

## *Chapter 1*

# *Developments in the Activity and Structure of the Banking System in 2009*

The recession that began in late 2008 and continued in early 2009 was relatively short and weak in Israel compared with that in advanced economies, as GDP contracted in only two consecutive quarters. This development is attributable, among other things, to several salient factors related to the domestic banking system—including the limited extent of domestic banks' exposure to hybrid financial assets abroad, their small dependency on the interbank market, the high level of household savings, a housing market that was balanced at the time the global crisis began, and comprehensive regulation and close supervision of the banking system.

The banking system recovered rapidly from the direct effects of the crisis and coped mainly with its indirect effects—the downturn in domestic business activity and corporate solvency.

During and after the crisis, the banks, encouraged by the Banking Supervision Department, took measures to improve their resiliency: they continued to shore up their capital, toughened their lending terms, reduced exposures to foreign financial institutions, and improved their liquidity.

Despite the turn for the better in the second half of 2009, macroeconomic uncertainty abroad and in the global banking system remained high; this had strong effects on the state of the Israeli economy and its financial system.

During the review year, the domestic capital markets gradually started functioning again and firms, mainly less-risky ones, went back to raising sources via large debt and equity issues. This diverted demand for credit from the banking system to nonbank settings and lowered the balance of bank credit to business.

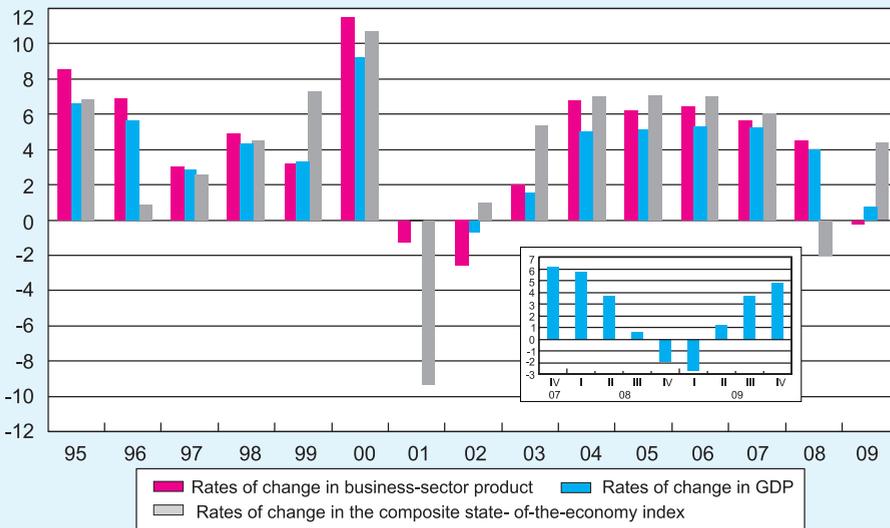
The damage to the Israeli economy was relatively mild by virtue, among other factors, of an expansionary monetary policy that was reflected in lowering the monetary lending rate to only 0.5 percent in April–August. Consequently, the balance of the public's deposits to very short terms (demand and self-renewing-overnight (SRO)) increased markedly, since the return on low-risk short-term financial assets was close to zero and the banks amassed a surplus of short-term assets. Most of this surplus was placed in unindexed local-currency deposits with the Bank of Israel or invested in government bonds, which are not considered risk assets for capital-adequacy purposes. It seems to have been the close-to-zero interest rates in all channels of liquidity that prompted the banks to invest in this vehicle.

The performance of the public's long-term savings (provident, severance-pay, advanced-training, and pension funds, and life-insurance companies) is strongly dependent on the domestic and foreign capital markets, which remained very risky even though they rebounded swiftly during the review year. Accordingly, the money that the public redeemed from its long-term savings funds in 2008 was not returned to these funds in 2009; instead, it was diverted, at least in part, to real-estate assets, which the public perceived as low-risk and as able to generate a positive real return for years. Since investing in these assets usually requires large-scale bank financing, demand for housing loans built up during the year. The public chose to take unindexed adjustable-rate mortgage loans (ARMs), in which the interest rate is directly affected by the monetary lending rate—which was at historically low levels, in contrast to previous years.

## 1. THE BACKGROUND—GLOBAL AND DOMESTIC MACROECONOMIC DEVELOPMENTS

The domestic economy sustained relatively minor damage in the economic crisis that buffeted the world in the past two years. The contraction of economic activity that began in late 2008, in the wake of the crisis, continued at the beginning of the review year. In

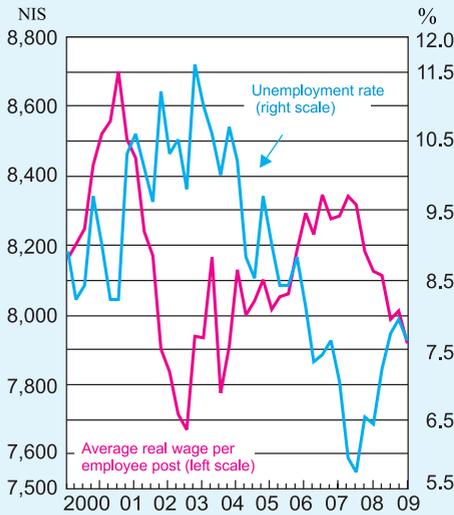
**Figure 1.1**  
**Annual and Quarterly Change in GDP, and Annual Change in Business Sector Product and in the Composite State-of-the-Economy Index, 1995-2009**  
 (Annual rates of change)



SOURCE: Based on data from the Central Bureau of Statistics.

**Figure 1.2**  
**Major Developments in the Labor Market—Unemployment and Average Real Wage per Employee Post, December 1999 to December 2009**

(Quarterly data, seasonally adjusted, wages at December 2007 prices)



SOURCE: Based on Central Bureau of Statistics.

the second quarter, however, activity began to expand and in the second half of the year the recovery continued.

Gross Domestic Product, employment, and nominal wage were basically unchanged (on average) in 2009 after five years of rapid growth. Although the downturn in domestic economic activity raised the unemployment rate and lowered per-capita GDP, the blow to the Israeli economy was mild relative to other developed countries (Figures 1.1 and 1.2). Market data (the bank-share indices—Figure 1.3) also bear this out.

The extent of damage and the duration of the global crisis in developed countries traced to the economic policies of these countries' governments and central banks, which were noted for measures of extraordinary strength and scope. The Israeli economy, as a small and open one, is acutely affected by global developments, especially those in large economies. The domestic factors that spared Israel from major damage included a low level of leveraging among households, low exposure to hybrid financial assets, strict banking supervision including a demand to

improve capital adequacy, a balanced housing market at the time the crisis began, fiscal responsibility, and a strongly expansionary monetary policy including direct intervention in the foreign-currency and government-bond markets<sup>1</sup> in addition to lowering of the monetary lending rate to an unprecedented low.

Despite the turn for the better, uncertainty in the global economy and the global financial system remained high, and Israel's financial system was no exception.

In 2009, the business sector met most of its financing needs by turning to the capital market. Outstanding bank credit to business declined whereas nonbank credit increased steadily, largely among low-risk firms.<sup>2</sup> Thus, public issues of tradable bonds on the Tel Aviv Stock Exchange attained a high level of NIS 20 billion gross, of which nearly two-thirds was issued in the second half of the year (Figure 1.4). This level of issuing, however, was much lower than in the pre-crisis years, especially among low investment-grade and high-yield companies and those in the real-estate industry. By implication, most firms that issued in the review year were of lesser risk.

<sup>1</sup> For elaboration, see Bank of Israel *Annual Report* for 2009, Chapter 1.

<sup>2</sup> *Ibid.*, Figure 4.12, p. 187.

From the last quarter of 2008 onward, the Bank of Israel responded to the crisis by engineering a monetary expansion including, but not limited to, slashing its monetary lending rate to only 0.5 percent. As a result, the total return on short-term low-risk financial assets such as bank deposits and makam approached close to zero (after subtraction of fees and taxes), prompting the public to increase its balance of liquid assets—demand deposits and SROs—significantly.

Given the depreciation of its financial assets in 2008 and early 2009, the public internalized the intrinsic risks of investing directly in the domestic and foreign capital market despite the rapid recovery that occurred in this domain in 2009. Once the public realized that the performance of its long-term savings (provident, severance-pay, advanced-training, and pension funds, and life-insurance companies) depended heavily on these markets, it did not return the money that it had withdrawn from long-term savings vehicles in 2008 to the same vehicles. Instead, it preferred to turn to a long-term investment vehicle that it perceived as a safer one that would generate a positive real return for years—investment real estate. In addition to considerations of change in risk-adjusted yield, investors in real estate benefited from low financing costs due to the almost zero monetary lending rate, which lowered the cost of local-currency adjustable-rate mortgage (ARM) loans as its main effect. Developments during the year in the housing market and housing credit, and their effects on the banks' activity, profits, and risks, are analyzed at length in this chapter and in the rest of this survey.

**Figure 1.3**  
**Index of Israeli Bank Shares and Indices of Bank Shares in the US and Europe, 2008-09**



SOURCE: Bank of Israel and Bloomberg.

## 2. PRINCIPAL DEVELOPMENTS IN BALANCE-SHEET AND OFF-BALANCE-SHEET ACTIVITY

### a. General remarks

The total balance sheet of the Israeli banking system continued to expand in the review year but sluggishly by recent years' standards. At the end of 2009, the banks' total assets were NIS 1.088 trillion (140 percent of GDP), 3 percent more than on the year-earlier date (Table 1.1).

On the uses (assets) side, the composition of the increase was different in 2009 than in previous years. Total credit to the public, accounting for some two-thirds of the banking system's balance sheet, decreased by NIS 10 billion (1.5 percent). The sources freed were invested in deposits with the Bank of Israel, which grew by NIS 43 billion (more than 50 percent) in 2009. The securities line grew by 10 percent or NIS 13 billion, largely in government debentures.

The decrease in total bank credit to the public was derived from the contraction of domestic business activity due to the crisis. The downturn in the banking system's centrality in business credit is part of a long-term trend of contraction in classic banking intermediation as the capital market becomes deeper and more efficient.

The banks' securities portfolio grew in 2009, both in size and in percent of the total balance sheet. The portfolio stood at NIS 151 billion at the end of 2009 as against NIS 137 billion a year earlier—up 10 percent—and, accordingly, its share in the balance sheet advanced by 1 percentage point, to 14 percent, still far below the 2006–2007 level (17 percent). The increase in portfolio value is explained by a combination of higher asset prices and purchase of new securities.<sup>3</sup>

The sources (liabilities) side was typified in 2009 by an increase in equity and subordinated notes as the banks invoked a deliberate policy to improve capital adequacy per instruction of the Supervisor of Banks. Also, the public's deposits increased mildly—by NIS 17 billion, 2 percent.

The entire increase in the public's bank deposits was in unindexed local currency, which is essentially a short-term vehicle. This reflected a move toward greater liquidity in the public's portfolio, against the background of the almost zero net return (after subtraction of fees and taxes) on solid portfolio investment vehicles—alternatives to demand and other short-term deposits—most of the year.

All banking groups did much to reduce their exposure to foreign financial institutions, both in absolute values and relative to equity. This development, coupled with the aforementioned increase in deposits with the Bank of Israel and the increase in investments in government bonds, enhanced the banking system's liquidity.

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<sup>3</sup> For a more thorough analysis of the banks' activities in securities and of securities trends and developments during the review year, see Section 4 of this chapter.

**Table 1.1**  
**The Balance Sheet of Israel's Banking System,<sup>a</sup> 2006-09**

	At current prices			Rate of change in			Distribution			Average balance at	
	(NIS million)			(percent)			(percent)			(NIS million)	
	2006	2007	2008	2009	2009	2006	2007	2008	2009	2008	2009
<b>Assets</b>											
Cash and Deposits in banks	138,889	125,733	125,978	160,785	28	14.5	12.5	11.9	14.8	119,742	142,864
<i>of which:</i> Cash <sup>b</sup>	21,631	23,544	83,326	126,958	52	15.6	18.7	66.1	79.0		
Deposits in commercial banks	113,370	99,355	40,028	31,896	-20	81.6	79.0	31.8	19.8		
Securities	164,023	170,138	137,475	150,871	10	17.1	16.9	12.9	13.9	146,783	147,917
Credit to the public <sup>c</sup>	615,883	663,450	732,428	721,960	-1	64.1	65.9	69.0	66.3	694,535	726,942
<i>of which:</i> Unindexed local currency	261,713	298,258	359,772	386,188	7	42.5	45.0	49.1	53.5	331,353	371,281
CPI-indexed local currency	176,722	186,084	189,136	178,124	-6	28.7	28.0	25.8	24.7	190,456	182,144
In or indexed to foreign currency	176,350	177,485	183,024	156,804	-14	28.6	26.8	25.0	21.7	171,502	172,866
<i>of which:</i> In dollars	126,473	118,195	125,597	103,459	-18	71.7	66.6	68.6	14.3	113,985	116,731
Non-financial items	1,098	1,622	496	844	70	0.2	0.2	0.1	0.1	1,225	651
Credit to the government	3,247	1,425	2,283	2,973	30	0.3	0.1	0.2	0.3	2,121	2,817
Investment in subsidiary and affiliated companies	3,751	4,981	4,548	4,490	-1	0.4	0.5	0.4	0.4	4,824	4,348
Buildings and equipment	12,099	12,705	13,554	13,856	2	1.3	1.3	1.3	1.3	13,063	13,625
Other assets	22,606	26,493	44,533	29,955	-33	2.4	2.6	4.2	2.8	35,021	35,055
<b>Total assets</b>	<b>960,499</b>	<b>1,007,215</b>	<b>1,062,234</b>	<b>1,088,378</b>	<b>3</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>1,018,056</b>	<b>1,076,961</b>
<b>Liabilities and equity</b>											
Deposits of the public	759,701	787,928	820,401	836,904	2	79.1	78.2	77.2	76.9	781,469	832,721
<i>Of which:</i> Unindexed local currency	324,410	355,946	412,952	434,957	5	42.7	45.2	50.3	52.0	376,520	421,753
CPI-indexed local currency	104,812	97,531	101,302	99,822	-2	13.8	12.4	12.3	11.9	98,151	101,081
In or indexed to foreign currency	328,891	332,324	305,572	301,215	-1	43.3	42.2	37.2	36.0	305,382	309,174
<i>of which:</i> In dollars	253,997	245,999	223,853	212,810	-5	77.2	74.0	73.3	70.7	221,058	221,991
Deposits from banks	26,180	26,424	20,428	18,879	-8	2.7	2.6	1.9	1.7	27,725	19,818
Government deposits	12,368	4,895	3,536	3,649	3	1.3	0.5	0.3	0.3	4,156	3,608
Bonds and subordinated notes	51,554	59,257	66,725	78,710	18	5.4	5.9	6.3	7.2	64,449	72,357
Other liabilities	53,210	58,567	80,087	71,431	-11	5.5	5.8	7.5	6.6	69,129	72,912
Total liabilities	903,013	944,585	1,000,179	1,018,291	2	94.0	93.8	94.2	93.6	955,393	1,010,909
Minority interests	1,549	1,532	1,770	1,853	5	0.2	0.2	0.2	0.2	1,656	1,803
Equity	55,937	61,098	60,285	68,234	13	5.8	6.1	5.7	6.3	61,007	64,248
<b>Total liabilities and capital</b>	<b>960,499</b>	<b>1,007,215</b>	<b>1,062,234</b>	<b>1,088,378</b>	<b>3</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>1,018,056</b>	<b>1,076,961</b>

<sup>a</sup> Consolidated. Including the five major banking groups (Leumi, Hapoalim, Discount, the First International, and Mizrahi Tefahot), Union, Jerusalem, and Dexia, but not including the branches of foreign banks operating in Israel, so that the data shown here are slightly lower than those shown in Figure 1.11 in this publication. Dexia, but not including the branches of foreign banks operating in Israel, so that the data shown here are slightly lower than those shown in Figure 1.11 in this publication.

<sup>b</sup> Including deposits with the central bank.

<sup>c</sup> Excluding non-financial items.

SOURCE: Banks' financial statements.

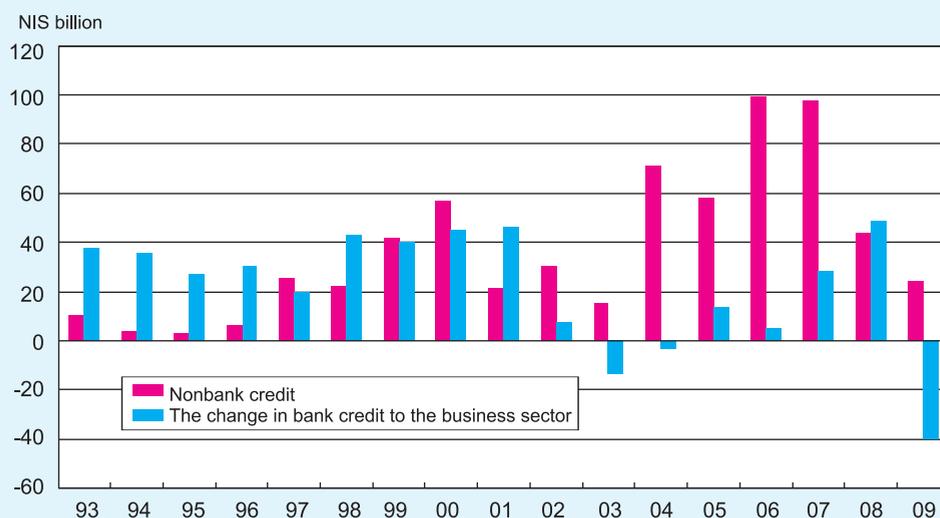
## b. Principal developments in bank credit to the public

### (1) Business lending

In the review year, outstanding bank credit to the business sector contracted considerably while interest was relatively stable (Table 1.2, Table A1.5, Figure 1.4). This development, in our estimation, is the outcome of a new equilibrium that formed in the aftermath of the slump in domestic real activity. The slump dampened both demand for and supply of bank credit as the combination of greater customer risk and macroeconomic uncertainty prompted the banks to greater caution in lending.

Business demand for bank credit is affected by two factors apart from the interest rate: the substitution effect and the income effect. In 2009, both effects pulled in the same direction: mitigating demand for bank credit. An empirical study relating to the Israeli economy<sup>4</sup> found that the demand elasticity of bank credit to the issue of credit substitutes (debt and equity) is negative and significant<sup>5</sup>; meaning that the increase

**Figure 1.4**  
Credit from Nonbank Sources and the Change in Bank Credit to the Business Sector,<sup>a</sup> 1993-2009<sup>b,c</sup>



<sup>a</sup> Business credit given during the year, excluding credit to individuals.

<sup>b</sup> Due to structural changes in the capital market, in 2005 assets held in and outside of the banking system were reclassified.

<sup>c</sup> The considerable increase in non-bank credit in 2006 was a result, inter alia, of Teva's raising of NIS 24 billion to finance its merger with the American pharmaceutical firm IVAX.

SOURCE: Based on Tel Aviv Stock Exchange data, IVC, and returns to the Bank Supervision Department.

<sup>4</sup> D. Ruthenberg and Y. Hecht (2006), "The Relationship between Business Cycles in the Economy and the Volume and Quality of Bank Credit Against the Background of the Basel II Agreement—the Israeli Experience," Bank of Israel, Banking Supervision Department, Research Unit, Discussion Paper Series 06.01.

<sup>5</sup> Ibid., Table 3, p. 31.

**Table 1.2**

(NIS million, at current prices)

Difference between changes in bank credit and its substitutes	Funds from non-bank substitutes									
	(1)=(3)-(4)	(2)=(3)+(4)	Changes in bank business credit <sup>a</sup>	Total	Bond issues in Israel <sup>a</sup>	Share issues in Israel <sup>b</sup>	Capital raised abroad <sup>c</sup>	Direct credit from abroad <sup>d</sup>	Venture capital funds	Credit from institutional investors <sup>e</sup>
	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)		
1997	-5,390	44,892	19,751	25,141	1,546	8,256	6,895	10,144	1,730	-3,430
1998	21,148	65,207	43,177	22,030	2,549	7,895	4,562	6,953	2,448	-2,377
1999	-1,592	82,302	40,355	41,947	1,681	5,659	17,802	9,218	4,462	3,126
2000	-11,292	101,800	45,254	56,546	292	14,212	19,267	5,122	13,351	4,301
2001	24,219	67,947	46,083	21,864	90	5,833	7,322	-2,217	8,708	2,129
2002	-22,368	37,739	7,686	30,053	2,969	5,555	1,061	14,624	5,289	555
2003	-29,040	1,613	-13,714	15,326	2,793	3,148	2,286	-3,390	4,427	6,062
2004	-74,061	67,679	-3,191	70,870	12,551	8,251	15,801	17,172	6,268	10,826
2005	-44,556	71,295	13,370	57,925	14,169	10,994	4,879	7,324	6,154	14,404
2006	-94,415	104,486	5,035	99,450	19,065	11,241	33,306 <sup>f</sup>	11,852	6,853	17,133
2007	-68,895	126,004	28,554	97,449	36,333	19,634	1,332	2,411	6,765	30,974
2008	4,807	92,245	48,526	43,719	3,818	5,383	14,567	3,285	7,889	8,777
2009	-64,398	-15,830	-40,114	24,284	9,536	7,026	1,491	-740	4,236	2,735

<sup>a</sup> Balance sheet credit to business companies (excluding individuals) from banks in Israel, on a consolidated basis, for use in Israel and abroad. It is assumed that the change in outstanding credit reflects the flow of new credit given.

<sup>b</sup> Issues and allocations of corporate bonds on the Tel Aviv Stock Exchange by companies to finance their activities. Excluding issues by banking corporations and of financial instruments such as exchange traded funds (ETFs). From 2008 redemptions of bond series issued in the past have been deducted from the issues.

<sup>c</sup> Including issues of bonds and shares abroad, after offsetting redemption of bonds and share buy-backs.

<sup>d</sup> Non-tradable credit given to nonbank businesses by banks abroad. Does not include commercial credit.

<sup>e</sup> From 2005 this item included non-negotiable bonds issued to institutional investors. From 2008 redemption of series of bonds issued in the past is deducted from new issues.

<sup>f</sup> Of which some NIS 24 billion was raised by Teva to finance its merger with the American pharmaceuticals company IVA.X.

SOURCE: Reports to the Supervisor of Banks, balance of payments data, and the Central Bureau of Statistics.

in sources of nonbank finance—as occurred in Israel in 2009, mainly in the second half of the year—had a significant downward effect on demand for bank credit. The income effect also mitigated demand for bank credit in 2009. Business-sector product contracted in the review year by 0.2 percent after having grown by 4.5 percent in 2008. The demand elasticity of bank credit to GDP growth is positive and greater than unit.<sup>6</sup> Thus, when the rebound from a cyclical downturn begins, both factors—substitution and income—act in the same direction: less demand for bank credit.

Almost all industries participated in the decrease in bank credit; in 2009, the ratio of credit risk on account of domestic borrower activity to GDP fell to 1.18, the lowest level in the past decade, due to the combination of the contraction of credit and mild GDP growth<sup>7</sup> (Table 1.3).

**Table 1.3**  
**Ratio of Credit<sup>a</sup> to Output, by Industry, 1999-2009**

Sector	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Agriculture	1.46	1.41	0.77	0.71	0.69	0.67	0.54	0.59	0.66	0.66	0.61
Manufacturing	1.27	1.20	1.55	1.59	1.53	1.38	1.32	1.28	1.30	1.13	1.01
Construction	3.63	4.09	4.35	4.06	3.62	3.57	3.50	3.18	3.05	3.10	3.00
Water and electricity	0.77	0.85	1.01	1.01	0.75	0.75	0.75	0.75	0.75	0.81	0.70
Trade and services	0.94	0.95	1.01	1.03	0.99	1.02	1.02	0.97	1.04	1.07	0.89
Trade	1.19	1.27	1.36	1.40	1.27	1.24	1.22	1.11	1.12	1.07	1.20
Services	0.84	0.83	0.88	0.90	0.89	0.93	0.94	0.91	1.01	1.06	0.81
Hotels and catering	1.84	1.74	2.39	2.44	2.38	2.15	1.84	1.66	1.58	1.55	1.03
Financial services	2.40	2.55	2.77	2.45	2.58	2.52	2.68	2.85	3.22	3.48	2.48
Communications and computer services	1.14	1.38	1.38	1.10	0.80	0.66	0.62	0.52	0.48	0.51	0.42
Transport and storage	0.82	0.80	0.82	0.88	0.80	0.78	0.77	0.70	0.69	0.72	0.78
<b>Total</b>	<b>1.38</b>	<b>1.36</b>	<b>1.50</b>	<b>1.59</b>	<b>1.43</b>	<b>1.36</b>	<b>1.28</b>	<b>1.21</b>	<b>1.31</b>	<b>1.31</b>	<b>1.18</b>

<sup>a</sup> Credit is calculated for lending activity in Israel only and includes balance-sheet credit (credit to the public, investment in bonds and other assets in respect of derivatives) and off-balance-sheet credit risk weighted by conversion coefficients for balance-sheet credit (guarantees and other liabilities on behalf of customers, and futures transactions).

SOURCE: Based on reports to the Supervisor of Banks, the Central Bureau of Statistics, and other Bank of Israel data.

## (2) *Housing loans to households*

Banks' activity in housing loans increased considerably in 2009 for two main reasons: an upturn in the public's demand for housing, which shifted the credit-demand curve, especially in parts of the country noted for strong housing demand, and the decrease in the price of credit, especially that indexed to the prime rate.

The housing market was noted for rather brisk demand in 2009, pushing prices upward by a steep 14 percent on countrywide average and by 30 percent in high-demand areas

<sup>6</sup> Ibid.

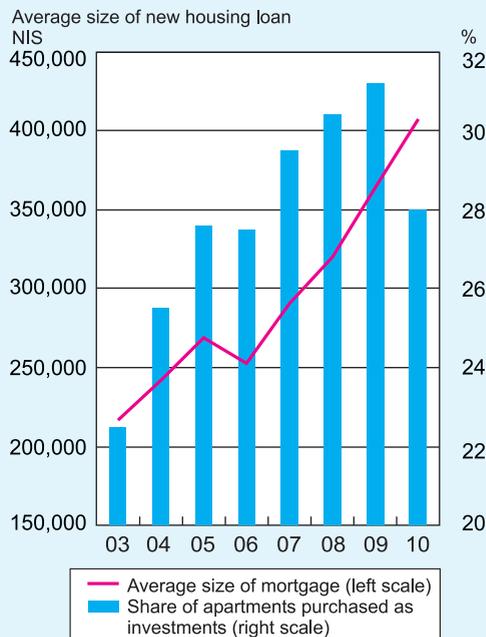
<sup>7</sup> For further discussion, see Chapter 3, Section 1d and Table 3.4, in this survey.

such as Tel Aviv,<sup>8</sup> due to a proportional increase in buyers of second and further dwellings as an alternative to long-term portfolio assets. Given the depreciation of its portfolio assets in 2008 and early 2009, the public internalized the intrinsic riskiness of direct investment in the domestic and foreign capital markets, notwithstanding the rapid recovery in this domain during 2009. In view of the realization that the performance of the public's long-term savings depends on these markets, the money withdrawn from long-term financial savings in 2008 was not sent back to that vehicle in 2009. Instead, the public preferred to turn to a long-term form of investment that it perceived as safer and as offering a positive real return for years—real estate. Activity in the housing market set a record in 2009 as some 100,000 transactions were consummated—7.5 percent more<sup>9</sup> than in 2008.<sup>10</sup> The number of transactions involving new-home purchase increased by 27 percent relative to 2008, not including private construction initiatives within the framework of purchasing groups.<sup>11</sup>

Short-term housing supply is relatively inelastic due to constraints in the production process (e.g., availability of land and labor) and additional constraints of bureaucratic and financial nature. This supply inelasticity delayed the rapid adjustment of supply to the increase in demand and had the inevitable result of rapid escalation of housing prices and thus the average housing loan.

During the review year, the number of housing transactions ramped up and a large share of the purchases was made for investment. Starting in 2008, in a departure from

**Figure 1.5**  
**Apartments Purchased as Investments as a Share of Total Apartments Purchased, and the Average Size of New Mortgages, 2003 to March 2010**



SOURCE: Based on returns to the Bank Supervision Department, and the Israel Tax Authority.

<sup>8</sup> Israel Tax Authority estimate.

<sup>9</sup> This rate of increase is downward-biased because the number of transactions reported to the Israel Tax Authority does not include the activities of purchasing groups, which have been increasing. In the estimation of the State Revenue Administration, some 4,300 dwellings were purchased by means of these groups in 2009. We have no corresponding figure for 2008, but the conjecture is that the groups' activities expanded vigorously in 2009.

<sup>10</sup> Source: Ministry of Construction and Housing, Information and Economic Analysis Division, March 2010 survey (Hebrew), p. 27, Table 3.1.

<sup>11</sup> Ibid.

previous years, home-buying for investment began to escalate outside the central part of the country as well. These non-central areas, especially Beersheva and Haifa, became attractive due to their relatively low dwelling prices, allowing even households of modest financial means to purchase an income-producing asset. According to the State Revenue Administration, 39 percent of homebuyers in Beersheva in the first half of 2009 lived outside the Beersheva area, as against only 22 percent in 2003. These parts of the country are also typified by relatively high dividend returns (rent) on real-estate investments, at 4.4 percent in the south of the country as against 3.3 percent in the Tel Aviv area in 2009, according to various estimates.

Analysis of the homebuyers' characteristics shows that middle-class wage-earners became more prominent among real-estate investors, at 61 percent in the first half of 2009. The median monthly wage among members of this group was only NIS 11,000. For comparison, the national average wage at the time was around NIS 8,000 per month.<sup>12</sup>

As a result of the increase in property prices, the average loan became larger—at NIS 370,000 in 2009 as against NIS 332,000 in 2008, up 12.5 percent (Figure 1.5).

Due to the decrease in interest, especially on ARM loans, monthly payments on an average mortgage loan taken in 2009 were lower than those on a loan taken in 2008.<sup>13</sup>

Another avenue of real-estate activity that gathered momentum in 2009 and evidently affected the extent of housing loans, generally, and average mortgage-loan size, specifically, was housing purchase within the framework of purchasing groups. Such acquisitions are usually carried out for investment purposes and many buyers finance most of their acquisitions by taking bank loans. Since most purchasing groups buy dwellings in high-demand areas, the average loan in this type of transaction exceeds the average loan in an ordinary home purchase for residential use. Most acquisitions by purchasing groups take place in two stages. First, as the dwelling is being built, mortgage banks provide bridging loans that the purchasing group uses to finance the construction, deferring the payback of principal until it takes possession of the dwellings. In the second stage, as title is handed over, banks issue the buyers with ordinary long-term housing loans. The relatively large size of the average loan given to members of purchasing groups had an upward effect to the total extent of mortgage lending. Given the effect of the tax discrimination that existed in favor of purchasing groups, these groups induced an increase in land prices, especially in high-demand areas, which in turn pushed housing prices upward.

The relation between average housing loan and average dwelling price has remained stable in recent years, largely due to concurrent increases on both sides. The ratio of the average monthly payback of new loans to the national average wage has fallen.

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<sup>12</sup> Source of data: Israel Tax Authority Annual Report 57, November 2009 (Hebrew), p. 441, Table 19.13.

<sup>13</sup> The monthly payment on an average loan taken in 2008 (NIS 330,000), at the average interest rate prevailing that year (4.07 percent) was—according to calculation—NIS 2,000, as against NIS 1,900 on a loan of the same size taken in 2009. See Table A1.8.

Importantly, however, the relative stability of these risk indices may be undermined quickly if housing prices fall or interest rises.

Given the credit risk originating largely in the possibility of a higher burden of monthly payments for takers of ARM loans, the Supervisor of Banks asked the mortgage banks to be more careful in this sector of activity. During the year, the Banking Supervision Department also examined the mortgage banks' activity vis-à-vis purchasing groups and concluded that this activity is riskier than ordinary activity involving buyers of housing for residential use. For expanded discussion of the Department's activity in 2009 in these regards, see Chapter 4 of this survey.

### **Box1.1**

#### **Activity of the banks in housing loans in Israel**

In analyses of the banking system's classical activities—raising sources and lending them out—it is customary to separate housing-loan activity from ordinary banking activity. The reason is that housing loans usually involve nonrecurrent long-term relations in which, by and large, the bank has little information about its customers and needs to determine their risk profile before they have demonstrated their credit-worthiness. If the Bank is wrong about a customer's risk and prices the loan incorrectly as a result, it may sustain great damage because it is time-consuming and expensive to evict tenants from their dwellings in case of default. Once the pricing is done, the bank issues the loan and rarely sees the customer again; the loan is paid back by standing order until it is settled. Due to this unique process and the need to raise long-term deposits for this activity, dedicated mortgage banks have been established. Over the years, these banks' managements realized that this activity alone cannot deliver strong yields and that they should combine it with other activities in order to maximize their economies of scale and diversity. Accordingly, most housing-loan activity today takes place at ordinary commercial banks, albeit in separate departments.

Mortgage-lending activity has grown markedly in recent years due to lively activity in the housing market. The tough competition in this area of operations and each bank's desire to increase its market share, however, have narrowed the financial margin on this activity. Also, the earnings of mortgage banks that have not yet merged have been slumping in recent years.

Outstanding bank credit to households for housing purposes increased by NIS 17 billion in 2009 over 2008—a significant 12 percent upturn. The banks that operate in this field lent a record NIS 35 billion during the review year as against NIS 30 billion in 2008, which was also a year of increase in activity. Mortgage

lending activity in Israel is divided into three indexation sectors—unindexed, CPI-indexed, and in foreign-currency. The largest sector in recent years has been the unindexed, which grew very vigorously during that time, mainly in the aftermath of steep disinflation that whet the public's demand for unindexed loans. The second-largest sector is CPI-indexed lending, whereas foreign-currency housing loans are preferred mainly by nonresidents, Israelis abroad, and persons whose income is in foreign currency. Some 60 percent of loans issued in 2009 were at floating interest rates, as against only 48 percent on average in 2008. The discrepancy between new lending in 2009 (transactions) and changes in outstanding loans (balance) is largely explained by NIS 14 billion in early payback and rollover of old loans, up 7 percent from 2008 (Table A1.7). The increase in early payback evidently originates in customers' wish to switch indexation bases—from CPI-indexed to floating interest rate loans based on changes in the prime rate, which in 2009 was very low by historical standards. Early in the review year, the proportion of ARMs in housing loans set a record at 77 percent (Figure 1.6).

**Figure 1.6**  
**The Share of Housing Loans at Unindexed Floating Interest Rates in Total Housing Loans, and Total New Housing Loans, 2006-10**



SOURCE: Based on returns to the Bank Supervision Department.

*(3) Household consumer credit*

Since household consumer credit is meant mainly for current consumption, one would expect demand for it to be strongly affected by developments that shape the macroeconomic environment and prevent households from changing their level of consumption. The macroeconomic environment changed during the review year: the contraction of economic activity that began in late 2008, in the wake of the global economic crisis, continued at first. In the second quarter, however, activity began to rebound. Similarly, private consumption slackened in the first quarter but reverted to expansion later in the year. On annual reckoning, consumer credit on the balance sheet grew increased by 7 percent.

*(4) Bank credit by types of indexation*

Developments in outstanding credit in domestic activity by types of indexation and currency show a decrease in foreign-currency credit as against a nearly identical increase in local-currency credit and, within this sector, an upturn in unindexed credit alongside a minor decline in CPI-indexed lending (Tables A1.1–A1.4).

The difference in the development of credit by indexation sector traces to macroeconomic developments during the year. The 8 percent decrease in business investment had a direct effect on firms' demand for CPI-indexed bank credit, which is largely long-term in nature.

The contraction of global trade by more than 12 percent induced a similar rate of decline in Israeli exports. This decrease and its concomitant, a downturn in the activity of Israeli firms that operate abroad, reduced outstanding foreign-currency credit in both NIS and dollar terms. The decrease in outstanding foreign-currency credit encompassed both lending to residents, who account for 75 percent of the balance, and nonresidents.

**c. Main developments in the public's bank deposits**

The resident investment portfolio represents the supply of the public's sources to the banking system. It is conventional to divide this portfolio into three main parts that are more-or-less equal in size.<sup>14</sup> The first part is composed of tradable financial assets, most of which managed by investment-portfolio management firms and institutional players, with the rest directly managed by the public. This part of the portfolio contains domestic and foreign shares and bonds (government and corporate). The second part is composed largely of long-term savings that institutional investors (provident, severance-pay, advanced-training, and pension funds, and insurance companies) manage for the public. The third part of the portfolio, the non-tradable part, comprises bank deposits (Table 1.4).

The value of the public's portfolio leaped ahead in 2009, marking the resumption of the upward trend after perceptible decreases in 2008. The portfolio was worth NIS 2.2

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<sup>14</sup> The public also keeps a small proportions of its assets—around 1 percent—in cash.

**Table 1.4**  
**The Public's<sup>a</sup> Assets Portfolio in Banks and not in Banks, 2006-09**

	Balances (NIS billion)				Distribution (percent)				Rate of change relative to 2007 to 2008	
	2006	2007	2008	2009	2006	2007	2008	2009	2008	2009
<b>1. The public's assets in banks<sup>b</sup></b>	<b>581.4</b>	<b>614.8</b>	<b>676.3</b>	<b>710.3</b>	<b>31.6</b>	<b>29.9</b>	<b>35.8</b>	<b>31.6</b>	<b>10.0</b>	<b>5.0</b>
Unindexed local-currency deposits <sup>c</sup>	333.3	366.0	426.5	452.9	18.1	17.8	22.6	20.1	16.5	6.2
Deposits in and indexed to foreign currency <sup>d</sup>	127.4	140.2	135.4	135.7	6.9	6.8	7.2	6.0	-3.4	0.3
Indexed deposits <i>of which</i> : Bank deposits of provident and pension funds and insurance companies	120.8	108.7	114.4	121.6	6.6	5.3	6.1	5.4	5.3	6.3
	56.6	56.4	63.5	87.6	3.1	2.7	3.4	3.9	12.7	38.0
<b>2. The public's tradable assets</b>	<b>709.5</b>	<b>832.2</b>	<b>586.2</b>	<b>785.5</b>	<b>38.6</b>	<b>40.5</b>	<b>31.1</b>	<b>34.9</b>	<b>-29.6</b>	<b>34.0</b>
Shares <sup>e</sup>	320.9	408.0	180.0	302.8	17.4	19.8	9.5	13.5	-55.9	68.2
Traded bonds and <i>makam</i> <sup>f</sup>	209.0	240.0	253.6	310.9	11.4	11.7	13.4	13.8	5.7	22.6
Residents' investments abroad	179.6	184.2	152.6	171.8	9.8	9.0	8.3	9.3	-17.2	12.6
<b>3. Cash held by the public</b>	<b>21.6</b>	<b>24.6</b>	<b>30.1</b>	<b>35.6</b>	<b>1.2</b>	<b>1.2</b>	<b>1.6</b>	<b>1.6</b>	<b>22.4</b>	<b>18.3</b>
<b>4. Assets of provident and pension funds and insurance companies (excluding bank deposits)<sup>g</sup></b>	<b>526.4</b>	<b>584.3</b>	<b>594.1</b>	<b>717.8</b>	<b>28.6</b>	<b>28.4</b>	<b>31.5</b>	<b>31.9</b>	<b>1.7</b>	<b>20.8</b>
<b>Total assets of the public: 1+2+3+4</b>	<b>1,839.0</b>	<b>2,055.8</b>	<b>1,886.7</b>	<b>2,249.1</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>-8.2</b>	<b>19.2</b>

<sup>a</sup> Not including the government, the Bank of Israel, the commercial banks and the mortgage banks.

<sup>b</sup> Including commercial and mortgage banks.

<sup>c</sup> Including unindexed earmarked deposits (earmarked for specified loans).

<sup>d</sup> Including exchange-rate-indexed deposits (PATZAM), resident deposits (PAMAH) and residents' nonresident deposits.

<sup>e</sup> Shares held by the public not including the holdings of nonresidents and the government.

<sup>f</sup> Including government bonds (indexed and unindexed) and corporate bonds.

<sup>g</sup> Includes provident and compensation funds, advanced study funds, pensions and life insurance funds in the "guaranteed return" and "participating in profits" programs.

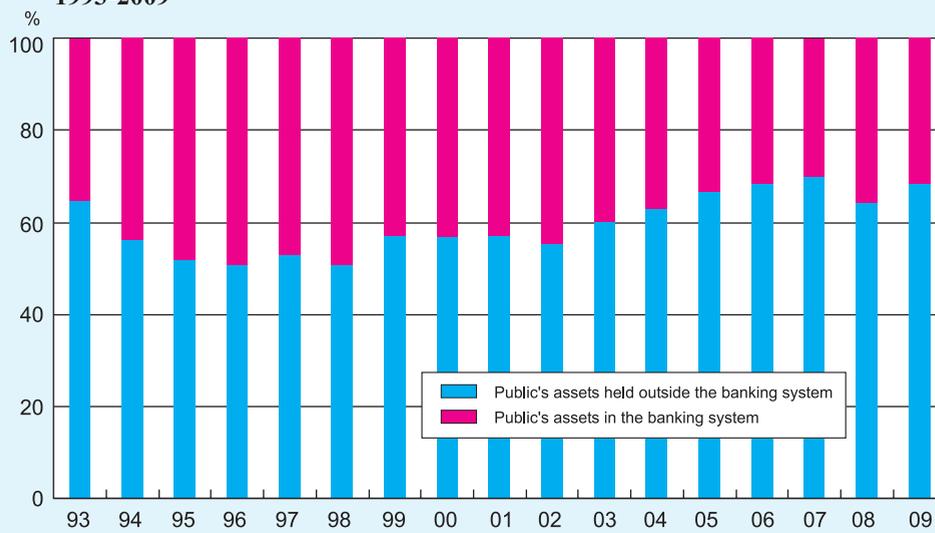
SOURCE: Based on returns to the Bank of Israel.

trillion at the end of 2009, up NIS 360 billion (20 percent) from the year-earlier date. Most of the increase occurred in the tradable part of the portfolio, which grew by 34 percent (NIS 200 billion) and focused largely on the shares portion—up 68 percent, NIS 120 billion—as the Tel Aviv Stock Exchange general share index bounded by 79 percent.<sup>15</sup>

The public's bank deposits also increased in 2009, albeit by a gentle 5 percent (NIS 34 billion), mostly (NIS 26 billion) in unindexed local currency. The increase in the balance of unindexed deposits reflects the public's wish to make some of its financial assets more liquid by placing them in demand deposits, given the close to zero net return on deposits to longer terms. Thus, the balance of demand deposits and SROs grew by NIS 35 billion while that of unindexed deposits to longer terms (time deposits) dropped by NIS 9 billion.

Since the tradable part of the public's portfolio grew more quickly than the non-tradable portion, the share of the former increased by 4 percentage points, to 35 percent, and that of bank deposits fell by a similar measure, to 32 percent (Table 1.4 and Figure 1.7).

**Figure 1.7**  
**Proportion of the Public's Assets in and outside the Banking System, 1993-2009<sup>a</sup>**



<sup>a</sup> Due to structural changes in the capital market, in 2005 assets held in and outside of the banking system were reclassified.

SOURCE: Based on reports to the Bank of Israel and Bank of Israel data.

<sup>15</sup> For expanded discussion, see 2009 Bank of Israel Annual Report, Chapter 4, and in particular Table 4.1, p. 160.

*d. Main developments in off-balance-sheet activity*

Off-balance-sheet activity incurs credit risk on account of customers' liabilities to the bank. It takes place along two main channels. The first channel is transactions in off-balance-sheet financial instruments, in which book value represents a credit risk. This activity includes documentary credit, guarantees,<sup>16</sup> and liabilities on account of credit approved but not yet used.<sup>17</sup> Most transactions of this nature involve overdraft facilities (revolving debitory accounts) and other credit facilities for the public not yet used, unused credit card facilities, and irrevocable credit commitments approved but not

**Table 1.5**  
**Distribution of Off-Balance-Sheet Financial Instruments, the Five Major Banking Groups, 2007-09**

	End-of-year balances			Rate of change (relative to the previous period)		Distribution		
	2007	2008	2009	2008	2009	2007	2008	2009
	(NIS billion)			(percent)		(percent)		
Documentary credit	6	6	5	-11.5	-1.1	1.6	1.3	1.5
Credit guarantees	28	24	21	-11.3	-13.8	7.1	5.9	5.9
Guarantees for home buyers	24	26	29	8.9	10.0	6.2	6.3	8.0
Other guarantees and liabilities	38	40	45	5.0	11.5	9.8	9.6	12.4
Non-recurring commitments for approved credit that has not yet been extended	90	82	77	-8.8	-6.6	23.3	19.8	21.4
Commitments to issue guarantees	19	19	22	1.5	15.9	4.8	4.5	6.1
Overdraft facilities and other credit facilities to the public not yet utilized	132	136	85	2.6	-37.6	34.0	32.6	23.5
Overdraft facilities and other credit facilities to the public not yet utilized	51	83	76	61.9	-8.0	13.2	19.9	21.2
<b>Total</b>	<b>389</b>	<b>416</b>	<b>360</b>	<b>7.1</b>	<b>-13.5</b>	<b>100</b>	<b>100</b>	<b>100</b>

SOURCE: Banks' financial reports.

<sup>16</sup> Loan guarantees, homebuyers' guarantees, and other guarantees and liabilities on customer account.

<sup>17</sup> Unused credit card facilities, unused balances of overdraft facilities, irrevocable undertakings to issue credit that were approved and not yet exercised, and irrevocable undertakings to issue guarantees.

yet exercised. Together, these account for two-thirds of this activity—24 percent, 21 percent, and 21 percent, respectively (Table 1.5). The balance of the five large banking groups' transactions in off-balance-sheet financial instruments, in which book value represents a credit risk, was NIS 360 billion at the end of 2009, NIS 56 billion smaller than the year-earlier level. Nearly all of the decrease (NIS 51 billion) was recorded on the "Overdraft facilities and other credit facilities to the public not yet utilized" line and pertains mainly to facilities for households; the banks reduced these facilities when they changed over to the Basel II rules, which define unused credit balances as risk assets on which the banks must allocate capital.

The second channel involves derivative financial instruments. Contracts of this type are divided into four categories according to their exposure to base risk: interest rate contracts,<sup>18</sup> foreign-currency contracts, contracts on shares and commodities, and other contracts. The instruments at issue take several forms: hedging derivatives,<sup>19</sup> asset-and-

**Table 1.6**  
**Distribution of Balances of Financial Derivatives, the Five Major Banking Groups,**  
**December 2008 and December 2009**

(NIS billion)<sup>a</sup>

	2008				2009			
	Interest rate contracts	Exchange rate contracts	Other <sup>b</sup>	Total	Interest rate contracts	Exchange rate contracts	Other <sup>b</sup>	Total
Leumi	161	186	14	361	172	187	19	378
Hapoalim	204	186	39	430	197	207	34	438
Discount	58	75	9	143	56	63	39	157
Mizrahi-Tefahot	53	92	14	160	42	89	27	157
First International	7	60	33	100	9	70	60	138
<b>Total</b>	<b>484</b>	<b>599</b>	<b>111</b>	<b>1,194</b>	<b>475</b>	<b>615</b>	<b>178</b>	<b>1,268</b>

<sup>a</sup> In terms of notional value, at current prices.

<sup>b</sup> Contracts based on shares, commodities and others.

SOURCE: Published financial reports.

<sup>18</sup> Contracts for the purchase/sale of NIS indexed to the CPI in exchange for unindexed NIS or other interest-rate contracts.

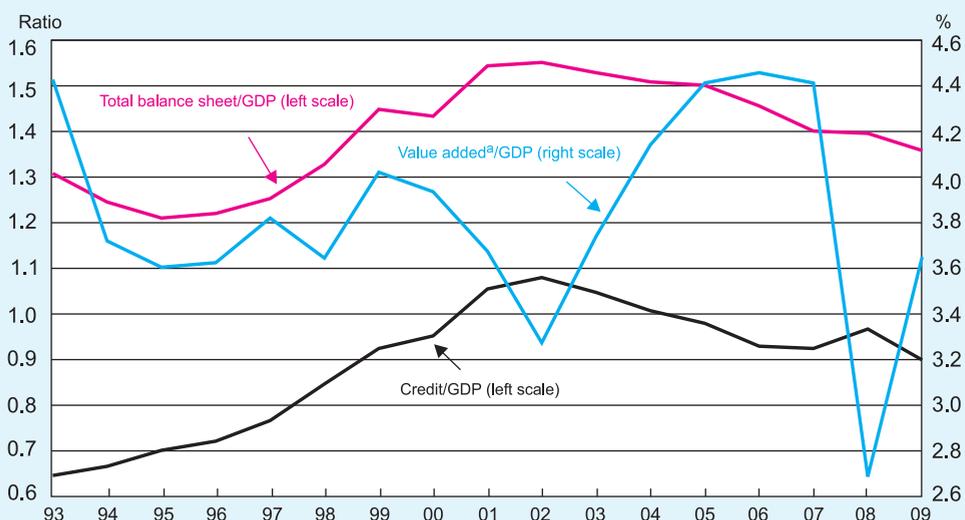
<sup>19</sup> A derivative that the bank management designates as being used for hedging, provided that it is fit for this use. This includes the following conditions: the derivative's exposure to risk must be identical to that of what is being hedged; what is being hedged must be identified specifically; at the beginning of the transaction, formal documentation must be created for the hedging relation and its goal, as well as the bank's strategy for risk management in creating the hedge, which includes identifying the hedging instrument, the nature of the hedged risk, and the method for evaluating the efficacy of the hedging instrument in offsetting the exposure to changes in the fair value of what is being hedged, which may be attributed to the hedged risk.

liability management (ALM) derivatives,<sup>20</sup> other derivatives,<sup>21</sup> credit derivatives,<sup>22</sup> and foreign-currency swap contracts. The balance of other derivative instruments increased slightly in 2009 (Table 1.6).

### 3. PRINCIPAL DEVELOPMENTS IN THE INDICATORS OF BANKING ACTIVITY

The share of banking activity in total economic activity and its changes over time and from an international perspective are generally measured by means of two types of indicators that reflect the output of the industry. The first relates to balance-sheet data such as the ratio of the banking system's total balance sheet or bank credit to GDP; the second type relates to flow data such as the banking system's added value. This

**Figure 1.8**  
**Indices of Banking Activity of the Five Major Banking Groups Relative to GDP, 1993-2009**



<sup>a</sup> Value added is the sum of net ordinary before-tax income, salaries and related expenses, general expenses, maintenance and depreciation on buildings and equipment.

SOURCE: Based on banks' financial statements and data from the Central Bureau of Statistics.

<sup>20</sup> A derivative that the bank management considers a hedge although it does not satisfy the conditions for hedging as they appear in the accounting standards.

<sup>21</sup> A derivative that is neither a hedge nor an ALM.

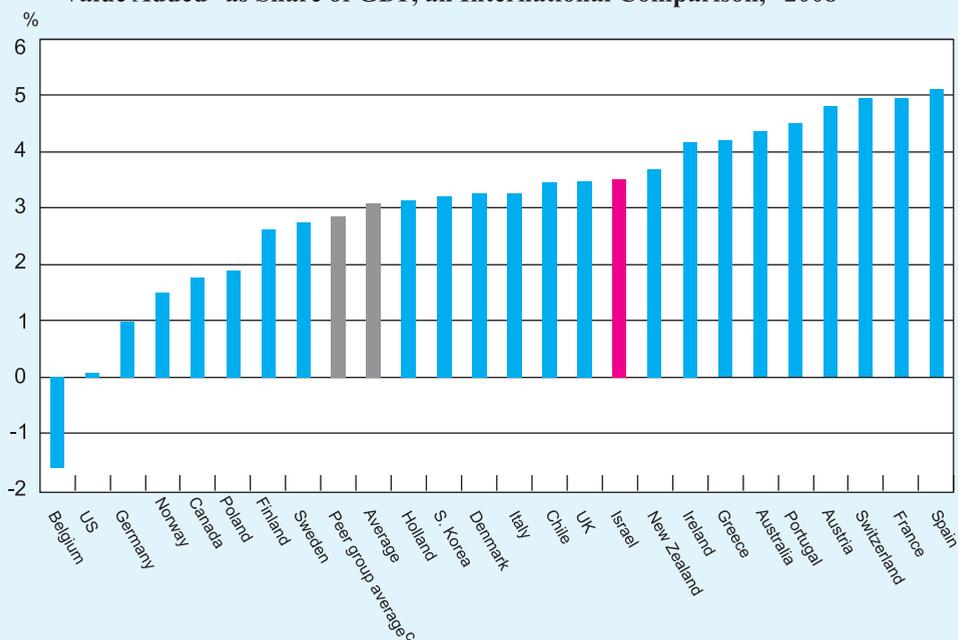
<sup>22</sup> A contract that transfers credit risk from a buyer to a seller. Credit derivatives can take on several forms: options for protection against credit failure, a note to cover part of a credit risk, a swap for full coverage of a risk, etc.

indicator gives expression to income deriving from banks' off-balance-sheet activities (futures transactions, guarantees, etc.), which have been growing in recent years.<sup>23</sup>

In 2009, the indicators of developments in banking activity pointed in contrasting directions. The two balance-sheet indicators (balance sheet/GDP and credit/GDP) suggested a decline in the share of bank activity in economic activity, whereas the third indicator—Added Value/GDP—signaled a steep increase in bank activity relative to the economy at large (Figure 1.8).

Notwithstanding the conspicuous contrast in the development of these indicators, the phenomenon itself is not exceptional; it is typical of times of change in the state of the economy—both at the beginning of a slump and at its end. It originates in different effects of cyclical activity on the banks' balance sheets and profits: when a recession

**Figure 1.9**  
Value Added<sup>a</sup> as Share of GDP, an International Comparison,<sup>b</sup> 2008



<sup>a</sup> Value added is ordinary before-tax profit, plus salaries and related expenses, maintenance, depreciation on buildings and equipment, and general and other expenses.

<sup>b</sup> In each country the optimal number of groups were chosen as a function of the structure and the size of the banking sector. In most countries the largest ten groups were chosen, except for the US, for which the largest fifty groups were chosen; Chile, Portugal, and South Korea, for which the largest seven groups were chosen; Belgium, Finland and Israel, for which the largest five groups were chosen; and New Zealand, for which the largest four groups were chosen.

<sup>c</sup> Israel's peer group consists of seven countries similar to Israel in terms of size of GDP and the Banking system: Belgium, Denmark, Finland, Greece, Ireland, Norway and Portugal.

SOURCE: Based on Bankscope data and IFS data of the IMF.

<sup>23</sup> For broader discussion, see D. Ruthenberg, *Bank Management in Israel: Asset, Liabilities and Risk Management* (Jerusalem: Keter, 2002, in Hebrew), pp. 53–54.

is being exited, most business demand for credit is addressed to the nonbank market, mainly because this market is resuming its sound activity after having “seized up” during the slump. Hence, the centrality of the banking system in economic activity decreases at this stage. However, the exit from an economic downturn causes the banks’ profits to surge after having eroded during the slump, largely due to earnings on their own (nostro) portfolio at first and, later on, due to a decline in loan-loss provisions and the expansion of real activity, which allows the banking system’s added value to grow more quickly than product.<sup>24</sup> The increase in added value was steeper in 2009 than in the exit phase from the previous recession (2003–2004) but its level, 3.6 percent of GDP, was low by historical standards.

#### 4. THE BANKING SYSTEM’S ACTIVITY IN SECURITIES

Two main trends typified the Israeli banking system’s nostro activity in securities<sup>25</sup> up to 2007.

The first trend was a rapid and almost uninterrupted increase in the size of the portfolio (domestic and foreign): the balance of the five large banking groups’ securities portfolio stood at NIS 163 billion at the end of 2007, 16 percent of total assets (Table 1.7 and Figure 1.10).<sup>26</sup>

The second trend was an increase in the share of corporate bonds (domestic and foreign) in the portfolio: at the end of 2007, 45 percent of the five large banking groups’ portfolio was composed of nongovernment bonds,<sup>27</sup> lowering the proportion of government bonds to only 48 percent.

In 2008, the trend changed as the intrinsic risks of the size and composition of the nostro portfolio fulfilled themselves. As a result, the banks downsized their portfolio significantly and made it less risky by increasing the component of government bonds at the expense of nongovernment paper. In 2009, the portfolio began to grow again, both in size—from NIS 129 billion at the end of 2008 to NIS 144 billion at the end of 2009 (up 12 percent)—and in its share in the system’s balance sheet, from 12.1 percent to 13.2 percent, respectively. However, 2009 was different from the years preceding 2008 in two respects. First, the portfolio/balance-sheet ratio remained far below the 2004–2007

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<sup>24</sup> For further discussion of the relation between business cycles and banks’ financial results, see Chapter 2 below.

<sup>25</sup> Nostro activity is that in the banks’ own securities portfolios, which are part of their balance sheets, as distinct from securities portfolios that the banks manage for their customers.

<sup>26</sup> For an explanation of the policy change that underlay this development, see the 2008 Annual Survey of the Banking Supervision Department, Chapter 1, Section 5.

<sup>27</sup> The banks also have holdings in tradable and non-tradable shares. Since most of these holdings are the results of the exercise of collateral and shares held as collateral against credit, they do not reflect a strategic purchase for the purpose of diversifying sources of profit.

**Table 1.7**  
**The Securities Portfolios of the Major Banking Groups<sup>a</sup>, 2008-09**

	Leumi				Hapoalim				Discount			
	2008		2009		2008		2009		2008		2009	
	Fair value (NIS million)	Distribution (percent)										
<b>Bonds held to maturity</b>	1,467	3.3	816	1.4	68	0.3	89	0.3	814	2.6	1,609	4.4
Other bonds	71	0.2	59	0.1	1,965	7.4	766	2.7	1,041	3.3	405	1.1
<b>Total bonds held to maturity</b>	<b>1,538</b>	<b>3.4</b>	<b>875</b>	<b>1.5</b>	<b>2,033</b>	<b>7.6</b>	<b>855</b>	<b>3.0</b>	<b>1,855</b>	<b>5.9</b>	<b>2,014</b>	<b>5.5</b>
<b>Securities available for sale</b>	10,399	23.1	24,529	42.6	14,077	52.8	17,445	62.0	10,313	32.8	18,937	52.1
Other bonds	18,928	42.1	19,752	34.3	6,992	26.2	5,069	18.0	15,947	50.7	12,554	34.5
Total bonds available for sale	29,327	65.3	44,281	77.0	21,069	79.1	22,514	80.1	26,260	83.4	31,491	86.6
<b>Total shares available for sale</b>	<b>3,219</b>	<b>7.2</b>	<b>2,490</b>	<b>4.3</b>	<b>1,813</b>	<b>6.8</b>	<b>1,476</b>	<b>5.2</b>	<b>1,325</b>	<b>4.2</b>	<b>703</b>	<b>1.9</b>
<b>Total securities available for sale</b>	<b>32,546</b>	<b>72.4</b>	<b>46,771</b>	<b>81.3</b>	<b>22,882</b>	<b>85.9</b>	<b>23,990</b>	<b>85.3</b>	<b>27,585</b>	<b>87.6</b>	<b>32,194</b>	<b>88.5</b>
<b>Negotiable securities</b>	9,261	20.6	7,428	12.9	1,648	6.2	3,096	11.0	1,608	5.1	2,033	5.6
Government bonds	1,489	3.3	2,357	4.1	62	0.2	132	0.5	383	1.2	112	0.3
Other bonds	10,750	23.9	9,785	17.0	1,710	6.4	3,228	11.5	1,991	6.3	2,145	5.9
Total negotiable bonds	105	0.2	97	0.2	20	0.1	44	0.2	42	0.1	10	0.0
<b>Total negotiable securities</b>	<b>10,855</b>	<b>24.2</b>	<b>9,882</b>	<b>17.2</b>	<b>1,730</b>	<b>6.5</b>	<b>3,272</b>	<b>11.6</b>	<b>2,033</b>	<b>6.5</b>	<b>2,155</b>	<b>5.9</b>
<b>Total government bonds</b>	<b>21,127</b>	<b>47.0</b>	<b>32,773</b>	<b>57.0</b>	<b>15,793</b>	<b>59.3</b>	<b>20,630</b>	<b>73.4</b>	<b>12,735</b>	<b>40.5</b>	<b>22,579</b>	<b>62.1</b>
<b>Total other bonds</b>	<b>20,488</b>	<b>45.6</b>	<b>22,168</b>	<b>38.5</b>	<b>9,019</b>	<b>33.8</b>	<b>5,967</b>	<b>21.2</b>	<b>17,371</b>	<b>55.2</b>	<b>13,071</b>	<b>35.9</b>
<b>Total bonds</b>	<b>41,615</b>	<b>92.6</b>	<b>54,941</b>	<b>95.5</b>	<b>24,812</b>	<b>93.1</b>	<b>26,597</b>	<b>94.6</b>	<b>30,106</b>	<b>95.7</b>	<b>35,650</b>	<b>98.0</b>
<b>Total shares</b>	<b>3,324</b>	<b>7.4</b>	<b>2,587</b>	<b>4.5</b>	<b>1,833</b>	<b>6.9</b>	<b>1,520</b>	<b>5.4</b>	<b>1,367</b>	<b>4.3</b>	<b>713</b>	<b>2.0</b>
<b>Total securities</b>	<b>44,939</b>	<b>100.0</b>	<b>57,528</b>	<b>100.0</b>	<b>26,645</b>	<b>100.0</b>	<b>28,117</b>	<b>100.0</b>	<b>31,473</b>	<b>100.0</b>	<b>36,363</b>	<b>100.0</b>
<i>Of which: Total other securities</i>	<b>23,812</b>	<b>53.0</b>	<b>24,755</b>	<b>43.0</b>	<b>10,852</b>	<b>40.7</b>	<b>7,487</b>	<b>26.6</b>	<b>18,738</b>	<b>59.5</b>	<b>13,784</b>	<b>37.9</b>

(cont'd)

**Table 1.7 (Cont'd)**  
**The Securities Portfolios of the Major Banking Groups<sup>a</sup>, 2008-09**

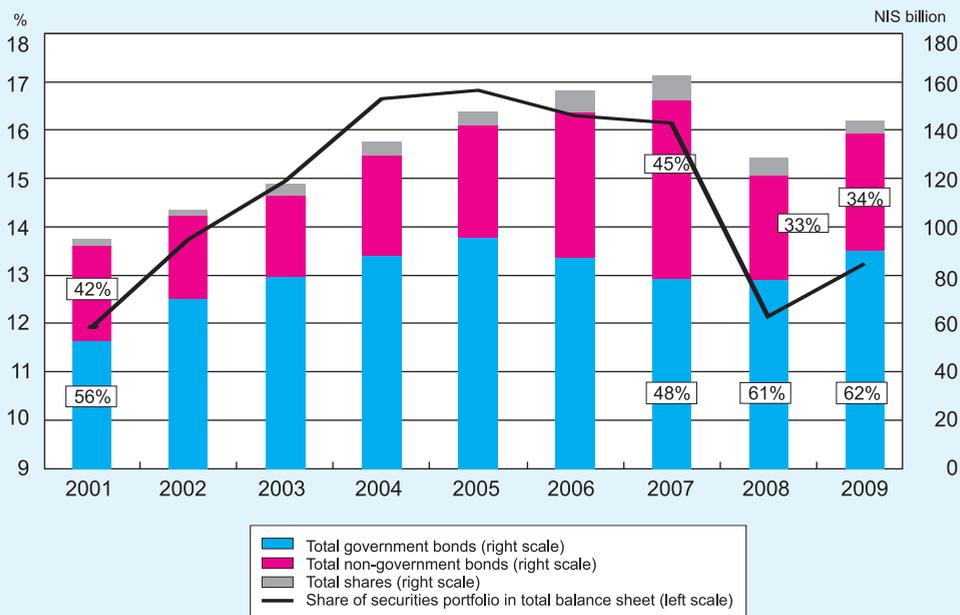
	Mizrachi-Tefahot			First International			Total of Five Banking Groups			
	2008		2009	2008		2009	2008		2009	
	Fair value (NIS million)	Distribution (percent)	Fair value (NIS mil- lion)	Fair value (NIS million)	Distribution (percent)	Fair value (NIS mil- lion)	Fair value (NIS mil- lion)	Distribution (percent)	Fair value (NIS mil- lion)	Distribution (percent)
<b>Bonds held to maturity</b>	0	0	0	0	0	56	2,877	2.2	2,570	1.8
Government bonds	0	0	0	0	0	273	3,190	2.5	1,503	1.0
Other bonds	0	0	0	704	4.2					
<b>Total bonds held to maturity</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>704</b>	<b>4.2</b>	<b>329</b>	<b>6,067</b>	<b>4.7</b>	<b>4,073</b>	<b>2.8</b>
<b>Securities available for sale</b>	6,699	72.4	5,993	8,120	48.9	6,197	61,095	47.4	73,101	50.8
Government bonds	1,740	18.8	1,307	5,757	34.6	6,110	37,940	29.4	44,792	31.1
Other bonds	8,439	91.1	7,300	13,877	83.5	12,307	99,035	76.8	117,893	81.9
available for sale										
Total shares	380	4.1	86	688	4.1	206	7,425	5.8	4,961	3.4
available for sale										
<b>Total securities available for sale</b>	<b>8,819</b>	<b>95.2</b>	<b>7,386</b>	<b>14,565</b>	<b>87.6</b>	<b>12,513</b>	<b>106,460</b>	<b>82.6</b>	<b>122,854</b>	<b>85.3</b>
<b>Tradable securities</b>	437	4.7	251	1,229	7.4	1,361	14,190	11.0	14,169	9.8
Government bonds	3	0.0	6	107	0.6	102	2,037	1.6	2,709	1.9
Other bonds										
Total tradable	440	4.8	257	1,336	8.0	1,463	16,227	12.6	16,878	11.7
bonds	0	0	0	16	0.1	8	183	0.1	159	0.1
Total tradable shares										
<b>Total tradable securities</b>	<b>440</b>	<b>4.8</b>	<b>257</b>	<b>1,352</b>	<b>8.1</b>	<b>1,471</b>	<b>16,410</b>	<b>12.7</b>	<b>17,037</b>	<b>11.8</b>
<b>Total government bonds</b>	<b>7,136</b>	<b>77.1</b>	<b>6,244</b>	<b>9,349</b>	<b>56.2</b>	<b>7,614</b>	<b>78,162</b>	<b>60.6</b>	<b>89,840</b>	<b>62.4</b>
<b>Total other bonds</b>	<b>1,743</b>	<b>18.8</b>	<b>1,313</b>	<b>6,568</b>	<b>39.5</b>	<b>6,485</b>	<b>43,167</b>	<b>33.5</b>	<b>49,004</b>	<b>34.0</b>
<b>Total bonds</b>	<b>8,879</b>	<b>95.9</b>	<b>7,557</b>	<b>15,917</b>	<b>95.8</b>	<b>14,099</b>	<b>121,329</b>	<b>94.1</b>	<b>138,844</b>	<b>96.4</b>
<b>Total shares</b>	<b>380</b>	<b>4.1</b>	<b>86</b>	<b>704</b>	<b>4.2</b>	<b>214</b>	<b>7,608</b>	<b>5.9</b>	<b>5,120</b>	<b>3.6</b>
<b>Total securities</b>	<b>9,259</b>	<b>100.0</b>	<b>7,643</b>	<b>16,621</b>	<b>100.0</b>	<b>14,313</b>	<b>128,937</b>	<b>100.0</b>	<b>143,964</b>	<b>100.0</b>
<i>Of which: Total other securities</i>	<b>2,123</b>	<b>22.9</b>	<b>1,399</b>	<b>7,272</b>	<b>43.8</b>	<b>6,699</b>	<b>50,775</b>	<b>39.4</b>	<b>54,124</b>	<b>37.6</b>

<sup>a</sup> In this table mortgage backed securities (MBSs) issued by federal US agencies (FNMA, FHLMC and GNMA) are included in government bonds whether or not they are backed by a government guarantee. In Table 3.5 these securities are included in the item "Other securities."

SOURCE: Banks' financial reports.

level (16–17 percent) and resembled the 2002 level (13 percent).<sup>28</sup> Second, the portfolio was differently composed as the share of government bonds, which are considered less risky, climbed from only 48 percent of the portfolio in 2007 to 62 percent in 2009

**Figure 1.10**  
**The Size and Composition of the Securities Portfolio of the Five Major Banking Groups, 2001-2009**



SOURCE: Based on published financial statements.

## 5. THE BANKING GROUPS' PRINCIPAL ACTIVITIES VIA SUBSIDIARIES

### a. General remarks

Apart from classic financial intermediation and other banking activities that they perform directly, Israel's banks operate via subsidiaries in several fields: commercial banking in Israel, holding of companies that specialize in activity in the capital markets, leasing, mortgage lending;<sup>29</sup> consumer lending to households via credit card companies;

<sup>28</sup> For an analysis of the banks' nostro portfolio in terms of its riskiness and the changes in this respect in recent years, see Chapter 3, Section 1f of this survey.

<sup>29</sup> The importance of mortgage banks that operate as separate subsidiaries of large banks is declining steadily due to their merger with their parent companies. For a description of this trend and its development in 2009, see "The Structure of Israel's Banking System," below in this chapter.

and banking activity abroad by means of branches and representative offices. The contribution of these areas of activity to the profits of the banks that head the groups is a material one that allows them to diversify their profit sources. Concurrently, this activity allows the subsidiaries to specialize in niche population groups that are not necessarily identical to the customers of the commercial banks that head the groups. Examples of this are Poalei Agudat Israel Bank, part of the First International group, and Arab-Israel Bank, a member of the Bank Leumi group. The exploitation of diversity advantages by the commercial banks has become immensely important in recent years in view of the supervisory constraints that these banks now face due to the implementation of the Bachar Committee recommendations.<sup>30</sup>

### **b. The banking groups' credit card activity**

Credit card activity has been growing vigorously in recent years. Apart from the upturn occasioned by the steady increase in the public's use of credit cards, the credit card companies have also intensified their activity in this important consumer sector. The combined activity of the banks and their subsidiaries in this area has created two separate markets for consumers of credit: on the one hand, it allows the bank that controls the credit card company to provide consumer credit at its own liability; on the other hand, the credit card companies have created a consumer-credit market for households that prefer to obtain credit directly, without bank intermediation and at the companies' liability. An examination of the return on investment from the point of view of their contribution to the parent bank's profit over time, together with the risk involved in this activity, indicates that the risk-adjusted profitability of this activity is relatively high, motivating the banks to expand the purview of these companies and their investment in them (Table 1.13).

The continuing growth of credit card activity traces to the vast availability of these instruments and their convenience for shopping. The possibility of using a credit card to shop by phone or online also contributes to the increase in the cards' use.<sup>31</sup>

In 2009, the use of this important distribution channel of banking services continued to grow at a pace approximating that in recent years. The number of active credit cards<sup>32</sup> increased by 7 percent, matching the growth rate in 2008, and the number of transactions also advanced by 7 percent, a little slower than in 2008. The value of transactions performed by means of credit cards was NIS 168 billion in 2009, most of which in Israel (Table 1.8).

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<sup>30</sup> For elaboration on this topic, see the 2007 Annual Survey of the Supervisor of Banks.

<sup>31</sup> For a survey of types of credit cards and companies active in the credit card market, see the 2007 Annual Survey of the Supervisor of Banks, Chapter 1, Section 6.

<sup>32</sup> Including cards good only for carrying out transactions, which are usually linked to a customer club, and credit cards valid both for transactions and for withdrawal of cash.

**Table 1.8**  
**Credit Card Activity, 2006-09**

	2006	2007	2008	2009	Rate of change from 2007 to 2008 (percent)	Rate of change from 2008 to 2009 (percent)
Number of cards active at the end of the year	4.4	4.7	5.0	5.4	6.8	6.8
<i>of which:</i> Cards at the sole responsibility of the credit card company	0.57	0.71	0.91	1.18	28.0	30.0
Number of transactions	541.2	595.9	653.3	697.4	9.6	6.7
<i>of which:</i> in Israel	532.0	585.5	641.3	684.5	9.5	6.7
Amount of transactions	131.5	146.3	160.6	168.0	9.8	4.6
<i>of which:</i> in Israel	125.8	139.4	153.5	160.5	10.1	4.6
Average credit card transaction (NIS)	242.9	245.5	245.9	240.9	0.1	-2.0
Average monthly expenditure per credit card (NIS)	2,511	2,597	2,670	2,615	2.8	-2.1
Average number of transactions per card per year	124.0	127.0	130.3	130.3	2.6	0

SOURCE: Reports to the Supervisor of the Banks.

### c. Activity abroad—directly and via subsidiaries

Israeli banks operate abroad—both directly and via subsidiaries—on a large scale. Their international activity expanded considerably in the boom years that preceded the recent crisis, including activity in securities, which increased credit risk in the activities of the overseas offices. Some of these risks came to pass during the crisis and combined with the operating risks, which are higher at overseas offices than in the groups' activity at home due to the offices' distance from head management.

The average number of employee posts at the offices increased by 40 percent between 2001–2005 and 2006–2009—from 2,413 to 3,407, respectively (Table 1.9). The banks' balance-sheet exposure to foreign countries contracted in 2009 by 5.7 percent, to NIS 156.1 billion. Nearly all of the exposure was to leading Western countries; the decrease originated in actions that the banks took to reduce their exposure to foreign financial institutions on account of the crisis. Analysis of the composition of the banks' balance-sheet exposure to foreign countries shows that about a third of the exposure originated in overseas offices—32.8 percent to exposure to foreign banks and 4.6 percent to foreign governments.

In 2009, the number of subsidiaries' overseas offices declined slightly and returned to the 2007 level, whereas the number of overseas branches and representative offices of Israeli banks has hardly changed in several years (Table 1.9).

**Table 1.9**  
**Banking Representation Abroad: Branches, Offices and Positions, 1994-2009**

Year	Total offices	Number of branches and representative offices <sup>a</sup>	Number of offices of subsidiaries <sup>b</sup>	Number of positions <sup>c</sup>
1991-1995 average	120	72	48	2,827
1996-2000 average	97	63	34	2,084
2001-2005 average	114	63	51	2,413
2006-2009 average	162	60	102	3,407
2004	120	64	56	2,502
2005	111	64	47	2,296
2006	149	63	86	3,050
2007	163	62	101	3,600
2008	179	59	120	3,642
2009	158	56	102	3,337

<sup>a</sup> Branches and representative offices of Israeli banking groups abroad.

<sup>b</sup> Branches of subsidiaries abroad.

<sup>c</sup> Not including overtime.

SOURCE: Reports to the Supervisor of Banks.

The overseas offices held NIS 145 billion in assets at the end of 2009, 14 percent of the groups' total assets and slightly down from NIS 150 billion and 15 percent of assets a year earlier. Most of the decrease occurred in customer credit whereas the portfolio of foreign assets, which underwent acute changes in 2008, remained flat at its low 2008 level (Tables 1.10 and 1.11). This decrease is related to the banks' activity by means of offices and the banking groups' wish to reduce their external exposure at this time as a lesson of the recent crisis.

The review year was typified by a return to profit after heavy losses in 2008. Offices in the U.S. earned \$83 million after losing more than \$1 billion in 2008 (Table 1.12).

For years now, banking activity abroad, although extensively deployed and benefiting from major investments, has not managed to provide the Israeli banks with a significant and stable source of profit. Thus, the risk-adjusted return of the banking groups' external activity, according to two different indicators, is far below that of commercial banking, mortgage lending, and credit card activity (Table 1.13). Competition abroad from local banks that have a lengthy tradition of activity vis-à-vis local inhabitants and the large number of foreign banks that operate in the international financial centers constitute daunting barriers to the Israeli banks' market penetration.

**Table 1.10**  
**Overseas Offices' Role in Total Credit and Assets in the Five Major Banking Groups in Israel, 1999-2009**

	Assets			Credit		
	Total assets in the five banking groups	<i>Of which:</i> Overseas offices <sup>a</sup>	Assets of overseas offices as share of total assets (%)	Total credit <sup>b</sup> in the five banking groups	<i>Of which:</i> Overseas offices <sup>a</sup>	Credit from overseas offices as share of total credit (%)
1999	637.6	88.9	13.9	407.3	38.6	9.5
2000	699.6	100.0	14.3	464.9	42.0	9.0
2001	795.6	117.1	14.7	543.4	45.5	8.4
2002	778.6	139.4	17.9	541.8	51.1	9.4
2003	789.1	135.6	17.2	535.2	52.0	9.7
2004	812.1	148.1	18.2	536.2	57.1	10.7
2005	877.5	157.7	18.0	573.3	58.7	10.2
2006	912.0	159.0	17.4	582.7	63.0	10.8
2007	961.7	166.4	17.3	635.1	73.5	11.6
2008	1013.3	150.4	14.8	701.9	73.5	10.5
2009	1042.2	145.4	13.9	690.4	64.7	9.4

<sup>a</sup> Overseas offices in the US, Western Europe, South America and the Cayman Islands.

<sup>b</sup> Balance sheet credit.

SOURCE: Reports to the Supervisor of Banks.

**Table 1.11**  
**Assets and Liabilities of the Overseas Offices,<sup>a</sup> 2007–09**

	US						Western Europe						Total overseas offices <sup>b</sup>					
	2007		2008		2009		2007		2008		2009		2007		2008		2009	
	(\$ million)		(percent)		(percent)		(\$ million)		(percent)		(percent)		(\$ million)		(percent)		(percent)	
Credit to the public	10,774	11,905	9,385	10.5	-21.2	8,244	7,385	7,624	-10.4	3.2	19,144	19,417	17,130	1.4	-11.8			
Cash and bank deposits	3,017	5,076	5,725	68.2	12.8	4,700	3,843	4,811	-18.2	25.2	7,747	8,958	10,601	15.6	18.3			
<i>of which: In related banks</i>	622	591	740	-4.9	25.1	1,104	1,691	2,430	53.2	43.7	1,747	2,328	3,236	33.3	39.0			
Securities	11,736	6,806	7,141	-42.0	4.9	3,479	2,913	2,488	-16.3	-14.6	15,222	9,723	9,634	-36.1	-0.9			
<b>Total assets</b>	<b>26,339</b>	<b>24,711</b>	<b>23,017</b>	<b>-6.2</b>	<b>-6.9</b>	<b>16,796</b>	<b>14,659</b>	<b>15,282</b>	<b>-12.7</b>	<b>4.2</b>	<b>43,314</b>	<b>39,560</b>	<b>38,506</b>	<b>-8.7</b>	<b>-2.7</b>			
Deposits of the public	18,362	15,880	14,542	-13.5	-8.4	10,573	8,454	9,427	-20.0	11.5	29,063	24,479	24,134	-15.8	-1.4			
Deposits of banks	4,725	6,255	4,453	32.4	-28.8	4,461	4,343	3,755	-2.6	-13.5	9,208	10,610	8,219	15.2	-22.5			
<i>of which: In related banks</i>	3,857	5,642	4,123	46.3	-26.9	3,296	3,570	3,021	8.3	-15.4	7,172	9,223	7,154	28.6	-22.4			
<b>Total liabilities</b>	<b>25,184</b>	<b>23,553</b>	<b>21,760</b>	<b>-6.5</b>	<b>-7.6</b>	<b>15,507</b>	<b>13,422</b>	<b>13,922</b>	<b>-13.4</b>	<b>3.7</b>	<b>40,855</b>	<b>37,150</b>	<b>35,872</b>	<b>-9.1</b>	<b>-3.4</b>			
Equity	1,155	1,157	1,257	0.2	8.6	1,289	1,238	1,360	-4.0	9.9	2,459	2,410	2,634	-2.0	9.3			
Off-balance-sheet credit risk	10,280	7,586	6,509	-26.2	-14.2	3,236	2,809	2,605	-13.2	-7.3	13,531	10,406	9,231	-23.1	-11.3			
Activity in derivatives <sup>c</sup>	16,309	9,438	6,677	-42.1	-29.3	11,149	10,469	17,352	-6.1	65.7	27,467	19,918	24,036	-27.5	20.7			

<sup>a</sup> Selected items.

<sup>b</sup> Including overseas offices, primarily in South America, not included in the US (including the Cayman Islands) or Europe.

<sup>c</sup> Face value.

SOURCE: Reports to the Supervisor of Banks.

**Table 1.12**  
**Main Items in Profit and Loss Statements of the Overseas Offices,<sup>a</sup> 2006–08**

	US				Western Europe				Total overseas offices <sup>b</sup>						
	2007		2008		2007		2008		2007		2008		2009		
	(\$ million)	(percent)	(\$ million)	(percent)	(\$ million)	(percent)	(\$ million)	(percent)	(\$ million)	(percent)	(\$ million)	(percent)	(\$ million)	(percent)	
Net interest income before loan-loss provision	171.0	-827.7	466.7	+→-	242.9	55.8	335.5	-77.0	501.3	420.4	-765.9	803.1	+→-	-→+	
Loan-loss provision	13.3	36.4	73.7	173.7	102.5	15.5	62.2	73.4	301.3	18.0	28.8	98.6	146.8	242.4	48.9
Operating fees	70.2	66.1	69.8	-5.8	5.6	154.8	139.1	-10.1	0.0	226.1	206.2	209.9	-8.8	1.8	
Other income	16.6	15.1	6.9	-9.0	-54.3	11.5	21.4	16.6	86.1	-22.4	29.2	38.4	26.9	31.5	-29.9
<b>Total non-interest and other income</b>	<b>89.8</b>	<b>80.3</b>	<b>82.0</b>	<b>-10.6</b>	<b>2.1</b>	<b>170.2</b>	<b>159.0</b>	<b>158.6</b>	<b>-6.6</b>	<b>-0.3</b>	<b>262.2</b>	<b>242.2</b>	<b>244.9</b>	<b>-7.6</b>	<b>1.1</b>
Salaries and related expenses	195.4	200.1	200.1	2.4	0.0	156.9	163.1	171.7	4.0	5.3	355.9	367.5	376.6	3.3	2.5
Other expenses	92.7	91.8	110.0	-1.0	19.8	91.9	85.8	105.5	-6.6	23.0	187.5	180.6	219.4	-3.7	21.5
<b>Total operating and other expenses</b>	<b>346.3</b>	<b>353.0</b>	<b>369.0</b>	<b>1.9</b>	<b>4.5</b>	<b>293.5</b>	<b>297.6</b>	<b>326.8</b>	<b>1.4</b>	<b>9.8</b>	<b>647.2</b>	<b>658.7</b>	<b>705.7</b>	<b>1.8</b>	<b>7.1</b>
Ordinary before-tax income	-98.8	-1,136.8	106.0	-→-	-→+	104.1	-145.0	93.9	+→-	-→+	6.6	-1,280.9	195.4	+→-	-→+
Provision for taxes on ordinary income	36.5	-3.0	24.2	+→-	-→+	26.0	5.3	14.7	-79.6	177.4	63.4	3.2	39.7	-95.0	1,140.6
<b>Net income</b>	<b>-135.9</b>	<b>-1,135.2</b>	<b>83.2</b>	<b>-→-</b>	<b>-→+</b>	<b>78.6</b>	<b>-149.0</b>	<b>79.3</b>	<b>+→-</b>	<b>-→+</b>	<b>-56.9</b>	<b>-1,284.1</b>	<b>157.3</b>	<b>-→-</b>	<b>-→+</b>

+→- Transition from profit to loss.

-→+ Transition from loss to profit.

-→- Loss to loss.

<sup>a</sup>Selected items.

<sup>b</sup>Including overseas offices, primarily in South America, not included in the US (including the Cayman Islands) or Europe.

SOURCE: Reports to the Supervisor of Banks.

**Table 1.13**  
**Investment and Contribution to Profit of Companies in which the Bank has a Holding and of the Bank Itself, the Five Major Banking Groups, 2008-09**

	Book value of investment at end of year												Yield on investment		Yield on investment in 1997-2009		
	2008		2009		2007-2008		2008-2009		2008		2009		Average	St. dev.		Variance <sup>b</sup>	Sharpe <sup>c</sup>
	(NIS million)	(NIS million)	(percent)	(percent)	Rate of change	Contribution to net profit <sup>a</sup>	Rate of change	Investment distribution	Investment distribution	Investment distribution	Yield on investment	Yield on investment					
<b>a. Major consolidated companies</b>																	
Commercial banks	3,735	2,828	-16	-24	429	357	-3	-17	10	8	10	10	9.9	4.1	2.4	1.72	
Mortgage banks	3,735	4,107	10	10	186	161	-29	-13	10	11	5	7	7.7	3.5	2.2	1.37	
Holdings, investments and others <sup>d</sup>	7,870	9,026	-4	15	209	346	-51	66	20	25	3	4	5.9	3.4	1.8	0.89	
Banking and financial companies abroad <sup>e</sup>	11,176	11,436	1	2	-338	381	213	29	31	-3	3	3	7.6	7.7	1.0	0.61	
Capital market (underwriting and management)	1,511	1,519	38	1	50	150	-93	200	4	4	5	10	19.7	43.5	0.5	0.38	
Credit cards	2,476	2,731	23	10	520	415	48	-20	6	7	26	17	13.9	8.9	1.6	1.23	
Leasing	247	163	4	-34	7	5	17	-29	1	0	3	2	2.4	1.6	1.4	-0.35	
<b>Total major consolidated companies</b>	<b>30,750</b>	<b>31,810</b>	<b>1</b>	<b>3</b>	<b>1,063</b>	<b>1,815</b>	<b>-50</b>	<b>71</b>	<b>78</b>	<b>86</b>	<b>3</b>	<b>6</b>	<b>8.3</b>	<b>2.6</b>	<b>3.2</b>	<b>2.06</b>	
<b>b. Major companies included on an equity basis</b>																	
Commercial banks <sup>f</sup>	1,679	1,632	-2	-3	108	219	80	103	4	4	6	13	8.1	4.5	1.8	1.13	
Non-financial companies and insurance <sup>g</sup>	720	622	0	-14	38	-	-90	-100	2	2	5	-	11.2	14.5	0.8	0.57	
Holdings, investment, financial and other (including abroad)	1,195	1,371	-19	15	114	7	-47	-94	3	4	8	1	8.7	5.8	1.5	0.72	
<b>Total major companies included on an equity basis</b>	<b>3,594</b>	<b>3,625</b>	<b>-8</b>	<b>1</b>	<b>260</b>	<b>226</b>	<b>-60</b>	<b>-13</b>	<b>9</b>	<b>10</b>	<b>7</b>	<b>6</b>	<b>9.4</b>	<b>6.2</b>	<b>1.5</b>	<b>0.79</b>	

(cont'd)

**Table 1.13 (Cont'd)**  
**Investment and Contribution to Profit of Companies in which the Bank has a Holding and of the Bank Itself, the Five Major Banking Groups, 2008-09**

	Book value of investment at end of year		Rate of change		Contribution to net profit <sup>a</sup>		Rate of change		Investment distribution		Yield on investment		Yield on investment in 1997-2008			
	2008	2009	2007-2008-	2008-	2008	2009	2008	2009	2008	2009	2008	2009	Average	St. dev.	Variance <sup>b</sup> Sharpe <sup>c</sup>	
	(NIS million)		(percent)		(NIS million)		(percent)		(percent)		(percent)					
<b>Total major companies included on an equity basis</b>	34,344	35,435	0	3	1,323	2,041	-52	54	88	96	4	6	17.8	23.4	0.8	0.57
Non-major companies <sup>b</sup>	4,831	4,577	23	-5	-328	290	-225	188	12	12	-8	6				
<b>Total companies in which the banks have a holding</b>	<b>39,175</b>	<b>40,012</b>	<b>2</b>	<b>2</b>	<b>995</b>	<b>2,331</b>	<b>-63</b>	<b>134</b>	<b>100</b>	<b>109</b>	<b>3</b>	<b>6</b>	<b>9.2</b>	<b>5.7</b>	<b>1.6</b>	<b>1.5</b>
<b>The bank itself</b>	<b>18,498</b>	<b>22,128</b>	<b>-9</b>	<b>20</b>	<b>-792</b>	<b>3,020</b>	<b>-113</b>	<b>481</b>	<b>100</b>	<b>132</b>	<b>-4</b>	<b>16</b>	<b>14.9</b>	<b>12.7</b>	<b>1.2</b>	<b>1.1</b>

<sup>a</sup> Profits in the companies in which the banks have a holding include "profits from ordinary activities and profits from extraordinary activities" and do not include dividends or receipts from the sale of surplus holdings.

<sup>b</sup> The average yield divided by the standard deviation measures the yield on an investment adjusted by the inherent risk.

<sup>c</sup> The Sharpe index was calculated for the period 1997-2009. The risk-free interest rate is 3.0 percent, obtained from the average yield to maturity for CPI-indexed government bonds.

<sup>d</sup> This includes merchant and investment finance banks as well holding and investment companies and other financial companies, mainly those of Bank Hapoalim.

<sup>e</sup> The contribution to net profits and the yield of the investment in banking and financial companies abroad in 2006 was biased downward considerably, due to the significant negative profit statement of Discount Bank.

<sup>f</sup> Discount Bank's holdings in First International Bank were not discounted from the total investments nor from the contribution to profits.

<sup>g</sup> The yield on investment in these companies was downwardly biased, as the investment in non-banking companies does not have to maintain a minimum capital requirement, and therefore the capital invested in them can serve fully for profit-earning banking activity, which was not taken into account in the yield above.

<sup>h</sup> Companies in which the banks have a holding which are not detailed as major companies in Note 6 of the Financial Statements.

<sup>i</sup> The investment in the bank itself is derived from deducting the investment in companies in which the bank has a holding, according to balance sheet value, from total shareholders equity, and this differs from the definition of shareholders equity for purposes of calculating item 23a according to the Banking Law (Licensing). The contribution to net profits of the bank itself was calculated as the net ordinary profits after tax plus extraordinary profits, by bank. This is in effect the profits from ordinary activities (and from extraordinary activities) of the bank, discounted by the (net) profits from ordinary activities and from extraordinary profits of all companies in which the bank has a holding (both major and non-major).

SOURCE: Banks' financial reports.

In response to the weak performance abroad and the heavy regulatory restrictions imposed on bank activity in recent years (primarily due to the implementation of the Bachar Committee recommendations), the banks have changed their strategy in regard to activity abroad. Until the crisis broke out in 2008, there had been a perceptible tendency to expand activity in emerging markets by acquiring local banks that had long been operating in their natural environment. This strategy was reflected in the acquisition and maintenance of control in foreign banks for the purpose of merging them into the banking group.

## 6. THE STRUCTURE OF ISRAEL'S BANKING SYSTEM

In conspicuous contrast to the shocks that swept most financial systems in the West in the financial crisis of 2008–2009, the structure of Israel's financial system hardly changed. The few changes that did occur marked the continuation, in small dosages, of trends that had begun several years back according to long-standing plans.<sup>33</sup>

### a. Structure of the system and its services

The Israeli banking system is composed of five groups (Leumi, Hapoalim, Discount, Mizrahi-Tefahot, and First International) that hold 95 percent of system assets. The groups provide universal banking services via commercial banks, mortgage banks, overseas offices, credit card companies, financial institutions, and joint service companies. Alongside them are three independent banks (Union, Jerusalem, and Dexia) and four branches of foreign banks—BNP Paribas, HSBC, Citibank, and State Bank of India (Figure 1.11).

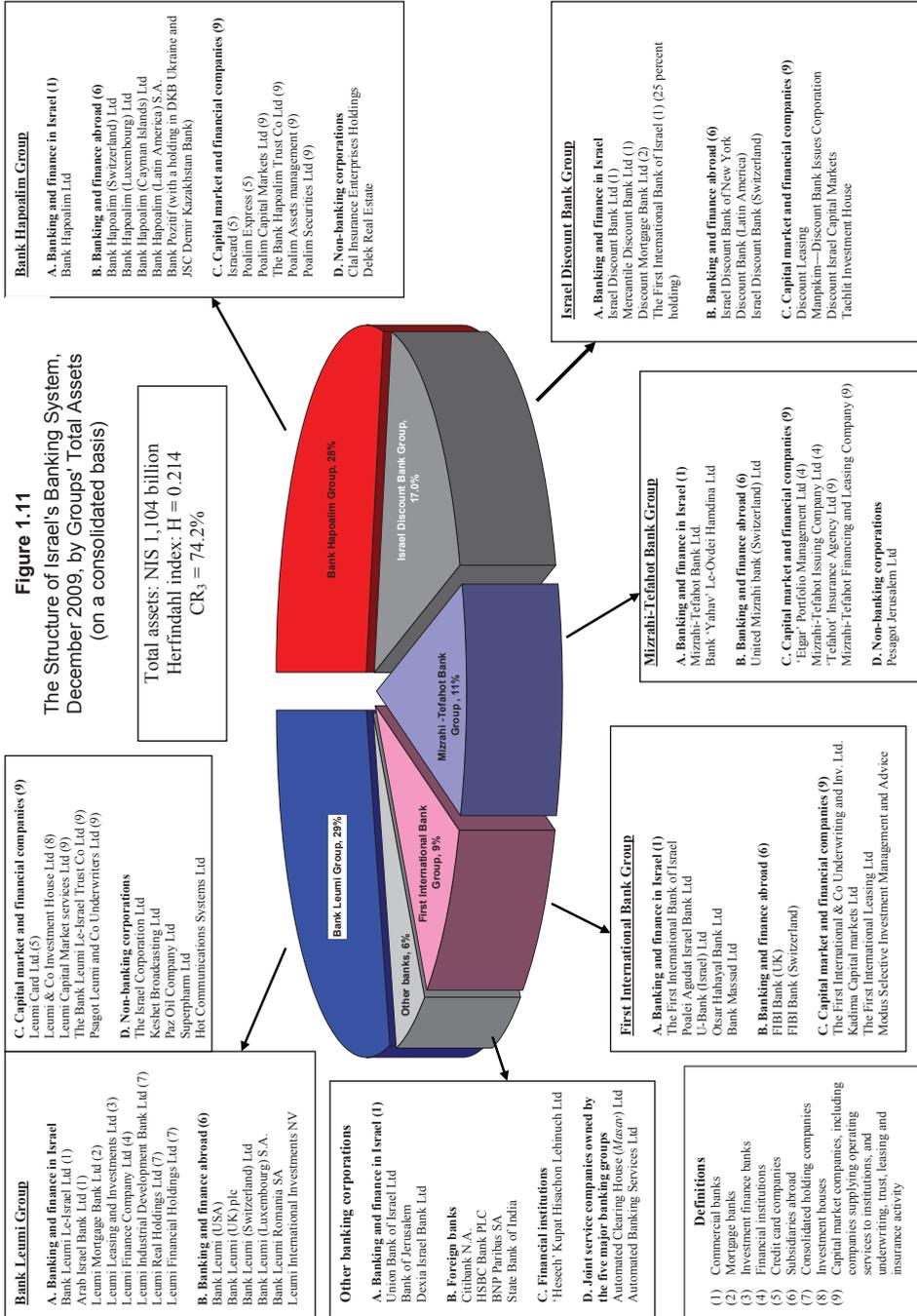
The banking system comprises nineteen individual commercial banks (Figure 1.12). Although the mortgage banks, in addition to their main activity of providing housing loans, also accept deposits and extend non-housing loans (“all-purpose loans,” etc.), this activity is not included in Figure 1.12 because it does not constitute real competition with the commercial banks.

The first foreign branch among the four that are active in Israel today, that of Citibank, was opened in 2000, and the most recent, that of State Bank of India, opened in 2007. Together, the four branches have 250 employees (not including outsourcing) and a combined balance sheet of NIS 17 billion, only 1.6 percent of total banking-system assets. In Israel, like other countries, local branches of large foreign banks do not pose real competition to domestic banks. In countries where foreign banks are saliently involved, e.g., those of Eastern Europe, their involvement is manifested in the acquisition of control of older and larger local banks.

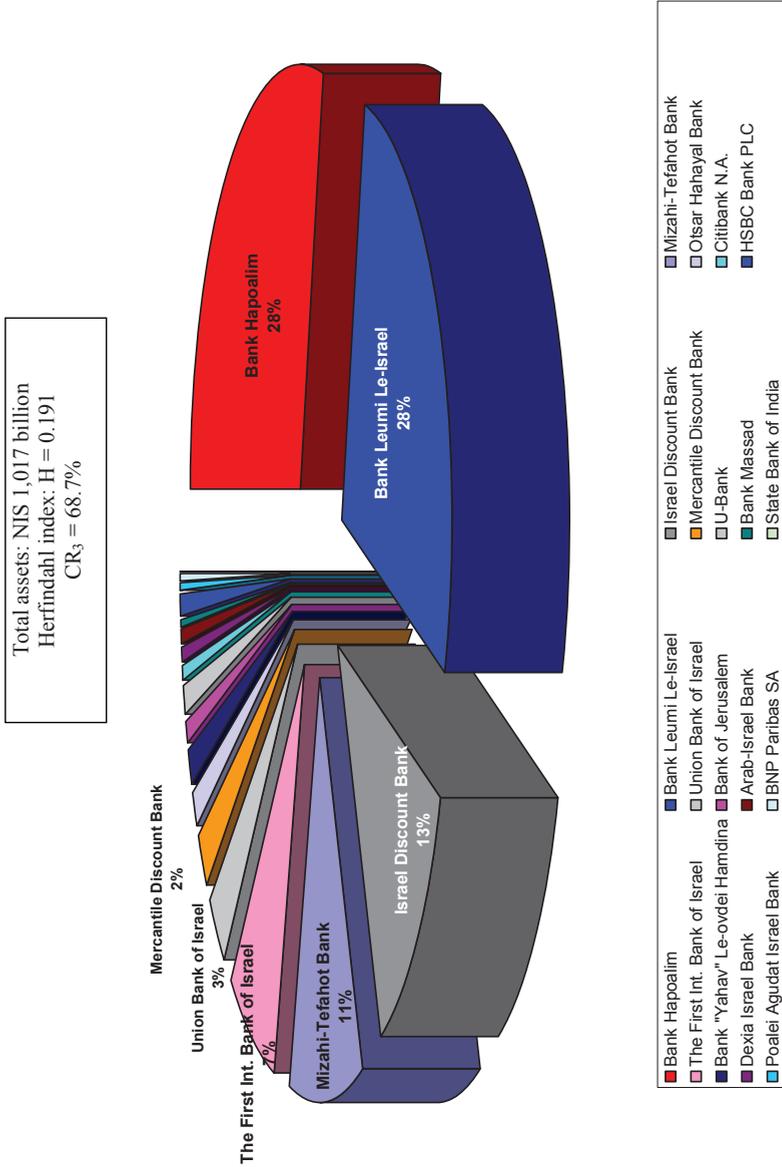
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<sup>33</sup> For a description of developments in the structure of the banking system in recent years, see the 2008 Annual Survey of the Supervisor of Banks, Chapter 1, Section 3.

**Figure 1.11**  
The Structure of Israel's Banking System,  
December 2009, by Groups' Total Assets  
(on a consolidated basis)



**Figure 1.12**  
**The Structure of Israel's Banking System, December 2009, by Total Assets of Individual Commercial Banks (on a non-consolidated basis)**

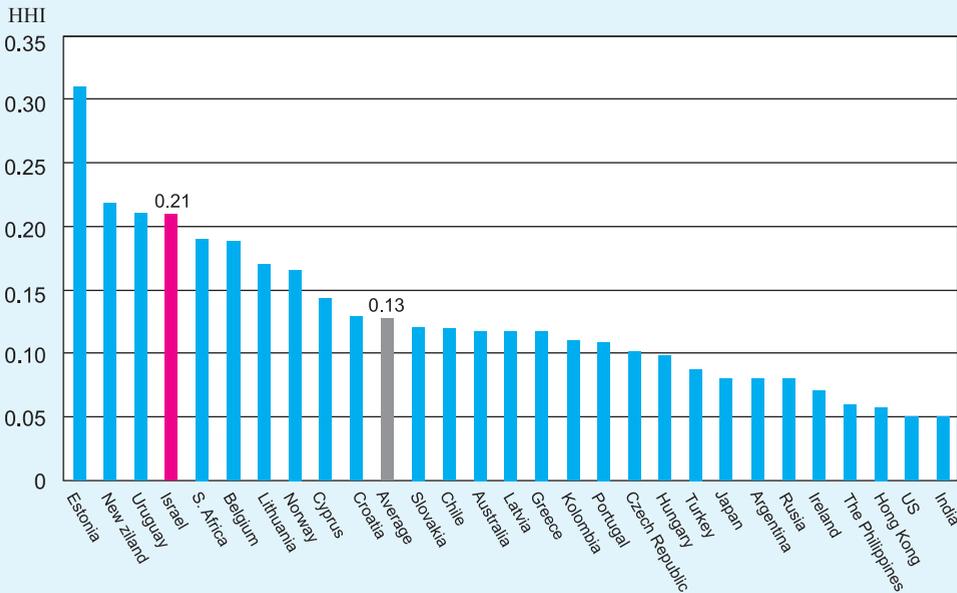


The four branches of foreign banks in Israel today operate mainly among niche populations in which they have comparative advantages, e.g., wealthy customers abroad who wish to have bank accounts in Israel, firms going through merger or acquisition processes or raising capital abroad, firms active in global capital markets or the diamond industry, and those involved in unique transactions such as guarantees for industries in Israel or customers abroad.

An international comparison of total banking activity shows that Israel's banking system is more highly concentrated than the average among Israel's peers<sup>34</sup> (Figure 1.13).

In addition to classical banking intermediation activity, the banking groups operate via subsidiaries in areas that complement their commercial-banking activities. In the last few years, however, the scope of their activity has contracted severely, particularly in regard to securities. Their main complementary activity relates to credit cards; this area of operations has been growing steadily in recent years.

**Figure 1.13**  
**Herfindahl-Hirschmann Index (HHI)<sup>a</sup>--An International Comparison, 2008**



<sup>a</sup> Calculated from the total assets of individual banks, on a non-consolidated basis.  
SOURCE: Countries' banking authorities.

<sup>34</sup> Israel's peer group consists of nine countries with economies of similar size to Israel's and banking systems of similar size and degrees of concentration: Belgium, Denmark, Finland, Greece, Ireland, New Zealand, Norway, Portugal, and South Africa.

## b. Concentration and competition in the banking system

### (1) Concentration

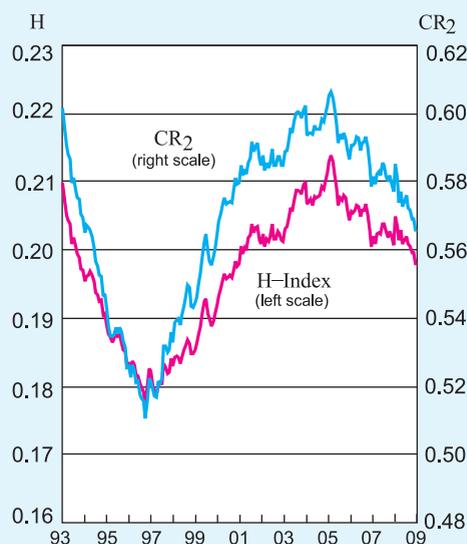
Concentration in the banking system, one of the factors determining its degree of competition, is generally measured using two indexes: the Herfindahl-Hirschman index (H), calculated here for unindexed bank credit (which accounts for most of total commercial bank credit; Table A1.4), and CR<sub>2</sub>, which measures the market share of the two largest banks (i.e., Leumi and Hapoalim) in total unindexed local-currency credit. Concentration in 2009, measured by H, was 0.198 at the end of 2009, slightly down from the 2008 value of 0.201. Banking-system concentration according to CR<sub>2</sub> also waned slightly in 2009 relative to 2008, at 57 percent as against 58 percent at the end of the respective years (Figure 1.14).

### (2) Competitiveness

The extent of competition in Israel's banking system, the changes in this parameter in recent years, and its level relative to that of banking systems abroad are customarily measured in two ways. The first approach is the indirect-estimator one, also known as the structure approach;<sup>35</sup> it tests the market power that banks invoke against their customers.<sup>36</sup> The second approach is the direct-estimator approach, also known as "contestability."<sup>37</sup>

Changes in competitiveness in 2009 were uneven by both approaches. At the beginning of the year, competitiveness declined significantly as the economic downturn continued and worsened; later on, however, as economy began to climb out of its recession, competition steadily increased.

**Figure 1.14**  
The Herfindahl-Hirschman (H) Index<sup>a</sup> and Market Share Index for the Largest Two Banks<sup>b</sup> (CR<sub>2</sub>) Calculated from Unindexed Local Currency Credit, 1993-2009



<sup>a</sup> The H-Index is defined as  $H = \sum_{i=1}^n \left( \frac{y_i}{Y} \right)^2$

where  $y_i$  is the output of bank  $i$  (unindexed local currency credit), and  $Y$  is the output of the banking industry.

<sup>b</sup> CR<sub>2</sub> is the market share of the largest two banking groups (Leumi and Hapoalim).

SOURCE: Based on banks' financial statements and reports to the Supervisor of Banks.

<sup>35</sup> For more details, see David Ruthenberg (2005), "Competition in the Banking Sector: Theoretical Aspects and Empirical Evidence in Israel and Abroad," Bank of Israel, Supervision of Banks, Research Unit, Discussion Paper Series, 05.02. For explanation of the concepts involved, see the 2008 Annual Survey of the Supervisor of Banks, Chapter 1, Section 3.

<sup>36</sup> Ibid.

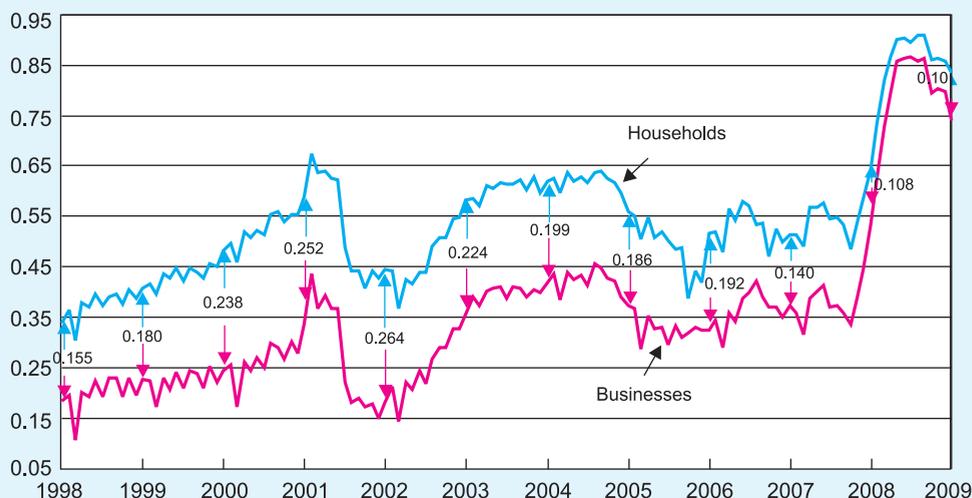
<sup>37</sup> Ibid.

In accordance with the indirect-estimator approach, use was made of an index of market power. The index was calculated using unindexed local-currency credit, which is a good proxy for financial intermediation, with a distinction made between banks' activity vis-à-vis households and vis-à-vis firms. According to this indicator, 2009 was a bumpy year: the market-power index surged in the first quarter, especially in regard to the banks' market power over business firms (Figure 1.15). Even though we cannot isolate the effect of the risk premium from the other factors, we can probably trace this development to two main factors: an increase in borrower risk via lending interest due to the crisis—especially evident in regard to business firms—and a decrease in contestability due to the evaporation of nonbank credit sources, largely until mid-year.

In accordance with the direct-estimator approach, contestability from nonbank players took an appreciable upward turn in the second half of the year. Contestability over the public's assets, measured as the difference between the public's total financial assets held outside the banking system and its bank deposits, rebounded in 2009 after falling in 2008 and returned to the 2007 level (Table 1.4 and Figure 1.16).

In terms of the public's liabilities to banks (bank credit), contestability, measured by the difference between credit substitutes and bank credit, rebounded in mid-2009 to its high pre-crisis levels (Figure 1.16).

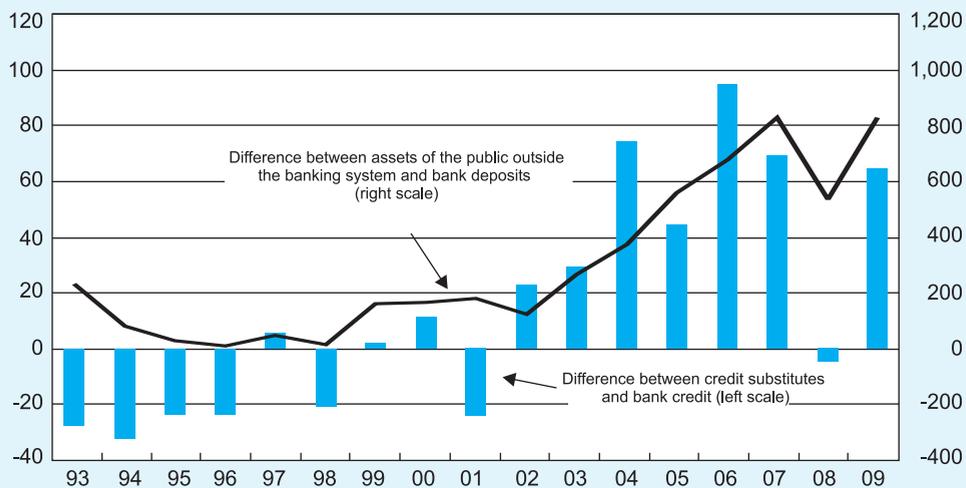
**Figure 1.15**  
**The Market Power (M) Index<sup>a</sup> of the Seven Major Commercial Banks,<sup>b</sup>**  
**Businesses vis-à-vis Households in the Unindexed Local Currency Segment,**  
**December 1998 to December 2009**



<sup>a</sup> The M-Index is defined as  $(R_L - R_M) / R_L$ , where  $R_L$  is the rate of interest on unindexed local currency credit (including income from credit management fees), and  $R_M$  is the inter-bank interest rate.

<sup>b</sup> Leumi, Hapoalim, Discount, First International, Mizrahi-Tefahot, Mercantile Discount, and Union.  
 SOURCE: Based on banks' reports to the Supervisor of Banks.

**Figure 1.16**  
**Contestability in the Credit and Deposit Markets, 1993-2009**  
**(NIS billion)**



SOURCE: Based on returns to the Bank Supervision Department and Tel Aviv Stock Exchange data.

Table A.1.1

## Unindexed Local-Currency Assets and Liabilities of Commercial Banks, 2007–09

	End-of-year balance		Real change on previous year		Annual average balance (Dec 2008 prices)		Real change on previous year		Balance-sheet composition	
	2007	2008	2009	2008	2009	2008	2009	2009	2008	2009
	(NIS million)			(percent)		(NIS million)		(percent)		
<b>Assets</b>										
Banknotes and coins	4,698	4,180	5,827	-11	39	4,810	4,882	2	1	1
Deposit in Bank of Israel	13,144	43,929	105,171	234	139	15,141	76,097	403	4	15
Deposit in banks	18,182	17,592	26,184	-3	49	17,171	21,671	26	4	4
Credit to the public	275,642	329,455	347,732	20	6	306,921	336,947	10	75	67
Makam and unindexed bonds	53,283	43,396	50,689	-19	17	46,352	48,838	5	11	10
<i>Of which: makam</i>	8,283	3,429	18,300	-59	434	5,127	13,372	161	1	3
Other assets	12,164	15,925	16,489	31	4	16,194	16,759	3	4	3
<b>Total assets</b>	<b>377,112</b>	<b>454,477</b>	<b>552,092</b>	<b>21</b>	<b>21</b>	<b>406,589</b>	<b>505,195</b>	<b>24</b>	<b>100</b>	<b>100</b>
<b>Liabilities</b>										
Monetary loan from Bank of Israel	411	-69	351			5,866	-34		1	0
Deposit from banks	12,031	9,922	11,783	-18	19	9,456	11,805	25	2	2
Deposit of the government	887	690	1,057	-22	53	870	867	0	0	0
Total deposits of the public	365,953	426,515	452,974	17	6	386,116	436,402	13	89	91
Demand deposits	50,637	60,988	87,136	20	43	51,374	79,617	55	12	17
SRO deposit	41,377	50,143	59,886	21	19	42,516	63,531	49	10	13
Resident time and short-term deposits	273,847	315,338	305,923	15	-3	292,144	293,226	0	68	61
Other deposits	91	46	29	-50	-37	83	29	-65	0	0
Other liabilities	28,434	29,942	33,232	5	11	30,269	31,262	3	7	7
<b>Total liabilities</b>	<b>407,716</b>	<b>466,999</b>	<b>499,397</b>	<b>15</b>	<b>7</b>	<b>432,577</b>	<b>480,302</b>	<b>11</b>	<b>100</b>	<b>100</b>
Activity in derivatives	46,630	35,490	-16,988	-24		42,572	7,421	-83	10	2
Surplus of assets over liabilities	16,026	22,968	35,707	43	55	16,585	32,313	95		

SOURCE: Reports to the Supervisor of Banks.

**Table A.1.2**  
**Local-Currency CPI-Indexed Assets and Liabilities in Commercial Banks, 2007-09**

	End-of-year balance (December 2007 prices)		Real change on previous year		Annual average balance (December 2007 prices)		Real change on previous year		Balance-sheet composition	
	2007	2008	2008	2009	2008	2009	2009	2009	2008	2009
	(NIS million)		(percent)		(NIS million)		(percent)		(percent)	
<b>Assets</b>										
Credit to the public	146,505	145,713	-1	-4	149,659	142,902	-5	75	72	
Deposit in banks	28,430	32,938	16	-13	30,791	30,611	-1	15	16	
Credit to the government	1,519	1,748	15	2	2,208	1,759	-20	1	1	
Bonds	15,498	16,593	7	45	14,574	20,481	41	7	10	
Other assets	1,318	1,478	12	-16	1,428	1,463	2	1	1	
<b>Total assets</b>	<b>193,270</b>	<b>198,469</b>	<b>3</b>	<b>-1</b>	<b>198,660</b>	<b>197,215</b>	<b>-1</b>	<b>100</b>	<b>100</b>	<b>100</b>
<i>of which:</i> Credit from earmarked deposits	698	462	-34	-5	567	494	-13	0	0	
<b>Liabilities</b>										
Deposits of the public										
Savings	24,124	21,763	-10	-7	22,886	21,009	-8	15	13	
Indexed deposits	78,392	84,883	8	7	80,624	89,136	11	52	53	
Other deposits	6,227	7,931	27	34	7,187	9,477	32	5	6	
Total deposits of the public	108,743	114,577	5	6	110,697	119,622	8	72	72	
Deposit from banks	4,703	4,801	2	3	4,935	5,129	4	3	3	
Deposit of the government	3,596	2,355	-35	-12	2,991	2,261	-24	2	1	
Other liabilities	31,322	36,977	18	16	35,686	40,080	12	23	24	
<b>Total liabilities</b>	<b>148,365</b>	<b>158,709</b>	<b>7</b>	<b>8</b>	<b>154,308</b>	<b>167,091</b>	<b>8</b>	<b>100</b>	<b>100</b>	<b>100</b>
<i>of which:</i> Earmarked deposits	1,088	869	-20	-16	959	784	-18	1	0	
Derivatives	-35,862	-35,652	-25,779		-35,790	-31,767		-23	-19	
Surplus of assets over liabilities	9,044	4,108	-55		8,562	-1,643				

SOURCE: Reports to the Supervisor of Banks.

**Table A.1.3**  
**Assets and Liabilities of Commercial Banks Denominated in and Indexed to Foreign Currency,<sup>a</sup> 2007-09**

	End of year balance		Real change on previous year		Annual average balance		Real change on previous year		Composition of average balances	
	2007	2008	2008	2009	2008	2009	2008	2009	2008	2009
	(\$ million)		(percent)		(\$ million)		(percent)		(percent)	
<b>Assets</b>										
Banknotes and coins	400	400		-12	433	364		-16	1	1
Deposits in banks abroad	22,332	11,829	-47	-21	19,681	11,109		-44	30	21
Deposits in Banks in Israel	1,054	923	-12	5	1,212	1,135		-6	2	2
Deposits in Bank of Israel	594	5,184		-91	1,916	823		-57	3	2
Nondirected credit to residents	23,951	22,648	-5	-14	23,557	20,992		-11	36	40
Nondirected credit to nonresidents	4,331	6,336	46	-16	5,249	5,766		10	8	11
Credit to the government	199	133	-33	135	166	269		62	-	1
Securities <sup>b</sup>	8,492	7,958	-6	4	8,394	8,141		-3	13	16
Other assets	2,453	6,569	168	-65	4,107	3,370		-18	6	6
<b>Total assets</b>	<b>63,806</b>	<b>61,979</b>	<b>-3</b>	<b>-25</b>	<b>64,716</b>	<b>51,969</b>		<b>-20</b>	<b>100</b>	<b>100</b>
<i>of which:</i> Denominated in foreign currency	62,023	59,982	-3	-25	62,780	50,157		-20	97	97
<b>Liabilities</b>										
Deposits from banks abroad	1,762	1,515	-14	39	1,398	1,952		40	2	3
Deposits from banks in Israel	419	414	-1	33	592	559		-6	1	1
Loan from Bank of Israel	0	0			0	0			0	0
Deposits of the government	1,428	112	-92	-5	872	111		-87	1	-
Residents' deposits	59,664	58,100	-3	-1	60,295	57,164		-5	89	90
Nonresidents' deposits	23,095	22,374	-3	-3	22,865	21,941		-4	34	35
Residents' and restitutions deposits	5,577	5,233	-6	-2	5,554	5,112		-8	8	8
Other residents' deposits	30,991	30,493	-2	2	31,876	30,111		-6	47	47
Other liabilities <sup>c</sup>	2,700	7,304	171	-62	4,598	3,806		-17	7	6
<b>Total liabilities</b>	<b>65,973</b>	<b>67,445</b>	<b>2</b>	<b>-6</b>	<b>67,756</b>	<b>63,593</b>		<b>-6</b>	<b>100</b>	<b>100</b>
<i>of which:</i> Denominated in foreign currency	63,919	65,439	2	-6	65,744	61,911		-6	97	97
Derivatives	-2,798	43	26,242		-1,956	6,384			-3	10
Surplus of assets over liabilities	-4,965	-5,424			-4,996	-5,240				

<sup>a</sup> Commercial banks only, on a bank basis.

<sup>b</sup> Including investment in shares in subsidiaries and in affiliated companies.

<sup>c</sup> Including intermediate amounts, bonds, and promissory notes recognized as earmarked deposits.

SOURCE: Reports to the Supervisor of Banks.

**Table A.1.4**  
**Distribution of Credit to the Public,<sup>a</sup> Total Commercial Banking System, 2007-09**

	End-of-year balance		Change in end-of-year balance		Average balance at December 2007 prices		Real change in average balances		Composition of average balances	
	2007	2008	2008	2009	2008	2009	2009	2009	2008	2009
Total credit to the public	530,890	585,340	581,448	10	-1	559,256	585,080	5	100	100
Total local-currency credit	422,147	475,168	488,016	13	3	456,580	479,849	5	82	82
Unindexed	275,642	329,455	347,732	20	6	306,921	336,947	10	55	58
Overdraft accounts and facilities <sup>b</sup>	43,080	44,789	39,517	4	-12	43,188	39,029	-10	8	7
Other short-term credit <sup>b</sup>	181,280	237,289	278,246	31	17	213,085	261,863	23	38	45
On-call credit	51,282	47,376	29,969	-8	-37	50,648	36,054	-29	9	6
CPI-indexed	146,505	145,713	140,284	-1	-4	149,659	142,902	-5	27	24
Total foreign-currency credit	108,743	110,172	93,432	1	-15	102,676	105,230	2	18	18
To residents	92,088	86,084	73,228	-7	-15	83,942	82,539	-2	15	14
<i>of which:</i> Foreign-currency-indexed	4,647	3,442	3,808	-26	11	3,740	3,743	0	1	1
To nonresidents	16,655	24,088	20,204	45	-16	18,734	22,692	21	3	4

<sup>a</sup> Commercial banks only, on a bank basis.

<sup>b</sup> Including credit from earmarked deposits.

<sup>c</sup> Including credit at the bank's responsibility only. Does not include credit to specialized banking corporations.

SOURCE: Reports to the Supervisor of Banks.

**Table A.1.5**  
**Average Annual Yields on Selected Assets and Liabilities in the Various Segments, 2008 and 2009**

	Annual average		2009				Annual average					
	2008	2009	I	II	III	IV	2008	2009	I	II	III	IV
	(nominal rates of return)						(expected real rates of return)					
<b>Unindexed local-currency segment</b>												
Demand deposits <sup>a</sup>	0.9	0.1	0.2	0.1	0.1	0.1	-1.0	-1.7	-0.5	-1.7	-2.2	-2.2
SRO deposits <sup>a</sup>	2.7	0.4	0.7	0.3	0.3	0.5	0.8	-1.3	0.0	-1.5	-2.0	-1.9
Resident time deposits <sup>a</sup>	3.3	1.1	1.3	0.9	1.1	1.0	1.3	-0.7	0.6	-0.8	-1.2	-1.4
<b>Total unindexed deposits</b>	<b>2.9</b>	<b>0.8</b>	<b>1.1</b>	<b>0.7</b>	<b>0.8</b>	<b>0.7</b>	<b>1.0</b>	<b>-1.0</b>	<b>0.4</b>	<b>-1.1</b>	<b>-1.5</b>	<b>-1.6</b>
Term credit <sup>a</sup>	6.0	3.7	4.0	3.5	3.6	3.8	4.0	1.9	3.3	1.7	1.2	1.4
Overdraft accounts and facilities <sup>a</sup>	9.8	8.0	8.1	7.8	7.9	8.3	7.7	6.1	7.3	5.9	5.4	5.8
Total unindexed credit (term credit, overdraft facilities and overdrafts)	9.8	8.0	8.1	7.8	7.9	8.3	7.7	6.1	7.3	5.9	5.4	5.8
<i>Makam</i> <sup>b</sup>	5.5	1.4	2.6	1.9	0.5	0.9	3.5	-0.5	1.9	-0.5	-1.8	-1.5
<b>Total unindexed assets</b>	<b>6.6</b>	<b>4.2</b>	<b>4.5</b>	<b>4.0</b>	<b>4.1</b>	<b>4.3</b>	<b>4.6</b>	<b>2.4</b>	<b>3.7</b>	<b>2.2</b>	<b>1.7</b>	<b>1.8</b>
<b>Bank of Israel declared effective interest rate<sup>c</sup></b>	3.7	0.8	1.2	0.5	0.5	0.8						
<b>CPI-indexed local-currency segment</b>												
Savings plans <sup>d</sup>	.	.	.	.	.	.	1.4	0.4	0.9	0.2	0.2	0.2
Indexed bonds <sup>e</sup>	.	.	.	.	.	.	2.9	1.6	2.0	1.7	1.5	1.1
CPI-indexed credit <sup>f</sup>	.	.	.	.	.	.	4.5	3.6	4.0	3.7	3.8	3.1

(cont.)

**Table A.1.5 (Cont'd)**  
**Average Annual Yields on Selected Assets and Liabilities in the Various Segments, 2008 and 2009**

	Annual average		2009				Annual average		2009				
	2008		I	II	III	IV	2008		I	II	III	IV	
	(in dollar terms <sup>e</sup> )												
<b>Foreign-currency-denominated and indexed credit</b>	(expected real rates of return <sup>b</sup> )												
Time deposits	0.6	0.1	0.2	0.0	0.1	0.1	0.1	-13.5	8.7	14.2	18.2	6.0	-3.8
Foreign-currency-denominated deposits <sup>i</sup>	1.9	0.3	0.4	0.3	0.2	0.2	0.2	-12.4	8.8	14.4	18.5	6.1	-3.7
Foreign-currency-indexed credit	5.3	2.9	3.5	3.1	2.7	2.5	2.5	-9.4	11.8	18.0	21.8	8.7	-1.6
Foreign-currency credit to residents	4.1	2.2	2.4	2.2	2.1	2.2	2.2	-10.5	11.0	16.7	20.8	8.2	-1.8
Deposits abroad <sup>j</sup>	2.8	0.6	1.1	0.7	0.3	0.1	0.1	-11.6	9.2	15.3	19.0	6.2	-3.8

<sup>a</sup> Effective annual yields/costs, as reported by the seven major banking groups.

<sup>b</sup> The market yield for two months on *makam*.

<sup>c</sup> The effective annual interest on monetary loans via auction and on deposits in the Bank of Israel via auction are usually the Bank of Israel declared effective rate plus or minus a few basis points.

<sup>d</sup> Average rate of interest on savings deposits.

<sup>e</sup> Average gross yield to maturity of five-year (or close to five-year) CPI-indexed bonds (market rate).

<sup>f</sup> Based on reports of cost of credit extended during the month.

<sup>g</sup> The data refer to dollar denominated credit and deposit items.

<sup>h</sup> Real interest calculated on the basis of the public's inflation expectations, derived from the capital market, and the expected exchange rate, calculated from the rate of actual depreciation over the previous twelve months.

<sup>i</sup> Including nonresidents' and residents' restitutions deposits.

<sup>j</sup> 3-month Libor interest rate.

SOURCE: Based on the seven major banks' reports on costs and tariffs, reports to the Supervisor of the Banks and Bank of Israel estimates.

**Table A.1.6**  
**The Public's Credit and Deposits with All the Banking Corporations,<sup>a</sup>**  
 (NIS million)

	Local currency unindexed	CPI-indexed local currency	Foreign currency (f.c.) and f.c. indexed	Non-monetary items	Total (percent)	Change from 2008
<b>Credit to the public</b>						
<b>Total residents</b>	<b>345,665,837</b>	<b>139,578,296</b>	<b>77,065,319</b>	<b>795,248</b>	<b>563,104,700</b>	<b>0.00</b>
<i>Of which: Corporations</i>	206,328,153	64,093,711	50,787,667	699,278	321,908,809	-0.05
Individuals	139,337,684	75,484,585	26,277,652	95,970	241,195,891	0.09
<i>Of which: Households</i>	115,925,820	70,189,809	4,885,761	12,010	191,013,399	0.14
<b>Total nonresidents</b>	<b>2,050,773</b>	<b>712,938</b>	<b>36,807,789</b>	<b>5,301</b>	<b>39,576,801</b>	<b>-0.21</b>
<i>Of which: Corporations</i>	1,074,481	583,890	30,228,532	-	31,886,903	-0.22
Individuals	976,292	129,048	6,579,257	5,301	7,689,899	-0.13
<i>Of which: Households</i>	705,050	126,124	3,222,409	-	4,053,584	-0.06
<b>Total credit to the public</b>	<b>347,716,611</b>	<b>140,291,234</b>	<b>113,873,108</b>	<b>800,549</b>	<b>602,681,502</b>	<b>-0.01</b>
<b>The public's deposits</b>						
<b>Total residents</b>	<b>446,824,359</b>	<b>121,145,145</b>	<b>140,622,567</b>	<b>864,353</b>	<b>709,456,425</b>	<b>0.04</b>
<i>Of which: Corporations</i>	196,695,968	60,697,529	64,311,238	827,231	322,531,967	0.12
Individuals	250,128,391	60,447,616	76,311,329	37,122	386,924,458	-0.01
<i>Of which: Households</i>	233,120,745	54,984,235	71,012,287	10,390	359,127,657	-0.02
<b>Total nonresidents</b>	<b>5,960,226</b>	<b>655,437</b>	<b>103,767,582</b>	<b>1,787</b>	<b>110,385,032</b>	<b>-0.01</b>
<i>Of which: Corporations</i>	1,969,631	559,823	27,808,819	1,787	30,340,060	0.22
Individuals	3,990,595	95,614	75,958,763	-	80,044,971	-0.07
<i>Of which: Households</i>	3,352,753	85,596	68,308,050	-	71,746,400	-0.08
<b>Total deposits of the public</b>	<b>452,784,584</b>	<b>121,800,582</b>	<b>244,390,149</b>	<b>866,140</b>	<b>819,841,456</b>	<b>0.04</b>

<sup>a</sup> Data taken from the monthly balance sheet on a bank basis.

SOURCE: Bank of Israel.

**Table A.1.7**  
**Mortgages Granted and Repaid of Mortgage-Granting Banks, and the Balance of**  
**Mortgage-Backed Housing Loans<sup>a</sup>, 2005–09**  
**(NIS million)**

	2005	2006	2007	2008	2009	Change 2009 compared with 2008 (percent)
Total non-directed loans to mortgagors	20,661	16,845	24,498	30,119	34,573	14.8
Total early repayments (housing loans)	15,306	8,991	11,308	12,884	13,820	7.3
Total cumulative balance of mortgagors' arrears	2,134	2,233	2,229	2,124	2,056	-3.2
Total balance of mortgage loans to the public	124,189	126,057	136,994	154,123	172,637	12.0
<i>of which:</i> Housing loans	110,734	111,710	122,210	138,491	155,843	12.5
Total early repayments	6,699	976	10,500	16,281	17,352	6.6

a Including mortgage banks and commercial banks with mortgage activity.

SOURCE: Reports to the Supervisor of Banks.

**Table A.1.8**  
**Main Indicators of Mortgage Activity, and the Burden of Loans Relative to Wages, 2004-2010:Q1**

	2004		2005		2006		2007		2008		2009		2010:Q1		Change from 2008 to 2009 (percent)
	Amount	Interest rate	Amount	Interest rate											
New housing loans to the public, NIS million	7,212.5	5.0	10,861.4	4.3	5,444.0	4.8	8,857.0	4.2	5,366.0	3.8	4,033.0	3.1	1,103.0	2.9	-24.8
Fixed-interest indexed loans	1,387.6	5.0	3,276.9	4.2	4,008.0	5.0	5,420.0	4.4	9,316.0	3.7	8,132.0	2.7	3,091.0	2.4	-12.7
Floating-interest indexed loans	3.5	6.4	25.1	6.9	157.0	7.2	242.0	6.6	170.0	7.1	262.0	5.4	119.0	5.6	54.1
Unindexed fixed-interest loans															
Floating-interest unindexed loans	2,010.5	5.5	4,434.1	4.8	5,103.3	6.2	8,687.0	4.8	14,416.0	4.4	20,840.0	1.8	5,392.0	2.3	44.6
Loans in or indexed to foreign currency	4,859.5	3.7	1,899.5	5.4	1,637.0	7.2	1,280.0	7.3	855.0	4.9	1,351.0	2.7	487.0	2.7	58.0
Total directed loans not at the banks' responsibility	3,167.0		2,360.0		2,157.0		1,967.0		1,516.0		776.0		156.0		-48.8
<b>Total housing loans made during the year and the average interest rate</b>	<b>18,640.6</b>	<b>3.9</b>	<b>22,857.0</b>	<b>4.0</b>	<b>18,506.3</b>	<b>4.9</b>	<b>26,453.0</b>	<b>4.3</b>	<b>31,639.0</b>	<b>3.9</b>	<b>35,394.0</b>	<b>2.1</b>	<b>10,348</b>	<b>2.4</b>	<b>11.9</b>

**Table A.1.8 (Cont.)**  
**Main Indicators of Mortgage Activity, and the Burden of Loans Relative to Wages, 2004-2010:Q1**

	2004		2005		2006		2007		2008		2009		2010:Q1		Change from 2008 to 2009 (percent)
	Amount	Interest rate	Amount	Interest rate											
Number of housing loans made to the public via mortgages	56,568.0		71,327.0		61,182.0		81,309.0		90,501.0		93,496.0		24,766		3.3
Average loan (excluding directed credit - NIS)	273,540		287,367		267,224		301,147		332,847		370,262		411,532		11.2
Average monthly repayment over 20 years (NIS)	1,641		1,748		1,746		1,870		2,000		1,899		2,165		-5.1
Average wage (NIS)	7,000		7,220		7,468		7,630		7,922		7,950		8,232		0.4
Ratio of repayment to average wage (percent)	23.4		24.2		23.4		24.5		25.2		23.9		26		-5.4
Average house price per year (NIS '000) <sup>a</sup>	686.5		724.8		757.6		743.7		773.4		884.7		957.9		14.4
Average loan-to-value ratio in Israel (percent)	39.8		39.6		35.3		40.5		43.0		41.9		43.0		-2.6
Number of houses/apartments bought for investment purposes	20,286		22,531		24,008		28,711		27,801		31,519		6,960		13.4
Share of houses/apartments bought for investment purposes (percent)	25.5		27.6		27.5		29.5		30.4		31.2		28.0		2.6

<sup>a</sup> Quarterly average over the year. Source: the Ministry of Housing and Construction Survey of Owner-Occupied House Prices. SOURCE: Based on reports to the Supervisor of Banks and publications of the Central Bureau of Statistics and the Tax Authority.

