

Chapter 4

Financing of Economic Activity: Sources and Uses

- The economy's sources of financing continued to grow in 2015, against the background of an increase in the national rate of saving, which was manifested in an expansion of the public's gross financial asset portfolio and of home purchases.
- In the financial assets portfolio managed by institutional investors, most of the net new investment went to credit provided to the government and investments abroad, while the public chose to increase its holdings of liquid assets. This occurred against the background of low yields on government bonds and low interest rates on deposits, at the same time as the perceived high level of risk in the equities markets.
- The flow of investment abroad by Israeli residents (not including reserve assets) moderated this year, while the flow of investment by nonresidents into Israel remained stable. The net capital outflow in the financial account of the balance of payments continued.
- The transmission from monetary policy to consumption by the deposits channel apparently weakened as the Bank of Israel interest rate neared zero. In contrast, it appears that the transmission to economic activity by the credit channel was maintained.
- The credit to households, both housing and nonhousing, increased by a high rate again this year. Although Israel's ratio of household debt to GDP is relatively low, the ratio of nonhousing credit to GDP is high by international standards. Therefore, encouraging the expansion of nonhousing credit will raise the level of leveraging among households and the risk to which they are exposed.
- Total credit to the nonfinancial business sector increased this year again at a low rate, a continuation of the trend since 2008. This is the result of a decline in credit to large businesses, which was apparently affected by the large capital stock in the economy, which reduced the demand for investment by those businesses.
- Large businesses have alternative methods of obtaining capital: bonds issues, institutional loans and credit from abroad. This year, there was a moderate increase in the net issue of bonds by the nonfinancial business sector following the contraction last year. Most of the issues were in the real estate and construction industry.
- Large businesses are not subject to a credit supply constraint. This is the conclusion reached based on the stability in internal sources of credit of public companies.
- Bank credit to small and medium-sized businesses, which is almost their only source of credit, continued to increase this year, by a rapid rate. In addition, the gap in interest rates narrowed between them and large businesses.
- In contrast, the credit provided by institutional entities for private economic activity (households and the business sector) grew only somewhat, since their traditional customers are large businesses, which as noted reduced their demand for investment. The shifting of institutional sources of credit to small and medium-sized businesses should be facilitated through the securitization of retail banking credit portfolios.

The sources of financing economic activity continued to grow in 2015, against the background of an increase in the national saving rate, a development that was manifested in the growth of the gross financial assets portfolio and home purchases. The main uses of these sources were credit to the government and households and investment abroad, while the financing of the nonfinancial business sector's activity increased at a slow pace.

There is no constraint on the supply of credit in the economy. Housing and nonhousing credit to households has grown at a rapid pace in recent years and the level of interest rates on this credit is relatively low.

The analysis indicates that there is no constraint on the supply of credit in the economy. Housing and nonhousing credit to households has grown at a rapid pace in recent years and the level of interest rates on this credit is relatively low. Although total credit to the business sector virtually did not increase, this is apparently the result of low demand for investment in principal industries in recent years, after having reached a very high level in 2011. Furthermore, there has been a structural change in the internal allocation of credit segmented by size of activity (primarily in the allocation of bank credit) and rapid rates of change in segments. Bank credit to small and medium-sized businesses has grown rapidly in recent years, in parallel with a decline in bank credit to large businesses. The drop in interest rates was larger for small and medium-sized businesses than for large businesses, such that the gap between them narrowed. This development is supported by Companies Survey data, which indicated a decline in the share of small and medium-sized companies that report financing constraints and only a slight increase in the share of large companies reporting such constraints. The decrease in bank credit to large businesses was accompanied by stability in non-bank credit, which is used primarily by them. Large businesses do not face any constraint in the bond market, which can easily accommodate even issues by foreign companies, and they can also turn to the international credit market. The figures for the internal sources of public companies, which serve as a representative sample for large businesses, do not indicate a shortage of credit either. The aforementioned indicates that the low demand for investment in the economy is the result of low levels of demand for investment among large businesses.

There has recently been a variety of initiatives and regulatory changes related to sources of finance in the economy and its uses. In 2016, the Solvency 2 regulations, which relate to the insurance companies, will go into effect. The Team for Regulation of Non-Institutional Financial Activity (the Briss Committee) submitted its recommendations, of which a major one is the appointing of a regulator over providers of currency services and of non-institutional credit. In this context, legislation has been passed for the issuing of bonds in parallel to the provision of credit to non-bank corporations as well. A Credit Information Bill is in the advanced stages of approval. This law is expected to increase competition in the retail credit sector and increase access to credit. The recommendations of the Joint Team to Promote Securitization, whose goal was to remove barriers in this market and to advance and develop it, will soon begin the legislation process. At the same time, the Strum Committee is currently formulating its recommendations to increase competition in common financial and banking services in Israel. The numerous initiatives to further increase the sources

of credit to households and small and medium-sized businesses, which are liable to result in excess leverage, should be carefully considered, in view of the continuing expansion of credit to these segments.

1. THE SOURCES OF FINANCING ECONOMIC ACTIVITY

a. The public's financial assets portfolio

In 2015, the rate of gross national saving stood at 24.4 percent of GDP, about NIS 277 billion in current prices. This amount is the domestic base for financing the expansion of economic activity, less the net capital outflow in the financial account, i.e., the component that represents the net domestic sources that are channeled to other countries. The savings rate relative to GDP is on a moderate upward trend, following its decline from an average of 24.3 percent of GDP in 2005–07 to about 21.2 percent in 2008. The share of gross saving out of GDP is at the center of the distribution of saving rates of OECD countries and Israel's ranking is continuing to rise, primarily due to the decline in the government deficit and to some extent also because of the drop in energy prices, a process that has increased real income (for further details on saving, see Chapter 2).

The public's gross financial assets portfolio (Table 4.1) includes the financial investments of households and the nonfinancial business sector, as well as the holdings of controlling shareholders of traded companies. The quantitative change in the portfolio reflects a large proportion of public saving.¹ The value of the assets portfolio increased this year by about NIS 142 billion, to NIS 3.3 trillion (an increase of 4.5 percent as compared to an average rate of 6.7 percent during 2010–14). Only about one-quarter of the value of the portfolio can be attributed to the change in the prices of financial assets.² Most of the contribution of the change in financial asset prices is due to stocks in Israel and only a small portion is due to government and corporate bonds. The decline in financial asset prices abroad this year reduced the value of the asset portfolio. New investment in the portfolio, net of the influence of price changes, was primarily in cash and current accounts this year, in view of the low levels of interest rates and yields and the high level of risk in the domestic and global economies.³

In 2015, as in 2014, the net new investment in assets was primarily in the liquid component of the portfolio. Thus, cash and deposits grew by about NIS 100 billion, which accounts for about 70 percent of the increase in the value of the portfolio. A breakdown of this component (Figure 4.1) shows a strong tendency to holding highly

The public's gross financial assets portfolio increased by about 4.5 percent in 2015. Net new investment was focused on liquid assets, which don't bear transaction costs when purchasing, or management fees—cash, current accounts, and deposits of up to 1 week.

¹ The remaining amount is made up of real assets, particularly real estate (as described in Chapter 7a) and holdings in private companies.

² For further details on the changes in financial asset prices, see the Financial Stability Report for the second half of 2015.

³ See Figures 3 and 6 in the Financial Stability Report for the second half of 2015.

Table 4.1
Distribution of the public's gross financial asset portfolio^a, by type of asset, end of period data, 2006–15

Period	Total portfolio NIS billion	Portfolio as a share of GDP Percentage	Government bonds				Corporate bonds ^b		Israeli residents' investments abroad ^e				
			Cash and deposits	Tradable	Nontradable ^f	Distribution in percent	Tradable	Nontradable ^c	Deposits	Bonds	Stocks	Other	
2015	3,315	288	33.8	11.9	9.7	8.1	1.3	2.2	14.9	0.8	5.3	8.1	3.9
2014	3,172	290	32.2	12.5	9.8	8.2	1.6	3.0	15.6	0.7	5.2	8.4	2.9
2013	2,971	281	31.9	13.0	9.3	9.0	1.8	2.6	16.8	0.9	4.2	7.4	3.1
2012	2,728	273	33.5	13.1	9.4	9.4	2.1	2.6	14.9	1.1	4.4	6.4	3.0
2011	2,530	270	34.0	12.1	9.6	9.4	2.2	3.0	15.5	1.8	4.2	5.7	2.7
2010	2,561	292	30.1	12.0	8.7	9.3	2.2	2.7	21.4	2.2	3.2	5.6	2.5
2009	2,298	281	31.8	12.6	9.4	8.7	2.6	2.7	18.5	3.2	3.1	4.8	2.5
2008	1,882	242	37.1	13.9	11.2	6.9	2.9	3.5	11.6	3.9	3.1	3.3	2.7
2007	2,055	279	30.8	10.1	6.6	7.3	3.9	3.2	24.0	4.0	3.6	4.0	2.5
2006	1,837	267	32.4	11.0	7.4	5.0	3.9	4.6	21.4	3.9	4.1	4.0	2.2

^a The public does not include the government, the Bank of Israel, investments by nonresidents, the commercial banks or mortgage banks.

^b Including convertible bonds.

^c Holdings by institutional investors only.

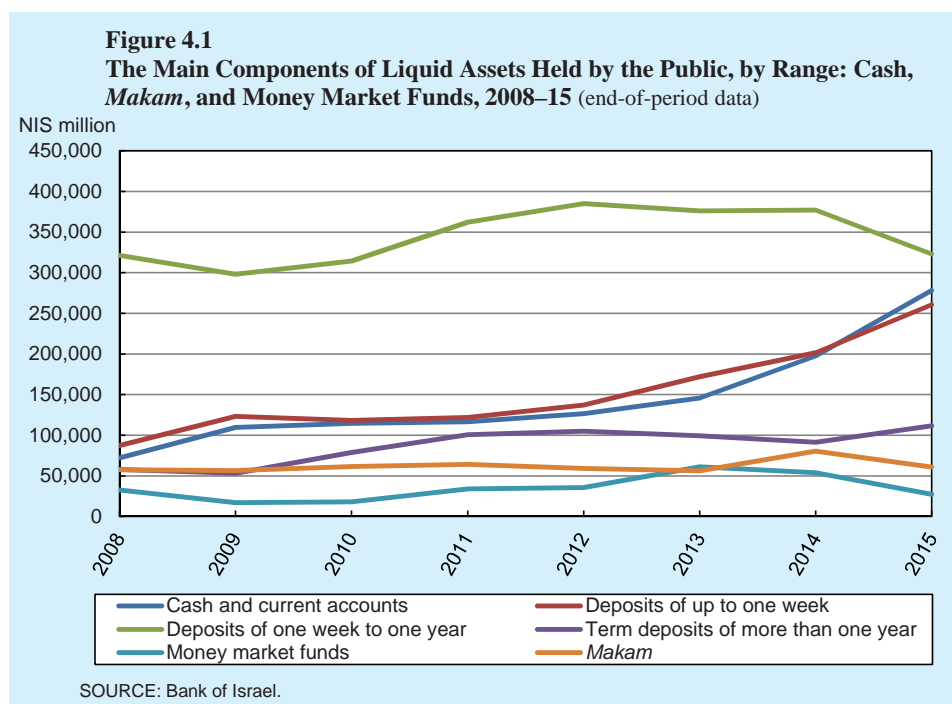
^d Including warrants.

^e Including investments in Israeli securities traded abroad, and excluding investment in TASE-traded ETFs tracking foreign indices.

^f Beginning in 2008, this component includes government obligations to assist the old pension funds.

SOURCE: Bank of Israel.

liquid assets, i.e., cash, current accounts, self-renewing overnight deposits (up to one week) and foreign currency deposits of up to one week. These instruments are highly liquid and do not involve any transaction costs or management fees and they have a low level of risk. In addition, the rate of taxation on them is low relative to other investment channels. The real yields on deposits and current accounts even had a tax-free real rate of return due to the one-percent decline in the CPI. In contrast, there was a drop in longer-term deposits (foreign currency deposits and term deposits of one week to a year). An exception was the deposits of one year or more, which increased by about 20 percent.



There was also a decline in the holdings of *makam*, money market funds and certificates of deposit.⁴ This is in spite of the fact that these three instruments are also low-risk, and are highly liquid—they can be sold at any time. It appears that the public prefers to reduce its holding of these assets since their nominal yields are near-zero and after transaction cost and management fees (which are not charged on the holding of cash, current accounts and bank deposits) the return turns negative. The advantage in holding cash and current accounts would become even greater if the Bank of Israel interest rate would be reduced further.

⁴ It is important to emphasize that a significant portion of the holding of money market funds and certificates of deposit are invested in bank deposits and *makam*, whose trends were described above. Their mention in the present context is intended to emphasize the effect of the near-zero yields on the holdings of the public.

Institutional investors have not constituted a major source of financing for private economic activity in recent years since their main customers are large businesses, whose demand for credit is low,

Direct institutional loans to the business sector and households continued to grow by a high rate in 2015. At the same time, the institutions have not constituted a major source of financing for private economic activity in recent years since their main customers are large businesses, whose demand for credit is low. Since the end of 2007, the assets of the institutions have grown by more than 100 percent, to a total of about NIS 737 billion. The lion's share of the increase has been channeled to the government and investment abroad and only a few percent have been invested in stocks and corporate bonds (both traded and non-traded). Although direct loans have grown rapidly since the end of 2007, their share of institutional assets and in total credit to the nonfinancial business sector has not exceeded 10 percent.

One of the ways in which the public deals with the low level of yields vis-à-vis the risks that it perceives in the equity markets is to invest in real assets, primarily the purchase of homes, whose yields remain higher. Nonetheless, since mid-2012 the ratio of the value of real estate owned by households to the value of the public's asset portfolio has remained stable.⁵ In the case of the public's direct holding of financial assets, the public has preferred liquid assets that do not involve transaction costs or management fees, i.e., cash, current accounts, and daily/weekly deposits. In contrast, the institutions have increased their investments abroad since they have an advantage over households due to their ability to hedge against the exchange rate, reduce transaction costs and gather information.

b. The financial account of the balance of payments

Net outflow of capital moderated in 2015, impacted on by the moderation in the flow of investment by Israeli residents abroad.

The balance of payments is composed of the current account and the financial account. In 2015, the surplus in the current account continued and accordingly the net outflow of capital in the financial account continued (Table 4.2; for further details on the current account, see Chapter 2). The net outflow of capital (not including reserve assets) was \$6.75 billion in 2015, compared to \$8.6 billion in 2014, and reflected the continued channeling of sources of financing to investment abroad, alongside the continuing process of diversification of the asset portfolio of Israeli residents. The decline in the net outflow of capital in 2015 was impacted on by the moderation in the flow of investment by Israeli residents abroad (not including reserve assets), following stability at a high level since 2013.

The flow of investment from nonresidents in 2015 remained at a similar level to that in 2014. This stability was the result of an increase in direct investment in shareholder loans and equity capital, including venture capital funds that invest in startups, in parallel to a moderation of financial investment, primarily as a result of a marked decline in the holding of government bonds in the domestic market and of corporate bonds held abroad by nonresidents. Likewise, the exit by nonresidents from other investments in Israel, which had also contributed to the moderation in previous years, continued as well. This year there was a decline in deposits of foreign banks as

⁵ For further details, see the Financial Stability Report, June 2015, pp. 13-14.

opposed to a slight increase last year, as well as a decline in loans from nonresidents, albeit at a slower rate than last year. In addition, the downward trend continued in the deposits of nonresidents in Israel. The background for the accelerating decline in these deposits since mid-2011 (a trend that began already in 2008) has been the decline in the Bank of Israel interest rate, which began in that year, as well as the Foreign Account Tax Compliance Act (FATCA)⁶, which the US Congress passed in 2010.

Table 4.2
Nonresidents' investments in Israel and Israeli residents' investments abroad, by investment type, 2012–15

	(net transactions, \$ million)							
	Year				2015			
	2012	2013	2014	2015	Q1	Q2	Q3	Q4
1. Nonresidents' investments in Israel	1,468	13,408	9,698	9,534	2,704	524	-755	7,062
Direct investments in Israel	8,468	12,449	6,738	11,565	4,724	3,259	2,379	1,203
Financial investments in tradable securities	-3,323	1,770	9,555	3,238	-705	-513	-865	5,321
Other investments in Israel	-3,677	-811	-6,596	-5,269	-1,315	-2,222	-2,269	538
2. Israelis' investments abroad, excluding reserve assets	8,083	18,569	18,273	16,286	7,991	-1,185	644	8,838
Direct investments abroad	3,257	5,502	3,667	9,742	1,611	1,113	640	6,379
Financial investments in tradable securities	7,531	9,348	10,337	9,986	5,255	3,204	-36	1,563
Other investments abroad	-2,408	4,176	4,687	-3,182	1,386	-5,346	-370	1,148
Derivative instruments	-297	-458	-418	-260	-261	-156	410	-252
3. Net financial account excluding reserve assets (1-2)	-6,615	-5,161	-8,575	-6,752	-5,287	1,709	-1,399	-1,776
4. Reserve assets	180	-4,357	-7,396	-7,328	-1,492	-2,359	-1,904	-1,573
5. Net financial account (3+4)	-6,435	-9,518	-15,970	-14,080	-6,779	-650	-3,303	-3,349

SOURCE: Based on Central Bureau of Statistics.

The moderation in investment abroad by Israeli residents in 2015 derived from the decrease in “other investments” abroad, primarily as a result of withdrawals of deposits of Israeli banks abroad, starting in the second quarter. In addition, loans to abroad declined and became negative. The withdrawal of the deposits of the banks and the decline in loans were offset by the increase in deposits of Israeli residents abroad. The decline in other investments abroad was moderated by the increase in

⁶ This law was legislated with the goal of preventing US residents from evading taxes. It establishes that financial institutions outside the US—including banks and within them Israeli banks—must report accounts maintained by customers who are required to report in the US, even if they are residents of Israel. At the beginning of August 2012, the Ministry of Finance in Israel decided to establish a taskforce to examine the implementation of FATCA and in May 2014 Israel began its formal implementation.

direct investment abroad, particularly shareholder loans. In addition, the high rate of growth continued in direct investment in foreign shares and in financial investment abroad in shares and bonds.

Despite some moderation in investment abroad by institutional investors, their share in Israel's investments abroad remains high, and makes a fundamental contribution to the outflow of capital in the financial account.

In 2015, institutional entities invested about \$4.2 billion abroad, compared to \$3.9 billion in 2014, a decline relative to the average of \$5.2 billion for 2009–13. Nonetheless, the share of the institutional entities in the investments of Israeli residents abroad is still large and it has been making a fundamental contribution to the outflow of capital in the financial account since 2006. This is against the background of the reforms in the pension saving market and the relatively high rate of saving in the economy, which have contributed to the rapid increase in institutional investors' assets; a relatively small domestic capital market; a low level of demand for investment and credit; and also institutional investors' policy of asset diversification, by investing a growing proportion of their assets abroad, which reached about 20 percent at the end of 2015. The increase in the proportion of their investments abroad is also explained by the correction of the excessively low rate of investment abroad in past years. Over the years, the lion's share of institutional investment abroad was channeled to financial investments, while direct and other investment (deposits and loans) were at low or even negligible levels. However, the flow of other investments (primarily in the subcategories of loans and other assets) was at a high level in 2015 and this moderated to some extent the decline since 2014 in the flow of financial investments. Although a large proportion—23.7 percent at the end of 2015—of institutional entities' assets are denominated in foreign currency or indexed to foreign currency, their exposure to foreign currency, about 14.4 percent, is lower due to their use of currency hedging. The use of currency hedging declined during the first half of the year, when the exchange rate of the shekel against the dollar was relatively stable, and the exposure to foreign currency grew from 12.8 percent in the second half of 2014 to 14.4 percent at the end of 2015.⁷

2. FINANCING ECONOMIC ACTIVITY

The sources of financing described above are used to finance the activity of the government, households and the business sector (Table 4.3). In 2015, the gross debt of these three sectors was about NIS 2 trillion, an increase of only about NIS 53 billion relative to the previous year. Of that increase, the debt of the household and the business sectors grew by about NIS 40 billion. (For further details on the financing of the government debt, see Chapter 6.) The sources side and the uses side are connected by the financial intermediaries, which reduce risk and increase the liquidity of the financial markets.

⁷ In the third quarter of 2015, there was a temporary increase in the volume of currency hedging of institutional investment abroad following the increased risk in emerging markets at that time. The exposure once again increased in the fourth quarter.

Table 4.3
Gross debt balances in the economy: Distribution among lending and borrowing sectors (excluding the financial sector), December 2015

(NIS billion)

	Borrowing sectors			Total debt in the economy
	Households	Business sector	Government	
Total debt to banks	433	397	87	917
Nonhousing credit to the public	126	390	16	532
Housing credit to the public	307			307
Tradable bonds		7	72	78
Total debt to institutional investors	11	154	409	574
Loans	11	58	5	74
Tradable bonds		71	221	292
Nontradable bonds		25	183	208
Total debt to credit card companies	14	1		16
Loans	14	1		16
Total debt to nonresidents		171	101	272
Loans		143	3	146
Tradable bonds		28	80	108
Nontradable bonds			18	18
Debt from government sources	17	0		17
Targeted credit	17	0		17
Debt to households and others		86	145	231
Tradable bonds		86	145	231
Total debt	475	809	742^a	2,026

^a Total debt of the general government was NIS 746 billion in December 2015. However, NIS 4 billion of that sum are not included in this table because they have not yet been classified conclusively by lending sector. (These NIS 4 billion are included in overall public debt appearing in Chapter 6.)

SOURCE: Bank of Israel.

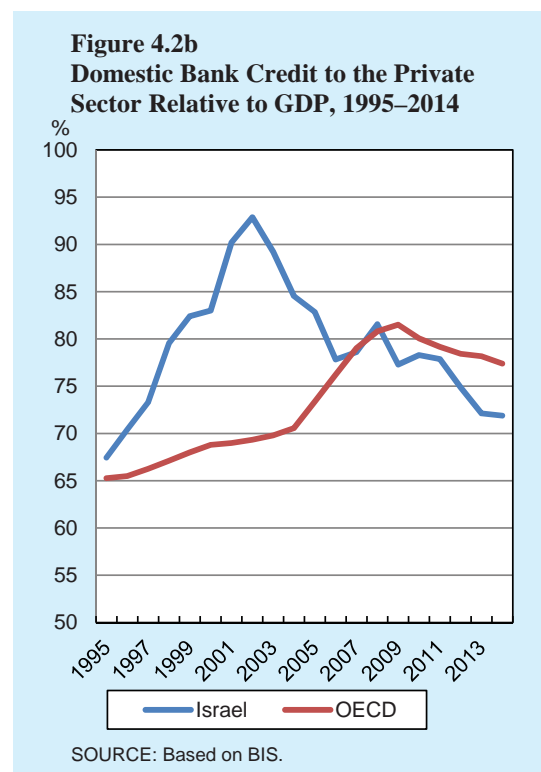
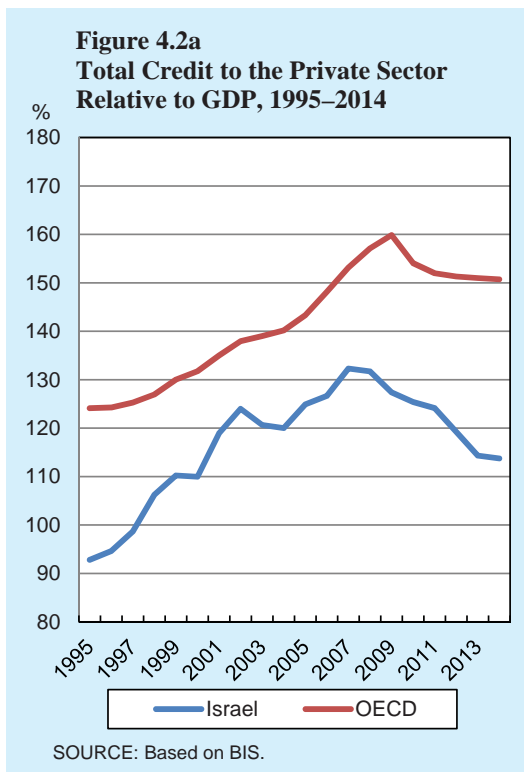
The debt of the private sector (households and the nonfinancial business sector) relative to GDP has been declining since 2008 (Figure 4.2a). Although this ratio was on an uptrend in Israel until 2007, and as a result the gap relative to the OECD countries narrowed by about 20 percentage points, the gap has widened since 2007. The location of Israel relative to the OECD countries is not undesirable in itself⁸, and as long as there is no constraint from the supply side, the ratio of credit to GDP is dependent to a large degree on the level of risk aversion among individuals and firms

⁸ The widening gap between Israel and the OECD average after 2008 was apparently also the result of the moderate increase in the GDP of the OECD countries relative to the larger increase in Israel.

and their choice between present consumption and future consumption. In addition, many countries in the OECD were characterized by excessive leveraging in the years prior to the 2008 crisis and in some of them the level of leverage is still high. The gap with respect to the OECD average reflects the low leverage level in Israel, which was among the Israeli economy's strengths when dealing with the 2008 crisis. Nonetheless, the decline in the ratio of credit to the private sector to GDP in Israel in recent years is a result of the slow growth of credit relative to the growth in GDP. This is against the background of low demand for investment, primarily among large corporations.

Figure 4.2b presents the ratio between total bank credit to the private sector and GDP. It indicates that both before and after the crisis in 2008 the gap between the ratio in Israel and the OECD average was not large. Thus, the gap between Israel and the OECD in the ratio between total credit to the private sector and GDP does not derive from bank credit but rather non-bank credit.

The decline in the ratio of credit to the private sector to GDP in Israel in recent years derives from slow growth of credit relative to GDP growth, against the background of low demand for investment, primarily among large firms.



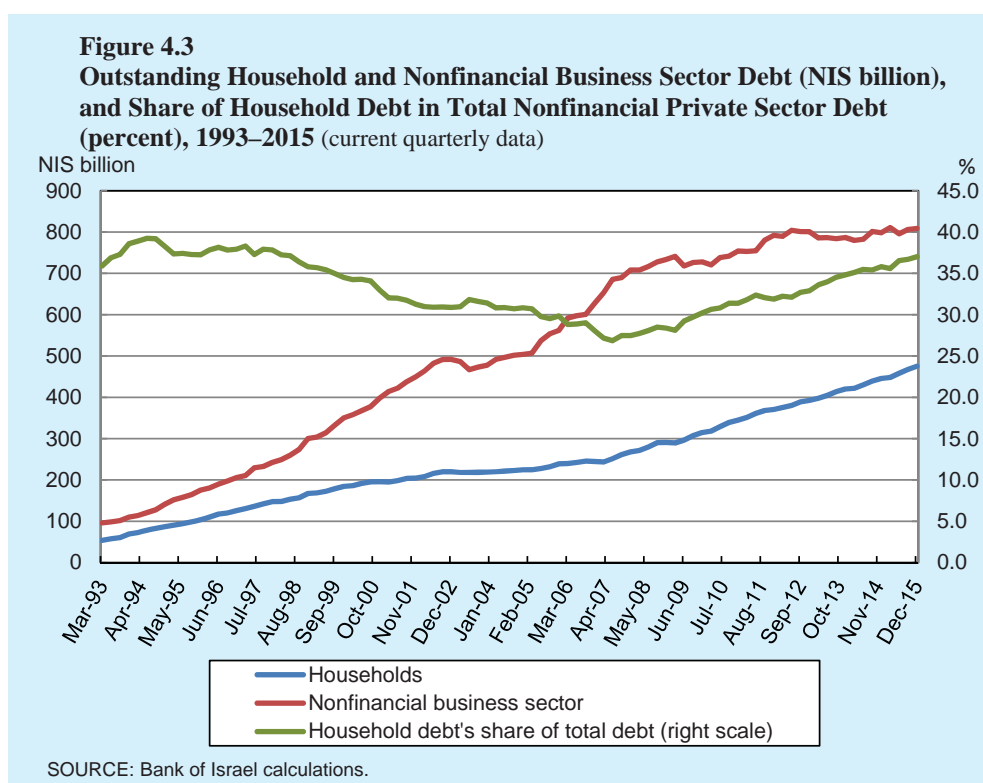
In the non-bank market, the institutional investors, which are benefiting from a rapid increase in sources, essentially deal very little with the household or small and medium-sized business sectors. Furthermore, the demand for credit by large corporations, which account for the vast majority of their credit portfolio, was apparently weak during this period and they are also in a process of reducing leverage.

As a result, institutional investors are channeling their increasing sources mainly to the government and to abroad and almost not at all to the private sector (see the section on sources above). As the character of the institutional entities' operations currently is not appropriate for providing retail credit, which characterizes households and small and medium-sized businesses, the most convenient way for them to channel additional sources of credit to the private sector is to purchase retail credit portfolios from the banks, by means of, for example, securitization.⁹ However, in order to do so an appropriate legal, regulatory and business environment must first be created.

Institutional investors are channeling their increasing sources mainly to the government and to abroad and only slightly to the private sector.

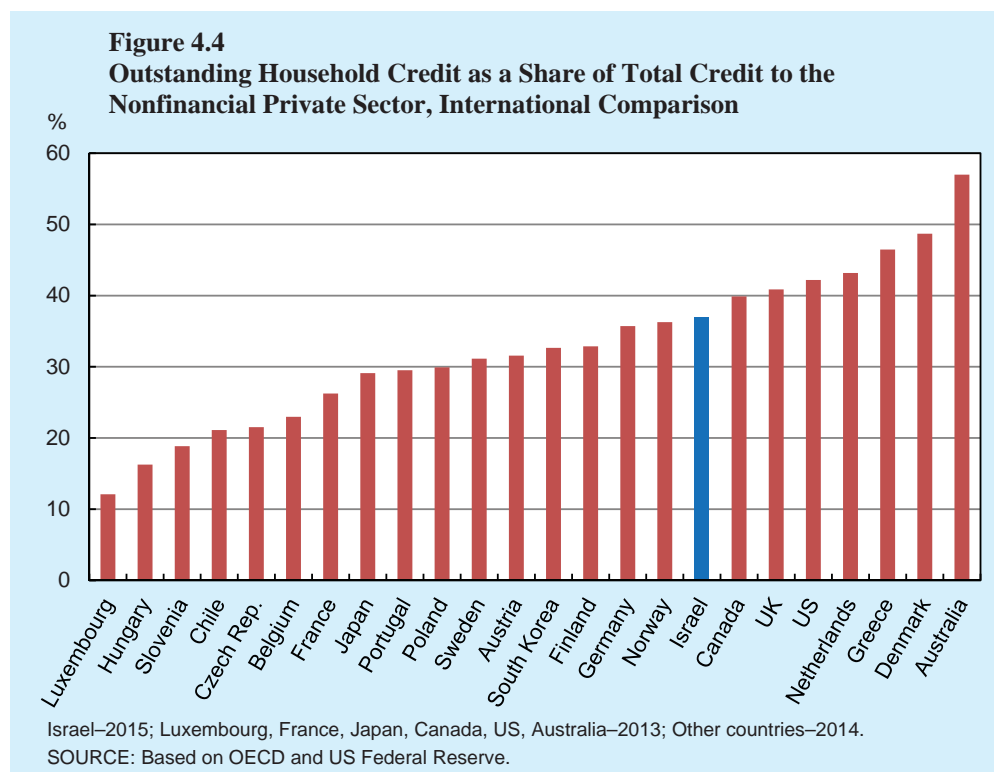
Figure 4.3 shows that total credit to households began to expand rapidly in 2007, in contrast to the slower growth in credit to the nonfinancial business sector during that same period, which followed a years-long period of rapid expansion. The increase in credit to households was the result of the growth in housing credit, due to the increased activity in the housing market, as well as an increase in nonhousing credit, which has also grown rapidly in recent years. The total credit to households today accounts for about 37 percent of credit to the private sector, which is similar to its share in the mid-1990s and relatively high by international standards (Figure 4.4).¹⁰ Bank credit to households accounts for more than half of the bank credit to the private sector.

Credit to households today is about 37 percent of total credit to the private sector.



⁹ For further details on securitization, see Box 4.2 in the 2014 Bank of Israel Annual Report.

¹⁰ The selection of countries for this comparison is based on the availability of relevant data.



Based on data for various economies, Beck, et al. (2012)¹¹ claim that the share of credit channeled to households within total credit is dependent on demand and supply constraints, rather than the structure of the banking system or regulatory policy. Thus, for example, the share of households in total credit is higher in urban societies, in economies where the share of the manufacturing industry is small and also in economies with a developed capital market where businesses have access to non-bank sources of financing.

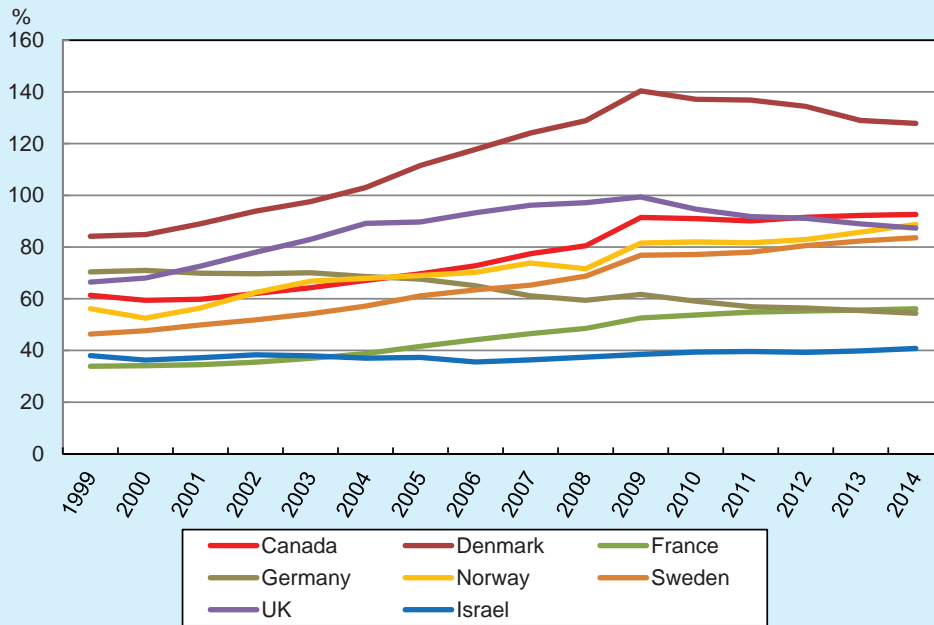
a. Households

Total household debt at the end of 2015 was NIS 473 billion (Table 4.3), compared to NIS 445 billion at the end of the previous year. This represents an increase of 6.3 percent, which is similar to the increase in the previous year. The ratio of household debt to GDP continued to rise moderately, from about 40.7 percent at the end of 2014 to about 41.7 percent at the end of 2015, though it is still low relative to other advanced economies (Figure 4.5), in which housing credit has grown rapidly. Total housing debt stood at NIS 322 billion, following an increase of 6 percent (compared to 5.3 percent in 2014). The share of housing debt in total household debt remained at about 68 percent in 2015.

The ratio of household debt to GDP is still low relative to other advanced economies.

¹¹ T. Beck, B. Büyükkarabacak, F.K. Rioja and N.T. Valev (2012). “Who Gets the Credit? And Does It Matter? Household vs. Firm Lending Across Countries”, The B.E. Journal of Macroeconomics, Vol. 12, Issue 1 (Contributions), Art. 2.

Figure 4.5
Household Debt to GDP Ratio in Israel and Selected Countries, 1999–2014

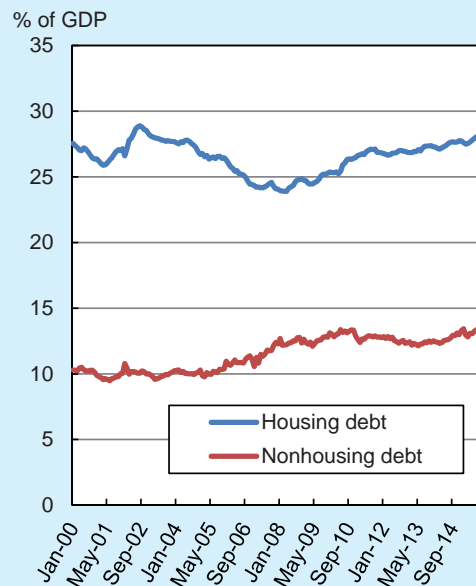


SOURCE: Based on OECD.

Total new mortgages extended in 2015 reached about NIS 65 billion. The average monthly volume was about NIS 5.4 billion, and a historical record of NIS 6.99 billion was reached in June. Nonetheless, the ratio of housing debt of Israeli households to GDP is low relative to other countries and its increase during the period 2007–15 was moderate (Figure 4.6) despite the rapid increase in home prices during this period. The slow growth in housing debt is primarily a result of the constraints placed by the Bank of Israel on the leveraging of mortgage applicants in recent years.

During the first half of the year, the downtrend in the weighted real rate of interest on mortgages continued.

Figure 4.6
Household Debt to GDP Ratio, 2000–15



SOURCE: Bank of Israel calculations.

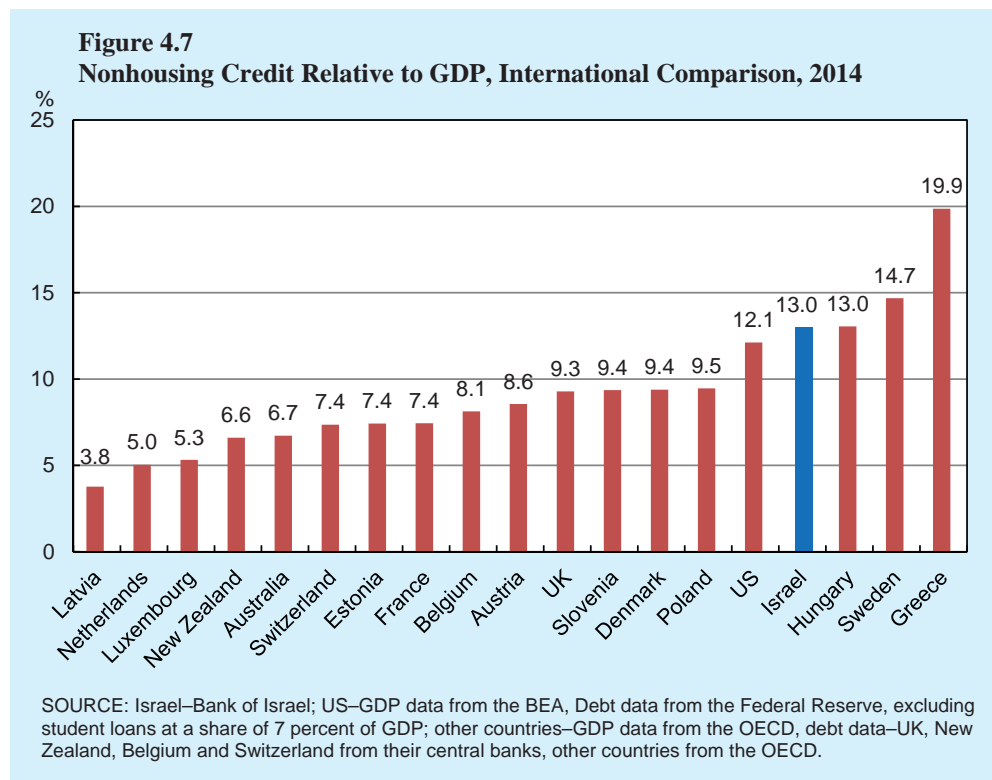
Total volume of new mortgages increased this year despite the increase in interest rates on new mortgages in most tracks in the second half of the year.

This trend began in late 2013 and ended in May 2015, when the interest rate reached a level of only 0.71 percent. In June, the trend reversed and the weighted real interest rate rose sharply, reaching a level of 1.17 percent by the end of the year. This increase was the result of a relatively large increase in the real yields on government bonds, both in Israel and worldwide, between May and July.¹² Although these yields then fell to levels that prevailed a year ago, the interest rates on the various components of new mortgages added about 0.6 percentage points, on average, since May 2015.

Nonhousing debt continued to expand at an accelerated rate of 6.8 percent, although this is lower than the rates during the last two years (7.1 percent on average), and reached about NIS 152 billion at the end of 2015. Although the ratio of household debt to GDP in Israel is relatively low, nonhousing debt relative to GDP is high by international standards (Figure 4.7). Nonetheless, an examination of the development of Israeli households' debt relative to GDP over time does not indicate a major increase in nonhousing debt in recent years (Figure 4.6).

Most of the nonhousing credit, about 83 percent, is provided by the banking system, with the rest divided between the credit card companies (the part not guaranteed by the banks)—about 9 percent; institutional entities—about 5 percent, and directed credit

Although the ratio of household debt to GDP in Israel is relatively low, nonhousing debt relative to GDP is high by international standards.



¹² The increase in yields on government bonds in Israel followed the sharp increase in government bond yields in major economies, and in particular Eurozone countries, beginning in April 2015 (for further details, see Monetary Policy Report 44).

from government sources— about 3 percent.¹³ The rapid expansion of nonhousing credit and the decline in the share of the banks within it in recent years may be an indication of the increasing level of competition between the banks and other providers of credit in this segment of the market. The share of the two largest banks in total nonhousing credit risk in the household segment reached 60.6 percent in 2015 (together with the third largest bank, the share rises to 77.5 percent).

Total credit card debt in Israel is low relative to the US, where this type of credit accounts for about 17 percent of total nonhousing credit to households. One of the reasons for this is that in the US there is almost no use of overdraft, which is relatively common in Israel.^{14,15} In addition, there is no possibility in the US of paying for a purchase in installments, which is essentially a loan from the seller, rather than from the credit card company. According to a long term survey by the Central Bureau of Statistics, only about 2 percent of households in Israel took a direct loan from any credit card company, while about 54 percent reported that their account had been overdrawn during the last 12 months. The data indicate that households in Israel prefer indirect loans from merchants or from credit card companies. Thus, 84.2 percent of households use credit cards, of which 16.4 percent utilize payments through these cards to defer the payment date, 65.2 percent use them to pay in installments and only 24.1 percent buy goods and services on credit terms as an alternative to a direct loan from a credit card company. (Of course, a household can use more than one of these arrangements simultaneously.)

Although the credit card sector in the US is considered to be competitive (based on the number of issuers and acquirers) and in Europe as well there is a large variety of international and domestic credit cards, the interest rates on credit card debt abroad are much higher than in Israel (Figure 4.8). According to data from the financial statements of the credit card companies (Cal—Cartisey Ashrai Le'Yisrael, Isracard and Leumi Card), the average interest rate charged to households in Israel stood at about 8.4 percent in 2014, which follows a continuous decline in recent years from the vicinity of 11 percent in 2010. This level of interest is only slightly higher than that on a credit facility,¹⁶ which in 2014 stood at about 8.2 percent on average.

Interest on credit card debt and on overdrafts in Israel is low in international comparison.

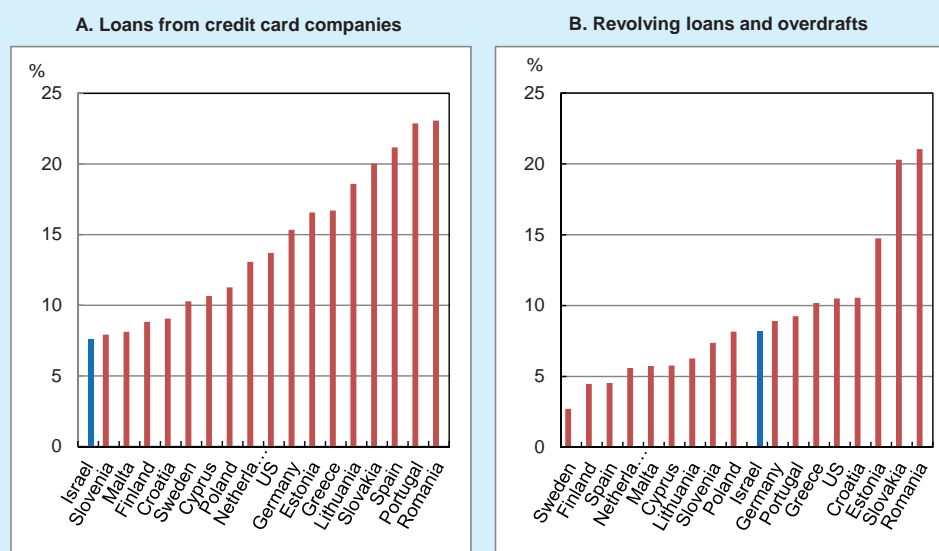
¹³ As of today, no detailed information on the uses of nonhousing credit or the interest charged to borrowers is provided by the banks; however, starting in 2016, the banks will be required to report the purposes of nonhousing loans, in accordance with a directive issued by the Supervisor of Banks.

¹⁴ In contrast, one can obtain a line of credit from a bank in the US, which is similar to a credit facility in Israel, although in the US banks can demand collateral (including real estate) against a line of credit.

¹⁵ There is no similar data found for Europe, although it can be assumed that the share of credit card debt in total consumer credit is lower than in the US, since in the US about 38 percent of households are in debt to credit card companies, while the figure is only 18 percent in Europe.

¹⁶ Current loan account: A current account with an approved credit facility. The interest on this type of account is essentially that on an overdraft, which is another type of bank credit.

Figure 4.8
Interest Rate on Overdrafts and on Loans from Credit Card Companies Issued to Households



SOURCE: Israel—Credit card companies' financial statements, 2014 average; European countries—ECB Statistical Data Warehouse, March 2015; US—Federal Reserve, October 2014, Interest on personal loans to 24 months.

In order to increase the level of competition in the banking system and in the credit market, the government established the Committee to Increase Competition in Common Banking and Financial Services in Israel (the Strum Committee). The Committee was asked to propose ways of introducing additional participants who would compete for “small consumers”, i.e., households and small businesses. Its interim report recommended the separation of the credit card companies from the two largest banks,¹⁷ such that all credit cards would have a non-bank credit facility (which would compete with bank credit), while the banks would only distribute them and would be able to issue only debit cards for immediate debit. At the same time, the Committee proposed increasing competition in the acquiring market by making it easier to obtain an acquirer license, and at a later stage, through the transition from monthly to daily settlement. In addition, the Committee recommended that non-bank corporations, which are involved in retail financing, be able to raise funds through issuing bonds to the public, which today requires the approval of the Bank of Israel according to the Banking (Licensing) Law, 5741–1981.¹⁸ (For further details

¹⁷ This would mean a separation of control and ownership between Bank Leumi and Bank Hapoalim on the one hand and the credit card companies Leumi Card and Isracard on the other, within three years, and in four years the question of whether the Cal–Cartisey Ashrai Le’Yisrael company should be separated from the ownership of the medium-sized banks will be examined.

¹⁸ According to the law, an entity that is involved in the provision of credit but is not supervised does not have the right to issue bonds. The Arrangements Law 2015-16 includes the addition of a section to the Banking Law that will enable non-bank corporations both to issue bonds to the public and to provide credit, subject to a limitation on the issued amount. According to the Ministry of Finance, this amendment is intended to reduce the concentration of credit in the economy.

on non-institutional credit intermediation or “shadow banking”, its advantages and disadvantages, see Box 2 of the Financial Stability Report for the second half of 2015.)

In contrast to the recommendations of the Committee, it appears that the addition of new credit providers alone will not ensure a major reduction in the cost of credit to the public. Nonhousing credit is considered to be relatively risky, more so than housing credit since only part of it (primarily car loans) is backed up by collateral. Credit providers price the risk implicit in the credit to each customer and accordingly they set an interest rate for the various borrowers. Furthermore, the cost of financing for the separated companies will apparently be higher than it is today, when they belong to major banking groups.

Competition in the banking system can be increased by converting the credit card companies into independent banks. The Bank of Israel supports this solution and is in favor of easing the criteria for granting a banking license to these companies. The conversion of the credit card companies into banks will enable them to accept deposits from the public and thus create competition in the area of saving, as well as relatively cheap sources for the financing of credit to these new banks. If indeed additional small banks are created, it is important to introduce deposit insurance, as it exists in other countries.

The creation of a central credit data register will complement the effort to increase competition in the credit market. The credit data register, whose establishment is specified in the proposed Credit Information Law and which is now in the process of passing the Knesset,¹⁹ is meant to include information on households and small businesses that is based on data gathered from various financial and governmental bodies. Its goal is to enable financial entities of all kinds to base their decision on objective information about the customer and to offer customers improved credit terms according to level of risk. Such databases, whether private or public, exist in many countries and according to empirical evidence they contribute to growth in credit, the reduction in bankruptcy rates and lowering the cost of credit (see, for example, Japelli and Pagano, 2002).

The Strum Committee has also recommended that pension savers be able to borrow funds that are backed by their pension savings. This is a far-reaching recommendation, since it opens the way for the use of pension funds for current consumption by individuals who prefer current consumption over future consumption. This is in contrast to the government’s desire to encourage long-term saving that will ensure reasonable living conditions for retirees.²⁰ Furthermore, the government encourages

Competition in the banking system can be increased by converting the credit card companies into independent banks.

The creation of a central credit data register will complement the effort to increase competition in the credit market.

¹⁹ The Bank of Israel has already begun preparing for the creation of the Credit Data Register, which it will manage.

²⁰ The Committee recommended that the amount of the loan be limited, such that in the event of default, the amount left in the fund will be sufficient to provide a monthly pension of at least NIS 3,800, indexed to the 2005 CPI, and including the old age pension from the National Insurance Institute and pensions from other sources. Nevertheless, it is doubtful that this amount will ensure a retiree enough to live on, and furthermore the borrowing ceiling involves a technical difficulty that arises from the uncertainty of future yields.

pension savings by means of tax breaks, which are provided both on the deposits and on the accumulated earnings (exemption from capital gains tax), and the option of withdrawing these savings early (and primarily in the event of default) means that these tax breaks are in fact being enjoyed in the short run.²¹

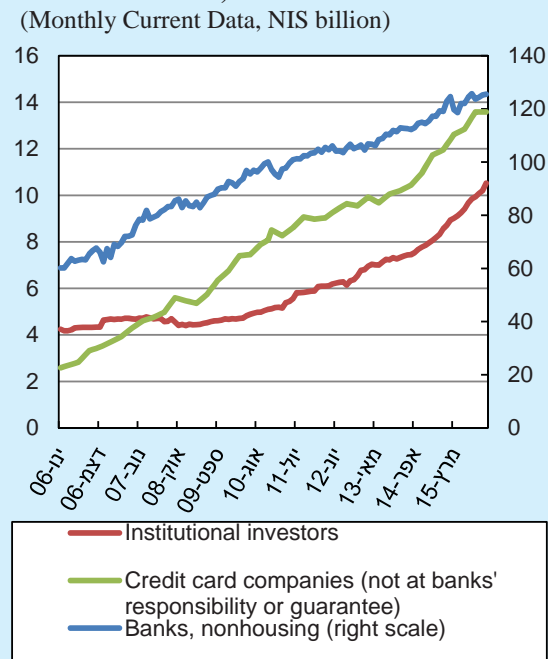
Box 4.1

Macroeconomic consequences of an increase in consumer credit

Against the background of reforms to improve households' credit terms—a welcome objective—there are two questions that should be discussed: is there in fact a shortage of consumer credit for households (which should be reflected in a high cost of such credit to the public), and whether it is proper to encourage an increase in households' leverage. With regard to the first question, quantities of nonhousing credit from all sources increased markedly in recent years (Figure 1), and relative to numerous other countries, nonhousing credit relative to GDP in Israel is already high, as shown in Figure 4.7. In terms of the cost of the credit—we don't have comparative data on bank-credit costs, but the international comparison, noted in Chapter 4 itself (see also Figure 4.8a), of the cost of credit extended by credit card companies, indicates that households with credit cards are able to attain credit at the scope they want. With that, access to credit is limited for low-income households.

In order to answer the second question, we will make use of the international research experience—theoretical and empirical. The basic model of private consumption is the life-cycle model, in which consumption is based on the permanent income expected over a lifetime (Ando and Modigliani, 1963; Modigliani and Brumberg, 1979; and Hall, 1978). As in actuality the income of individuals or households depends on where they are in their lifecycle, they smooth out consumption through financial instruments. Credit serves to transfer consumption between periods when the income of an

Figure 1
Households' Nonhousing Debt Balances, to Various Lenders, 2006–15
(Monthly Current Data, NIS billion)



SOURCE: Bank of Israel.

²¹ There are those that claim that for low wage earners, the pension contributions significantly reduce consumption in the present, while their substitution ratio (the ratio of income after pension contribution to income before pension contribution) is likely to reach more than 100 percent. It is possible that in this case, it is worthwhile considering the reduction in the mandatory saving requirement and to lower pension contributions.

individual or household is low and periods when it is high. That is, individuals/households will borrow when they are young and their income is relatively low, and will repay the debt when they are older and their income increases. As such, debt in itself does not have a causative function in determining private consumption.

This result derives from the adoption of simplifying assumptions—lack of credit restrictions, no change in interest rates, the ability of households to precisely forecast their income over the course of a lifetime, complete certainty regarding all macroeconomic variables, etc. However, reality is more complex: households face credit constraints, which even change over time, and they cannot borrow against future income but must put up collateral against most loans, and there is uncertainty both in terms of households' future income and in terms of the economy's activity, because external shocks are liable to lead to deviations of macroeconomic variables from their long term trends. In reality, most households are not classified as either borrowers or lenders; a range of considerations leads them to have both savings and loans together.

Models that remove the simplifying assumptions conclude that there is a link between the terms and amount of credit (and its resulting debt burden), and growth. Fisher (1933) showed that during the Great Depression in the US, the debt burden intensified the initial shock. King (1994) implemented Fisher's model for the UK economy in the 1990s crisis and presented a model in which households that borrowed in expectation of high future income undergo a negative shock to their future income and are required to reduce consumption in order to repay the debt. Kiotaki and Moore (1997) presented a model in which, due to a requirement for a guarantee against loans, even a relatively small and transitory shock to technology or to income distribution can have a marked and prolonged adverse impact on asset prices and growth. This is because assets are used both for production and as collateral, and shocks that negatively impact their value reduce the scope of credit that can be received against them, thus reducing investment in the economy. Carroll and Dunn (1997) constructed a model in which financial liberalization eases the down payment, which leads to an increase in debt, and indirectly increases the sensitivity of consumption to changes in unemployment expectations.

The development of the credit market brings with it new forms of consumer credit that are uncollateralized—credit card facilities, overdraft, nonbank network credit cards, etc.—which are proposed to customers mostly in periods of economic growth. In the short term, these benefit households in low-medium income distribution deciles, as it enables them to consume at a relatively high level. Consumer credit is procyclical—it tends to expand rapidly in periods of growth and to contract in periods of recession. Rajan (1994) suggested the theory that demands by banks' shareholders to increase profitability in growth periods cause banks to relax their requirements for extending credit during those times. In periods of recession, when shareholders are prepared to accept lower returns, banks re-tighten their demands. This conduct creates cyclicality in credit policy—it becomes more lenient in good periods and more restraining in difficult times. Similarly, Ferri and Simon (1997) found that in periods of recession banks tend to provide credit to higher quality customers and to limit credit to lower quality customers—a type of flight to quality in the consumer credit market. Households as well are interested in borrowing when the economic environment is more optimistic and they have positive expectations regarding their economic prospects.

Recently published research (Kumhof, et al. 2015) claims that the two big crises—the Great Depression of 1929–32 and the Great Recession that began in 2008—occurred after long periods of rising inequality. The research presents a mechanism, supported by empirical findings, in which the increase of high-earners' income increases their savings (due to the relatively low marginal propensity to consume among this group), and thus—the scope of credit sources in the economy. The increased sources of credit are utilized by low-income earners, who borrow in order to increase consumption. As a result, the debt-to-income ratio for low-income earners increases, which weakens the financial resilience of the system and increases the probability of a financial crisis occurring. The crisis is triggered by the endogenous decision of some of the borrowers to default, a decision that lenders anticipate and therefore charge high interest rates. The non-repayment of loans reduces, in the immediate term, the debt-to-income ratio of borrowers. However, as the financial crisis is accompanied by a slowdown in real activity, which has an adverse impact precisely on lower income households, whose employment and wages are more cyclical, the ratio of their debt to their income increases again. It is understood that this mechanism depends to some extent on the ease with which a borrower can default.¹ The more severe the sanctions on non-repayment of loans are, the stronger the effect of the debt burden on future consumption in the case of a negative shock to household income will be.

Hall (2012) showed that the extended real crisis in the US is the result of a large decline in demand by households—that is, in personal consumption, which in the US constitutes around two-thirds of GDP—a decline that derived from their need to avoid taking on additional credit. The period before the crisis was characterized by a rapid increase of investment in residential real estate and durable-goods consumption, while the expansion of investment in the business sector was moderate—a result of a significant easing of credit terms for households but not for businesses. Thus, for example, households with low or irregular income, who beforehand were ineligible to receive credit, were able to take out mortgages at subprime interest rates. In addition to mortgages, loans for other objectives were also expanded, including credit for purchasing automobiles. Just prior to the onset of the crisis, in 2007, more than three-fourths of households did not have sufficient liquid assets² to serve as a shock absorber in a case of an unexpected decline in income. Therefore, many of them depended on the mercy of financial institutions in order to continue to maintain their standard of living when their income was adversely impacted. Due to the crisis, the banks made their credit terms stricter, and many households were forced to tighten their belt—to reduce their consumption in order to be able to repay the loans.

An analysis based on micro data in the UK (Bunn and Rostom, 2014) indicates that after the financial crisis broke out in 2008, households with high debt levels reduced their consumption (mainly of durable goods and luxury items) relative to income more than the average household. It was also found that a decline in consumption as a result of housing debt (which makes up about 80 percent of household debt in the UK) can explain about 40 percent of the decline in aggregate private consumption after 2007. The

¹ At the one end of the scale, a borrower who is unable to repay the loan loses only the asset put up as collateral for the loan. At the other end of the scale, such borrower must repay the entire loan out of future income, unrelated to the value of the collateral. Thus, for example, mortgages in the US and in some countries in Europe are nonrecourse, meaning debt collection is limited to the value of the asset, while in Israel the collection of the debt remains in place even if the value of the asset declines.

² This is based on the yardstick of sufficient liquid assets for two months.

contraction of consumption by high-debt households reflects primarily their concern about their ability to repay their debt in the future³, as well as their expectations of stricter terms for receiving new credit.

Israel's economy is now in a period of growth, albeit slower than in the past, in an environment of a zero-bound interest rate and of full employment. Possible changes in any of those parameters, such as an increase in the interest rate or in unemployment, are liable to risk borrower-households' economic situation and to impact on their level of consumption. A decline in interest rates due to the financial crisis increased the worthwhileness of consumer credit and has already contributed to an increase in household debt. Demand for credit is met by supply—banks opted to supply additional credit to households, among other reasons because the risk weighting for consumer credit is lower than that of business credit. Although nonhousing debt is only about 30 percent of total household debt, compared to mortgages, nonhousing credit bears a much higher interest rate and is much less flexible in terms of the ability to roll it over at more favorable terms, since it has a shorter term to repayment. The high debt burden is liable to lead to greater vulnerability of households due to their reduced ability to respond to an unexpected shock to their income (such as unemployment or a decline in wages), to their wealth (a decline in the value of their assets) or to the interest rate that they pay (on variable-rate loans). On the aggregate level, the measure of sensitivity of private consumption to unemployment shocks depends to a great degree on the extent of lower-decile households' access to credit, as the increase in credit to this population is liable to load them with a heavy burden of repaying the debt (which will make up a greater share of their income). This comes against the background of their more-cyclical employment, which generally is more negatively impacted in recessions. Therefore, policy measures to increase competition in extending consumer credit must be adopted carefully and must take into account the undesired ramifications of increasing households' leverage, both on their financial stability and on the economy's growth.

References

- Ando, A. and F. Modigliani (1963). "The "Life Cycle" Hypothesis of Saving: Aggregate Implications and Tests", *American Economic Review*, 1963, 55-84.
- Bunn, P. and M. Rostom (2014). "Household Debt and Spending", *Bank of England Quarterly Bulletin*, 2014 Q3.
- Carroll, C. and W. Dunn (1997). "Unemployment Expectations, Jumping (S,s) Triggers, and Household Balance Sheets", *NBER Macroeconomics Annual 1997*, vol. 12.
- Ferri, G. and P. Simon (1997). "Constrained Consumer Lending: Exploring Business Cycle Patterns Using the Survey of Consumer Finances", *Mimeo*, Bank of Italy and Princeton University, October 1997.
- Fisher, I. (1933). "The Debt-Deflation Theory of Great Depressions", *Econometrica*, vol. 1, no. 4, 337-57.

³ A special survey among households confirmed their conclusions. Based on the survey, households that reduced their consumption due to debt burden considerations were troubled by their income being lower than expected and by the uncertainty regarding their future income.

- Hall, R. (1978). “Stochastic Implications of the Life Cycle–Permanent Income Hypothesis: Theory and Evidence”, *Journal of Political Economy*, vol. 86, 971-87.
- Hall, R. (2012). “How the Financial Crisis Caused Persistent Unemployment”, in L.E. Ohanian, J.B. Taylor and I.J. Wright (eds.), *Government Policies and the Delayed Economic Recovery*, Hoover Institution Press, pp. 57–83.
- Jappelli, T. and M. Pagano (2002). “Information Sharing, Lending and Defaults: Cross-Country Evidence”, *Journal of Banking and Finance*, vol. 26, 2017–2045.
- King, M. (1994). “Debt Deflation: Theory and Evidence”, *European Economic Review*, vol. 38, no. 3-4, 419-55.
- Kiotaki, N. and J. Moore (1997), “Credit Cycles”, *Journal of Political Economy*, vol. 105, No. 2, 211-248.
- Kumhof, M., R. Rancière and P. Winant (2015). “Inequality, Leverage, and Crises”, *American Economic Review*, vol. 105(3), 1217-1245.
- Modigliani, F. and R. Brumberg (1979). “Utility Analysis and the Consumption Function: An Attempt at Integration”, in Abel, A. (ed.), *The Collected Papers of Franco Modigliani*, vol. 2, MIT Press, Cambridge, Massachusetts, pp. 128-97.
- Rajan, R (1994). “Why Bank Credit Policies Fluctuate: A Theory and Some Evidence”, *Quarterly Journal of Economics*, May 1994, 399-441.

b. The nonfinancial business sector

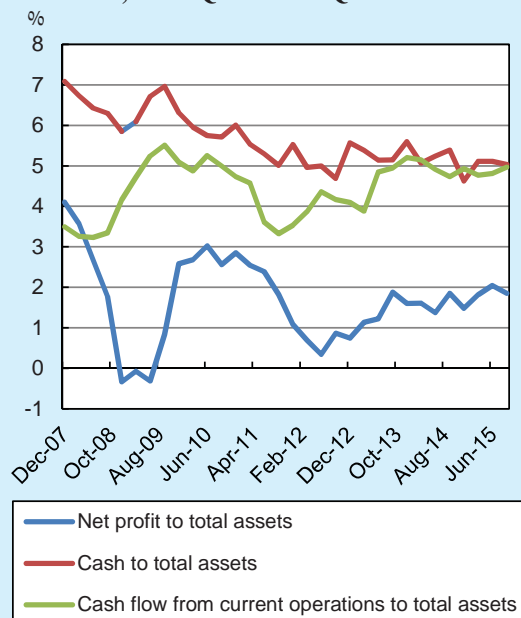
The business sector finances its activity by means of internal sources, i.e., retained earnings and cash flow; bank credit, as in the case of households; credit from institutional entities and from abroad; and the issuing of stocks and bonds. Business sector activity that utilizes financing can be broken down into current activity and investment. An indicator of the level of investment in the business sector is the investment in principal industries according to the National Accounts. In 2015, investment in industry totaled about NIS 142.5 billion in current prices. Since the second half of 2012, the level of investment in industry has remained almost unchanged, after an increase of 32 percent during the years 2010–12.²² (For further details on investment in the economy, see Chapter 2 of this report.)

²² In current prices, according to National Accounts data. The financing needs in the business sector also include, in addition to investment, current activity which is not reflected in the investment figures of the National Accounts.

1) *Internal sources*

The internal sources available to nonfinancial public companies (Figure 4.9) remained stable during the past four quarters.²³ The weighted ratio of cash and cash equivalents to total balance sheet assets has remained stable at a level of about 5 percent since the third quarter of 2011, following a downward trend from a level of about 7 percent in 2007. The weighted ratio of cumulative cash flow from current operations during the last four quarters to total balance sheet assets has also remained stable around the level of 5 percent since the second half of 2013,²⁴ following an increase from a level of 3.3 percent in the third quarter of 2011. In contrast, the weighted ratio of net profit during the last four quarters to total

Figure 4.9
Indicators of Public Companies' Internal Sources, 2007:Q4 to 2015:Q3



SOURCE: Bank of Israel calculations.

balance sheet assets has continued to rise since mid-2012, from a level of 0.35 percent to almost 2 percent in 2015. Figure 4.10 shows the stability in long-term credit (bank credit and bonds) since the end of 2011 and in short-term bank credit (which even fell somewhat since mid-2014) relative to total assets. In contrast, bank credit relative to total assets shows a downward trend at least since 2007, against the background of the development of the corporate bond market, the increase in institutional loans and the structural process involving the decrease in bank credit to large companies (many of which are public companies included in this sample), as will be described below.

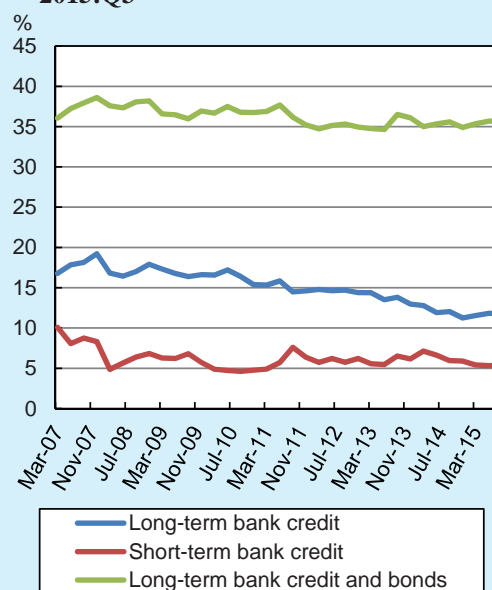
Public companies can serve as a representative sample for large businesses. Therefore, the stability in their quantity of cash and their cash flow from current operations relative to assets indicates that although the various ratios of cash to assets are not increasing (Figure 4.10), large businesses are apparently not being forced to reduce their cash holding relative to their assets. This implies that they are able to

²³ The accounting figures that follow relate to data that ends with the third quarter of 2015. The analysis of internal sources is based on the assumption that public companies are a representative sample of all the large companies in the economy. In order to avoid various biases, we used a sample of companies that reported on a continuous basis, i.e., each quarter, since 2007. A similar sample from 2011 produces similar results.

²⁴ During this period, the total balance sheet assets in the sample group also remained stable.

finance their activity and to invest with relatively little dependence on raising debt or external capital. Furthermore, it appears that they are managing to maintain their growth, as can be seen from the data for net profit. Therefore, internal sources are not limiting the demand for investment among large companies, and the stability in the credit ratios derives from the demand side, rather than supply factors.

Figure 4.10
Credit From Various Sources to Total Assets of Public Companies, 2007:Q1 to 2015:Q3



SOURCE: Bank of Israel calculations.

Box 4.2 Companies' Sources of Financing

Companies can finance their activities using internal sources (retained earnings), share capital (and together, below, "equity"), financial debt or various combinations of those sources. In this box, we will explain in short the theory on this issue¹, and in parallel the situation at companies in Israel compared with others worldwide. There are various theories in corporate finance dealing with a company's capital structure—particularly, whether it decides to finance its operations through debt or through equity.

A good starting point is the Modigliani-Miller theorem (1958). According to this theorem, raising funds through debt or equity are equivalent, but this only exists in a market with very specific characteristics.² In markets where the required characteristics are missing, such as, for example, those with taxes, the balance does not hold and there is an advantage to a company raising funds through debt, because the company can deduct interest payments from taxes.³ When referring as well to bankruptcy costs⁴, a

¹ An expanded discussion on companies' capital structure can be found in Graham and Leary (2011).

² Efficient markets, without taxes, without bankruptcy costs, without transaction costs and without asymmetrical information.

³ Modigliani and Miller (1963).

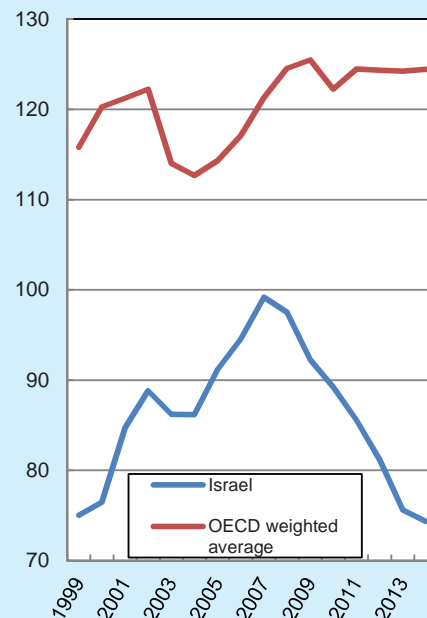
⁴ Bankruptcy costs are inherent in debt issues.

company will choose how much debt and how much equity to use in funding its operations by balancing the advantages and disadvantages of each of those alternatives.^{5,6}

Another theory is the pecking order theory, in which a company has a set of priorities. The firm will first prefer to use cash on hand (internal sources) to finance investments. If there is a shortage of cash, the company will turn to loans or debt issues. Issuing equity will be at the bottom of the list of priorities. This is because issuing debt incorporates lower starting costs and does not change the ownership structure. The theory is based on investors interpreting equity issuance as a sign that the share is overpriced—the managers, who know the company better than external investors (information asymmetry) will only issue when there are external investors who overvalue the company and pay an excess price.⁷ In this manner, managers will avoid issuing equity as much as possible.⁸ The empirical literature indicates that the main factors impacting on the proportion of debt of a company are the type of firm, the industry to which it belongs, and the characteristics of the country in which it is located.⁹

From 1999 to 2008, the nonfinancial business sector in OECD countries increased (on average) its leverage (Figure 1). That is, it based its activities on debt more than on equity. However, from 2008 through 2014, the ratio of nonfinancial business sector debt to GDP remained essentially unchanged. In Israel, in contrast, the ratio increased through 2007, and has been declining consistently since 2008, in contrast to what is taking place worldwide. Among the main factors in this trend are the following: (a) At the end of 2005, the Bachar Committee reforms began to be implemented, and due to that a sharp rise in corporate bond issues began, which contributed to, among other things, an increase in the overall leverage ratio in Israel; (b) the large number of debt restructuring deals apparently contributed to a reversal of the trend in the leverage ratio in 2008. The reversal served, almost certainly, as a correction to excess issuance immediately after the reform, which occurred without appropriate regulation and legal arrangements.¹⁰ Other than the change

Figure 1
Nonfinancial Business Sector
Debt to GDP Ratio, 1999-2014



SOURCE: OECD; Israel data - Bank of Israel.

⁵ The tradeoff theory.

⁶ See, for example, Kraus and Litzenberger (1973).

⁷ Myers and Majluf (1984).

⁸ Myers, S.C. (1984).

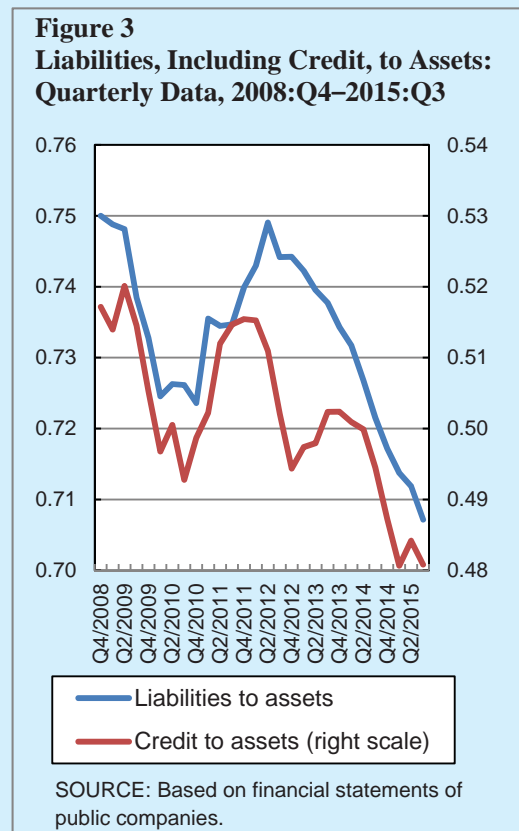
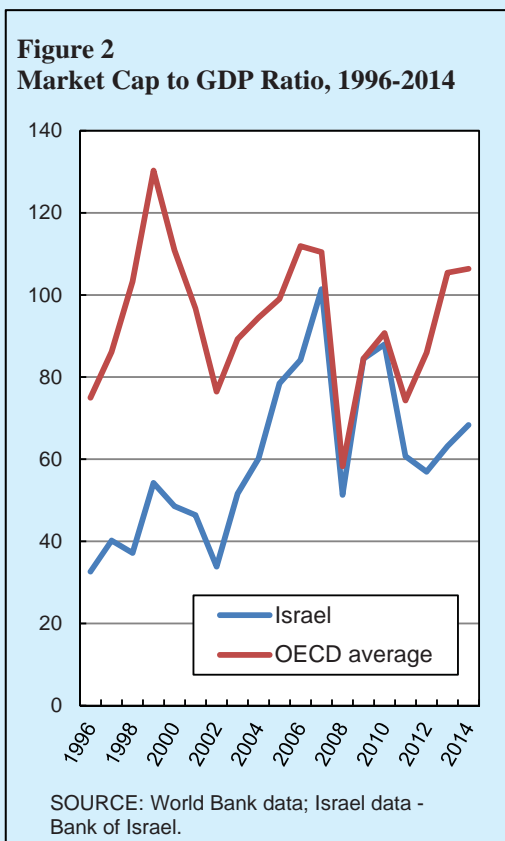
⁹ For more on the link between debt level and company type, see, for example, Titman and Wessels (1988). For more on the link between debt level and institutional environment, see, for example, Fan, Titman and Twite (2012).

¹⁰ However, after the crisis several steps were carried out, including establishing the Hodak Committee and the Andorn Committee on debt restructuring deals.

in trend, it should be added that this ratio is markedly low in Israel, compared to the OECD average. As of 2014, the OECD average is about 124 percent, while in Israel the average is only 74 percent.

In contrast to debt, Israel is similar to the OECD average in the trend of public companies' market capitalization to GDP¹¹ in 1995–2014 (Figure 2). In the level of the ratio, Israel was similar to the rest of the world only in part of the period studied (2008–10), while in subsequent years, a gap again opened between them.

In Section b(1) of the main part of this chapter, it is noted that in Israel, the stability in quantity of companies' cash and in cash flows from current operations relative to assets, alongside an increase in net profit relative to balance-sheet assets¹², contributed to companies' financing of their operations. Thus they were able to make investments from their internal sources, with relatively low dependence on raising debt or issuing equity.



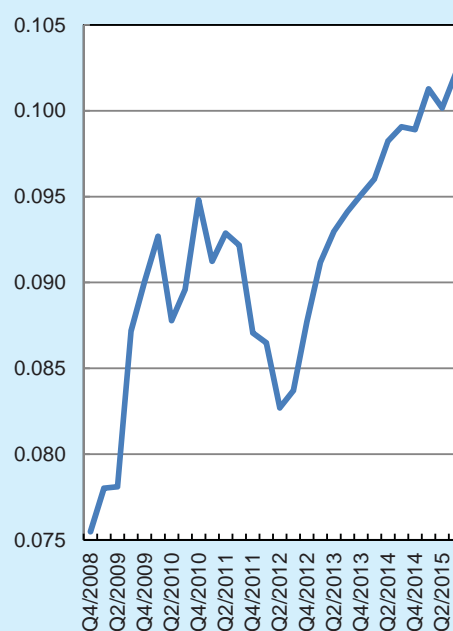
¹¹ Based on World Bank data.

¹² See Figure 4.9.

Since the financial crisis of 2008, there has been a decline of 4 percentage points in the leverage ratio (defined as liabilities divided by assets) of public nonfinancial companies in Israel (Figure 3).^{13,14} The share of total credit¹⁵ out of liabilities, which remained essentially stable over those years, makes up the lion's share of total liabilities (about 70 percent), so that the decline in the ratio of liabilities to assets derives mostly from the decline in the credit component in total assets. However, at the same time, the share capital item on the balance sheet (which represents part of the company's equity) remained essentially stable, around 3 percent of the balance sheet, so that liabilities' declining share was taken up by the retained earnings (See Figure 4) and minority rights components.¹⁶ Retained earnings are the part of the company's profits that accumulate and are not distributed as a dividend, but at the same time are not considered share capital, while the minority rights section represents the share of external shareholders (those who are not controlling interests in the company) in shares, assets, and liabilities of subsidiaries.

An increase in retained earnings can derive from an increase in accumulated profits or from reduced dividend distribution. As a specific trend in dividend distribution volume has not been observed, it may be assessed that the increase in retained earnings derived from the increase in accumulated profits. In contrast, the increase in the minority rights section can be explained as an increase in the profits of subsidiaries or as an increase in the holdings share of the minority shareholders. If the increase in minority rights of a company derives from an increase in the holding rate of minority shareholders in subsidiaries, it means that the share of the company's controlling shareholders in consolidated profits needs to decline, meaning—we would expect to see a decline in the consolidated retained earnings of the company. The fact that a similar trend of increase was observed, in both the consolidated retained earnings section of the company and in the minority rights

Figure 4
Retained Earnings to Assets,
Quarterly Data, 2008:Q4–2015:Q3



SOURCE: Based on financial statements of public companies.

¹³ The data used in this section do not include financial companies or holding and investment companies. Financial companies are not discussed here as they provide the credit to the economy and because they are subject to different, generally stricter, regulation than nonfinancial companies. Likewise, holding and investment companies are not discussed here as they generally do not have significant activities of their own and their financial statements include the operating results of their subsidiaries as well, and reference to reports of holding and investment companies is liable to lead to double counting the subsidiaries.

¹⁴ In order to avoid various biases, we used, as in the chapter itself, the financial statements of companies that reported consistently, per quarter, since 2007.

¹⁵ Current bank credit and maturities (the principal in long-term credit that matures within one year), and banking corporation credit and long term bonds.

¹⁶ Also termed "Non-ownership acquiring rights".

section, strengthens the conclusion that the increase in minority rights is attributed to an increase in the retained earnings of subsidiaries.

In conclusion, the leverage ratio of the nonfinancial business sector in Israel is low relative to the rest of the world, while its rate of financing through equity is similar to the rest of the world, even if a bit lower. Likewise, beginning in 2008, the share of nonfinancial business sector debt in Israel has declined consistently, with most of the decline deriving from a decline in credit. In parallel, equity has not changed during the period, so that the share that did increase was retained earnings—that is, company profits that accrued but that were not distributed as dividends. This analysis is consistent with the one presented in the chapter itself—that is, that the relatively low scope of credit in Israel does not derive from a shortage in sources of financing.

References

- Fan, J. P. H., Titman, S. & Twite G. (2012). “An International Comparison of Capital Structure and Debt Maturity Choices”, *Journal of Financial and Quantitative Analysis*, Vol. 47(1), pp. 23-56.
- Graham, J. R. & Leary M. T. (2011). “A Review of Empirical Capital Structure Research and Direction for the Future”, *Annual Review of Financial Economics*, Vol. 3(2011).
- Karus, A. & Litzenberger, R. H. (1973). “A State-Preference Model of Optimal Financial Leverage”, *Journal of Banking & Finance*, Vol. 35(2), pp. 358-371.
- Modigliani, F. & Miller, M. H. (1958). “The Cost of Capital, Corporation Finance and the Theory of Investment”, *American Economic Review*, Vol. 48, No. 3, pp. 261-297.
- Modigliani, F. & Miller, M. H. (1963). “Corporate Income Taxes and the Cost of Capital”, *American Economic Review*, Vol. 53, No. 3, pp. 433-443.
- Myers, S. C. (1984). “The Capital Structure Puzzle”, *Journal of Finance*, Vol. 39 (3), pp. 574-592.
- Myers, S. C. & Majluf N. S. (1984). “Corporate Financing and Investment Decisions When Firms Have Information that Investors Do Not Have”, *Journal of Financial Economics*, Vol. 13 (2), pp. 187-221.
- Titman, S. & Wessels, R. (1988). “The Determinants of Capital Structure Choice”, *Journal of Finance*, Vol. 43, No. 1, pp. 1-19.

2) Credit

Total credit to the nonfinancial business sector increased in 2015 at a slow pace of 1.3 percent, to a level of NIS 809 billion (Table 4.4). This is a continuation of the moderate increases in recent years. In 2015, bank credit to the nonfinancial business sector grew by 3.5 percent and credit from institutional investors grew by 3.2 percent, primarily due to loans from institutional entities, which increased by about 20 percent. However, their share in total loans to the business sector (excluding bonds) is only about 10 percent. In contrast, credit from nonresidents declined by 4.8 percent.

Only in the second half of 2010 did total credit to the business sector recover from the effects of the global crisis that began in 2008. Since then, it has grown cumulatively by only about 12.3 percent. Thus, the ratio of business sector debt to business sector product declined in 2015 by about 4 percentage points, to a level of 95 percent. This represents a continuation of the continuous downtrend since mid-2007, when the ratio stood at more than 130 percent. Nonetheless, there was no decline in the accessibility of credit for the business sector, as reflected in lines of credit from the banks, which

Table 4.4
Nonfinancial business sector debt (excluding banks and insurance companies) by funding channels, 2010–15

	(NIS billion)					
	2010	2011	2012	2013	2014	2015
Total debt to banks ^a	389	404	401	384	383	397
of which: tradable bonds	6	6	9	6	8	7
Total debt to institutional investors	135	149	153	151	150	155
of which: loans ^b	18	26	35	44	50	59
Total debt to the financial sector	524	554	554	535	534	552
Total debt to nonresidents	148	163	168	165	179	171
of which: loans	123	141	149	146	150	143
Directed credit from the government	2	2	2	1	0	0
Tradable bonds held by households and others ^c	79	73	78	86	85	86
Total debt to all lenders	754	792	801	787	798	809
Percent of business sector product	115%	114%	108%	100%	99%	95%
Loans	527	567	578	569	576	593
Tradable bonds	185	185	185	186	192	191
Nontradable bonds	41	40	38	32	30	25
CPI-indexed	257	256	258	252	236	229
Foreign currency indexed	219	240	236	221	232	223
Unindexed	278	297	307	314	331	357

^a Israeli residents only. Solo figures include foreign branches but do not include foreign subsidiaries.

^b Including loans from credit card companies that are neither the responsibility of, nor guaranteed by, the banks.

^c "Others" are business and financial companies.

SOURCE: Bank of Israel.

show stability relative to balance sheet credit since mid-2012 and even an increase in the manufacturing and real estate industries.

The low rate of expansion in business sector credit is not consistent with the economy's rate of growth, unlike the period prior to the onset of the global crisis in 2008. Although a similar process can be seen in other countries, it appears that in Israel the rate of growth in credit to the business sector has moderated much more than the moderation in the GDP growth rate. The slow expansion of credit to the business sector relative to growth in GDP is apparently the result of the shift of the economy to growth based on labor-intensive activity, which also contributed to moderating the development of productivity (for further details, see Chapter 2). The diminishing need for investment in capital has generated changes in the division of credit between sectors and between industries, particularly in the case of bank credit. Since 2008, total credit to large businesses has decreased, in contrast to the increase in credit to small and medium-sized businesses. In addition, credit to the trade and service industries has expanded in contrast to the contraction of credit to manufacturing. The opposing effects sum to only a moderate increase in total credit to the business sector as a whole. (For further details, see Chapter 4 of the Bank of Israel Report for 2014).

(a) Bank credit

Bank credit to the business sector (including bonds) grew in 2015 at a moderate rate of 3.5 percent, to NIS 397 billion, which followed a cumulative contraction of 5.2 percent during the period 2012–14. The division of credit between activity segments has changed as a result of the high rates of change in the various segments and their opposing directions.²⁵ The ratio of bank credit to business sector product declined again this year, at a moderate rate of about 1 percentage point, to a level of 46.5 percent. This represents a continuation of the moderate downward trend since mid-2013, which followed the steep decline during the period 2002–13. The share of bank credit to the business sector within total credit to the sector has remained stable since 2008 at a level of about 50 percent, after it had declined steeply since 2003. The drop in the share of bank credit to the business sector was an expression of the growth in financing through non-bank credit, while the stability since 2008 is an expression of the halt in the growth in financing through this channel.

The distribution of credit among activity segments changed as a result of high rates of change in opposing directions between the various activity segments.

Analysis by activity segment

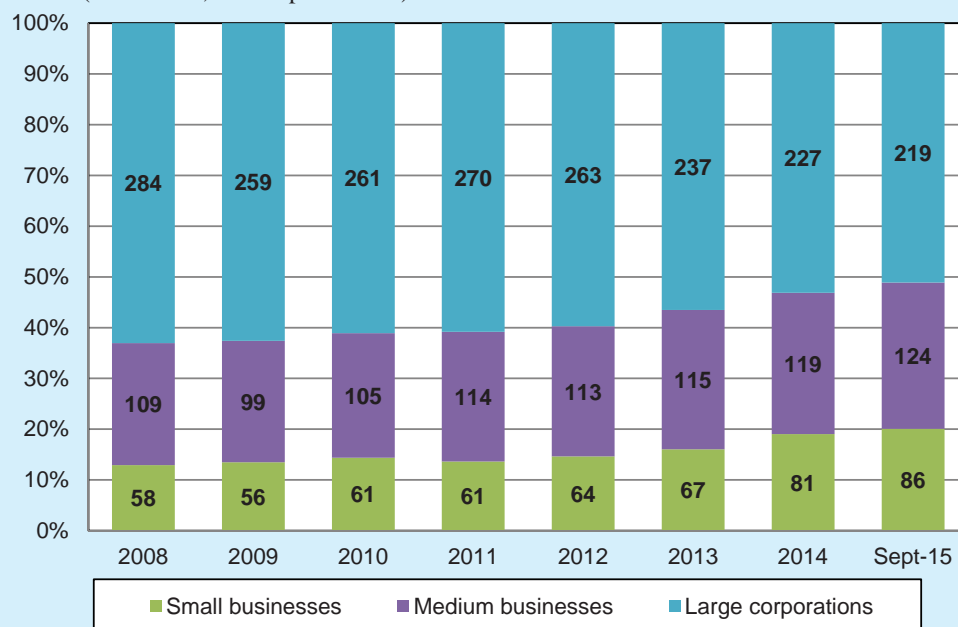
The moderate increase in total bank credit to the business sector this year is the result of significant shifts, in opposite directions, in credit to the various activity segments. Figure 4.11 shows a notable increase in the share of small and medium-sized businesses

²⁵ Total credit granted by the banks is broken down according to the size of the borrower: the business segment (large businesses), the commercial segment (medium-sized businesses) and the retail segment (small businesses). The definition of segments up until 2015 differed from one bank to another and in some of the banks it even changed over time. Banking Supervision decided to introduce fixed levels starting from 2016, which will be used by all of the banks.

in total bank credit to the business sector since the beginning of 2009 at the expense of the share of large businesses. This trend continued in 2015.²⁶

The background to the decline in the quantity of bank credit to large businesses was the alignment of interests between them, the banks and the institutional entities. This occurred as a result of the realization of risk in this segment as a result of the 2008 crisis, which demonstrated that in a time of crisis the risk implicit in large businesses is larger than what was thought. The main consideration of the banks in reducing the proportion of credit to large businesses was their higher weighting in the banks' risk assets than the weighting for credit to small and medium-sized businesses, a consideration that became even more important when the banks' capital requirements were increased.²⁷ As a result of the crisis, the institutions wished to transfer the non-negotiable portion of their holdings from bonds to loans in order to improve and better

Figure 4.11
Distribution of Bank Credit to the Business Sector by Activity Segment, and Balance of Credit in Each Segment, 2008 to September 2015
(NIS billion, end-of-period data)



SOURCE: Bank of Israel.

²⁶ The data in this subsection relate to the period up until September 2015. Total bank credit to the business sector, as presented in Tables 4.3 and 4.4, is lower than the sum of bank credit to the three activity segments in Figure 4.11. The reason for this is that while total credit to the business sector is presented after modifications to meet the international standard, the data for segments broken down by activity are available on an aggregate level only, i.e., on a crude basis. These data also include, for example, the activity of branches abroad and credit to local authorities. This gap does not appear to alter the overall picture of the trends in credit by segment.

²⁷ Starting from January 2015, all of the banks were required to have a total capital adequacy ratio of 12.5 percent.

monitor their credit portfolio and to achieve lower costs. The shift from bonds to loans was reinforced by the conclusions of the Hodak Committee, which placed limits and obligations on investment in the corporate bond market.²⁸ Large businesses, which had reduced their demand for investment, found loans from institutional investors to be a channel that increased their bargaining power with the banks.

As a result of the alignment of interests between the banks, the institutions and large businesses, total bank credit to large businesses in September 2015 was lower than its peak in the first quarter of 2009 by about 25 percent—about NIS 74 billion. This decrease was offset by an increase of about NIS 45 billion in loans from the institutions, almost all of which was provided to large businesses. With regard to corporate bonds, a large portion of which are also issued by large businesses, there has been only a slight change since 2009—a decline of about NIS 31 billion in non-negotiable bonds and an increase of about NIS 27 billion in negotiable bonds. As a result, the change in total credit to large businesses since 2009 was smaller—NIS 33 billion, a decline of about 6.5 percent.

Banks' credit to large businesses was reduced in recent years as bank credit to small and medium-sized businesses was increased.

The banks that reduced their credit to large businesses began expanding their credit to small and medium-sized businesses (Figure 4.11) for three reasons: (1) As noted, of the banks' risk assets, credit to small and medium-sized businesses has a lower risk weighting than credit to large businesses. Therefore, the banks channeled the sources that became available to small and medium-sized businesses (and to households; see Part 2a) and thus improved their ability to meet the increased capital requirements. (2) Several reforms and measures, some of which were adopted as a result of the protests in the summer of 2011, increase competition in the economy and restrict monopolies and large companies in some industries, such as food and communication. These measures may adversely affect the profits of large businesses (and to some extent have already done so) and improve the conditions of small businesses more. This will therefore also alter the distribution of credit in the economy. (3) The economy's cyclical position is characterized by a change in the composition of demand: Demand shifted from export-oriented industries, such as manufacturing, to industries dependent on domestic demand, primarily trade and services, and these industries tend to be labor-intensive and are characterized by a concentration of small businesses. This change has occurred alongside the appreciation in recent years of the shekel, which has been influenced by the changing composition of demand and against the background of a decline in world trade (for further details, see Chapter 2).

The increase in credit to small and medium-sized businesses offsets only partially the decline in total bank credit to large businesses, which is due to several reasons: (1) Small businesses and the trade and services industries are labor-intensive and therefore their contribution to economic growth requires lower investment and as a

²⁸ In addition, the restrictions and obligations that were recommended in April 2014 by the Goldshmidt Committee for the Regulation of Institutional Loans would not have significantly reduced the worthwhileness of these loans. It is likewise possible that the illiquidity premium on direct loans is higher than on non-negotiable bonds, which can be traded on TACT-institutional, and therefore the return to institutions from loans is higher than that from bonds.

result they consume a smaller amount of credit relative to large and capital-intensive businesses. (2) From an operational viewpoint, providing credit to small businesses consumes more human and physical resources than providing a similar amount of credit to large businesses²⁹ and therefore the shift of credit between industries occurs gradually and over a long period. (3) Part of the decline in credit to large businesses is channeled to the household sector.

Alongside the increase in the amount of bank credit to small and medium-sized businesses, the estimated interest rate on credit to these segments has fallen.³⁰ Relative to the beginning of 2011, the estimated interest rate for small businesses has declined by about 1.4 percentage points, to a level of 7.1 percent, and for medium-sized businesses by about 0.7 percentage points, to a level of 3.8 percent. The gap relative to the estimated interest rate for large businesses narrowed as the estimated interest rate for them dropped by only 0.2 percentage points, to 3.1 percent. The relative decline in the price of credit for small and medium-sized businesses (although it is still at a high level relative to the price for large businesses), together with the growth in total credit to small businesses, strengthens the assessment that there is no significant supply-side constraint facing this segment.

The spreads between the estimated interest rate for small and medium-sized businesses and the estimated interest rate for large businesses are contracting.

This assessment is also supported by the findings of the Companies Survey, according to which the share of small and medium-sized companies that are reporting financing constraints declined in 2015, in contrast to a slight increase in the proportion of large companies reporting financing constraints. Essentially, the access to credit for small businesses is higher than the average for the EU.³¹ Small and medium-sized businesses are also eligible for various types of assistance from the Small and Medium-Sized Businesses Agency and, in particular, in the area of financing, through a fund operated by the Agency, which provided credit to small and medium-sized businesses of more than NIS 2.75 billion from the start of 2014 until September 2015. Nonetheless, it would be worthwhile determining whether the cost of credit is still high relative to the level of risk and operational costs for credit to small businesses.

The transmission from monetary policy to bank credit

In September 2014, the Bank of Israel reduced the monetary interest rate to 0.25 percent and in February 2015 to only 0.1 percent, the lowest levels reached historically in Israel and very close to zero (Figure 4.12). The accommodative monetary policy is meant to encourage economic activity. Two of the channels by which monetary policy affects economic activity through the interest rate are deposits and credit.

Transmission through the deposits channel is intended to encourage economic activity through its effect on consumption. A reduction in the Bank of Israel interest

²⁹ The final report of the Team to Examine Increasing Competition in the Banking System, March 2013.

³⁰ The estimate is calculated by dividing total revenue from interest and fees from each segment by total balance sheet credit of each segment. The data on revenue and credit are in aggregate form, such that this is a rough estimate of the interest rate for each segment.

³¹ See *2014 SBA Fact Sheet – Israel*, by the European Commission.

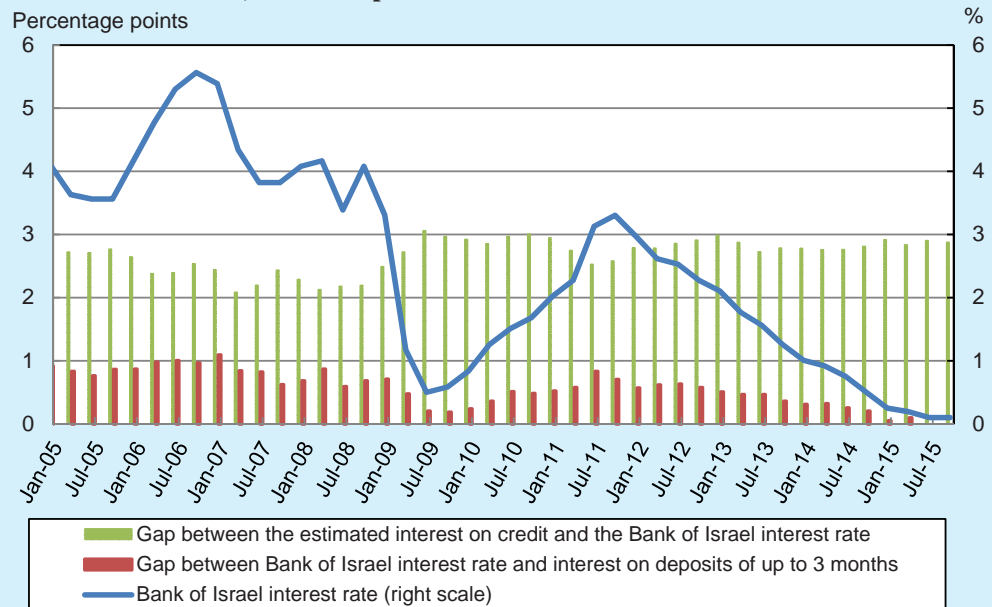
The effectiveness of the deposits channel in the transmission of monetary policy to economic activity declined as the Bank of Israel interest rate approached zero.

The recent reductions in the interest rate apparently did not adversely affect the credit channel of transmission from monetary policy to economic activity.

rate leads to a reduction in the interest rate on bank deposits, thus reducing the incentive to save and in turn increasing consumption. Figure 4.12 presents the spread between the Bank of Israel interest rate and the interest rate on deposits of up to three months. This gap has narrowed in recent years, and during the past year has even become negligible. In other words, the effectiveness of the deposits channel in encouraging growth has declined as the Bank of Israel interest rate approached zero. Nonetheless, it is possible that the high liquidity of the public's deposits is also contributing to the increase in private consumption.

The transmission from monetary policy through the credit channel is meant to encourage economic activity by, among other things, making credit cheaper. Accommodative monetary policy works along two tracks: first, it reduces the burden of debt servicing as a result of the reduction in the interest rate on the balance, and second, it reduces the cost of new credit. Figure 4.12 presents the spread between the estimated interest rate on unindexed business credit (which accounts for about 70 percent of business credit) and the Bank of Israel interest rate. This gap has remained almost unchanged since 2009, when it rose somewhat as a result of the global crisis. This implies that the recent reductions in the interest rate apparently did not adversely affect this channel of transmission from monetary policy to economic activity. The narrowing of the deposit gap as opposed to the stability of the credit gap implies that the banks have reduced the interest rate margin, even though this is liable to lead to a decline in their profitability.

Figure 4.12
The Bank of Israel Interest Rate and the Gap Between It and the Interest on Deposits of up to 3 Months and the Estimated Interest on Unindexed Business Credit, 2005 to September 2015



SOURCE: Bank of Israel.

(b) Non-bank credit

Total non-bank credit to the business sector³² at the end of 2015 was about NIS 412 billion, about NIS 3 billion (about 0.8 percent) lower than at the end of the previous year. As a result of the expansion of bank credit and the contraction in non-bank credit, the proportion of non-bank sources in the financing of business sector activity declined this year and accounted for about 51 percent of the total debt of this sector. Total debt owed to institutional entities continued to expand due to the component of direct loans, which grew by about 21 percent. This was accompanied by the drop in total debt to nonresidents and the stability in other financing channels.

Total debt owed to institutional entities continued to expand due to the increase in direct loans.

Corporate bond issuance

The total net issues of Israeli corporate bonds in the nonfinancial sector³³ reached about NIS 2.5 billion in 2015, following two years in which net capital raised was negative. Total gross issues this year were NIS 28.6 billion, similar to the level in recent years, although total redemptions were lower. About one-half of gross issues, about NIS 14.5 billion, were carried out by companies in the real estate and construction industry. In addition to issues by Israeli real estate companies, there were 18 issues by foreign real estate companies, which raised a total of about NIS 5.5 billion. Total issues of foreign companies in the Israeli market reached a record in 2015 (for further details, see the Financial Stability Report for the second half of 2015).

Total issues of foreign companies in the Israeli market reached a record in 2015.

Within the nonfinancial business sector, the real estate and construction industry was the only one that raised a significant amount of net debt. In the other industries, apart from manufacturing, total redemptions were higher than new issues. In manufacturing, total gross debt raised totaled about NIS 2.9 billion, with a small number of issues (in contrast to redemptions of about NIS 1.8 billion). Of this, about NIS 1.5 billion was raised by Oil Refineries Ltd. (Bazan).

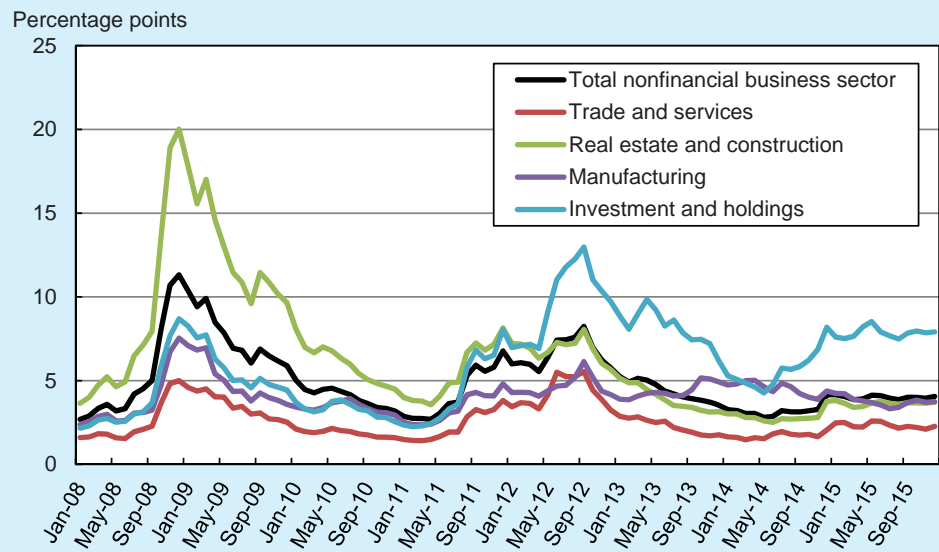
The cost of raising debt (the yields on corporate bonds) in the nonfinancial business sector declined at the beginning of the year and rose later on, together with the increase in the interest rate on indexed government bonds. In all of the industries, apart from manufacturing, the cost of raising debt at the end of the year was higher than at the beginning of the year. This apparently reflects the positive net debt raised in this industry. The year 2015 was characterized by stability in the spreads between yields on corporate bonds and those on government bonds, apart from the narrowing of spreads in the trade and services industry (Figure 4.13).

The nonfinancial business sector's cost of raising debt declined at the beginning of the year and rose later on.

³² Including negotiable and non-negotiable bonds held by institutional investors and nonresidents and by Israeli households, both directly and through mutual funds; loans from institutions, from nonresidents and from credit card companies; and directed government credit.

³³ Including negotiable bonds and also non-negotiable bonds registered on *Retzef Mosdiim*, a system for trading in bonds that were issued to institutional investors without a prospectus and which therefore are not permitted for trading by the public.

Figure 4.13
Corporate Bond Spreads in the Nonfinancial Business Sector^a, 2008–15



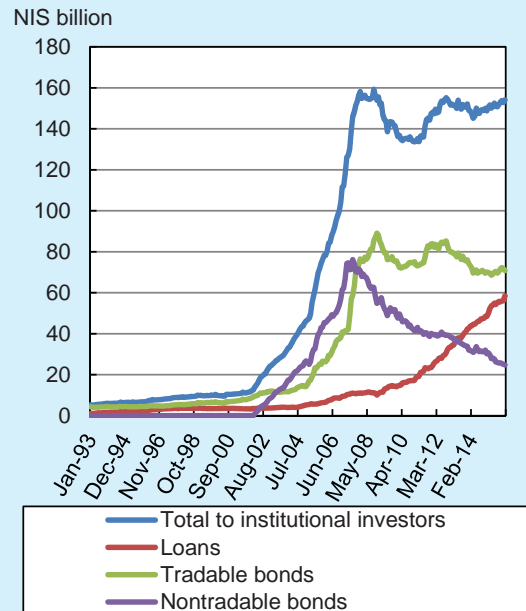
^a The weighted average of the spreads between yields on indexed corporate bonds (excluding structured and convertible) and the yields on parallel government bonds, by industry, monthly average, 2008–15. SOURCE: Bank of Israel calculations.

Credit from institutions

The share of institutional entities in total nonfinancial business sector credit reached 19 percent this year, with total debt to them growing to NIS 5.4 billion. This increase was the result of the continuing expansion of direct loans, which grew this year by NIS 10 billion. Nonetheless, there is a substitution seen between direct loans and non-negotiable bonds held by institutions (Figure 4.14). The proportion of the nonfinancial business sector in total credit provided by the institutions was similar to what it was last year, about 27 percent, while most of the domestic credit provided by the institutions went to the government.

In institutions' credit to the business sector there is a substitution seen between direct loans and non-negotiable bonds.

Figure 4.14
Outstanding Nonfinancial Business Sector Debt to Institutional Investors and Its Components, 1993–2015



SOURCE: Bank of Israel calculations.

In view of the increasing quantity of assets held by institutional investors, and first and foremost pension funds, it appears that the expansion of credit provided to the nonfinancial business sector is particularly slow. In 2015, only about one-quarter of the increase in total credit provided by institutional investors went to the nonfinancial business sector.

It appears that institutional investors are looking to diversify their investments, which will allow them to diversify the risks, and therefore they are also directing a notable amount of resources to investments abroad (see Section 1b in this chapter). In addition, they are interested in long-term investments and are beginning to participate in the process of mortgage securitization³⁴, in accordance with the recommendations of the Joint Team to Promote Securitization in Israel (see Box 4.2 in the Bank of Israel Annual Report for 2014). Nonetheless, the main goals of the abovementioned recommendations were the expansion of credit to small businesses and the securitization of loans provided to them, something which has not yet been achieved.

3) Share capital

Share capital in the amount of NIS 5.15 billion was issued on the Tel Aviv Stock Exchange (TASE) in 2015, similar to the annual average in 2011–14. Eighty percent of the capital was issued by real estate (about NIS 2.6 billion) and manufacturing companies (about NIS 1.5 billion), while the rest was issued by investment and holding companies (about NIS 0.7 billion) and trade and services companies (about NIS 0.3 billion). Manufacturing companies issued a smaller amount of equity than in the previous year, simultaneous with a positive net issuing of debt, while real estate companies issued a similar amount of equity as in the previous year and companies in the investment and holding industry and the trade and services industry issued more equity than in the previous year. This was in parallel to the negative net issuing of debt in these industries this year. In addition, Israeli startup companies raised \$4.43 billion, 30 percent more than in 2014 (for further details, see Box 4.1—The Financing of Startup Companies—in the Bank of Israel Annual Report for 2014). Of this amount, 72 percent was raised from venture capital funds, most of them foreign. The activity of domestic venture capital funds is still relatively limited and institutional investors avoid investing in them, due to the involvement of management fees.

The number of companies on the TASE continued to decline and reached only 576 at the end of 2015, compared to 600 at the end of 2014. Forty-seven companies were removed from trading, of which 23 were stock companies. Eleven were removed as a result of mergers and acquisition offers, five were removed as a result of liquidation or an arrangement. At the same time, 23 new companies were listed on the TASE, of which 11 are stock companies, most of them foreign firms that did raise capital this year (for further details, see the Financial Stability Report for the second half of

³⁴ For example, the sale of a part worth NIS 770 million of a mortgage portfolio by Mizrahi-Tefahot Bank to the Menora-Mivtachim group. Eighty percent of the rights and liabilities were sold, and the remainder stayed at the bank.

2015). The rest were bond companies. This year there only two IPOs, both of which were in the real estate and construction industry, which together raised the very small amount of about NIS 150 million. In 2014 as well, the IPOs all involved real estate and construction companies, although the amount (about NIS 1.4 billion) of the issues was greater by a magnitude of almost 10.