PART 3
RISKS AND CAPITAL ADEQUACY

Banks in Israel's banking system are exposed to a wide range of risks, i.e., credit risks, market risks (interest-rate, inflation, exchange-rate, and share-price), liquidity risk, operational risks, legal risks, etc. In order to maintain their stability and reduce the risk of bankruptcy, banks take several steps, among them maintaining adequate capital to serve as a cushion for the absorption of losses.

In this section we describe financial risks (credit risks, market risks, and liquidity risks), capital adequacy, risk-adjusted return on capital, and the development of the Robustness Index of the resilience of Israel's banking system.[1]

1. CREDIT RISK

In this section we analyze credit risk, the main risk to which the banks in Israel's banking system are exposed. The analysis is arranged according to three main criteria: the size, quality, and concentration of the credit portfolio.

During 2005 the extent of on- and off-balance-sheet credit rose moderately (after declining for several years), and the quality of credit improved markedly, as was expressed primarily by the contraction of problem loans and loan-loss provision. However, the concentration of the credit portfolio, reflected in the distribution of credit by principal industry and large single-borrower exposure, remained without substantial change, after having fallen for several years.

a. The size of the credit portfolio

The extent of on- and off-balance-sheet activity rose in 2005, as a result of the increased supply of and demand for credit—in the context of Israel's continued economic development since 2003—as well as of the improved payback ability of borrowers. For more detailed information about the size of the credit portfolio (both on and off the balance sheet), see the first section of this chapter.

b. The quality of the credit portfolio[2]

The improvement in the economic environment in which Israel's financial system operates[3]—GDP growth, the rise in the real wage, the decline in the unemployment

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1 Unless stated otherwise, the data in this chapter are based on the published financial statements of the five major banking groups.

2 The analysis of indices of credit quality in this section relate solely to balance-sheet items.

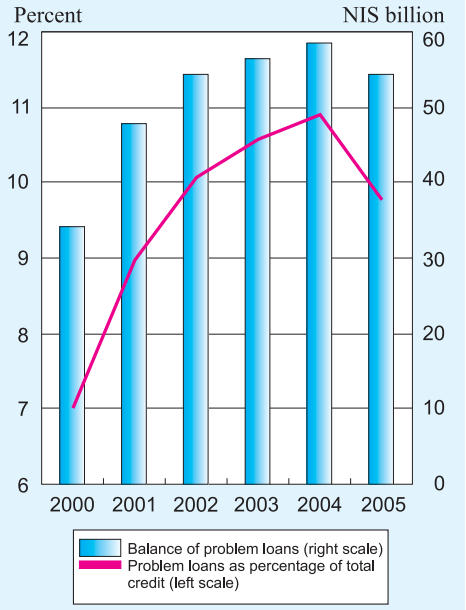
3 For more detailed information about macroeconomic developments, see the first section of this chapter.

rate, and the surge in the capital market (expressed inter alia in the particularly large extent of private bond issues)—alongside positive changes in the performance of firms,[4] had a positive effect on the payback ability of the banks' customers, and this improvement began to find significant expression in most indices of the quality of the credit portfolio.[5]

The most prominent change is evident in the share of problem loans[6] in total credit at the responsibility of the banking group, which dipped by one percentage point (from 10.9 percent to 9.8 percent) for the first time in five years (Table 1.17 and Figure 1.32).

This development derives from two factors which operated simultaneously: outstanding credit to the public rose by 3.3 percent, and total balance-sheet credit to problem borrowers declined by about 7 percent (Table 1.18). As stated, the positive change in this index relates to the marked improvement in the Israeli economy; the rise in the demand for bank credit, and the improvement in borrowers' payback ability, which led to a decline in credit defined as problem loans. Most of the components of problem loans—non-performing loans, credit in temporary arrears, and credit under special supervision—declined in 2005, by 7, 18, and 10 percent respectively. Only problem loans classified as restructured credit and credit requiring reorganization rose (by 21 and 27 percent respectively; Table 1.18 and Figure 1.33).

Figure 1.32
Problem Loans as a Proportion of Total Credit vis-à-vis Problem Loan Balance in the Five Major Banking Groups, 2000-05



SOURCE: Based on published financial reports.

[4] Evidence of this may be found in the positive shifts in firms which went public in 2005 (the net income of all these companies rose from NIS 37 billion to NIS 44 billion, return on equity rose from 13 percent to 15 percent, the capital/balance sheet ratio rose from 11 percent to 12 percent, and the ratio of the current account balance and market value/book value improved in most principal industries). While these data relate solely to companies traded on the TASE, it may be assumed that this trend is common to all the firms operating in Israel. According to the Altman index, these developments attest to a decline in the probability of default (PD) by borrowers, and hence to an improvement in their payback ability.

[5] Indices of the quality of credit express the probability that a borrower or group of borrowers will not repay part of their liabilities (principal and/or interest) to the banks in time.

[6] Problem loans are divided into five categories, as defined in Regulation no. 314 of the Proper Conduct of Banking Business: non-performing loans, restructured credit, credit requiring renewed approval, credit in temporary arrears, and credit under special supervision.

Table 1.17
Indices of Credit Portfolio Quality,[a] The Five Major Banking Groups, 2000-05

	Year	Hapoalim	Leumi	Discount	Mizrahi–Tefahot	First Intl.	The five groups
Ratio of risk-weighted assets to total assets[b]	2000	0.694	0.667	0.595	0.629	0.600	0.653
	2001	0.727	0.692	0.580	0.631	0.631	0.673
	2002	0.715	0.701	0.571	0.653	0.656	0.675
	2003	0.711	0.685	0.581	0.645	0.654	0.669
	2004	0.714	0.674	0.588	0.670	0.617	0.667
	2005	0.712	0.679	0.600	0.673	0.613	0.670
Share of problem loans in total credit at group's responsibility (percent)	2000	7.7	6.8	9.2	6.1	2.9	7.0
	2001	8.4	10.0	10.9	7.6	6.6	9.0
	2002	10.4	9.8	12.4	7.5	9.1	10.1
	2003	11.3	9.8	11.9	7.7	12.3	10.6
	2004	11.9	11.0	10.7	6.6	12.7	10.9
	2005	10.3	9.9	9.4	6.9	12.1	9.8
Share of non-performing loans in total credit at group's responsibility (percent)	2000	1.2	1.3	3.5	1.0	0.7	1.5
	2001	1.3	1.4	3.8	0.9	1.4	1.7
	2002	2.1	2.3	3.9	1.7	2.9	2.5
	2003	2.9	2.3	3.8	1.4	2.5	2.6
	2004	3.3	1.5	3.7	1.5	3.3	2.6
	2005	3.0	1.4	3.3	1.5	2.7	2.3
Ratio of annual loan-loss provision to total credit (multiplied by 100)	2000	0.45	0.44	1.02	0.36	0.27	0.50
	2001	0.68	0.93	1.33	0.53	0.91	0.85
	2002	1.68	1.10	1.19	0.52	1.73	1.31
	2003	1.28	1.11	1.11	0.50	1.34	1.12
	2004	0.97	0.89	1.14	0.56	0.99	0.92
	2005	0.68	0.80	0.82	0.45	0.64	0.71
Share of the balance of the loan-loss provision in total problem debts plus the balance of the loan-loss provision (percent)	2000	31.0	31.8	32.7	30.7	34.0	31.7
	2001	28.5	25.4	33.3	27.9	24.2	28.0
	2002	29.9	28.6	32.8	29.5	28.5	29.9
	2003	33.3	31.7	36.3	31.9	25.6	32.5
	2004	34.7	30.8	40.5	37.1	29.9	34.2
	2005	38.2	34.5	42.8	37.4	30.8	37.0

[a] Refers to balance sheet credit only.
[b] Total risk assets are total assets (balance sheet and off-balance-sheet assets translated into balance sheet equivalent value), weighted by risk. Total assets are total (balance sheet and off-balance-sheet assets translated into balance sheet equivalent value), without risk weighting.
SOURCE: Based on published financial reports.

Table 1.18
Distribution of Problem Loans, the Five Major Banking Groups, 2001-05

	Year	Hapoalim	Leumi	Discount	Mizrahi–Tefahot	First Intl.	Total
				(NIS million)[a]			
Non-performing	2001	2,386	2,416	2,805	527	711	8,845
	2002	4,041	3,999	2,925	989	1,387	13,341
	2003	5,290	3,845	2,872	807	1,119	13,933
	2004	6,070	2,602	2,859	926	1,454	13,911
	2005	5,639	2,431	2,740	996	1,188	12,994
Rescheduled	2001	1,642	560	417	153	61	2,834
	2002	1,376	831	539	101	31	2,878
	2003	1,857	516	639	111	173	3,296
	2004	1,307	838	360	110	85	2,700
	2005	1,473	985	457	131	221	3,267
Due to be rescheduled	2001	797	88	3	63	20	970
	2002	1,040	74	80	24	296	1,514
	2003	935	81	39	21	399	1,475
	2004	774	1,210	84	23	201	2,292
	2005	1,479	1,070	92	1	277	2,919
In temporary arrears	2001	2,267	1,518	500	1,211	367	5,863
	2002	3,190	1,306	714	1,281	837	7,328
	2003	2,428	931	679	1,281	1,416	6,735
	2004	1,237	754	615	1,290	1,115	5,011
	2005	1,147	698	555	1,424	261	4,085
Under special supervision	2001	8,304	12,035	4,333	2,483	2,150	29,305
	2002	9,931	10,655	4,932	2,065	1,859	29,442
	2003	10,255	11,128	4,862	2,329	2,513	31,087
	2004	12,331	13,246	4,403	1,842	2,744	34,566
	2005	9,319	12,404	4,034	1,897	3,305	30,959
Total balance-sheet credit to problem borrowers	2001	15,397	16,617	8,058	4,437	3,308	47,817
	2002	19,578	16,865	9,190	4,460	4,410	54,503
	2003	20,765	16,501	9,091	4,549	5,620	56,526
	2004	21,719	18,650	8,321	4,191	5,599	58,480
	2005	19,057	17,588	7,878	4,449	5,252	54,224

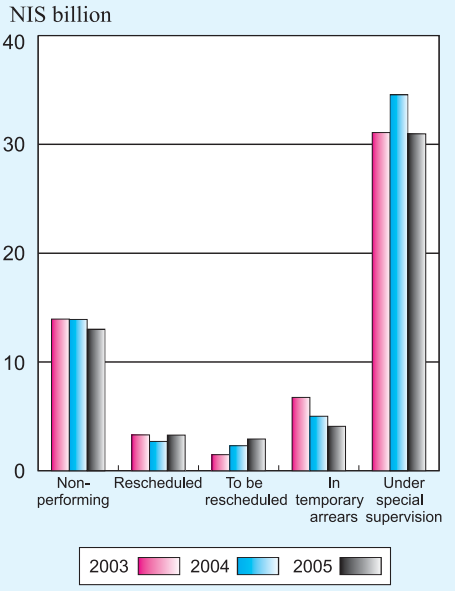
[a] Data up to 2003 are shown at December 2003 prices, and from 2004 at current prices.
SOURCE: Based on published financial reports.

The share of non-performing loans in total credit at the banking group's responsibility fell for the first time since 2000, dropping by 0.25 percentage points to stand at 2.3 percent (Table 1.17). This development is attributed to the 7 percent decline in non-performing loans, which is the most severe category of problem loans (Table 1.18 and Figure 1.33).

Net loan-loss provision by the five major banking groups declined by about NIS 1 billion during 2005[7] (Table 1.13). Their ongoing reduction, which began in 2003, attests to the banks' acknowledgement of an improvement in borrowers' payback ability. This acknowledgement was expressed in the drop in the ratio of annual expenditure on loan-loss provision to total credit, from 0.92 in 2004 to 0.71 in 2005 (Table 1.17). The marked reduction in this index encompassed all the banking groups in the system, the most impressive improvement being in the First International banking group.

The balance of loan-loss provision, as recorded on the balance sheet, rose by NIS 1.5 billion but, as stated, the reduction in provision rates in recent years led to an increase in the balance—albeit at a decelerating pace.[8] The contraction of problem loans and the rise in the balance of loan-loss provision led to a 3 percentage-point increase in the ratio of the balance of loan-loss provision to total problem loans plus the balance of loan-loss provision[9] (Table 1.17).

Figure 1.33
Distribution of Problem Loans in the Banking System by Type, 2003-05



SOURCE: Published financial statements.

In contrast to the significant improvement in most of the indices of credit quality reviewed so far, the ratio of total risk-weighted assets to total assets[10] rose only slightly, by 0.5 percent, largely as a result of an increase in off-balance-sheet transactions[11] (Table

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7 The decline in net loan-loss provision stems from the fall in gross loan-loss provision (from NIS 6.674 million to NIS 5,959 million) as well as from the rise in the 'Reduction of provision' (from NIS 1,666 million to NIS 1,918 million) and 'Debts collected after being written off previously' (from NIS 50 million to NIS 88 million) items.

8 The rate of increase was 18 percent in 2003, 11 percent in 2004, and 5 percent in 2005.

9 This ratio measures a bank's readiness to absorb expected loan losses (as expressed in past and present profit and loss reports) in relation to the size of the credit portfolio it has defined as problematic. A high ratio reflects a low potential to absorb additional future losses from the bank's problem loans portfolio. Accordingly, a rise in the ratio expresses a decline in credit risk.

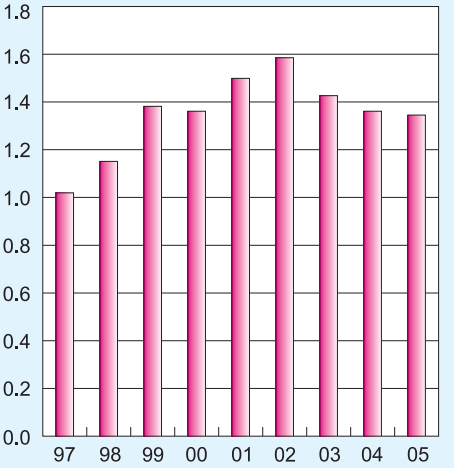
10 The ratio of on- and off-balance-sheet risk-weighted credit, calculated in accordance with the instructions of the Supervisor of Banks for the purpose of the minimum capital ratio, to outstanding on- and off-balance-sheet credit.

11 For further details and analysis of the extent of off-balance-sheet transactions, see the first section of this chapter.

1.17). On the other hand, the ratio of total credit[12] to GDP dipped slightly, from 1.36 in 2004 to 1.35 in 2005, after declining continually since the end of 2002, when it reached a peak of 1.59 (Appendix Table A.8, Figure 1.34).

The credit/product ratio is an indication of borrowers' payback ability, because product is the source of credit repayment. Hence, the decline in this ratio can attest to an improvement in payback ability because, as stated, the economic growth rate is higher than the growth rate of credit. Note that independent capital issues in the business sector, which have risen notably in recent years, constituting part of that sector's sources of finance, have an indirect positive effect on the quality of the banks' credit portfolio.

Figure 1.34
Credit[a] of Five Major Banking Groups as Proportion of GDP, 1997-2005



[a] Credit calculated as loan 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 (guarantees and other commitments at expense of future clients and transactions), weighted by conversion coefficients for balance-sheet credit.

SOURCE: Based on published financial statements and returns to the Supervisor of Banks.

c. The concentration of the credit portfolio[13]

During 2005 the concentration of the credit portfolio by principal industry[14] rose slightly, as expressed in the Herfindahl concentration index of the total credit and the business credit portfolios (Table 1.19). However, over the years the Herfindahl index of concentration by principal industry has declined gradually (from 0.092 in December 1997 to 0.078 in December 2005), attesting to an improvement (greater diversification) in the credit portfolio by principal industry (Figure 1.35).

Whereas the Gini Index of the distribution of credit by borrower size[15] indicates that there was a slight increase in 2005 (Table 1.19), this index has also improved markedly

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[12] Credit is calculated solely for transactions by borrowers in Israel, and includes balance-sheet credit (credit to the public, investment in bonds and other assets against derivatives), and off-balance-sheet credit (guarantees and other liabilities at customers' expense and future transactions) which is weighted by credit-conversion factors for balance-sheet credit.

[13] The analysis of the concentration of the credit portfolio is based on both on- and off-balance-sheet items.

[14] The analysis of the concentration of the credit portfolio includes the industries listed in Table A20.

[15] This index reflects the inequality of the distribution of the banks' credit portfolio, and is measured by the area between the curve of the actual distribution of the credit portfolio (the ratio of the proportion of accrued credit to the proportion of accumulated borrowers) and the 45 degree intersect, which expresses the egalitarian distribution of credit. A rise in the index means that the concentration of the credit portfolio by borrower size has increased.

Table 1.19
Indices of Concentration in Public's Credit Portfolio, The Five Major Banking Groups, 2003–05[a]

	Year	Hapoalim	Leumi	Discount	Mizrahi–Tefahot	First Intl.	The five groups
Concentration by principal industry							
Herfindahl Index of concentration of the total credit portfolio by principal industry[b]	2003	0.086	0.085	0.087	0.054	0.106	0.079
	2004	0.082	0.084	0.092	0.050	0.106	0.077
	2005	0.077	0.088	0.098	0.047	0.102	0.078
Share of credit to households in total credit portfolio (percent)	2003	25.5	26.1	22.0	49.9	20.0	27.0
	2004	29.9	26.6	20.6	49.0	19.1	28.5
	2005	30.3	26.2	19.6	51.3	20.0	28.5
Herfindahl Index of concentration of the business credit portfolio by principal industry[c]	2003	0.156	0.155	0.143	0.214	0.165	0.149
	2004	0.167	0.156	0.147	0.192	0.162	0.150
	2005	0.159	0.162	0.152	0.197	0.159	0.152
Concentration by size of borrower							
Share of credit borrowers whose credit balance is more than NIS 40 million (percent)	2003	51.4	45.5	42.9	24.7	50.7	45.7
	2004	45.0	42.9	42.6	23.9	45.4	41.9
	2005	47.4	43.4	43.1	22.7	46.0	43.0
Gini Index[d]	2003	0.909	0.912	0.904	0.810	0.929	0.904
	2004	0.887	0.910	0.896	0.809	0.929	0.893
	2005	0.887	0.915	0.900	0.816	0.929	0.896
Share in the group's total credit of credit given to borrowers whose indebtedness is more than 5 percent of the group's equity[e] (percent)	2003	11.5	7.3	9.7	10.1	24.5	
	2004	6.2	4.7	8.7	8.6	20.7	
	2005	8.9	6.5	7.7	5.8	18.5	

[a] On the basis of balance sheet and off-balance sheet data.

[b] This index is the sum of squares of the credit weights in a particular industry (excluding households) in total credit to the public (including households).

[c] This index is the sum of squares of the credit weights in a particular industry (excluding households) in total credit to the public (excluding households).

[d] The Gini Index reflects the inequality of the distrubtion of credit according to borrowers (see the comment in the text).

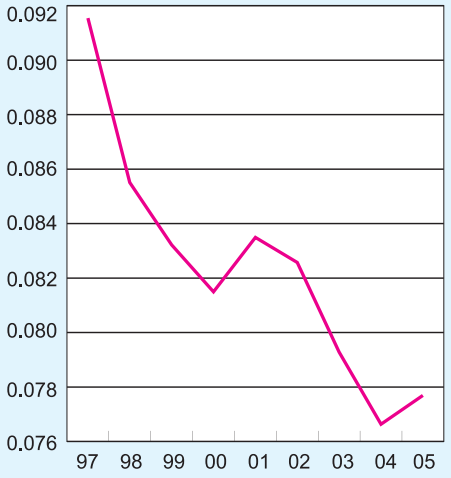
[e] With the addition of the rights of external shareholders.

SOURCE: Based on published financial reports.

in the last decade, attesting to a decline in the concentration of the credit portfolio by borrower. It may be assumed that underlying the decline in the Gini Index, especially since 2002, is the rise in the share of credit extended to households[16] in total credit to the public (Figure 1.36). It would seem, therefore, that households, most of which are small borrowers, have helped to reduce the concentration of credit among borrowers.

The share of credit extended to borrowers whose outstanding debt is greater than

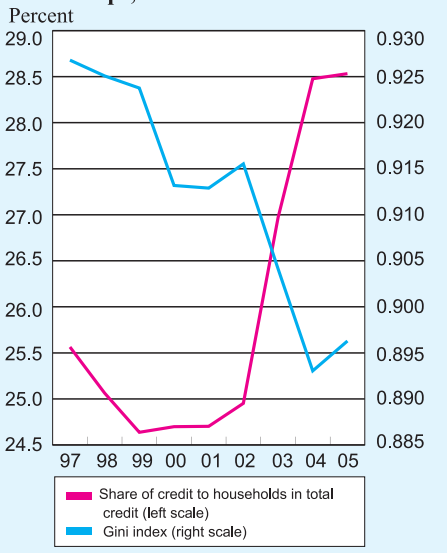
Figure 1.35
Herfindhal (H) Index[a] of Credit Concentration by Principal Industries, for the Five Major Banking Groups, 1997-2005



[a] This index of credit portfolio concentration is calculated as the sum of the squares of the proportions of credit in a particular industry (excluding the household sector) to total credit to the public (including the household sector).

SOURCE: Based on published financial statements.

Figure 1.36
The Gini Index of Credit[a] Distribution by Borrower Size and Credit Given to Household Sector in Israel out of Total Credit Portfolio,[b] Five Major Banking Groups, 1997-2005



[a] On the basis of balance-sheet and off-balance-sheet credit.
[b] Credit portfolio includes overseas activity.

SOURCE: Based on published financial statements.

NIS 40 million rose by 3 percent in 2004 (Table 1.19 and Appendix Table A.1.9); this is evident in all the banking groups except the Mizrahi-Tefahot banking group, whose concentration has been the lowest in the system for several years (this group extends considerable credit to households), although this ratio has declined from 47.5 percent

[16] Part of the increase in the share of credit extended to households derives from the imposition of direct credit frameworks classified as off-balance-sheet credit in the private persons sector—narrow credit frameworks extended by one of the five major banks to certain customers in December 2004 without being asked to do so (and sometimes without the customer's knowledge), and which the bank may cancel at its discretion.

in 2000-2001 to 43 percent in 2005. The changes in the ratio of credit extended to large single borrowers[17] have not been uniform; the index rose in the two largest banking groups, and fell in the others[18] (Table 1.19).

d. Activity, financial results, and the quality of credit by principal industry and in the household sector[19]

In this section we describe developments in 2005 and the first half of 2006[20] in the principal industries to which the banking system is particularly exposed, among them construction and real estate, tourism,[21] manufacturing, and the communications and computer services industry. We also describe developments in the household sector.

In the course of the year reviewed the decline in activity in the construction and real-estate industry was checked. The industry's output inched up by 0.4 percent, contrasting with the sharp 8.1 percent drop in 2004. Several additional indicators attest to a trend of recovery in the industry; the number of building starts was up by 13.4 percent in 2006:I compared with the equivalent quarter in 2005 (Appendix Table A.1.10). The fact that housing prices rose by 3 percent in 2005 and that the area of housing units in the process of construction increased also shows that there has been improvement in this industry. Even though activity in the industry in Israel did not rise substantially in 2005, there was considerable recovery in the financial results of government-owned construction and real-estate companies, due inter alia to the expansion of their activity to international markets (primarily in Europe and North America). The return on equity (ROE) of public-sector corporations in the industry reached 12.8 percent, compared with 3.0 percent in 2004 (Figure 1.37), mainly as a result of the increase in total net profit in 2005 to NIS 1.5 billion, after NIS 0.35 billion in 2004 (Figure 1.38).

Another expression of the ongoing positive trend was the rise in the ratio of market value to book value (MV/BV) of companies operating in the construction and real-estate sector (Figure 1.39). The improvement attests to the positive assessment made

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17 Borrowers whose outstanding debt exceeds 50 percent of the group's equity (plus rights of external shareholders).

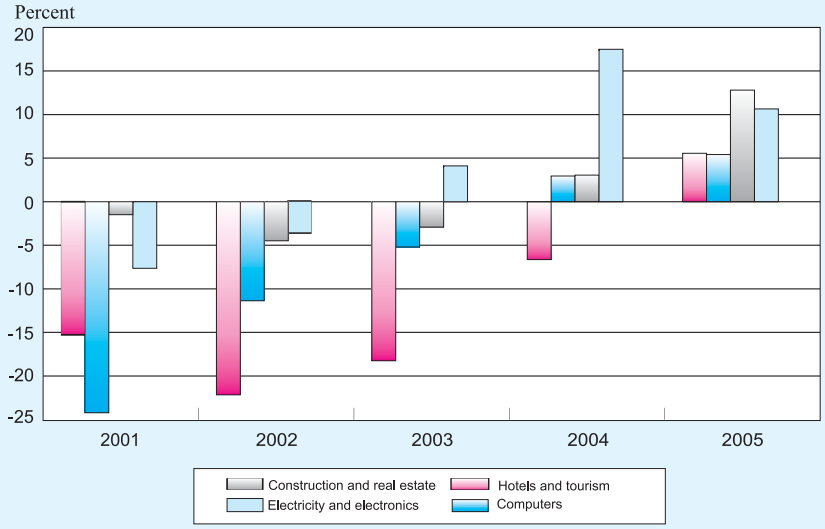
18 The share of credit to large single borrowers is measured in relation to the group's equity, which also grew during the year. Accordingly, the index declined in the Discount and First International banking groups despite the increase in the share of credit to borrowers whose outstanding debt exceeded NIS 40 million, as described above.

19 The analysis of indices of credit quality by principal industry relates to both on- and off-balance-sheet items. The analysis of indices of activity in the principal industries is based on CBS data, the Bank of Israel's Annual Report, 2005, and data from the Research Unit of the Banking Supervision Department.

20 It is still too early to assess the extent to which the war in the north, which broke out on 13 July, affected nonfinancial economic activity. It can, however, be said on a preliminary basis that events of that kind generally embody potentially adverse effects on economic activity.

21 Hotels, catering services, and hospitality.

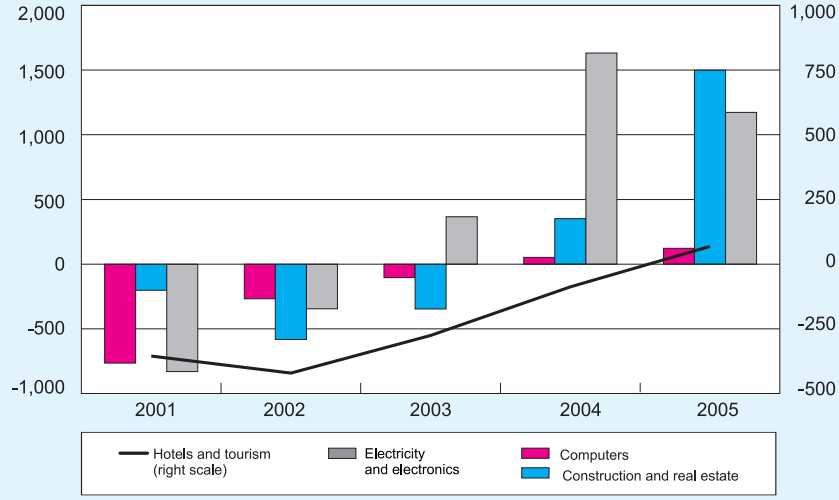
Figure 1.37
Return on Equity (ROE) of the Principal Industries,[a] 2001-05



[a] The Stock Exchange's classification of the principal industries differs from that of the Central Bureau of Statistics and the Bank of Israel.

SOURCE: Based on DUCAS database of financial statements.

Figure 1.38
Net Profits[a] of the Principal Industries,[b] 2001-05
(NIS million)

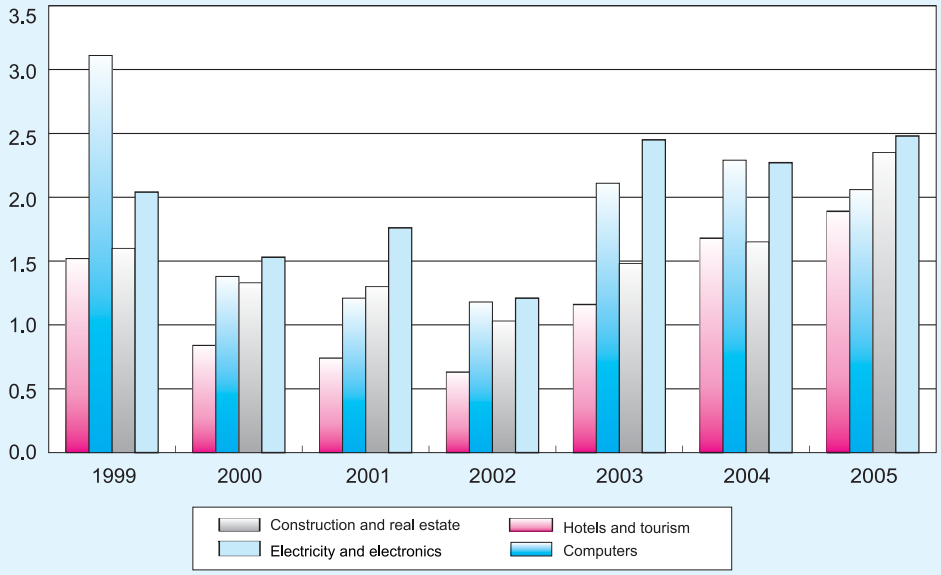


[a] After tax, including subsidiaries and affiliated companies.
[b] The Stock Exchange's classification of the principal industries differs from that of the Central Bureau of Statistics and the Bank of Israel.
SOURCE: DUCAS database of financial statements.

by the securities market of firms operating in this sector,[22] i.e., to expectations that the performance of firms in this industry will continue to improve. Outstanding credit to the construction and real-estate industry expanded by 5.4 percent during the year (Table 1.20).

The share of problem loans and of loan-loss provision in total credit to the industry also declined (Table 1.20). The industry's total credit/product ratio fell from 3.91 at the end of 2004 to 3.88 at the end of 2005, continuing the positive trend which had begun in 2002 (Appendix Table A.1.8). In December 2005 the industry accounted for 14.2 percent of the credit in the system (Table 1.20), compared with 16.9 percent at the end of 2001. The last developments indicate that the banking system also assesses that there has been an improvement in the payback ability of firms in this industry.

Figure 1.39
Ratio of Market Value to Book Value[a] (MV/BV) of the Principal Industries,[b] 1999-2005



[a] Calculated as the market value at time *t* divided by shareholders equity at time *t*-1.
[b] The Stock Exchange's classification of the principal industries differs from that of the Central Bureau of Statistics and the Bank of Israel.
SOURCE: Published financial statements of publicly traded companies.

The improvement in the security situation gave rise to a positive shift in the tourism, catering, and hospitality industry; the number of incoming tourists and tourist bed-nights in hotels soared in 2005 (by 26 percent and 42 percent respectively); the hotel occupancy

[22] Note, however, that 60 percent of the activity of firms in the real-estate index of 15 companies (including the large, publicly-traded real-estate firms and large investment firms) is implemented abroad, according to published stock-exchange data for September 2006.

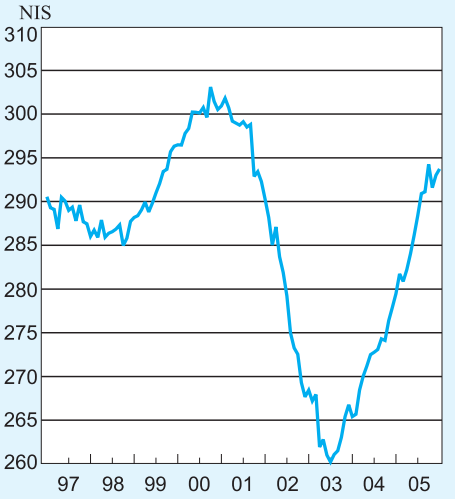
Table 1.20
Distribution of Credit by Principal Industry, The Five Major Banking Groups, 2004-05

	Balance of credit to public[a]		Change in balance of credit	Distribution of credit balance		Problem loans: Balance		Problem loans: Share in total credit		Annual specific loan-loss provision		Loan-loss provision/total credit	
	2004	2005	2005	2004	2005	2004	2005	2004	2005	2004	2005	2004	2005
	(NIS million)			(percent)		(NIS million)		(percent)		(NIS million)		(percent)	
Agriculture	5,656	5,936	280	0.7	0.7	926	858	16.4	14.5	70	12	1.24	0.20
Manufacturing	100,050	104,907	4,857	11.9	11.6	12,208	11,256	12.2	10.7	876	900	0.88	0.86
Construction and real estate[b]	122,127	128,760	6,633	14.5	14.2	17,783	18,422	14.6	14.3	1,630	1,254	1.33	0.97
Water and electricity	8,100	7,622	-478	1.0	0.8	98	49	1.2	0.6	12	(1)	0.15	-0.01
Commerce	58,319	61,960	3,641	6.9	6.8	5,249	4,477	9.0	7.2	500	497	0.86	0.80
Tourism[c]	14,214	13,954	-260	1.7	1.5	5,419	5,089	38.1	36.5	188	37	1.32	0.27
Transport and storage	17,521	18,739	1,218	2.1	2.1	617	582	3.5	3.1	113	39	0.64	0.21
Communications and computer services	22,477	22,852	375	2.7	2.5	4,829	4,061	21.5	17.8	88	307	0.39	1.34
Financial services	66,589	79,394	12,805	7.9	8.8	3,525	2,321	5.3	2.9	308	31	0.46	0.04
Other business services	28,026	29,389	1,363	3.3	3.2	2,024	1,794	7.2	6.1	207	163	0.74	0.55
Public and community services	19,930	20,180	250	2.4	2.2	1,729	1,664	8.7	8.2	119	94	0.60	0.47
Individuals	239,353	258,336	18,983	28.5	28.5	7,950	7,800	3.3	3.0	718	597	0.30	0.23
Housing loans	104,413	111,717	7,304	12.4	12.3	4,371	4,122	4.2	3.7	278	289	0.27	0.26
Non-housing loans	134,940	146,619	11,679	16.1	16.2	3,579	3,678	2.7	2.5	440	308	0.33	0.21
Borrowers abroad	138,137	153,391	15,254	16.4	16.9	2,181	1,800	1.6	1.2	117	25	0.08	0.02
Total	**840,499**	**905,420**	**64,921**	**100.0**	**100.0**	**64,538**	**60,173**	**7.7**	**6.6**	**4,946**	**3,955**	**0.59**	**0.44**
Municipalities	9,086	9,148	62	1.1	1.0	679	574	7.5	6.3	0	0	0.00	0.00

[a] Includes the balance of credit to the public, the public's investment in bonds, other assets due to derivatives and the equivalent credit value of off-balance sheet items.
[b] Industry data not calculated in accordance with the industry concentration constraint.
[c] Hotels and catering.
SOURCE: Published financial statements.

rate rose by 57 percent, approaching that evident in the late 1990s (about 61 percent); the combined number of bed-nights of foreign and Israeli tourists almost reached the peak level attained in 2000. This trend persisted in the first half of 2006, when there were over one million tourist entries into Israel—up by 22 percent over the equivalent period in 2005.[23] Tax receipts from tourism, which plummeted to only one billion dollars in the first two years of the Intifada, have risen gradually since then, and reached $ 1.8 billion in 2005. The expansion of activity in the industry led to a rise in average revenue per bed-night[24] (Figure 1.40).

Figure 1.40
Average Daily Hotel Revenue[a] per Tourist (Domestic and Foreign) 1997-2005



[a] Monthly data seasonally adjusted.
SOURCE: Central Bureau of Statistics.

These positive developments also found expression in the financial results of public-sector corporations active in the area of hotels and tourism: in 2005, for the first time in five years, the industry recorded positive net profit (Figure 1.38), and the ROE of public-sector corporations changed from negative to positive (Figure 1.37). The continuation of the positive trend in the industry is also indicated by the MV/BV ratio of firms in the industry (Figure 1.39). As stated, the positive shifts in activity in the tourism industry led to an improvement in the quality of credit in the industry, and the share of problem loans in total industry credit declined in 2005 (Table 1.20). However, its share is still the highest of all the principal industries, indicating that the banks are not yet convinced that the positive changes in the industry are permanent. The ratio of loan-loss provision to total industry credit shrank conciderably (from 1.32 percent in 2004 to 0.27 percent in 2005). The positive developments in this industry alongside the moderate reduction in outstanding bank credit (which contracted[25] by 2 percent) caused the industry's credit/product ratio to drop from 1.36 to 1.13 (Appendix Table A.1.8 and Table 1.20).

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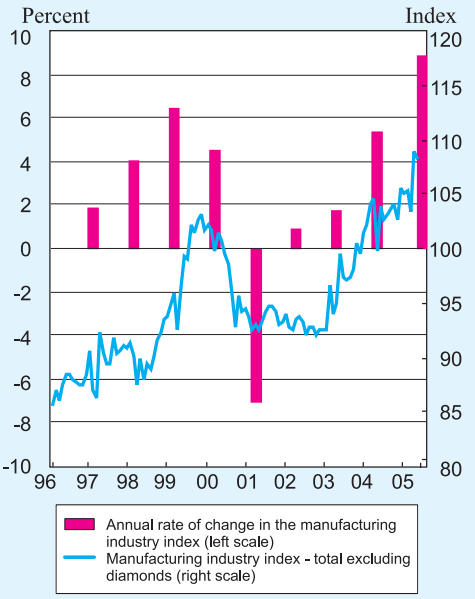
23 The effect of the war in the north (which began on 13 July) on activity in the industry has not yet been expressed because of the paucity of data at the time this review was prepared. Past experience indicates that foreign tourists cut their visits short and even avoid coming to Israel altogether at times of security uncertainty, and their return after the security situation improves is gradual and slow.

24 Deriving from both internal and incoming tourism.

25 The industry's share of credit to the principal industries dipped to about 1.5 percent, continuing the trend of the previous two years. Another industry whose outstanding credit has fallen is electricity and water.

The product of the manufacturing industry,[26] which constitutes about a quarter of total business-sector product, grew by 4 percent during 2005, although at a slower rate than in 2004. the manufacturing production index,[27] which reflects the industry's economic activity, rose by 8.6 percent in 2005, continuing the upward trend evident since 1996 (with the exception of 2001 and 2002, when Israel experienced a recession; Figure 1.41).

Figure 1.41
Manufacturing Industry Index (excluding Diamonds) and Annual Rate of Change, 1996 to December 2005



SOURCE: Central Bureau of Statistics.

The Companies Survey (undertaken by the Bank of Israel's Research Department) for 2006:II also indicates that the expansion of activity in the manufacturing and commerce industry, as well as in the output of manufacturing firms, is continuing. The risk level in the manufacturing industry declined in 2005, as may be inferred from the banks' financial statements, and the share of problem loans in total industry credit improved (Table 1.20). The rise in the industry's activity and the improvement in its credit quality was expressed by only a slight increase in the industry credit/product ratio—from 1.38 in 2004 to 1.41 in 2005—after this had risen for many years in succession (from 0.84 in 1999 to 1.39 in 2002; Appendix Table A.1.8).

The communications industry, which is part of the communications and computer services industry, and accounts for 5 percent of business-sector product, grew by only 3 percentage points in 2005—as a result of the persistent rise in the use of new communications services, the internet, mobile phones, and multi-channel TV. On the other hand, the product of computer services, R&D, and start-ups grew by 8 percent in 2005, compared with a 10 percent increase in 2004.[28] Financial results in the computer industry attest to the continued improvement in the industry in 2005, too; this is expressed by the rise in total net profit (Figure 1.38) and ROE (Figure 1.37). Total credit risk in the communications and computer services industry declined from 21.5 percent in 2004

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[26] The manufacturing industry incorporates many three-digit industries, and hence is highly heterogeneous.

[27] Excluding the diamond industry.

[28] The slowing of the growth rate in the computer services industry stemmed from two simultaneous developments: a decline in the rate at which exports expanded, falling from 24 percent to only 5 percent, and a 20 percent increase in the activity of start-ups during the year.

to 17.8 percent in 2005. However, the share of loan-loss provision in total credit to the industry soared—from 0.39 percent to 1.34 percent.[29] The continued improvement is also apparent in the industry's payback ability, which is estimated from the ratio of total industry credit to product (Appendix Table A.1.8): this ratio was the lowest of all the principal industries, apparently attesting to the industry's future ability to borrow from non-banking sources as a substitute for bank credit. This is also indicated by the moderate rise in outstanding bank credit in the industry, only NIS 375 million, because the activity of start-ups (which belong to this industry) is financed mainly by equity, venture capital funds, and direct credit from abroad (Table 1.5).

Developments in the household sector (defined here as a sector, not an industry[30]) had a positive effect on borrowers' payback ability: the real wage per employee post in 2005 was up by an average of 1.2 percent from 2004. The entrenchment of economic growth was also evident in 2006:I as reflected by the 1.2 percent increase in the real wage per employee post over the equivalent period in 2005 (expressing a rise of 1.9 percent in the business sector and of 0.3 percent in the public services). Concurrently, the average unemployment rate declined by 1.4 percent in 2005 to stand at 9.0 percent, and the number of persons employed[31] rose by 4.1 percent—the steepest increase in the last five years. The upward trend in the employment rate was checked in 2006:I, however (the unemployment rate fell to 8.7 percent, but this was as a result of the decline in the participation rate). The expansion of employment and the rise in the real wage during 2005, alongside the reduction of income tax rates[32] and a slight increase in benefits,[33] led to a real 1.6 percent growth in per capita disposable income.

The relatively calm security situation which prevailed in Israel in 2005 also contributed to an improvement in this sector's performance, as expressed by a 3.4 percent rise in private consumption in the course of the year[34] (an annual rate of 9.2 percent in 2006:I). These developments are also reflected in an increase in the index of

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29 The steep rise in this ratio derived from the considerable repayment of provision made by Bank Hapoalim during 2004, but when 'Bank Hapoalim data' (for 2004 and 2005) are offset, the decline is only a slight one (from 1.6 percent in 2004 to 1.5 percent in 2005).

30 For additional particulars about this, see A. Barnea and I. Landskroner, "Consumer Credit: Its Characteristics and Inherent Risks," (1998) Bank of Israel, Banking Supervision Department, Discussion Paper no. 98.03 (Hebrew).

31 Israelis, foreign workers, and Palestinians.

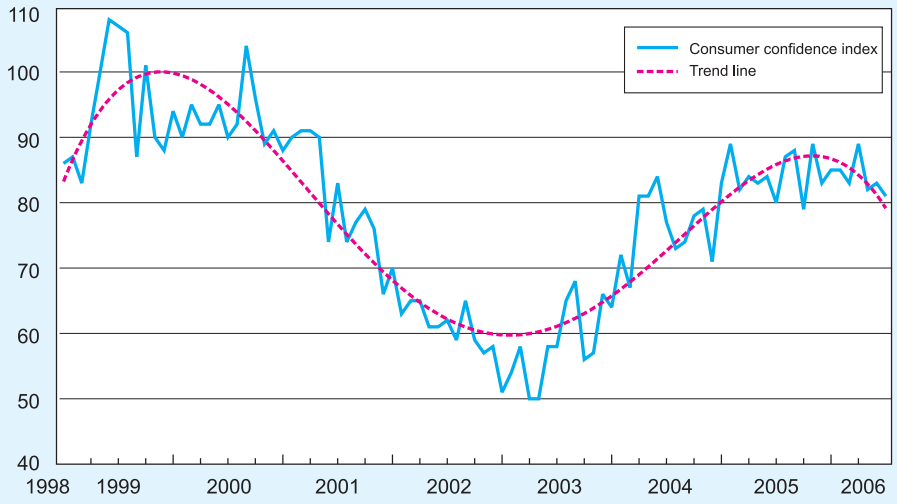
32 In 2005 another stage of the legislative reform intended to reduce income tax was implemented and it was decided at the same time to bring the last stage in the process of income-tax reduction forward to the beginning of 2006, see Bank of Israel, Annual Report, 2005.

33 Transfer payments rose by a real 0.5 percent as a result of the increase in old age pensions, see Bank of Israel, Annual Report, 2005.

34 Continuing the 5 percent rise in 2004.

consumer confidence[35] (Figure 1.42; in the first half of 2006 this index fell as a result of the war in the north).

Figure 1.42
Consumer Confidence Index,[a] 1998 to June 2006



[a] The Globes Consumer Confidence Index is based on a sample of 500 individuals as a representative sample of the adult Israeli population. The index is based on three questions: one concerns the current state of the economy, the second concerns the economy in six months' time and the third concerns the personal/family economic situation in six months' time.
SOURCE: Globes Research.

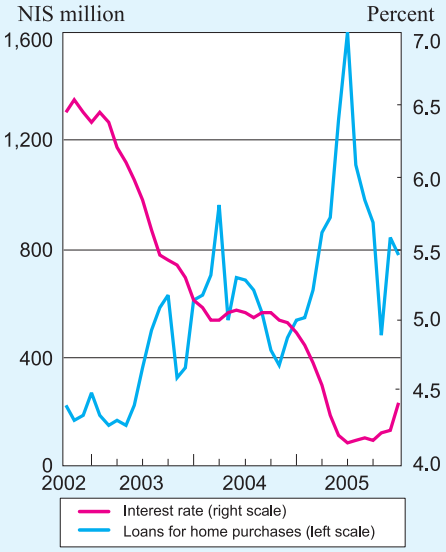
Outstanding credit to the household sector expanded as a result of the improvement in the macroeconomic indicators in 2005, but the share of credit to this sector in total credit remained stable at 28.5 percent, the same as in 2004 (Table 1.20). The increase in outstanding credit to households stemmed from the rise in housing loans (up by 7 percent) and a greater rise in non-housing loans (up by 9 percent). There are two reasons for the positive shift in the extent of housing credit: the first is the price effect, as expressed in the fall in interest rates, so that mortgages were rolled over (Figure 1.43), while the other is the income effect, which derived from the growth in disposable income and decline in the unemployment rate.

The increase in outstanding non-housing credit stemmed, as stated, from the improvement in households' economic situation (a rise in disposable income and fall

[35] The Globes newspaper's Index of Consumer Confidence is based on a survey conducted for the paper by the Hanoch and Rafi Smith Institute. The survey examines 500 respondents, constituting a representative sample of Israel's adult population. The index is based on three questions, one about the current state of the economy, one about the state of the economy in another six months, and a third about the respondant family's economic situation in another six months.

in unemployment). Some of this increase may express greater use of 'revolving credit' cards[36] (R.C.C.), a substitute for the credit framework and deviation from it by customers of the banking system. As a result of the positive developments described above credit risk in the household sector declined (continuing the trend which had begun in 2004), and this is reflected by the two main indices of credit quality: both loan-loss provision as a share of total credit to the private persons' sector and the share of problem loans in total credit declined (Table 1.20). This improvement encompassed both housing and non-housing loans. As a result of the positive developments in the sector's situation, the credit/disposable income ratio of households[37] remained stable at its end-2004 level, after rising continuously for several years (Figure 1.44).

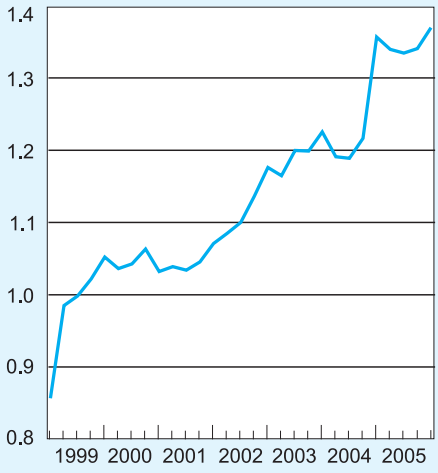
Figure 1.43
Loans for Home Purchases[a] given by Mortgage Banks,[b] and the Interest Rate Charged, September 2002 to December 2005



[a] Non-directed CPI-indexed loans at fixed rate given during the month.
[b] Includes commercial banks.

SOURCE: Returns to the Supervisor of Banks.

Figure 1.44
Ratio of Credit[a] to Disposable Income[b] in Households, 1999 to December 2005



[a] Defined as total credit given to the private individual sector in Israel by commercial banks.
[b] Disposable income includes total wages (excluding workers in the territories) after income taxes, national insurance contributions and health tax and including national insurance allocations.

SOURCE: Based on published financial statements and data from the Bank of Israel and the Central Bureau of Statistics.

[36] 'Revolving credit' cards provide a separate and independent credit framework in the individual's bank account, enabling him or her to maintain a separate expenditure account to the current account. The card accords customers flexibility in matters concerning the level of amounts and payment dates during the month in which they are debited, in accordance with their needs and abilities at any given time. Leumi Card offers the 'Multi' card; C.A.L. offers the 'Active' card, and the Isracard conglomerate offers the 'More' card.

[37] The denominator and numerator rose by almost identical rates.

2. MARKET RISK

a. General

Market risks relate to the potential erosion of a bank's economic value as a result of unexpected shifts in market prices (interest rates, shares and securities, the exchange rate, and inflation). Below we estimate exposure to indexation-base risk (inflation and exchange rate)[38] as well as to interest-rate risks[39] in three indexation segments (indexed local-currency, unindexed local-currency, and foreign-exchange), using the Value at Risk (VaR)[40] method, for a one-month planning horizon and data with 99 percent significance at a given point in time. The calculation of value at risk is implemented by means of the historical scenarios approach.[41] Value at risk is usually calculated as a multiple of two components—the size of the position,[42] expressing the effect of quantity, and the risk price,[43] expressing the effect of price (Appendix Figures A.1.4 and A.1.5).

During 2005 the exposure of the total banking system to market risks declined. Note, however, that the share of risk-weighted assets attributed to market risks in total risk-weighted assets[44] of the five major banking groups is extremely low (2 percent), and the contribution of this component to the capital base/risk-weighted assets ratio of the system is only 0.21 percentage points.

b. Indexation-base risks

In calculating value exposed to indexation-base risk, net worth is ascribed initially to the unindexed local-currency segment, and only subsequently to the indexed local-currency

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38 A bank is exposed to indexation-base risk when, in the framework of financial intermediation, it borrows sources at one indexation base and uses them at another. Consequently, changes in the relative prices of the various indexation bases could harm the bank's profits.

39 Interest-rate risk is the risk that unexpected changes in interest rates will adversely affect a bank's financial situation and erode its net worth. This risk arises when the relative sensitivity of the value of the bank's assets to interest-rate changes differs from that of its liabilities.

40 This value reflects the maximum loss expected on holdings of long or short financial instruments. For a detailed account of the way VaR is calculated, see the 2002 issue of this publication.

41 This approach is based on the use of historical data for the previous five years.

42 The size of the position is calculated as the difference between assets and liabilities in each segment plus the effect of future transactions. In cases of exposure to interest-rate risk, the present values of assets and liabilities are taken and are capitalized by the market rate of interest (rates of yield to maturity on *makam*, Shahar, Galil, and the Libor interest rate).

43 The risk price, in the case of exposure to indexation-base risk, constitutes the (unexpected) change in relative prices (e.g., exchange and inflation rates). In the case of exposure to interest-rate risks, the risk price is calculated as a multiple of the adjusted average duration of capital (see note c to Appendix Table A.1.12) in the specific intermediation segment and the relative (unexpected) change in the relevant market interest rate in that segment.

44 Risk-weighted assets are assets subject to credit and market risks.

segment. This is done in order to reduce to a minimum a bank's exposure to inflation in the unindexed segment. Consequently, in the unindexed segment zero positions were obtained in all the banks, meaning that they were not exposed to inflation risk in this segment (Appendix Table A.1.11). In the foreign-exchange segment the VaR declined in most banking groups (except the First International group), and this was due solely to the quantity effect, as the outlying values in the distribution of exchange-rate changes did not alter (Appendix Table A.1.11). Because of positive positions in the foreign-exchange segment, the Hapoalim, Leumi, and Mizrahi-Tefahot groups were exposed to local-currency appreciation against the dollar. This means that a lower shekel/dollar exchange rate erodes the group's assets. The value of the first percentile in the distribution of the monthly shifts in the shekel/dollar exchange rate in the last five years was -3.38 percent (Appendix Figure A.1.4). In the Discount and First International groups, on the other hand, there was a negative position in this segment, so that these groups were exposed to local-currency depreciation against the dollar (the value of the 99th percentile in the distribution of NIS/dollar exchange-rate shifts was +4.65 percent, Appendix Figure A.1.4).

In general, total value exposed to indexation-base risk in most of the banking groups declined in 2005, varying between NIS 19 million in the Discount group to NIS 0.1 million in the Mizrahi-Tefahot group. However, these values are negligible in relation to the banks' net worth—between 0.002 percent in the Mizrahi-Tefahot group and 0.807 in the Discount group (Appendix Table A.1.11). Also in relation to equity, VaR was negligible in all the banks, ranging from 0.002 percent in the Mizrahi-Tefahot group to 0.343 percent in the First International group (Appendix Table A.1.11).

c. Interest-rate risks

Total value exposed to interest-rate risk[45] declined in 2005 in the Hapoalim, Leumi, and Mizrahi-Tefahot groups as part of a process that had begun in 2004, and in December 2005 this stood at NIS 557 million, NIS 650 million, and NIS 159 million respectively. In the Discount and First International groups, on the other hand, value exposed to interest-rate risk rose, and stood at NIS 727 million and NIS 454 million respectively (Appendix Table A.1.12). A similar trend was evident with regard to the ratio of VaR to the bank's net worth (and equity). The highest ratios were found in the Discount and First International groups (18.54 and 19.11 percent respectively, Appendix Table A.1.12).

The most significant loss due to interest-rate risk is implicit in the local-currency segments, where changes in VaR derive from changes in the price effect and not from shifts in the quantity effect. In both these segments VaR declined in the three banking groups mentioned above.

[45] Value exposed to interest-rate risk is calculated as total value exposed to interest-rate risk in all the indexation segments, using a conservative assumption of the worst scenario in all segments simultaneously, and ignoring possible correlations between the changes in the various interest rates.

3. LIQUIDITY RISK

Liquidity risk stems from the banking group's uncertainty regarding the extent of the public's withdrawals from its deposits, from failure to renew deposits once their redemption date is reached, and from unexpected demand for credit. The realization of this risk could cause a bank to be short of liquid assets as a result of which it may have to sell assets at less than the market price and/or borrow sources in the secondary market, such as interbank loans and loans from the Bank of Israel (monetary loans) at a price that is higher than the market price. Hence, liquidity risk, which is a short-term risk, is expressed in Israel primarily in the unindexed local-currency and the foreign-exchange segments, in which bank items exist which do not have pre-determined redemption dates (e.g., current deposits, CDs, and resident time deposits). Liquidity risk is relatively low in the indexed local-currency segment, however, because most deposits in this segment are long term, and the redemption dates of most of them are known in advance.[46]

The liquidity ratio presented here (Table 1.21) is measured as the ratio of assets with a high liquidity level to liabilities whose sensitivity to unexpected withdrawals is relatively high in the unindexed and foreign-exchange segment.[47] In addition, in 2004 'Total liquidity risk,' incorporating both assets and liabilities, is presented for both segments together. To a great extent these ratios reflect the extent of the various banks' exposure to liquidity risk (exposure deriving inter alia from each bank's risk management policy) in these two segments, but these ratios are not necessarily the ones the banks calculate for estimating their exposure to this risk, and hence may not reflect their actual exposure to this risk.

4. CAPITAL ADEQUACY

A bank's capital serves as a 'cushion' for absorbing losses which could emerge as a result of the unexpected realization of the risks to which it is exposed. Today capital adequacy is calculated in accordance with the recommendations of the first Basel Committee in 1988 regarding the allocation of capital against credit risks, and its 1996 recommendations about allocating capital against market risks. In June 2006 a final copy of its new recommendations (henceforth Basel II) was published. The purpose of the recommendation was to improve the estimation of credit risks and the capital allocation against these risks, thus providing a closer link between credit risks and

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46 For a more detailed account of liquidity risk, see the 2003 issue of this publication.

47 In August 2003 the Supervisor of Banks issued a regulation regarding liquidity risk management (Proper Conduct of Banking Business, Regulation no. 342), according to which the banks are obliged to manage this risk actively, while applying a standard model or developing an internal model. However, the liquidity ratio presented in this survey is a simple estimate used to measure liquidity risk and so does not necessarily represent the way the banks are obliged to estimate risks on the basis of this regulation.

Table 1.21
The Liquidity Ratios[a] of the Five Major Banks, 2003-05

	Unindexed segment[b]			Foreign currency segment[c]			Total liquidity ratio[d]		
	2003	2004	2005	2003	2004	2005	2003	2004	2005
Hapoalim	0.164	0.166	0.161	0.550	0.562	0.688	0.201	0.200	0.200
Leumi	0.289	0.293	0.272	0.541	0.858	1.093	0.311	0.340	0.340
Discount	0.424	0.435	0.431	0.494	0.733	0.801	0.431	0.464	0.465
Mizrahi–Tefahot	0.320	0.238	0.171	1.014	1.287	1.827	0.351	0.282	0.233
First International	0.299	0.284	0.282	0.852	1.408	1.636	0.324	0.328	0.339

[a] The ratio of highly liquid assets to liabilities that are relatively highly sensitive to unexpected withdrawals in the unindexed and foreign currency segments.
[b] Assets weighted by the liquidity ratio in the unindexed segment: cash, deposits with the banking corporations, deposits with the Bank of Israel, and bonds. Liabilities weighted by the liquidity ratio in the unindexed segment: demand deposits (current accounts), pahak (self-renewing overnight deposits), and pazak (fixed-term deposits).
[c] Assets weighted by liquidity ratio in the foreign currency segment: cash, deposits with banks abroad, deposits with the Bank of Israel, and bonds abroad.
[d] The liquidity ratio in the unindexed and foreign currency segments.
SOURCE: Based on published financial reports.

capital requirements against risks. For the first time the Basel II recommendations also include a demand to allocate capital for operational risks.

The risk-weighted capital ratio in the five major banking groups remained unchanged at 10.73 percent in 2005 (Table 1.22 and Figure 1.45). However, in December 2005 the risk-weighted capital ratio reached its highest level since 1999, when the Supervisor of Banks' minimum capital requirement was raised from 8 to 9 percent. The stability of the capital adequacy ratio in the five major banking groups in 2005, given variability between the groups (a decline in Discount and Hapoalim with an increase in the other three), derived from identical increases in the risk-weighted assets and the capital base (8 percent).

A 6 percent rise in Tier-1 capital,[48] together with an 8 percent increase in risk-weighted assets, led to a slight dip in the quality of capital: the ratio of Tier-1 capital to risk-weighted assets declined from 7.26 percent in 2004 to 7.14 percent in 2005 (Figure 1.46). In the ratio of Tier-II capital[49] to risk-weighted assets, reflecting the less

[48] The components of Tier-1 capital are: redeemed share capital (excluding cumulative preference or redeemable shares), funds (deriving from a premium paid at share and other issues), surpluses (less losses), receipts on account of shares and external shareholders' rights in the capital of consolidated subsidiaries.

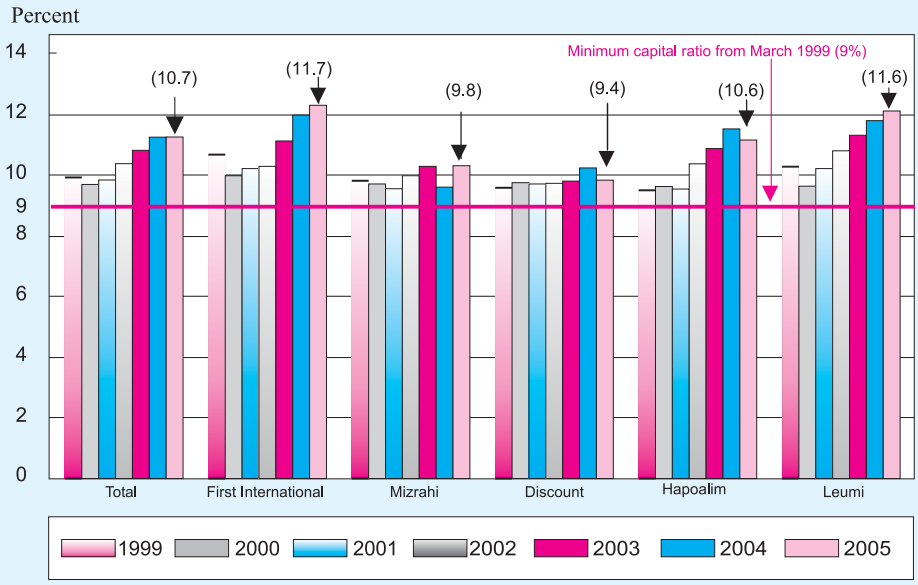
[49] The components of Tier-1I capital are: cumulative preference shares, general loan-loss provision, and subordinated notes, which may be converted into the banking corporation's shares, whose average term to redemption is five years.

Table 1.22
Distribution of Capital, and the Capital Ratios of the Five Major Banking Groups, 2003–05

	Hapoalim		Leumi		Discount		Mizrahi–Tefahot		First International		Total	
	2004	2005	2004	2005	2004	2005	2004	2005	2004	2005	2004	2005
	(NIS million)											
Equity[a]	16,269	16,825	15,262	16,205	6,835	7,185	4,139	4,682	3,907	4,278	46,412	49,175
Tier 1 capital[b]	16,617	17,037	15,165	16,277	6,619	7,092	4,072	4,606	3,847	4,217	46,320	49,229
Tier 2 capital[b]	8,015	8,762	7,343	8,876	3,559	3,796	2,060	2,385	1,909	1,893	22,886	25,712
of which: Hybrid capital investment	739	758	505	517	43	43	1,953	2,278	1,823	1,807	5,063	5,403
Tier 3 capital	0	0	193	198	41	37	0	0	0	0	234	235
Investment in shares and subordinated notes of consolidated companies	-36	-30	-34	-142	-824	-947	-40	-51	-43	-32	-977	-1,202
Total capital for risk-weighted capital ratio calculation	24,596	25,769	22,667	25,209	9,395	9,978	6,092	6,940	5,713	6,078	68,463	73,974
	(NIS million)											
Total balance sheet	262,765	273,988	256,111	273,152	142,721	155,009	83,292	86,451	68,710	72,010	813,599	860,610
Balance of off-balance-sheet instruments (notional value)	295,317	409,583	205,889	223,624	96,234	112,643	72,891	89,679	83,609	84,191	753,940	919,721
Credit value of off-balance-sheet items	45,344	60,390	37,590	41,399	18,819	19,833	14,902	15,550	11,201	10,882	127,856	148,054
Weighted balance-sheet balances of credit risk	188,295	193,717	171,814	183,592	81,753	90,174	53,094	55,429	41,080	43,190	536,036	566,102
Weighted off-balance-sheet balances of credit risk	31,714	44,282	26,183	30,027	13,201	14,732	12,690	13,211	8,243	7,649	92,031	109,901
Market risk	3,867	4,222	3,527	4,585	1,318	1,521	722	1,966	682	963	10,116	13,257
Total weighted items	223,876	242,221	201,524	218,204	96,272	106,427	66,506	70,606	50,005	51,802	638,183	689,260
	(percent)											
Capital/balance-sheet ratio	6.19	6.14	5.96	5.93	4.79	4.64	4.97	5.42	5.69	5.94	5.70	5.71
Tier 1 risk-weighted capital ratio	7.42	7.03	7.53	7.46	6.88	6.66	6.12	6.52	7.69	8.14	7.26	7.14
Tier 2 risk-weighted capital ratio	3.58	3.62	3.64	4.07	3.70	3.57	3.10	3.38	3.82	3.65	3.59	3.73
Total risk-weighted capital ratio	10.99	10.64	11.25	11.55	9.76	9.38	9.16	9.83	11.42	11.73	10.73	10.73

[a] Equity and minority interest, according to groups' balance sheets.
[b] In accordance with the minimum capital ratio requirement.
SOURCE: Published financial statements.

Figure 1.45
Risk-Weighted Capital Ratio of the Major Banking Groups, 1999-2005



SOURCE: Published financial statements.

stable part of capital,[50] the upward trend which had characterized it in recent years persisted, and it rose from2.3 percent in December 1999 to 3.59 percent at the end of 2004 and 3.73 percent at the end of 2005 (Table 1.22 and Figure 1.46). This increase was due to a marked rise in borrowing via subordinated notes in most of the banking groups[51] (primarily in the Leumi group); this is apparently because of the possibility of exhausting the supervisory limitation according to which subordinated notes cannot exceed 50 percent of Tier-I capital (not allocated against market risks) and in view of the decline in the cost of borrowing.

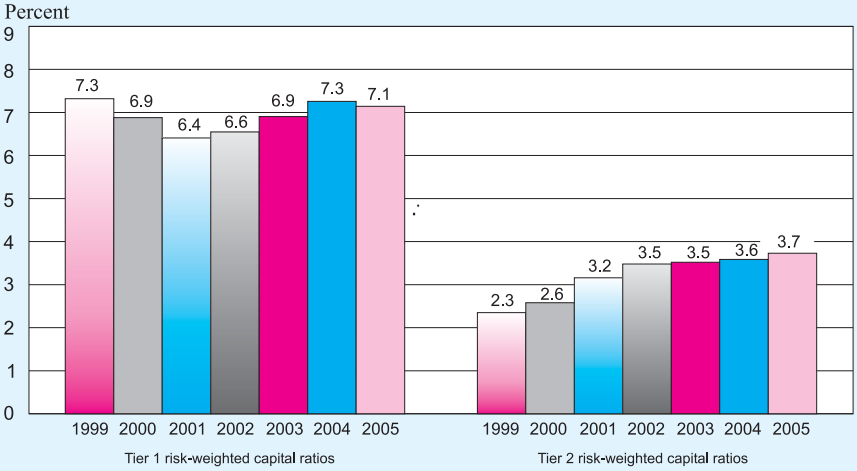
Despite the improvement in the risk-weighted capital ratio in recent years, by international standards Israel is one of the two countries with the lowest relative excess capital adequacy ratios[52] (Figure 1.47). It would seem, therefore, that Israel's banking

[50] Subordinated notes constitute the major part of Tier-II capital, and from the bank's viewpoint they reflect a less stable part of capital than those in Tier-I capital. This is because they are cumulative (the interest rates payable on them cannot be deferred), are issued for a limited period, there is no certainty regarding their availability (beyond the period determined in the regulations) or the cost of renewing them, and they do not participate in the issuing bank's losses on an ongoing basis.

[51] The ratio of subordinated notes to Tier-I capital (not allocated against market risks) rose by 3.11 percentage points during 2005 (from 43.6 to 46.7 percent).

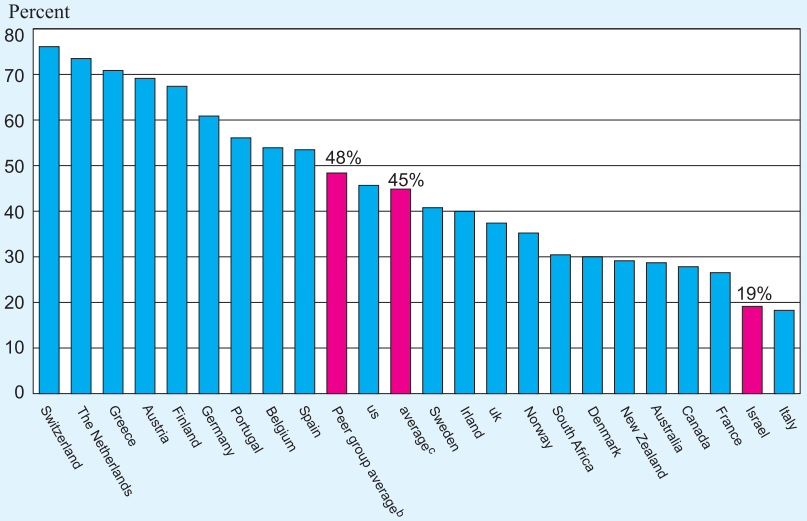
[52] Relative excess capital adequacy is calculated as the proportion of excess capital in total minimum capital required in each country.

Figure 1.46
Tier 1 and Tier 2 Risk-Weighted Capital Ratios, 1999-2005



SOURCE: Published financial statements.

Figure 1.47
Relative Excess Capital Adequacy Ratios[a] in Selected Banking Systems[b] an International Comparison, 2005



[a] The relative excess capital adequacy ratio is calculated as the percentage deviation of the actual capital ratio from the minimum required. The minimum capital adequacy ratio required in each country is 8 percent, except for Israel where the minimum required is 9 percent and in Canada and South Africa where the minimum required is 10 percent.
[b] Israel's reference group numbers 12 countries with similar features in terms of GDP, GDP per head and size of banking sector: Belgium, Cyprus, the Czech Republic, Finland, Greece, Ireland, New Zealand, Norway, Portugal, Slovenia, South Africa, and South Korea.
[c] In each country, the values were calculated based on the 10 largest banking groups, except for Israel, Finland and South Africa, where the values were based on the five largest banking groups, in New Zealand on the four largest banking groups and in the US on the 50 largest banking groups.
SOURCE: Based on Bankscope data.

system should increase its relative capital adequacy ratio to what is currently required (9 percent as of March 1999) in order to improve its ability to absorb losses (especially in the bank credit portfolio), primarily at times of recession in Israel, when both the demand for and the quality of credit decline. Note that also according to the second level of Basle II the Supervisor of Banks should expect the banks to maintain excess capital beyond the minimum capital requirements.

5. RISK-ADJUSTED RETURN ON CAPITAL

The improvement in the risk-adjusted return on capital (RAROC) continued in 2005 in all five major banking groups, albeit at a more moderate rate than in 2004. As was the case in 2004, the improvement in 2005 (0.52, 1.26 and 1.51 in 2003, 2004, and 2005 respectively) is the result of a rise in return on excess capital (above risk-free interest) and a slight decline in the standard deviation of the banks' profitability, which should reflect the effect of all bank risks.

A breakdown by activity segment shows that commercial banking benefits from the highest RAROC value (Table 1.23), which has even risen markedly in the last two years. From the table it can also be seen that there are considerable differences between the banks as regards risk-adjusted returns, with the mortgage banks presenting the lowest risk-adjusted returns of all the main banking activities.

6. THE SOUNDNESS OF THE BANKING SYSTEM ACCORDING TO THE ROBUSTNESS INDEX AND ASSESSMENTS MADE BY DOMESTIC AND INTERNATIONAL EXTERNAL RATING COMPANIES

This year, too, the Robustness Index,[53] which incorporates several indicators of banks' performance—among them capital adequacy, credit risks, management quality, profitability, liquidity, and sensitivity to market risks—indicated that there has been an improvement in the soundness and resilience of Israel's banking system. Although the improvement in 2005 was less pronounced than in previous years, it still maintains the long-term upward trend evident since 2003 (Table 1.24). The decline (i.e., improvement) in the Robustness Index in 2005 is attributed primarily to the improvement in credit quality, which is consistent with the improvement evident in early 2006 in the ranking

[53] This index was developed by the Banking Supervision Department. The index varies between 1 (the highest grade) to 5 (the lowest grade). For a detailed explanation of the index and its components, see Box A1 in the 2003 version of this publication, and Y. Fishman and D. Ruthenberg, "Robustness: an Index for Measuring the Soundness and Resilience of Banks in Israel," Banking Issues 17, pp. 61-93.

Table 1.23
Risk-Adjusted Return on Capital (RAROC): The Variance–Covariance Method,[a] by Group (the Five Major Groups) and by Activity Segment,[b] 2005

		Hapoalim	Leumi	Discount	Mizrahi –Tefahot[c]	First International	Total
A*	Commercial banking	1.32	1.10	-0.11	0.60	0.89	1.14
		(38.29%)	(38.02%)	(45.89%)	(34.31%)	(67.06%)	(41.80%)
	Mortgage banks	0.00	0.36	-0.02	0.70	1.44	0.44
		(6.40%)	(8.24%)	(7.39%)	(47.21%)	(13.11%)	(10.47%)
	Overseas offices	0.82	0.15	0.54	-0.03	-0.29	0.52
		(9.56%)	(21.37%)	(35.04%)	(6.64%)	(12.75%)	(17.52%)
	Financial companies[d]	0.09	1.08	-0.02	0.58	-0.09	0.50
		(22.72%)	(12.74%)	(3.78%)	(10.52%)	(3.95%)	(13.76%)
	Credit card companies	0.66	0.09	0.44	0.00	0.04	0.51
		(1.73%)	(1.70%)	(1.64%)	(0.00%)	(0.19%)	(1.42%)
	Real companies and insurance companies	0.18	0.45	0.55	0.00	0.00	0.48
		(15.36%)	(6.81%)	(2.16%)	(0.04%)	(0.00%)	(7.74%)
	Other subsidiaries	0.05	1.01	0.07	0.22	0.03	0.10
		(5.94%)	(11.12%)	(4.09%)	(4.85%)	(2.94%)	(7.00%)
B	Total activity of the banking group						
	1993–2003 Rf (2003)=4.84%	0.75	0.35	-0.09	0.78	0.06	0.52
	1994–2004 Rf (2004)=4.22%	1.48	0.98	0.54	1.20	0.34	1.26
	1995–2005 Rf (2005)=3.63%	1.84	1.13	0.41	1.71	1.03	1.51

[a] RAROC is calculated by the variance-covariance method: RAROCi=(ROEi–Rf)/(2.33*σROEi)
where
ROE = return on equity in the last year (profit at end of year to investment at beginning of the year).
R_f = risk-free interest: yield to maturity on 10-year CPI-indexed government bonds (Galil).
σ_{ROE} = standard deviation of ROE, calculated from quarterly observations of annual ROEs (the four previous quarters) over ten years.
2.33 = the value of Z at the 99% significance level. The JARQUE-BERA statistical tests we performed showed that the distribution of the quarterly ROEs over eleven years was normal.
[b] If there was no banking activity in a particular segment in 2005, RAROC is recorded as 0.
[c] The merger of Mizrahi with Tefahot created some distortion of RAROC data for the group when splitting by activity, arising from the calculation of equity at the end of 2004 (the year prior to the merger) and income at the end of 2005 (after the merger).
[d] Including holding and investment companies, leasing companies, and financial holding companies.
* Figures in parentheses are the average ratios of investment in the activity to the equity of the banking group in the years 1994–2005.
SOURCE: Published financial statements.

of the two largest banks (Hapoalim and Leumi) by external rating agencies[54] (Appendix Tables A.13 and A.14).

Table 1.24
Grades for the Robustness ("Hosen") Index of Banking Institutions in Israel; Weighted Average for the Entire System, 2000 to 2005

Year	2000	2001	2002	2003	2004	2005
Overall grade	2.78	2.99	2.95	2.76	2.60	2.51

[54] Ma'alot, Standard and Poor's, Moody's, and Fitch-ICA.

Table A.1.1

Unindexed Local-Currency Assets and Liabilities of Commercial Banks, 2003–05

	End-of-year balance			Change on previous year		Annual average balance (Dec 2003 prices)		Change on previous year	Balance-sheet composition	
	2003	2004	2005	2004	2005	2004	2005	2005	2004	2005
	(NIS million)			(percent)		(NIS million)			(percent)	
Assets										
Banknotes and coins	2,953	3,025	3,453	2	14	3,076	3,479	13	1	1
Deposit in Bank of Israel	41,250	26,255	17,818	-36	-32	27,259	17,219	-37	10	6
Deposit in banks	4,091	4,627	7,627	13	65	5,086	6,169	21	2	2
Credit to the public	170,913	186,316	208,883	9	12	175,734	196,228	12	67	70
Makam and unindexed bonds	33,967	46,436	58,135	37	25	43,235	51,046	18	17	18
Of which makam	6,748	7,034	13,735	4	95	9,418	9,460	0	4	3
Other assets	7,071	6,979	6,937	-1	-1	6,088	6,210	2	2	2
Total assets	**260,245**	**273,638**	**302,854**	**5**	**11**	**260,478**	**280,350**	**8**	**100**	**100**
Liabilities										
Monetary loan from Bank of Israel	2,654	2,117	1,028	-20	-51	2,394	1,611	-33	1	1
Deposit from banks	2,529	3,298	6,198	30	88	4,459	5,893	32	2	2
Deposit of the government	528	459	1,206	-13	163	437	817	87	0	0
Total deposits of the public	247,687	287,654	305,793	5	6	270,224	292,917	8	95	94
Demand deposits	26,353	34,574	38,806	31	12	27,430	34,719	27	10	11
SRO deposit	30,510	27,977	35,000	-8	25	27,086	30,700	13	9	10
Resident time and short-term deposits	211,631	221,862	230,733	5	4	211,016	225,431	7	74	72
Other deposits	6,193	3,240	1,253	-48	-61	4,691	2,067	-56	2	1
Other liabilities	9,017	10,119	11,549	12	14	8,239	10,425	27	3	3
Total Liabilities	**289,415**	**303,646**	**325,773**	**5**	**7**	**285,753**	**311,662**	**9**	**100**	**100**
Activity in derivatives	22,408	30,436	32,625	36	7	25,250	34,651	37	9	11
Surplus of assets over liabilities	-6,761	428	9,705	.	.	-25	3,339	.	.	.

SOURCE: Reports to the Supervisor of Banks.

Table A.1.2
Assets and Liabilities of Commercial Banks Denominated in and Indexed to Foreign Currency, 2003-05

	End-of-year balance			Change on previous year		Annual average balance		Change on previous year	Balance-sheet composition	
	2003	2004	2005	2004	2005	2004	2005	2005	2004	2005
	($ million)			(percent)		($ million)		(percent)	(percent)	
Assets										
Banknotes and coins	427	360	332	-16	-8	360	364	1	1	1
Deposits in banks abroad	8,273	13,277	16,518	60	24	10,405	16,481	58	20	30
Deposits in banks in Israel	2,136	2,040	1,468	-5	-28	1,884	1,695	-10	4	3
Deposits in Bank of Israel	599	369	240	-38	-35	369	311	-15	1	1
Nondirected credit to residents	28,459	27,085	24,016	-5	-11	27,697	25,412	-8	54	46
Nondirected credit to nonresidents	4,390	3,914	3,381	-11	-14	4,250	3,488	-18	8	6
Credit to the government	517	474	402	-8	-15	481	444	-8	1	1
Securities[a]	4,762	4,148	5,385	-13	30	4,066	4,668	15	8	8
Other assets	2,525	2,237	2,312	-11	3	1,978	2,159	9	4	4
Total assets	**52,088**	**53,903**	**54,053**	**3**	**0**	**51,490**	**55,022**	**7**	**100**	**100**
of which Denominated in foreign currency	50,000	51,636	51,431	3	0	49,477	52,181	5	96	95
Liabilities										
Deposits from banks abroad	2,307	2,269	1,546	-2	-32	2,453	1,880	-23	5	4
Deposits from banks in Israel	333	234	302	-30	29	266	321	21	1	1
Loan from Bank of Israel	0	0	.	.	.	0	0	.	0	0
Deposits of the government	1,621	1,575	1,533	-3	-3	1,599	1,560	-2	3	3
Nonresidents' deposits	20,541	20,253	19,986	-1	-1	19,916	19,916	0	41	39
Residents' and restitutions deposits	4,931	5,325	4,762	8	-11	4,943	4,950	0	10	10
Other residents' deposits	17,208	18,782	21,639	9	15	17,744	20,184	14	36	39
Other liabilities[b]	2,392	2,422	2,620	1	8	2,102	2,412	15	4	5
Total Liabilities	**49,332**	**50,861**	**52,389**	**3**	**3**	**49,023**	**51,224**	**4**	**100**	100
of which Denominated in foreign currency	46,335	48,324	49,751	4	3	46,397	48,683	5	95	95
Derivatives	-4,527	-5,033	-4,072	11	-19	-4,195	-6,061	44	-9	-12
Surplus of assets over liabilities	-1,771	-1,991	-2,408	.	.	-1,729	-2,263	.	.	.

[a] Excluding investment in shares in subsidiaries and in affiliated companies.

[b] Including intermediate amounts, bonds, and promissory notes recognized as earmarked deposits.

SOURCE: Reports to the Supervisor of Banks.

Table A.1.3
Local-Currency CPI-Indexed Assets and Liabilities in Commercial Banks, 2003-05

	End-of-year balance (December 2003 prices)			Change on previous year		Annual average balance (December 2003 prices)		Change on previous year	Balance-sheet composition	
	2003	2004	2005	2004	2005	2004	2005	2005	2004	2005
	(NIS million)			(percent)		(NIS million)		(percent)	(percent)	
Assets										
Credit to the public[a]	93,758	107,093	137,174			112,267	133,815		69	77
Deposit in banks	47,023	37,341	31,935	-21	-14	37,690	31,450	-17	23	18
Credit to the government	3,115	2,021	1,366	-35	-32	2,493	1,616	-35	2	1
Bonds	12,973	8,662	5,600	-33	-35	9,320	5,699	-39	6	3
Other assets	747	128	413	-83	.	345	387	12	0	0
Total assets	**157,615**	**155,245**	**176,487**	**-2**	**14**	**162,115**	**172,966**	**7**	**100**	**100**
of which Credit from earmarked deposits	2,897	1,915	1,492	-34	-22	2,365	1,582	-33	1	1
Liabilities										
Deposits of the public:										
Savings	68,641	39,987	37,121	-42	-7	54,991	40,032	-27	39	26
Indexed deposits	37,302	60,306	73,445	62	22	53,470	71,311	33	38	47
Other deposits	3,149	2,138	2,967	-32	39	2,626	2,479	-6	2	2
Total deposits of the public	109,092	102,432	113,533	-6	11	111,086	113,822	2	78	75
Deposit from banks	2,175	4,407	6,858	103	56	4,567	6,051	33	3	4
Deposit of the government	5,264	5,052	4,658	-4	-8	5,394	4,847	-10	4	3
Other liabilities	19,183	21,713	27,955	13	29	20,709	26,610	28	15	18
Total liabilities	**135,714**	**133,604**	**153,005**	**-2**	**15**	**141,755**	**151,330**	**7**	**100**	**100**
of which Earmarked deposits	3,608	2,515	2,243	-30	-11	3,044	2,211	-27	2	1

[a] Data for 2003-05 are not comparable (neither end-of-year balances nor annual average balances) due to the non-inclusion of Mishkan Bank in 2003 data and Tefahot Bank in 2003 and 2004 data. Data for comparison are (in NIS million): 2003 - 143,321; 2004 - 131,992; 2005 - 137,174.

SOURCE: Reports to the Supervisor of Banks.

Table A.1.4

Distribution of Off-Balance-Sheet Financial Instruments, the Five Major Banking Groups, 2003-05

	End-of-year balances			Rate of change (relative to the previous period)		Distribution		
	2003	2004	2005	2004	2005	2003	2004	2005
	(NIS billion)			(percent)		(percent)		
Documentary credit	6	7	6	14	-11	3	3	2
Credit guarantees	18	17	19	-6	8	7	6	6
Guarantees for home buyers	19	20	20	3	2	8	7	7
Other guarantees and liabilities	23	25	27	7	10	9	9	9
Non-recurring commitments for approved credit that has not yet been extended	55	53	72	-2	34	22	20	24
Commitments to issue guarantees	14	14	15	-1	9	6	5	5
Commitments due to open credit card transactions	14	18	18	26	-2	6	7	6
Overdraft facilities and other credit facilities to the public not yet utilized	57	76	84	34	10	23	28	28
Credit cards facilities not yet utilized	38	39	41	4	3	15	15	13
Total	244	269	301	10	12	100	100	100

SOURCE: Published financial reports.

Table A.1.5
Distribution of Balances of Financial Derivatives, the Five Major Banking Groups, December 2004 and December 2005
(NIS billion)[a]

	2004				2005			
	Interest rate contracts	Exchange rate contracts	Other[b]	Total	Interest rate contracts	Exchange rate contracts	Other[b]	Total
Hapoalim	111	145	17	273	172	228	34	433
Leumi	74	136	28	238	78	144	32	255
Discount	16	55	7	78	20	76	9	105
Mizrahi-Tefahot	11	65	25	102	19	69	19	107
First International	8	68	33	110	9	76	50	135
Total	221	470	111	802	297	592	145	1,035

[a] In terms of notional principal, in current prices.

[b] Contracts based on shares, share indexes, future makam and commodities.

SOURCE: Published financial reports.

Table A.1.6
Coverage and Efficiency Ratios of the Five Major Banks, 2004 and 2005

	2004		2005	
Bank	Coverage ratio[a]	Efficiency ratio[b]	Coverage ratio[a]	Efficiency ratio[b]
Hapoalim	0.59	1.79	0.57	1.74
Leumi	0.56	1.81	0.56	1.73
Discount	0.48	1.28	0.45	1.08
Mizrahi-Tefahot	0.51	1.39	0.54	1.59
First International	0.62	1.56	0.62	1.66
Average of the five major banks	0.56	1.65	0.54	1.59

[a] Calculated as the ratio of non-interest and other income to overheads.

[b] Calculated as the ratio of non-interest income and net interest revenue to operating expenses which is known as the efficiency ratio. It is sometimes presented as the ratio of operating expenses to non-interest income and profit from financial activity.

SOURCE: Based on published financial reports.

Table A.1.7
Ratio of Overheads to Unit of Output[a], and X-Efficiency by Banking Group (by Size), 1994-2005

	Small banks (up to NIS 40 billion)[b]	Medium-sized banks (NIS 40-150 billion)[c]	Large banks (more than NIS 150 billion)[d]
		Average expenses	
1994-2004	0.027	0.022	0.018
2005	0.024	0.021	0.016
		Maximum X-Efficiency[e] (maximum saving)	
1994-2004	0.17	0.67	0.88
	(0.83)	(0.33)	(0.12)
2005	0.34	0.66	0.998
	(0.66)	(0.34)	(0.002)

[a] Defined as total operating expenses as share of output. Output is calculated as total balance sheet assets and equivalent value of off-balance-sheet assets.

[b] It should be taken into account that this group of banks underwent structural changes during the period, such as mergers and acquisitions or closures of certain banks, which influenced the average over time. The banks included in this group are Union, Otsar Hahayal, Yahav, Arab Israel, Massad, Poalei Agudat Israel and Continental.

[c] This group includes Discount, Mizrahi-Tefahot and First International.

[d] This group includes Hapoalim and Leumi.

[e] Calculated as the minimum average expenses divided by the maximum average expenses for that group (by size) of banks (AC_{min}/Ac_{max}) and therefore 1 minus this ratio, in each group, reflects the maximum potential saving in production expenses for that group.

SOURCE: Reports to the Supervisor of Banks.

Table A.1.8
Ratio of Credit[a] to Output, by Industry, 1997-2005

Sector	1997	1998	1999	2000	2001	2002	2003	2004	2005
Agriculture	1.53	1.25	1.46	1.41	0.77	0.71	0.69	0.67	0.60
Manufacturing	0.84	1.04	1.27	1.20	1.55	1.59	1.53	1.38	1.41
Construction and real estate	2.81	3.00	3.55	4.08	4.47	4.33	4.11	3.91	3.88
Construction	2.73	3.08	3.63	4.09	4.35	4.06	3.62	3.57	3.55
Real estate	3.24	2.69	3.29	4.02	4.90	5.23	5.81	5.22	4.85
Water and electricity	0.65	0.61	0.77	0.85	1.01	1.01	0.75	0.75	0.62
Commerce and services	0.57	0.71	0.88	0.87	0.94	0.98	0.92	0.94	0.94
Commerce	0.97	1.17	1.29	1.37	1.47	1.46	1.41	1.41	1.43
Services	0.43	0.56	0.74	0.71	0.78	0.83	0.77	0.79	0.81
Hotels and catering	0.98	1.35	1.54	1.16	1.53	1.47	1.55	1.36	1.13
Financial services	0.77	1.08	2.08	2.32	2.66	3.99	3.32	3.51	3.81
Communications and computer services	0.34	0.61	0.80	0.82	0.90	0.82	0.64	0.47	0.43
Transport and storage	0.41	0.49	0.82	0.80	0.83	0.93	0.87	0.84	0.83
Total	**1.02**	**1.15**	**1.38**	**1.36**	**1.50**	**1.59**	**1.43**	**1.36**	**1.35**

[a] 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.

Table A.1.9
Distribution of Credit to the Public[a] - by Single Borrower Indedtedness, the Five Major Banking Groups,[b] 2004-05

Credit per borrower	Balance of credit to public, and off-balance-sheet risk		Number of borrowers		Average credit balance		Proportion of credit balance		Proportion of borrowers	
	2004	2005	2004	2005	2004	2005	2004	2005	2004	2005
(NIS thousand)	(NIS million)				(NIS thousand)		(%)		(%)	
Up to 10	7,392	8,131	1,946,999	1,998,788	4	4	100.0	100.0	100.00	100.00
From 10 to 20	9,199	8,946	616,837	610,351	15	15	99.1	99.1	59.89	59.85
From 20 to 40	19,654	20,193	670,572	688,261	29	29	98.0	98.1	47.18	47.58
From 40 to 80	36,055	37,379	636,662	667,909	57	56	95.5	95.8	33.36	33.76
From 80 to 150	50,083	50,506	472,529	479,006	106	105	91.1	91.5	20.25	20.34
From 150 to 300	59,599	60,395	283,419	281,623	210	214	84.9	85.8	10.51	10.72
From 300 to 600	59,691	66,587	147,697	163,200	404	408	77.6	78.9	4.67	5.06
From 600 to 1,200	32,919	38,664	41,550	48,595	792	796	70.2	71.3	1.63	1.78
From 1,200 to 2,000	18,148	20,028	12,129	13,353	1,496	1,500	66.2	66.9	0.77	0.80
From 4,000 to 8,000	25,725	27,790	9,464	10,183	2,718	2,729	64.0	64.6	0.52	0.54
From 8,000 to 20,000	32,502	35,269	6,063	6,348	5,361	5,556	60.8	61.5	0.33	0.33
From 8,000 to 20,000	59,652	61,996	4,897	4,976	12,181	12,459	56.8	57.5	0.20	0.20
From 20,000 to 40,000	61,355	65,467	2,232	2,339	27,489	27,989	49.4	50.4	0.10	0.10
From 40,000 to 200,000	182,096	193,887	2,298	2,399	79,241	80,820	41.9	43.0	0.06	0.06
From 200,000 to 400,000	72,622	73,827	259	272	280,394	271,423	19.5	20.9	0.01	0.01
From 400,000 to 800,000	55,293	62,695	101	116	547,455	540,474	10.5	12.5	0.00	0.00
From 800,000 to 1,200,000	17,996	20,947	19	22	947,158	952,136	3.7	5.4	0.00	0.00
From 1,200,000 to 1,600,000	4,194	5,161	3	4	1,398,000	1,290,250	1.5	3.0	0.00	0.00
From 1,600,000 to 2,000,000	5,571	5,417	3	3	1,857,000	1,805,667	1.0	2.4	0.00	0.00
From 2,000,000 to 2,400,000	2,320	6,697	1	3	2,320,000	2,232,333	0.3	1.8	0.00	0.00
from 2,400,000 to 2,800,000	-	-	-	-	-	-	0.0	1.0	0.00	0.00
From 2,800,000 to 3,200,000	-	8,863	-	3	-	2,954,333	0.0	1.0	0.00	0.00
Higher than 3,200,000	-	-	-	-	-	-	0.0	0.0	0.00	0.00
Total	**812,066**	**878,845**	**4,853,734**	**4,977,754**	**167**	**177**	**100.0**	**100.0**	**100.00**	**100.00**

[a] Includes the balance of credit to the public and credit-risk equivalent of off-balance-sheet financial instruments, calculated according to the definitions used for calculating the single borrower limitation. Excludes the public's investment in bonds.

[b] The data in the "up to 8,000 shekels" category are the summation of the figures for each consolidated company (consolidation on the basis of layers) in the credit categories, while for over 8,000 shekels, the credit data and the number of borrowers were calculated as the sum of the credit of each borrower in the whole banking group (specific consolidation).

SOURCE: Published financial reports.

Table A.1.10
Characteristics of Activities in the Construction Industry, 1997-2005

	1997	1998	1999	2000	2001	2002	2003	2004	2005	1-3/2006	Real change in 2005 over 2004
											(%)
Total area under construction (million sq.m.)	19.2	17.5	16.6	16.9	15.5	14.9	13.9	12.7	11.8	12.4	-7.1
of which Residential (million sq.m.)	13.0	12.1	11.6	11.9	11.0	10.3	9.9	9.4	9.1	9.4	-3.2
Housing units under construction	93,711	86,291	76,459	77,950	70,528	64,713	61,579	57,148	54,876	55,985	-4.0
of which Public sector	34,627	27,348	20,440	24,345	22,662	20,096	18,590	15,199	11,569	11,719	-23.9
Housing starts	53,779	44,384	38,357	45,779	31,932	33,290	31,521	29,238	30,180	12,459[d]	3.2
Total building completions	67,676	53,849	46,287	43,578	39,263	38,763	34,605	33,443	32,028	11,315	-4.2
of which Public sector	22,326	17,648	16,702	10,556	8,956	10,473	8,927	8,654	8,195	2,181	-5.3
Sale of new housing units		14,537	14,302	13,999	14,535	14,599	11,846	12,344	12,487	5,429[d]	1.2
Sale of land for construction in terms of housing units[a]	41,370	31,390	33,544	24,537	16,649	25,243	,494	23,346	24,415	6,880[e]	4.6
Sale of cement (million tons)	5.52	5.09	4.84	4.50	4.38	4.38	3.93	3.69	3.74	1.93	1.4
Investment in construction as percentage of GDP	13.9	12.6	11.0	9.6	9.4	9.6	9.0	7.9	7.4	6.7	-6.3
Numbers employed in construction industry as percentage of total employed in economy	11.3	10.9	10.0	9.4	8.7	8.2	7.9	7.3	7.3	7.1	0.0
Change in the Owner-Occupied Housing Index[b] (%)	10.6	5.1	0.9	-2.7	4.1	11.7	-5.2	-2.9	-0.8	-	-
Number of net real estate transactions[c] according to purchase tax	96,643	88,674	101,452	95,676	95,898	68,846	71,484	79,245	82,279	33,704[d]	3.8
Percentage of all transactions which were eligible for state assistance	47	47	40	40	38	47	42	28	18	20	-33.0
Loans for housing											
Total individuals eligible for state assistance	45,580	41,060	40,240	38,515	36,525	32,110	30,125	21,840	15,190	6,850[e]	-30.4
of which New immigrants	14,800	9,990	9,770	9,000	8,125	6,755	6,030	4,530	4,245	2,075[e]	-6.3
Number of new immigrants	66,221	56,726	76,766	60,192	43,580	33,565	23,267	20,895	21,126	8,127[e]	1.1

[a] Includes sale of land by the Ministry of Construction and Housing and the Israel Lands Administration through public auction and other frameworks approved by the Israel Lands Administration.

[b] In January 1999, the method of calculating the Owner-Occupied Housing Index was changed, and is now based on the change in prices of new and renewed house rental contracts.

[c] Data on transactions were corrected retroactively in 2002 and now include net transactions.

[d] Data for 1-5/2006.

[e] Data for 1-6/2006.

SOURCE: Ministry of Construction and Housing, monthly data, May 2006.

Table A.1.11
Exposure to Changes in CPI and the Exchange Rate, the Five Major Banking Groups, December 2004 and December 2005
NIS million

	Hapoalim		Leumi		Discount		Mizrahi-Tefahot		First International	
	2004	2005	2004	2005	2004	2005	2004	2005	2004	2005
Unindexed segment										
Assets *minus* liabilities	-5,977	-3,130	-4,208	-1,697	-3,419	-1,238	-8,132	-9,008	-3,659	-3,327
Effect of futures and options	4,820	4,977	10,712	10,086	3,934	2,315	7,889	9,987	4,457	5,887
The financial capital classified as part of the unindexed segment[a]	0	1,847	6,504	8,389	515	1,077	0	979	798	2,560
Total position in segment	-1,157	0	0	0	0	0	-243	0	0	0
Change in CPI[b] (percent)	-0.75	1.41	1.41	1.41	1.41	1.41	-0.75	1.41	1.41	1.41
Value at risk[c]	8.64	0.00	0.00	0.00	0.00	0.00	1.82	0.00	0.00	0.00
Indexed segment[d]										
Assets *minus* liabilities	11,523	12,795	5,087	4,624	2,304	2,324	5,182	5,401	3,042	2,891
Effect of futures and options	-1,426	-3,816	-2,469	-3,362	234	-642	-2,310	-3,190	-1,409	-2,410
The financial capital classified as part of the indexed segment[a]	10,901	9,203	2,924	1,541	2,086	1,274	2,644	2,213	1,620	135
Total position in segment	-804	-224	-306	-279	452	408	228	-2	13	346
Foreign-currency segment[e]										
Assets minus liabilities	5,355	1,711	8,549	7,003	3,717	1,267	5,594	6,799	3,035	3,131
Effect of futures and options	-3,394	-1,487	-8,243	-6,724	-4,169	-1,675	-5,579	-6,797	-3,048	-3,477
Total position in segment[f]	1,961	224	306	279	-452	-408	15	2	-13	-346
Change in real exchange rate[g] (percent)	-3.38	-3.38	-3.38	-3.38	4.65	4.65	-3.38	-3.38	4.65	4.65

(cont'd.)

Table A.1.11 (cont'd.)
Exposure to Changes in CPI and the Exchange Rate, the Five Major Banking Groups, December 2004 and December 2005
NIS million

	Hapoalim		Leumi		Discount		Mizrahi-Tefahot		First International	
	2004	2005	2004	2005	2004	2005	2004	2005	2004	2005
Value at risk[c]	66.35	7.58	10.35	9.44	21.01	18.96	0.51	0.07	0.60	16.08
Total financial capital[h]	10,901	11,050	9,428	9,930	2,601	2,351	2,644	3,192	2,418	2,695
Total value at indexation-base risk[i]	75.0	7.6	10.4	9.4	21.0	19.0	2.3	0.1	0.6	16.1
As percentage of financial capital	0.688	0.069	0.110	0.095	0.808	0.807	0.088	0.002	0.025	0.597
As percentage of equity	0.461	0.045	0.068	0.058	0.307	0.264	0.059	0.002	0.015	0.343

[a] The financial capital was classified as shekel, indexed and unindexed in a way that minimized the total position in the unindexed segment.

[b] The maximum change in the CPI that was derived from the distribution of changes in that index during the last five years. The probability of a change greater than that is smaller than 1%.

[c] The change in the bank's situation as a result of the maximum change in the CPI and the foreign exchange rate calculated according to the VaR model.

[d] Including the CPI/$ indexation option.

[e] Including foreign-currency-indexed.

[f] When the sign is positive, an unexpected decrease in the nominal foreign exchange rate will erode the capital and an unexpected increase will increase it; and vice versa when the sign is negative.

[g] The maximum change in the nominal foreign exchange rate of the dollar against the shekel which is derived from the distribution of changes in this index during the last five years. The probability of a change greater than that is smaller than 1%.

[h] Assets minus liabilities plus effect of futures and options.

[i] The total value subject to base risk obtained by the simple addition of the values subject to risk in the unindexed and foreign currency segments under the assumption that the worst scenario, from the bank's point of view, occurs in the two sectors.

SOURCE: Based on published financial reports and data from the Central Bureau of Statistics.

Table A.1.12
Exposure to Changes in Interest Rates, the Five Major Banking Groups, 2004-05

	Hapoalim		Leumi		Discount		Mizrahi-Tefahot		First International	
	2004	2005	2004	2005	2004	2005	2004	2005	2004	2005
Unindexed segment										
Total exposure[a] (NIS million)	-1,604	1,426	6,408	8,321	157	965	-677	763	849	1,685
Duration of assets (years)	0.59	0.46	0.52	0.48	0.60	0.75	0.32	0.42	0.34	0.69
Duration of liabilities (years)	0.38	0.33	0.30	0.32	0.29	0.25	0.17	0.32	0.22	0.16
Duration of economic capital[b] (percent)	10.88	9.70	3.43	2.14	95.59	26.56	7.08	4.76	4.79	11.49
Modified duration of capital[c] (percent)	10.34	9.20	3.26	2.03	90.83	25.17	6.73	4.51	4.55	10.89
Duration Gap[d] (Dgap) (years)	0.20	0.14	0.24	0.19	0.31	0.50	0.15	0.10	0.12	0.54
Maximum change of interest[e] (percentage points)	1.61	1.61	1.61	1.61	1.61	1.61	1.61	1.61	1.61	1.61
Value at Risk[f] (VaR)	267	211	337	272	230	392	73	56	62	296
Indexed segment[g]										
Total exposure[a] (NIS million)	13,073	10,944	4,587	3,235	3,794	2,847	3,724	2,996	2,096	1,006
Duration of assets (years)	3.85	3.90	4.29	4.42	4.14	4.61	3.90	3.99	3.85	4.27
Duration of liabilities (years)	3.92	5.46	3.65	3.99	3.80	3.92	3.69	4.02	2.95	3.40
Duration of economic capital[b] (percent)	3.59	-3.82	11.77	11.90	5.98	9.51	5.81	3.66	9.54	16.19
Modified duration of capital[c] (percent)	3.46	-3.69	11.34	11.47	5.76	9.17	5.59	3.53	9.19	15.62
Duration Gap[d] (Dgap) (years)	0.76	-0.65	0.93	0.65	0.93	1.18	0.57	0.29	1.30	1.10
Maximum change of interest[e] (percentage points)	0.95	-0.83	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Value at Risk[f] (VaR)	429	336	493	352	207	247	197	100	183	149
Foreign-currency segmenth										
Total exposure[a] (NIS million)	3,307	1,472	1,087	571	-120	108	-58	-140	-119	-315
Duration of assets (years)	1.08	0.88	0.62	0.55	1.41	1.21	0.46	0.41	0.25	0.27
Duration of liabilities (years)	0.76	0.86	0.56	0.47	1.01	0.76	0.36	0.36	0.30	0.31
Duration of economic capital[b] (percent)	13.21	2.51	6.52	18.73	233.70	325.14	34.38	8.60	-10.90	-3.43
Modified duration of capital[c] (percent)	12.76	2.40	6.30	17.90	225.85	310.80	33.23	8.22	-10.53	-3.28

(cont'd.)

Table A.1.12 (cont'd.)
Exposure to Changes in Interest Rates, the Five Major Banking Groups, 2004-05

	Hapoalim		Leumi		Discount		Mizrahi-Tefahot		First International	
	2004	2005	2004	2005	2004	2005	2004	2005	2004	2005
Duration Gap[d] (Dgap) (years)	0.35	0.03	0.06	0.08	0.39	0.45	0.09	0.05	-0.06	-0.04
Maximum change of interest[e] (percentage points)	0.32	0.26	0.32	0.26	0.32	0.26	0.32	0.26	-0.91	-0.91
Value at Risk[f] (VaR)	136	9	22	27	87	88	6	3	11	9
Total financial capital[i] (NIS million)	14,776	13,842	12,082	12,127	3,831	3,920	2,989	3,619	2,826	2,377
Total value at risk[j] (NIS million)	832	557	852	650	525	727	277	159	256	454
As percentage of financial capital	5.63	4.02	7.05	5.36	13.70	18.54	9.27	4.39	9.07	19.11
As percentage of equity	5.11	3.31	5.58	4.01	7.68	10.12	6.69	3.39	6.56	10.62

[a] Present value of assets less present value of liabilities including effect of futures and options. The present value of the assets and liabilities is obtained by discounting the future cash flow (principal and interest) at the market interest rate according to the time structure of the interest rate relevant in each segment: the yield to maturity on makam in the unindexed segment, on bonds in the indexed segment and on LIBOR in the foreign currency segment.

[b] When the sign is positive, an unexpected increase in the interest rate will erode economic capital and a decrease will increase it, and vice versa when the sign is negative.

[c] The modified duration of the capital is equal to the partial duration of capital (1 plus the rate of interest, r). The modified duration of capital can also be treated as the rate of exposure of the position for a change of one percentage point in the rate of interest.

[d] The duration gap expresses the sensitivity of the bank's economic capital to changes in the interest rate in terms of time, and therefore allows an estimate of the average duration of assets/liabilities that must be bought/sold to cover the bank's economic capital from interest rate risk. The duration gap index is calculated thus:

where DA is duration of the assets; DL is duration of the liabilities; A is the present value of assets; L is the present value of liabilities.

[e] The maximum change in yield to maturity on one-month makam in the unindexed segment, on 5-year indexed bonds in the indexed segment and on the 3-month LIBOR in the foreign currency segment. The maximum change of interest is derived from the distribution of monthly changes in the past five years, where the probability of a change greater than that is smaller than 1%.

[f] The change that will occur in the situation of the bank as a result of the maximum change in the rates of interest calculated according to the VaR model.

[g] Including the CPI/$ indexation option.

[h] Including foreign-currency-indexed.

[i] Total present value of assets less present value of liabilities including effect of futures and options.

[j] The total value subject to interest rate risk obtained by simply adding the adjusted value at risk in the three segments under the strong assumption of the worst scenario, from the bank's point of view, in all the segments (full correlation, positive or negative, between the risks).

SOURCE: Based on published financial reports.

Table A.1.13
Rating of the Five Major Banking Groups by External Rating Agencies,[a] July 2006

		Fitch-IBCA				Moody's			Standard & Poor's		Ma'alot	
		Long term	Short term	Support	Individual	Long term	Short term	Financial strength	Long term	Short term	General	Deferred promissory notes
Hapoalim	Rating	BBB+	F2	2	C	A2	P-1	C	A-	A-2	AA+	AAA
	Date of rating	(04/03)	(04/03)	(10/95)	(09/01)	(09/00)	(09/00)	(09/00)	(03/06)	(09/97)	(02/2003)	(05/06)
	Previous rating	A-	F1		B/C	A3	P-2	D+	BBB+			AA+
Leumi	Rating	BBB+	F2	2	C	A2	P-1	C	A-	A-2	AA+	AAA
	Date of rating	(04/03)	(04/03)	(02/97)	(09/01)	(09/00)	(09/00)	(09/00)	(03/06)	(02/99)	(02/2003)	(05/06)
	Previous rating	A-	F1		B/C	A3	P-2	D+	BBB+			AA+
Discount	Rating					A2	P-1	D+	BBpi		AA-	AA-
	Date of rating	bank not rated by the rating agency				(09/00)	(09/00)	(01/02)	(09/02)		(07/2003)	(09/03)
	Previous rating					A3	P-2	C-	BBBpi			
Mizrahi-Tefahot	Rating					A2	P-1	C-	BBBpi		AA+	AA+
	Date of rating	bank not rated by the rating agency				(09/00)	(09/00)	(10/01)	(04/97)		(07/2003)	(10/03)
	Previous rating					A3	P-2	D+				
First International	Rating	BBB	F3	2	D	A2	P-1	C-	BBBpi		AA	AA
	Date of rating	(12/02)	(12/02)	(12/03)	(12/02)	(09/00)	(09/00)	(12/02)	(04/1997)		(02/2003)	(02/03)
	Previous rating	BBB+	F2	3	C/D	A3	P-2	C				AA+
State of Israel												
Domestic bonds	Rating	A				A2	P-1		A+	A-1		
	Date of rating	(12/95)				(08/00)	(08/00)		(12/02)	(12/02)		
	Previous rating	A+				A3	P-2		AA-	A-1+		
Foreign bonds	Rating	A-	F1			Aa1	P-1		A-	A-1		
	Date of rating	(02/05)	(12/95)			(06/06)	(08/00)		(12/97)	(12/97)		
	Previous rating		F1			A2	P-2					

[a] Explanations of the various ratings appear in Table A.1.14.

SOURCE: Websites of Bankscope, Moody's, S&P and Fitch-IBCA, published financial reports and Ma'alot.

Table A.1.14

Credit Rating Definitions

Long-term rating (more than one year)	**Highest**		→		→		→		→			**Lowest**
Fitch-IBCA (Long-term ratings)	AAA	AA	A	BBB	BB	B	CCC	CC	C	DDD	DD	D
Moody's (Long-term ratings)	Aaa	Aa	A	Baa	Ba	B	Caa	Ca	C			
Standard & Poor's (Long-term ratings)	AAA	AA	A	BBB	BB	B	CCC	CC	C	D		

The long-term rating, based principally on the financial party's business and financial risks, rates its ability to repay debt in the long term.
The symbols (+) and (-) for Fitch and S&P, and the numbers (1,2,3) for Moody's denote the ratings within each level.

Short-term ratings (up to one year)	**Highest**		→		→	**Lowest**
Fitch-IBCA (Short-term ratings)	F1	F2	F3	B	C	D
Moody's (Short-term ratings)	P-1	P-2	P-3	Not-prime		
Standard & Poor's (Short-term ratings)	A-1	A-2	A-3	B	C	D

The short-term rating, based principally on the financial party's financial liquiidty situation, rates its ability to repay debt in the short term.

Financial strength ratings	**Highest**		→		**Lowest**
Fitch-IBCA (Individuals ratings)	A	B	C	D	E

The individual rating expresses the rating agency's assessment of the bank's ability to stand on its own without external support, for example, from local authorities or from its shareholders.
The symbols A/B, B/C, C/D and D/E denote ratings within each category.

Moody's (Bank financial strength ratings)	A	B	C	D	E

The bank financial strength rating measures the level of reasonability that the bank will need support from a third party, such as its shareholders, other banks operating in the industry or official bodies.
The symbols (+) and (-) denote ratings within each category.

Support ratings	**Highest**		→		→	**Lowest**
Fitch-IBCA (Support ratings)	1	2	3	4	5	T

The support rating measures the support that various banks are likely to receive, according to the likelihood of receiving such support and the quality of the supporting party.

SOURCE: Websites of Moody's, S&P and Fitch-IBCA.

Table A.1.15
Distribution of Credit to the Public, Total Commercial Banking System,[a] 2003-05

	End-of-year balance					Average balance			Change in average balance	
	At December 2003 prices	At current prices		Change in end-of-year balance		At December 2003 prices	At current prices			
	2003	2004	2005	2004	2005	2003	2004	2005	2004	2005
	(NIS million)			(percent)		(NIS million)			(percent)	
Total credit to the public	472,276	463,206	471,838	-9.6	1.9	435,654	467,200	459,966	7.2	-1.5
Total local-currency credit[b]	317,901	321,340	345,734	-7.7	7.6	286,518	316,257	330,019	10.4	4.4
Unindexed	174,580	189,348	208,883	6.7	10.3	165,661	178,483	196,231	7.7	9.9
Overdraft accounts and facilities[c]	46,922	43,344	39,935	-7.6	-7.9	45,177	44,227	41,923	-2.1	-5.2
Other short-term credit[c]	79,929	98,062	123,756	18.9	30.2	72,701	86,231	110,497	18.6	28.1
On-call credit	47,730	47,942	45,193	0.4	-5.7	46,807	48,025	43,811	2.6	-8.8
CPI-indexed	143,321	131,992	136,851	-25.3	3.7	120,857	137,774	133,788	14.0	-2.9
Total foreign-currency credit	154,375	141,866	126,104	-13.5	-11.1	149,136	150,943	129,946	1.2	-13.9
To residents (total)	135,149	125,006	110,423	-13.7	-11.7	128,240	131,875	114,249	2.8	-13.4
of which Foreign-currency-indexed	7,388	9,052	7,322	-33.9	-19.1	2,400	8,464	8,116	252.7	-4.1
To nonresidents (total)	19,226	16,859	15,681	-12.3	-7.0	19,370	19,068	15,698	-1.6	-17.7

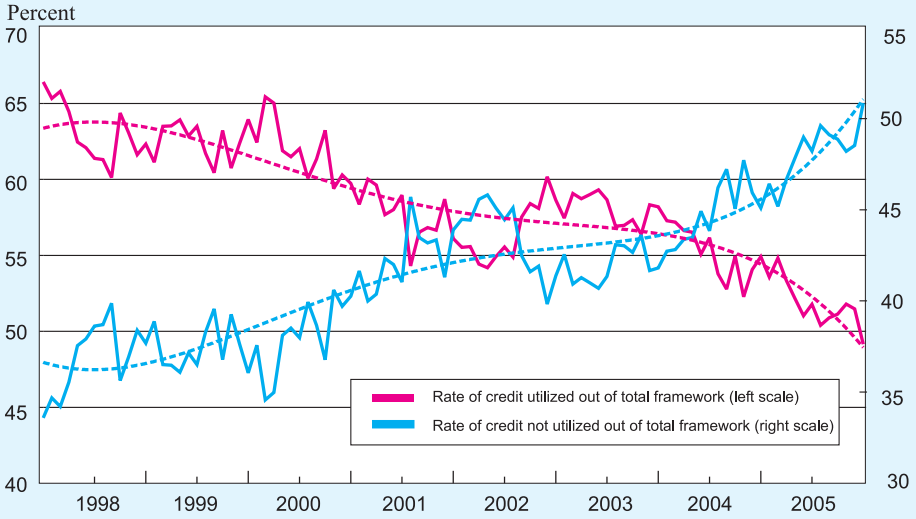
[a] Including data on all the commercial banks on a bank basis, not including subsidiaries.

[b] From 2004 and 2005, credit data include credit balances of mortgage bank activities of Mishkan and Tefahot that were merged into Hapoalim and Mizrahi, respectively. The data were reclassified and comparative figures for 2002, 2003 and 2004 were adjusted accordingly.

[c] Including credit at the bank's responsibility only. Does not include credit to specialized banking corporations.

SOURCE: Reports to the Superviser of Banks.

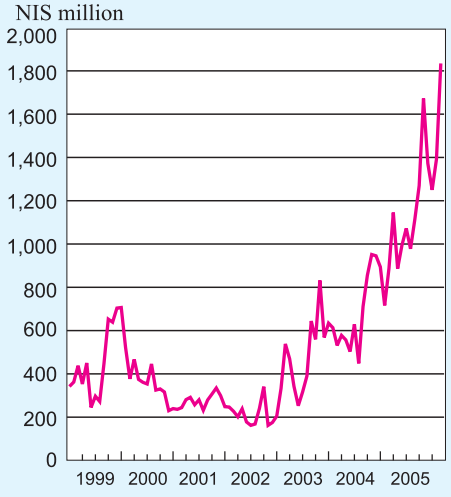
Figure A.1.1
Rate of Credit[a] Utilized compared to Rate of Credit not Utilized out of Total Approved Framework, in the Seven Largest Banks in Israel, December 1997 to December 2005



[a] Debit balance in current loan account, or checking account, monthly average.

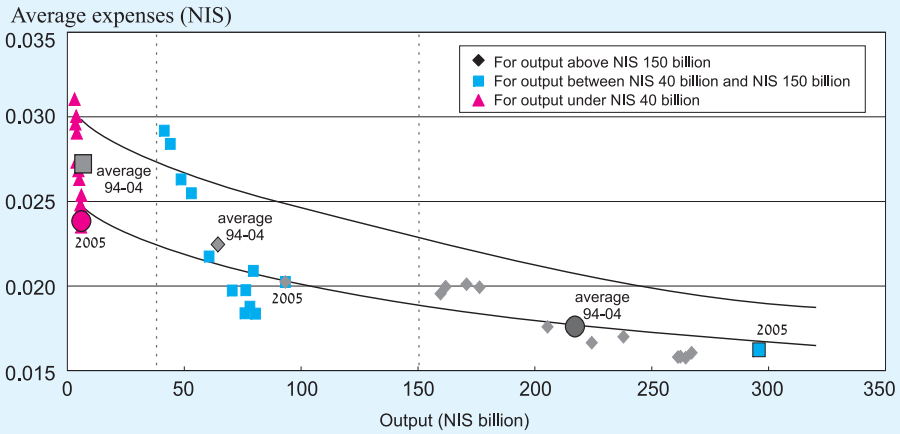
SOURCE: Returns to the Supervisor of Banks.

Figure A.1.2
Monthly Average Trading Volumes for Shares and Convertible Bonds on the Tel Aviv Stock Exchange, March 1999 to March 2006



SOURCE: Bank of Israel.

Figure A.1.3
Operating Expenses per Unit of Output[a] in the Banking System,[b] 1994-2005

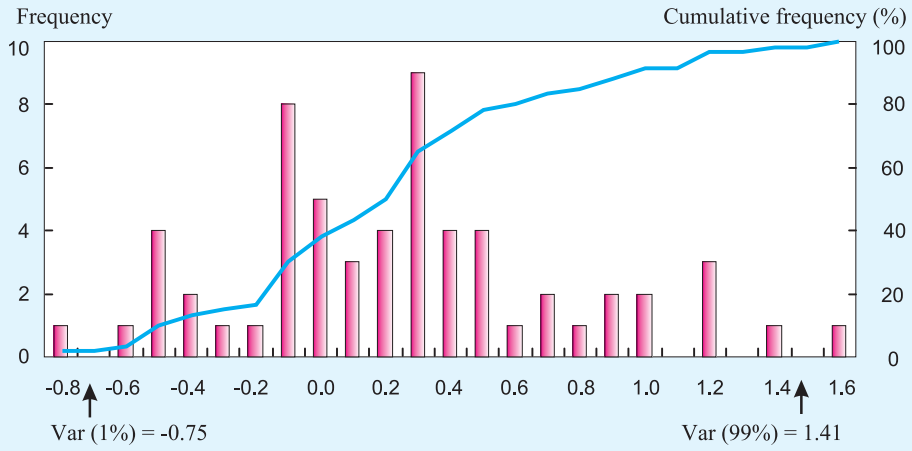


[a] Output: The book balance of balance-sheet assets and the equivalent balance-sheet value of non-balance-sheet assets.
[b] Bank Hapoalim, Leumi Bank, Discount Bank, Mizrahi Bank, First International Bank of Israel, Union Bank, Mercantile Discount Bank, Bank Otsar Ha-hayal, Bank Yahav for Government Employees, Arab Israel Bank, Bank Massad, Bank Poalei Agudat Israel, Continental Bank, Industrial Development Bank (up to 2002), Bank of Jerusalem (from 1997), Bank Investec Israel, Maritime Bank (up to 2002), Eurotrade Bank, and Trade Bank (up to 2001).

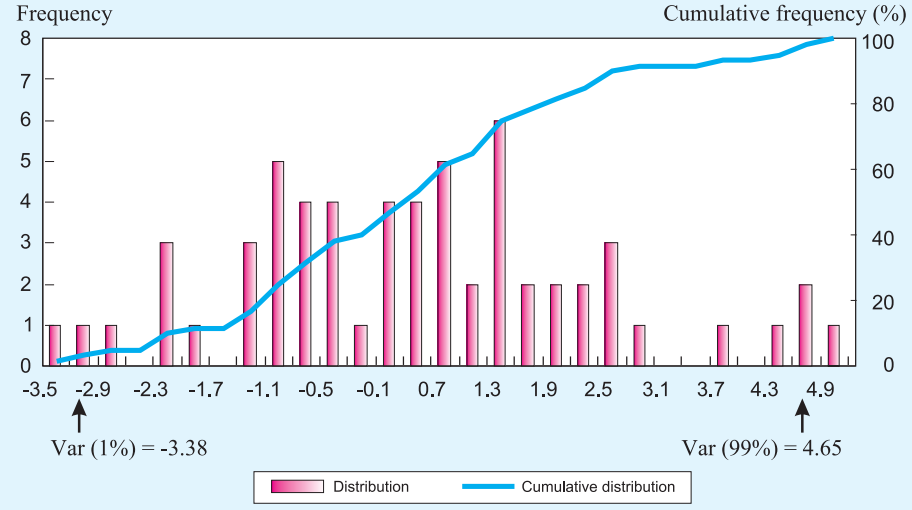
SOURCE: Based on published financial statements.

Figure A.1.4
Distribution and Cumulative Distribution of Monthly Changes in the Consumer Price Index and Exchange Rate, 2001-05

A. Distribution of Changes in the Consumer Price Index

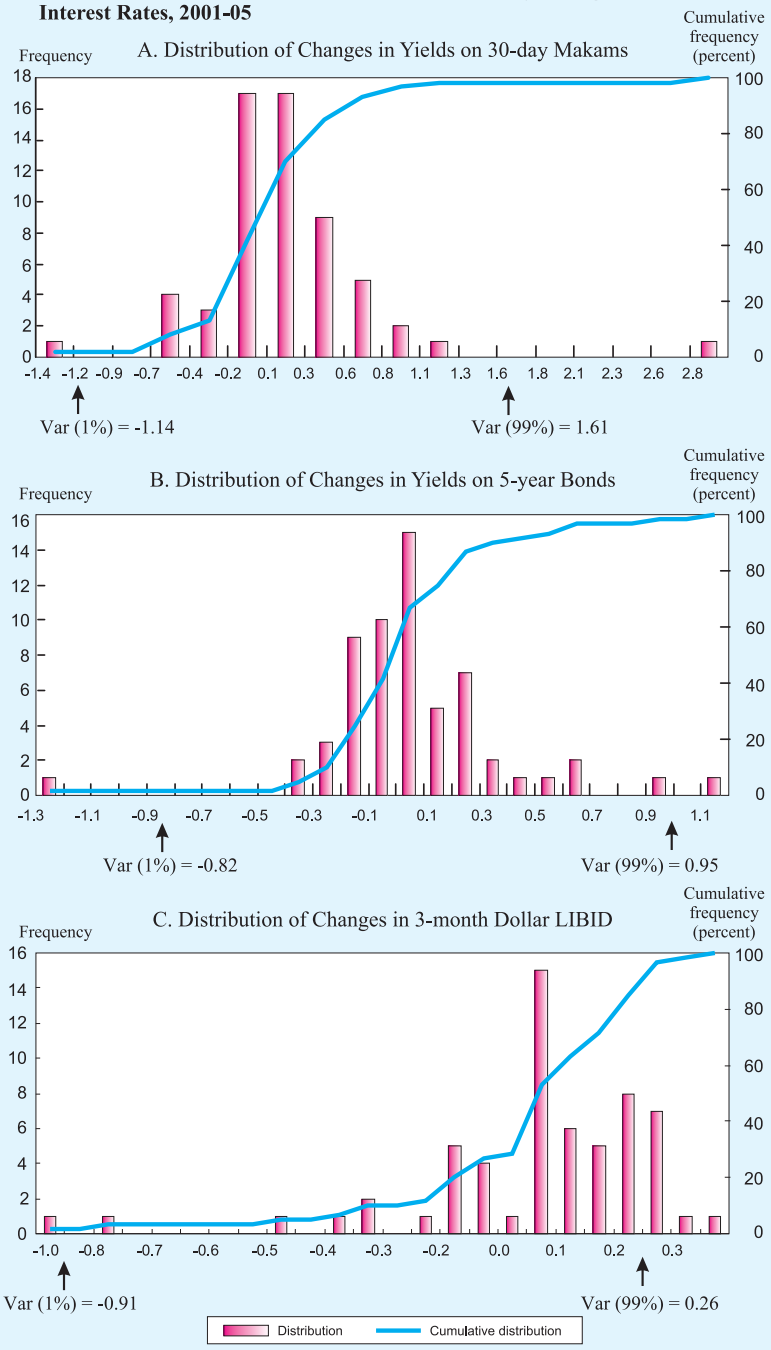


B. Distribution of Changes in the Nominal Shekel/Dollar Exchange Rate



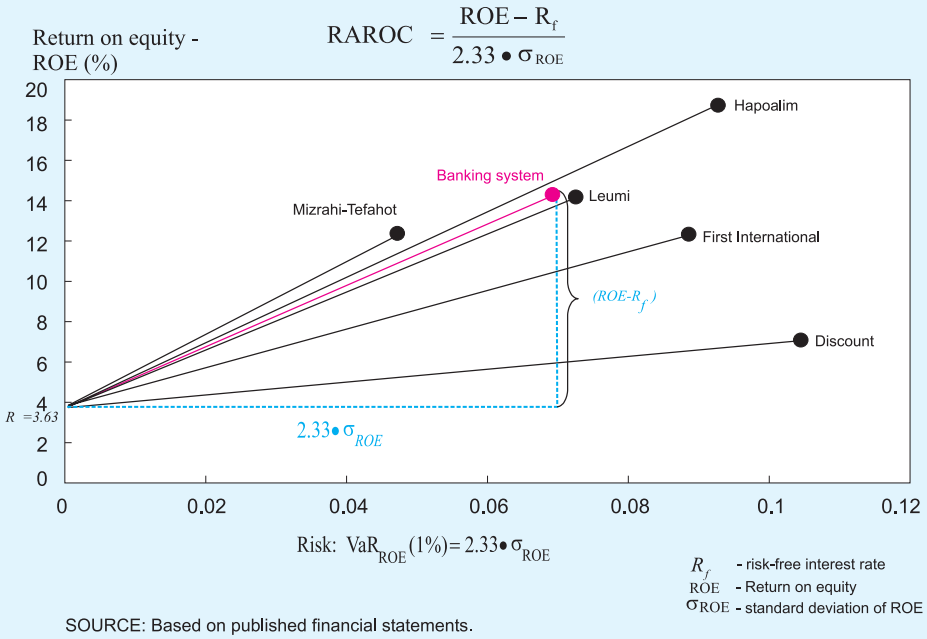
SOURCE: Based on Bank of Israel data.

Figure A.1.5
Distribution and Cumulative Distribution of Monthly Changes in Selected Interest Rates, 2001-05



SOURCE: Based on Bank of Israel data.

Figure A.1.6
Risk-Adjusted Return on Capital, Comparison of Five Major Banking Groups and Banking System, 2005



SOURCE: Based on published financial statements.