2009 to 2014
(percent)

	Year	Leumi	Hapoalim	Discount	Mizrahi Tefahot	First International	Five groups
Loan loss provision to total balance-sheet credit to the public[a]	2009	0.74	0.93	0.87	0.39	0.44	0.75
	2010	0.26	0.46	0.69	0.44	0.18	0.41
	2011	0.30	0.48	0.65	0.28	0.14	0.39
	2012	0.50	0.39	0.61	0.21	0.20	0.41
	2013	0.11	0.34	0.49	0.21	0.14	0.25
	2014	0.18	0.16	0.13	0.12	0.13	0.15
Net write-offs to total gross balance-sheet credit to the public	2011	0.84	0.84	0.72	0.44	0.15	0.71
	2012	0.47	0.38	0.51	0.26	0.24	0.39
	2013	0.21	0.38	0.42	0.40	0.13	0.32
	2014	0.12	0.06	0.24	0.10	0.05	0.11
Allowance for credit losses to total balance-sheet credit to the public	2010[b]	2.30	2.12	1.66	1.62	1.33	1.96
	2011	1.62	1.64	1.67	1.35	1.33	1.57
	2012	1.68	1.61	1.74	1.22	1.22	1.56
	2013	1.59	1.54	1.81	0.94	1.19	1.46
	2014	1.55	1.56	1.68	0.90	1.25	1.44
Problematic loans to total balance-sheet credit to the public	2012	4.95	5.28	6.58	2.88	3.49	4.84
	2013	4.42	6.05	5.73	1.99	3.50	4.62
	2014	3.96	4.46	4.84	1.38	3.48	3.76
Impaired loans and non-impaired loans 90 days or more past due to total balance-sheet credit to the public	2010[b]	4.13	5.06	5.38	2.90	2.31	4.29
	2011	3.26	3.74	5.19	2.57	2.02	3.49
	2012	3.54	3.79	5.11	2.55	2.11	3.57
	2013	2.81	3.54	3.71	1.70	1.83	2.89
	2014	2.23	2.74	2.69	1.20	1.54	2.22
Allowance for credit losses to impaired loans and non-impaired loans more than 90 days past due	2010[b]	55.60	41.82	30.80	55.76	57.64	45.69
	2011	49.53	43.69	32.13	52.62	66.11	44.88
	2012	47.33	42.53	34.09	47.94	57.69	43.56
	2013	56.44	43.60	48.69	55.37	64.96	50.52
	2014	69.57	56.87	62.43	75.36	81.64	64.71
Impaired loans and non-impaired loans 90 days or more past due, net, to total equity	2010[b]	18.19	30.46	41.67	18.89	10.54	25.21
	2011	17.10	21.92	37.86	18.31	7.51	21.18
	2012	18.15	20.41	33.22	18.70	9.05	20.48
	2013	11.32	17.54	17.94	10.26	6.35	13.87
	2014	6.13	10.03	9.04	3.82	2.73	7.34

[a] Until December 2010, net credit to the public was used; since 2011, gross credit to the public has been used.

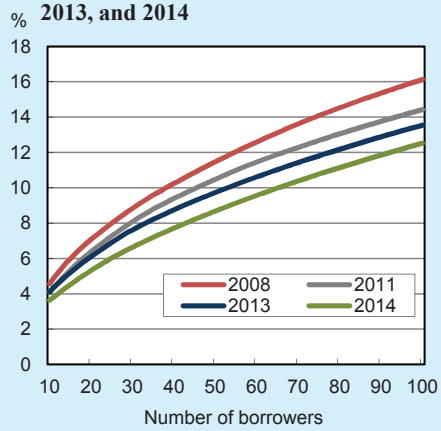
[b] Data calculated as of January 1, 2011—after the implementation of the directive for the measuring and disclosure of impaired debt, credit risk and credit loss allowance.

SOURCE: Banking Supervision Department based on published financial statements.

c. Concentration in the credit portfolio

In recent years, there has been a sharp decline in concentration of credit by borrower size, although such concentration is relatively high, in part because there is a concentrated structure of ownership and control in the Israeli economy. The decline in credit concentration by borrower size took place against the background of the limitations put in place on the indebtedness of borrowers and of groups of borrowers[32], and due to the banking system's focus on the household sector and on small business borrowers. In recent years, reforms have been put in place and measures have been adopted intended to increase competition in the economy and to limit monopolies and large corporations in some industries.[33] These reforms and measures are expected to also contribute to the continued decline in borrower concentration.

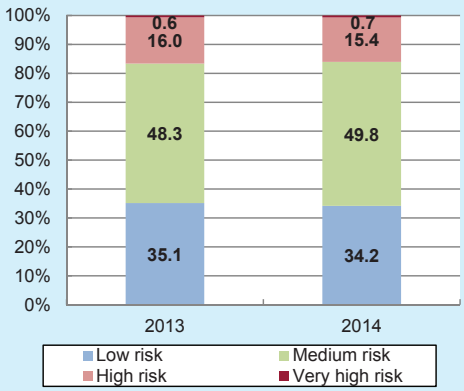
Figure 1.25
Credit Risk of the 100 Largest Borrowers[a] Out of Total Credit Risk, the Five Banking Groups, 2008, 2011, 2013, and 2014



[a] The large borrowers do not include banking corporations.
SOURCE: Based on published financial statements and reports to the Banking Supervision Department.

The decline in borrower concentration in the bank credit portfolio continued in 2014 as well, and the outstanding credit[34] of the large borrowers declined. Total exposure of the five banking groups to the 10 largest business groups contracted by about NIS 11 billion, to NIS 117 billion. The proportion of these groups in the total credit portfolio was 9 percent in December 2014, and their share of total equity was 127 percent, compared with 10 percent and 149 percent in December 2013. In addition, credit to the 100 largest borrowers as a proportion of the credit portfolio was 12.5 percent, and its share of total equity was 182 percent in December 2014, compared with 13.5 percent and 201 percent in December 2013 (Figure 1.25). There was no change in the distribution of the internal rating of credit risk to these borrowers (Figure 1.26).

Figure 1.26
Total Credit Risk of the 100 Largest Borrowers[a]: Distribution by Risk Level[b], the Five Banking Groups, 2013–14



[a] The large borrowers do not include banking corporations.
[b] In reports to the Banking Supervision Department, the banking corporations rate the credit risk of the large borrowers. Since the rating scales of the banks differ, a uniform rating scale with four risk ratings was built.
SOURCE: Based on reports to the Banking Supervision

[32] In June 2015, the Supervisor of Banks published an update to the directive on limitations on the indebtedness of a borrower and a group of borrowers. The update was published further to the Banking Supervision Department's actions to reduce concentration of the credit portfolio in the banking system and against the background of the Basel Committee's recommendations as part of the Supervisory Framework for Measuring and Controlling Large Exposures (April 2014). The main amendments to the directive were (1) The definition of capital that serves for the calculation of the limitations on the indebtedness of a borrower or a group of borrowers was reduced to Tier 1 capital; (2) The limitation on the rate of indebtedness of a banking group of borrowers from capital, which was reduced from 25 percent to 15 percent; and (c) The method for calculating the permitted deductions in Directive 313 was adjusted to the method for calculating eligible credit risk reducers that are included in Directive 203. The directive comes into force on January 1, 2016.

[33] By way of illustration, the Competition Encouragement and Concentration Reduction Law, 5774–2013, sets out limitations on the control of multi-layer business groups.

[34] Including balance-sheet and off-balance-sheet credit risk balances.

Table 1.11

Indices of concentration of the portfolio of credit to the public[a] of the five banking groups, 2008–2014

	Year	Leumi	Hapoalim	Discount	Mizrahi-Tefahot	First International	The five groups
Concentration by principal industries							
Herfindahl-Hirschman Index (H) of the concentration of the aggregate credit portfolio excluding credit to individuals[b,c]	2008	0.092	0.073	0.090	0.044	0.067	0.075
	2009	0.093	0.080	0.088	0.039	0.069	0.076
	2010	0.093	0.079	0.086	0.041	0.070	0.076
	2011	0.090	0.080	0.076	0.035	0.057	0.071
	2012	0.085	0.077	0.080	0.035	0.055	0.070
	2013	0.079	0.074	0.074	0.034	0.057	0.065
	2014	0.077	0.074	0.074	0.032	0.055	0.064
Herfindahl-Hirschman Index (H) of business credit portfolio concentration[d,e]	2008	0.190	0.170	0.168	0.185	0.172	0.172
	2009	0.199	0.171	0.173	0.189	0.177	0.176
	2010	0.205	0.175	0.173	0.197	0.177	0.181
	2011	0.205	0.174	0.171	0.188	0.167	0.181
	2012	0.207	0.172	0.165	0.210	0.170	0.183
	2013	0.203	0.169	0.170	0.227	0.175	0.183
	2014	0.208	0.169	0.174	0.233	0.176	0.184
Credit to individuals[f] as a share of total credit (percent)	2008	27.8	33.0	26.1	50.1	37.4	32.9
	2009	29.9	29.5	27.8	54.4	37.5	33.1
	2010	30.5	30.9	28.9	54.7	37.2	34.2
	2011	31.5	30.8	29.2	57.0	41.1	35.2
	2012	33.0	32.0	29.7	59.0	42.9	36.7
	2013	35.4	32.6	32.3	61.1	42.8	38.5
	2014	36.4	32.3	32.5	63.1	43.8	39.0
Credit for borrowers' activity abroad as a share of total credit portfolio (percent)	2008	19.1	13.4	21.0	3.1	4.9	14.2
	2009	18.6	13.1	23.0	3.1	4.4	14.3
	2010	17.3	11.5	21.9	2.4	3.9	13.0
	2011	15.6	11.0	26.8	1.9	3.0	13.0
	2012	15.9	10.6	25.2	2.7	2.3	12.6
	2013	15.3	10.2	22.2	2.9	1.8	11.7
	2014	15.0	11.0	23.2	2.4	1.8	11.9
Concentration by borrower size							
Gini Index[g] of credit diversification by borrower size	2008	0.908	0.909	0.904	0.810	0.837	0.896
	2009	0.905	0.903	0.912	0.808	0.854	0.897
	2010	0.907	0.913	0.908	0.813	0.855	0.902
	2011	0.901	0.924	0.911	0.811	0.846	0.904
	2012	0.896	0.920	0.908	0.806	0.847	0.902
	2013	0.880	0.916	0.908	0.807	0.846	0.896
	2014	0.876	0.920	0.907	0.799	0.843	0.896
Credit granted to borrowers whose indebtedness exceeds NIS 40 million as a share of total credit (percent)	2008	43.6	51.1	41.6	29.0	33.7	43.1
	2009	40.6	50.2	41.8	26.1	30.8	41.4
	2010	42.0	49.0	43.2	26.1	33.3	41.6
	2011	41.9	48.9	44.5	24.6	29.3	41.2
	2012	40.1	47.7	42.7	23.1	27.9	39.6
	2013	38.0	46.6	39.7	22.7	28.2	38.0
	2014	36.6	46.5	38.8	21.0	27.8	37.1
Credit granted to borrowers whose outstanding indebtedness exceeds 5% of the group's equity[h] as a share of the group's total credit (percent)	2008	8.5	10.6	8.4	9.5	12.9	
	2009	5.2	11.6	9.4	7.5	10.6	
	2010	5.4	8.1	7.8	8.2	11.3	
	2011	5.6	8.4	13.0	5.2	9.1	
	2012	5.2	7.8	10.2	4.3	7.5	
	2013	5.7	6.6	9.3	3.9	7.1	
	2014	3.6	5.9	8.3	3.0	4.6	

[a] On a balance-sheet and off-balance-sheet basis.

[b] This index is the sum of the squares of of the weights of credit in a specific industry (excluding credit granted to individuals) in total credit to the public (including credit granted to individuals). The index increases with an increase in concentration.

[c] The principal industries weighted in this index include the borrower's activity both in Israel and abroad.

[d] This index is the sum of the squares of of the weights of credit in a specific industry (excluding credit granted to individuals) in total credit to the public (excluding credit granted to private individuals).

[e] The principal industries weighted in this index include the borrower's activity in Israel only.

[f] Credit to private individuals whose principal activity is in Israel.

d. Country risk

The volume of the five banking groups' balance-sheet exposure to foreign countries totaled NIS 180 billion in December 2014, constituting 14 percent of total assets, compared to NIS 147 billion (12 percent of total assets) in December 2013. About 45 percent of the exposure to foreign countries in December 2014 derived from exposure to the US, and about one-third from exposure to European countries. Exposure to high-risk European countries[35] remained low (about NIS 1.3 billion; Table 1.12).

The increase in exposure to foreign countries took place in the second half of the year—mainly exposure to the US, which grew by NIS 19 billion in 2014. The increase is mainly the result of an increase in the foreign securities portfolio and from an increase in deposits in foreign banks, which were affected among other things by the depreciation of the shekel against the dollar.

About NIS 67 billion of the balance-sheet exposure to foreign countries in December 2014 comes from exposure to foreign financial institutions—about 89 percent of which is to foreign financial institutions with credit ratings of A- or higher (Table 1.13).

5. LIQUIDITY RISK

The Israeli banking system continued to maintain a relatively high level of liquidity during 2014. This was reflected in the value of the supervisory model ratio[36]—although it declined slightly during the year from about 1.42 in 2013 to about 1.38 (Table 1.15)—and in the stability of the medium-term (up to three months) liquidity ratios (Table 1.14). The high level of liquidity in the banking corporations is also reflected in the high rate of HQLA (high-quality liquid assets) in the stock of liquid assets, and in the high volume of stable sources—mainly retail deposits. With that, the low interest rate environment is leading individuals to seek income-generating investment channels, which is acting to reduce the rate of retail deposits in total short-term deposits (from about 65 percent in 2013 to about 58 percent in 2014) and to increase the overall share of deposits by large businesses and by institutional investors (to about 42 percent). In other words, it is acting to increase the share of deposits that are characterized by a higher extent of liquidity risk.

An examination of deposit concentration also shows this trend. The share of small deposits of up to NIS 1 million declined slightly, from 34 percent in 2013 to about 32 percent in 2014, and the volume of large deposits and the share of the 20 largest deposits increased, from about 12 percent in December 2011 to about 18 percent (Table 1.15). The credit to deposit ratio declined slightly in 2014, indicating a slight improvement in the extent of liquidity of the banking system (Table 1.14; further information appears in the chapter dealing with activity).

With the aim of examining the resilience of the banking corporations and the banking system to a possible liquidity crisis, the Banking Supervision Department estimated the effect of a possible stress scenario—the immediate redemption of 10 percent of the public's short-term deposits of up to one month[37]—on the supervisory model ratio. The results of the estimate indicate that each of the banks is resilient to shocks,

[35] Portugal, Ireland, Italy, Greece and Spain.

[36] The supervisory model ratio—the ratio of liquid assets to short-term (up to one month) liabilities—was developed by the Banking Supervision Department to examine trends in banking corporations' liquidity levels. A value of 1 is the minimum that assures compliance with liquidity needs. It also allows latitudinal comparison to take place.

[37] No distinction was made in the stress scenario between the types or sizes of deposits.

Table 1.12
Exposure to foreign countries, the five banking groups, December 2014

(NIS million)

	Balance sheet exposure abroad			Net balance sheet exposure of overseas offices[b] of the banking corporation to local residents[c]	Total balance sheet exposure	Total balance sheet exposure to equity (%)	Total balance sheet exposure to assets (%)	Total off balance-sheet exposure[d]
	To governments[a]	To banks	To others					
US	7,463	15,683	17,752	39,550	80,448	87.1	6.1	26,537
UK	357	13,251	9,565	6,277	29,450	31.9	2.2	6,909
Germany	285	3,414	3,419	-	7,118	7.7	0.5	350
France	62	4,562	2,952	-	7,216	7.8	0.5	2,543
Switzerland	-	2,091	1,666	7,513	11,270	12.2	0.8	751
Belgium	236	782	136	-	1,154	1.2	0.1	74
Turkey	1	11	17	1,186	1,215	1.3	0.1	1,263
Netherlands	-	78	865	-	943	1.0	0.1	206
Italy	86	227	104	-	417	0.5	0.0	128
Spain	43	204	19	-	266	0.3	0.0	56
Portugal	-	-	1	-	1	0.0	0.0	2
Ireland	-	7	214	-	221	0.2	0.0	241
Greece	-	-	-	-	0	0.0	0.0	1
Other countries	2,304	18,494	18,299	1,682	40,779	44.1	3.1	7,459
Total exposure to foreign countries	**10,837**	**58,804**	**54,649**	**56,208**	**180,498**	**195.4**	**13.6**	**46,520**
Of which: Total exposure to LDCs[e]	548	2,937	3,930	2,121	9,536	10.3	0.7	3,056
Exposures to Portugal, Ireland, Greece, Italy, and Spain, which were not included above.	-	13	356	-	369	0.4	0.0	43
Total exposure to Europe	**1,069**	**24,616**	**18,581**	**13,790**	**58,056**	**63**	**4**	**11,261**
***Of which:* Total exposure to Portugal, Ireland, Greece, Italy, and Spain**	**129**	**451**	**694**	**0**	**1,274**	**1**	**0**	**471**

[a] Governments, official bodies, and central banks.

[b] The banking corporation's offices in a foreign country.

[c] Net balance sheet exposure after deduction of local liabilities.

[d] Credit risk in off balance-sheet financial instruments, as calculated for the borrower indebtedness limit.

[e] Less developed countries - the countries classified by the World Bank as having low or medium revenue.

SOURCE: Banking Supervision Department based on published financial statements.

Table 1.13

Current credit exposure to foreign financial institutions[a,b], the five banking groups, December 2014

(NIS million)

	Leumi		Hapoalim		Discount		Mizrahi-Tefahot		First International		Five groups, total	
Credit rating[c]	Total credit risk	Of which: Balance sheet credit risk	Total credit risk	Of which: Balance sheet credit risk	Total credit risk	Of which: Balance sheet credit risk	Total credit risk	Of which: Balance sheet credit risk	Total credit risk	Of which: Balance sheet credit risk	Total credit risk	Of which: Balance sheet credit risk
AAA to AA-	24,955	23,360	5,267	3,753	2,951	2,433	572	572	1,285	1,282	35,030	31,400
A+ to A-	2,168	2,167	16,690	15,675	5,693	5,511	2,304	2,302	3,139	3,110	29,994	28,765
BBB+ to BBB-	2,040	1,890	3,135	2,919	1,338	1,316	0	0	179	160	6,692	6,285
BB+ to B-	85	83	203	145	195	193	0	0	40	40	523	461
Below B-	1	0	1	1	0	0	11.00	0	0	0	13	1
Unrated	250	248	197	155	234	126	0	0	23	17	704	546
Total credit exposure to foreign financial institutions	**29,499**	**27,748**	**25,493**	**22,648**	**10,411**	**9,579**	**2,887**	**2,874**	**4,666**	**4,609**	**72,956**	**67,458**
Balance of problematic debts	0	0	0	0	122	122	0	0	0	0	122	122
Exposure as a share of assets (%)		0.07		0.06		0.05		0.01		0.04		0.05
Exposure as a share of equity (%)	1.04	0.98	0.81	0.72	0.76	0.70	0.25	0.25	0.65	0.64	0.79	0.73

[a] Foreign financial institutions are: investment banks, broker/dealers, insurance companies, institutions and entities controlled by those institutions. Credit exposure does not include exposure to financial institutions which have clear and full government guarantees, and does not include investments in asset backed securities.

[b] Balance sheet credit: deposits in banks, credit to the public, fixed income investments, securities borrowed or bought in reverse repurchase agreements, and other assets in respect of instruments. Off balance-sheet credit: primarily guarantees and commitments to grant credit, including third-party indebtedness guarantees.

[c] External credit rating is based on ratings assigned by the Fitch, S&P, and Moody's credit rating agencies.

SOURCE: Banking Supervision Department based on published financial statements.

Table 1.14
Selected liquidity indices, the five banking groups, 2007–14

	Year	Leumi	Hapoalim	Discount	Mizrahi-Tefahot	First International	The five groups
Ratio of liquid assets[a] to short-term liabilities[b]	2007	0.31	0.24	0.35	0.24	0.33	0.29
	2008	0.31	0.23	0.32	0.18	0.33	0.27
	2009	0.39	0.37	0.41	0.24	0.42	0.38
	2010	0.33	0.38	0.32	0.20	0.33	0.32
	2011	0.38	0.38	0.39	0.27	0.37	0.37
	2012	0.39	0.42	0.40	0.27	0.36	0.39
	2013	0.36	0.39	0.38	0.29	0.39	0.38
	2014	0.33	0.36	0.36	0.33	0.40	0.35
Ratio of liquid assets[a] to total assets	2007	0.17	0.15	0.20	0.13	0.23	0.17
	2008	0.17	0.15	0.17	0.10	0.23	0.16
	2009	0.23	0.23	0.24	0.13	0.29	0.23
	2010	0.19	0.23	0.21	0.12	0.24	0.20
	2011	0.22	0.23	0.25	0.15	0.26	0.23
	2012	0.24	0.26	0.25	0.14	0.27	0.24
	2013	0.23	0.25	0.25	0.18	0.29	0.24
	2014	0.21	0.23	0.24	0.20	0.31	0.23
Ratio of credit to the public to deposits of the public	2007	0.83	0.88	0.78	0.99	0.73	0.85
	2008	0.87	0.98	0.84	0.97	0.77	0.90
	2009	0.82	0.93	0.81	1.00	0.73	0.86
	2010	0.90	0.96	0.86	1.01	0.79	0.91
	2011	0.86	0.96	0.76	1.00	0.80	0.89
	2012	0.83	0.92	0.77	1.00	0.80	0.87
	2013	0.84	0.91	0.78	0.98	0.77	0.87
	2014	0.83	0.89	0.79	0.97	0.72	0.85

[a] Liquid assets include government bonds, as well as cash and deposits at the Bank of Israel and at banks with an original term to maturity of up to 3 months.

[b] Short-term liabilities include total deposits with an original term to maturity of up to 3 months.

SOURCE: Banking Supervision Department based on published financial statements.

Table 1.15
The supervisory model ratio[a], stress scenario, and selected liquidity concentration indices[b], the five banking groups, 2011 to 2014

	2011	2012	2013	2014
Supervisory model ratio	**1.58**	**1.61**	**1.42**	**1.38**
Minimum value of the supervisory ratio	1.41	1.38	1.04	1.12
Maximum value of the supervisory ratio	1.74	1.79	2.00	1.99
Supervisory model ratio after stress scenario of an immediate redemption of 10% of total public short-term deposits	**1.25**	**1.27**	**1.12**	**1.17**
Minimum value of the supervisory ratio	1.41	1.38	0.94	1.12
Maximum value of the supervisory ratio	1.74	1.79	1.86	1.99
Concentration and stability of deposits				
Deposits up to NIS 1 million as a share of total deposits	0.35	0.35	0.34	0.32
Deposits above NIS 50 million as a share of total deposits	0.27	0.27	0.31	0.33
The 20 largest deposits up to one month as a share of total deposits up to one month	0.12	0.14	0.17	0.18

[a] The supervisory model ratio was developed at the Banking Supervision Department, and is calculated as the ratio between liquid assets and liquid liabilities for a period of up to one month. This ratio serves to assess trends in the banking corporations' level of liquidity. A value of 1 is the minimum required to ensure meeting liquidity needs. The ratio also enables horizontal comparisons.

[b] The indices relate to activity in both Israeli and foreign currency (indexed and denominated).

SOURCE: Based on reports to the Banking Supervision Department.

which is also true of the system as a whole (the value of the supervisory model ratio is higher than 1; Table 1.15).

In September 2014, the Supervisor of Banks published a new Proper Conduct of Banking Business directive (221) on the liquidity coverage ratio (LCR).[38] The directive came into force in April 2015, and is a further significant step toward the overall implementation of the Basel III framework. The directive adopts the recommendations of the Basel III committee regarding this ratio, and its formulation completed the work of the professional team set up by the Banking Supervision Department for that purpose, following an analysis the quantitative impact study (QIS) submitted to the Department in April of 2014. The results of the study showed that the Israeli banking system already met the minimum requirements of the ratio set out in the directive and that its aggregate value resembled the weighted average among European Union countries.

[38] The LCR, developed by the Basel Committee to enhance the short-term resilience of banking corporations' liquidity profiles, indicates the quantity of HQLA (High-Quality Liquid Assets) that corporations should 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 outflows, 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.

6. MARKET RISKS

a. Interest rate risks

Total exposure to interest rate risk in most of the banking groups declined slightly in 2014 compared to the previous year, but its level remained higher than in recent years. Most of the groups were exposed to interest rate increases in all segments in 2014, similar to the previous year. The potential loss in the five groups as a result of an increase of one percentage point in the interest rate ranged from 0.1 percent to 8.6 percent of the fair value of the bank's capital[39], while in 2013 it ranged between 1.2 percent and 17.6 percent[40] (Table 1.16). The extent of exposure to interest risk varies widely among the groups and over time. Even though interest risk exposures are typically smaller than those related to credit risk, the eventuation of an interest risk due to changes in interest rates is liable to result in immediate losses. It should be noted that this analysis relates to the risk derived from a parallel change in the yield curve, and does not take into account the risk of a change in the slope of the curve or the effect of convexity that is typical of the ratio between the interest rate and the present value.

In the unindexed segment, most activity is based on floating rate interest that is indexed to the prime rate and relatively short maturities of assets and liabilities. Consequently, assets and liabilities in this segment are less sensitive to changes in interest rates than their counterparts in the CPI-indexed segment. Net positions in the unindexed segment continued their upward trend in most banking groups in 2014[41], and in many of the groups the duration of capital increased as well. Both parameters had an upward effect on the potential loss that would be sustained by most banking groups in the event of an interest rate change. The potential loss in the unindexed segment occasioned by an increase of 1 percentage point in interest rates ranged from 0.1 percent to 4.4 percent of the fair value of the bank's capital, and in most groups, this segment made the largest contribution to total loss of fair value of the bank's capital.

In the CPI-indexed segment, assets and liabilities are more sensitive to interest rate changes than in other indexation segments, since here most assets and liabilities carry fixed interest and have medium to long terms of maturity. Net positions in the indexed segment showed a mixed trend in 2014: exposure in some of the banking groups increased, while in others it decreased. Most of the banking groups were exposed to an increase in the interest rate, and the potential effect of an increase of one percentage point in the interest rate ranged from a profit of 0.7 percent to a loss of 2.0 percent of the fair value of the bank's capital.

In the foreign currency segment, most banking groups have been maintaining small net positions in recent years as a matter of policy. All of the banking groups were exposed to the risk inherent in an increase in the interest rate[42] in 2014, and the potential loss due to an increase of one percentage point in the interest rate ranged from 0.0 percent to 5.9 percent of the fair value of the bank's capital. Notably, while there is a strong positive correlation among interest rates in the domestic currency segments, the correlation between

[39] The fair value of a bank's capital is equal to the difference between the fair value of assets and the fair value of liabilities in all indexation segments, plus the effect of futures transactions.

[40] The calculation is based on banking groups' board of directors' reports, which show how hypothetical changes in the interest rate affect net fair value of the financial instruments of the bank and its consolidated firms.

[41] The net position in an indexation segment is equal to the difference between the fair value of assets and the fair value of liabilities in the segment, plus the effect of futures transactions.

[42] The exposure in the foreign currency segment is to interest rates in foreign markets.

Table 1.16
Exposure to changes in interest rates, the five banking groups, December 2013 and December 2014
(NIS million)

	Leumi		Hapoalim		Discount		Mizrahi-Tefahot		First International		The five groups	
	2013	2014	2013	2014	2013	2014	2013	2014	2013	2014	2013	2014
Unindexed segment												
Net position in segment[a]	18,509	21,555	15,749	20,454	3,749	2,405	1,429	1,378	3,973	4,276	43,409	50,068
The change in the fair value of the net position in the segment as a result of an interest rate change[b]												
1 percentage point increase	-722	-871	52	-21	-358	-132	-85	-289	-156	-223	-1,269	-1,536
1 percentage point decrease	794	961	-63	20	362	289	77	189	177	255	1,347	1,714
The change in the fair value of the net position in the segment as a percentage of the fair value of the bank's total equity												
Interest rate increase	-3.5	-4.0	0.2	-0.1	-6.0	-1.6	-1.1	-3.7	-3.3	-4.4	-2.1	-2.3
Interest rate decrease	3.9	4.4	-0.3	0.1	6.1	3.5	1.0	2.4	3.8	5.0	2.2	2.5
CPI-indexed segment												
Net position in segment[a]	3,789	2,758	6,944	4,099	123	3,090	6,447	7,057	819	866	18,122	17,870
The change in the fair value of the net position in the segment as a result of an interest rate change[b]												
1 percentage point increase	-81	-123	-139	13	-93	-86	-279	52	-71	-104	-663	-248
1 percentage point decrease	30	153	145	20	106	87	104	-88	80	130	465	302
The change in the fair value of the net position in the segment as a percentage of the fair value of the bank's total equity												
Interest rate increase	-0.4	-0.6	-0.6	0.1	-1.6	-1.0	-3.7	0.7	-1.5	-2.0	-1.1	-0.4
Interest rate decrease	0.1	0.7	0.7	0.1	1.8	1.0	1.4	-1.1	1.7	2.5	0.8	0.4
Foreign currency segment[c]												
Net position in segment[a]	-1,845	-2,538	-409	-137	2,057	2,797	-239	547	-104	-28	-540	-453
The change in the fair value of the net position in the segment as a result of an interest rate change[b]												
1 percentage point increase	-197	-216	-173	-21	-592	-493	1	-2	-29	-37	-990	-769
1 percentage point decrease	262	168	262	-24	460	249	8	11	41	47	1,033	451
The change in the fair value of the net position in the segment as a percentage of the fair value of the bank's total equity												
Interest rate increase	-1.0	-1.0	-0.8	-0.1	-10.0	-5.9	0.0	0.0	-0.6	-0.7	-1.6	-1.1
Interest rate decrease	1.3	0.8	1.2	-0.1	7.8	3.0	0.1	0.1	0.9	0.9	1.7	0.7
Total												
Total fair value of bank's total equity[d]	20,453	21,775	22,284	24,416	5,929	8,292	7,637	7,888	4,688	5,114	60,991	67,485
The change in the fair value of the bank's total equity as a result of an interest rate change[b]												
1 percentage point increase	-1,000	-1,210	-260	-29	-1,043	-711	-363	-239	-256	-364	-2,922	-2,553
1 percentage point decrease	1,086	1,282	344	16	928	625	189	112	298	432	2,845	2,467
The change in the fair value of the bank's total equity as a percentage of the fair value of the bank's total equity												
Interest rate increase	-4.9	-5.6	-1.2	-0.1	-17.6	-8.6	-4.8	-3.0	-5.5	-7.1	-4.8	-3.8
Interest rate decrease	5.3	5.9	1.5	0.1	15.7	7.5	2.5	1.4	6.4	8.4	4.7	3.7

[a] The difference between the fair value of assets and the fair value of liabilities, including the effect of futures transactions in each indexing segment.
[b] Based on published financial statements - directors report: "The effect of potential changes in interest rates on the net fair value of financial instruments".
[c] Including the foreign-currency-indexed segment.
[d] The total of net positions in the three indexing segments.

SOURCE: Banking Supervision Department based on published financial statements.

domestic currency interest rates and interest rates in markets abroad is weaker. Therefore, the potential losses in this activity segment are not always aligned in intensity or direction with those in the domestic currency segments.

b. Indexation base risks

The banking system's total exposure to indexation base risk increased slightly in 2014, largely because several banks increased their foreign currency positions. The potential loss brought on by maximum changes in the exchange rate and inflation[43] was NIS 605 million, 0.9 percent of the five groups' total capital (Table 1.17). The extent of exposure varies widely among the groups, with potential loss ranging from 0.2 percent to 2.7 percent of the bank's capital.

In the CPI-indexed segment, most of the large groups had asset surpluses in 2014, similar to recent years, meaning that they were exposed to an unforeseen decline in the CPI. The CPI declined by 0.2 percent in 2014, lower than the average inflation expectations derived from the capital market during the year (1.2 percent). Thus, the risk inherent in exposure to the CPI was apparently realized at least partially.

In the foreign currency segment, the banking groups' exchange rate exposure showed an increase in 2014 compared to the previous year. All banking groups with the exception of Discount[44] were exposed to deprecation of the shekel as they had liability surpluses in this segment.[45] The shekel depreciated against the dollar by about 12 percent during 2014, negatively affecting most banking groups' profits from exchange rate differentials.

[43] The maximum change in inflation and in the exchange rate is determined on the basis of monthly changes that occurred, respectively, in inflation expectations and in the nominal exchange rate of the shekel against the US dollar over the past seven years, assuming normal distribution and 99 percent significance.

[44] In 2012, Israel Discount Bank moved from negative positions in the foreign currency segment to positive positions, following a change in the accounting definition of the investment in IDB New York (as a result of the Supervisor of Banks Circular of September 14, 2012, regarding the currency of operations of representative offices operating abroad). As a result of the change, the hedging of the investment was cancelled, such that the ratio of capital to risk weighted assets would not be sensitive to changes in the exchange rate.

[45] The banking corporations' foreign currency exposures were calculated for this survey on the basis of the positions obtained from Note 16 to the financial statements. The positions shown below do not take into account the taxation effects that banking corporations may bear in mind when managing their exposures. Changes in the exchange rate have an impact on the effective tax rate, because exchange rate differentials between investments abroad are not taken into account in calculating the income basis for the purpose of calculating provisions for taxes, while exchange rate differentials in respect of financing sources are taken into account, resulting in the development of asymmetry in respect of exchange rate differentials. In calculating the scope of investments abroad, these changes may have a significant effect on tax provisions. Some banks hedge against tax exposure in respect of investments abroad.

Table 1.17
Exposure to changes in the CPI and the exchange rate, the five banking groups, December 2013 and December 2014
(NIS million)

	Leumi		Hapoalim		Discount		Mizrahi-Tefahot		First International		The five groups	
	2013	2014	2013	2014	2013	2014	2013	2014	2013	2014	2013	2014
Unindexed segment												
Total assets (excluding futures transactions and options)	224,492	234,474	236,852	245,679	112,798	119,097	105,410	119,977	77,436	82,505	756,988	801,732
Total liabilities (excluding futures transactions and options)	179,667	189,987	210,271	222,142	102,447	103,351	102,445	109,086	63,791	67,877	658,621	692,443
Effect of futures transactions and options	-23,045	-18,978	-11,743	-3,487	-6,974	-13,678	-1,113	-9,111	-9,657	-10,308	-52,532	-55,562
Total position in the segment[a]	21,780	25,509	14,838	20,050	3,377	2,068	1,852	1,780	3,988	4,320	45,835	53,727
The bank's total equity[b,c]	**17,955**	**19,530**	**23,143**	**25,173**	**7,138**	**9,161**	**8,752**	**9,797**	**4,743**	**4,955**	**91,731**	**68,616**
CPI-indexed segment												
Total assets (excluding futures transactions and options)	57,992	54,203	59,698	55,301	25,032	21,772	53,881	54,521	16,890	15,393	213,493	201,190
Total liabilities (excluding futures transactions and options)	56,606	54,018	46,737	43,111	20,392	16,919	37,513	38,936	16,520	13,887	177,768	166,871
Effect of futures transactions and options	-2,441	-2,177	-4,064	-5,925	-3,420	-759	-9,125	-7,258	490	-841	-18,560	-16,960
Total position in the segment[a]	-1,055	-1,992	8,897	6,265	1,220	4,094	7,243	8,327	860	665	17,165	17,359
Maximum change in the CPI[d] (percent)	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Loss as a result of the maximum change in the CPI												
CPI increase	14	25	-	-	-	-	-	-	-	-	14	25
CPI decline	-	-	117	79	16	52	95	105	11	8	240	244
Foreign currency segment[e]												
Total assets (excluding futures transactions and options)	80,522	94,589	76,812	99,570	56,729	61,364	18,413	22,115	13,000	15,154	245,476	292,792
Total liabilities (excluding futures transactions and options)	109,114	121,081	93,211	110,124	64,582	72,802	28,994	38,798	22,272	26,333	318,173	369,138
Effect of futures transactions and options	25,822	22,505	15,807	9,412	10,394	14,437	10,238	16,373	9,167	11,149	71,428	73,876
Total position in the segment[a]	-2,770	-3,987	-592	-1,142	2,541	2,999	-343	-310	-105	-30	-1,269	-2,470
Maximum change in the exchange rate[f] (percent)	6.9	6.6	6.9	6.6	6.9	6.6	6.9	6.6	6.9	6.6	6.9	6.6
Loss as a result of the maximum change in the exchange rate[g]												
Increase in the exchange rate (weakening of the shekel)	191	263	41	75	-	-	24	20	7	2	263	361
Decline in the exchange rate (strengthening of the shekel)	-	-	-	-	176	198	-	-	-	-	176	198
Total maximum loss to the bank's total equity as a result of indexation base risk[h]	**205**	**288**	**158**	**154**	**192**	**250**	**119**	**126**	**19**	**10**	**503**	**605**
As a percentage of the bank's total equity	1.1	1.5	0.7	0.6	2.7	2.7	1.4	1.3	0.4	0.2	0.8	0.9

[a] The total position in the segment as the difference between assets and liabilities in the segment, including the effect of futures transactions.
[b] The difference between assets and liabilities in all segments includes the effect of futures transactions (excluding nonmonetary items), per Note 16 to the published financial statements.
[c] The bank's total equity is attributed (by definition) entirely to the unindexed segment, with the result that the nominal exposure to indexation bases occurs in the indexed segment and in the foreign currency segment.
[d] The maximum change in the CPI derived from monthly changes in inflation expectations during the past 7 years, assuming a normal distribution and a significance level of 99 percent.
[e] Including foreign-currency indexed. The calculation of the banking corporations' exposure to foreign currency in this survey is based on the positions obtained from Note 16 to the financial statements. The positions presented do not take into account taxation effects, which the banking corporations may take into account when managing the exposure.
[f] The maximum change in the nominal shekel-dollar exchange rate, which is derived from monthly changes in the exchange rate over the past 7 years, assuming a normal distribution and a significance level of 99 percent.
[g] The change that will occur in the bank's position as the result of a maximum change in the shekel-dollar exchange rate.
[h] The total maximum loss as a result of indexation base risk is obtained by simple addition of the maximum losses as a result of risks in the indexed segment and the foreign currency segment, assuming that the maximum change will occur in the direction that causes the bank the maximum loss in each segment.

SOURCE: Banking Supervision Department based on published financial statements and Central Bureau of Statistics data.

7. CAPITAL ADEQUACY

The equity of the five banking groups increased by 8 percent in 2014, due to the retained earnings and due to an increase in the value of the securities portfolio available for sale that was imputed to capital funds, and after several banks distributed dividends. The Common Equity Tier 1 capital ratio[46] remained unchanged during the period, at 9.3 percent (Table 1.18; Figure 1.27). Two main factors affected the Common Equity Tier 1 capital ratio: The first is the transition to implementation of the new directives that adopt the Basel III framework on January 1, 2014.[47] This transition led to an increase of 1 percent in Common Equity Tier 1 capital, and to an increase of 4 percent in risk-weighted assets, and the negative impact on the Common Equity Tier 1 capital ratio was just 0.2 percentage points. This small effect derived from the conservative accounting rules and capital measurement rules that applied to the Israeli banking system from the outset. The second factor is developments that took place over the course of the year—an increase of 8 percent in Common Equity Tier 1 capital and an increase of 6 percent in risk-weighted assets as a result of expanded bank credit. These led to an increase of 0.2 percentage points in the Common Equity Tier 1 capital ratio.

The ratio of total risk-weighted assets to and total assets—meaning the average weighted rate of credit risk assets—increased from 61.9 percent in December 2013 to 63.4 percent in December 2014 (Table 1.19). The increase was mainly the result of the transition to implementation of the Basel III rules, as stated, since this led to an increase in the average weighting of some credit risk assets.

The Tier 1 capital ratio of the five banking groups declined during the reviewed period by 0.1 percentage points, to 9.6 percent (Table 1.18). This ratio is significantly lower than what is commonly accepted in the banking systems of other OECD countries (Figure 1.28). One of the explanations for this is that Israel determines capital allocations for credit risks on the basis of the more conservative standard approach, as opposed to advanced approaches. The differences in approach affect the weighting of credit risk assets, and are reflected in discrepancies between the banking systems in their ratios of risk-weighted assets to total assets (Figure 1.29). An examination of equity in relation to total balance-sheet assets without taking into account the weighting of assets shows that the level of equity in the Israeli banking system in relation to the balance sheet (7 percent) is similar to the accepted levels in OECD countries (Figure 1.30).

In the next few years, the banking system is expected to continue building capital and strengthening capital adequacy. While all the banks met the Common Equity Tier 1 capital target of 9 percent in December 2014, as required in March 2012[48], they are expected to increase capital buffers beyond this target. First, in accordance with the directive from March 2012, banking corporations whose assets constitute at least 20 percent of total balance-sheet assets of the banking system are required to reach a Common Equity Tier 1 capital ratio of 10 percent by January 1, 2017.[49] Second, in September 2014, the Supervisor of

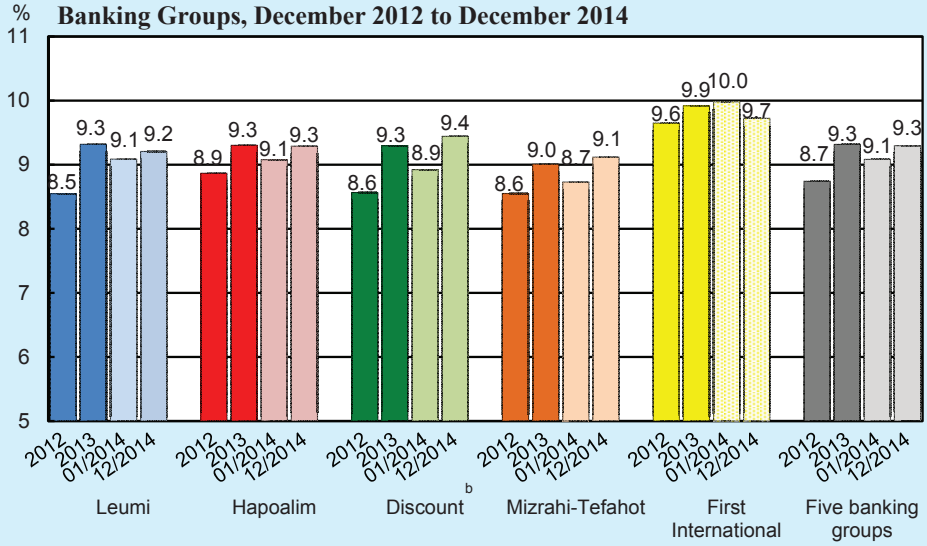
[46] Until December 2013, the banks presented the Core Tier 1 capital ratio in accordance with Basel II directives. From January 1, 2014, the banks present the Common Equity Tier 1 capital ratio in accordance with Basel III directives.

[47] These directives set out total capital targets, fitness criteria for capital instruments classified as Additional Tier 1 capital and Tier 2 capital, and criteria for the classification of ordinary shares are Common Equity Tier 1 capital. In addition, the directives redefine adjustments to and deductions from supervisory capital, including how to handle deferred taxes, minority rights, group loan loss allowances, capital allocation in respect of CVA loss, and more. The date for initial implementation was set for January 1, 2014, and gradual transition directives were set out until the date of final implementation—January 1, 2018. More information appears in Israel's Banking System: Annual Survey, 2012.

[48] More information appears in Israel's Banking System: Annual Survey, 2013.

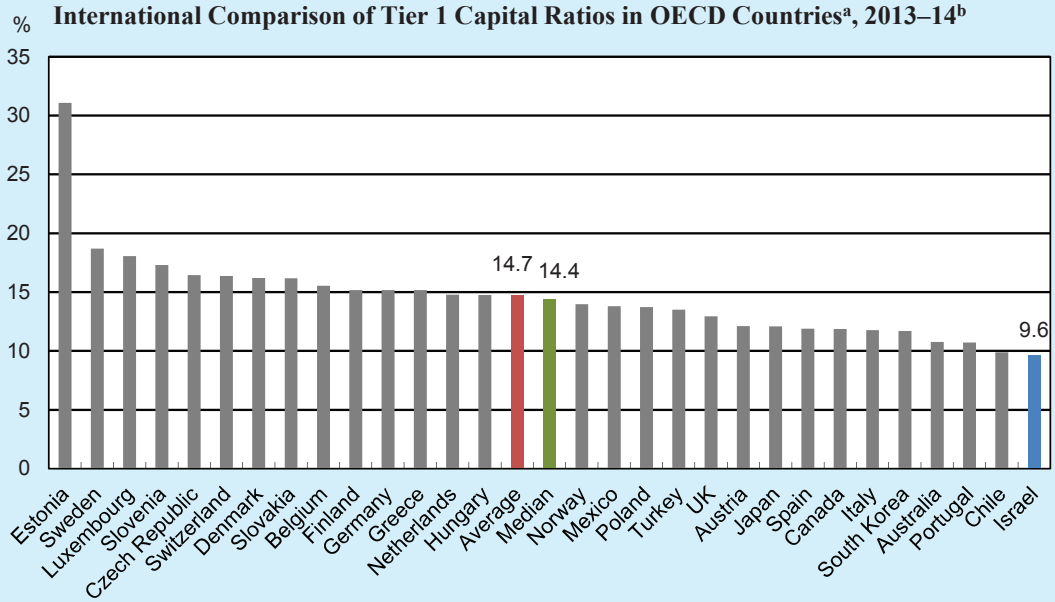
[49] This directive applies to Bank Leumi and Bank Hapoalim.

Figure 1.27
Common Equity Tier 1 Capital / Core Tier 1 Capital Ratios[a] of the Five Banking Groups, December 2012 to December 2014



[a] Data up to December 2013 are in Basel II terms (Core Tier 1 capital ratio). Data from January 2014 onwards are in Basel III terms (Common Equity Tier 1 capital ratio) in accordance with the transition directives.
[b] The Core Tier 1 capital ratio of the Discount Group for 2012 and 2013 does not include the deduction in respect of the Group's investment in the First International Group.
SOURCE: Based on published financial statements and reports to the Banking Supervision Department.

Figure 1.28
International Comparison of Tier 1 Capital Ratios in OECD Countries[a], 2013–14[b]



[a] The US, Ireland and France were excluded due to a lack of data.
[b] Data for Finland, Germany and Switzerland are as of December 2013. Data for Belgium, the Czech Republic, Italy, South Korea, Luxembourg, Norway, Portugal and the UK are as of June 2014. Data for Austria, Canada, Chile, Denmark, Estonia, Greece, Japan, Poland, Slovakia, Sweden and Turkey are as of September 2014. Data for Australia, Hungary, Mexico, Netherlands, Slovenia, Spain and Israel are as of December 2014.
SOURCE: Foreign countries—International Monetary Fund; Israel—Based on published financial statements.

Table 1.18

Distribution of capital and capital ratios at the five banking groups, 2013–2014

	Leumi			Hapoalim			Discount[a]			Mizrahi-Tefahot			First International			Five groups		
	Dec. 2013	Jan. 2014	Dec. 2014	Dec. 2013	Jan. 2014	Dec. 2014	Dec. 2013	Jan. 2014	Dec. 2014	Dec. 2013	Jan. 2014	Dec. 2014	Dec. 2013	Jan. 2014	Dec. 2014	Dec. 2013	Jan. 2014	Dec. 2014
	(NIS million)																	
Equity[b]	26,469		28,433	29,084		31,611	12,538		13,641	10,335		11,500	7,025		7,211	85,451		92,396
Common Equity Tier 1 capital / Core Tier 1 capital[c,d]	25,967	26,082	28,130	28,195	28,966	31,482	12,266	12,364	13,393	10,217	10,206	11,370	6,757	7,034	7,181	83,402	84,652	91,556
Tier 1 capital[c]	25,967	26,082	28,130	30,664	30,920	33,436	13,282	13,500	14,818	10,217	10,206	11,370	6,757	7,034	7,181	86,887	87,742	94,935
Tier 2 capital[c]	15,007	14,337	14,684	16,341	15,697	16,041	5,663	6,124	6,288	4,569	4,850	4,883	3,357	3,296	3,357	44,937	44,304	45,253
Total capital base	40,974	40,419	42,814	47,005	46,617	49,477	18,945	19,624	21,106	14,786	15,056	16,253	10,114	10,330	10,538	131,824	132,046	140,188
Total balance sheet	374,540		396,134	380,020		407,794	200,507		206,946	179,613		198,564	110,989		117,743	1,245,669		1,327,181
Credit risk	247,728	255,932	274,341	276,537	292,522	311,329	117,138	123,736	126,843	105,411	108,917	116,291	60,348	62,680	66,148	807,162	843,787	894,952
Market risks	10,510	10,613	10,839	4,748	4,748	5,269	2,588	2,588	2,629	842	842	1,020	1,350	1,350	1,226	20,038	20,141	20,983
Operational risk	20,426	20,426	20,317	21,769	21,769	22,275	12,217	12,217	12,345	7,154	7,154	7,383	6,423	6,423	6,459	67,989	67,989	68,779
Total risk-weighted assets	278,664	286,971	305,497	303,054	319,039	338,873	131,943	138,541	141,817	113,407	116,913	124,694	68,121	70,453	73,833	895,189	931,917	984,714
	(Percent)																	
Common Equity Tier 1 / Core Tier 1 capital[d] ratio	**9.3**	**9.1**	**9.2**	**9.3**	**9.1**	**9.3**	**9.3**	**8.9**	**9.4**	**9.0**	**8.7**	**9.1**	**9.9**	**10.0**	**9.7**	**9.3**	**9.1**	**9.3**
Tier 1 capital ratio	9.3	9.1	9.2	10.1	9.7	9.9	10.1	9.7	10.4	9.0	8.7	9.1	9.9	10.0	9.7	9.7	9.4	9.6
Tier 2 capital ratio	5.4	5.0	4.8	5.4	4.9	4.7	4.3	4.4	4.4	4.0	4.1	3.9	4.9	4.7	4.5	5.0	4.8	4.6
Total capital ratio	**14.7**	**14.1**	**14.0**	**15.5**	**14.6**	**14.6**	**14.4**	**14.2**	**14.9**	**13.0**	**12.9**	**13.0**	**14.8**	**14.7**	**14.3**	**14.7**	**14.2**	**14.2**

[a] Core Tier 1 capital and the Core Tier 1 capital ratio of the Discount group in December 2013 do not include the deduction in respect of the group's investment in First International Bank.

[b] Including minority interest in accordance with the group's balance sheet.

[c] After deductions.

[d] 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 and the transition directives.

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

Table 1.19
Main capital indices of the five banking groups, 2007–2014
(percent)

	Year	Leumi	Hapoalim	Discount	Mizrahi-Tefahot	First International	Five Groups
Ratio of total risk-weighted assets to total assets[a]	2007	68.97	72.76	61.88	68.16	58.81	68.03
	2008	69.46	72.28	64.83	66.87	59.09	68.32
	2009[b]	64.17	67.88	60.56	67.15	54.44	64.12
	2009[c]	67.01	69.16	63.89	59.59	55.50	65.22
	2010	68.30	68.62	67.17	58.66	61.00	66.39
	2011	67.67	67.33	60.45	58.26	60.02	64.59
	2012	65.67	64.83	61.27	58.03	57.69	63.05
	2013	64.56	64.98	59.09	56.12	55.66	61.91
	2014	66.36	67.72	60.07	55.82	56.21	63.44
Common Equity Tier 1 capital / Core Tier 1 capital ratio[e]	2009[c]	8.33	7.66	6.99	8.01	9.16	7.91
	2010	8.57	8.23	7.89	8.07	8.11	8.25
	2011	8.07	7.90	8.07	7.77	8.48	8.01
	2012	8.55	8.87	8.57	8.55	9.65	8.74
	2013	9.32	9.30	9.30	9.01	9.92	9.32
	1.1.2014[d]	9.09	9.08	8.92	8.73	9.98	9.08
	2014	9.21	9.29	9.44	9.12	9.73	9.30
Equity to total balance-sheet assets	2009	6.79	6.65	5.32	5.52	5.90	6.25
	2010	7.19	7.13	6.01	5.62	6.12	6.67
	2011	6.46	6.76	5.44	5.36	5.93	6.19
	2012	6.71	7.19	6.04	5.70	6.41	6.59
	2013	7.07	7.65	6.25	5.75	6.33	6.86
	2014	7.18	7.75	6.59	5.79	6.12	6.96

[a] Total risk-weighted assets are assets (balance sheet and off-balance-sheet) weighted by risk weights. Total assets are the total assets (balance sheet and off-balance-sheet), without risk weighting.

[b] The ratio is calculated in accordance with Basel I rules.

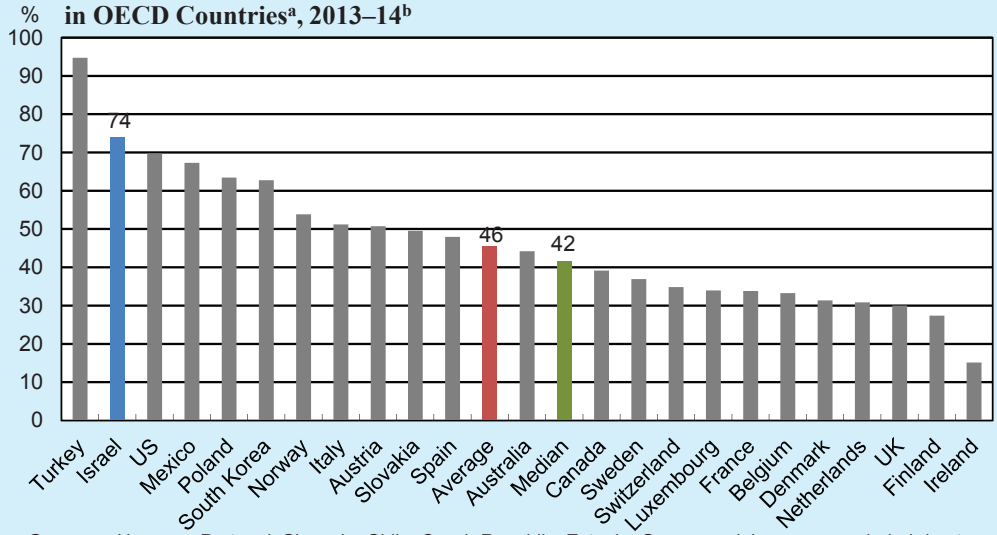
[c] As of this date, the ratio is calculated in accordance with Basel II rules.

[d] As of this date, the ratio is calculated in accordance with Basel III rules in accordance with the transition directives.

[e] 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.

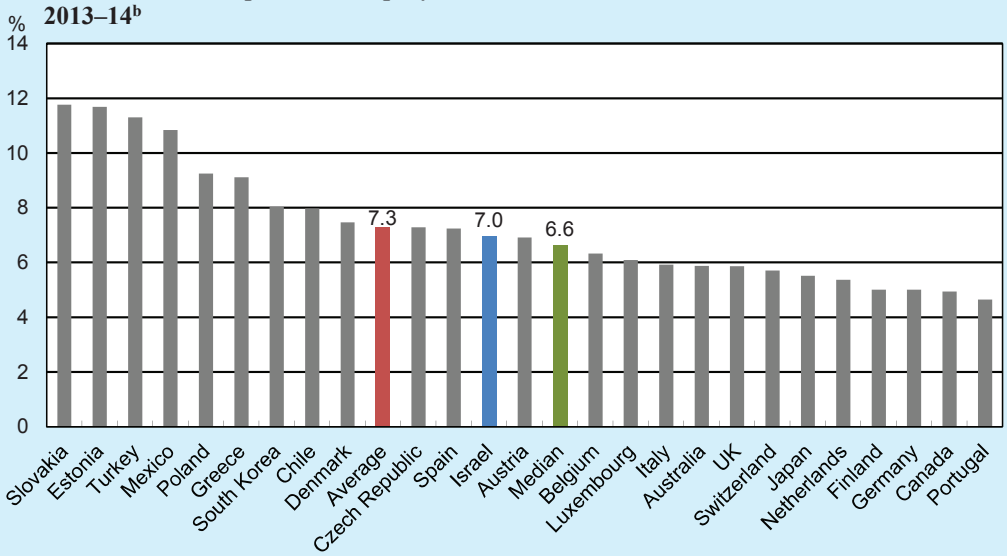
SOURCE: Based on published financial statements and reports to the Banking Supervision Department.

Figure 1.29
International Comparison of the Ratio of Risk-Weighted Assets to Total Assets in OECD Countries[a], 2013–14[b]



[a] Germany, Hungary, Portugal, Slovenia, Chile, Czech Republic, Estonia, Greece and Japan are excluded due to a lack of data.
[b] Data for Belgium, Finland, France, Ireland, Italy, South Korea, Norway, Poland, Sweden, Switzerland, Turkey and the UK are as of December 2013. Data for Australia, Austria, Canada, Denmark, Luxembourg, Mexico, Netherlands, Slovakia, Spain, the US and Israel are as of December 2014.
SOURCE: Foreign countries—International Monetary Fund; Israel—Based on published financial statements.

Figure 1.30
International Comparison of Equity Ratios to Balance-Sheet Assets in OECD Countries[a], 2013–14[b]



[a] The US, Sweden, Slovenia, Norway, Ireland, Hungary and France are excluded due to lack of data.
[b] Data for Finland, Germany and Switzerland are as of December 2013. Data for Belgium, the Czech Republic, Italy, South Korea, Luxembourg, Portugal and the UK are as of June 2014. Data for Austria, Canada, Chile, Denmark, Estonia, Greece, Japan, Poland, Slovakia and Turkey are as of September 2014. Data for Australia, Mexico, Netherlands, Spain and Israel are as of December 2014.
SOURCE: Foreign countries—International Monetary Fund; Israel—Based on published financial statements.

Banks published a directive on increasing capital buffers against the housing credit portfolio. This directive requires the banking corporations to increase the Common Equity Tier 1 capital target through an addition that is the equivalent of 1 percent of the outstanding housing credit portfolio. The banking corporations are required to meet this target by January 1, 2017, and they must increase the target gradually and by fixed quarterly rates beginning on January 1, 2015. In addition, the Supervisor of Banks is permitted at any time to demand differential Common Equity Tier 1 targets from the banks, in accordance with the risk profile derived for them from the Supervisory Review and Evaluation Process (SREP).

As a result of the Basel III reform, the Basel Committee published the framework in January 2014, along with disclosure requirements relating to leverage.[50] This publication defined a simple leverage ratio that is transparent and not risk-based, with the objective of creating a complementary and reliable measure for risk-based capital requirements. In addition, it sets out a minimum leverage ratio of 3 percent, while some supervisory authorities in the world set out higher requirements.[51] In April 2015, the Supervisor of Banks published a directive adopting the Basel III leverage ratio framework. Accordingly, the directive defined the leverage ratio as the ratio between Tier 1 capital and total exposure—meaning total balance sheet exposure, exposures to derivatives and securities financing transactions, and off-balance-sheet items. The directive also set out that all banking corporations must meet a leverage ratio that is no less than 5 percent on a consolidated basis by January 1, 2018.[52] If the total balance-sheet assets on a consolidated basis of a banking corporation comprise at least 20 percent of total balance-sheet assets in the banking system, the bank is required to meet a leverage ratio of at least 6 percent on that date.[53] In addition, the banking corporations are required to include disclosure of the leverage ratio in their financial statements as of April 1, 2015.

In November 2014, the banking corporations submitted a quantitative impact survey (QIS) to the Banking Supervision Department estimating the leverage ratio on the basis of September 2014 data. The results of the survey, at the individual bank level, show that on the assumption that the banks fully implement the Basel III recommendations[54], the lowest ratio is 4.22 percent, and the highest ratio is 9.37 percent. The results also show that the leverage ratio is higher than 5 percent at each one of the banking groups. By way of comparison, in March 2015 the Bank for International Settlements (BIS) published a monitoring report[55] that estimated the leverage ratio of 212 banks around the world based on June 2014 data. According to this report, and assuming that the banks fully implement the Basel III recommendations, the leverage ratio of 97 banks with Tier 1 capital of more than 3 billion euros averages 4.7 percent, and the leverage ratio of 115 banks with Tier 1 capital of less than 3 billion euros averages 5.6 percent. In addition, it was found that 17 banks do not meet the 3 percent leverage ratio set out by Basel III.

[50] Basel III Leverage Ratio Framework and Disclosure Requirements (January 2014).

[51] By way of illustration, banks with systemic importance in the US must meet a leverage ratio of 6 percent, and in the Netherlands it was recommended to set a leverage ratio of 4 percent for such banks.

[52] If a banking corporations meets the leverage ratio requirement on the directive's date of publication, it is not permitted to decline below the minimum threshold set in the directive. If a banking corporation does not meet the requirement on the directive's date of publication, it is required to increase the ratio by fixed quarterly rates until January 1, 2018.

[53] As of December 2014, the Leumi and Hapoalim groups are required to meet a ratio of 6 percent, since their total balance-sheet assets on a consolidated basis comprise at least 20 percent of total balance-sheet assets in the banking system.

[54] Implementation is currently in accordance with transition directives.

[55] Basel III Monitoring Report, "Basel Committee on Banking Supervision", March 2015.

8. FINANCIAL RESULTS

a. Profits and profitability

There were many factors that influenced the development of the income and expense items, and of the net profit reported by the banking groups in 2014. Some of these factors are internal to the system and non-recurrent, while others are exogenous and capable of influencing the banks' main profit channels over time. The exogenous factors acted to erode interest-bearing profit channels in 2014, prominent among which were: (a) the continued reduction of the Bank of Israel interest rate and the low interest rate environment in Israel and other western countries, which led to a decline in the net interest margin (about 2.2, compared to about 2.3 last year; Figure 1.31) and to a negative price effect on net interest income; and (b) continued developments in the housing market, the lessening of business opportunities (due to moderate GDP growth), and increasing competition over business credit on the part of nonbank entities, which served to change the mix of the credit portfolio and for the continued increase in the proportion of housing credit, a segment that is characterized by low interest (see Table 1.9). Among the most prominent internal factors were (a) the realization of operational risk and payment of fines by the Leumi group in respect of contraventions of tax law, and additional expenses recorded by other groups in view of the investigations conducted against them by authorities in the United States; and (b) an efficiency program instituted by Discount group in 2014.

In attempt to deal with the effects of the exogenous factors and to minimize their possible effects on net interest income in the future as well, some of the groups expanded the scope of operations in activity segments with higher risk and higher interest levels (including the small business segment, the commercial segment, and consumer credit). While this reflects the developments in the economic environment in which the groups operate, it also indicates an attempt to vary interest-bearing profit channels.

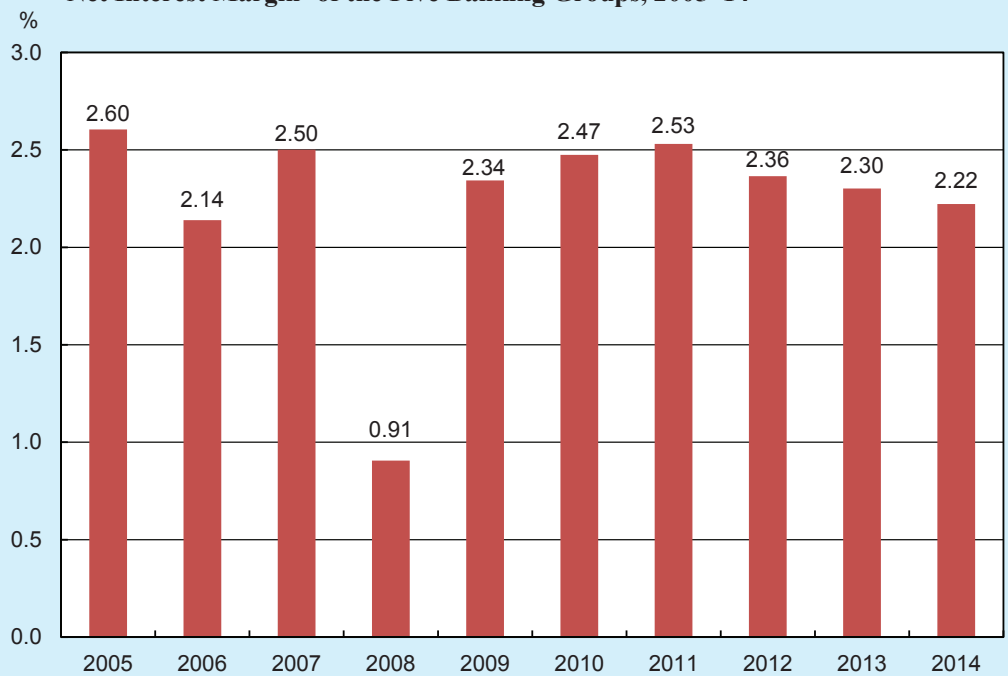
Total net profit of the five banking groups contracted markedly this year—by about 9 percent—to about NIS 6.4 billion (Table 1.20). The rate of change of net profit varied among the groups, and ranged between a negative change of about 32 percent in Discount group to a positive change of about 7.5 percent in Hapoalim group. Return on equity declined from 8.7 percent in 2013 to 7.3 percent in 2014 (Figure 1.32), due to an increase in the groups' total equity (which explains about 0.6 percentage points of the total decline), and due to the decline in net profit. An international comparison shows that the return on assets recorded in the Israeli banking system in 2014 (about 0.8 percent) is similar to the average yield in the OECD countries (about 0.9 percent; Figure 1.33).

Among the prominent components of profit, net interest income declined for the second consecutive year, operating and other expenses increased (partly due to one-time processes), and loan loss provisions were low even though the banks increased them in the fourth quarter of the year due to a new directive published by the Supervisor of Banks regarding group allowances for private individuals.

Among the causes of the decline in net profit are lower net interest income which, even though it didn't lead the decline in net profit, has a special significance, since it reflects the negative impact of the low interest rate environment on the banks' structural profit channels. The decline in income symbolizes better than anything else the decline in the contribution of the classic profit channels from interest-bearing activity, a decline that was created due to the difficulty in adjusting the interest rate on deposits in a low interest rate environment. Net interest income declined by about NIS 376 million in 2014, to about NIS 24.8 billion—a decline of about 1.5 percent (Table 1.20). The net interest margin—the yield in respect of

interest-bearing activity—declined for the third consecutive year, to about 2.2 percent (Figure 1.31). Net interest income was positively affected in 2014 by the implementation of the Supervisor's guideline on measuring interest income.[56] Excluding this effect, there would have been a larger decline recorded in net interest income (about 4.9 percent), which better reflects the effect of the exogenous factors. The decline in income encompassed most of the banking groups.

Figure 1.31
Net Interest Margin[a] of the Five Banking Groups, 2005–14



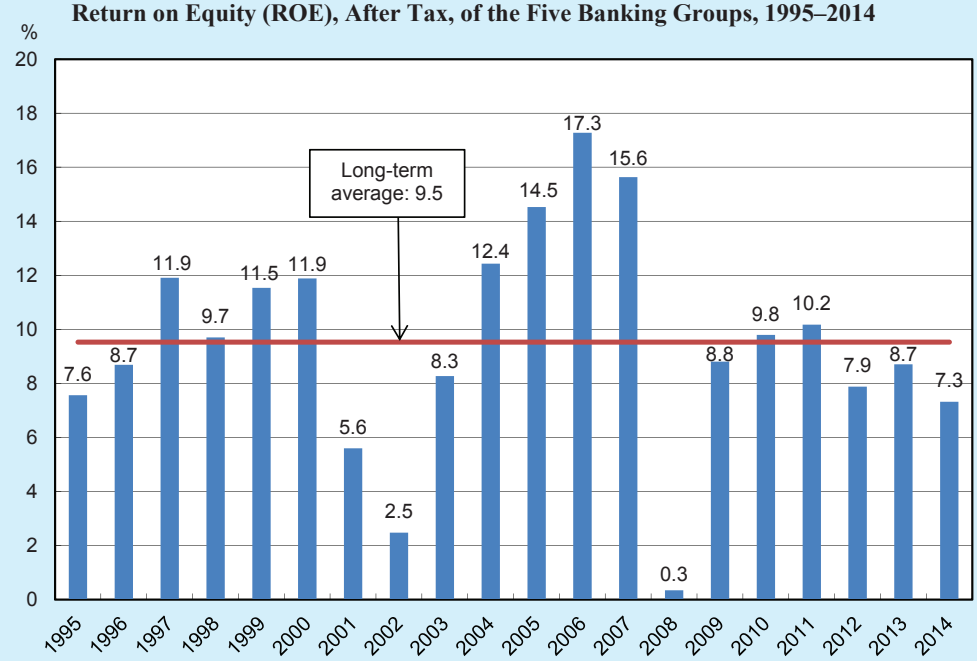
[a] Net interest income to average interest-earning assets.
SOURCE: Based on published financial statements.

An examination of interest-bearing activity by type of activity shows that net interest income declined by about NIS 550 million in the classic activity area of credit allocation and deposit taking from the public (Table 1.21), and by about NIS 540 million in deposits with the Bank of Israel (Table 1.22). These declines offset interest-bearing activity in bonds, since the loss derived from the latter declined during the year.

Interest income declined in 2014 even though the quantity effect was positive (about NIS 860 million; Table 1.21) after interest-bearing assets grew and interest-bearing liabilities declined. The decline in interest income was entirely the result of the negative and stronger price effect (about NIS 1.2 billion; Table 1.21). Interest-bearing activity grew on the assets side despite moderate growth in GDP. This was almost

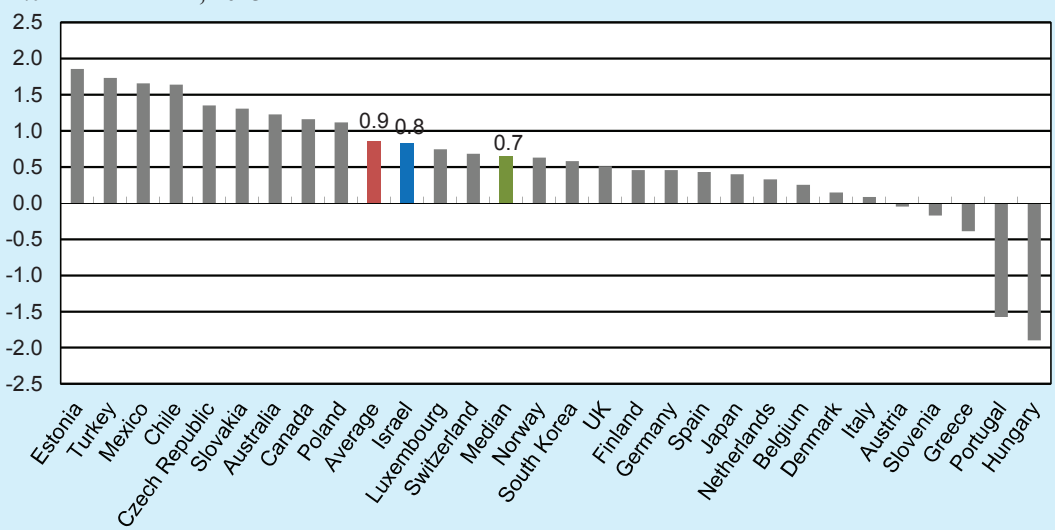
[56] Starting in January 2014, the banking corporations are required to implement the Supervisor's guidelines regarding the measurement of interest income. These guidelines include rules for handling credit generation fees, commitments to provide credit, changes in debt terms and early repayment fees. The guidelines led to the classification of about NIS 861 million in net interest income and to the classification of about NIS -846 million in fees income.

Figure 1.32
Return on Equity (ROE), After Tax, of the Five Banking Groups, 1995–2014



SOURCE: Based on published financial statements.

Figure 1.33
International Comparison of the Return on Assets (ROA), Before Tax, in the OECD Countries[a,b], 2013–14[c]



[a] The US, Sweden, Ireland and France were excluded due to a lack of data.
[b] Countries in which the yield was negative were not included in the calculation of the average and median.
[c] Data for Finland, Germany and Switzerland are as of December 2013. Data for Belgium, the Czech Republic, Italy, South Korea, Luxembourg, Norway, Portugal, and the UK are as of June 2014. Data for Austria, Canada, Chile, Denmark, Estonia, Greece, Japan, Poland, Slovakia and Turkey are as of September 2014. Data for Australia, Hungary, Mexico, Netherlands, Slovenia, Spain and Israel are as of December 2014.

SOURCE: Foreign countries—International Monetary Fund; Israel—Based on published financial statements.

Table 1.20

Main items in consolidated profit and loss statements of the five banking groups, 2012–14

(NIS millon, at current prices)

	Leumi				Hapoalim				Discount			
	2012	2013	2014	% change in 2014 compared with 2013	2012	2013	2014	% change in 2014 compared with 2013	2012	2013	2014	% change in 2014 compared with 2013
Interest income	13,507	12,134	10,012	-17.5	14,346	12,961	10,673	-17.7	7,847	6,822	5,736	-15.9
Interest expenses	6,099	4,777	2,649	-44.5	6,186	5,018	2,905	-42.1	3,388	2,572	1,518	-41.0
Net interest income	**7,408**	**7,357**	**7,363**	**0.1**	**8,160**	**7,943**	**7,768**	**-2.2**	**4,459**	**4,250**	**4,218**	**-0.8**
Loan loss provisions	1,236	268	472	76.1	987	874	425	-51.4	726	580	164	-71.7
Net interest income after loan loss provisions	**6,172**	**7,089**	**6,891**	**-2.8**	**7,173**	**7,069**	**7,343**	**3.9**	**3,733**	**3,670**	**4,054**	**10.5**
Noninterest income	**4,774**	**5,517**	**5,173**	**-6.2**	**5,477**	**5,721**	**6,254**	**9.3**	**3,257**	**3,519**	**3,254**	**-7.5**
of which: Noninterest financing income	444	1,127	795	-29.5	255	480	916	90.8	352	632	549	-13.1
of which: stocks	0	669	485	-	90	140	136	-2.9	80	137	63	-54.0
bonds	520	155	628	305.2	347	469	343	-26.9	341	400	307	-23.3
activity in derivative instruments	-673	-1,376	1,906	-	-315	-949	1,933	-	-333	-577	854	-
exchange rate differentials	597	1,580	-2,252	-	114	818	-1,496	-	265	642	-675	-
of which: Fees	4,199	4,188	4,167	-0.5	5,105	5,115	5,207	1.8	2,685	2,704	2,586	-4.4
Total operating and other expenses	**9,120**	**8,892**	**9,311**	**4.7**	**8,886**	**9,024**	**9,140**	**1.3**	**5,826**	**6,018**	**6,371**	**5.9**
of which: salaries and related expenses	5,310	5,133	4,968	-3.2	5,130	5,434	5,300	-2.5	3,444	3,619	3,988	10.2
Pre-tax profit	**1,826**	**3,714**	**2,753**	**-25.9**	**3,764**	**3,766**	**4,457**	**18.3**	**1,164**	**1,171**	**937**	**-20.0**
Income tax provision	800	1,397	1,281	-8.3	1,230	1,271	1,729	36.0	407	305	324	6.2
After tax profit	**1,026**	**2,317**	**1,472**	**-36.5**	**2,534**	**2,495**	**2,728**	**9.3**	**757**	**866**	**613**	**-29.2**
Net income attributed to shareholders	**922**	**1,982**	**1,502**	**-24.2**	**2,506**	**2,548**	**2,740**	**7.5**	**802**	**874**	**596**	**-31.8**
Capital for calculating ROE[a]	24,199	25,345	27,210	7.4	24,812	27,576	30,276	9.8	11,296	11,973	12,681	5.9
Total pre-tax ROE (percent)	**7.55**	**14.65**	**10.12**		**15.17**	**13.66**	**14.72**		**10.30**	**9.78**	**7.39**	
Total after-tax ROE (percent)	**3.81**	**7.82**	**5.52**		**10.10**	**9.24**	**9.05**		**7.10**	**7.30**	**4.70**	
Total ROA (percent)	**0.25**	**0.53**	**0.39**		**0.68**	**0.67**	**0.70**		**0.40**	**0.44**	**0.29**	
Net interest margin (percent)[b]	**2.24**	**2.24**	**2.22**		**2.52**	**2.37**	**2.32**		**2.67**	**2.39**	**2.41**	

Table 1.20 continued
Main items in consolidated profit and loss statements of the five banking groups, 2012–14
(NIS millon, at current prices)

	Mizrahi-Tefahot				First International				Total for all groups			
	2012	2013	2014	% change in 2014 compared with 2013	2012	2013	2014	% change in 2014 compared with 2013	2012	2013	2014	% change in 2014 compared with 2013
Interest income	6,591	6,442	5,347	-17.0	3,787	3,322	2,664	-19.8	46,078	41,681	34,432	-17.4
Interest expenses	3,377	2,978	1,972	-33.8	1,537	1,135	563	-50.4	20,587	16,480	9,607	-41.7
Net interest income	**3,214**	**3,464**	**3,375**	**-2.6**	**2,250**	**2,187**	**2,101**	**-3.9**	**25,491**	**25,201**	**24,825**	**-1.5**
Expenses in respect of credit losses	276	288	173	-39.9	134	97	89	-8.2	3,359	2,107	1,323	-37.2
Net interest income after credit loss expenses	**2,938**	**3,176**	**3,202**	**0.8**	**2,116**	**2,090**	**2,012**	**-3.7**	**22,132**	**23,094**	**23,502**	**1.8**
Income not from interest	**1,573**	**1,499**	**1,612**	**7.5**	**1,547**	**1,682**	**1,667**	**-0.9**	**16,628**	**17,938**	**17,960**	**0.1**
of which: Financing expenses not from interest	95	14	173	1,135.7	150	200	230	15.0	1,296	2,453	2,663	8.6
of which: shares	29	-1	11	-	38	85	60	-29.4	237	1,030	755	-26.7
bonds	149	89	114	28.1	164	174	197	13.2	1,521	1,287	1,589	23.5
activity in derivative instruments	-62	-599	1,614	-	-50	-566	870	-	-1,433	-4,067	7,177	-
exchange rate differentials	-21	525	-1,566	-	-2	507	-897	-	953	4,072	-6,886	-
of which: fees	1,452	1,458	1,395	-4.3	1,362	1,418	1,375	-3.0	14,803	14,883	14,730	-1.0
Total operating and other expenses	**2,786**	**2,957**	**3,032**	**2.5**	**2,814**	**2,850**	**2,878**	**1.0**	**29,432**	**29,741**	**30,732**	**3.3**
of which: salaries and related expenses	1,701	1,836	1,869	1.8	1,676	1,736	1,746	0.6	17,261	17,758	17,871	0.6
Before tax profit	**1,725**	**1,718**	**1,782**	**3.7**	**849**	**922**	**801**	**-13.1**	**9,328**	**11,291**	**10,730**	**-5.0**
Deduction for tax on profits	599	592	673	13.7	315	376	340	-9.6	3,351	3,941	4,347	10.3
After tax profit	**1,126**	**1,126**	**1,109**	**-1.5**	**534**	**546**	**461**	**-15.6**	**5,977**	**7,350**	**6,383**	**-13.2**
Net profit attributed to shareholders	**1,076**	**1,078**	**1,083**	**0.5**	**563**	**555**	**478**	**-13.9**	**5,869**	**7,037**	**6,399**	**-9.1**
Capital for calculating ROE[a]	8,214	9,374	10,413	11.1	5,926	6,529	6,829	4.6	74,447	80,797	87,409	8.2
Total pre-tax ROE (percent)	**21.00**	**18.33**	**17.11**		**14.33**	**14.12**	**11.73**		**12.53**	**13.97**	**12.28**	
Total after-tax ROE (percent)	**13.10**	**11.50**	**10.40**		**9.50**	**8.50**	**7.00**		**7.88**	**8.71**	**7.32**	
Total ROA (percent)	**0.69**	**0.63**	**0.57**		**0.54**	**0.51**	**0.42**		**0.49**	**0.57**	**0.50**	
Net interest margin (percent)[b]	**2.15**	**2.15**	**1.90**		**2.48**	**2.38**	**2.16**		**2.36**	**2.30**	**2.22**	

[a] Capital for the purpose of calculating total ROE includes total capital resources minus the average balance of minority interest minus/plus the average balance of losses/profits that have yet to be realized from reconciliations to fair value of bonds for trading and losses/profits in respect of bonds available for sale, which are included in shareholders equity.

[b] Net interest income to total assets that generate financing revenue.

SOURCE: Based on published financial statements.

entirely the result of the increase in credit to private individuals, particularly housing credit, a field that is characterized by lower interest rates.

Regarding the price effect, interest income from credit activity (about NIS 6.1 billion; Table 1.21) declined markedly compared with the previous year, though this was partly offset by the decline in interest expenses on deposits (about NIS 4.9 billion; Table 1.21). The effect of credit and deposit activity abroad (about NIS 75 million; Table 1.21) was negative on the quantity side and positive and stronger on the price side, slightly offsetting the decline in income in this area from activity in Israel. The negative price effect was also reflected in the fact that the interest rate gap from credit and deposit activity declined from 3.29 in 2013 to about 3.13 in 2014 (Figure 1.34).

Loan loss provisions declined sharply (about 37 percent; Table 1.20) for the second consecutive year. They totaled about NIS 1.3 billion, constituting about 0.15 percent of total balance-sheet credit to the public (Table 1.10). The decline encompassed four of the five banking groups. Loan loss provisions were negative in the first three quarters of the year, and positive in the fourth quarter—a direct result of the implementation of the Supervisor's directive on Group Allowance in Respect of Credit to Private Individuals. (More information appears in Section B of the chapter on risks). The negative level of provisions in the first three quarters is a result of the decline in provisions on an individual basis in respect of those customers, and the recovery of debts that had been written off in previous years.

Noninterest income remained stable in 2014, totaling about NIS 18 billion, following two years of sharp increases of about 9.3 percent on average (Table 1.20). This income did not develop uniformly, ranging from an increase of about 9.3 percent in the Hapoalim group to a decline of about 7.5 percent in the Discount group. The level of income was affected to a large extent in 2014 by the implementation of the Supervisor's guidelines regarding the measurement of interest income[57], since the guideline acted to divert income from the fees from credit activity item to the interest income item (a decline of about NIS 846 million on the fees income side). The volume and variance of the income were positively affected in 2014 by developments in income derived from capital market activity (customers' securities activity, mutual fund and provident fund management fees, financial product distribution fees, the sale and revaluation of securities, and exchange rate and derivative differentials), because this income increased by about NIS 387 million (about 6 percent) in 2014. There were negative effects from developments in income derived from the banking services array (fees income, financing income and others), because this income declined by about NIS 365 million (about 3.2 percent) in 2014. Income from capital market activity constitutes about 38 percent of total noninterest income. The high volume of such income was affected in 2014 by the high level of income from the sale of bonds available for sale (although this is a lower volume that what was recorded in the previous year), and the positive contribution of such income was from the adjustments to fair value of tradable bonds. These developments cumulatively contributed to an increase of about 23.5 percent in income from bond activity.

Income from activity in shares declined by about 27 percent in 2014 (Table 1.20), but remained high. The decline in this activity is attributed to the high levels in this activity in the Leumi group[58] in 2013, and to a lesser extent to the decline in value of First International Bank shares held by the Discount group. Income from capital market activity was also positively affected by customers' direct activity in the capital market, including growth in fees from customers' activity in securities—in view of the low interest rate environment

[57] See Note 56.

[58] During 2013, the group recorded income from the sale of shares of Migdal Insurance and Caesar Stone.

Table 1.21

The effect of quantity[a] and price[b] on interest income and expenses, Israel and abroad the five banking groups, 2013 and 2014 (NIS million)

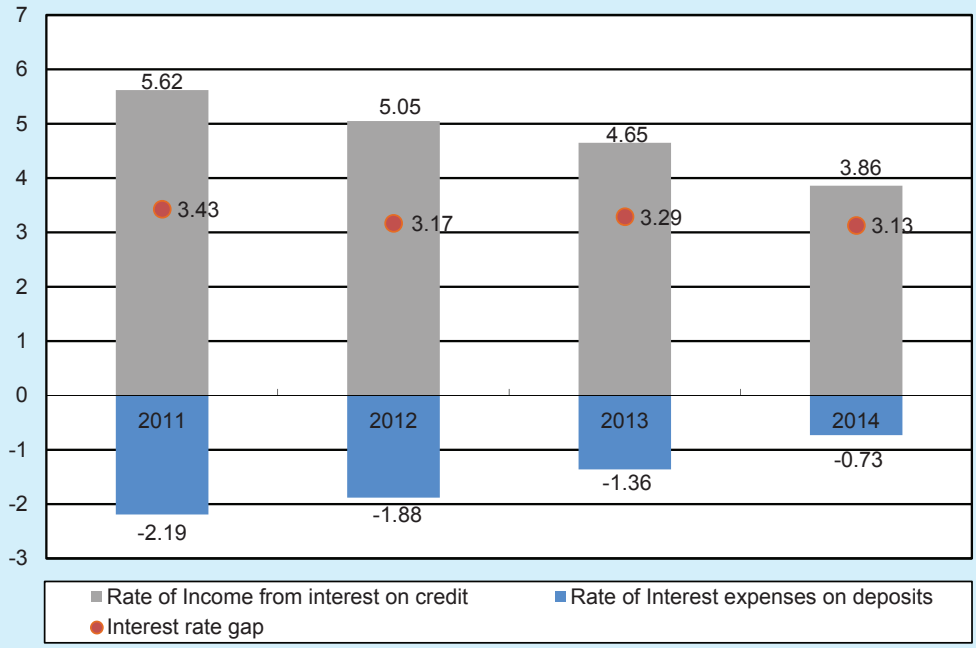
	2014								
	Quantity effect			Price effect			Net change		
	Assets side	Liabilities side	Net	Assets side	Liabilities side	Net	Assets side	Liabilities side	Contribution to net interest income
Credit to the public / deposits of the public in Israel	824	31	793	-6,230	-4,812	-1,418	-5,406	-4,781	-625
Credit to the public / deposits of the public abroad	-86	-13	-73	94	-54	-148	8	-67	75
Total credit to the public / deposits of the public	738	18	720	-6,136	-4,866	-1,270	-5,398	-4,848	-550
Other interest-bearing assets / liabilities in Israel	30	-115	145	-1,893	-1,859	-34	-1,863	-1,974	111
Other interest-bearing assets / liabilities abroad	-69	-64	-5	81	13	68	12	-51	63
Total other interest-bearing assets / liabilities	-39	-179	140	-1,812	-1,846	34	-1,851	-2,025	174
Total interest income / expenses	699	-161	860	-7,948	-6,712	-1,236	-7,249	-6,873	-376
	2013								
	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
Credit to the public / deposits of the public in Israel	424	-21	445	-3,021	-3,899	878	-2,597	-3,920	1,323
Credit to the public / deposits of the public abroad	-133	-25	-108	-100	-136	36	-233	-161	-72
Total credit to the public / deposits of the public	291	-46	337	-3,121	-4,035	914	-2,830	-4,081	1,251
Other interest-bearing assets / liabilities in Israel	174	-73	247	-1,572	177	-1,749	-1,398	104	-1,502
Other interest-bearing assets / liabilities abroad	-11	-89	78	-158	-41	-117	-169	-130	-39
Total other interest-bearing assets / liabilities	163	-162	325	-1,730	136	-1,866	-1,567	-26	-1,541
Total interest income / expenses	454	-208	662	-4,851	-3,899	-952	-4,397	-4,107	-290

[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.

Figure 1.34
Rate of Income from Interest on Credit, Rate of Interest Expenses on Deposits, and the Interest Rate Gap, the Five Banking Groups, 2011-14



SOURCE: Based on published financial statements.

and the diversion of assets to the capital markets abroad—and an increase in financial services distribution fees. Income from the array of banking services constituted about 62 percent of total noninterest income in 2014, and were negatively affected to a great extent by the Supervisor of Banks' directive regarding the measurement of interest income, since this directive had the effect of decreasing income from fees concerning the handling of credit and execution of contracts (about 52.5 percent; Table 1.23). The decline in this item was slightly offset by the increase in income from credit card activity (about 3.2 percent) and the growth that was generated in fees derived from financing transactions (about 3.1 percent) due to the increase in the volume of off-balance-sheet activity concerning guarantees and credit facilities. Income from credit card activity was positively affected by the growth in the number of transactions executed with the use of credit cards, and was negatively affected by the slight decline in the rate of the fees. The increase in income was derived from the fact that the increase in the number of transactions at medium and small businesses, which are characterized by a higher fee rate, was greater than the decline recorded in the number of transactions at large corporations.

A breakdown of noninterest income into fees income and noninterest financing income, and an examination of these elements relative to the volume of operations, shows the increase in the rate of noninterest financing income in the past three years, primarily the contribution of securities activity. It also

Table 1.22
Average balances, income and expense rates, and interest rate gap in respect of assets and liabilities (NIS million, percent) the five banking groups, 2014 and 2013

2014

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	801,005	30,939	3.86	Deposits of the public	756,110	-5,493	-0.73	3.13
Deposits at banks	26,670	224	0.84	Deposits from banks	15,909	-174	-1.09	-0.25
Deposits at central banks	111,345	551	0.49	Deposits from central banks	89	-	-	0.49
Bonds activity	167,933	2,584	1.54	Bonds	92,454	-3,694	-4.00	-2.46
Other assets[a]	10,089	134	1.33	Other liabilities[a]	9,510	-246	-2.59	-1.26
Total interest-bearing assets	1,117,042	34,432	3.08	Total interest-bearing liabilities	874,072	-9,607	-1.10	1.98
Net yield on interest-bearing assets (net interest margin)[b]								

2013

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	780,754	36,337	4.65	Deposits of the public	760,279	-10,341	-1.36	3.29
Deposits at banks	23,542	264	1.12	Deposits from banks	16,120	-262	-1.63	-0.51
Deposits at central banks	104,461	1,091	1.04	Deposits from central banks	5	-	-	1.04
Bonds activity	177,878	3,799	2.14	Bonds	95,174	-5,576	-5.86	-3.72
Other assets[a]	8,199	190	2.32	Other liabilities[a]	10,945	-301	-2.75	-0.43
Total interest-bearing assets	1,094,834	41,681	3.81	Total interest-bearing liabilities	882,523	-16,480	-1.87	1.94
Net yield on interest-bearing assets (net interest margin)[b]	1,094,834	25,201	2.30					

[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 spread is shown in percent.

SOURCE: Banking Supervision Department based on published financial statements.

Table 1.23
Fees and other income, and operating expenses, the five banking groups, 2012 to 2014

	Amounts			Distribution			Changes compared with previous year	
	2012	2013	2014	2012	2013	2014	2013	2014
	(NIS million, at current prices)			(Percent)			(Percent)	
1 Fees and other income								
Income from banking services								
Account management fees	3,061	2,994	2,954	20.0	19.3	19.3	-2.2	-1.3
Credit cards	3,617	3,689	3,808	23.6	23.8	24.9	2.0	3.2
Credit services and contracts	1,286	1,224	582	8.4	7.9	3.8	-4.8	-52.5
Foreign trade activity and special services	403	383	392	2.6	2.5	2.6	-5.0	2.4
Other fees[a]	1,478	1,485	1,529	9.6	9.6	10.0	0.5	3.0
Total income from services	9,845	9,775	9,265	64.2	63.1	60.6	-0.7	-5.2
Income from capital market activity								
From securities activity	2,720	2,677	2,888	17.7	17.3	18.9	-1.6	7.9
Financial products[b] distribution fees	723	779	893	4.7	5.0	5.8	7.8	14.6
Management, operational and trust fees for institutional investors	248	250	238	1.6	1.6	1.6	0.8	-4.8
Profits from severance pay funds	288	310	174	1.9	2.0	1.1	7.6	-43.9
Total income from capital market activity	3,979	4,016	4,193	26.0	25.9	27.4	0.9	4.4
Fees from financing transactions	1,267	1,402	1,446	8.3	9.1	9.5	10.7	3.1
Other income[c]	241	292	393	1.6	1.9	2.6	21.2	34.6
Total fees and other income	**15,332**	**15,485**	**15,297**	**100.0**	**100.0**	**100.0**	**1.0**	**-1.2**
2 Operating expenses								
Salaries and related expenses[d]	17,261	17,758	17,871	58.7	59.7	58.2	2.9	0.6
Of which: Salaries	10,872	11,296	10,868	36.9	38.0	35.4	3.9	-3.8
Maintenance and depreciation of premises and equipment	5,770	5,745	5,678	19.6	19.3	18.5	-0.4	-1.2
Amortization and write-down of intangible assets and goodwill	190	245	209	0.7	0.8	0.7	29.0	-14.7
Other expenses	6,211	5,993	6,974	21.1	20.2	22.7	-3.5	16.4
Of which: Marketing and advertising	969	922	914	3.3	3.1	3.0	-4.9	-0.9
Computer expenses	900	882	889	3.1	3.0	2.9	-2.0	0.8
Communications	645	642	630	2.2	2.2	2.1	-0.5	-1.9
Insurance	116	116	115	0.4	0.4	0.4	0.0	-0.9
Office expenses	326	301	302	1.1	1.0	1.0	-7.7	0.3
Professional services	827	764	805	2.8	2.6	2.6	-7.6	5.4
Total operating expenses	**29,432**	**29,741**	**30,732**	**100.0**	**100.0**	**100.0**	**1.1**	**3.3**

[a] Includes mainly margin and collection fees on credit from the Finance Ministry, conversion and other differentials.

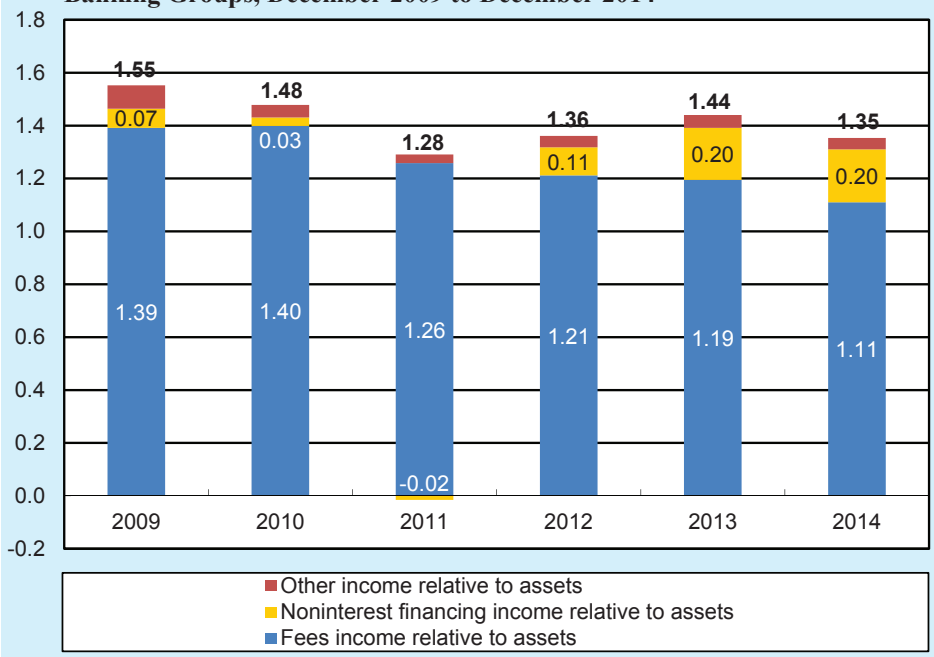
[b] As part of the Bachar Reform, the banks began to charge a "distribution fee". The ceiling on the distribution fee with respect to mutual funds amounts to 0.25 percent of assets in funds that invest mainly in low risk short-term investments, 0.80 percent of assets in equity funds, and 0.40 percent of assets in other funds. The ceiling with respect to provident funds and pension funds amounts to 0.25 percent of the assets in a fund.

[c] Includes profit from the realization of assets received in respect of the discharge of credit, management fees from related companies and other income.

[d] Includes payroll tax, severance pay, royalties, pension and national insurance.

SOURCE: Based on published financial statements.

Figure 1.35
Composition of Noninterest Income Relative to Total Assets, the Five Banking Groups, December 2009 to December 2014



SOURCE: Based on published financial statements.

shows the continuing decline in the rate of fees income[59] (Figure 1.35). It is noticeable that fees income declined due to regulatory measures adopted by the Banking Supervision Department in recent years with the aim of reducing consumer fees, because the regulations are reflected in a decline in the volume of income from account management fees among other things.[60]

Total operating and other expenses increased by about 3.3 percent during 2014, to about NIS 30.7 billion. The increase in expenses encompassed all five of the banking groups, and reflects both one-time developments and sustainable changes concerning the number of employees and the cost of their employment. The increase in expenses is prominent at the Leumi Group (4.7 percent) and at Discount Group (5.9 percent), and explains about 78 percent of the total growth recorded in this item in 2014. The sharp increase at Leumi Group is explained by the fine it paid in respect of contraventions of tax laws as part of the arrangement with the American authorities. The group's total expenses were about NIS 1 billion in 2014, in addition to cumulative expenses of about NIS 632 million in the past two years. As a result of the same matter, Hapoalim Group recorded an expense of about NIS 196 million, and Mizrahi-Tefahot recorded an expense of about NIS 95 million. The increase in expenses at Discount Group was the result of

[59] The sharp decline in 2014 is the result of the accounting reclassification of income from credit activity, due to the Supervisor's directive (see Note 56).

[60] Among the regulatory measures adopted are: the "Tracks Service" and reducing the minimum account management fee, expanding the definition of small businesses that are eligible for inclusion in the retail fee schedule, disclosure of the cost of securities services for clients, and amendment of the Banking Order regarding the early repayment of housing loans.

Table 1.24
Number of employee posts and expenses by annual salary levels, the five banking groups, 2013 and 2014

	2013		2014			
	Number of employee posts	Salaries and related expenses (NIS million)	Number of employee posts	Salaries and related expenses (NIS million)	Annual change in number of employee posts (percent)	Annual change in salary expenses (percent)
Active employees at offices in Israel - yearly salary levels (NIS thousand)						
Up to 60	274	15	96	5	-64.9	-66.1
60 to 120	7,238	707	6,615	638	-8.6	-9.7
120 to 240	16,372	2,976	15,882	2,893	-3.0	-2.8
240 to 360	12,179	3,517	12,264	3,589	0.7	2.1
360 to 600	7,628	3,338	7,488	3,304	-1.8	-1.0
600 to 1,000	1,613	1,131	1,671	1,187	3.6	5.0
Above 1,000	356	580	329	494	-7.5	-14.7
Total wage and related components attributed to active employees at offices in Israel	**45,660**	**12,262**	**44,345**	**12,111**	**-2.9**	**-1.2**
of which: expenses for external employees, yearly salary levels (NIS thousand)	2,218	551	1,945	488	-12.3	-11.6
Up to 120	633	61	604	61	-4.5	0.8
Above 120	1,586	491	1,341	427	-15.4	-13.1
Wage and related components not attributed to active employees at offices in Israel		4,433		4,272		
Bank employees at offices abroad	3,085	1,447	2,975	1,815	-3.6	25.4
Salary expenses capitalized to assets	-1,458	-517	-774	-327	-46.9	-36.9
Total	**47,287**	**17,625**	**46,546**	**17,871**	**-1.6**	**1.4**

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

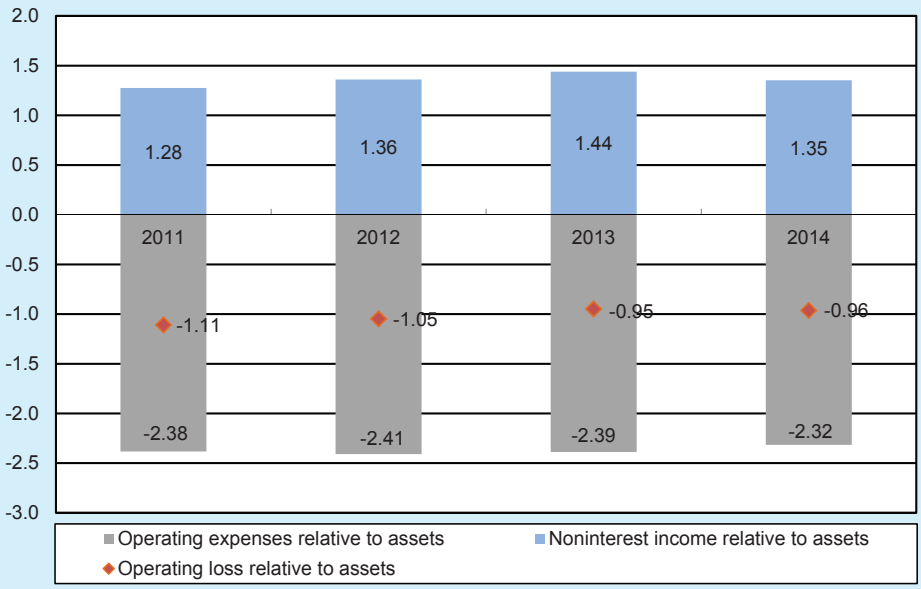
an increase in expenses related to voluntary severance, as a result of the streamlining program implemented at the parent bank and at Mecantile Discount Bank with the aim of reducing the workforce.

Salary and related expenses increased slightly in 2014—by about 0.6 percent (about NIS 17.8 billion; Table 1.23). This change reflects a decline of about 3.8 percent in direct salary expenses and an increase of about 8.5 percent in related expenses, which fully offset the decline. The decline in direct salary expenses was the result of a decline in the three largest banking groups, and took place despite the growth in the two smaller banking groups (Mizrahi-Tefahot and First International). The decline in related expenses was the result, as stated, of the streamlining program at the Discount Group. The decline recorded in total salary and related expenses in 2014 can be attributed to a decline in the active workforce, which declined by 741 positions (Table 1.24), and by a decline in the salary cost in various wage categories (Table 1.24). The decline in the number of workers encompassed most income levels in 2014, while it took place only at the lower wage levels and temporary positions in 2013. These developments resulted in an increase of about 3 percent in the average wage per position (about NIS 384,000 per year; Table 1.25).

b. Operating efficiency

The operating efficiency of the banking groups was affected this year by all those factors that had an effect on income and expenses and on operating volumes. The increase in total operating and other expenses, together with the decline in net interest income, caused a worsening of the operating efficiency ratio in four of the five banking groups, with the aggregate ratio increasing from about 68.9 percent in 2013 to 71.8 percent in 2014 (Table 1.26). Cost per output unit improved in 2014, even though operating costs increased, because the groups' operating volumes increased sharply. The value of the aggregate ratio was 2.39 percent, compared to about 2.41 percent in 2013, but there is variance among the groups (Table 1.26).

Figure 1.36
Noninterest Income, Operating Expenses, and Operating Loss Relative to Total Assets, the Five Banking Groups, 2011–14



SOURCE: Based on published financial statements.

Table 1.25
Salaries and related expenses of the five banking groups, 2000 to 2014

(Reported amounts[a], at current prices)

Year	Average number of posts[b]	Salaries		Related expenses[c]		Salaries and related expenses	
		Total	Per post	Total	Per post	Total	Per post
		(NIS million)	(NIS thousand)	(NIS million)	(NIS thousand)	(NIS million)	(NIS thousand)
2000	39,251	7,220	184	3,557	91	10,777	275
2001	39,753	7,231	182	3,560	90	10,791	271
2002	39,531	6,819	172	3,976	101	10,795	273
2003	38,427	7,260	189	3,566	93	10,826	282
2004	38,170	7,898	207	3,681	96	11,579	303
2005	40,029	8,595	215	4,283	107	12,878	322
2006	42,200	9,561	227	5,354	127	14,915	353
2007	44,286	9,798	221	4,718	107	14,516	328
2008	46,628	9,015	193	5,705	122	14,720	316
2009	47,097	9,640	205	4,378	93	14,018	298
2010	47,818	10,336	216	5,280	110	15,616	327
2011	48,344	10,717	222	5,814	120	16,531	342
2012	48,010	10,872	226	6,389	133	17,261	360
2013	47,577	11,296	237	6,462	136	17,758	373
2014	46,546	10,868	233	7,003	150	17,871	384
		Change compared with previous year (Percent)					
2001	1.3	0.1	-1.1	0.1	-1.2	0.1	-1.1
2002	-0.6	-5.7	-5.2	11.7	12.3	0.0	0.6
2003	-2.8	6.5	9.5	-10.3	-7.7	0.3	3.2
2004	-0.7	8.8	9.5	3.2	3.9	7.0	7.7
2005	4.9	8.8	3.8	16.4	11.0	11.2	6.1
2006	5.4	11.2	5.5	25.0	18.6	15.8	9.9
2007	4.9	2.5	-2.3	-11.9	-16.0	-2.7	-7.3
2008	5.3	-8.0	-12.8	20.9	14.5	1.4	-3.6
2009	1.0	6.9	6.2	-23.3	-23.8	-4.8	-5.7
2010	1.5	7.2	5.4	20.6	18.3	11.4	9.7
2011	1.1	3.7	2.8	10.1	9.1	5.9	4.6
2012	-0.7	1.4	1.8	9.9	10.8	4.4	5.3
2013	-0.9	3.9	4.9	1.1	2.3	2.9	3.6
2014	-2.2	-3.8	-1.7	8.4	10.3	0.6	2.9

[a] Until 2002, amounts are adjusted for the effect of inflation on the basis of the December 2003 index.

[b] The number of posts includes posts at subsidiaries abroad and at consolidated companies, translation of the cost of overtime and budgets for external personnel that were required to supplement current personnel and for the assimilation of projects.

[c] This item includes mainly severance pay, benefit payments, advanced study fund, pension, vacation, national insurance and payroll tax, other related expenses, voluntary retirement expenses and benefits deriving from the allocation of options to employees.

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

Table 1.26

Average cost[a] and efficiency ratio[b], five banking groups, 2012–14

(percent)

	Average cost			Efficiency ratio		
Bank	2012	2013	2014	2012	2013	2014
Leumi	2.46	2.37	2.42	74.9	69.1	74.3
Hapoalim	2.43	2.39	2.32	65.2	66.0	65.2
Discount	2.89	3.00	3.13	75.5	77.5	85.3
Mizrahi-Tefahot	1.78	1.73	1.60	58.2	59.6	60.8
First International	2.72	2.63	2.52	74.1	73.7	76.4
Average of the five banking groups	**2.45**	**2.41**	**2.39**	**69.9**	**68.9**	**71.8**
Union	2.06	2.08	1.98	78.7	79.5	83.6
Bank of Jerusalem	2.14	2.22	2.54	73.9	78.7	75.4
Dexia Israel Bank	0.53	0.58	0.51	36.2	37.3	32.2
Total	**2.43**	**2.39**	**2.37**	**70.0**	**69.2**	**72.0**

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

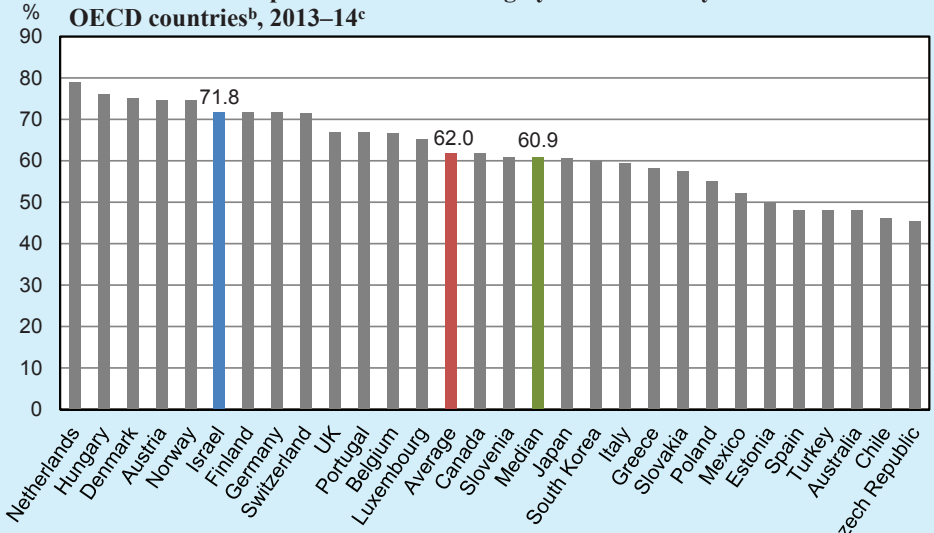
[b] The ratio between total operating and other expenses and total net interest and noninterest income (cost to income).

SOURCE: Based on published financial statements.

An examination of the cost per output unit compared to noninterest income relative to total assets shows that the groups' operating loss rate declined somewhat in recent years, and remained stable in 2014 (Figure 1.36). The operating efficiency of the Israeli groups remained low compared to the efficiency in other banking systems in the OECD (Figure 1.37), which is reflected in the high level of the operating efficiency ratio.

Figure 1.37

International Comparison of the Banking System Efficiency Ratio[a] in OECD countries[b], 2013–14[c]



[a] Total operating expenses out of total net interest and noninterest income.

[b] The US, Sweden, Ireland and France were excluded due to a lack of data.

[c] Data for Finland, Germany and Switzerland are as of December 2013. Data for Belgium, the Czech Republic, Italy, South Korea, Luxembourg, Norway, Portugal and the UK are as of June 2014. Data for Austria, Canada, Chile, Denmark, Estonia, Greece, Japan, Poland, Slovakia and Turkey are as of September 2014. Data for Australia, Hungary, Mexico, Netherlands, Slovenia, Spain and Israel are as of December 2014.

SOURCE: Foreign countries—International Monetary Fund; Israel—Based on published financial statements.

Box 1.2: Activity Segments—Business Volume and Financial Results

Background:

In the early 2000s, some of the large banking groups began dividing their activity segments into independent profit centers, and their managements use the division to analyze business results and make decisions accordingly. According to Bank of Israel directives[1], an activity segment must fulfill three conditions: It must deal with business activity from which it may generate income and bear expenses; the results of its activity are examined regularly by management and the Board of Directors in order to reach decisions regarding the resources allocated to it and the evaluation of its performance; and there is separate financial information regarding it. In July 2005, the Banking Supervision Department clarified what activity segments require disclosure in the financial statements—business, commercial, small businesses, private banking, households, financial management, and others. [2] The activity segments are divided here into two main sub-groups: (1) business activity, which is comprised of the business and commercial segments, and (2) retail activity, which is comprised of the small businesses, private banking and households segments (the last of which also includes mortgage activity).

The division into activity segments is based on types of products and services or on types of customers. Since the banking groups are allowed to define their activity segments according to character, volume and features of their customers' activity, this creates differences in definition between them and makes analysis more difficult. In the analysis presented below, we focus on the five main activity segments which require disclosure: business, commercial, small businesses, private banking and households. The analysis relates only to activity in Israel.

Development of activity by segment

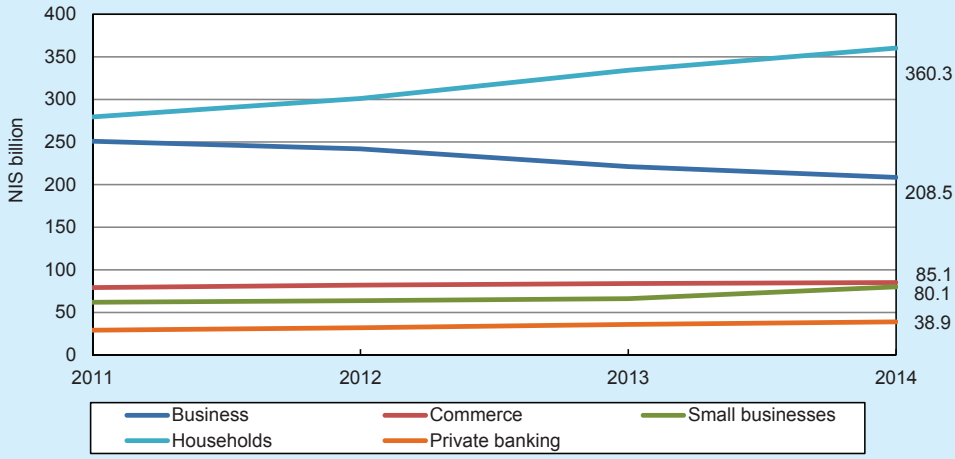
Average outstanding credit[3] issued to these five activity segments increased by an average annual rate of about 3.3 percent between 2011 and 2014 (cumulative increase of about 10 percent), and totaled about NIS 773 billion (Figure 1). In those years, there was a marked trend of shifting between business activity and retail activity: Outstanding credit in the business segments declined by a cumulative rate of about 11 percent in the three reviewed years, while it increased in the retail segments by a cumulative rate of about 29 percent during the period. The growth in outstanding credit was prominent in the households segment (Figure 2), and particularly in housing loans. As a result,

1 Reporting to the Public Directives (12/01)(9) Annual Financial Report, Section 79 (Main Activity Segments).

2 In general, the households segment is comprised of private customers with low to medium financial wealth; the private banking segment is comprised of private customers with high financial wealth; the small businesses segment is comprised of commercial customers with a low volume of business activity; the commercial segment is comprised of businesses with a medium volume of business activity; the business segment is comprised of corporations with large sales turnover and indebtedness.

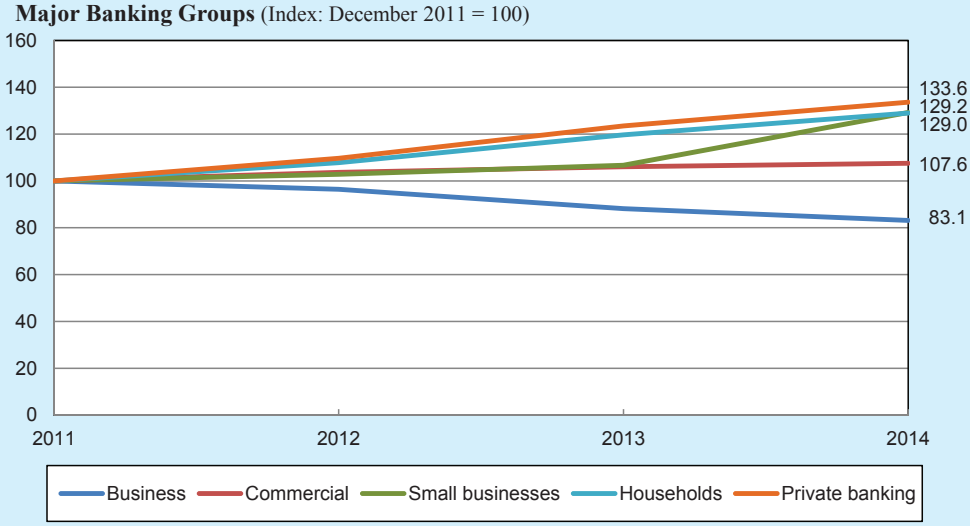
3 The analysis in this part does not reconcile with the analysis in the chapter dealing with the credit portfolio and credit risk, due to the use of different definitions.

Figure 1
Development of Credit[a,b,c] in Each of the Five Classic Activity Segments, the Five Major Banking Groups, 2011–14



[a] In the first quarter of 2013, the Discount Group reclassified credit to the various activity segments. In order to be able to compare the data for 2011–13 to the later data, we standardized them.
[b] The sharp growth rate recorded in the small business segment during 2014 is the result of a change in classification made by the FIBI Group.
[c] Activity in Israel, not including the financial management segment, "others" and adjustments.
SOURCE: Published financial statements and reports to the Banking Supervision Department.

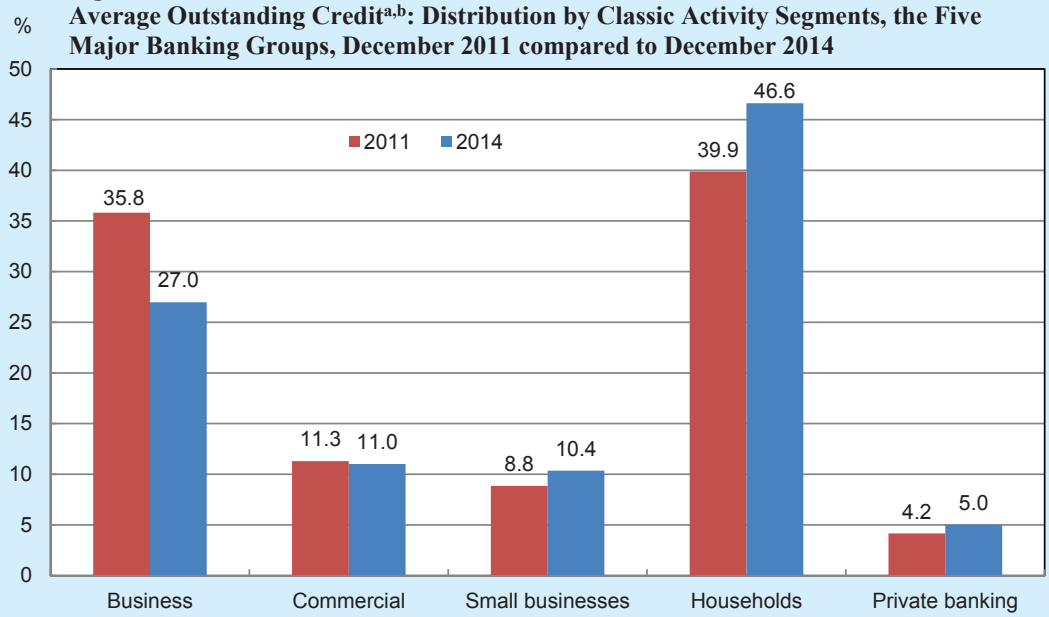
Figure 2
Development of Credit[a,b,c] in Each of the Five Classic Activity Segments, the Five Major Banking Groups (Index: December 2011 = 100)



[a] In the first quarter of 2013, the Discount Group reclassified credit to the various activity segments. In order to be able to compare the data for 2011–13 to the later data, we standardized them.
[b] The sharp growth rate recorded in the small business segment during 2014 is the result of a change in classification made by the FIBI Group.
[c] Activity in Israel, not including the financial management segment, "others" and adjustments.
SOURCE: Published financial statements and reports to the Banking Supervision Department.

the distribution of credit between the various activity segments changed, and there was a marked shift from the business segment to the household segment, with households' share of total credit increasing to about 47 percent (compared to 40 percent in 2011), while the business segment's share declined to about 27 percent (compared to about 36 percent in 2011) (Figure 3). These developments continued in 2015, when there was a further decline in credit to the business segment and further growth in the other activity segments.[4]

Figure 3
Average Outstanding Credit[a,b]: Distribution by Classic Activity Segments, the Five Major Banking Groups, December 2011 compared to December 2014



[a] In the first quarter of 2013, the Discount Group reclassified credit to the various activity segments. In order to be able to compare the data for 2011–13 to the later data, we standardized them.
[b] Activity in Israel, not including the financial management segment, "others" and adjustments.
SOURCE: Based on Published financial statements and reports to the Banking Supervision Department.

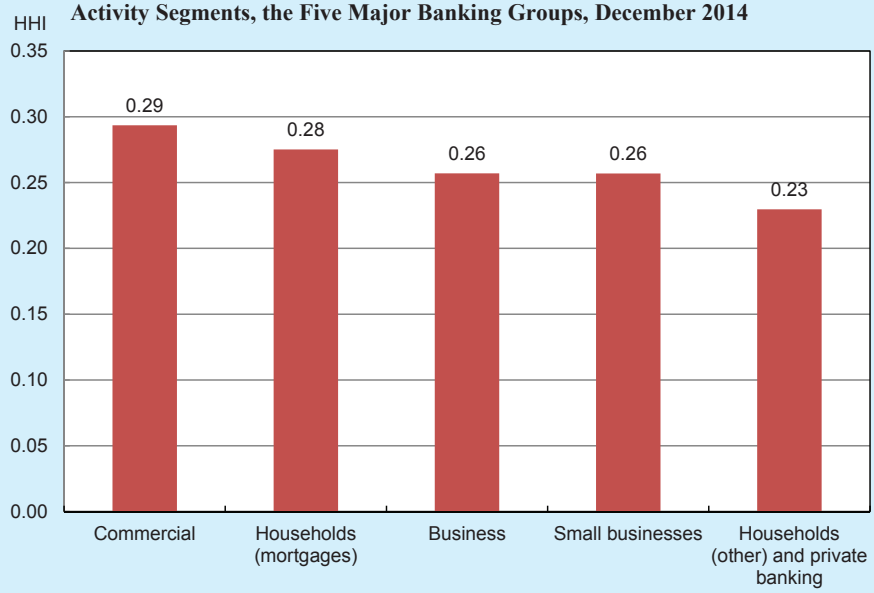
Concentration of the banking credit portfolio by segment

The professional literature tends to distinguish between two approaches[5] to examining competition in the banking industry: (1) The Structure Conduct Performance (SCP), which holds that there is a connection between the structure of the banking system, the bank's behavior, and its performance.

[4] The First International Group reclassified credit to the small businesses segment and to the commercial segment this year, which had a slight effect on the rates of change in those segments. The Discount Group also carried out reclassifications and adjustments over the years, but the group's credit balances were standardized and do not affect the rates of change.

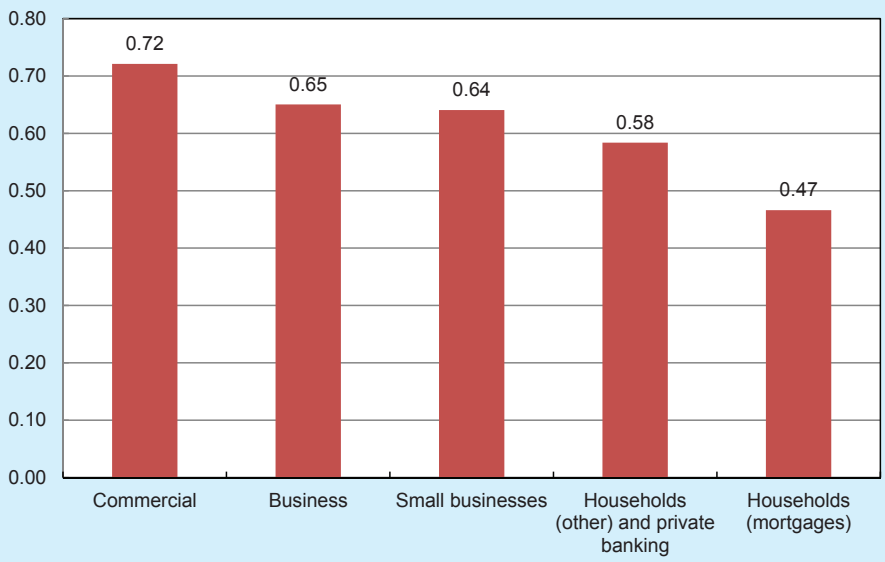
[5] A third approach—the Efficiency Hypothesis approach—connects the bank's performance and the extent of concentration in the industry with the extent of the banking corporation's efficiency. However, this approach is not widely used.

Figure 4
The Herfindahl-Hirschman Index (HHI) of Credit Concentration[a], by Classic Activity Segments, the Five Major Banking Groups, December 2014



[a] The figures relate to activity in Israel and do not include the financial management or "others" segments, or adjustments.
SOURCE: Based on Published financial statements and reports to the Banking Supervision Department.

Figure 5
Credit Market Share[a] of the Two Largest Banking Groups[b] (CR_2), by Activity Segments, December 2014



[a] The figures relate to activity in Israel and do not include the financial management or "others" segments, or adjustments.
[b] Bank Hapoalim and Bank Leumi.
SOURCE: Based on published financial statements and reports to the Banking Supervision Department.

The more concentrated the market is, the greater the ability of the banking corporations to use market power and to present good results. (2) The Contestability approach, which holds that competition can exist even in a concentrated banking system, and the factor that determines the extent of competition in the industry is not the number of banks, but the basic market attributes, such as entry and exit barriers to and from the industry, the existence of credit and deposit alternatives, and so forth. According to this approach, the banking system will face a competitive threat—and will therefore act in a competitive fashion even when there are few banking institutions active in the industry—if a number of conditions exist: developed capital and money markets, the existence of nonbank financial institutions, the lack of entry and exit barriers for banking firms into and out of the industry, and access to banks and markets abroad.

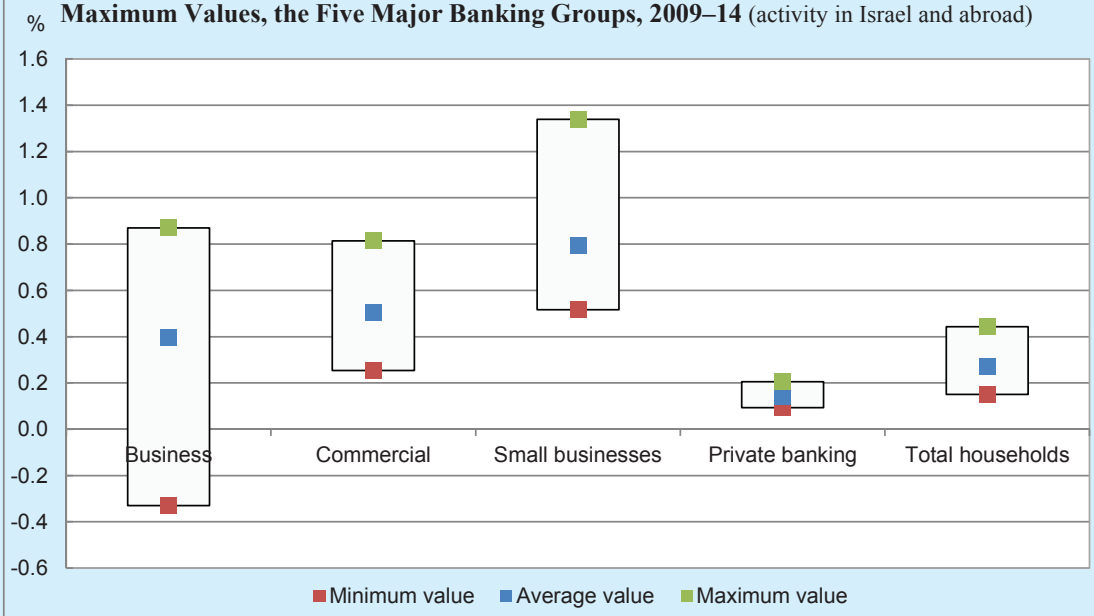
Banking credit activity is characterized by high concentration in each of the activity segments, even though each one of them has different activity characteristics and a different extent of competitive threat. The Herfindahl-Hirschmann index—an index of concentration that takes into account the distribution of credit between groups—also indicates a high level of concentration in most segments, particularly in the commercial and households (mortgages) segments (Figure 4). The market segment of the two largest banking groups (Hapoalim and Leumi) ranges from 72 percent in the commercial segment to 47 percent in the households (mortgages) segment (Figure 5). Credit concentration in the households (other) segment and in the private banking segment is lower than the concentration in the other segments. It is important to note that the concentration indices presented in this section do not include nonbank credit issued in each of the segments. For instance, the volume of bank credit issued to customers in the business segment only constitutes about 53 percent of total credit issued to them. In contrast, retail customers rely almost absolutely on bank credit. More on the competitive threat, structure and performance appears below.

Analysis of financial results by activity segment

The performance of the business segments is characterized by a high level of exposure to macroeconomic developments and to the business cycles in the economy (Figure 6). During boom periods, the contribution to profit and the return on assets of the business segments are high, and exceed those of the retail segments, while the opposite is true during periods of downturn. (In this regard, the small businesses segment is similar to the business segments, and acts the way they do.) Between 2012 and 2014, the average return on assets was high in the business segments and in the small businesses segment, and was low in the retail segments (Figure 7). The gap can be attributed both to economic developments during the reviewed period and to differences in the characteristics of the segments, including the extent of customer risk, operating costs, and the extent of competition and competitive threat.

The extent of risk as reflected in the loan loss provisions was lower in the retail segments (excluding small businesses) than in the business segments between 2012 and 2014. During this period, the business segment recorded lower loan loss provisions because the quality of credit in it improved

Figure 6
Ratio of Loan Loss Provisions[a,b] in the Classic Activity Segments—Minimum, Average and Maximum Values, the Five Major Banking Groups, 2009–14 (activity in Israel and abroad)



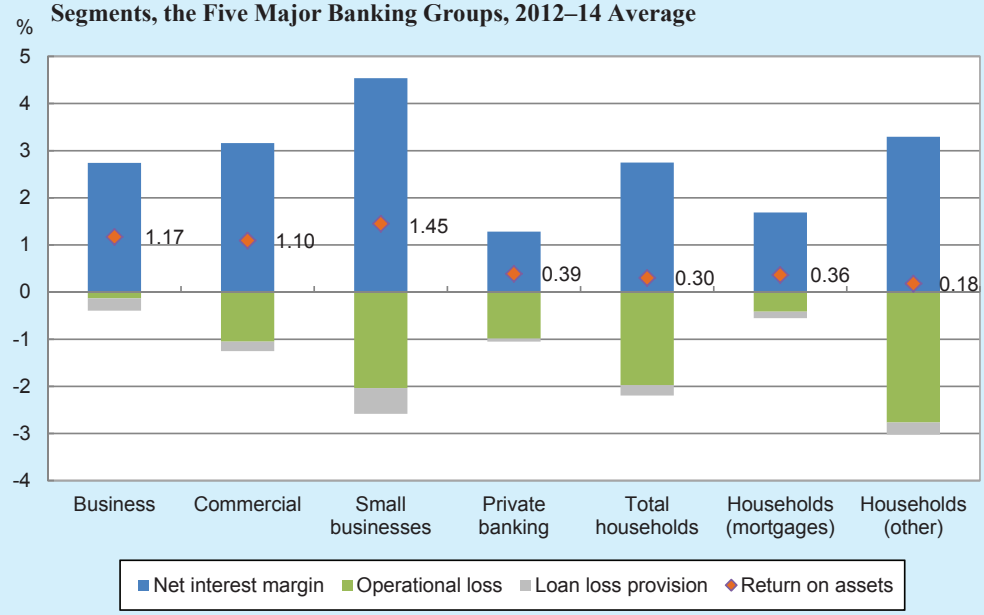
[a] The ratio is calculated in relation to the average balance of assets and liabilities.
[b] The figures relate to activity in Israel and do not include the financial management or "others" segments, or adjustments.

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

in recent years (even though the GDP growth rate stabilized at a low rate), and because the banking groups adopted a targeted policy with the objective of minimizing exposure to risk in respect of customers in this segment. The decline in loan loss provisions was reflected in a decline in the volume of current expenditure and in an increase in the volume of recovery in respect of problematic debts written off in past years. Risk in the small businesses segment is characterized by a high level compared to the other activity segments (0.55; Table 1). This is not unique to Israel, and is the result of two main factors. First, there is an asymmetry of information between the banking corporation and the small business owner—a direct result of the lack of available quality information regarding the borrower's status. Second, small business owners generally have no administrative or financial training.

The operational cost of the segments has a large effect on the return on assets in each segment. The operational cost of the retail segments is significantly higher than that of the business segments, because the retail segments involve high expenses on maintenance and operation of a broad network of branches, including a high amount of physical and human infrastructure. In contrast, business activity is concentrated in a small number of centers, leading to lower cost (Figure 8). The effect of operational cost on the return on assets is measured here through the rate of operational loss relative

Figure 7
Composition of the Average Return on Assets and Liabilities[a] in the Main Activity Segments, the Five Major Banking Groups, 2012–14 Average



[a] The figures relate to activity in Israel and do not include the financial management or "others" segments, or adjustments.

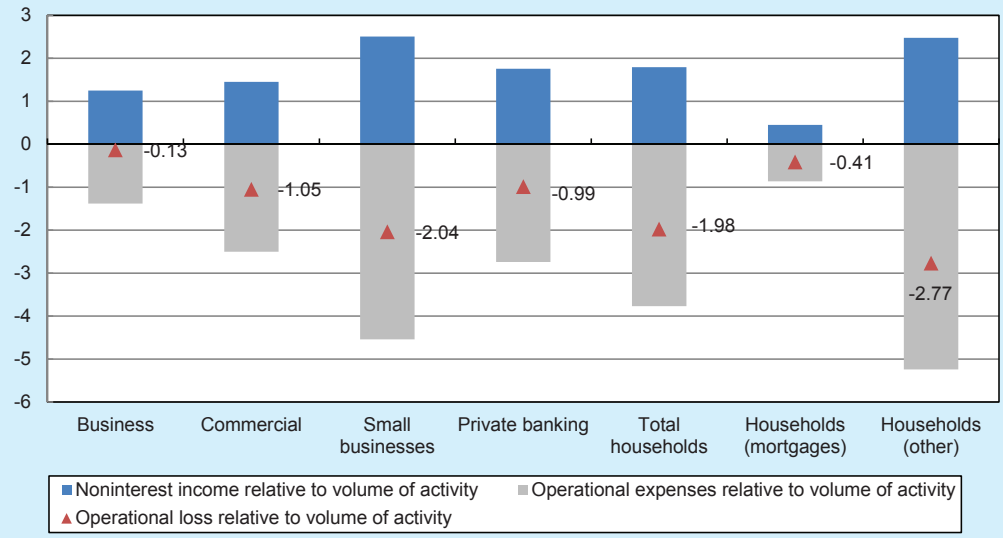
SOURCE: Based on Published financial statements and reports to the Banking Supervision Department.

to the average balance of assets and liabilities, a figure which illustrates this well. For instance, the cost per unit of output (average of assets and liabilities) in the households (other) segment is high—about 5.2 percent—compared to about 1.3 percent in the business segment (Figure 8).

The extent of competitive threat is another factor that explains the gap between the returns on assets in the various activity segments. Here, too, it is common to distinguish between the business segments—particularly the business segment—and the other activity segments, since the former enjoy a supply of nonbank credit (and therefore a high level of competitive threat to the banking groups) while the latter do not enjoy alternative sources of financing at reasonable quality (and therefore suffer from a low level of competitive threat). Competitive threat in the business segment has increased in the past decade due to a series of deregulation measures and reforms, including reducing the role of government as a main borrower in the economy, expanding and deepening the tradable government bond market, implementing the Bachar reform, and implementing the Compulsory Pension Law.

While income from credit activity reflects the cost of the sources of financing and the risk premium, they also reflect the extent of competitive threat and the market power exercised on customers in the various segments. An examination of the average rate of income received from credit activity in the past three years shows high variance between the segments. The level is high in the small business and households (other) segments, and low in the households (mortgages) and private banking

Figure 8
Noninterest Income, Operational Expenses and Operational Loss Relative to Volume of Activity in the Classic Activity Segments[a,b], the Five Major Banking Groups, 2012–14



[a] The volume of activity is equal to the average of the balance of assets and the balance of liabilities.
[b] The figures relate to activity in Israel and do not include the financial management or "others" segments, or adjustments.
SOURCE: Based on Published financial statements and reports to the Banking Supervision Department.

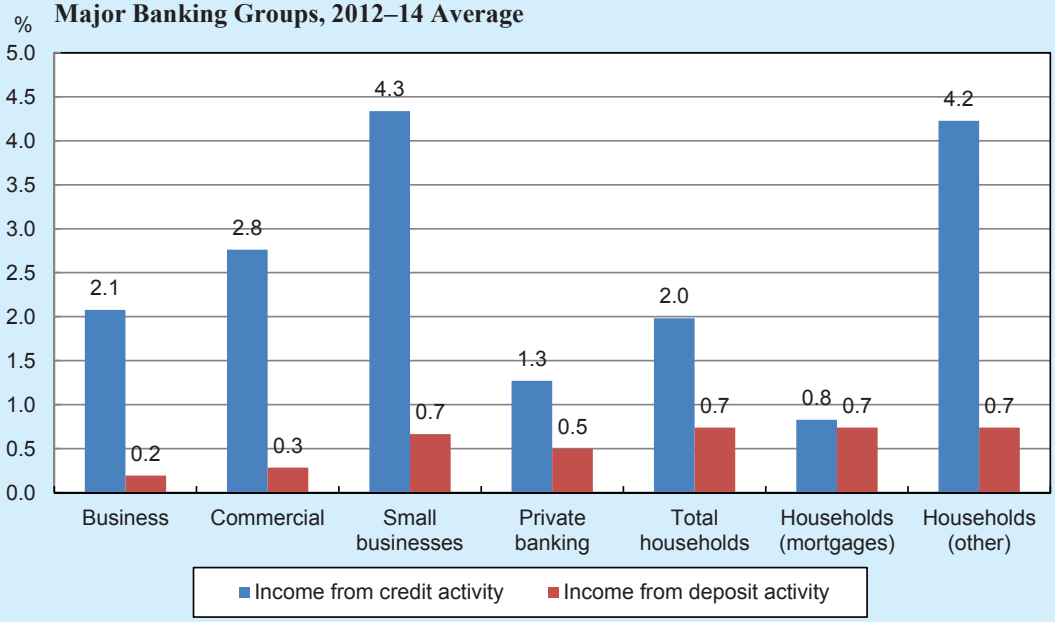
segments (Figure 9). Even though the low extent of risk in the latter two segments can explain the low rates of income in those segments, it can be said that it is also affected by the fact that there is a high level of competition between the banking groups in the households (mortgages) segment—both due to the nature of the product and due to the behavior of consumers—and that the customers in private banking have nonbank credit alternatives. In terms of the first two segments, the high rate of income can also be related to the lack of a nonbank credit market for these customers, and the lack of competition within the banking system itself (in contrast to the area of mortgages). The rate of income from deposit activity reflects the income of the groups from such activity relative to the shadow price[6], and shows that in the business segments—segments that are characterized by large deposits—the rate of income is low compared to the rate in the retail segments. The low rate of income means that the interest paid on deposits is high (Figure 9).

The operational efficiency of the banks in the activity segments is derived from the volume of income and expenditure in each one. An examination over time illustrates that the efficiency of the retail segments is stable, while the efficiency of the business segments is characterized by high variance. This variance is derived from the fact that business activity is, as stated, connected to economic

[6] The shadow price is the interest rate that banks use for internal pricing, including the internal calculation of spreads from credit provision and deposit receipt activities.

activity and to the business cycles, which leads to volatility in income volume. Between 2012 and 2014, the retail segments show low efficiency, while the business segments showed high efficiency. The small businesses segment showed high efficiency relative to the retail segments, due to high returns and spreads in this segment and despite the high expenses inherent in it (Figure 7).

Figure 9
Income from Credit and Deposit Activity[a] in the Classic Activity Segments, the Five Major Banking Groups, 2012–14 Average



[a] The figures relate to activity in Israel and do not include the financial management or "others" segments, or adjustments.
SOURCE: Based on Published financial statements and reports to the Banking Supervision Department.

Table 1
Activity segments—balance-sheet balances and performance indices
The five major banking groups

	Business	**Commercial**	**Small businesses**	**Private banking**	Households (other)	Households (mortgages)	**Total households**
	Balance-sheet balances (yearly average in 2014: NIS million)						
Average balance of credit	210,428	86,357	73,419	37,487	116,621	232,591	349,211
Average balance of assets	216,362	89,485	74,149	39,304	119,202	232,951	352,153
Average balance of deposits	133,784	83,271	81,447	169,093	304,585	44	304,629
Average balance of liabilities	151,410	88,570	86,370	170,187	311,970	364	312,334
	Performance indices (2012–14 average; percent)						
Return on assets (ROA)	1.17	1.10	1.45	0.39	0.18	0.36	0.30
Net interest margin (net interest income on the average balance of assets and liabilities)	2.74	3.16	4.54	1.28	3.30	1.69	2.75
Income from credit activity	2.08	2.76	4.34	1.27	4.23	0.83	1.98
Income from deposit activity	0.20	0.28	0.67	0.50	0.74	0.74	0.74
Operational income on the average balance of assets and liabilities	1.25	1.45	2.51	1.76	2.47	0.45	1.79
Average cost (operational expenses on the average balance of assets and liabilities)	1.38	2.50	4.54	2.74	5.24	0.86	3.77
Operational loss on the average balance of assets and liabilities (absolute value)	0.13	1.05	2.04	0.99	2.77	0.41	1.98
Efficiency ratio (operational expenses out of total gross income)	36.2	55.4	63.5	91.0	92.4	40.6	84.1
Loan loss provisions on the average balance of assets and liabilities	0.26	0.20	0.55	0.07	0.26	0.14	0.22

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

9. STRESS TESTS

Macroeconomic stress test of the banking system based on uniform scenario, 2014–15

a. General

The Banking Supervision Department has been carrying out macroeconomic stress tests based on a uniform scenario on the banking system since 2012. The banking corporations are required to estimate the results of the scenario through various methodologies that they develop, while at the same time, the Banking Supervision Department conducts its own test on the same scenarios, applying a uniform methodology for all the banks.

The stress tests contribute to an understanding of risks facing the banking system in general and each bank on its own, and are an accepted international standard based on the Basel Committee's recommendations. The characteristics of the stress test scenarios are set each year after analyzing the potential risks faced by the banking system and their development over the recent period, assessing the probability of the scenario occurring, studying the lessons learned from previous crises, and compiling the insights gleaned from stress tests conducted previously in Israel and abroad. The stress test scenario should be severe but plausible, and should reflect the main risks to which the banking system is exposed at the current time.

Beginning with the previous year, the Banking Supervision Department integrates the uniform stress test as a complementary element to the Supervisory Review and Evaluation Processes (SREP), and its integration includes both quantitative and qualitative aspects. In parallel, the banking corporations[61] are required to integrate it into their internal capital adequacy assessment processes (ICAAP). This is intended to utilize the testing process as an aid for evaluating the banking system's resilience, to ensure the existence of sufficient capital levels, to test the banks' capital planning, to set capital requirements, and to take other measures as necessary—in accordance with best practices customary around the world. In addition, this process allows an examination of the banks' ability to conduct a uniform stress test based on statistical models and other methodologies, and supports the understanding of focal points of risk in the banking corporations while strengthening the supervisory dialogue with them.

The characteristics of the scenario and the results of the test conducted by the Banking Supervision Department are presented below.

b. The scenarios

The test was based on two scenarios—a base scenario and a stress scenario. The stress scenario featured a high level of severity, and its parameters are calibrated to stress the main risk factors in the Israeli and global economy and in the banking system. The scenario horizon is 13 quarters, and the starting point is September 30, 2014.

[61] The five banking groups (Leumi, Hapoalim, Discount, Mizrahi-Tefahot and First International) and two independent banks (Union Bank and Bank of Jerusalem).

The base scenario: The values of the variables in this scenario are based on the Bank of Israel's macroeconomic models, international institutions' projections of global developments, and other assessments regarding economic developments—all as of the date on which the scenarios were formulated (September 2014).

The stress scenario: The macroeconomic stress scenario includes a severe domestic shock as a result of a deterioration in Israel's geopolitical situation, alongside a global shock resulting from a serious slowdown in the European economy and a certain slowdown in the US economy. The two shocks lead to a severe decline in domestic economic activity in Israel, which is also reflected in a sharp decline in private consumption, and a serious negative impact on the labor market and on the housing and real estate market. The low global interest rate environment, alongside the sharp decline in demand, lead to monetary accommodation adopted through a reduction in the interest rate to near zero. Alongside the decline in real economic activity, there is also a sharp decline in financial and real asset prices, against the background of the underpricing of risk in the bond market and high housing prices. (Figure 1.38) presents the development of the macroeconomic variables in each of the scenarios, and Table 1.27 presents an international comparison relating to the variables of the scenarios conducted in other advanced economies.

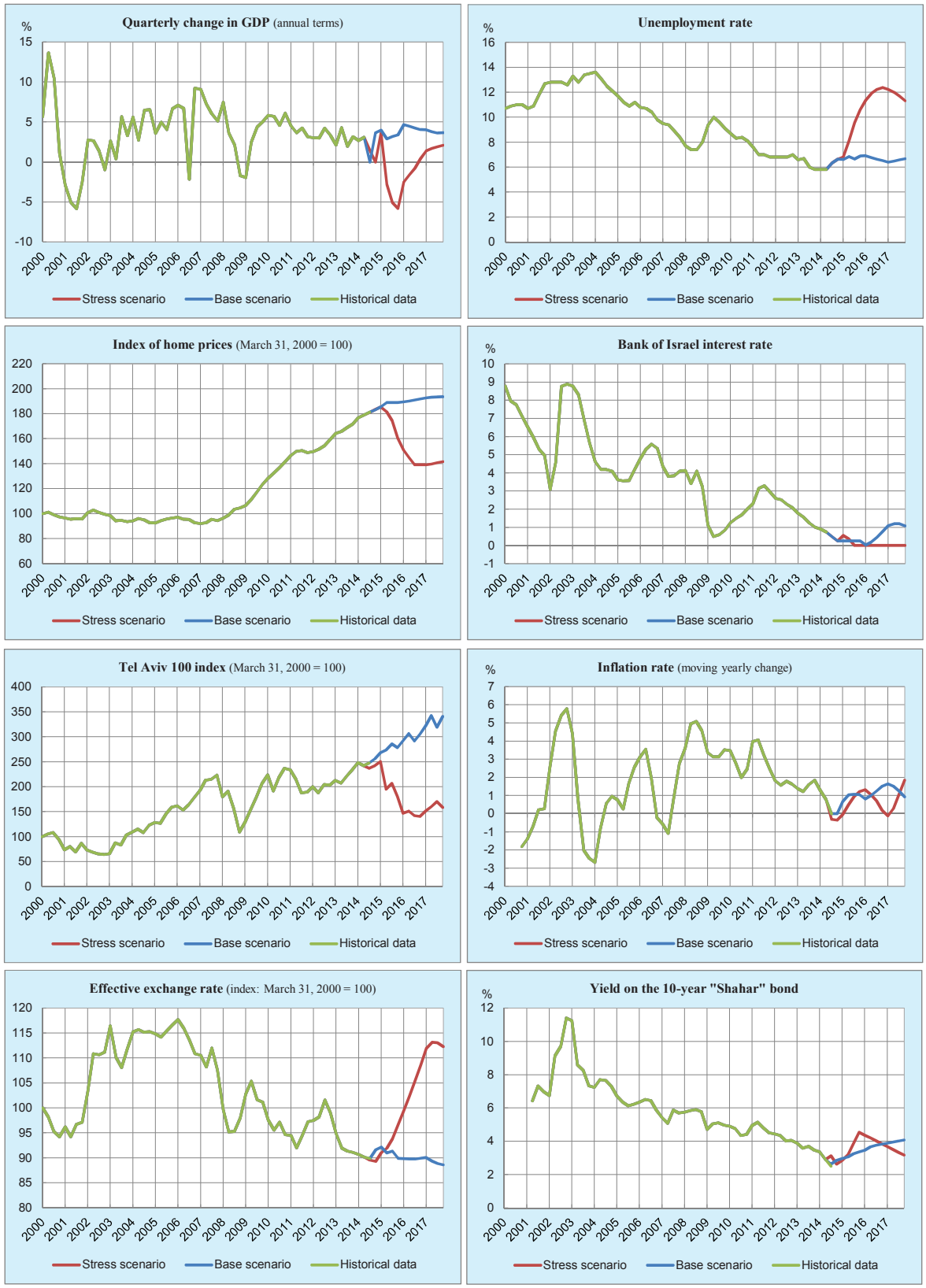
c. The methodology and assumptions

The banking Supervision Department conducted the uniform stress test for 2014–15 based on assumptions accepted worldwide, including: during the course of the scenario there is no change in asset balances or composition; the banks do not raise additional capital; and there is no accounting for the possible responses by the banks to the development of the crisis.

In order to carry out the stress test, the Banking Supervision Department estimated the effect of the scenario on the main sections in the income statement and balance sheet, and on Common Equity Tier 1 capital. In order to estimate the credit risk and its main focal points, the Banking Supervision Department used a range of models and methodologies which it developed for that purpose: satellite models that connect macroeconomic variables and credit losses, and models based on data at the borrower level. In addition to credit risk, the Banking Supervision Departments estimated market risks—the effects on the bond and stock portfolios.

It should be noted that the uniform stress test does not include an analysis of the scenario's effect on liquidity risk and on operational risk. It also does not include related indirect consequences, such as withdrawals of deposits by nonresidents, lowered credit ratings for banks, and a negative impact on investor confidence. The test focuses on the scenario's direct effect on the credit portfolio, the securities portfolio, and banks' profitability.

Figure 1.38
Historical Macroeconomic Data and Development of Scenarios, 2000–17



SOURCE: Historic data—Based on Central Bureau of Statistics and Tel Aviv Stock Exchange. Base and stress scenario data—Bank of Israel.

Table 1.27

Comparison of main macroeconomic variables in a stress test[a], Israel and selected economies

(percent)

	Israel		US			Europe		UK	
Main macroeconomic variables	**Starting point**	**Stress scenario**	**Starting point**	**Stress scenario**	**Severe stress scenario**	**Starting point**	**Stress scenario**	**Starting point**	**Stres scenari**
GDP - Maximum contraction in the stress scenario		**4.6**		**0.5**	**4.6**		**2.1**		**3.9**
Unemployment rate - Maximum level in the stress scenario	6.3	**12.4**	6.1	**8.0**	**10.1**	10.7	**13.5**	7.2	**11.8**
Monetary interest rate[b] - Maximum level in the stress scenario	0.5	**0.0**	0.0	**5.3**	**0.1**	-	**-**	0.5	**4.2**
Inflation - Maximum/minimum quarterly level in the stress scenario (in annual terms)	0.6	**3.0**	1.1	**4.0**	**2.0**			2.1	**6.6**
Depreciation of the currency[c]		**24**		**-4**	**-13**				**29**
Long-term yields - Maximum/minimum level in the stress scenario	2.6	**4.6**	2.5	**5.8**	**0.9**			2.9	**5.8**
Stock index - Maximum change of the leading index in each country		**-44**		**-28**	**-58**		**-20**		**-28**
Home prices - Maximum change during the stress scenario		**-25**		**-14**	**-26**		**-12**		**-35**

[a] Duration of the scenario: Israel - 13 quarters; US - 9 quarters; UK and Europe - 3 years.

[b] Data regarding the ECB's monetary interest rate were not published in the stress scenario carried out in Europe.

[c] In Israel - the nominal effective exchange rate, including the yen, pound sterling, US dolllar and euro (the currencies of Israel's main trading partners); In the US - the dollar/euro exchange rate; In the UK - the effective exchange rate vis-à-vis a basket of currencies. Depreciation (+), Appreciation (-).

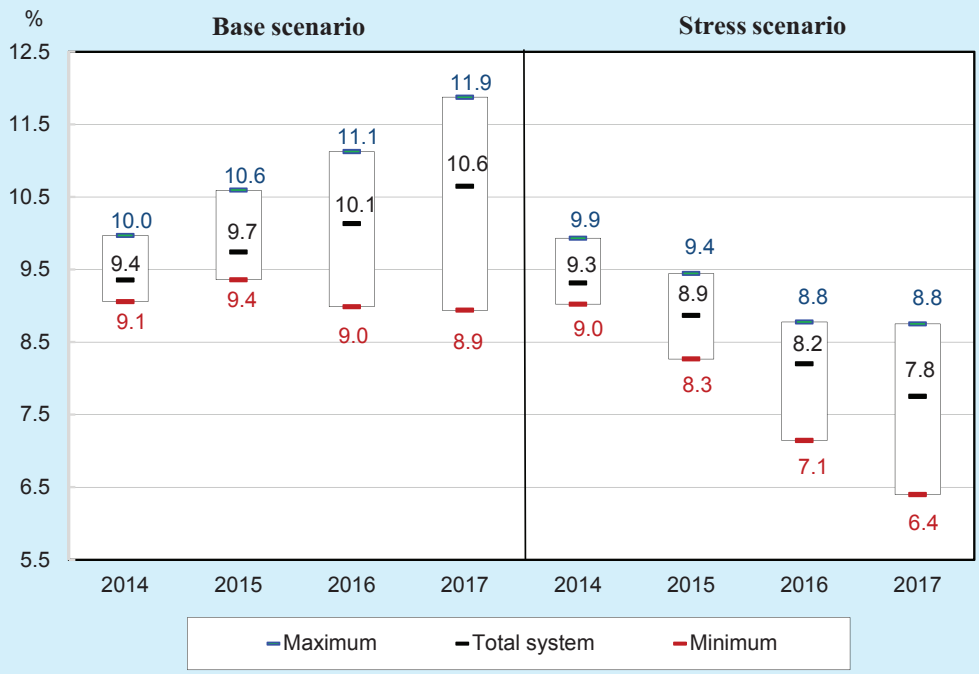
SOURCE: Israel - Bank of Israel; US - Federal Reserve; UK - Bank of England; Europe - European Banking Authority.

d. The findings

The results of the stress test indicate that a realization of the adverse domestic macroeconomic scenario combined with a global shock would have a significant impact on the banking system, but no risk to stability is expected. The recession will make it difficult for business and private borrowers to meet their commitments, and the banks will record large losses in the credit portfolio.

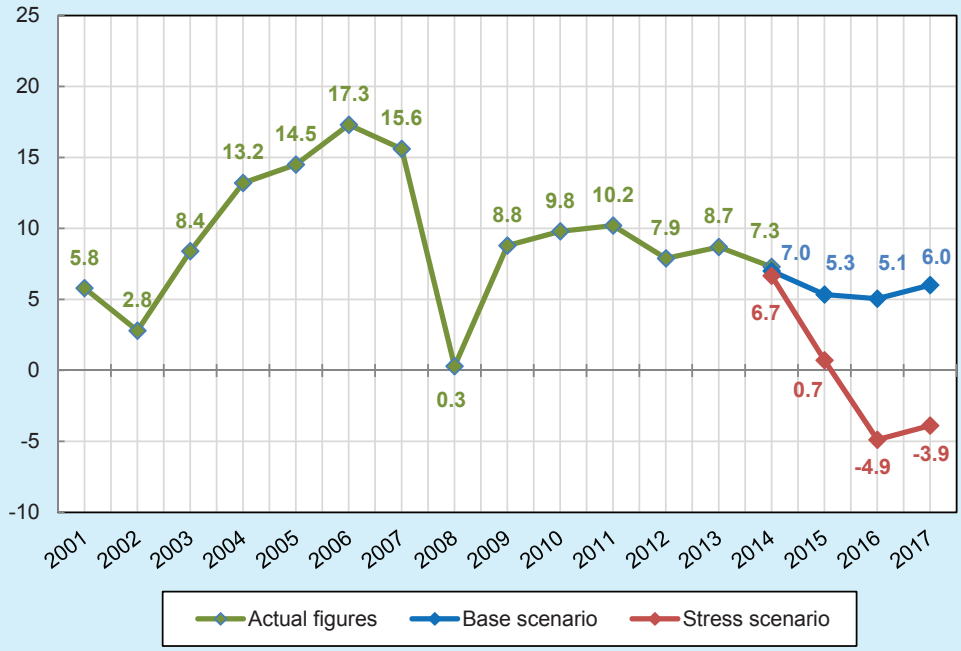
The negative impact to the profitability of the banking system could be serious and prolonged: A cumulative loss of more than NIS 7 billion, and return on equity of 0.7 percent in 2015, of -4.9 percent in 2016, and of -3.9 percent in 2017. The Common Equity Tier 1 capital ratio of the banking system will be negatively affected, and declined from 9.4 percent in September 2014 (the beginning of the scenario) to 7.8 percent at the end of 2017 (the end of the scenario). The Common Equity Tier 1 capital ratio of the banks will range from 6.4 percent to 8.8 percent—levels that show that the capital buffers are sufficient to absorb serious macroeconomic shocks to the Israeli and global economy. However, it should be remembered that the results present a direct impact to the banking system, and do not take into account indirect and feedback effects (Figure 1.39 and Figure 1.40).

Figure 1.39
Development of Common Equity Tier 1 Ratio, Total System, December 2014 to December 2017



SOURCE: Banking Supervision Department calculations.

Figure 1.40
Development of the Return on Equity, the Total System, 2001–17



SOURCE: Banking Supervision Department calculations.

The most significant negative impact on bank profitability, as noted, derives from credit losses. During the three years of the adverse scenario occurring, banks would post credit losses of about NIS 41 billion (before tax), an annual average loss of 1.5 percent. About 40 percent of the credit losses, NIS 16.5 billion, derives from credit to the construction and real estate industry, and from housing credit. (More on the results of the stress test in the housing credit portfolio appears in Section 4.) Part of the credit losses comes with a lag (in the second and third years), and is liable to increase the severity of the crisis and to lead to an additional negative impact. With regard to the securities portfolio, the declines in value over the course of the scenario total about NIS 3 billion. This loss is not high relative to the credit losses, a result of the fact that the Bank of Israel interest rate declines during the scenario and long-term bond yields increase at a relatively moderate rate.