

## *Chapter 1*

# *Israel's Banking System - Activity, Financial Results and Risks in 2004*

The performance of the Israeli banking system continued to improve in 2004. The improvement was reflected by a further growth in return on equity (ROE) following a large increase in the previous year and by a slight decrease in the extent of risk. The decrease was apparent in the credit risks to which the banking system is exposed, although these risks remained high.

The recovery in the local and global economy led to an improvement in all components of the banking system's profitability. Particularly notable in this respect was the increase in financing profits and the decrease in loan-loss provisions. The upsurge in the economy concurrent with the vibrant activity in the capital market spurred a renewed expansion in financial services, including commission-earning services. This led to a growth in non-interest income. An increase in employee-related expenses, especially direct salary expenses, offset the improvement in the banks' profits to a slight extent.

Other factors contributing to the improvement in profitability in 2004 were the growth in the profits of subsidiary and affiliated companies that derived from holdings in non-financial companies, and extraordinary profit in respect of the issue and sale of the shares of a subsidiary abroad.

Despite the recovery in the economy and its positive impact on profitability, the banking system's risks, particularly credit risks, remained high in 2004. However the banks' capital adequacy, which provides a cushion for absorbing losses, improved in 2004. This improvement resulted from two main developments – a slight expansion in the credit portfolio, which led to a minor increase in the elements of risk, and a large rise in the profits of the banking groups, which led to a growth in Tier I capital and as a result, in the capital base as well.

During 2004 the banking system was heavily exposed to contestability from non-banking financial intermediaries. Although the renewed growth in economic activity in 2004 was reflected by an increase in the borrowing requirements of the banks' customers, the additional demand was directed towards non-banking channels, mainly in the form of corporate bond issues in the capital market. In addition, the banks maintained a policy of reducing the supply of credit as part of the conservative approach to risk management that they adopted in light of past experience, due to the need to reduce their exposure to groups of large borrowers in the economy as a result of the stricter directives imposed by the Supervisor of Banks in this area, and with the aim of increasing their capital adequacy.

Overall, 2004 was notable for an improvement in the performance and stability of the banking system, which was reflected by the Hosen robustness index, as well as by the risk-adjusted return on capital (RAROC) indexes.

## PART 1

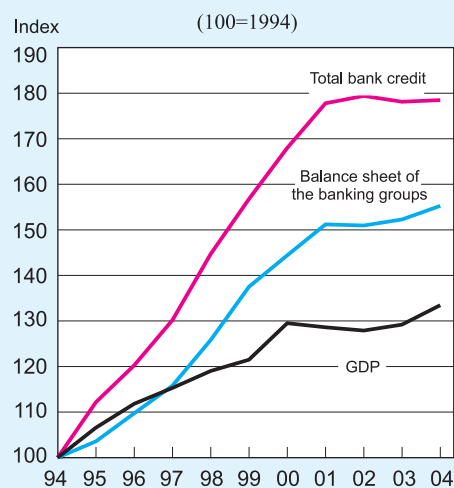
# MAIN DEVELOPMENTS IN THE ACTIVITY OF THE BANKING SYSTEM IN ISRAEL

## 1. GENERAL BACKGROUND AND MACROECONOMIC DEVELOPMENTS

Activity in the banking system is heavily affected by developments in the economy as a whole. During the year reviewed, the growth in economic activity that began in the second half of 2003 gathered momentum. The upturn was reflected by a 4.3 percent increase gross domestic product and by a 6 percent increase in business-sector product (Figures 1.1 and 1.3). The growth in GDP encompassed all the principal industries except for the construction industry, whose output fell for the seventh consecutive year. The economic growth in 2004 mainly derived from the upturn in global growth (especially in the countries that are Israel's trading partners), the calmer security situation in Israel, the reduction in taxes, the Bank of Israel's expansionary monetary policy, and the government's policy of fiscal restraint. The growth in the economies that are Israel's trading partners concurrent with a real depreciation (in terms of import and export prices) opened up new markets for Israeli exports, and these rose by 14 percent. The prosperity was particularly apparent in the high-tech industries, although it extended to traditional industries where exports also rose appreciably.

Private consumption surged by 5.3 percent in 2004 and the upturn was particularly strong in the area of consumer durables. The growth in households' demand for durables derived from the reduction in direct and indirect taxes, the moderate increase in real wages, the decline in the unemployment rate, the large rise in the number of employed persons and companies' profits, and the wealth effect, which was reflected by a substantial increase in the value of tradable financial assets. Private consumption was also affected by the optimistic assessments regarding geopolitical developments that resulted from the calm security situation, and the expectation of changes in the Palestinian Authority.

**Figure 1.1**  
**Activity of the Five Largest Banking Groups vis-à-vis Total Economic Activity, 1994-2004**



SOURCE: Published Financial Statements and the Central Bureau of Statistics

Another result of the recovery in the economy was the considerable improvement in borrowers' repayment ability in the main industries to which the banking system is heavily exposed. (See Part 4 – Risks – for more details on this subject.)

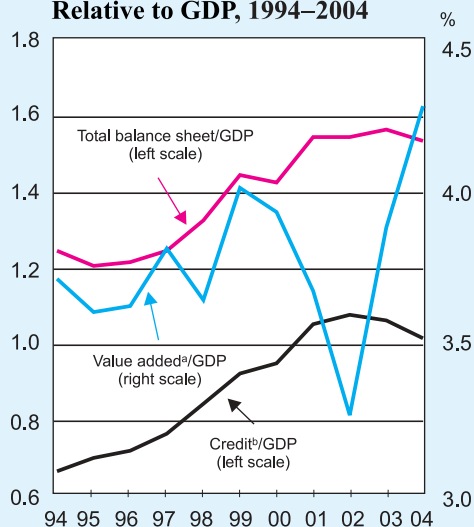
## 2. BANK CREDIT TO THE PUBLIC AND INCREASED CONTESTABILITY FROM NON-BANK CREDIT

Outstanding credit to the public at the five banking groups rose by a mere 0.4 percent in 2002 and totaled NIS 537 billion at the end of the year.<sup>1</sup> This development followed a one percent decrease in 2003 and a two percent increase in 2002. The lack of change in outstanding credit to the public during the last two years is notable against the background of the rapid expansion that exceeded the GDP growth rate during most of the 1990s (Table 1.1 and Figures 1.2 and 1.3).

The high level of the credit-GDP ratio during those years was indicative not only of the centrality of the banking system in financial intermediation activity, but also of the system's extensive exposure to credit risks, since product was the principal source for the repayment of credit. Moreover, at the end of the previous business cycle concurrent with the stagnant GDP growth rate, the banking system supplied credit that served as a source for the purchase of the means of control in many companies in the Israeli economy. This was not reflected in GDP because the process involved the replacement of companies' ownership. During 2002 and 2003 the increase in this ratio slowed due to the reduced supply of credit (as will be detailed below), and because of the drop in demand for credit in those years against the background of the slowdown in economic activity.

The equilibrium result in 2004 appears to have derived from changes in the credit

**Figure 1.2**  
**Indices of Banking Activity of the**  
**Five Major Banking Groups**  
**Relative to GDP, 1994–2004**



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

SOURCE: Returns to Supervisor of Banks and the Central Bureau of Statistics.

<sup>1</sup> The outstanding credit presented in Section b, part 2 is of the five largest groups on a consolidated basis, including the activity of the commercial banks at the head of the groups as well as credit granted by subsidiaries in Israel including housing credit and abroad for uses in Israel and abroad.

demand function as compared to the dominant impact of supply factors in the previous years. The demand for bank credit in 2004 was mainly affected by two opposing and mutually offsetting developments: the increased contestability from non-banking financial intermediaries ('the substitution effect') led to a drop in demand for bank credit; while the 'income effect' resulting from firms' and households' increased demand for sources of finance with the resumption of growth, led to an increase in demand for credit. Overall, the demand for bank credit in 2004 remained largely unchanged. In addition, the banks maintained a policy of reducing the supply of credit in line with their conservative risk management following the lessons learned from the past, with the aim of enhancing their capital adequacy.

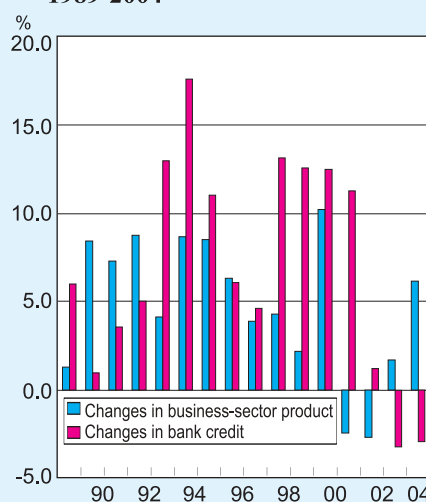
It should be noted that non-bank credit is currently available to only a small proportion of credit consumers, mainly financially sound customers – mostly publicly-traded companies or private companies that conduct extensive activity in Israel and abroad, and that issue corporate bonds and shares. This situation is typical of a market in the initial stages of development.

It can be assumed that as the capital market in Israel matures, companies characterized by a higher level of risk will also float issues, that is, issues of higher-risk series of bonds.

The positive developments in Israel and in the world's leading economies increased Israeli firms' ability to raise capital by means of bond and share issues in foreign stock markets, to obtain direct credit from abroad, and to benefit from finance from venture capital companies (Table 1.2). In 2004 the acceleration of the general process of substituting for bank credit by means of non-bank sources of finance, also known as contestability to the banking system, resulted from several factors:

1. A large decrease in the amount and mix of public sector issues, due to the much lower budget deficit and the government's preference for issuing bonds abroad. This development mainly affected the issue of CPI-indexed bonds, and foreign-currency denominated and indexed bonds.
2. The recovery in the high-tech industries, which led to a large growth in Israeli companies' issues in the capital markets in Israel and abroad.
3. The increased supply of issues resulting from the substantial improvement in the profitability of publicly-traded companies concurrent with the decrease in their

**Figure 1.3**  
**Annual Changes in Business-Sector Product and in Bank Credit of the Commercial Banking System 1989-2004**



SOURCE: Based on Returns to the Supervisor of Banks,

risk premium (Figures 1.4 and 1.5). This was reflected by a rise in share prices on the Tel Aviv Stock Exchange, a development that made it easier to float issues. Another factor was the Supervisor of Banks' new directive concerning the borrower group restriction, which greatly reduced the potential amount of credit that the banking system was able to supply to the largest borrowers in the economy. Borrowers' and the banks' preparation for the implementation of this directive appear to have led to the repayment of bank credit and its replacement by bond issues to the public.

**Table 1.1**  
**The Consolidated Balance Sheet of the Five Largest Banking Corporations, 2000-04**

	Balance at end of year					Average quarterly balance	Average quarterly balance	Rate of change
	2000	2001	2002	2003	2004	2003	2004	
	At December 2003 prices			At current prices		At current prices		percent
	(NIS million)							
<b>Assets</b>								
Cash and deposits in banks	119,783	110,415	90,614	95,099	102,263	91,881	94,484	2.8
Securities	87,224	99,182	106,967	117,539	134,137	112,538	129,315	14.9
Credit to the public	485,801	533,463	542,073	535,202	537,093	531,936	536,244	0.8
Credit to the government	13,244	8,301	6,768	4,684	3,301	5,493	3,845	-30.0
Investment in subsidiary and affiliated companies	4,222	4,180	3,573	3,561	4,000	3,488	3,788	8.6
Buildings and equipment	8,914	9,530	9,801	10,117	10,243	9,981	10,062	0.8
Other assets	11,880	15,776	19,096	22,918	21,647	21,227	19,803	-6.7
<b>Total assets</b>	<b>731,068</b>	<b>780,847</b>	<b>778,892</b>	<b>789,120</b>	<b>812,684</b>	<b>776,542</b>	<b>797,542</b>	<b>2.7</b>
<b>Liabilities and capital</b>								
Deposits of the public	613,741	654,884	651,345	649,303	666,353	641,312	653,769	1.9
Deposits from banks	20,412	19,624	18,921	21,522	21,834	20,289	23,240	14.5
Government deposits	12,882	11,943	10,369	9,890	8,987	9,985	9,334	-6.5
Bonds and subordinated notes	29,115	34,424	35,654	37,718	39,957	37,086	39,626	6.9
Other liabilities	16,767	20,054	22,877	27,180	29,141	25,448	25,877	1.7
Total liabilities	692,917	740,929	739,166	745,613	766,272	734,119	751,846	2.4
Minority interests	1,965	1,814	1,767	1,711	2,027	1,715	2,043	19.1
Equity	36,186	38,104	37,959	41,796	44,385	40,709	43,654	7.2
<b>Total liabilities and capital</b>	<b>731,068</b>	<b>780,847</b>	<b>778,892</b>	<b>789,120</b>	<b>812,684</b>	<b>776,542</b>	<b>797,542</b>	<b>2.7</b>

SOURCE: Published financial statements, 2003-04 data, at current prices.

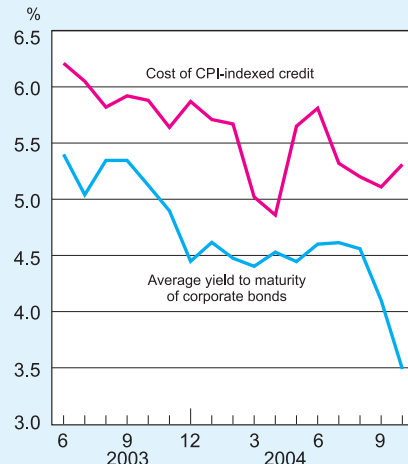
The commercial banks' outstanding credit to the public fell by 2 percent in 2004 following a 3 percent decrease in 2003, and totaled NIS 427 billion at the end of the year (Table 1.3 and Figure 1.5).<sup>2</sup> An examination of credit by indexation segment shows a large decrease in CPI-indexed credit (8.7 percent) and foreign-currency credit (8.5 percent), which was partly offset by an 8.3 percent increase in unindexed credit. Part

<sup>2</sup> Including the commercial banks' data on a bank basis; not including subsidiaries.

of the increase in unindexed credit is attributed to the redirection of credit from the other indexation segments, which resulted mainly from the decrease in inflationary uncertainty ('the substitutability effect'), as well as from a drop in the price of unindexed local currency credit that derived from the cut in the Bank of Israel's interest rate and the higher interest rate on foreign-currency credit following the rise in the Libor interest rate.

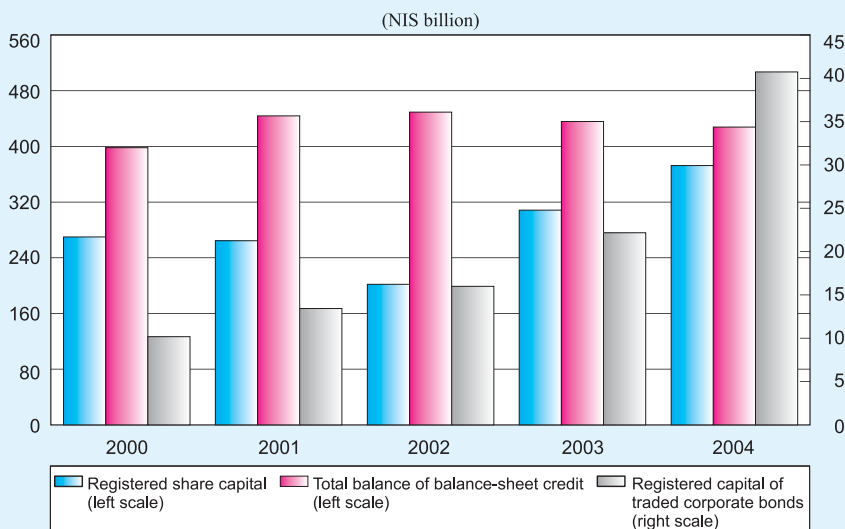
The proportion of time credit to total unindexed credit rose from 44 percent in 2003 to 50 percent in 2004. The weighted interest-rate spread in the unindexed segment remained stable, at 2.95 percent compared with 3 percent in 2003. The spread was affected by a number of opposing developments: the resumption of growth in the economy had the effect of increasing the demand for credit and the supply of deposits, and thereby led to a growth in interest-rate spread; while the cut in the Bank of Israel's interest rate and the increased contestability to the banking system, including the unindexed segment, had the effect of reducing the spread.

**Figure 1.4**  
**Yield to Maturity on Corporate Bonds and the Cost of Raising Credita**



<sup>a</sup> New credit given by the commercial banks during the month.  
SOURCE: Banking Supervision Research Department.

**Figure 1.5**  
**Registered Capital for Trading of Bonds and Shares Traded on the Tel Aviv Stock Exchange compared with the Balance of Bank Credita**  
**2004-2004**



<sup>a</sup> The balance of balance-sheet credit of all the commercial banking corporations, activity in Israel

SOURCE: Based on data of the Tel Aviv Stock Exchange

**Table 1.2****Raising of Bank Credit to the Business Sector and Its Principal Substitutes, 1998 to 2004**

(NIS million, at December 2003 prices)

	Total bank credit and its substitutes	Bank credit <sup>a</sup>	Total bank credit substitutes raised	Bond issues in Israel <sup>b</sup>	Share issues in Israel	Capital raised abroad <sup>c</sup>	Direct credit from abroad <sup>d</sup>	Venture capital funds	Credit from institutional investors <sup>e</sup>	Difference between credit and substitutes
1998	51,031	32,400	18,631	2,549	7,895	4,562	3,554	2,448	-2,377	13,769
1999	76,204	38,591	37,613	1,681	5,659	17,802	4,883	4,462	3,126	979
2000	93,939	40,384	53,555	292	14,212	19,267	2,131	13,351	4,301	-13,171
2001	58,129	33,400	24,729	90	5,833	7,322	648	8,708	2,129	8,671
2002	27,518	5,325	22,193	2,969	5,555	1,061	6,763	5,289	555	-16,867
2003	4,233	-17,044	21,277	2,793	3,148	3,855	992	4,427	6,062	-38,321
2004 <sup>f</sup>	49,907	-1,563	51,469	12,551	8,251	11,341	7,866	6,268	5,191	-53,032

<sup>a</sup> Credit to the public from the commercial banks (on a consolidated basis). Does not include credit to individuals and credit to borrowers for activity abroad. It is assumed that the change in credit balances reflects the flow of new credit granted.

<sup>b</sup> Since 2001 all issues and capital raised via bonds which are not credit substitutes have been deducted (e.g., financial issues, tier 2 capital issued by banking corporations, and ETFs (exchange traded funds), so that this column refers to real issues.

<sup>c</sup> Including issues of bonds and shares abroad, after offsetting early redemption of bonds and self-purchase of shares.

<sup>d</sup> This series has been reclassified.

<sup>e</sup> Including nontradable bonds issued by institutional investors (e.g., provident funds, further education funds and new pension funds) and credit from institutional investors and insurance companies.

<sup>f</sup> Data up to and including 2003 are at December 2003 prices; from 2004, at current prices.

SOURCE: Reports to the Supervisor of Banks.



The growth in outstanding unindexed credit was accompanied as stated by a large 8.7 percent decrease in outstanding CPI-indexed credit, to NIS 107 billion at the end of the year. The previously mentioned substitutability that resulted from issues of bonds to the public appears to have led to the decrease in outstanding CPI-indexed credit.

The main substitute for bank credit was as stated firms' issue of bonds, which were graded at a relatively high rating. Most issues consisted of medium-term CPI-indexed series. Business entities' issues of non-tradable bonds for institutional investors – pension funds, provident funds and insurance companies – increased considerably. A large part of these sources was used for financing infrastructure projects, which by their very nature are indexed to the CPI for long terms.

The interest rates in the CPI-indexed segment are derived from yield developments in the market for medium and long-term government bonds. These yields fell from an annual average of 4.9 percent in 2003 to 3.8 percent in 2004 (Table 3.3), with the result that CPI-indexed interest rates fell by a similar rate. Concurrent with the large 1.1 percentage point drop in yields on government bonds, the returns on saving plans and other indexes deposits fell by the same rate, from an annual average of 4 percent in 2003 to 2.9 percent in 2004. In the final account, the weighted interest spread in the CPI-indexed segment rose very slightly, from 2.4 percent in 2003 to 2.5 percent in 2004.

Outstanding foreign-currency denominated and foreign-currency indexed credit contracted by 8.5 percent to NIS 133.5 billion. Two main developments acting in the same direction affected activity in dollar-denominated credit. The first development was the growing contestability to the banking system, which was reflected by the increased availability of foreign-currency denominated credit from non-banking sources abroad and more extensive issues of bonds to the public abroad. The other development was related to the positive macroeconomic developments that led to an improvement in the financial stability of Israeli companies, principally those active in the area of information technology. These developments enhanced Israeli companies' ability to raise sources in the international market. This was apparent from the large growth in capital raising from abroad, including issues of shares and bonds to a total of NIS 11.3 billion (\$ 2.5 billion) in 2004 compared with NIS 3.85 billion in 2003. Other developments contributing to the growth in issues abroad were the improvement in Israel's country rating resulting from the increased credibility of government policy and the consistent decline in the Israeli economy's risk premium, which reduced the costs of raising sources of credit from banks abroad. The end result was the raising of a record level of direct credit from abroad in 2004, to the amount of NIS 7.9 billion compared with NIS 992 million in 2003. In addition, the government's exit from the dollar-indexed market (Gilboa bonds and in the past, Rimon bonds) enabled local companies to increase their issues of foreign-currency indexed corporate bonds, which also served as a substitute for bank credit.

The second development that affected foreign-currency credit was the decrease in demand resulting from the consistent rise in the 3-month dollar Libor rate (from one percent in 2003 to 2.2 percent in 2004 in line with the consistent upturn in the Fed's interest rate), which serves as a credit-pricing anchor. This development led to

**Table 1.3**  
**Distribution of Credit to the Public, Total Commercial Banking System,<sup>a</sup> 2002-04**

	End-of-year balances			Change from end of previous year		Average balance			Change in average balances	
	2002	2003	2004	2003	2004	2002	2003	2004	2003	2004
	At December 2003		At current			At December 2003		At current		
	prices		prices			prices		prices		
	(NIS million)			(percent)		(NIS million)			(percent)	
Total credit to the public <sup>b</sup>	<b>448,327</b>	<b>435,211</b>	<b>426,935</b>	-2.9	-1.9	448,504	435,654	431,234	-2.9	-1.0
Total local-currency credit	290,132	289,325	293,409	-0.3	1.4	286,969	286,518	288,001	-0.2	0.5
Unindexed	166,810	171,979	186,316	3.1	8.3	161,429	165,661	175,734	2.6	6.1
Overdraft accounts and facilities	45,508	46,922	43,344	3.1	-7.6	42,323	45,177	44,227	6.7	-2.1
Other short-term credit <sup>c</sup>	75,048	76,262	95,030	1.6	24.6	73,515	72,701	83,482	-1.1	14.8
On-call credit <sup>c</sup>	45,308	47,730	47,942	5.3	0.4	44,875	46,807	48,025	4.3	2.6
CPI-indexed	123,322	117,346	107,093	-4.8	-8.7	125,540	120,857	112,267	-3.7	-7.1
Total foreign-currency credit	158,195	145,886	133,526	-7.8	-8.5	161,535	149,136	143,233	-7.7	-4.0
To residents (total)	136,644	124,603	116,666	-8.8	-6.4	139,464	128,240	124,165	-8.0	-3.2
<i>of which</i> Foreign-currency-indexed	2,553	2,115	4,882	-17.2	130.8	2,807	2,400	4,609	-14.5	92.0
To nonresidents (total)	20,584	19,226	16,859	-6.6	-12.3	21,531	19,370	19,068	-10.0	-1.6

<sup>a</sup> Including data on all the commercial banks on a bank basis, not including subsidiaries.

<sup>b</sup> Since 2004 data on credit includes the balance of the credit portfolios of the activity of Bank Mishkan, and the data have therefore been reclassified. The data for 2002 and 2003 have been adjusted according to the new classification.

<sup>c</sup> Including credit at the bank's responsibility only. Does not include credit to specialized banking corporations (mortgage banks, investment finance banks, or financial institutions)."

SOURCE: Reports to the Supervisor of Banks.

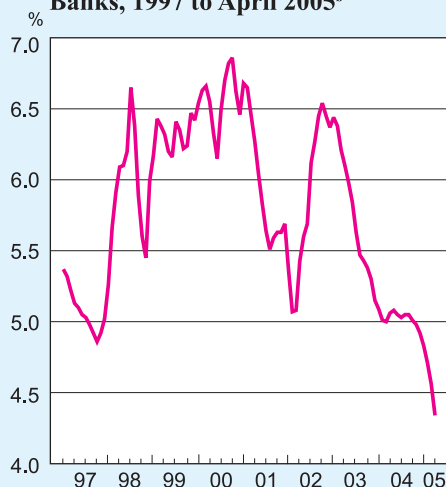
an increase in the cost of foreign-currency credit from 3.8 percent in 2003 to 5 percent in 2004 (Table 3.3).<sup>3</sup> Since the interest rate on foreign-currency deposits rose from 1.7 percent to 2.8 percent, the weighted interest spread in the foreign-currency segment remained unchanged at 2 percent.<sup>4</sup>

The relative stability in the volume of credit that the banking system extended to the general public concurrent with the source surpluses in the unindexed segment and the foreign-currency segment increased the banking groups' other uses. As an example, the securities portfolio and foreign-currency denominated deposits at banks abroad expanded. The banking group's securities portfolio grew by a substantial 14 percent to NIS 134.3 billion in 2004 (Table 3.2). Most of the portfolio (81 percent) is classified as available for sale<sup>5</sup>, and two thirds of it are invested in unindexed government bonds and Treasury bill series that are issued by the Bank of Israel. The increase in Treasury bill holdings partly derived from the Bank of Israel's policy relating to the redirection of the banks' surplus sources from deposits at the Bank of Israel to Treasury bills. The banking groups' holdings of corporate bonds also increased, and the balance of investments in them at the end of 2004 amounted to NIS 46.7 billion.

#### a. Housing credit

Contrasting with the downturn in commercial credit activity, the trend in housing credit changed in 2004 and this credit<sup>6</sup> expanded. New credit extended for housing in 2004 (by the mortgage banks and the commercial banks that engage in mortgage activity) increased by 33 percent compared with 2003 (Table 3.4). The turnaround appears to have resulted from favorable macroeconomic developments: the growth in the economy, the increase in disposable income, the decline in the unemployment rate, and the further decrease in directed credit that for many years had a substitute for credit from the banks' sources. Due to the impact of this

**Figure 1.6**  
**Average Rates of Interest<sup>a</sup> on**  
**Housing Loans Given by Mortgage**  
**Banks, 1997 to April 2005<sup>b</sup>**



<sup>a</sup> Fixed interest in the indexed segment.

<sup>b</sup> From September 2002 the interest shown is on housing loans only.

SOURCE: Returns to the Supervisor of Banks

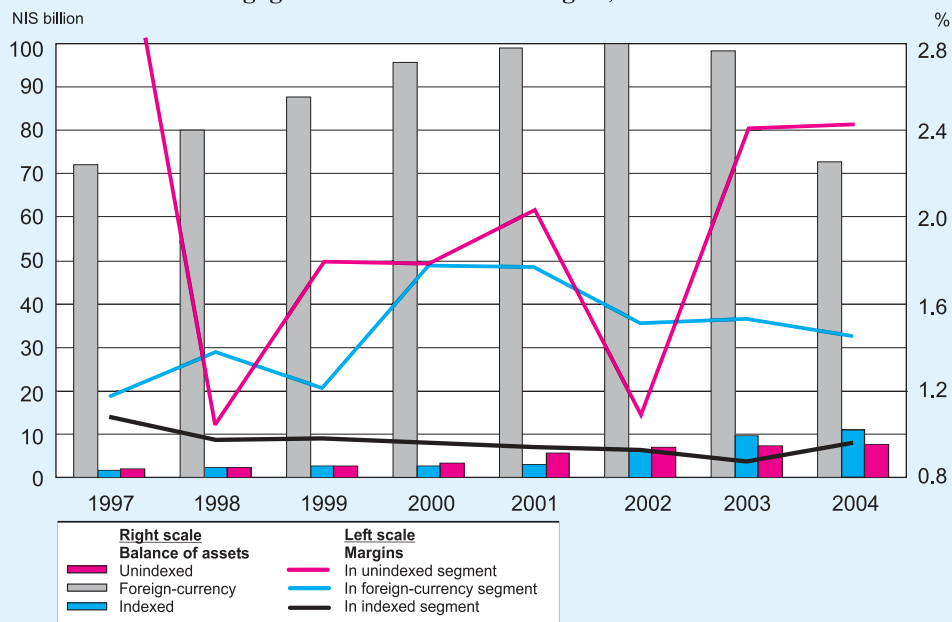
<sup>3</sup> The dollar interest rate on foreign-currency credit in real shekel terms.

<sup>4</sup> The dollar interest rate on foreign-currency denominated deposits in real shekel terms.

<sup>5</sup> This classification does not affect net income during the period in which bonds are held even if their fair value changes.

<sup>6</sup> The inference is to new credit that was granted during the year without the offset of early repayments in the course of the year (which totaled NIS 9.5 billion).

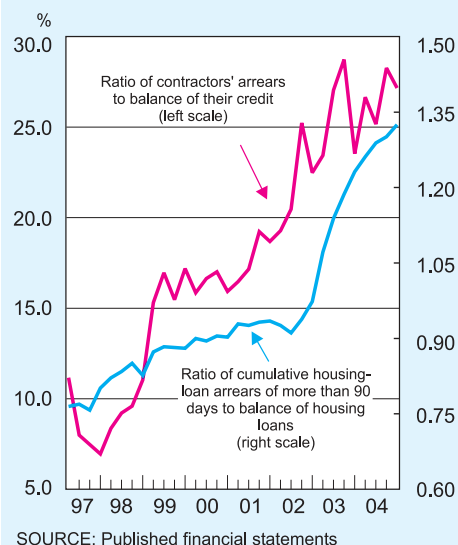
**Figure 1.7**  
**Balance of Mortgage Banks' Assets and Margins, 1997–2004**



SOURCE: Returns to Supervisor of Banks.

substitution, these income factors were not reflected in the development of overall credit to the public that was examined in the previous section. The growth in housing credit activity came against the background of a 20 percent growth in the volume of housing transactions in the economy, which was centered among second-hand apartments. Concurrently the rollover of old loans increased, a phenomenon that derived from the large reduction in interest rates in the economy, which extended to the area of mortgage activity. The interest rate on CPI-indexed loans reached its lowest level for seven years – 5 percent at the end of 2004 – and continued to fall during the initial months of 2005 (See Figure 1.6). This decrease together with the expectation of a renewed upturn in interest rates, as derived from the rising timing structure of interest rates, greatly increased the feasibility of rolling over loans despite the economic fine involved in this practice. NIS 9.5 billion were

**Figure 1.8**  
**Ratio of Housing-Loan Arrears of more than 90 days to the Balance of Housing Loans vis-à-vis the Ratio of Building Contractors' Arrears to the Balance of their Credit, March 1997 to December 2004**



SOURCE: Published financial statements

repaid in 2004 – 7.5 percent of the credit portfolio, a particularly high rate of early repayments (Table 3.4).

The stabilization of inflation at a low annual level and the reduced inflationary uncertainty increased the feasibility of redirecting housing loans from the CPI-indexed segment to the unindexed segment. As a result, the proportion of CPI-indexed loans fell to 77 percent of total housing loans in 2004 compared with much higher rates until the recent past (94 percent at the end of 2000 for example). At the same time, the proportion of foreign-currency denominated and indexed loans increased, as did the proportion of unindexed loans (10 percent in 2004). (See Figure 1.7.) It should be realized that the replacement of old fixed-rate CPI-indexed loans by foreign-currency indexed or unindexed shekel loans with an interest rate indexed to the prime rate, could expose banks that engage in mortgage activity to credit risks. This is because the development of home-buyers' income does not necessarily match the unindexed interest rates in the market or changes in exchange rates.

## **b. Off-balance-sheet activity**

The banks' off-balance-sheet activity is mainly conducted in two areas – guarantees and liabilities for the granting of credit and activity in derivative financial instruments as detailed below.

**The banks' transactions in the granting of guarantees:**<sup>7</sup> The outstanding guarantees and other liabilities of the five banking groups increased by NIS 25 billion to NIS 269 billion in 2004 (Table 3.5). Most of the increase derived from an NIS 19 billion expansion in the overdraft accounts item and other unutilized credit lines to the public. The main contributor to this growth was the Bank Hapoalim group, which increased its credit lines to households by NIS 14 billion. An NIS 4 billion or 26 percent increase was recorded in the 'liabilities in respect of open credit card transactions' item due to the growth in credit card activity. No major changes in comparison with 2003 were recorded in the remaining items – guarantees of various types and liabilities for the granting of credit that was approved but not utilized.

**Activity in derivative financial instruments:**<sup>8</sup> The multi-year growth trend in derivatives activity at the five banking groups continued in 2004. This activity expanded

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<sup>7</sup> Activity in which the notional balance represents credit risk. These transactions are: LCs, guarantees for securing credit, guarantees for home-buyers under the Law of Sale, other guarantees and liabilities, irrevocable liabilities for the extension of credit that was approved but not granted, liabilities for the issue of guarantees, overdraft accounts, other credit lines, and unutilized credit card credit lines.

<sup>8</sup> The banks can use these instruments for risk hedging purposes and for protecting their economic capital against an unexpected rise in interest rates.

by 10 percent during the year compared with 2003 and totaled NIS 802 billion (in nominal value terms).<sup>9</sup>

Table 1.4 shows that the growth in derivative financial instruments activity derived from two factors. The first factor was an NIS 37 billion increase in interest rate contract transactions, which the banks use in their interest-rate risk management. This increase may have resulted from the considerably volatility in the Libor rate during 2004, which was reflected by a rise in the standard deviation of the 6-month Libor interest rate from 0.08 percent to 0.5 percent (Figure 1.28). The other factor was an NIS 39 billion increase in the 'other contracts' item, which includes contracts in respect of shares, share indexes, future Treasury bills and commodities. This increase derived from the continued recovery in the capital market during the year as reflected by the rise in the volatility of the share indexes: the Maof index (Figure 1.29), the Tel Aviv 100 index and the Tel-Tech index, which rose by 16 percent and 23 percent respectively in 2004. Concurrently, the average daily turnover in the equities market rose by 80 percent to NIS 658 million.

**Table 1.4**  
**Distribution of Balances<sup>a</sup> of Financial Derivatives**  
**Five Major Banking Groups, December 2003 Compared to December 2004**  
(NIS billions)<sup>a</sup>

	Interest contracts	Exchange contracts	Other <sup>b</sup>	Total	Interest contracts	Exchange contracts	Other <sup>b</sup>	Total
	<b>2003</b>				<b>2004</b>			
Leumi	63.4	127.5	22.9	213.8	74.4	135.6	28.4	238.4
Discount	10.1	48.9	6.9	65.9	16.3	55.3	6.7	78.3
Hapoalim	99.4	165.9	11.6	276.8	110.9	145.3	17.2	273.4
Mizrahi	3.9	59.2	17.8	80.9	10.9	65.4	25.4	101.7
First International	7.5	69.9	12.6	90.0	8.5	68.3	33.0	109.7
<b>Total</b>	<b>184.3</b>	<b>471.3</b>	<b>71.7</b>	<b>727.4</b>	<b>220.9</b>	<b>469.9</b>	<b>110.8</b>	<b>801.6</b>

<sup>a</sup> In terms of notinal principal, in current prices.

<sup>b</sup> Contracts based on shares, share indexes, future Treasury Bills and commodities.

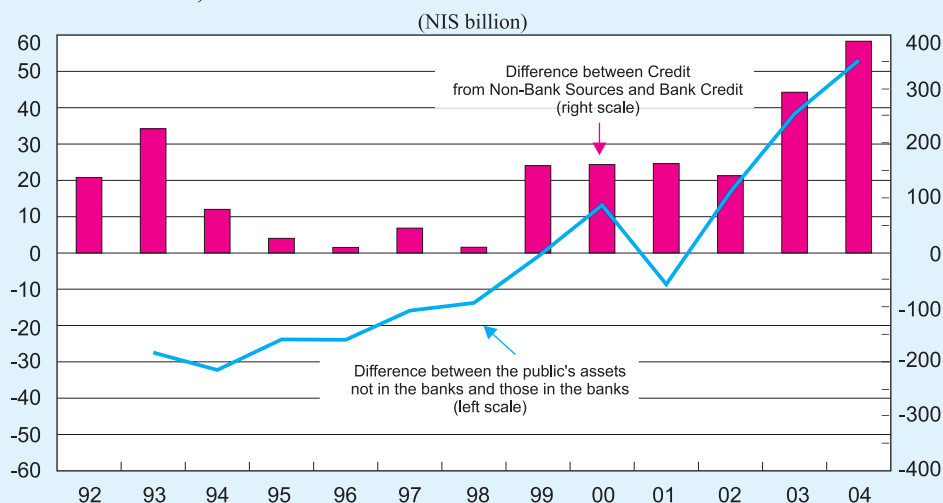
SOURCE: Published financial reports.

<sup>9</sup> This value relates to total futures transactions as reported to the public. For the purpose of calculating the minimum capital ratio, it is necessary to deduct from this value activity in transactions that were offset and futures contracts that are traded in the stock market, Maof options purchased and options written after this deduction. Total futures transactions for the purpose of calculating the minimum capital ratio amounted to NIS 472.2 billion, and the balance-sheet value of this total was NIS 47.2 billion.

### 3. THE SUPPLY OF DEPOSITS TO THE BANKING SYSTEM AND THE PUBLIC'S ASSET PORTFOLIO

The public's supply of sources to the banking system is affected by the real developments that are expected in the economy (the income effect) and the interest rates that the banks offer on them, compared with the yields on substitutes that reflect the level of liquidity and the relative risks inherent in investment in them (the substitution effect). The public's supply of sources that were available to the banks in 2004 were affected by two main developments that acted in opposing directions: The public's asset portfolio expanded due to the recovery in economic activity, which led to an increase in households' disposable income and that was accompanied by buoyant activity in the money and capital markets in Israel and worldwide - the income effect. But at the same time, the substitution effect resulted in the redirection of sources from the banking system to the money and capital markets. The value of the public's financial assets totaled NIS 1,441 billion in 2004, an increase of 7.4 percent compared with 2003 (Table 1.5). The substitution effect took hold as a result of the large growth in the profits of publicly-traded companies and the continued downturn in interest rates, which reduced the yield on bank deposits and increased the profits of the firms traded. The growth in demand for investment in the capital markets in itself led to a 21 percent increase in the issued capital of the listed firms (Figure 1.9). As a result of these developments, the proportion of the public's

**Figure 1.9**  
**Difference between the Public's Assets not in the Banks and those in the Banks, and the Difference between Credit from Non-Bank Sources and Bank Credit,<sup>a</sup> 1992-2004**



<sup>a</sup> Business credit excluding credit to individuals.

SOURCE: Based on Returns to the Supervisor of Banks, the Annual Report of the Commissioner of the Capital Market, Insurance and Savings, and the Tel Aviv Stock Exchange.



assets outside of the banking system increased at the expense of the deposits of the public at the banks. Contributing to the move to tradable assets in the stock market was the Bank of Israel's policy of directing the banks' source surplus from deposits with it to the public's direct investment in Treasury bills. This development was made possible by the abolition of the Treasury bill ceiling in 2002. At the end of 2004, the balance of Treasury bills held by the public totaled NIS 73 billion compared with NIS 55 billion at the end of 2003 and NIS 43 billion at the end of 2002. The diversification of the assets traded ('certificates basket' for example), the increased sophistication of trading (such as the activation of market makers, the expansion of trading in derivative assets, and the regulatory coverage provided for short transactions), and the introduction of systems for trading in assets that in the past were not available for trading (private allotments of non-tradable bonds<sup>10</sup> that were listed for trading for example) all contributed to the shift of sources from the banking system to direct investment in the Tel Aviv Stock Exchange. The launching of a 'certificates basket' on international indexes (such as the S&P 100, investment baskets emulating the NASDAQ 100 index, the FTSE index and the Dow Jones index) enabled customers to invest in the world's leading shares indexes via the Tel Aviv Stock Exchange, thereby contributing to the redirection of structured deposits from the banking system to the stock market.

The shift of tradable assets from the banking system to the capital market also resulted from substantial changes in the investment regulations applying to the established pension funds. The main impact on the established funds of the new investment regulations, which went into effect at the end of 2003, was that they enabled them to move from investment in non-tradable assets such as earmarked bonds to investment in tradable assets.<sup>11</sup> As a result of the previously mentioned developments, the proportion of assets deposited with the banking system continued to decline. At the end of 2004, this proportion amounted to 36.5 percent, much less than the 42.4 percent average for the years 2002-2003 (Table 1.5). Other reasons for the decline were the impact of the taxation reform (which increased the relative feasibility of equities investments) and the liberalization of the foreign-currency controls, which is increasing the demand for investment in tradable assets abroad.

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<sup>10</sup> Towards the end of 2003 the Tel Aviv Stock Exchange launched a special trading system for non-tradable bonds that until then were not liquid. This system can only be used by institutional investors. The reduced stock of earmarked bonds, concurrent with the publication of new investment regulations applying to the pension funds' investment activities that went into effect in September 2003 increased the need for trading in non-tradable bonds. The stock exchange identified this potential and launched a new trading arena as stated, making it possible to increase the supply of non-tradable bonds. This helped to match bids (which increased during the year) with offers that had not existed in the past. The process was also fed by insurance policy portfolio managers' move to investment in (tradable and non-tradable) corporate bonds in accordance with the investment regulations that went into force in 2001. Also relevant in this respect are the new directives applied at the beginning of 2005 that require all institutional investors to reevaluate their assets on a daily basis. This reform is another factor that is increasing institutional investors' demand for corporate bonds for which there were no market quotations until then.

<sup>11</sup> These issues were mainly affected by the tax discrimination that had existed with respect to investment in local as compared to foreign securities. This discrimination ended at the beginning of 2005.



**Table 1.5**  
**The Public's Asset Portfolio in Banks and not in Banks,<sup>a</sup> 2000-2004**

Financial Assets	End-of-year balances (NIS billion, December 2003 prices)					Composition (%)					Real change	
	2000	2001	2002	2003	2004	2000	2001	2002	2003	2004	2003-2002	2004-2003
	(in December 2003 prices, NIS billions)					(in current prices, NIS billions)					(percent)	
Unindexed local-currency deposits <sup>b</sup>	255.6	289.9	261.2	278.0	290.4	21.7	23.5	22.1	20.7	20.2	6.4	4.5
Deposits in and indexed to foreign currency <sup>c</sup>	75.7	80.9	86.9	91.9	100.7	6.4	6.5	7.4	6.8	7.0	5.7	9.6
Indexed and earmarked deposits <sup>d</sup>	73.0	66.4	64.8	73.7	86.8	6.2	5.4	5.5	5.5	6.0	13.8	17.8
Deposits	103.9	99.1	106.6	80.0	48.3	8.8	8.0	9.0	6.0	3.4	-24.9	-39.6
Total in banks <sup>e</sup>	<b>508.4</b>	<b>536.3</b>	<b>519.4</b>	<b>523.6</b>	<b>526.2</b>	<b>43.1</b>	<b>43.4</b>	<b>44.0</b>	<b>39.0</b>	<b>36.5</b>	<b>0.8</b>	<b>0.5</b>
Cash in hands of public	10.4	12.6	12.7	13.4	14.7	0.9	1.0	<b>1.1</b>	<b>1.0</b>	1.0	5.2	9.8
Traded bonds and Treasury bills <sup>f</sup>	166.6	191.7	202.7	256.0	295.6	14.1	15.5	<b>17.2</b>	<b>19.1</b>	20.5	26.3	15.5
Nontraded bonds <sup>g</sup>	160.3	168.3	175.5	187.0	159.5	13.6	13.6	<b>14.9</b>	<b>13.9</b>	11.1	6.5	-14.7
Shares <sup>h</sup>	238.1	237.2	169.2	260.6	339.4	20.2	19.2	<b>14.3</b>	<b>19.4</b>	23.6	54.0	30.2
Residents' investments abroad	95.3	90.5	101.5	101.4	105.7	8.1	7.3	<b>8.6</b>	<b>7.6</b>	7.3	-0.1	4.2
Total not in banks	<b>670.6</b>	<b>700.1</b>	<b>661.0</b>	<b>818.3</b>	<b>914.9</b>	<b>56.9</b>	<b>56.6</b>	<b>56.0</b>	<b>61.0</b>	<b>63.5</b>	<b>23.8</b>	<b>11.8</b>
Total assets of the public	<b>1,179</b>	<b>1,236</b>	<b>1,180</b>	<b>1,342</b>	<b>1,441</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>14</b>	<b>7</b>
In provident institutions <sup>i</sup>	366.4	384.2	379.5	425.7	458.9	31.1	31.1	<b>32.2</b>	<b>31.7</b>	31.8	12.2	7.8
Of which In provident funds <sup>j</sup>	127.2	129.4	117.5	134.7	147.0	10.8	10.5	<b>10.0</b>	<b>10.0</b>	10.2	14.6	9.1
Total assets of mutual funds	48.6	65.8	45.0	83.2	101.1	4.1	5.3	<b>3.8</b>	<b>6.2</b>	7.0	84.9	21.5
Direct holdings of public <sup>k</sup>	381.1	396.9	360.2	475.9	588.5	32.3	32.1	<b>30.5</b>	<b>35.5</b>	40.8	32.1	23.7

<sup>a</sup> The public does not include the government, the Bank of Israel, the commercial banks or the mortgage banks.

<sup>b</sup> Including unindexed earmarked deposits.

<sup>c</sup> Including time deposits, unrestricted resident deposits, unrestricted resident deposits - compensation, residents' foreign currency deposits and non-resident deposits of residents of Israel.

<sup>d</sup> Including deposits approved for the granting of loans of affiliated companies and others.

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

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

<sup>g</sup> Designated government bonds and corporate non-traded private bonds.

<sup>h</sup> Shares held by the public and provident funds, not including the holdings of foreign residents and the government.

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

<sup>j</sup> Including provident and compensation funds and study funds.

<sup>k</sup> Including cash held by the public, Treasury Bills, unindexed bonds ("Gilon" and "Shahar"), CPI and dollar-indexed bonds, shares held by the public and investments by Israeli citizens abroad.

SOURCE: Reports to the Bank of Israel and processed data of the Research Unit of the Supervisor of the Banks and the Monetary Department

## PART 2

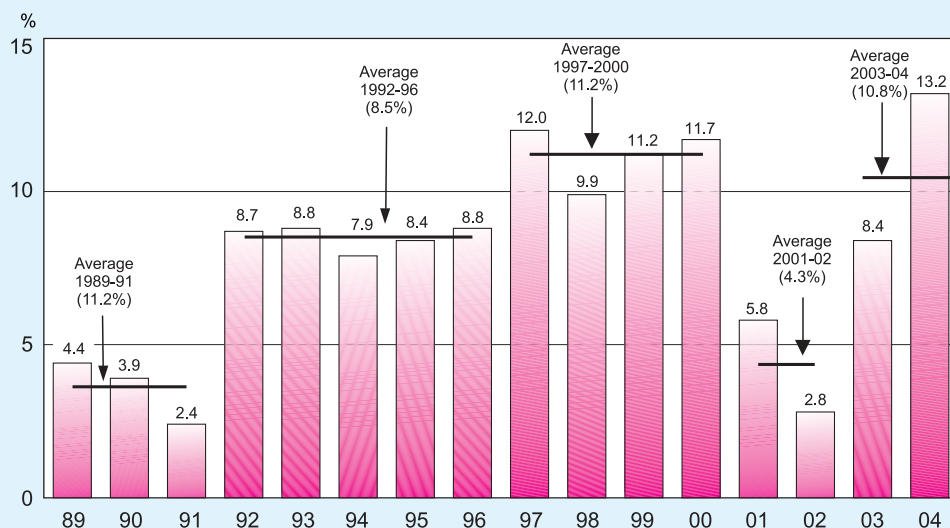
# FINANCIAL RESULTS OF THE FIVE BANKING GROUPS

## 1. PROFIT AND PROFITABILITY OF THE BANKING GROUPS

The substantial improvement in the financial results of the five largest banking groups that began in 2003 became even more notable in 2004. The total profit<sup>1</sup> of the largest banking groups<sup>2</sup> rose by 62 percent compared with 2003, and reached a record NIS 5,331 million compared with NIS 3,293 million in 2003 (Table 1.6).

The return on equity (ROE) of the five banking groups rose sharply, from 8.4 percent in 2003 to 13.2 percent in 2004 (Figure 1.10) – a record level that exceeded the multi-year average of 9.1 percent for the past decade. Although all of the banking groups recorded a large increase in ROE (except the Mizrahi group, where the increase was only slight), the lack of uniformity among the groups is striking: 14.3 percent at the Bank Leumi group, 15.5 percent at the Bank Hapoalim group, 10.3 percent at the Bank Discount group, 10.7 percent at the Bank Mizrahi group and 7.2 percent at the First International Bank group (Figure 1.11).

**Figure 1.10**  
**After-Tax Return on Equity (ROE), the Five Major Banking Groups, 1989-2004**

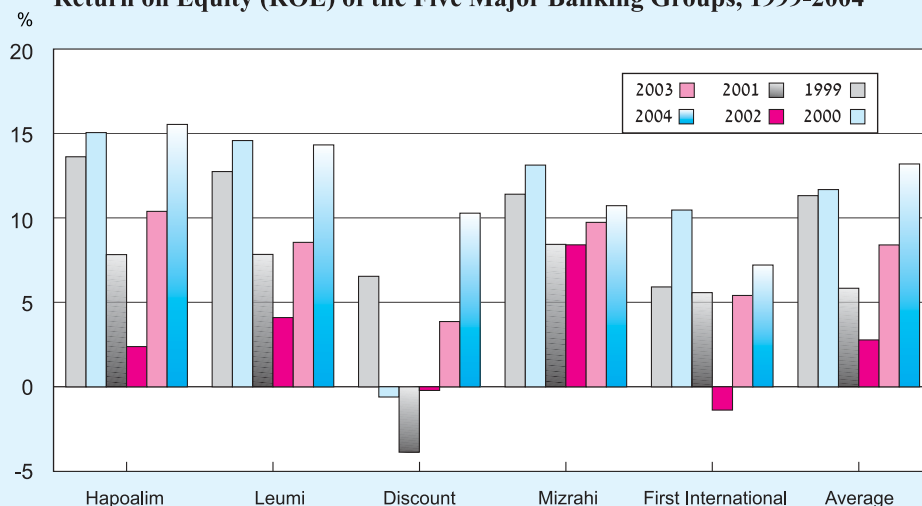


SOURCE: Published financial statements and Bank of Israel Banking Supervision Research Unit.

<sup>1</sup> Defined as net income plus minority interest and translation adjustments charged to capital.

<sup>2</sup> The Hapoalim group, the Leumi group, the Discount group, the Mizrahi group and the First International group.

**Figure 1.11**  
**Return on Equity (ROE) of the Five Major Banking Groups, 1999-2004**



SOURCE: Published financial statements.

The growth in net income led to an expansion in the banking groups' equity capital, which was partly offset by NIS 2.1 billion of dividend that was paid/declared.<sup>3</sup> As a result, total shareholders' equity (the banks' capital, including minority interest) rose from NIS 43.5 billion at the end of 2003 to NIS 46.4 billion at the end of 2004.

The increase in the five banking groups' profits in 2004 compared with 2003 mainly derived from an NIS 1.5 billion growth in net interest income before loan-loss provision and an NIS 1.0 billion decrease in the loan-loss provision. The rise in non-interest income was fully offset by a similar increase in operating expenses. Accordingly, non-interest income had no effect on total profit.

The rate of provision for taxes in 2004 was 42.4 percent of before-tax profit, 1.9 percentage points less than in 2002. The decrease in the rate is partly attributed to a reduction in the statutory rate of tax from 45.76 percent in 2003 to 44.52 percent in 2004.<sup>4</sup> Despite the decrease in the rate of provision for taxes, the actual provision for taxes increased by NIS 0.9 billion compared with 2003 due to the growth in non-interest income.

<sup>3</sup> In 2004 the Hapoalim group distributed dividend of NIS 1.2 billion, the Leumi group declared a dividend of NIS 1 billion, and the Mizrahi group distributed dividend of NIS 130 million.

<sup>4</sup> Under the Law for the Amendment of the Income Tax Ordinance that was passed in 2004 and that stipulates a gradual decrease in the rate of corporation tax, the overall rate of tax applying to the banks will also be reduced, but to a lesser extent due to their status as 'financial institutions': in 2005 – to 43.59 percent; in 2006 – to 41.88 percent; and from 2007 onwards – to 40.17 percent.

Subsidiary and affiliated companies' contribution to after-tax profit totaled NIS 0.6 billion in 2004, an increase of 94 percent compared with 2003 that derived from the profits recorded by non-

financial companies that are held by the banks. The main contribution to this item came from the Leumi group, in respect of the profits from its holdings in the Israel Corporation and Africa Israel.

An additional NIS 0.3 billion contribution to the growth in after-tax profit derived from the Hapoalim group's profits in respect of extraordinary transactions – principally a profit from a decrease in the rate of holding resulting from a public offering and the sale of shares of Signature Bank.

**Table 1.6**  
**Adjusted Capital and Profitability of the Five Major Banking Groups, 2000-2004**

	(NIS million)				
	2000	2001	2002	2003	2004
	<b>December 2002 prices</b>			<b>Current prices<sup>a</sup></b>	
1. Equity <sup>b</sup>	38,151	39,918	39,726	43,507	46,412
2. Capital for calculating ROE <sup>c</sup>	34,765	37,902	39,970	39,308	40,414
3. Ordinary before-tax income	6,409	4,623	2,299	5,707	7,811
4. Tax provision	3,059	2,281	1,029	2,529	3,413
5. Groups' share of profit of companies included on an equity basis	395	-184	-96	342	662
6. Extraordinary net income <sup>d</sup>	365	-11	-62	-15	292
7. Cumulative effect of change in accounting method <sup>e</sup>	-29	69	-17	-212	-21
<b>8. Total profit (3)-(4)+(5)+(6)+(7)<sup>f</sup></b>	<b>4,080</b>	<b>2,216</b>	<b>1,095</b>	<b>3,293</b>	<b>5,331</b>
Percent	(percent)				
9. Profitability on ordinary operations before tax (3)/(2)	18.4	12.2	5.8	14.5	19.3
10. Return on equity (ROE)(8)/(2)	<b>11.7</b>	<b>5.8</b>	<b>2.7</b>	<b>8.4</b>	<b>13.2</b>
<b>11. Return on assets (ROA)<sup>g</sup></b>	<b>0.58</b>	<b>0.30</b>	<b>0.14</b>	<b>0.42</b>	<b>0.67</b>

<sup>a</sup> In 2004 - cancellation according to the December 2003 index; in 2003 - cancellation of the adjustment for inflation according to the December 2002 index. Previous years are in prices adjusted to the December 2002 index.

<sup>b</sup> Including minority rights.

<sup>c</sup> Beginning-of-year capital with the addition of the share of external shareholders and the weighted issues according to date of issue *minus* dividends according to dates of payment.

<sup>d</sup> In 2003, the Discount Group includes a decrease in the provision for a decline in value due to investment of NIS 173 million in a company included on an equity basis.

<sup>e</sup> Includes adjustments from the translation of the financial reports of "autonomous companies" abroad.

<sup>f</sup> Includes the share of external shareholders in the consolidated profit.

<sup>g</sup> Weighted average of the assets during the year.

SOURCE: Published financial reports.

## 2. DEVELOPMENTS IN INCOME AND EXPENSES

### a. Net interest income before loan-loss provision

The improvement in net interest income before loan-loss provision at the five banking groups continued in 2004. This item expanded by NIS 1.5 billion or 8.4 percent compared with 2003 and by NIS 2.9 billion compared with 2002. In 2004 as in 2003, net interest income increased at all of the five banking groups. The largest contribution, a 33 percent growth in this profit, was recorded at the Discount group; and the smallest contribution, a 5 percent growth, was recorded at the First International group (Table 1.7).

The growth in net interest income was reflected by an improvement in the aggregate net interest margin, which expanded by 0.13 percentage points from 1.79 percent in 2003 to 1.92 percent in 2004. Taken into account in the net interest margin is the banks' income from activity in derivative financial instruments. Net interest income from these instruments totaled NIS 1.3 billion in 2004 compared with NIS 4.6 billion in 2003. Since transactions in respect of this income were conducted within the framework of the banks' indexation base management, neutralizing reverse effects in the components of financing profit, these transactions should be related to as an integral part of income and expenses in respect of financial assets and liabilities.

An examination of the growth in the financing profit of the five banking groups by indexation segment (Figure 1.12, Table 1A.6 and Table 1A.7) gave the following results:

1. The main contribution to the growth in financing profit (42 percent of the growth) derived from local activity in the foreign-currency segment. The transaction volume in this segment is the largest, at 40 percent, and amounted to NIS 409 billion. Derivative financial instruments accounted for 50 percent of this activity. The slight expansion in the interest spread<sup>5</sup> in this segment, from 0.68 percent in 2003 to 0.78 percent in 2004, together with the large volume of activity as stated, increased the financing profit from the segment by NIS 660 million.
2. The financing profit from the CPI-indexed local currency segment increased by NIS 530 million to NIS 3.3 billion. The net interest margin<sup>6</sup> expanded by 0.4 percentage points to 1.71 percent in 2004. The growth in profit largely resulted from the 0.9 percent positive effect of the known index in 2004 (compared with the 1.96 percent negative index in 2003) on the surplus of monetary assets in the

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<sup>5</sup> Calculated as the difference between financing income (including the effect of derivative instruments) divided by the balance of assets and financing expenses (including the effect of derivative instruments), divided by the balance of liabilities.

<sup>6</sup> Calculated as financing expenses minus financing income ((including the effect of derivative instruments) in the segment, divided by the balance of assets (which produce income).

**Table 1.7****Main Items in Consolidated Profit and Loss Statements, the Five Major Banking Groups, 2003 and 2004**

(NIS million, December 2004 prices)

	Leumi		Hapoalim		Discount		Mizrahi		First Intl.		Total		Contribution to profit (change in millions)	Rate of change in percent
	2003	2004	2003	2004	2003	2004	2003	2004	2003	2004	2003	2004		
Net interest income before loan-loss provision	5,975	6,359	6,715	7,071	2,983	3,489	1,439	1,652	1,349	1,432	18,461	20,003	1,542	8.4
Loan-loss provision	1,883	1,514	2,359	1,768	845	880	300	359	612	437	5,999	4,958	1,041	-17.4
Net interest income after loan-loss provision	4,092	4,845	4,356	5,303	2,138	2,609	1,139	1,293	737	995	12,462	15,045	2,583	20.7
Total operating and other income	3,216	3,403	3,665	4,215	2,091	2,200	955	1,036	812	832	10,739	11,686	947	8.8
<i>of which</i> Fee income	2,507	2,718	2,929	3,199	1,648	1,745	852	874	672	718	8,608	9,254	646	7.5
Total operating and other expenses	5,603	5,488	5,959	6,378	3,605	4,013	1,417	1,679	1,280	1,362	17,864	18,920	1,056	5.9
<i>of which</i> Salaries and related expenses	3,370	3,248	3,526	3,742	2,264	2,511	882	1,089	785	820	10,827	11,410	583	5.4
Ordinary before-tax income	1,840	2,760	2,190	3,140	654	796	714	650	309	465	5,707	7,811	2,104	36.9
Tax provision	824	1,244	861	1,361	371	342	342	255	131	211	2,529	3,413	884	35.0
Ordinary after-tax income <sup>a</sup>	1,016	1,516	1,329	1,779	283	454	372	395	178	254	3,178	4,398	1,220	38.4
Other income <sup>b</sup>	121	388	76	379	-70	158	-10	10	-2	-2	115	933	818	711.3
Shareholders' net income	<b>1,145</b>	<b>1,864</b>	<b>1,357</b>	<b>2,107</b>	<b>154</b>	<b>556</b>	<b>335</b>	<b>386</b>	<b>156</b>	<b>242</b>	<b>3,147</b>	<b>5,155</b>	<b>2,008</b>	<b>63.8</b>
Total income for calculation of return on equity <sup>c</sup>	1,137	1,904	1,405	2,158	213	612	362	405	176	252	3,293	5,331	2,038	61.9
Capital for the calculation of ROE <sup>d</sup>	<b>13,293</b>	<b>15,262</b>	<b>13,892</b>	<b>16,269</b>	<b>5,955</b>	<b>6,835</b>	<b>3,778</b>	<b>4,139</b>	<b>3,497</b>	<b>3,907</b>	<b>40,414</b>	<b>46,412</b>	<b>5,998</b>	<b>14.8</b>
Ordinary ROE, net (%)	7.6%	11.4%	9.8%	12.8%	5.4%	7.6%	10.0%	10.5%	5.5%	7.3%	8.1%	10.9%		
Total ROE (%) <sup>e</sup>	<b>8.6%</b>	<b>14.3%</b>	<b>10.4%</b>	<b>15.5%</b>	<b>4.1%</b>	<b>10.3%</b>	<b>9.7%</b>	<b>10.7%</b>	<b>5.4%</b>	<b>7.2%</b>	<b>8.4%</b>	<b>13.2%</b>		
Total return on assets (ROA)(%)	0.50%	0.76%	0.60%	0.83%	0.20%	0.43%	0.50%	0.50%	0.30%	0.38%	0.40%	0.67%		

<sup>a</sup> Including profit/loss from sale of shares.<sup>b</sup> Includes the group's share in the profits of companies included on an equity basis, net income from extraordinary activities, the cumulative effect of a change in the method of accounting and also translation adjustments for companies included on an equity basis from the changes in equity.<sup>c</sup> Total income is defined as net income plus the share of minority interests and translation adjustments imputed to equity.<sup>d</sup> Equity and minority interests at beginning of year plus issues according to time of issue minus dividends paid, according to time paid.<sup>e</sup> The calculation was based on net annual income divided by equity (as defined in note d above) at the end of the previous year.

SOURCE: Published financial statements.

CPI-indexed local currency segment.<sup>7</sup> The growth in profit in respect of the effect of the index was partly offset by an 8.5 percent decrease in the volume of activity in the CPI-indexed segment.

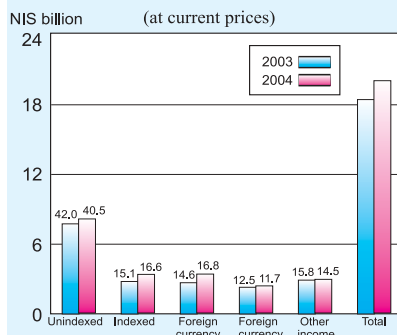
3. The proportion of the financing profit in the unindexed shekel segment to total profit from financing activity remained high in 2004, at 41 percent. The net interest margin in this segment remained unchanged compared with 2003 (2.7 percent). The increased volume of activity in the segment raised financing profit by NIS 350 million, and partly derived from the redirection of credit from the CPI-indexed segment.

The developments described above led to an aggregate 10 percent (NIS 1.6 billion) growth in the banks' net income from classical financial intermediation and from activity in derivative instruments in the different indexation segments (Table 3.6).

Other financing income declined by 10 percent compared with 2003, to NIS 2.5 billion, because of two opposing developments: (1) A 50 percent increase in income from the collection of interest on problem loans. This income totaled NIS 800 million and accounted for 43 percent of other income. The increase resulted from an improvement in the repayment ability of borrowers, including those borrowers whose debts were classified in the past as problem loans.<sup>8</sup> (2) A 46 percent decrease in income in respect of profits from the sale of bond investments and adjustments to fair value of bonds for trading, which totaled NIS 524 million (28 percent of other income compared with 50 percent in 2003).

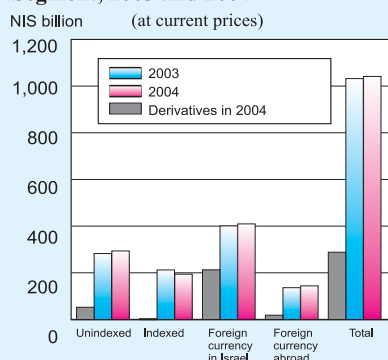
**Figure 1.12**

**a. The Contribution of the Various Indexation Segments to the Profit of the Five Major Banking Groups, 2003 and 2004**

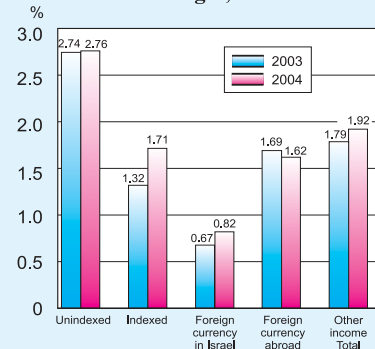


The numbers show the share (in percent) of the segment in total net interest income.

**b. Uses by Financial Intermediation Segment, 2003 and 2004**



**c. Net Interest Margin, 2003 and 2004**



SOURCE: Published financial statements.

<sup>7</sup> As of December 31 2004 the surplus of assets over liabilities in the CPI-indexed segment amounted to NIS 27.4 billion. The effect of the index, as stated, increased the financing profit in that segment by NIS 600 million.

<sup>8</sup> The collection of doubtful debt and collection on account of non-income bearing loans will be initially calculated as collection of interest. This interest will be charged to the 'other financing income' item in a note to the statement of profit and loss. (For details, see Proper Banking Management Directive No. 314.)

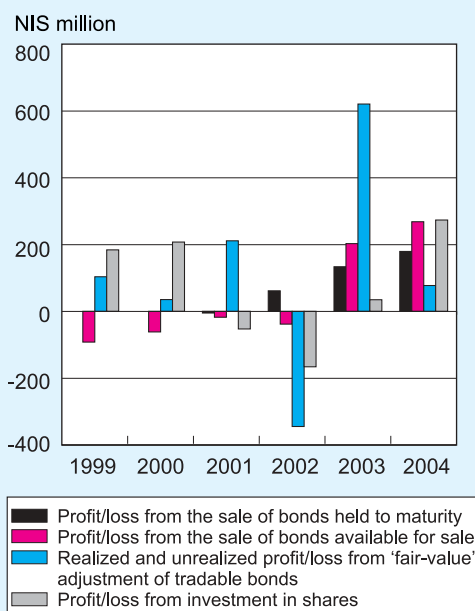
The large decrease in this income item in 2004, which resulted from developments in bonds prices<sup>9</sup> in the capital market is attributed to the very high NIS 970 million profits that the banks recorded in respect of this item in 2003 (Figure 1.13). Moreover, in 2003 these profits were the main source of the growth in net interest income before loan-loss provision following the losses that the banks incurred from bond investments in 2002. The changes in these profits derived from the interest rate adjustments in the economy, which are a factor external to the banking system and of a cyclical nature. After interest rates had risen in 2002, and thereby contributed to a decrease in the realization price and fair value of the bond portfolios at the banks, the rates fell heavily in 2003,<sup>10</sup> contributing to an increase in the realization price and the fair value of bond portfolios at the banks. In 2004, when the Bank of Israel's interest rate was cut from 5.2 percent to 3.9 percent, a further 1.3 percentage point decrease was recorded in the short-term interest rate while the long-term interest rate (the real yield-to-maturity on government bonds) remained unchanged. But in 2004, the Libid interest rate rose sharply, from 1.3 percent in 2003 to 3.0 percent in 2004), leading to losses from the revaluation of dollar-denominated bond portfolios. As a result of these developments, the banks recorded profits from the sale of bond portfolios and losses from the revaluation of their holdings in bond portfolios, mainly dollar-denominated portfolios.

## b. Loan-loss provision

The loan-loss provisions of the five banking groups fell by NIS 1 billion or 17.4 percent in 2004 compared with 2003, to a total of NIS 5 billion.

In 2001 the deterioration in the local and worldwide economic situation led to a substantial increase in loan-loss provisions during that year compared with the previous years (Figures 1.14). In 2002, which was the most difficult year for the banking system in the past decade, the five banking

**Figure 1.13**  
**Profit/Loss Deriving from Changes in Bond Prices on the Capital Market and from Investments in Shares, the Five Major Banking Groups, 1999-2004**



SOURCE: Published financial statements.

<sup>9</sup> Profits/losses from developments in bond prices in the capital market including profits/losses from the revaluation and sale of bonds for trading and the sale of bonds available for sale and bonds held to maturity.

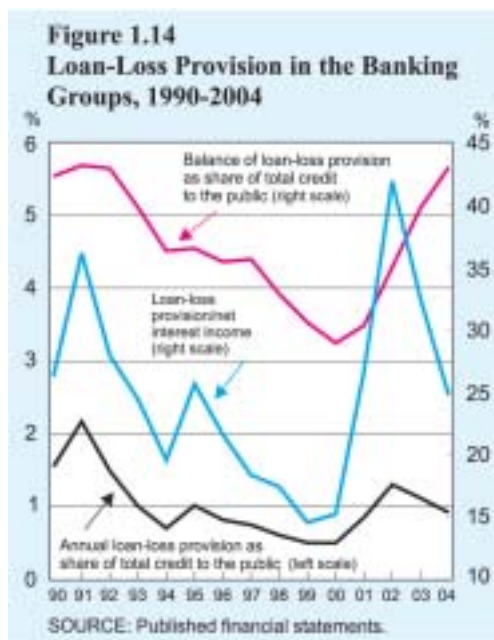
<sup>10</sup> In 2003: for the short term - Bank of Israel's short-term interest rate dropped by 3.9 percentage points, from 9.1 percent to 5.2 percent; for the long term - the real yield-to-maturity on government bonds fell by 1.4 percentage points, from 5.7 percent to 4.3 percent.



groups recorded provisions of NIS 7.2 billion. As a result of the recovery in the economy from mid-2003, all of the banking groups recorded a large decrease in provisions. The decrease in the five banking groups continued during 2004 due to the sustained economic recovery in Israel and abroad. But during 2004 in contrast to 2003, the decrease in provisions did not encompass all of the large banking groups. The Hapoalim group and the Leumi group, which accounted for most of the decline in provisions, recorded large respective decreases of 25 percent or NIS 590 million and 20 percent or NIS 370 million respectively. The First International group also recorded a large decrease of 29 percent or NIS 175 million. However, the Mizrahi group was notable for a 20 percent or NIS 60 million increase in provisions, mainly due to an increase in provisions in respect of large borrowers in the real estate industry. The Discount group recorded a moderate 4 percent increase in provisions, which largely derived from an NIS 95 million growth in provisions at the consolidated company Discount Mortgage Bank in respect of loans that were granted to the construction industry (Table 1.7).

Despite the substantial decrease in loan-loss provisions during the last two years, which contributed greatly to a rise in profit and profitability as stated, the level of provisions remained higher than the long-term average for the last decade. The ratio of the loan-loss provision to outstanding credit to the public at the five banking groups fell from 1.31 percent in 2002 to 1.12 percent in 2002 and to 0.92 percent in 2004 (Figure 1.14). This is higher than the 0.65 percent average ratio for the years 1997 to 2001, prior to the peak year for provisions (2002). These high rates of provision reflect the low quality of the credit portfolio in the Israeli banking system during the last three years that resulted from a decline in the financial position and repayment ability of borrowers in the economy, part of whom had yet to recover from the deep recession

at the beginning of the decade. The low quality of the credit portfolio is also apparent from the NIS 2.9 billion or 5 percent increase in the balance of problem loans in 2004. This increase derived from the growth in problem loans at the Hapoalim and Leumi groups, which was partly offset by a decrease in such loans at the Discount and Mizrahi groups. (Problem loans at the First International group remained stable.) The ratio of problem loans to total credit<sup>11</sup> remained stable compared with 2003 at 9.7 percent.



<sup>11</sup> Including the credit value equivalent of off-balance-sheet activity.

Since the amount of the general and supplementary provision<sup>12</sup> is minimal as is known, the current loan-loss provision consists almost entirely of the specific provision (Table 3.8). The calculation of specific loan-loss provisions is based on estimates regarding the losses expected on loan activity, which are measured as the difference between the amount of credit and the estimate of the borrower's repayment ability plus other sources of income and/or collateral. These estimates are calculated on the basis of a number of common variables relating to the borrower, such as business activity, credit rating, the extent to which he adhered to his liabilities in the past and an estimate of the value of his collateral at the bank. Macroeconomic parameters thereby affect to a considerable extent the estimate of the customer's repayment ability and the quality of his collateral. The recovery in the economy in 2004 had a favorable effect on many companies in most industries and as a result, on the repayment ability of borrowers in the business sector. The upturn in the capital market had the effect of increasing the value of customers' securities collateral. These developments led to a decrease in specific provisions.

An examination of provisions by principal industries (Table 1.16) reveals a striking increase in provisions in respect of the construction and real estate industry, which has long suffered from a slowdown in activity. The ratio of the loan-loss provision to total credit<sup>13</sup> in this industry reached 1.3 percent, compared with an average of 0.5 percent in the other principal industries. However, the provisions in respect of most other principal industries decreased as a result of the recovery in economic activity from mid-2003, which was reflected by high respective growth rates of 4.3 percent in GDP and 6.1 percent in business-sector product in 2004. Major industries for which provisions were reduced were manufacturing, telecommunications and computer services, and hotels and accommodation services. Also reduced were provisions in respect of the households sector and borrowers' activity abroad.

To summarize: despite the reduction in loan-loss provisions in 2004, they remained higher than the long-term average (about NIS 5 billion in 2004, compared with an average of about NIS 2.8 billion a year in 1997–2001). Moreover, the high level of problem credit indicates that loan-loss provisions are likely to remain high in the next few years. On the other hand, the positive economic developments (the improvement in most economic indices, and the rise in the capital-market indices), the recovery in most of the principal industries (apart from the real estate industry and some companies in the manufacturing industry), and the measures taken by the banks to improve their credit portfolios, all these serve to lower the loan-loss provision.

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<sup>12</sup> Under the Supervisor of Banks' directives of 1992, the banks record a 'supplementary provision' for loan losses instead of a general provision. The supplementary (additional) provision is determined in accordance with the Supervisor of Banks' directives on the basis of the risk criteria of the entire bank credit portfolio. For details, see Box 3.1 in the Supervisor of Banks' Annual Survey for 2001.

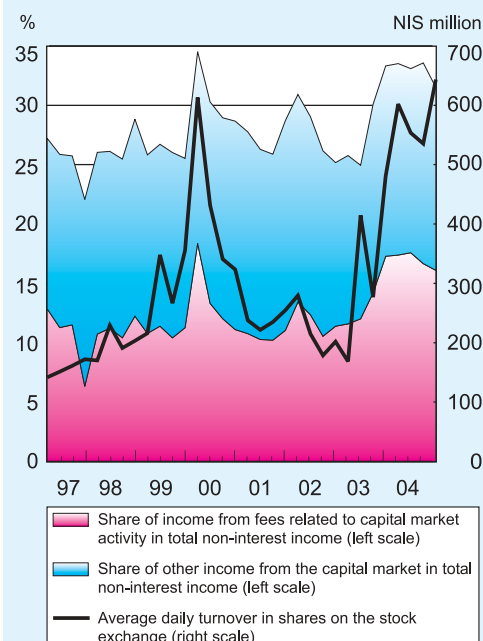
<sup>13</sup> Including the credit value equivalent of off-balance-sheet activity.

### c. Non-interest and other income

The recovery in the economy that was reflected by respective annual GDP growth rates of 4.3 percent and 1.3 percent during the years 2004 and 2003 (as compared to negative growth rates in the previous two years) spurred a renewed expansion in financial services, including commission-earning services. As a result of these developments, non-interest and other income rose by 9 percent, from NIS 9.5 billion in 2002 to NIS 10.7 billion in 2003 and NIS 11.7 billion in 2004 (Table 3.9).

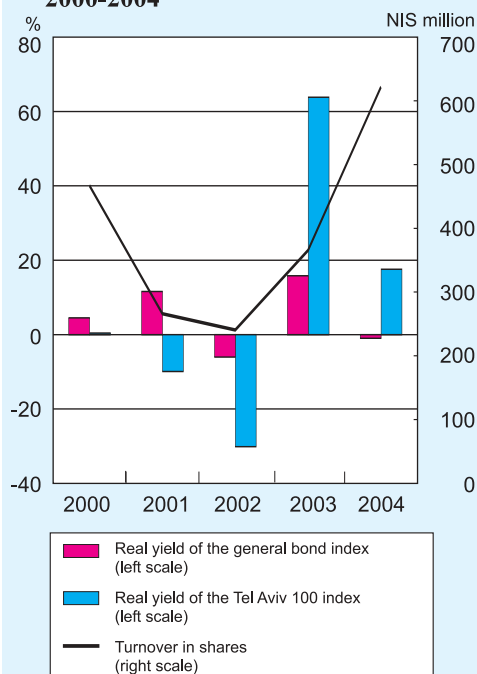
The banks' non-interest and other income was affected by real economic activity (such as investment and saving, consumption and foreign trade), and capital market activity (such as customers' activity in securities, securities underwriting and distribution, and provident and mutual fund management). In the analysis presented below, we made a distinction between the development of income deriving from the operation of the regular banking services network in the economy (64 percent of total non-interest

**Figure 1.15**  
**Share of Income from Capital-Market Activity of the Five Major Banks in Total Non-Interest Income, and the Average Daily Turnover in Shares on the Stock Exchange, March 1997 to December 2004**



SOURCE: Returns to the Supervisor of Banks, and the Tel Aviv Stock Exchange.

**Figure 1.16**  
**Real Annual Yield of the Tel Aviv 100 Index, the General Bond Price Index and the Average Daily Turnover in Shares, 2000-2004**



SOURCE: Based on Tel Aviv Stock Exchange data.

income), and the development of income deriving from commissions connected with activity in the capital market<sup>14</sup> (30 percent of total non-interest and other income).<sup>15</sup>

Non-interest income deriving from the operation of the regular banking services network in the economy increased by 4 percent or NIS 273 million to NIS 7.5 billion in 2004. This increase resulted from a growth in the majority of commission income items related to banking services, and in particular from a 10 percent or NIS 176 million expansion in income from credit card commissions. The latter is attributed to a 10.4 percent increase compared with 2003 in credit card transactions, to NIS 107.5 billion.

During recent years the banks exposure to competition in the area of life insurance and apartment insurance led to a decrease in their income from management fees and commissions on these forms of insurance.

The five banking groups' non-interest income from capital market activity increased by NIS 0.8 billion or 27 percent compared with 2003 and totaled NIS 3.5 billion (Figure 1.15). Commission income from securities activity<sup>16</sup> rose at all of the banking groups and totaled NIS 1.7 billion in 2004, an increase of 27 percent and 64 percent compared with 2003 and 2002 respectively (Table 3.9). This development resulted from a large growth in activity on the Tel Aviv Stock Exchange, as reflected by a rise in turnover and the level of prices in the capital market (Figure 1.16).<sup>17</sup> The remaining growth in income from capital market activity derived from a sharp 66 percent or NIS 0.4 billion rise in the banking groups' income from mutual fund management fees. This was the first time that the banks' income from mutual fund management (which totaled NIS 940 million) exceeded their income from provident fund management (NIS 875 million). The large increase resulted from the buoyant level of activity in the stock market, which prompted investors to move their money to mutual funds. The mutual fund assets managed by the five largest banks rose by NIS 12 billion compared with 2003. The five banking groups' income from provident fund management fees remained unchanged in 2004.

#### **d. Operating and other expenses**

The improvement in non-interest income was completely offset by an NIS 1 billion increase in operating expenses, to a total of NIS 18.9 billion. This increase mainly derived from a 5 percent (NIS 0.6 billion) growth in the employee-related expense component, which accounts for 60 percent of total operating expenses (Table 3.9). The growth in the employee-related expenses component mainly resulted from an NIS 460

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<sup>14</sup> This income is divided into income from operating commissions (from customers' securities activity, custody fees, and securities underwriting and distribution), and other income (from provident and mutual fund management fees).

<sup>15</sup> The balance of non-interest income (3.5 percent) includes profits from severance pay funds (which fell by NIS 320 million in 2004) and profits from the sale of shares (which grew by NIS 240 million). These items are affected indirectly by developments in the capital market.

<sup>16</sup> Income from customers' activity in securities, from custody fees, and from securities underwriting and distribution.

<sup>17</sup> The correlation between the proportion of income from the capital market to total non-interest income, and average daily turnover in the stock market is 0.79. See Figure 1.15.

million or 6.3 percent increase in direct salary expenses compared with 2003, to a total of NIS 7.7 billion. The growth in these expenses during 2004 followed an increase in the previous year. During the year reviewed, most of the increase derived from a 15 percent growth at the Hapoalim group (where they accounted for 34 percent of the total direct salary expenses of the five groups) that resulted from an increase in the bonus paid to employees due to an improvement in profitability and the recruitment of new employees at the bank's overseas offices. Direct salary expenses at the Leumi group fell by a slight 2 percent in 2004. The group retained a high level of salary expenses following a 10 percent growth in these expenses in 2003. The 6.5 percent rise in these expenses at the Mizrahi group resulted from salary adjustments, an increase in the number of employees at the group, and the payment of a bonus in connection with the merger of Bank Tefahot. At the Discount group, direct salary expenses rose by 7.1 percent due to an appreciation grant and a grant in connection with the privatization of the bank. The growth in the number of employees at the First International group had the effecting of increasing that group's salary expenses by 1.5 percent.

Voluntary retirement expenses amounted to only NIS 300 million in 2004, equivalent to 2.7 percent of total employee-related expenses. This represented a decrease of 13 percent compared with 2003, and a sharp drop of 70 percent compared with 2002 when large one-time voluntary retirement expenses equivalent to 9 percent of total employee-related expenses were recorded. The low expenses on this item in 2004 resulted from a large decrease at the two largest groups compared with previous years, and particularly in comparison with 2002. (The Hapoalim group did not record any early retirement expenses in 2004.) However, in 2004 a number of the banks continued to encourage employees to take early retirement as part of their efficiency-drive strategy. The main contribution to voluntary retirement expenses in 2004 came from the Discount and the Mizrahi groups (at the latter, in respect of the retirement program for employees of Bank Tefahot that was merged within it).

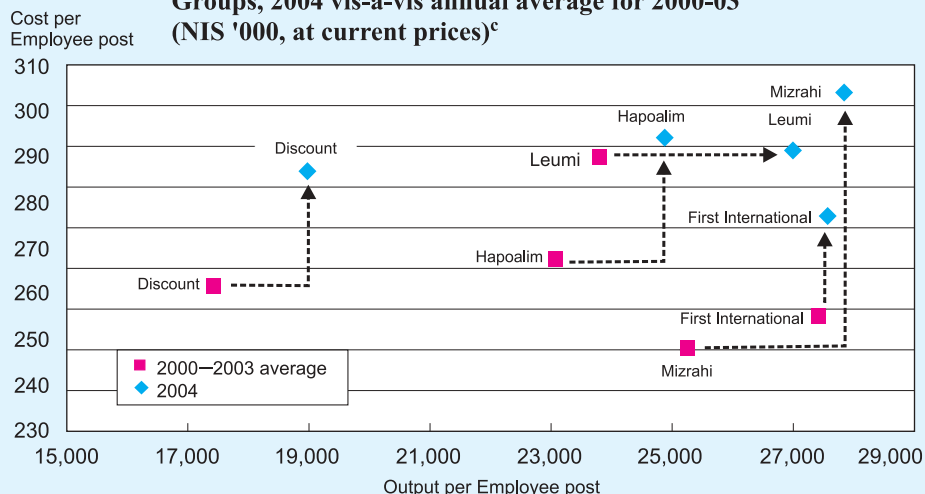
The number of employee posts in the banking system fell heavily from 2002 due to the encouragement of early retirement and employee dismissals. During the last three years, the average monthly number of employee posts dropped by 1,583. (The reduction peaked in 2003, when the number of posts fell by 1,104 compared with 2002.) In 2004 the number of employee posts at the five banking groups fell by 257 (Table 3.10). But in contrast to 2003, the change in the number of posts on a monthly average basis among the groups was not uniform.<sup>18</sup> The number of posts fell by 3.3 percent at the Leumi group, increased at the Mizrahi and First International groups, and remained stable at the Hapoalim and Discount groups.

Output per employee, measured as total balance-sheet assets and the balance-sheet value of off-balance-sheet assets divided by the number of employee posts, serves as

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<sup>18</sup> The number of employee posts at the end of the year (12.31.2004) was 800 higher than at the end of 2003. Most of the increase was recorded at the First International group – 350 posts – which mainly resulted from the acquisition of Investec Bank at the end of the year.

**Figure 1.17**  
**Cost<sup>a</sup> and Output<sup>b</sup> Per Employee Post in the Five Major Banking Groups, 2004 vis-à-vis annual average for 2000-03**  
**(NIS '000, at current prices)<sup>c</sup>**



<sup>a</sup> Salaries and related expenses divided by number of employee posts including those in subsidiaries abroad; includes a translation of the cost of overtime and a budget for staff from manpower companies.

<sup>b</sup> Total balance-sheet assets of the banking group plus balance-sheet value of off-balance-sheet assets.

<sup>c</sup> Until 2002, inflation adjusted using December 2003 CPI.

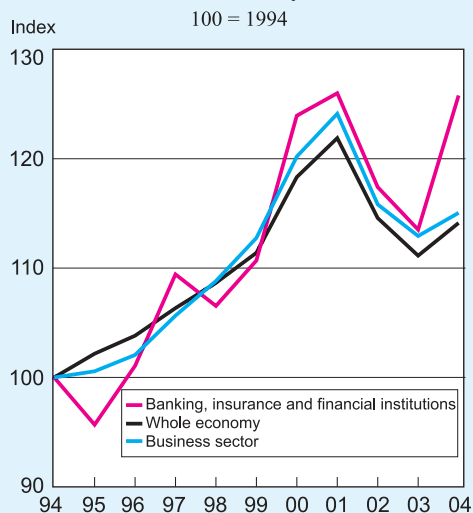
SOURCE: Published financial statements and the Bank of Israel Banking Supervision Research Department.

an index of average employee productivity. During recent years the banks placed an emphasis on a match between the level of remuneration and the level of the bank's portfolio as a whole and the level of average employee productivity in particular. Figure 1.17, which presents the development of output per employee relative to the cost of employing the employee in 2004 compared with the average for the years 2000-2003, reveals a positive relationship between these two elements at all of the banking groups except the First International group. This means that the level of remuneration at the First International group is not matched to the level of average employee productivity. Neither is such a match apparent at the Mizrahi group, as reflected by a higher increase in cost per post relative to output per post. The largest increase in output per post was at the Leumi group, a notable development in view of the stability in cost per post.

The large rise in wages in the banking system during 2004 was particularly striking in comparison with other sectors in the economy. The index of real wages per employee post in the banking, insurance and pension industries surged by 10.8 percent in 2004 compared with 2003, and in comparison with the index of wages per employee post in the economy and in the business sector, which rose by 2.7 percent and 1.9 percent respectively (Figure 1.18).

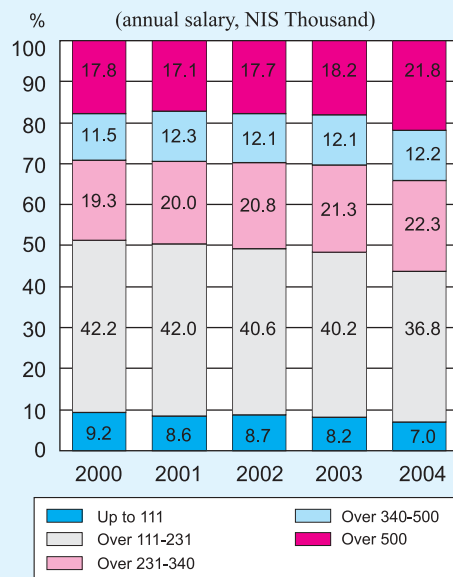
Another source of the wage increase in the banking system during recent years was the change in employee wage distribution. Figure 1.19, which presents the distribution of the wage levels at the commercial banks over time, shows that from 1999 to 2004

**Figure 1.18**  
**Index of Real Wage per Employee Post in**  
**Banking, Insurance and Other Financial**  
**Institutions vis-à-vis in the Business Sector**  
**and in the Whole Economy, 1994-2004**



SOURCE: Based on Central Bureau of Statistics data.

**Figure 1.19**  
**Distribution of Salaries in the**  
**Commercial Banks,**  
**2000-2004**



SOURCE: Returns to the Supervisor of Banks.

the proportion of relatively high wages (over NIS 500 thousand a year) at the banks increased continually concurrent with a continued decrease in the proportion of relatively low wages (up to NIS 231 thousand a year).

As a result of the previously mentioned developments, (a more moderate rate of increase in operating expenses than in non-interest income), the operational coverage ratio, which is defined as the rate of coverage of operating expenses by non-interest income, rose slightly at the five banking groups, from 60 percent in 2003 to 62 percent in 2004, and at the five commercial banks heading the groups, from 55 percent to 56 percent respectively (Table 1.8).



**Table 1.8**  
**Coverage and Efficiency Ratios of the Commercial Banks 2003 and 2004**

Bank	2003		2004	
	Coverage ratio <sup>a</sup>	Efficiency ratio <sup>b</sup>	Coverage ratio <sup>a</sup>	Efficiency ratio <sup>b</sup>
Hapoalim	0.54	1.70	0.59	1.79
Leumi	0.54	1.72	0.56	1.81
Discount	0.54	1.44	0.47	1.29
Mizrahi	0.53	1.44	0.51	1.39
First International	0.62	1.57	0.62	1.56
Average of the Five Major Banks	0.55	1.63	0.56	1.65

<sup>a</sup> Calculated as the ratio of operating and other income to operating and other expenses.

<sup>b</sup> Calculated as the ratio of operating income and profit from financial operations to operating expenses which is known as the efficiency ratio. It is sometimes presented as the ratio of operating expenses to operating income and profit from financial activity.

SOURCE: Published financial reports

The trend in the efficiency ratio was similar to that in the coverage ratio. The efficiency ratio is defined as total non-interest income and net interest income to total operating expenses. An improvement in this ratio indicates that a bank is utilizing more efficiently the factors of production available to it for the purpose of increasing its income (both financing and non-interest income).

Although the improvements in the operational coverage ratio and the efficiency ratio during 2004 were more moderate than in 2003, the level of these ratios during the past two years was higher than the average for recent years. The coverage ratio at the five largest banks during the years 1999 to 2002 averaged 51 percent (compared with 55 percent in the last two years), and the efficiency ratio during those years averaged 1.48 compared with 1.64 in the last two years.

### 3. ANALYSIS OF PERFORMANCE BY SEGMENTS OF ACTIVITY

The banking groups conduct their activity in a number of segments, each of which constitutes a profit center. The division by activities enables the banks' management to analyze their financial results and make the appropriate decisions with respect to the allocation of capital, changes in the number of employees and the assessment of performance. Under Bank of Israel directives,<sup>19</sup> a segment of activity must fulfill three conditions: engage in business activities from which the bank is likely to produce income and incur expenses; separate financial information on it can be found; the results of its

<sup>19</sup> Reporting to the public directives – Paragraph 79: Principal Segments of Activity (December 2001).



activity are examined on a regular basis by the management and the board of directors for the purpose of taking decisions regarding the allocation of resources to the segment and the assessment of its performance. The division into segments of activity is based on types of products and services, or on types of customers. (For details on the segments of activity, see Box 3.1 in the 2003 Review of Israel's Banking System.)

In the following analysis we focus on four principal segments – the business segment, the small customer segment, the households segment and mortgages. These are defined as follows:

**The business segment** – consolidates the data of the business banking segment, commercial banking, international activity, and the construction and real estate segment.

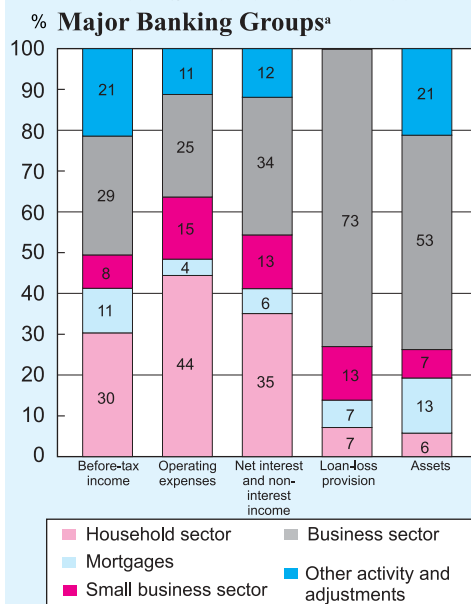
**The small businesses segment** – supplies a range of banking services and financial products for small businesses (which utilize credit lines of up to NIS 4 million a year).<sup>20</sup>

**The households segment** – consolidates the data of the households sector, private banking and the capital market segment. The households segment supplies a range of banking services and financial products for households (which are defined as private individuals earning a salary). The private banking segment supplies these services to moderate-to-highly affluent private customers.

**The mortgage segment** – including the granting of housing loans.

The recovery in the economy from mid-2003 favorably affected the repayment ability of business companies, and thereby led to a large decrease in loan-loss provisions for the business segment. Despite the decrease in loan-loss provisions for this segment, the segment's proportion of total provisions is still high, at 73 percent (Figure 1.20). Activity in the household and mortgage segments is still notable for a relatively low level of risk, which is reflected by these segments' small

**Figure 1.20**  
**The Contribution of Different Areas of Activity to Selected Items in the Financial Statement of the Five Major Banking Groups<sup>a</sup>**



<sup>a</sup> Hapoalim, Leumi, Discount, Mizrahi, First International  
SOURCE: Published financial statements

<sup>20</sup> At the First International group the small businesses segment includes companies with an obligo of up to NIS 100 thousand. For the sake of comparison with the other banks, the commercial banking segment was consolidated within it.

proportion in total loan-loss provisions. (Each segment accounts for 7 percent of total loan-loss provisions.)

The operating costs of the household segment are higher than those of the other segments, as reflected by its high 44 percent proportion to total operating expenses. The high operating expenses in respect of this segment result from the extensive expenditures on human and physical resources that are involved in operating a widespread network of branches where the majority of households' activity is conducted. The business segment's activity by contrast is conducted at a limited number of business centers, with the result that its 25 percent share of expenses is not high (Figure 1.20). Another indicator of the household segment's low operating efficiency compared with the business segment is the efficiency ratio. This ratio, which is calculated as the ratio of non-interest and financing income to total operating expenses, amounted to 2.25 in the business sector compared with a low ratio of 1.32 in the households segment (1.42 if the mortgage segment is included; Table 1.9).<sup>21</sup>

The household segment's high operating expenses, together with the relatively low extent of competition in that segment and in the small businesses segment, prompted the banks to charge high margins and numerous commissions in these segments (more than from the business segment). As an example, the ratio of net interest income before loan-loss provision to total assets (an indicator of the effective cost of granting credit) in respect of households' activity amounted to 12.6 percent, 7.7 percentage points more than this ratio in respect of small businesses and markedly higher, 10.5 percentage points, than the ratio in respect of business customers (Table 1.9).

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<sup>21</sup> This ratio in the mortgage segment is the highest (2.56) due to the low operating expenses attributed to this segment.

**Table 1.9**  
**Performance Indicators in the Two Major Banking Groups,<sup>a</sup> by Sector, 2004**

	The Large Groups					The Intermediate Groups <sup>a</sup>							Total of all Five Groups						
	Households	Mortgages	Small Businesses	Business Sector	Other Activities and Adjustments <sup>c</sup>	Total	Households	Mortgages	Small Businesses	Business Sector	Other Activities and Adjustments <sup>c</sup>	Total	Households	Mortgages	Small Businesses	Business Sector	Other Activities and Adjustments <sup>c</sup>	Total	
Weights (percentages)						Adjustments <sup>c</sup>							Adjustments <sup>c</sup>						
Assets	6	12	6	57	19	100	5	17	9	44	25	100	6	13	7	53	21	100	
Loan-loss provision	8	4	12	76	-0	100	5	11	16	68	-0	100	7	7	13	73	-0	100	
Financial and operating income <sup>b</sup>	36	4	12	36	12	100	34	7.9%	16	29	11	90	35	6	13	34	12	100	
Operating expenses	47	3	14	26	11	100	40	6	17	24	12	100	44	4	15	25	11	100	
Before-tax profit	28	7	7	35	22	100	37	22	12	10	19	100	30	11	8	29	21	100	
Ratios (percentages) <sup>d</sup>																			
Loan-loss provision to total assets	0.9	0.3	1.3	0.9		0.6	0.6	0.4	1.1	0.9		0.6	0.8	0.3	1.2	0.9		0.6	
Profit from financial activity to total assets	12.4	1.0	5.2	2.1		2.7	12.9	1.3	4.6	2.0		2.3	12.6	1.2	4.9	2.1		2.5	
Operating and financial income to total assets	24.0	1.6	7.9	2.6		4.2	25.3	2.1	7.2	2.5		3.8	24.4	1.8	7.6	2.6		4.0	
Operating expenses to total assets	17.8	0.6	5.4	1.1		2.3	12.4	0.8	2.6	0.5		1.4	18.4	0.7	5.3	1.1		2.4	
Before-tax profit per shekel of assets	5.3	0.7	1.3	0.7		1.2	4.8	0.9	0.9	0.1		0.7	5.2	0.8	1.2	0.5		1.0	
Coverage ratio <sup>e</sup> (ratio)	0.65	0.94	0.52	0.51		0.64	0.62	0.90	0.50	0.34		0.58	0.64	0.92	0.51	0.45		0.62	
Efficiency ratio <sup>f</sup>	1.35	2.78	1.48	2.49		1.77	1.28	2.40	1.40	1.80		1.51	1.32	2.56	1.45	2.25		1.67	
Return per unit of risk <sup>g</sup>	7.25	3.97	2.07	1.84		2.80	8.66	3.20	1.84	1.16		2.11	7.61	3.54	1.97	1.62		2.56	

<sup>a</sup> The two large banking groups: Leumi and Hapoalim; the three intermediate groups: Discount, Hamizrahi and First International.

<sup>b</sup> Including operating and other income and profit from financial activity before the loan-loss provision.

<sup>c</sup> This activity includes primarily the management of the bank nostro portfolio, the management of exposure, investment banking, activity in the capital market and the credit card market and others.

<sup>d</sup> Except for the coverage ratio, the efficiency ratio and the return per unit of risk, the ratios are expressed in percentages.

<sup>e</sup> Calculated as the ratio between total operating and other revenue to total operating and other expenses.

<sup>f</sup> Calculated as the ratio between total operating and other income and profit from financial activity to total operating and other expenses.

<sup>g</sup> Calculated as the ratio of before-tax profit plus provisions to the total loan-loss provision.

SOURCE: Published financial reports and processed data of the Research Unit of the Supervisor of the Banks.

An examination of the contribution of the business segment and the household segment to before-tax profit reveals a substantial difference between the large banks<sup>22</sup> and the medium-sized banks.<sup>23</sup> The business segment's contribution to before-tax profit at the two largest banks amounted to NIS 2 billion (35 percent of total before-tax profit), similar to the contribution of the household and mortgage segments. At the medium-sized banks however, the business segment's share of before-tax profit was only 10 percent (NIS 180 million), and the share of the household and mortgage segments in that profit was 59 percent (NIS 1.1 billion).

To conclude, while the efficiency ratio in the business segment is higher than that ratio in the household segment, the loan-loss provisions in the business segment are larger. Accordingly, the index of risk-adjusted return on capital (RAROC) by segments of activity is of major importance. In order to express this index we calculated the ratio of before-tax net income plus loan-loss provisions divided by loan-loss provisions (which reflect risk). We obtained a very low ratio in the business segment (1.62), a high ratio in the mortgages segment (3.54) and a very high ratio in the households segment (7.61; Table 1.9). These results are indicative of the household segment's superior performance to the business segment.

#### 4. AN ANALYSIS OF THE BANKS' PERFORMANCE ON THE BASIS OF THE MARKET-TO-BOOK RATIO OF THEIR SHARES

The MV/BV ratio expresses the extent of the adjustment between the market value of a bank's equity as assessed by investors (net worth), and the book value of its capital.<sup>24</sup> When the ratio is greater than 1, this means that the investor public appraise the bank in excess of its balance-sheet value, reflecting their opinion of a higher potential inherent in it. When the ratio is less than 1, this means that the investors regard the book value as an overestimation of the real net worth of the bank's equity.

The following sub-periods are apparent from an analysis of developments in this ratio during the past five years:

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<sup>22</sup> Bank Hapoalim and Bank Leumi.

<sup>23</sup> The First International, Mizrahi and Discount.

<sup>24</sup> The ratio is defined as Market-to-Book Ratio =  $(MV/BV)_i$

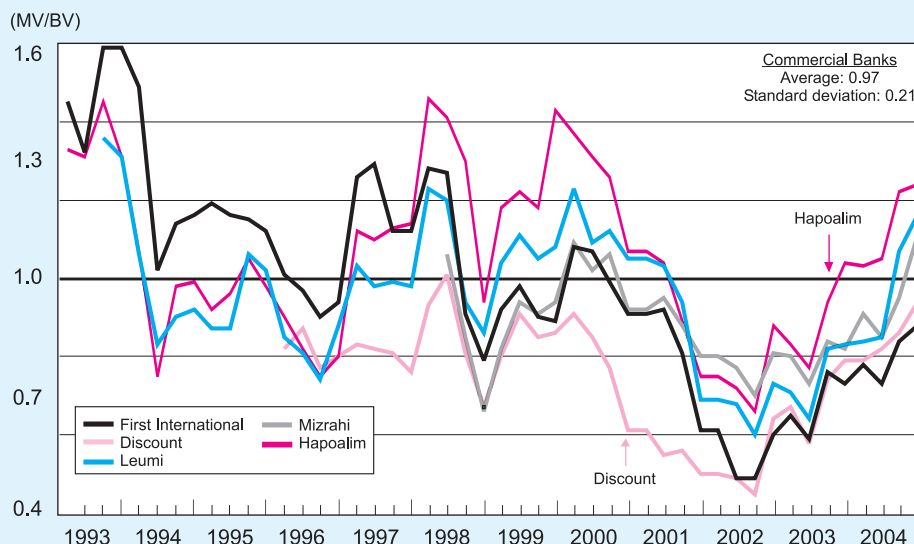
where  $MV_i$  – the market value of the bank's shares and options  $i$  in period  $t$ . The market value of any company is defined as the value of its shares and options that are listed for trading (excluding convertible bonds). The market value also includes shares that are not listed for trading to which the market value of shares that are listed for trading is attributed.

$BV_i$  = the balance-sheet value of shareholders' equity – including paid-up share capital, funds and surpluses of bank  $i$  in period  $t$ .

For more details see: David Ruthenberg and Shaul Pearl "Market to Book Ratio of the Bank's Shares in Israel". Banking Supervision Department, Research Unit, Bank of Israel, discussion paper, second version, June 2004.

1. During the period January 2000 to December 2002, the MV/BV ratios at the five large banking groups (Hapoalim, Leumi, Discount, First International and Mizrahi) declined continually (Figure 1.21). At the end of 2000, the average ratio for these groups crossed the value of 1 following many years of relative stability around the value of 1. In December 2002 the average ratio for the groups had reached 0.74. Based on the sharp decline during those years, the market had assessed the banking groups' performance as having deteriorated, and on the basis of the low values prevailing during this period the market did not expect their performance to improve.
2. From the beginning of 2003, investors changed their assessment and expected a substantial improvement in the banking groups' performance (Figure 1.22). These expectations did indeed materialize with the publication of the banks' favorable results in 2003 and 2004. This was reflected by a continuous rise in the MV/BV ratio for all the groups during those years. In December 2004 the average ratio for the group of commercial banks had again crossed the value of 1 and amounted to 1.11.

**Figure 1.21**  
**Ratio of Market Value to Book Value (MV/BV) of the Five Major Banks,**  
**March 1993-December 2004**

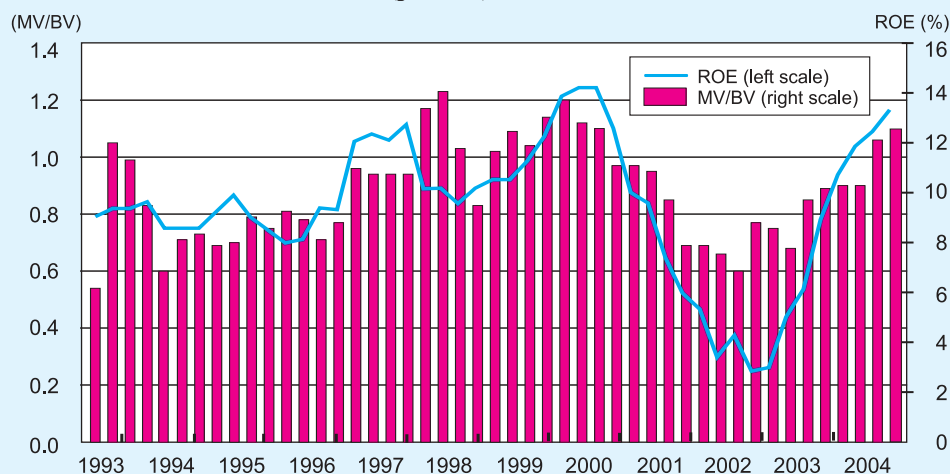


SOURCE: Tel Aviv Stock Exchange and Banking Supervision Research Unit.

We also examined the relationship between the MV/BV ratio of the five large banking groups and their aggregate return on equity (ROE) during the last decade, and the relationship between the MV/BV ratio and credit risk (which is measured by the ratios

of credit to GDP and loan-loss provisions divided by credit).<sup>25</sup> As expected, it can be seen that for over a decade the MV/BV was positively correlated with the ROE, and that in recent years the negative effect on the MV/BV ratio of the banks' exposure to credit risks has been apparent.

**Figure 1.22**  
**Return on Equity (ROE) and the MV/BV Ratio of the Commercial Banks,**  
**June 1993-December 2004 (percent)**



SOURCE: Financial Statements of Exchange companies 1993-2004 Tel Aviv Stock Exchange and Banking Supervision Research Unit.

## 5. RISK-ADJUSTED RETURN ON CAPITAL (RAROC)

Risk-adjusted return on capital (RAROC) in this review is calculated as the ratio between the surplus return on equity (in excess of the risk-free rate of return) and the standard deviation of the ROE in the same period<sup>26</sup> (which represents the banks' Value at Risk, that is, the unit of risk<sup>27</sup>).

<sup>25</sup> This relationship is based on the MV/BV equation that is formulated as follows:  $MV/BV = ROE - g / (k - g)$  where,

ROE – return on equity

g – rate of growth of the bank

k – the bank's risk (price of raising capital or rate of return required).

<sup>26</sup> The standard deviation of the return on equity (the average ROE for the past four quarters) is calculated for each quarter over periods of seven years (28 observations).

<sup>27</sup> The Value at Risk represents the cut-off value of the distribution of returns on equity at a probability of  $VaR_{ROE}(1\% \text{ percent}) = 1\%$ .

When examining alternative risk indexes such as the ratio of the loan-loss provision to total credit or the ratio of problem loans to total credit, similar results are obtained.

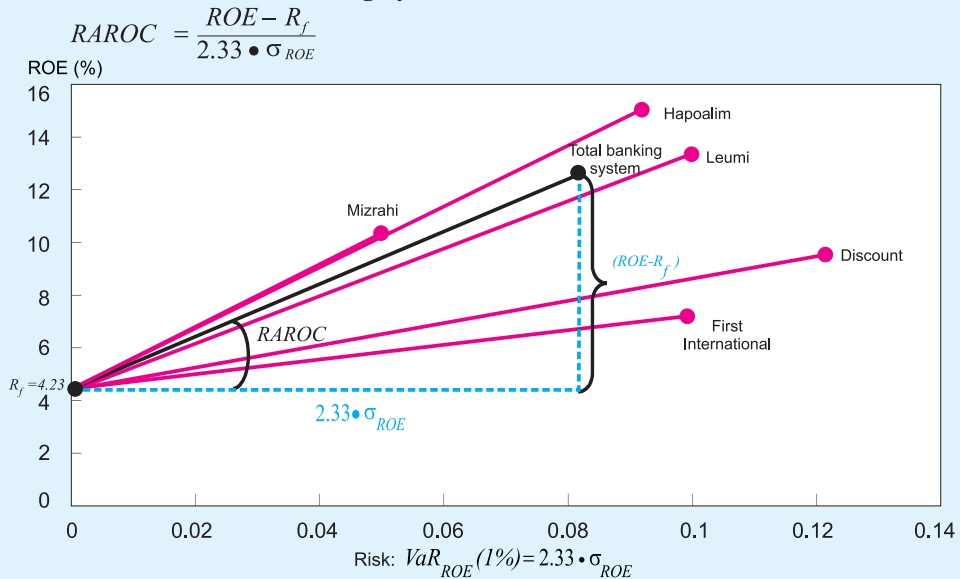
This calculation is based on the assumption that the range of banking risks is expressed by the ROE, which is distributed in a normal distribution over the relevant period.<sup>28</sup>

In 2004 the RAROC for the whole banking system amounted to 1.03 (Table 3.11) – an improvement compared with 0.46 in 2003. This ratio improved in 2002 following a deterioration in 2001 and 2002. The changes in RAROC in the last five years appear to have been positively correlated with the changes in the business cycle in the economy. As a result, the exit from the recession during the last two years, together with the improvement in ROE and the end to the deterioration in the banks' risks in that period, led to a substantial improvement in RAROC.

Figure 1.23 presents the risk-adjusted returns on capital of the five largest banks for 2004. The steeper the curve exiting from the starting point, the higher is the RAROC.

**Figure 1.23**

**Risk Adjusted Return on Equity (ROE), The Five Major Banking Groups vis-à-vis the Total Banking System, 2004**



$R_f$  - Risk-free interest.

ROE - Yield

$\sigma_{ROE}$  - Standard deviation of the ROE.

SOURCE: Published financial statements and Bank of Israel Banking Supervision Research Unit.

<sup>28</sup> Statistical tests that we conducted (Jarque-Bera tests) shows that the distribution of annual returns on equity based on quarterly observations over successive periods of seven years is normal.

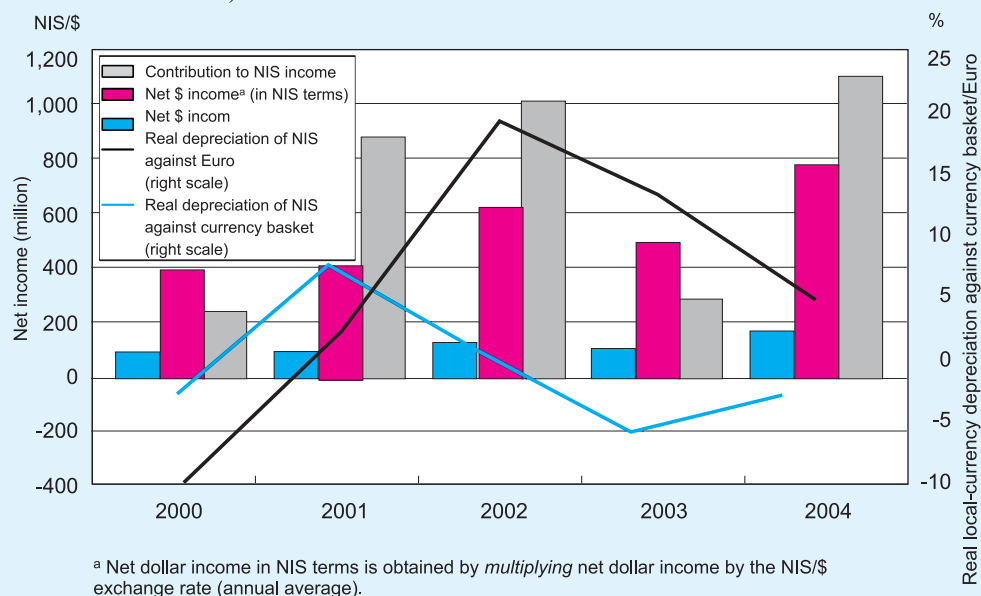
## PART 3

# THE CONTRIBUTION OF SUBSIDIARY AND AFFILIATED COMPANIES

### 1. MAIN DEVELOPMENTS AT SUBSIDIARY AND AFFILIATED COMPANIES

The large growth in the contribution of subsidiary and affiliated companies to the profits of the five largest banks heading the groups continued and actually increased in 2004. The contribution to net income from investments in these companies rose by 54 percent compared with 2003 and totaled approximately three billion shekels (Table 3.11). The increase was due mainly to a sharp 320 percent rise in the contribution of the profit of banking and financial companies abroad.<sup>1</sup> This contribution tends to be

**Figure 1.24**  
**Net Income<sup>a</sup> of Overseas Subsidiaries, and their Contribution to Groups' NIS Income, 2000-2004**



SOURCE: Published financial reports and returns to Supervisor of Banks.

<sup>1</sup> This profit is after conversions and adjustments to shekels, excluding income or expenses in respect of hedging for the bank's investments abroad against exposure to exchange-rate fluctuations, in cases where hedging was conducted.



volatile and amounted to NIS 1.1 billion in 2004, as compared to NIS 260 million and NIS 970 million in 2003 and 2002 respectively. The large increase in 2004 derived from an improvement in these companies' profitability (a growth in reported nominal dollar profit as detailed below), as well as from non-recurring profits in the form of exchange-rate differentials on investments abroad (Figure 1.24) and the profit that the Hapoalim group recorded as a result of the dilution of its holding in Signature Bank and the issue of its shares to the public.

Investment in the principal subsidiary and affiliated companies<sup>2</sup> in Israel and abroad totaled NIS 32.4 billion in 2004, an increase of 6.4 percent compared with 2003 (Table 3.11). This increase is also mainly attributed to the banks' international banking activity, which expanded by NIS 700 million or 8 percent, and accounted for 30 percent of total investment in subsidiary and affiliated companies. The growth in international activity derived from a number of sources: the shekel revaluation of foreign-currency denominated investments as a result of the depreciation (against the Swiss franc and the pound sterling, offset by the appreciation against the dollar), new investments and the accrual of profits.

During recent years the banks expanded their activity at overseas offices, mainly in the area of private banking, via the activity of the overseas branches of the large banks and by opening new branches of subsidiaries abroad. This activity enables the banks to diversify their sources of profit.

The main local investments are made in commercial banks (usually small banks that specialize in specific sectors) and mortgage banks. The banks have holdings in companies engaged in similar areas of activity or activities that complement banking intermediation activity, for example in financial leasing companies, credit card issuing, clearing and marketing companies, and companies that operate in the capital market. The banks also maintain holdings in companies that are not connected with their financial activity, such as non-financial companies including insurance companies. These are usually large publicly-traded companies that are classified as holding companies.

Most of the investment types held by subsidiary and affiliated companies operating in Israel expanded during 2004, both at financial companies (small commercial banks and credit card companies) and at non-financial companies and insurance companies. These companies' contribution to profit increased as well, for several reasons: (1) the growth in economic activity, which mainly affected the profits of non-financial companies and the credit card companies; a substantial increase in capital market activity and especially

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<sup>2</sup> The analysis in this section focuses on the holdings in subsidiary and affiliated companies of the five largest banks alone. The data for the following sections derive from financial reports to the public and the note detailing the banks' main holdings. The value of the investment and the return derived from it are calculated on the basis of the content of the reports, without reference to the market value of public companies that are traded on the Tel Aviv Stock Exchange. It can therefore be said that part of the yields calculated and the indexes based on these calculations are accounting rather than economic functions. The averages, the standard deviations and the Sharpe index also take into account the banks' holdings in companies that were included in the past (and part of which are no longer held) in accordance with the investment, the rates of holding and timing.

in the number of issues, which contributed to a large growth in the companies' profits from the issue of securities and portfolio management; (3) a large increase in the profits of small commercial banking subsidiaries, which derived mainly from a large decrease in loan-loss provisions; this was against the background of an improvement in borrowers' financial stability, concurrent with an appreciable expansion in these banks' income from payments system services (principally with households).

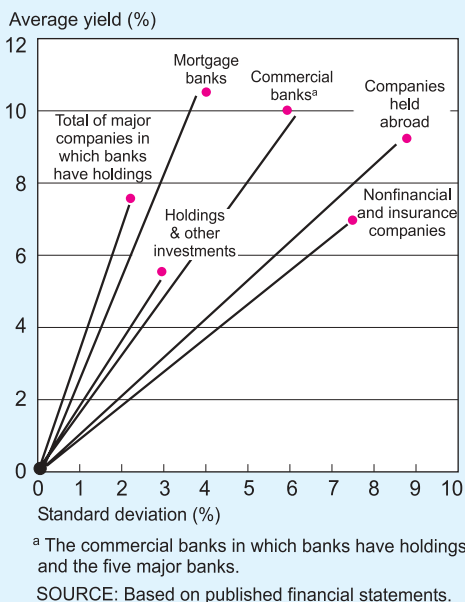
The mortgage banks' contribution<sup>3</sup> to the profits of the five banking groups fell slightly in 2004, continuing a trend that began in 2003. The decrease resulted from an increase in loan-loss provisions, a gradual but significant decline in income from the management of Treasury funds (which began several years ago), and from the growth in competition for apartment insurance and life insurance. The mortgage

banks belonging to the banking groups presented a low level of profitability in comparison with similar financial activities (as at commercial banks and credit card companies) and compared with the average for the past decade (Figures 1.25 and 1.26).

The diversification of holdings at non-banking financial companies enables the large banks to engage in universal banking, which encompasses the majority of financial activities, and to thereby exploit economies of diversification and to disperse risks. Alongside financial intermediation activity, the banks engage in capital market activity, brokerage, securities custody, portfolio management, mutual fund and provident fund management, underwriting and investment banking via subsidiary and affiliated companies.

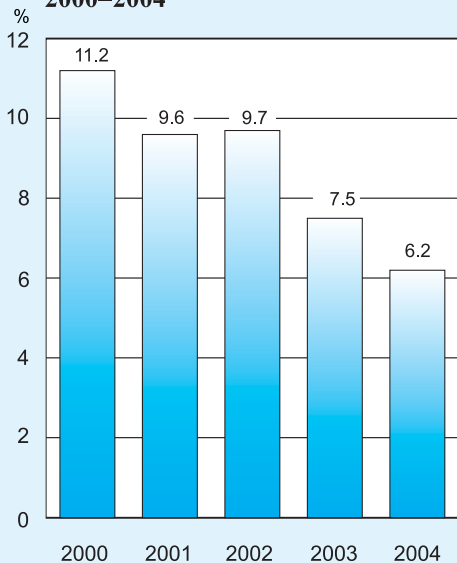
A long-term examination of the average return of subsidiary and affiliated companies and its standard deviation (Figure 1.15) reveals the advantage for the banks of investment diversification in different subsidiary companies. Figure 1.27 presents these companies' performance as measured by the Sharpe index.

**Figure 1.25**  
**Average Yield vis-à-vis Standard Deviation in Main Companies Held by Banks, 1994-2004**



<sup>3</sup> Investment and profit in 2004 do not include the activity of Bank Mishkan, due to the bank's merger within Bank Hapoalim on December 21 2003.

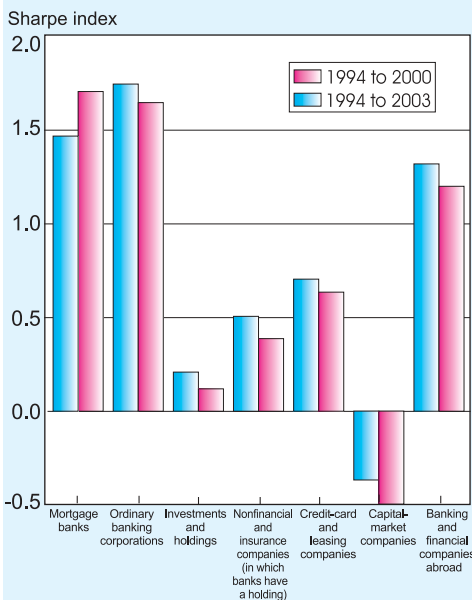
**Figure 1.26**  
Return on Equity<sup>a</sup> in Mortgage Banks,  
2000–2004



<sup>a</sup> Calculated as net income

SOURCE: Published financial statements of mortgage banks.

**Figure 1.27**  
Sharpe Index of Main Kinds of  
Investment of the Five Major Banks,  
Based on Yields, 1994–2003 and 1994–2004



SOURCE: Published financial statements.

## 2. OVERSEAS OFFICES

The assets of overseas offices (subsidiaries and branches) totaled \$ 34.4 billion at the end of 2004 (29.2 percent of which derived from branches abroad), an increase of 11.0 percent compared with 2003. Overseas offices' assets account for 18.2 percent of the assets of the five largest banking groups (Table 1.10). The five banking groups' investment in these overseas subsidiaries, which is measured by the balance-sheet book value of their shareholders' equity (without taking into account translation adjustments), accounts for 21.4 percent of the groups' shareholders' equity. The activity of the overseas offices, which is centered in the USA (71.5 percent), expanded in all the principal countries in which the offices operate (the USA, the UK and Switzerland).

The offices' main activity is the supply of wholesale financial services, while the subsidiaries in Switzerland focus on private banking and fiduciary deposit activity. This activity by the various offices helps diversify the Israeli banks' sources of profit, and to expand the scope of business overseas in the countries where they operate.

The activity of overseas offices yielded net income of \$ 226.2 million<sup>4</sup> in 2004, an amount equivalent to 20.0 percent of the net income of the five banking groups in Israel (Table 1.11). Net income rose by 38.4 percent in 2004 after falling by 5.5 percent in 2002. (The decline in 2003 resulted from a fall in net income in the UK and Switzerland.) The growth in net income had the effect of increasing the ROE of subsidiaries abroad to 9.1 percent in 2004 compared with 6.1 percent in 2003.

In March 2005 Bank Hapoalim sold its US subsidiary Signature Bank, which had yielded a considerable profit, and purchased a small bank in Switzerland, Bank of New York – Inter Maritime Bank.<sup>5</sup>

## **a. Activity and performance of offices in the USA**

1. The assets of offices in the USA<sup>6</sup> totaled \$ 24.6 billion at the end of 2004, an increase of 9.3 percent compared with 2003 (Table 1.10). The total net income of offices in the USA rose by 25.2 percent in 2004 following a 28.3 percent increase in 2003 (Table 1.11). Seventy percent of the growth in net income was recorded at Signature Bank, a subsidiary of Bank Hapoalim. Signature Bank's contribution to the growth in activity and profitability of the offices in the USA during 2004 was considerable (Table 1.12), but its impact will not be apparent in 2005 because Bank Hapoalim sold its holding in that bank as stated.
2. Lending activity at offices in the USA, which account for a third of the total assets of the offices there, is centered in the business sector. Signature Bank specialized in granting credit for financial activity as part of a range of specialized financial services for firms and private customers. The credit portfolio of US offices expanded by 9.6 percent to NIS 8.1 billion in 2004 (Table 1.10). This expansion, which increased in 2004 compared with 2003 (when the credit portfolio grew by only 3.7 percent), derived from the economic conditions prevailing in the USA and the offices' policy. In previous years the offices had been extremely cautious when extending credit due to the slack domestic of demand in the American economy. (The GDP growth rate in the USA fell from 6.0 percent in 2000 to 3.0-3.5 percent in 2001 and 2002.) In 2004 demand for credit rose as a result of the 6.6 percent growth in GDP in the USA. The Israeli banks relaxed their policy of restraint to some extent and also expanded their activity in financing those industries that are notable for relatively high risk, such as construction and real estate. Credit to the real estate industry grew by 30 percent in 2004 and totaled \$ 1.1 billion,

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<sup>4</sup> Without taking into account the shekel contribution recorded in the books of the banking groups in Israel. The difference between this contribution to net income at the offices derives mainly from exchange-rate differentials that are charged to investment in subsidiaries, and from various accounting adjustments.

<sup>5</sup> These changes are not yet reflected in the data in this survey.

<sup>6</sup> The principal offices in the USA are Bank Leumi USA, Israel Discount Bank of New York and Signature Bank (which are subsidiaries) and branches of Bank Hapoalim.

**Table 1.10**  
**Assets and Liabilities of the Overseas Offices,<sup>a</sup> 2003-04**

	US					Western Europe					Total overseas offices <sup>b</sup>				
	2002	2003	2004	Change (%)		2002	2003	2004	Change (%)		2002	2003	2004	Change (%)	
			2003	2004				2003	2004				2003	2004	
	(\$ millions)		(percent)			(\$ millions)		(percent)			(\$ millions)		(percent)		
Credit to the public	7,163	7,426	8,139	3.7	9.6	3,532	4,353	5,011	23.2	15.1	10,788	11,874	13,261	10.1	11.7
Cash and bank deposits	4,431	4,806	4,165	8.5	-13.3	1,947	1,735	2,163	-10.9	24.7	6,405	6,574	6,360	2.6	-3.3
<i>of which</i> in related bank	1,935	1,762	1,238	-8.9	-29.7	1,017	798	975	-21.5	22.2	2,968	2,583	2,230	-13.0	-13.7
Securities	9,056	9,547	11,533	5.4	20.8	2,325	2,008	2,242	-13.6	11.7	11,384	11,557	13,779	1.5	19.2
<b>Total Assets</b>	<b>21,241</b>	<b>22,503</b>	<b>24,592</b>	<b>5.9</b>	<b>9.3</b>	<b>8,057</b>	<b>8,329</b>	<b>9,619</b>	<b>3.4</b>	<b>15.5</b>	<b>29,425</b>	<b>30,969</b>	<b>34,369</b>	<b>5.2</b>	<b>11.0</b>
Deposits from the public	15,828	16,025	17,925	1.2	11.9	3,777	4,160	5,203	10.2	25.1	19,697	20,281	23,237	3.0	14.6
Deposits from the banks	1,771	2,151	1,845	21.5	-14.2	2,834	2,490	2,740	-12.2	10.0	4,629	4,669	4,618	0.9	-1.1
<i>of which</i> from banks	1,410	1,566	1,106	11.1	-29.4	2,039	1,491	1,959	-26.9	31.4	3,473	3,080	3,088	-11.3	0.3
<b>Total liabilities</b>	<b>20,147</b>	<b>21,406</b>	<b>23,282</b>	<b>6.3</b>	<b>8.8</b>	<b>7,376</b>	<b>7,551</b>	<b>8,734</b>	<b>2.4</b>	<b>15.7</b>	<b>27,643</b>	<b>29,086</b>	<b>32,164</b>	<b>5.2</b>	<b>10.6</b>
Equity	1,094	1,097	1,310	0.3	19.4	681	778	885	14.3	13.8	1,782	1,883	2,205	5.7	17.1
Off-balance-sheet credit risk <sup>c</sup>	5,723	6,299	6,784	10.1	7.7	1,429	1,725	1,676	20.7	-2.8	7,162	8,037	8,472	12.2	5.4
Activity in derivatives <sup>d</sup>	9,911	9,308	10,240	-6.1	10.0	8,030	8,749	7,871	9.0	-10.0	17,941	18,058	18,113	0.7	0.3

<sup>a</sup> Selected components.

<sup>b</sup> Volume of off-balance sheet credit risk before exchange and weighting coefficients.

<sup>c</sup> Denominated value.

<sup>d</sup> Includes additional branches, primarily in South America, which are not included in the US (including the Cayman Islands) or Europe.

SOURCE: Returns of Supervisor of Banks

**Table 1.11****Main Items in the Profit and Loss Statements of the Overseas Offices,<sup>a</sup> 2002-2004**

(\$ million)

	US					Western Europe					Total overseas offices <sup>b</sup>				
	2002	2003	2004	Change (%)		2002	2003	2004	Change (%)		2002	2003	2004	Change (%)	
			2003	2004				2003	2004				2003	2004	
	(\$ millions)		(percent)			(\$ millions)		(percent)			(\$ millions)		(percent)		
Net interest income before loan-loss provision	<b>380.7</b>	<b>361.1</b>	<b>454.9</b>	<b>-5.1</b>	<b>26.0</b>	<b>122.0</b>	<b>134.9</b>	<b>150.4</b>	<b>10.6</b>	<b>11.5</b>	<b>507.3</b>	<b>499.6</b>	<b>608.4</b>	<b>-1.5</b>	<b>21.8</b>
Loan-loss provision	30.4	23.7	19.2	-22.0	-19.0	0.8	18.5	7.6		-58.9	32.2	42.7	27.0	32.6	-36.8
									2,212.5						
Operating fees	51.1	63.7	70.0	24.5	10.0	60.2	83.3	92.2	38.4	10.7	113.2	149.0	164.2	31.6	10.2
Other income	21.8	18.9	18.3	-13.5	-3.1	64.1	11.2	14.9	-82.6	33.4	86.8	30.9	34.2	-64.4	10.8
Total non-interest and other income	75.6	83.3	88.8	10.2	6.6	131.0	114.5	118.1	-12.6	3.1	209.4	200.7	209.8	-4.2	4.5
Salaries and related expenses	153.0	160.2	187.7	4.7	17.2	66.6	84.3	83.6	26.6	-0.8	221.9	246.5	273.5	11.1	11.0
Other expenses	84.7	67.9	82.9	-19.9	22.1	73.7	60.9	56.9	-17.3	-6.6	162.0	131.6	142.5	-18.8	8.3
Total operating and other expenses	<b>285.2</b>	<b>280.3</b>	<b>328.1</b>	<b>-1.7</b>	<b>17.1</b>	<b>159.8</b>	<b>169.9</b>	<b>166.3</b>	<b>6.3</b>	<b>-2.1</b>	<b>451.4</b>	<b>455.6</b>	<b>500.1</b>	<b>0.9</b>	<b>9.8</b>
Ordinary before-tax income	140.6	140.4	196.4	-0.1	39.9	92.4	60.9	94.6	-34.1	55.3	233.1	202.0	291.2	-13.3	44.2
Provision for taxes	47.8	27.4	45.1	-42.7	64.6	13.1	18.6	19.1	42.0	2.7	61.2	46.3	64.5	-24.3	39.3
Net income	<b>94.0</b>	<b>120.6</b>	<b>151.0</b>	<b>28.3</b>	<b>25.2</b>	<b>79.2</b>	<b>42.7</b>	<b>75.4</b>	<b>-46.1</b>	<b>76.6</b>	<b>172.9</b>	<b>163.4</b>	<b>226.2</b>	<b>-5.5</b>	<b>38.4</b>

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

SOURCE: Reports to Supervisor of Banks.

an amount equivalent to 13.6 percent of the credit portfolio of the offices in the USA. This industry is known to be highly volatile, and real estate prices in the New York region during recent years rose very strongly. In addition, the banks in the USA increased their credit to the financial services industry (non banks, such as brokerage companies and insurance companies). This credit expanded by 16.2 percent in 2004 and totaled \$ 1.9 billion at the end of the year.

3. Investments in the nostro portfolio, whose proportion to US offices' assets reached 47 percent (Table 1.10), expanded by the high rate of 20.8 percent in 2004 compared with only 5.4 percent in 2003. Most of the nostro portfolio - over 75 percent - is invested in government bonds (mainly US government bonds) or bonds that are backed by government agencies, as well as bonds that are backed by mortgages issued by federal bodies in the USA (FHLMC, FNMA and GNMA) that yielded a relatively high return of 4.1 percent.<sup>7</sup>
4. US offices financed the growth in credit and securities activity in 2004 by means of deposits of the public (Table 1.10) after relying on other more-expensive means of finance in 2003, such as REPOs. (The cost of raising REPOs exceeds that of raising interest-bearing deposits by 1.25 percent.) Total deposits of the public at US offices increased by 11.9 percent in 2004 compared with a modest growth of only 1.2 percent in 2003 that was mainly recorded in the balance sheet of Signature Bank.
5. Offices in the USA are heavily oriented towards off-balance-sheet activity (Table 1.10), which very largely consists of unutilized credit lines (85 percent of total credit risk in respect of off-balance-sheet items), part of which consist of backup facilities for firms' activities in the financial markets (issues of equity, bonds and commercial papers). The extent of credit risk in respect of off-balance-sheet items at US offices expanded by 7.7 percent in 2004 following an increase of 10.1 in 2003, and its proportion to outstanding balance-sheet credit reached 84 percent at the end of the year.
6. The net income of US offices totaled \$ 151.0 million in 2004 (Table 1.11), an increase of 25.2 percent following a 28.3 percent growth in 2003. The net income of Israeli subsidiaries in the USA amounted to \$ 113.1 million<sup>8</sup> in 2004 compared with \$ 77.2 million in 2003 (Table 1.2), an increase of 46.5 percent. The net return on equity (ROE) rose considerably, to 9.6 percent compared with 7.4 percent in 2002 (Table 1.12). While the growth in the net income of Israeli subsidiaries in the USA in 2003 mainly derived from a decrease in tax payments, the increase in 2004 resulted from a growth in all profit components, particularly net interest income before loan-loss provision (30.7 percent). The growth in the latter profit item derived from an increase in the net interest margin from 1.78 percent in 2003

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<sup>7</sup> The data are from the Uniform Bank Performance Report for 2004, which covers all the insured banks in the USA with assets exceeding \$ 3 billion at the end of 2004 and that was taken from the Internet site of the FFIEC. The cost of interest-bearing deposits according to these reports reached 1.77 percent at IDB New York, 1.14 percent at Signature Bank and 1.39 percent at Bank Leumi USA.

**Table 1.12****US Subsidiaries of Israeli Banks vis-à-vis Similar US Banks in New York, 2003-04**

	2004					2003				
	IDB New York	Bank Leumi USA	Signature Bank	Total Israeli Subsidiaries	Peer Group in New York <sup>a,b</sup>	IDB New York	Bank Leumi USA	Signature Bank	Total Israeli Subsidiaries	Peer Group in New York <sup>1,2</sup>
	(\$ millions)									
Total assets	8,405	5,702	3,356	17,463	39,385	7,708	5,348	1,933	14,990	34,275
Credit to the public	2,481	2,370	676	5,527	20,791	2,214	2,163	502	4,879	17,911
Deposit of the public and from banks	5,021	4,509	2,581	12,111	24,544	4,588	4,072	1,573	10,233	21,763
Equity	531	378	339	1,248	4,197	518	373	152	1,043	3,593
Net profit	50.1	33.2	29.8	113.1	243.1	42.1	30.9	4.2	77.2	217.9
	(percent)									
Credit/assets	29.52	41.56	20.14	31.65	52.79	28.72	40.45	25.98	32.55	52.26
Securities/assets	57.13	46.79	74.50	57.10	31.72	59.56	46.68	66.99	55.92	27.48
Deposits (of public and from banks)/assets	59.74	79.08	76.89	69.35	62.32	59.53	76.14	81.37	68.27	63.49
Equity/assets	6.31	6.63	10.1	7.14	10.66	6.72	6.98	7.84	6.96	10.48
Ratio of loan-loss provision (annual) to total credit (average)	0.31	0.15	0.60	0.27	-0.10	0.36	0.29	0.53	0.35	0.10
Charge-offs/credit	0.26	0.21	0	0.21	0.26	0.42	0.59	0.03	0.46	0.36
Problem credit <sup>c</sup> /total credit	0.48	0.51	0.89	0.54	0.5	0.21	0.50	1.01	0.42	0.99
Capital adequacy	12.3	12.47	29.92	14.48	15.72	13.39	13.86	21.99	14.33	17.53
Average ROE	9.42	8.73	11.08	9.58	6.32	7.97	7.95	3.40	7.42	6.21
Average ROA	0.61	0.60	1.13	0.69	0.67	0.56	0.62	0.28	0.55	0.66
Net interest spread <sup>d</sup>	1.79	1.98	2.74	2.01	2.73	1.49	1.92	2.77	1.78	2.87
Efficiency ratio <sup>e</sup>	59.89	63.49	74.13	63.85	73.1	61.65	64.52	91.19	66.58	71.11
Number of positions	766	454	296	1516	4965	769	450	232	1451	4705
Annual wage per employee post (\$ '000s)	84.7	103.9	130.8	98.7	101.7	79.0	95.4	97.0	87.0	94.9
Assets per employee (\$ million)	10.97	12.56	11.34	11.52	7.93	10.02	11.88	8.33	10.33	7.28

<sup>a</sup> The peer group includes eight commercial banks in New York which are insured with the FDIC whose assets total from \$1-10 billion as follows:

Amalgamated Bank, Atlantic Bank of New York, Sterling National Bank, Bank of Tokyo Mitsubishi Trust Company Mizuho Corporate Bank (USA), Safra National Bank of New York, United States Trust Company of N.Y, Banco Popular North America.

<sup>b</sup> Average for the banks in the group.

<sup>c</sup> Problematic debt including credit in default and credit which does not produce income according to the accepted definitions in the US.

<sup>d</sup> Net financial revenue relative to average active assets.

<sup>e</sup> The ratio of non-interest expenses to profit from financial activity before loan-loss provisions and non-interest income..

SOURCE: Data on insured commercial banks on the FDIC Internet site.



to 2.01 percent in 2004, and from a 16.0 percent increase in the average amount of assets. In addition, the annual expenditure on loan-loss provisions fell by 9.1 percent and net interest income rose by 6.5 percent.

7. A comparison of the performance of the subsidiaries in New York to that of a peer group<sup>9</sup> shows an ROE in the peer group 6.3 percent lower than the 9.6 percent return at Israeli subsidiaries in New York (Table 1.12).
8. Problem loans at the responsibility of the offices in the USA totaled \$ 200 million in 2004 compared with \$ 385 million in 2003, a decrease of 42.9 percent. As a result, the proportion of problem loans to total credit at the responsibility of the US offices fell by 2.7 percent in 2004 compared with a decrease of 5.1 percent in 2003 (Table 3.15). The loan-loss provision amounted to just \$ 5 million in 2004, and its ratio to total credit at the bank's responsibility fell to only 0.2 percent in 2004 compared with 0.3 percent in 2003, which is the usual level at similar-sized banks in the USA.

## **b. Activity and performance of offices in the UK**

The Israeli offices in the UK operate via subsidiaries of two banks, Bank Leumi and the First International Bank, and three branches, of Bank Hapoalim, Bank Discount and Bank Mizrahi.

Activity in the UK expanded by 6.5 percent in pound sterling terms in 2004 and totaled £ 2.7 billion at the end of the year, compared with a decrease of 13.5 percent in 2002 (Table 3.13). The activity of these offices is oriented towards wholesale business activity. (Credit to the public reached 54 percent of total assets at the end of 2004.) The growth in activity in 2004 encompassed all the principal balance-sheet items. Particularly notable was a 6.6 percent increase in credit to £ 1.5 billion.

The activity of UK offices is financed mainly by the raising of deposits from the public, which increased by 16.6 percent to £ 1.3 billion in 2004 (Table 3.13). Credit risk in respect of off-balance-sheet items at the UK offices is much lower than at the offices in the USA and amounted to £ 583 million in 2004, 40 percent of outstanding balance-sheet credit compared with 84.0 percent at offices in the USA.

The net income of the UK offices totaled £ 19.3 billion in 2004 compared with £ 16.8 million in 2003, an increase of 14.9 percent (Table 3.14). The growth in net income in 2004 compared with the 27.6 percent decrease in 2003 resulted from the highly volatile

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<sup>8</sup> The data on Israeli subsidiaries in the USA were taken from the information system on the FDIC Internet site, and are based on call reports of individual banks that were submitted to the supervisory authorities in the USA, and which can be perused on that site. The data presented in this section and in sub-section 7 therefore differ to some extent from the data included in reporting to the Supervisor of Banks, which is prepared in accordance with reporting principles in Israel.

<sup>9</sup> The peer group contains a group of 8 commercial banks with total assets ranging between a billion and ten billion dollars and that operate in the New York metropolitan area, which are similar in size and operational characteristics to the Israeli subsidiaries. The data on the peer group are based on FDIC data.

annual expenditure on loan-loss provisions, which surged from £ 1.1 million in 2002 to £ 10.6 million in 2003 and dropped to £ 5.5 million in 2004. An 11.2 percent increase in commission income also contributed to the growth in net income.

### **c. Activity and performance of offices in Switzerland**

Each of the five large banking groups in Israel has a subsidiary operating in Switzerland. Their activity is focused mainly on providing private international banking services and on trust activity. Most credit is issued against deposits and customers' security portfolios.

The balance-sheet assets of the Israeli subsidiaries totaled SFr 4.1 billion at the end of 2004, a rise of 13.0 percent from the level at end-2003 (Appendix Table 13), with the rise in activity evident in all its main components. The credit portfolio grew by a marked 8.9 percent, to reach SFr 2.3 billion. The rise in activity was financed by deposits of the public recorded in the subsidiaries' balance sheets, which rose by a huge 21.7 percent (compared to a rise of 10.6 percent in 2003).

Net income of the five Israeli subsidiaries in Switzerland totaled about SFr 40.2 million in 2004, an increase 35.8 percent on the net income in 2003 (Appendix Table 14). At the same time their profitability also rose, and the net return on equity (ROE) reached about 7.0 percent, up from 5.4 percent in 2003. The average in the reference group of foreign banks in Switzerland was 11.4 percent, and the median was 9.7 percent. The rise in net income of the Israeli subsidiaries in 2004 derived mainly from the increase in net interest income before loan-loss provision (about 8.0 percent in terms of SFr), and from the rise (of about 4.2 percent) in income from operating fees.

The rate of loan-loss provision and the extent of problem debts in the Swiss subsidiaries are minimal (Appendix Table 14). This is the result of the nature of the activity—credit is granted against liquid securities and with high safety margins. On the other hand, the activity of the subsidiaries incurs operating risks (including legal risks) and also reputational risk, due to their specialization in private banking and in trust transactions. Incidents related to money laundering and the financing of terror are likely to seriously harm the reputation of the banks. The subsidiaries must therefore tighten their supervisory and control systems in these areas.

## PART 4

# RISKS AND CAPITAL ADEQUACY

In the course of their activity, banks are exposed to a wide range of risks. In this section we focus on credit risk, certain market risks and liquidity risk. Also examined are the amount of capital that the banks hold in order to absorb unexpected losses deriving from the materialization of risks, and the adequacy of this capital.

### 1. CREDIT RISK

Credit risk is the main risk to which the banks are exposed. The analysis in this section adheres to the traditional framework, which is based on an assessment of the risks inherent in the credit portfolio, the quality of the portfolio and its concentration.

The size and quality of the credit portfolio remained largely unchanged in 2004 following two years of deterioration in the portfolio quality, and the extent of concentration within the portfolio decreased. While credit risk actually fell slightly in 2004 and as will be explained later, from the long-term perspective of the last five years credit risk at the five large banking groups is still relatively high. This is despite the recovery apparent in the economy during the past two years.

#### **a. Size of the credit portfolio<sup>1</sup>**

The five large banking groups' portfolio of credit to the public expanded by a mere 0.3 percent in 2004 to NIS 537 billion (Table 1.13). The contestability to the entire banking system increased during 2004. This development was reflected by a considerable increase in issues of corporate bonds, which served as the main substitute for CPI-indexed indexed credit. Against the background of the stability in the credit portfolio and the growth in the banking groups' equity, the proportion of the credit portfolio to their equity fell by one percentage point.

The volume of off-balance-sheet activity (after translation of balance-sheet credit value equivalent by means of conversion coefficients) increased by 5.7 percent to NIS 126 billion. A similar trend was apparent in outstanding credit weighted by the risk inherent in off-balance-sheet transactions, which expanded by 6 percent to NIS 91 billion (Table 3.17). The growth in respect of off-balance-sheet items and their weighting by credit risk encompassed all of the banking groups except the First International group, where these two items remained stable.

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<sup>1</sup> The first part of this section centers on an analysis of the size of the balance-sheet portfolio, and this is followed by an analysis of off-balance-sheet activity.

**Table 1.13****Distribution of Credit by Indexation Base, the Five Major Banking Groups, 2002–04**

Year	Bank	End-year balances (NIS million)						Distribution (percent)			
		Unindexed	CPI	US	Other	Total	Relative to Equity <sup>a</sup>	Unindexed	CPI	US	Other
			Indexed	Dollars	Currencies				Indexed	Dollars	Currencies
		(NIS billions)						(percent)			
2002	Leumi	50.1	55.0	52.7	13.8	171.8	12.7	29.2	32.0	30.7	8.1
2003		51.9	54.8	46.8	15.6	169.2	11.7	30.7	32.4	27.7	9.2
2004		55.2	51.0	46.3	16.8	169.4	11.1	32.6	30.1	27.3	9.9
2004 relative to 2003 (percent)		6.3	-6.9	-1.2	7.9	0.1					
2002	Discount	24.6	19.9	25.8	4.1	74.3	13.5	33.0	26.7	34.8	5.5
2003		26.8	18.8	25.5	5.3	76.5	11.9	35.1	24.6	33.3	7.0
2004		27.4	18.8	25.8	5.5	77.5	11.3	35.4	24.2	33.3	7.1
2004 relative to 2003 (percent)		2.3	-0.4	1.3	3.1	1.4					
2002	Hapoalim	54.5	61.7	58.8	13.1	188.1	13.9	29.0	32.8	31.2	7.0
2003		56.6	58.3	52.7	16.5	184.1	12.5	30.7	31.7	28.6	9.0
2004		64.8	52.9	47.7	17.2	182.5	11.2	35.5	29.0	26.2	9.4
2004 relative to 2003 (percent)		14.5	-9.3	-9.5	4.1	-0.8					
2002	Mizrahi	15.3	32.4	8.4	3.2	59.3	15.9	25.9	54.6	14.1	5.5
2003		15.8	31.1	9.0	4.4	60.1	14.5	26.2	51.6	14.9	7.2
2004		17.7	32.5	9.1	4.4	63.6	15.4	27.8	51.0	14.4	6.8
2004 relative to 2003 (percent)		12.2	4.6	2.0	0.0	5.9					
2002	First International <sup>b</sup>	17.2	14.7	11.3	5.1	48.3	14.2	35.6	30.4	23.4	10.6
2003		16.6	14.1	10.0	4.8	45.5	12.4	36.6	31.0	22.0	10.5
2004		18.0	12.3	9.6	3.9	43.8	11.6	41.0	28.2	22.0	8.9
2004 relative to 2003 (percent)		8.1	-12.4	-3.7	-18.9	-3.7					
2002	Five groups	161.8	183.7	157.0	39.4	541.8	13.6	29.9	33.9	29.0	7.3
2003		167.7	177.1	144.0	46.6	535.3	12.3	31.3	33.1	26.9	8.7
2004		183.1	167.5	138.6	47.7	536.9	11.6	34.1	31.2	25.8	8.9
2004 relative to 2003 (percent)		9.2	-5.4	-3.7	2.5	0.3					

<sup>a</sup> With the addition of the rights of external shareholders.<sup>b</sup> The total end-of-year balances for the First International for 2003 do not include non-financial items in the amount of NIS 86 million.  
The total end-of-year balances for the First International for 2004 do not include non-financial items in the amount of NIS 198 million.

SOURCE: Published financial reports

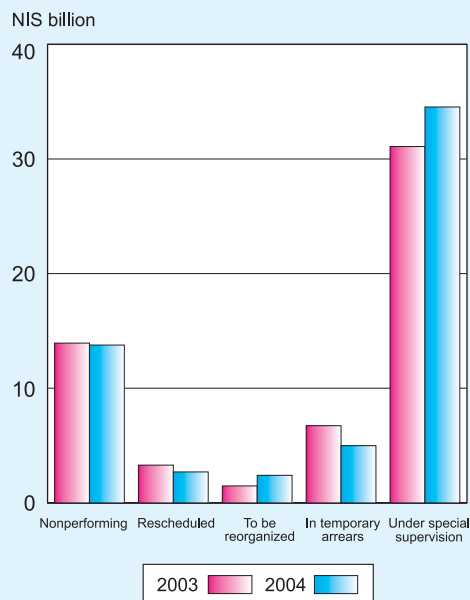
## b. Quality of the credit portfolio<sup>2</sup>

The quality of credit portfolio remained largely unchanged in 2004 despite the recovery in economic activity that began in 2003. The quality of the portfolio is measured via several indicators that express the probability that a borrower or group of borrowers will fail to adhere to their liabilities to the banks on time. These indicators are as follows:

**The proportion of problem loans to total credit at the group's responsibility** at the five large banking groups amounted to 10.9 percent at the end of 2004 (Table 1.14). From the long-term perspective of the last five years, an upward trend in this ratio has been apparent although in the last two years the rate of increase has slowed continually. The moderate increase in this ratio during 2004 resulted from a 3.3 percent increase in balance-sheet credit to problem borrowers from NIS 56.5 billion to NIS 58 billion (Table 1.15), and from the relative stability in overall outstanding credit, which amounted to NIS 537 billion at the end of 2004 as stated (Table 1.13). It can be seen from Table 1.14 that this ratio actually improved at the Discount and Mizrahi groups due to the decrease in balance-sheet problem loans (Table 1.15) and an increase in total outstanding credit (Table 1.13). Since the growth in the ratio of problem loans to total credit at the group's responsibility did not encompass all of the principal industries (Table 1.16), the banks' differing levels of exposure to the different sectors of the economy also led to disparate trends in the ratio among the banking groups.

**The ratio of non-performing loans to total credit at the group's responsibility** at the five banking groups remained unchanged in 2004 at 2.6 percent (Table 1.14). This was because total credit that is not in the category of non-performing loans changed little, from NIS 13.9 billion in 2003 to NIS 13.7 billion in 2004 (Table 1.15). An examination of developments over the past five years shows that the increase in this ratio, which began in 2001 (a very bad year for the Israeli economy in terms of GDP growth), ceased in 2004. It should be noted that non-performing loans are classified in the highest risk bracket in the group of

**Figure 1.28**  
**Distribution of Problem Loans in the Banking System, by Type, 2003-04**



SOURCE: Published financial statements.

<sup>2</sup> The analysis of the credit quality indexes relates to balance-sheet items only, while the analysis by principal industries is based on off-balance-sheet items as well.

**Table 1.14****Indices of Credit Portfolio Quality, the Five Major Banking Groups, 2000-04**

	Year	Leumi	Discount	Hapoalim	Mizrahi	First Intl.	Total
			(percent)				
Ratio of risk-weighted assets to total assets <sup>a</sup> (Average rate of weighting of assets with regard to risk assets)	2000	66.7	59.5	69.4	62.9	60.0	65.3
	2001	69.2	58.0	72.7	63.1	63.1	67.3
	2002	70.1	57.1	71.5	65.3	65.6	67.5
	2003	68.5	58.1	71.1	64.5	65.4	66.9
	2004	67.4	58.1	71.4	66.2	62.7	66.6
Share of problem loans in total credit at group's responsibility	2000	6.8	9.2	7.7	6.1	2.9	7.0
	2001	10.0	10.9	8.4	7.6	6.6	9.0
	2002	9.8	12.4	10.4	7.5	9.1	10.1
	2003	9.8	11.9	11.3	7.7	12.3	10.6
	2004	11.0	10.7	11.9	6.5	12.7	10.9
Share of non-performing loans in total credit at group's responsibility	2000	1.3	3.5	1.2	1.0	0.7	1.5
	2001	1.4	3.8	1.3	0.9	1.4	1.7
	2002	2.3	3.9	2.1	1.7	2.9	2.5
	2003	2.3	3.8	2.9	1.4	2.5	2.6
	2004	1.5	3.6	3.3	1.5	3.3	2.6
Share of annual loan-loss provision in total credit	2000	0.44	1.02	0.45	0.36	0.27	0.50
	2001	0.93	1.33	0.68	0.53	0.91	0.85
	2002	1.10	1.19	1.68	0.52	1.73	1.31
	2003	1.11	1.11	1.28	0.50	1.34	1.12
	2004	0.89	1.14	0.97	0.56	0.99	0.92
Share of the balance of the loan-loss provision in total problematic debt plus the balance of the loan-loss provision	2000	31.8	32.7	31.0	30.7	34.1	31.7
	2001	25.4	33.3	28.5	27.9	24.2	28.0
	2002	28.6	32.8	29.9	29.5	28.5	29.9
	2003	31.7	36.3	33.3	31.9	25.6	32.5
	2004	30.9	40.5	34.7	37.5	29.9	34.2

<sup>a</sup> Total risk-weighted assets calculated in accordance with the Supervisor of the Banks' directives regarding the minimum capital ratio; these assets include balance sheet credit and the credit-risk equivalent of off-balance-sheet items.

SOURCE: Published financial reports and processed data of the Research Unit of the Supervisor of the Banks.

**Table 1.15**  
**Distribution of Problem Loans, the Five Major Banking Groups, 2001-04**

	Year	Leumi	Hapoalim	Discount	Mizrahi	First Intl.	Total
		(NIS millions)					
Non-performing	2001	2,416	2,386	2,805	527	711	8,845
	2002	3,999	4,041	2,925	989	1,387	13,341
	2003	3,845	5,290	2,872	807	1,119	13,933
	2004	2,602	5,961	2,820	926	1,454	13,763
Rescheduled	2001	560	1,642	417	153	61	2,834
	2002	831	1,376	539	101	31	2,878
	2003	516	1,857	639	111	173	3,296
	2004	838	1,307	360	110	85	2,700
Due to be rescheduled	2001	88	797	3	63	20	970
	2002	74	1,040	80	24	296	1,514
	2003	81	935	39	21	399	1,475
	2004	1,210	883	84	23	201	2,401
In temporary arrears	2001	1,518	2,267	500	1,211	367	5,863
	2002	1,306	3,190	714	1,281	837	7,328
	2003	931	2,428	679	1,281	1,416	6,735
	2004	753	1,237	591	1,290	1,115	4,986
Under special supervision	2001	12,035	8,304	4,333	2,483	2,150	29,305
	2002	10,655	9,931	4,932	2,065	1,859	29,442
	2003	11,128	10,255	4,862	2,329	2,513	31,087
	2004	13,231	12,331	4,466	1,766	2,744	34,538
Total balance-sheet credit to problem borrowers	2001	16,617	15,397	8,058	4,437	3,308	47,817
	2002	16,865	19,578	9,190	4,460	4,410	54,503
	2003	16,501	20,765	9,091	4,549	5,620	56,526
	2004	18,634	21,719	8,321	4,115	5,599	58,388

SOURCE: Published financial reports and processed data of the Research Unit of the Supervisor of the Banks.

problem loans (Table 1.5, Figure 1.28), and can therefore serve as an indication of total loan-loss provisions in the future.

**The ratio of annual expenditure on loan-loss provision to total credit** fell from 1.12 percent to 0.92 percent at the five large banking groups, continuing a trend that began in 2003. The decrease resulted from a contraction in the loan-loss provision from NIS 6 billion in 2003 to NIS 5 billion in 2004 (Table 1.7). The largest improvement in this ratio

was at the First International group where it dropped from 1.34 percent to 0.99 percent, while it deteriorated slightly at the Discount and Mizrahi groups. Despite the decrease in annual current loan-loss provisions, the balance of these provisions at the end of the year rose. This increase, together with the relatively stable level of the credit portfolio, led to a rise of only 1.7 percentage points in **the ratio of the loan-loss provision to problem loans plus the balance of the loan-loss provision** at the five large banking groups (Table 1.14). This ratio expresses a bank's assessment of the potential losses that it can expect relative to the amount of the credit portfolio that it has classified as problematic. A high ratio reflects a low potential assessment of additional future losses in a bank's problem loan portfolio, that is, an assessment that the probability of credit risk materialization is low.

**The ratio of risk assets to total assets**, which expresses the extent of risk inherent in the entire asset mix, fell marginally, continuing a downtrend that began in 2003 (Table 1.14). The moderate decrease in this asset reflects the slight, previously mentioned expansion in the bank credit portfolio during 2004.

**The ratio of credit to domestic product**<sup>3</sup>, which expresses the repayment ability of borrowers in the economy at the five large banking groups (credit as compared to the source of repayment, which is represented by product). The higher this ratio therefore, the lower is the quality of credit. The downturn in this ratio that began in 2003 continued in 2004, and the ratio reached 1.02 in at the end of the year reviewed (Figure 1.2). This level is higher than the 0.87 average for the last decade. However the ratio has remained stable for the past four years.

To conclude, an analysis of the credit quality indexes shows that the deterioration in these indexes that was typical of the recession years in the economy (2001 and 2002) ceased in 2004 and some of the indexes showed an improvement. It would therefore appear that the changes in the credit quality indexes are matched to the business cycles in the economy (Figure 1.29).

### c. Credit-portfolio quality by principal industries and the household sector

Economic activity expanded in 2004, continuing a trend that began in the second half of 2003. The upturn in the economy derived from the rapid recovery in the global economy and the considerable improvement in the security situation in Israel. The recovery in the local economy during the year was reflected by a growth in product and employment in most of the principal industries. Only in the construction and real estate industry did the downturn in activity continue.

In this section, we will describe the developments that occurred during the year in the main industries to which the banking system is heavily exposed; manufacturing, construction and real estate, tourism<sup>4</sup>, and communications

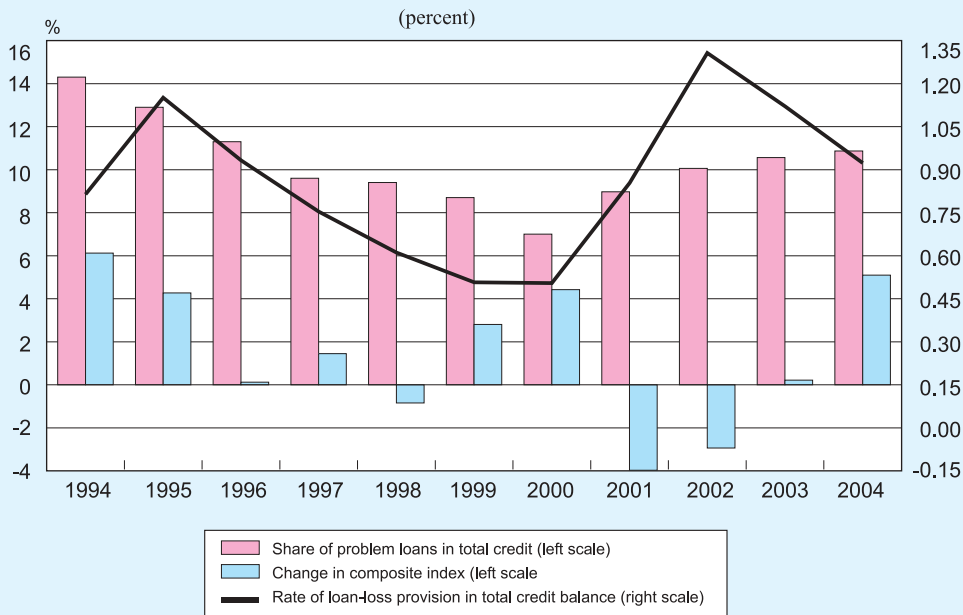
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<sup>3</sup> See also Chapter 1, Part 1, Section 2 in this review.

<sup>4</sup> Hotels, and catering and accommodation services.



**Figure 1.29**  
**Rate of Loan-Loss Provision and Share of Problem Loans in Total Credit in the Five Major Banking Groups, and the Annual Rate of Change in the Composite Index, 1994-2004**



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

and computer services. We will also describe the changes that occurred in the household sector, which is notable for its wide dispersal of borrowers and therefore has a major impact on the banking system.

The product of the **manufacturing** industry, which generates approximately one fourth of business-sector product, surged by 6.6 percent in 2004. Most of the increase derived from a large 16.3 percent growth in industrial exports, while sales to the local market rose by only 1.2 percent. The growth in industrial exports derived from the manufacturing industry's ability to respond rapidly to the recovery in world trade. Due to buoyant world demand, the utilization of labor and capital increased during the year. This utilization was translated into a growth in productivity in the industry, which was reflected by a rise in wages and industrialists' profitability.

The amount of credit to manufacturing industry fell slightly in 2004 to NIS 100.5 billion (Table 1.16). The ratio of credit to product, which reflects the quality of credit to the industry, dropped from 1.37 in 2003 to 1.25 in 2004 after peaking in the economic recession years of 2001 and 2002 (Table 3.18). The ratio of expenditure on the loan-loss provision to total credit also fell, from 1.27 percent to 0.87 percent - a decrease of 31 percent. The decrease in this ratio resulted mainly from a 33 percent decline in the annual expense on the loan-loss provision concurrent with a relatively stable volume of credit

**Table 1.16**  
**Distribution of Credit by Principal Industry, the Five Major Banking Groups, 2003-04**

	Balance of credit to public <sup>a</sup>		Change in balance of credit	Distribution of credit balances (percent)		Problem loans				Annual specific loan-loss provision		Loan-loss provision/total credit	
	2003	2004		2003	2004	Balance		Share in total credit (percent)		2003	2004	2003	2004
						2003	2004	2003	2004				
	(NIS million <sup>b</sup> )		(NIS million)	(percent)		(NIS million)		(percent)		(NIS million)		(percent)	
Agriculture	5,396	5,720	324	0.7	0.7	958	924	17.8	16.2	64	70	1.19	1.22
Manufacturing	103,062	100,523	-2,539	12.9	11.9	10,768	12,763	10.4	12.7	1,312	876	1.27	0.87
Construction and realty <sup>c</sup>	127,605	124,047	-3,558	15.9	14.7	16,696	17,782	13.1	14.3	1,226	1,630	0.96	1.31
Water and electricity	7,970	8,111	141	1.0	1.0	104	98	1.3	1.2	8	12	0.10	0.15
Commerce	53,703	57,642	3,939	6.7	6.8	4,007	4,684	7.5	8.1	514	500	0.96	0.87
Hotels and catering	14,471	14,444	-27	1.8	1.7	5,669	5,415	39.2	37.5	429	188	2.96	1.30
Transport and storage	16,221	17,272	1,051	2.0	2.0	521	619	3.2	3.6	37	113	0.23	0.65
Communications and	27,978	22,502	-5,476	3.5	2.7	5,185	4,829	18.5	21.5	507	88	1.81	0.39
Financial services	57,779	68,753	10,974	7.2	8.1	3,725	3,526	6.4	5.1	314	308	0.54	0.45
Other business services	25,893	27,578	1,685	3.2	3.3	1,498	2,022	5.8	7.3	206	207	0.80	0.75
Public and community	21,581	19,831	-1,750	2.7	2.4	1,760	1,655	8.2	8.3	149	119	0.69	0.60
Individuals	216,251	239,855	*23,604	27.0	28.4	8,040	7,942	3.7	3.3	827	718	0.38	0.30
of which housing loans	99,282	104,331	5,049	12.4	12.4	3,856	4,371	3.9	4.2	323	278	0.33	0.27
of which non-housing loans	116,969	135,524	18,555	14.6	16.1	4,184	3,571	3.6	2.6	504	440	0.43	0.32
Borrowers abroad	123,958	137,600	13,642	15.5	16.3	2,645	2,178	2.1	1.6	310	117	0.25	0.09
<b>Total</b>	<b>801,868</b>	<b>843,878</b>	<b>42,010</b>	<b>100.0</b>	<b>100.0</b>	<b>61,576</b>	<b>64,437</b>	<b>7.7</b>	<b>8</b>	<b>5,903</b>	<b>4,946</b>	<b>0.74</b>	<b>0.59</b>
Municipalities	10,389	9,021	-1,368	1.3	1.1	438	602	4.2	6.7	1	0	0.01	0.00

<sup>a</sup> 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.

<sup>b</sup> Data for 2003 is presented in December 2003 prices and 2004 data are presented as reported.

<sup>c</sup> The data of the sector are not calculated according to the restriction on sector concentration.

\* The substantial change in the balance of credit to private individuals is due to a change in classification of the off-balance sheet credit of this item in one of the banks from previous years.

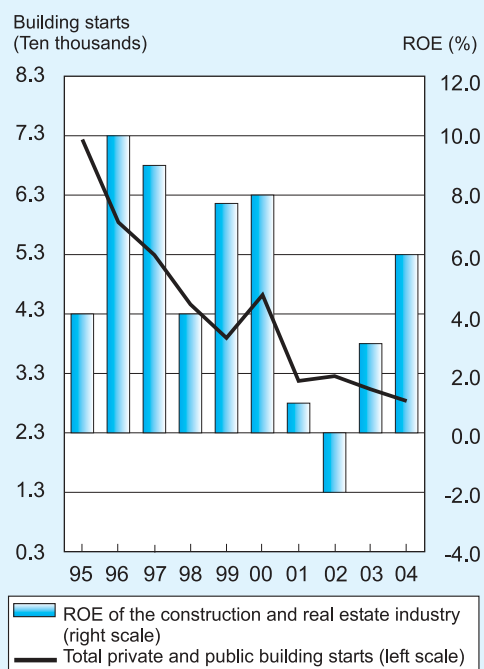
SOURCE: Published financial reports.

(Table 1.16). However, manufacturing industry's 19.8 percent share of problem loans in the principal industries remained higher than its 11.9 percent share of outstanding credit. Since the amount of problem loans to manufacturing industry actually increased in 2004, the proportion of these loans to total credit to the industry rose appreciably, from 10.4 percent to 12.7 percent (Table 1.16).

The downturn in activity in the **construction and real estate industry** continued in 2004, a development that was particularly apparent in view of the renewed growth in the economy. The product and output of the industry fell by 7.1 percent and 9.8 percent respectively. The decrease in the industry's output during 2004 resulted from the fall in demand for residential construction and a larger drop in demand for non-housing construction. This was concurrent with a shortage of skilled labor, an increase in the cost of labor inputs and increased difficulties in obtaining finance. The recession in the industry, which has now lasted for a decade, led to a contraction in the industry's share of business-sector product to only 7 percent in 2004 compared with 13 percent in the peak years for the industry in the mid-1990s. Residential construction output decreased by 6 percent, while the downturn in non-housing construction (including income-earning real estate) dipped to 15.3 percent. The fall in the number of building starts for the private and public sector continued a trend that began in the mid-1990s, although the rate of decrease during the last three years slowed to a slight extent (Figure 1.30).

Outstanding credit to the construction and real estate industry fell slightly, by 2.8 percent (Table 1.16). The decrease in the amount of credit together with the growth in outstanding problem loans (from NIS 16.7 billion to NIS 17.8 billion), increased the ratio of problem loans to total credit to the industry to 14.3 percent at the end of 2004 (Table 1.16). The position with respect to the ratio of loan-loss provisions to total credit to the industry also deteriorated and in 2004 this ratio rose by 40 percent to 1.31 percent, the highest in all the principal industries (Table 1.16). The ratio of credit to product in the construction and real estate industry fell from 4.54 in 2003 to 4.15 in 2004 (Table 3.18), but remained much higher than in the other sectors of the economy.

**Figure 1.30**  
**Number of (Private and Public) Building Starts and the Return on Equity (ROE) in the Construction and Real Estate Industry, 1995-2004**



SOURCE: The Tel Aviv Stock Exchange and financial statements of the Ministry of Construction and Housing.

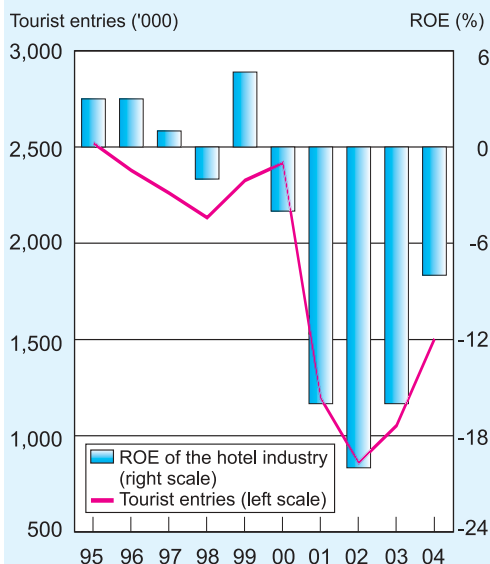
The positive trend in the **tourism industry** that began in 2003 continued during 2004, due to awareness of the recovery in economic activity and the improvement in the security situation. The industry expanded considerably, with a growth in the number of tourists arriving in Israel and the number of tourist's bed-nights at hotels (the continuation of a trend that began at the end of 2002). The number of tourist arrivals rose by 43 percent in 2004 compared with 2004 (Figure 1.31) and the number of tourist bed-nights at hotels increased by 50 percent.

Outstanding credit to the tourism industry remained largely unchanged in 2004. Against the background of the recovery in the industry, the ratio of problem loans to total credit to the industry fell from 39.2 percent in 2003 to 37.5 percent in 2004, and the ratio of loan-loss provisions to total

credit to the industry dropped from 2.96 percent to 1.3 percent (Table 1.16). However, these indexes are still higher than in the other sectors of the economy.

Activity in the **communications and computer services industry** expanded in 2004, continuing a trend that began in 2003: The industry's product<sup>5</sup> rose by 5.8 percent following an increase of 4.6 percent in 2003. Most of the improvement in 2004 derived from a 27 percent increase in start-up companies' product, following a 25 percent decrease in their product during 2003. Although the activity of the communications and computer services industry expanded in 2004, outstanding credit to the industry dipped by 20 percent during the year (Table 1.16). The decrease can be partly attributed to increased capital raising from non-banking sources by firms in the industry. The previously mentioned developments led to a decrease in the credit-product ratio in the industry from 0.83 in 2003 to 0.64 in 2004 (Table 3.18), a level similar to that prevailing before the recession in the industry. In addition, outstanding problem loans fell by 7 percent (Table 1.16). The improvement in the activity of the communications and computer services industry was also apparent from the large decrease in the annual expenditure on the loan-loss provision, from NIS 507 million in 2003 to NIS 88 million in 2004. As a result, the ratio of loan-loss provisions to total credit to the industry fell considerably, from 1.81 percent to 0.39 percent (Table 1.16).

**Figure 1.31**  
**Annual Tourist Entries into Israel and**  
**the ROE of the Hotel Industry,**  
**1995-2004**



SOURCE: The DUCAS data base of financial statements, the Ministry of Construction and Housing and the Tel Aviv Stock Exchange.

<sup>5</sup> Included in the calculation of the product of the communications and computer services industry are data on the communications, post and courier service, research and development, computer services and start-up industries.

A number of positive developments occurred in the **household sector** during 2004, primarily a 5.2 percent rise in income from wages and a 7 percent increase in the value of the public's asset portfolio (Table 1.5). However, these developments were partly offset by a decrease in transfer payments to this sector. The developments resulted from the growth in economic activity concurrent with the decrease in the rates of direct taxes. The unemployment rate fell gradually during 2004, from 10.9 percent in the second half of 2003 to 10.4 percent in the second half of 2004. This contributed to the expansion of private consumption, which rose by 5.7 percent.

The previously mentioned changes led to an 11 percent increase<sup>6</sup> in total credit to households and to a 13 percent decrease in the annual expenditure on the loan-loss provision, from NIS 827 million to NIS 718 million (Table 1.16). The improvement with respect to loan-loss provisions encompassed housing credit as well as non-housing credit.

#### **d. Concentration of the credit portfolio<sup>7</sup>**

The concentration of the bank credit portfolio decreased in 2004, continuing a trend that began in 2003. The most notable decrease was among large borrowers, as reflected by all the indexes of **credit portfolio concentration by borrower size**: The proportion of credit to borrowers with outstanding debt exceeding 5 percent of the group's equity fell at all five large banking groups by between 10 percent and 48 percent. The largest decrease, amounting to 5.5 percentage points, was recorded at the Hapoalim group (Table 1.17). A similar trend was apparent in the proportion of credit to borrowers with outstanding debt exceeding NIS 40 million. The decline in this proportion encompassed all five groups and here too, the largest improvement was recorded at the Hapoalim group, which recorded a decrease of 13 percent (Table 1.17). The Gini index of the distribution of credit by borrower size<sup>8</sup> also fell and amounted to 0.891 (Table 1.17) – the lowest value for the last five years.<sup>9</sup>

The decrease in bank credit portfolio concentration by borrower size is attributed to two factors. The first factor is the implementation of the Supervisor of Banks' directives<sup>10</sup> concerning the restrictions on the indebtedness of a borrower and borrower groups, most of which went into effect at the beginning of 2004. The other factor was the increased volume of bank credit substitutes that mainly attracted large borrowers. Part of the non-

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<sup>6</sup> Part of this substantial increase derived from change in the classification of credit lines to households at one of the banks that does not reflect an increase in outstanding credit.

<sup>7</sup> The analysis of credit concentration is based on both balance-sheet and off-balance-sheet items.

<sup>8</sup> This index, which reflects the inequality in the distribution of the bank credit portfolio, is measured by the space between the actual credit portfolio distribution curve (cumulative percent of credit to cumulative percent of borrowers) and the 45-degree line that expresses equality in the distribution of credit. The higher the index, the more concentrated is the portfolio by borrower size.

<sup>9</sup> See previous surveys.

<sup>10</sup> Proper Banking Management Directives No. 313.

bank credit that these large borrowers raised was used to repay debt to the banks, which also contributed to the decrease in the concentration of the bank credit portfolio.

Despite this decrease in the concentration of the bank credit portfolio, the concentration of the portfolio remained quite high, with 5 percent of borrowers accounting for over 77 percent of the credit portfolio (Table 3.19).

The trend of the previous years in the **concentration of the bank credit portfolio by principal industries** continued in 2004. The Herfindahl-Hirschman (H) index of credit concentration by principal industries<sup>11</sup> fell slightly to 0.077, and the H index of business credit portfolio concentration (excluding the household sector) remained largely unchanged at a level of 0.15 (Table 1.17).

**Table 1.17**

**Indices of Credit Concentration, the Five Major Banking Groups 2003-2004<sup>a</sup>**

		Leumi	Discount	Hapoalim	Mizrahi	First Intl.	Total
<b>Concentration by principal industry</b>							
H-Index by principal industry (including households) <sup>b</sup>	2003	0.085	0.087	0.086	0.054	0.106	0.079
	2004	0.084	0.094	0.081	0.050	0.108	0.077
Share of credit to households in total credit (percent)	2003	26.1	22.0	25.5	49.9	20.0	27.0
	2004	26.4	20.4	30.1	49.0	18.9	28.4
H-Index by principal industry (concentration of business portfolio) <sup>c</sup>	2003	0.155	0.143	0.156	0.214	0.165	0.149
	2004	0.155	0.148	0.166	0.192	0.164	0.150
<b>Concentration by size of borrower</b>							
Share of credit to borrowers whose credit balance is more than NIS 40 million (percent)	2003	45.5	42.9	51.4	24.7	50.7	45.7
	2004	42.9	42.6	44.8	23.9	46.0	41.9
Gini Index <sup>d</sup>	2003	0.912	0.904	0.909	0.810	0.929	0.904
	2004	0.910	0.890	0.883	0.809	0.930	0.891
Share of credit to large single borrowers (percent) <sup>e</sup>	2003	7.3	9.7	11.5	10.1	24.5	
	2004	4.7	8.7	6.0	8.6	21.5	

<sup>a</sup> On the basis of balance sheet and off-balance sheet data.

<sup>b</sup> This index is the sum of the squares of the credit weights in a particular sector (not including households) in the total credit to the public (including households).

<sup>c</sup> This index is the sum of the squares of the credit weights in that particular sector (not including households) in the total credit to the public (not including households).

<sup>d</sup> The Gini index reflects the inequality of the distribution of credit according to borrowers (see the comment in the text).

<sup>e</sup> With the addition of the rights of external shareholders.

SOURCE: Published financial reports and processed data of the Research Unit of the Supervisor of the Banks.

<sup>11</sup> The H 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). Households are notable for considerable heterogeneity in their financial situation; there is no high correlation between them, either in economic activity or in repayment ability, and it is doubtful whether they can be related to as a branch of the economy (industry) in this respect.

## 2. MARKET RISKS

### a. General

Market risks refer to the potential erosion in a bank's net worth resulting from changes in market prices (interest rates, share and securities prices, exchange rates and inflation).

We examine market risk in this survey by means of the Value at Risk method.<sup>12</sup> Under this method, the maximum expected loss to a bank as the result of changes in the relative prices of the different indexation bases is estimated, given a particular planning horizon (usually ten business days but in this section, one month) and a particular confidence level – 1 percent or 99 percent, according to the direction of the risk exposure (Figures 1.32 and 1.33).

### b. Indexation-basis (inflation and exchange-rate) risks

Indexation-basis risks describe a bank's exposure to inflation and exchange-rate adjustments. For 2004, the Value at Risk (VaR) in the indexation bases was calculated in a manner whereby financial capital is attributed, as a first preference, to the unindexed shekel segment, and the remainder is attributed to the CPI-indexed shekel segment<sup>13</sup>. (This is in contrast to previous years, when financial capital was attributed to the CPI-indexed segment alone.) This form of attribution is intended to minimize the bank's exposure to inflation in the unindexed segment.

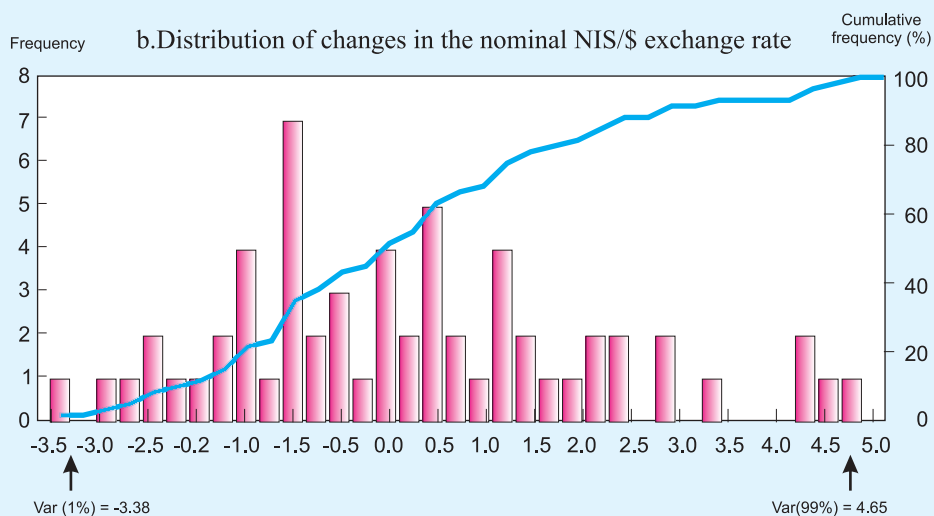
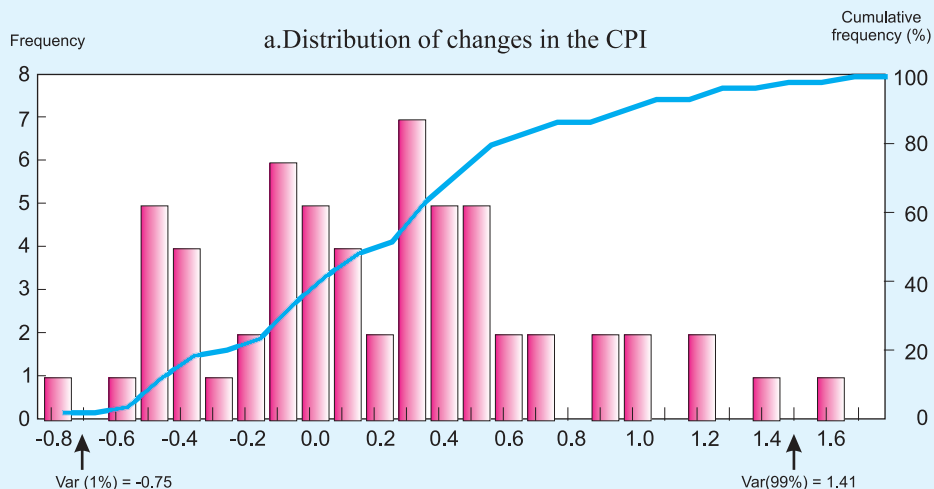
Indexation-basis risks decreased at all the banking groups in 2004 except for the Hapoalim group, as reflected by total VaR in the indexation segments and its proportion to financial capital and equity. These changes mainly derived from the quantitative effect on VaR and not the price effect. This was because the distribution of the changes in the consumer price index (inflation) and the changes in the exchange rate of the shekel against the dollar remained stable over time (Table 3.20). In the **unindexed segment**, negative positions are held at the Hapoalim and Mizrahi groups (that is, an excess of sources over uses), with the result that these groups are exposed to a decline in inflation. But at the other banking groups, the positions are minimal (Table 3.20). In the **foreign-currency segment**, the positions and total value at exchange-rate risk fell at four banking groups, while at the Hapoalim group the position increased by approximately one billion shekels and the value at exchange-rate risk rose by NIS 35 million. This positive position reflects an appreciation of the exchange rate of the shekel against the dollar (Table 3.20).

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<sup>12</sup> See pages 189-190 of the 2002 Annual Survey of Israel's Banking System for details of the calculation method.

<sup>13</sup> This attribution is made in accordance with Directive 341 of the Supervisor of Banks' directives.

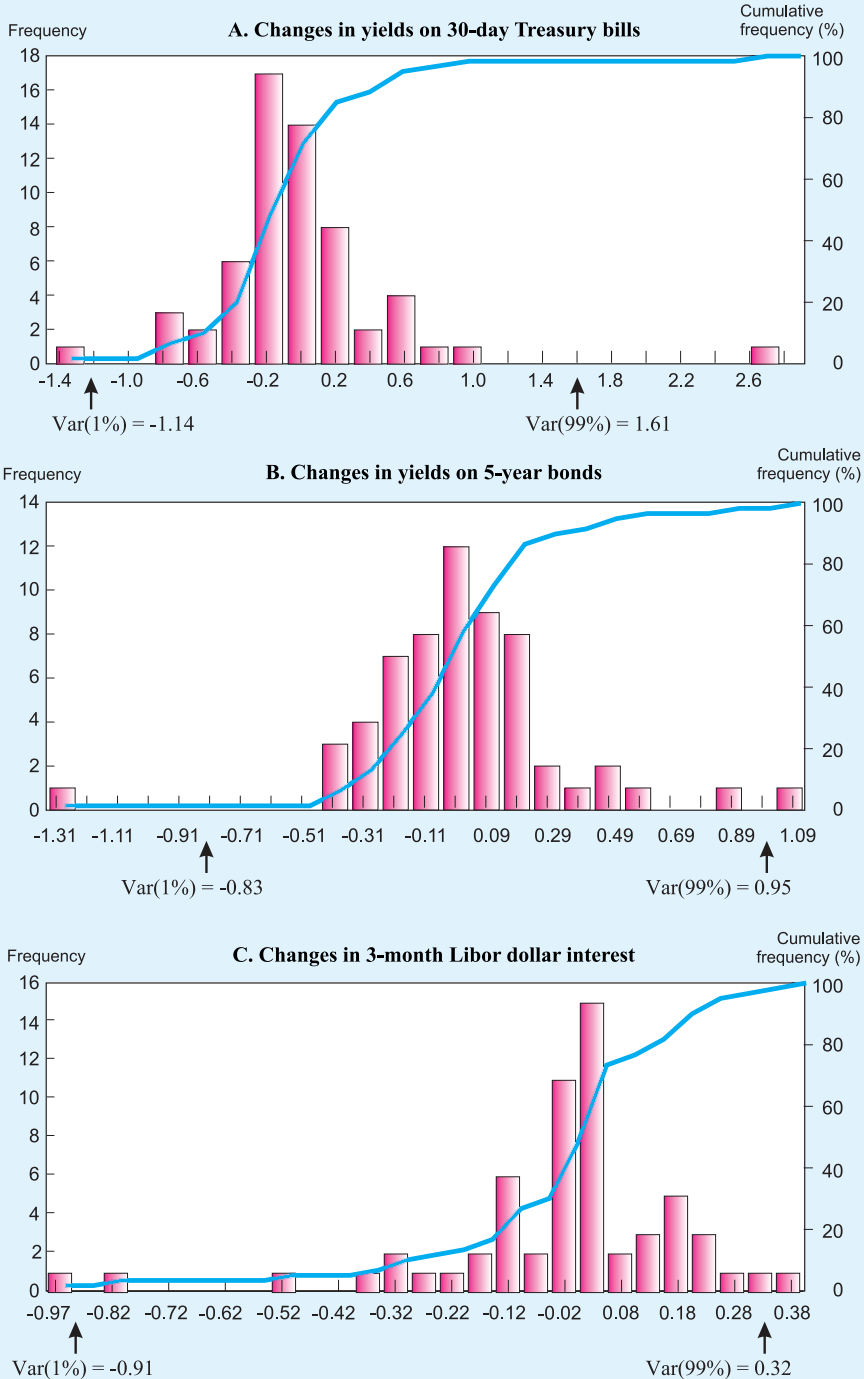
**Figure 1.32**  
**Distribution and Cumulative Distribution of Monthly Changes in the CPI and**  
**in the Exchange Rate, 2000-04**



SOURCE: Banking Supervision Research Department.



**Figure 1.33**  
**Distribution and Cumulative Distribution of Monthly Changes in**  
**Selected Interest Rates, 2000-2004**



SOURCE: Bank of Israel Monetary Department.

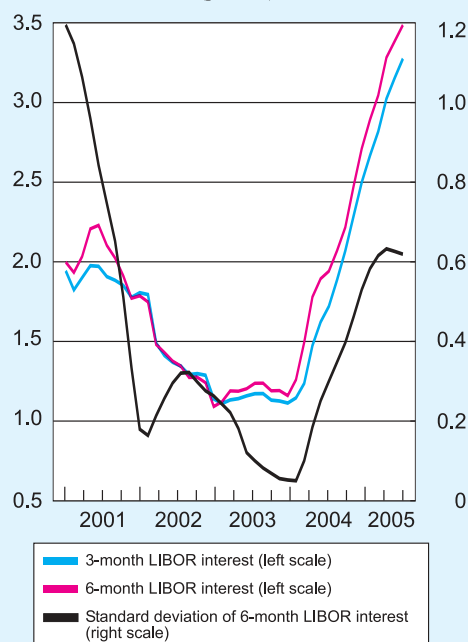
Against the background of these developments, total VaR in the indexation segments and its proportion to financial capital and equity rose at the Hapoalim group and fell at the other groups.

### c. Interest-rate risks

Total value at interest-rate risk in absolute terms and as a percentage of financial capital and equity fell in 2004 at all five large banking groups (Table 3.21). This VaR is calculated as the sum of the values subject to interest-rate risk from all the indexation segments and at a conservative assumption of a simultaneous worst possible scenario in all the segments, ignoring the potential common correlations between the changes in the different interest rates.

The five banking groups remained exposed to a rise in interest rates in 2004 because the duration (average term-to-maturity) of their net worth was positive (except at the First International group, in the foreign-currency segment). Although interest rates in the unindexed and CPI-indexed shekel segments fell during the year,<sup>14</sup> the cut-off value of the distribution of changes in interest rates in these segments remained unchanged. Interest-rate adjustments did not therefore affect the value at interest-rate risk in the CPI-indexed and unindexed shekel segments (Table 3.21). In the foreign-currency segment, despite the rise in the dollar Libid rate in 2004,<sup>15</sup> the cut-off value of the distribution of positive changes in the dollar interest rate fell slightly. As a result, the maximum change in the Libid rate led to a decrease in the value at interest-rate risk in foreign-currency segment at all the banking groups except for the First International group (Table 3.21).

**Figure 1.34**  
**LIBOR 3-and 6-Month (Average Monthly)**  
**Interest, a December 2001 to April 2005**  
(percent)



<sup>a</sup> LIBOR-London Interbank Offered Rate; The average rate of interest that banks pay on deposits from other banks. Rates available for the five largest banks in the world (UK, Japan, Germany, France and the US).  
SOURCE: Bank of Israel.

<sup>14</sup> The yield-to-maturity on 3-month Treasury bills, which is used for discounting asset and liability flows (net worth) in the unindexed segment, fell from 5.36 percent to 4.05 percent and the yield-to-maturity on 5-year CPI-indexed bonds, which is used for discounting net worth in the CPI-indexed segment, dropped from 4.08 percent to 3.52 percent.

<sup>15</sup> The 3-month dollar Libid rate rose from 1.03 percent in December 2003 to 2.44 percent in December 2004.

### 3. LIQUIDITY RISK

Liquidity risk is defined as uncertainty with respect to unexpected withdrawals from deposits of the public and their non-renewal on their contractual redemption date, and unexpected demand for credit. Apart from balance-sheet items this risk extends to off-balance-sheet items, such as changes in the unutilized component of credit lines in overdraft accounts and in demand deposit debit balances and the volume of guarantees for securing credit. Materialization of this risk could result in a bank experiencing a (monetary and business) liquidity shortage against which it will have to liquidate assets at below their market price (active asset management) and/or raise sources in the secondary market, by means of inter-bank borrowing for example or a loan from the Bank of Israel (active liability management) at above the market price. This means that changes in relative prices reflect of the price of the risk materializing.

Due to the growing importance of liquidity risk management in Israel and abroad, as apparent from the Basle Committee's publication of principles for the proper banking management of liquidity risk, on September 26 2003 the Supervisor of Banks issued a directive concerning the management of liquidity risk.<sup>16</sup> The directive requires banking corporations to manage this risk in an active manner. Under the directive, the banks were granted a choice between the application of a standard model whereby the ratio of liquid assets to liabilities with a repayment term of up to a month will not be less than 1, and the development of an internal model that takes into account the various sources of risk and on which the bank applies different scenarios. The Banking Supervision Department is currently monitoring the banks' adherence to this directive in the management of their liquidity risks.

In order to assess the extent of liquidity risk and its development in the Israeli banking system, we will present the liquidity ratio as a potential estimator. The liquidity ratio<sup>17</sup> is measured here as the ratio between assets with a high level of liquidity and liabilities whose sensitivity to unexpected withdrawals is relatively high. Highly liquid assets in the unindexed segment are cash in hand, deposits at banking corporations, deposits at the Bank of Israel and debentures. In the foreign-currency segment, liquid assets are cash in hand, deposits with the Bank of Israel, deposits with banks abroad, and debentures in Israel and abroad. Highly sensitive liabilities in the unindexed segment are demand deposits, SROs and time deposits and in the foreign-currency segment, are deposits from banks in Israel and abroad and nonresidents' deposits.

In 2004 the liquidity ratio in the unindexed segment remained largely unchanged at the three largest banking groups (Hapoalim, Leumi and Discount). A deterioration was recorded in this ratio at the other two groups – Mizrahi and the First International. At

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<sup>16</sup> Proper Banking Management Directive No. 342.

<sup>17</sup> The liquidity ratio presented in this survey is a simple potential estimator for examining liquidity risk at the banks, and is not necessarily the index that we would recommend that the banks apply for this purpose.

the former, the decrease was larger. Unlike in the unindexed segment, in the foreign-currency segment the liquidity ratio rose at all five large banking groups (Table 1.18).

The changes in the liquidity ratio in the different indexation segments reflected a substantial improvement in the banking groups' ability to cope with the potential materialization of liquidity risk in the foreign-currency segment, and relative stability in this respect in the unindexed segment.

**Table 1.18**  
**Liquidity Ratios for the Five Major Banking Groups - December 2003 to December 2004**

	Unindexed Segment <sup>a</sup>		Foreign Currency Segment <sup>b</sup>	
	2003	2004	2003	2004
	(percent)			
Hapoalim	16.4	16.6	55.0	56.2
Leumi	28.9	29.3	54.1	85.8
Discount	42.4	43.5	49.4	73.3
Mizrahi	32.0	23.8	101.3	128.7
First International	29.9	28.4	85.2	140.9

<sup>a</sup> The ratio of total assets with a high level of liquidity to total deposits of the public.

Total assets include: cash, bank deposits, deposits with the Bank of Israel and bonds.

Total liabilities include checking accounts, SROs and resident time deposits.

<sup>b</sup> The ratio of assets with a high level of liquidity to liabilities with high sensitivity.

Total assets include cash, bank deposits abroad, deposits with the Bank of Israel and bonds

abroad. Total liabilities include: deposits of foreign residents and deposits from banks in Israel and abroad.

SOURCE: Published financial reports.

#### 4. CAPITAL ADEQUACY

Banks use their capital as a cushion for absorbing the losses they could incur as a result of the unexpected materialization of the risks to which they are exposed. Today, capital adequacy is calculated in accordance with the recommendation of Basle Committee I of 1988 concerning the allocation of capital against credit risks, and its recommendation of 1996 regarding the allocation of capital against market risks. In June 2004, The Basle Committee issued the final version of its new recommendation (hereinafter: Basle II). These recommendations are intended to enhance the accuracy of the measurement of the match between credit risks and the allocation of capital against them, and for the first time include a requirement for allocation of capital against operational risks as well.

With respect to credit risks, the Basle II Committee advises one of two approaches for the allocation of capital:

**(1) The standard approach**, which expands the range of the coefficients for the weighting of credit risk from the current 0-100 percent under Basle I to 0-150 percent

under the new Basle II guidelines, relying on external rating companies' credit rating of business firms.

**(2) The Internal Rating Based (IRB) approach**, under which banks are to use internal systems for the assessment of credit risks, employing their own credit ratings and advanced models. The new directives are expected to lead to a considerable improvement in the management and pricing of risks, in the allocation of capital, and in control and monitoring activity.

An improvement in the capital base that the banks employ for absorbing losses was recorded in 2004. The aggregate risk-weighted capital ratio of the large banking groups rose by 0.4 percentage points to 10.75 percent at the end of the year following the increases that were recorded during recent years. The ratio of capital to the elements of risk rose by 0.5 percentage points in 2002 and 0.4 percentage points in 2003 to 9.9 percent and 10.32 percent at the end of those years respectively (Table 1.19 and Figure 1.35). The increase in the capital ratio was particularly apparent at the Hapoalim group and at the First International group where the highest ratio was recorded (11.24 percent). At the same time, a notable decrease in the ratio of capital to the elements of risk, from 9.81 percent in 2003 to 9.38 percent in 2004, was recorded at the Mizrahi group. This decrease resulted mainly from the additional acquisition of the shares of Bank Tefahot and its merger within the Mizrahi group.

As in 2002 and 2003, the increase in the ratio of capital to the elements of risk at the five banking groups in 2004 derived from simultaneous changes in the elements of risk and in the capital base: (1) a relatively slight 2.9 percent increase in the element of risks due to a minor 0.35 percent growth in credit to the public; (2) a 7.2 percent expansion in the capital base, mainly due to a growth in margins and as a result, in Tier I capital (8.4 percent).

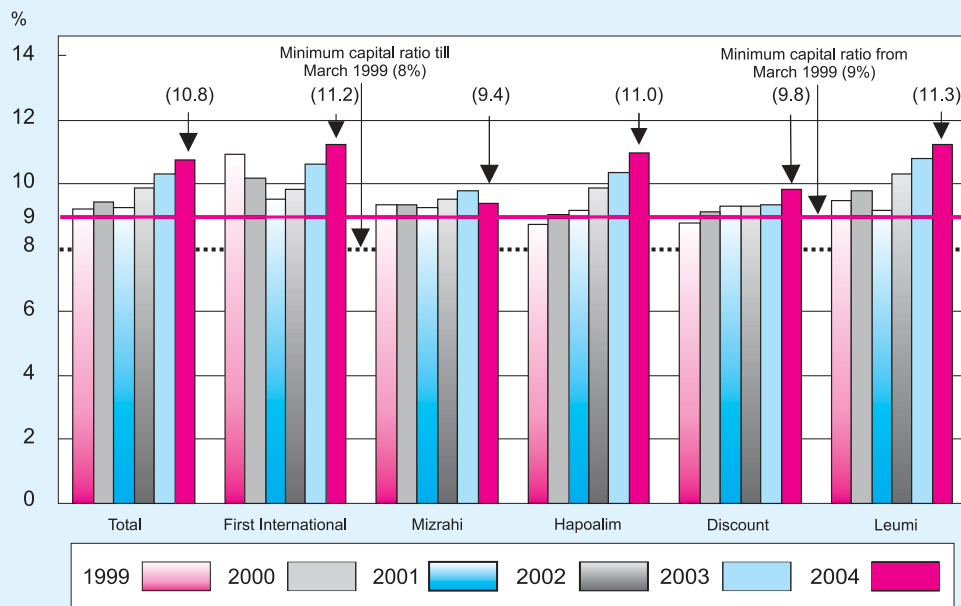
The banks maintained their policy of improving capital adequacy in 2004. The Supervisor of Banks encourages this policy in order to enable the banks to be fully prepared to cope with the materialization of risks in the future. The policy came against the background of the relatively high credit risk in the Israeli banking system. Another incentive for the improvement in capital adequacy was the banks' desire to enhance their rating by international rating companies.

The large increase in Tier I capital together with the relatively small growth in the elements of risk led to an improvement in the quality of capital: The ratio of Tier I capital to the elements of risk rose from 6.9 percent in 2003 to 7.28 percent in 2004 (Figure 1.36).

The ratio of Tier II capital to the elements of risk, which reflects the less stable part of the banks' capital, rose slightly, from 3.52 percent at the end of 2003 to 3.59 percent at the end of 2004 (Figure 1.36 and Table 1.19). This was mainly due to a 5.5 percent increase in the banks' balance of subordinated notes.<sup>18</sup>

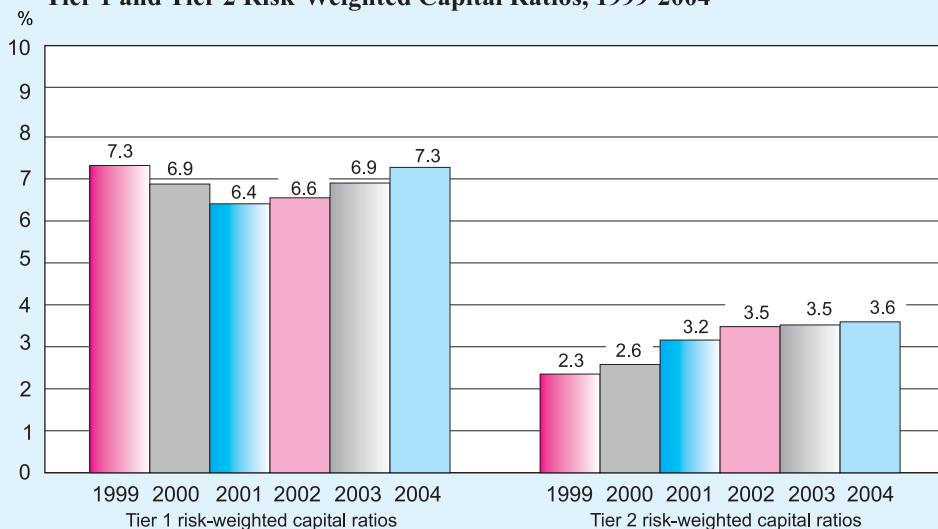
The ratio of subordinated notes to Tier I capital fell by 1.2 percentage points to 43.6 percent in 2004. This development was not uniform at the banking groups, and at a number of them the ratio approached the Supervisor of Banks restriction, whereby

**Figure 1.35**  
**Risk-Weighted Capital Ratio of the Major Banking Groups, 1999-2004**



SOURCE: Published financial statements

**Figure 1.36**  
**Tier 1 and Tier 2 Risk-Weighted Capital Ratios, 1999-2004**



SOURCE: Published financial statements.

**Table 1.19**  
**Capital Ratio of the Five Major Banking Groups, 2003-04**

	Leumi		Discount		Hapoalim		Mizrahi		First International		Total	
	2003	2004	2003	2004	2003	2004	2003	2004	2003	2004	2003	2004
	(NIS millions, in current prices)											
Equity <sup>a</sup>	14,471	15,262	6,439	6,835	14,757	16,269	4,158	4,139	3,682	3,907	43,507	46,412
Tier 1 capital <sup>b</sup>	14,345	15,165	6,098	6,619	14,567	16,617	4,133	4,072	3,584	3,847	42,727	46,320
Tier 2 capital <sup>b</sup>	6,649	7,343	3,295	3,559	8,251	8,015	1,811	2,059	1,785	1,901	21,791	22,877
<i>of which</i> Hybrid capital investment	402	406	43	43	735	739	1,707	1,952	1,708	1,815	4,595	4,955
Tier 3 capital	257	193	41	41	0	0	0	0	0	0	298	234
Investment in shares and subordinated notes of consolidated companies	-26	-34	-763	-824	-38	-36	-129	-53	-22	-38	-978	-985
Total capital for risk-weighted capital ratio calculation	21,225	22,667	8,671	9,395	22,780	24,596	5,815	6,078	5,347	5,710	63,838	68,446
	(NIS millions in current prices)											
Total balance sheet balances of credit risk	246,921	256,111	139,910	143,262	259,572	262,765	79,497	83,292	64,662	68,710	790,562	814,140
Balance of off-balance-sheet instruments (notional value)	191,273	205,889	82,437	96,234	276,783	295,317	56,954	72,891	77,907	83,609	685,354	753,940
Credit value of off-balance-sheet items	34,453	37,590	16,921	18,851	44,564	45,344	11,511	13,480	11,389	11,201	118,838	126,466
Weighted balance-sheet balances of credit risk	167,860	171,814	79,661	81,139	185,482	188,295	48,860	52,419	41,438	41,875	523,301	535,542
Weighted off-balance-sheet balances of credit risk	24,799	26,183	11,449	13,071	30,631	31,714	9,870	11,627	8,328	8,243	85,077	90,838
Market risks	3,996	3,527	1,617	1,318	3,656	3,867	567	722	642	682	10,478	10,116
Total weighted items	196,655	201,524	92,727	95,528	219,769	223,876	59,297	64,768	50,408	50,800	618,856	636,496
	(percent)											
Capital/balance-sheet ratio	5.86	5.96	4.60	4.77	5.69	6.19	5.23	4.97	5.69	5.69	5.50	5.70
Tier 1 risk-weighted capital ratio	7.29	7.53	6.58	6.93	6.63	7.42	6.97	6.29	7.11	7.57	6.90	7.28
Tier 2 risk-weighted capital ratio	3.38	3.64	3.55	3.73	3.75	3.58	3.05	3.18	3.54	3.74	3.52	3.59
Total risk-weighted capital ratio	10.79	11.25	9.35	9.83	10.37	10.99	9.81	9.38	10.61	11.24	10.32	10.75

<sup>a</sup> Equity and minority interests, according to groups' balance sheets.

<sup>b</sup> In accordance with the minimum capital ratio requirement.

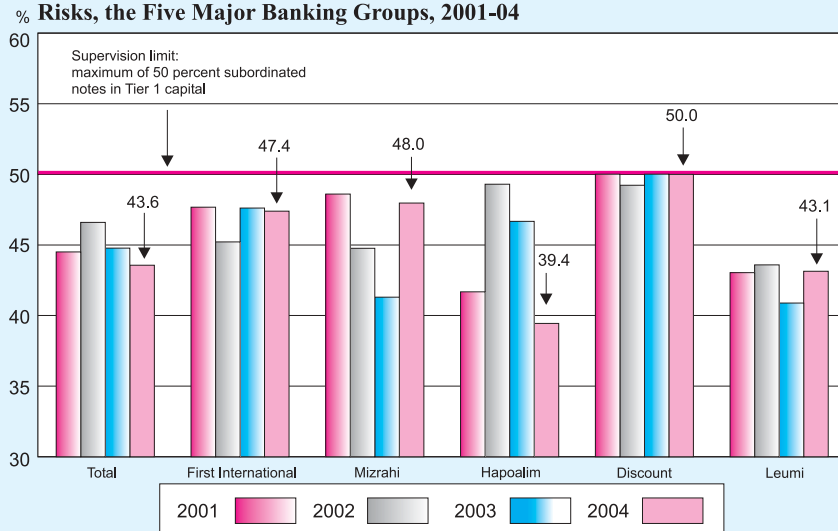
SOURCE: Published financial statements.

subordinated notes must not exceed 50 percent of Tier I capital. This ratio rose sharply to 48 percent at the Mizrahi group, remained high in comparison with 2003 at the First International and Discount groups and amounted to 50 percent at the Discount group, similar to its level during the last four years. At the Discount group, the ratio thereby reached the full extent of the Supervisor of Banks' restriction (Figure 1.37).

To conclude, an improvement was recorded in the capital base that the banks' employ for the absorption of losses, the ratio of capital to the elements of risk that is, together with an improvement in the quality of capital (in the ratio of Tier I capital to the elements of risk). The improvement in the banks' capital ratio increased the capital ratio's safety margin beyond the 9 percent minimum required by the Supervisor of Banks. This was against the background of credit risk, which remained high in the Israeli banking system during 2004 as well.

**Figure 1.37**

**Ratio of Subordinated Notes to Tier 1 Capital Not Allocated Against Market Risks, the Five Major Banking Groups, 2001-04**



SOURCE: Published financial statements.

<sup>18</sup> Subordinated notes comprise the majority of Tier II capital and from the banks' viewpoint, they reflect a capital component that is less stable than Tier I capital. This is because they are accrued (the interest payments on them cannot be postponed), are issued for a limited period, there is no certainty as to their availability (beyond the specific period determined in the directives) and renewal cost, and they do not participate in the losses of the issuing corporation on a current basis.



## 5. THE ROBUSTNESS OF THE BANKING SYSTEM

The improvement in the banking system's robustness and financial stability as reflected by the Hosen index continued in 2004. The Hosen ('robustness') index,<sup>19</sup> which was developed and applied by the Banking Supervision Department, combines a range of indicators on the banks' portfolio, risks and capital adequacy. The index thereby presents an overall and composite picture of the robustness and financial stability of the banking system over time. An analysis of the results in Table 1.20 shows that the improvement in the robustness and financial stability of the banking system derived mainly from an improvement in the banking groups' capital adequacy and profitability. Although the credit risks in the banking system fell slightly during the last two years compared with the worst years of 2001 and 2002, they remained high despite the recovery in economic activity. It should be noted that the development of Hosen marks to a large extent matches the banks' performance as described and analyzed in this survey.

**Table 1.20**

**Resilience Index of the Banking Institutions in Israel.**

**Weighted Average for the Entire Banking System 2000 to 2004**

Year	2000	2001	2002	2003	2004
Overall index	2.79	2.99	2.95	2.74	2.58

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<sup>19</sup> The index ranges between 1 (the highest median) and 5 (the lowest median). For a detailed explanation of the index and its components, see Box 1a (pages 32-33) in the Annual Survey for 2003 and Y. Fishman and D. Ruthenberg. Hosen – an index for examining the financial stability and robustness of the banks in Israel”, Research Unit, Banking Supervision Department, Bank of Israel, discussion paper, September 2004.

## Appendix 1

### Banking System Tables

**Table A.1**

**Total Credit to the Public of the Five Major Banking Groups According to Type of Indexation - 1997 to 2004<sup>a</sup>**

	1997	1998	1999	2000	2001	2002	2003	2004	Rate of Change (percent)
<b>Credit to the Public</b>									
Israeli currency unindexed	83,219	65,425	110,508	147,688	161,938	161,754	167,742	183,130	9.2
Israeli currency CPI-indexed	141,722	110,768	168,755	176,371	184,513	183,658	177,057	167,453	-5.4
Indexed to foreign currency and denominated in foreign currency	111,283	91,145	152,309	161,676	186,742	196,347	190,317	186,312	-2.1
<i>of which</i> dollars	88,724	70,545	121,515	124,633	151,525	156,994	143,962	138,574	-3.7
Foreign currency and indexed to a different foreign currency, non- financial items	0	0	0	0	0	0	86	198	130.2
<b>Total Credit to the Public</b>	336,224	267,338	431,572	485,735	533,193	541,759	535,202	537,093	0.4

**Of Which - Credit to the Public of the Five Major Mortgage Banking Groups According to Type of Indexation - 1997<sup>b</sup> to 2004**

	1997	1998	1999	2000	2001	2002	2003	2004 <sup>c</sup>	Rate of Change (percent)
Israeli currency unindexed	1,297	1,555	1,619	2,479	3,976	5,634	5,633	6,712	19.2
Israeli currency CPI-indexed	68,078	74,393	82,588	89,452	92,337	91,328	88,796	89,614	-2.8
Indexed to foreign currency and denominated in foreign currency	1,761	2,154	2,196	2,165	3,337	6,534	10,274	12,682	23.4
<i>of which</i> dollars	1,761	2,154	2,171	2,106	3,233	6,430	10,115	12,510	23.7
<b>Total Credit to the Public</b>	71,136	78,102	86,403	94,096	99,651	103,496	104,703	109,008	0.9

<sup>a</sup> The data are adjusted to the CPI until December 31, 2003 according to the index of December 31, 2003; from January 1, 2004 the data are in current prices.

<sup>b</sup> Including loans for housing and to housing contractors, building companies and the housing companies of Leumi Mortgage Bank, Discount Mortgage Bank, First International Mortgage Bank and Tephahot Mortgage Bank; until 2003 includes Mishkan and in 2004 Hapoalim takes its place..

<sup>c</sup> The data for 2004 include an estimate of the mortgage portfolio of Bank Hapoalim.

SOURCE: Published financial statements.

**Table A.2**  
**The Securities Portfolios of the Major Banking Groups, 2004**

		Hapoalim		Leumi		Discount	
		Fair Value NIS millions, in December 2004 prices	Distribution in percent	Fair Value NIS millions, in December 2004 prices	Distribution in percent	Fair Value NIS millions, in December 2004 prices	Distribution in percent
Bonds held to maturity	Government bonds	130	0.4	4,435	10.1	5,524	13.8
	Other bonds	1,765	4.9	116	0.3	35	0.1
	<b>Total bonds held to maturity</b>	<b>1,895</b>	<b>5.3</b>	<b>4,551</b>	<b>10.4</b>	<b>5,559</b>	<b>13.9</b>
Securities available for sale	Government bonds	12,930	36.0	19,721	45.1	26,352	65.8
	Other bonds	16,764	46.7	11,744	26.9	4,537	11.3
	Total bonds available for sale	29,694	82.7	31,465	72.0	30,889	77.1
	Total shares available for sale	1,053	2.9	1,423	3.3	894	2.2
	<b>Total securities available for sale</b>	<b>30,747</b>	<b>85.6</b>	<b>32,888</b>	<b>75.3</b>	<b>31,783</b>	<b>79.3</b>
Tradable securities	Government bonds	2,417	6.7	4,382	10.0	1,936	4.8
	Other bonds	57	0.2	1,212	2.8	772	1.9
	Total tradable bonds	2,474	6.9	5,594	12.8	2,708	6.8
	Total tradable shares	805	2.2	672	1.5	11	0.0
	<b>Total tradable securities</b>	<b>3,279</b>	<b>9.1</b>	<b>6,266</b>	<b>14.3</b>	<b>2,719</b>	<b>6.8</b>
	<b>Total government bonds</b>	<b>15,477</b>	<b>43.1</b>	<b>28,538</b>	<b>65.3</b>	<b>33,812</b>	<b>84.4</b>
	<b>Total other bonds</b>	<b>20,444</b>	<b>56.9</b>	<b>15,167</b>	<b>34.7</b>	<b>6,249</b>	<b>15.6</b>
	<b>Total securities</b>	<b>35,921</b>	<b>100.0</b>	<b>43,705</b>	<b>100.0</b>	<b>40,061</b>	<b>100.0</b>
		Mizrahi		First International		Total of Five Bank Groups	
		Fair Value NIS millions, in December 2004 prices	Distribution in percent	Fair Value NIS millions, in December 2004 prices	Distribution in percent	Fair Value NIS millions, in December 2004 prices	Distribution in percent
Bonds held to maturity	Government bonds	48	0.8	0	0.0	10,137	7.5
	Other bonds	314	5.5	156	1.8	2,386	1.8
	<b>Total bonds held to maturity</b>	<b>362</b>	<b>6.3</b>	<b>156</b>	<b>1.8</b>	<b>12,523</b>	<b>5.5</b>
Securities available for sale	Government bonds	3,952	68.7	4,592	51.9	67,547	50.3
	Other bonds	1,083	18.8	2,413	27.3	36,541	27.2
	Total bonds available for sale	5,035	87.5	7,005	79.2	104,088	77.5
	Total shares available for sale	341	5.9	491	5.6	4,202	3.1
	<b>Total securities available for sale</b>	<b>5,376</b>	<b>93.4</b>	<b>7,496</b>	<b>84.8</b>	<b>108,290</b>	<b>80.6</b>
Tradable securities	Government bonds	0	0.0	1,115	12.6	9,850	7.3
	Other bonds	17	0.3	70	0.8	2,128	1.6
	Total tradable bonds	17	0.3	1,185	13.4	11,978	8.9
	Total tradable shares	1	0.0	6	0.1	1,495	1.1
	<b>Total tradable securities</b>	<b>18</b>	<b>0.3</b>	<b>1,191</b>	<b>13.5</b>	<b>13,473</b>	<b>10.0</b>
	<b>Total government bonds</b>	<b>4,000</b>	<b>69.5</b>	<b>5,707</b>	<b>64.5</b>	<b>87,534</b>	<b>65.2</b>
	<b>Total other bonds</b>	<b>1,756</b>	<b>30.5</b>	<b>3,136</b>	<b>35.5</b>	<b>46,752</b>	<b>34.8</b>
	<b>Total securities</b>	<b>5,756</b>	<b>100.0</b>	<b>8,843</b>	<b>100.0</b>	<b>134,286</b>	<b>100.0</b>

SOURCE: Published financial reports

**Table A.3**  
**Average Annual Yields on Selected Assets and Liabilities in the Various Segments, 2003 and 2004**

	Annual average		2004				Annual average		2004			
	2003	2004	I	II	III	IV	2003	2004	I	II	III	IV
	(Nominal rates of return)						(Expected real rate of return <sup>i</sup> )					
<b>Unindexed local-currency segment</b>												
Demand deposits <sup>a</sup>	1.7	1.2	1.1	1.1	1.3	1.4	-0.2	-0.2	-0.1	-0.5	-0.2	0.0
SRO deposits <sup>a</sup>	6.2	3.1	3.4	3.0	3.1	3.0	4.2	1.7	2.1	1.4	1.6	1.5
Resident time deposits <sup>a</sup>	6.7	3.7	4.0	3.6	3.6	3.6	4.6	2.2	2.7	2.0	2.1	2.1
<b>Total unindexed sources</b>	<b>6.3</b>	<b>3.4</b>	<b>3.7</b>	<b>3.3</b>	<b>3.3</b>	<b>3.3</b>	<b>4.3</b>	<b>2.0</b>	<b>2.4</b>	<b>1.7</b>	<b>1.8</b>	<b>1.8</b>
Term credit <sup>a</sup>	9.5	6.5	6.9	6.4	6.4	6.4	7.4	5.0	5.6	4.8	4.8	4.8
Overdraft accounts and facilities <sup>a</sup>	13.7	10.2	10.6	10.0	10.2	10.0	11.5	8.6	9.2	8.2	8.6	8.4
Total unindexed credit	10.6	7.4	7.8	7.3	7.3	7.2	8.5	5.9	6.5	5.7	5.7	5.7
Treasury bills <sup>b</sup>	8.5	5.2	5.2	4.8	5.0	5.7	6.4	3.7	3.9	3.2	3.4	4.2
Banks' deposits with Bank of Israel <sup>c</sup>	7.8	4.3	4.7	4.2	4.3	4.2	5.7	2.9	3.4	2.6	2.7	2.7
<b>Total unindexed assets</b>	<b>9.5</b>	<b>6.6</b>	<b>6.9</b>	<b>6.5</b>	<b>6.5</b>	<b>6.5</b>	<b>7.4</b>	<b>5.1</b>	<b>5.6</b>	<b>4.9</b>	<b>4.9</b>	<b>4.9</b>
<b>CPI-indexed local-currency segment</b>												
CPI-indexed deposits <sup>d</sup>	4.0	2.9	3.0	2.9	3.0	2.8	4.0	2.9	3.0	2.9	3.0	2.8
Bonds <sup>e</sup>	.	.	.	.	.	.	4.9	3.8	3.8	3.9	3.8	3.6
CPI-indexed credit <sup>f</sup>	.	.	.	.	.	.	6.4	5.4	5.7	5.2	5.6	5.2
Mortgages <sup>g</sup>	.	.	.	.	.	.	6.0					

(cont'd.)

**Table A.3** (cont'd.)

	Annual average		2004				Annual average		2004			
	2003	2004	I	II	III	IV	2003	2004	I	II	III	IV
	(In dollar terms <sup>b</sup> )						(Expected real rate of return <sup>i</sup> )					
<b>Foreign-currency-denominated and indexed segment</b>												
Time deposits	0.1	0.2	0.1	0.1	0.2	0.2	1.1	1.9	0.7	2.1	1.7	3.1
Foreign-currency-denominated deposits <sup>j</sup>	0.8	1.0	0.6	0.7	1.1	1.6	1.7	2.8	1.3	2.7	2.6	4.5
Foreign-currency-indexed credit	3.1	3.7	3.2	3.3	3.8	4.4	4.1	5.5	3.8	5.4	5.4	7.4
Foreign-currency credit to residents	2.8	3.2	2.8	2.9	3.3	3.9	3.8	5.0	3.4	4.9	4.9	6.9
Deposits abroad <sup>k</sup>	1.1	1.5	1.0	1.2	1.6	2.2	2.0	3.3	1.6	3.2	3.2	5.1
Annual rates of change												
CPI	-1.9	1.2	-0.4	6.2	-0.8	0	.	.	.	.	.	.
NIS/\$ exchange rate	4.1	4.9	2	5.2	3.7	4.9	.	.	.	.	.	.

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

<sup>b</sup> The yield for two months on unindexed bonds.

<sup>c</sup> Calculated as the effective rate of return from interest income on the deposits with the Bank of Israel on an annual basis. The balances used for the calculation were the average balances for the period.

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

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

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

<sup>g</sup> Weighted average interest on nondirected mortgage loans.

<sup>h</sup> The data refer to dollar dominated credit and deposit items.

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

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

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

\* The interest on bank deposits that are part of the deposit tenders that the Bank of Israel initiated in the last quarter of 1996.

SOURCE: Based on reports to the Supervisor of the Banks and data from Monetary Department of the Bank of Israel.

**Table A.4****Cumulative Granting and Redemption at the Mortgage-Granting Banks<sup>a</sup>, NIS millions**

	2002	2003	2004	Rate of change relative to 2003 (percent)
Total non-directed loans granted to home buyers	15,502	11,899	15,886	33.5%
Total early redemptions (housing)	7,085	6,092	9,216	51.3%
Total accumulated arrears among home buyers	1,382	1,737	2,006	15.5%

<sup>a</sup> Adanim Mortgage Bank, Bank Hapoalim (starting from 2004), Union Bank (starting from 2004), Bank Otzar Hahayal (starting from 2004), Discount Mercantile Bank (starting from 2004), Jerusalem Bank, Leumi Mortgage Bank, Tefahot Mortgage Bank, Discount Mortgage Bank, First International Mortgage Bank and Independence Mortgage and Development Bank.

SOURCE: Reports to the Supervisor of the Banks

**Table A.5****Distribution of Dependent Liabilities and Special Commitments of the Five Major Banking Groups, 2002-2004**

	End-of-year balances			Rate of Change (relative to the previous period)		Distribution		
	2002	2003	2004	2003	2004	2002	2003	2004
	(NIS billions) <sup>a</sup>			(percent)		(percent)		
Documentary credit	7	6	7	-11.5	13.8	3.0	2.5	2.6
Credit guarantees	21	18	17	-13.7	-5.7	9.0	7.5	6.4
Guarantees for home buyers	22	19	20	-11.0	2.5	9.4	8.0	7.4
Other guarantees and liabilities	23	23	25	1.3	7.0	9.7	9.5	9.2
Non-recurring commitments for approved credit that has not yet been extended	50	55	53	8.4	-3.6	21.6	22.4	19.6
Commitments to issue guarantees	14	14	14	2.1	2.1	5.8	5.7	5.2
Commitments due to open credit card transactions	13	14	18	11.1	25.9	5.5	5.8	6.6
Overdraft facilities and other credit facilities to the public not yet utilized	45	57	76	24.6	34.4	19.4	23.2	28.3
Credit card facilities not yet utilized	39	38	39	-2.9	4.1	16.6	15.5	14.6
Total	233	244	269	4.4	10.3	100	100	100

<sup>a</sup> Distribution by years: 2002-2003 were calculated in December 2003 prices and 2004 is calculated in current prices.

SOURCE: Published financial reports

**Table A.6****Breakdown of Profits from Financial Activities Before the Loan-Loss Provision According to Type of Indexation Five Major Banking Groups 2004 relative to 2003 (NIS millions)**

	2003	2004	Change relative to 2003	Percentage change relative to 2003
	(Current prices)			
<b>Income by type of indexation (including derivatives)</b>				
Shekel unindexed	7,756	8,101	345	4.4
Shekel indexed to foreign currency	2,795	3,325	530	19.0
Foreign currency - local activity	2,694	3,351	657	24.4
Foreign currency - activity abroad	2,299	2,334	35	1.5
<b>(1) Total income from indexation derivatives</b>	<b>15,544</b>	<b>17,111</b>	<b>1,567</b>	<b>10.1</b>
Other financial income				
Commissions on transactions	754	747	-7	-0.9
Net other financial income	2,011	1,730	-281	-14.0
<i>of which</i> Profits from the sale and valuation of bonds <sup>a</sup>	968	524	-444	-45.9
<b>(2) Total other financial income</b>	<b>2,765</b>	<b>2,477</b>	<b>-288</b>	<b>-10.4</b>
<b>(3) Options and other derivatives</b>	<b>152</b>	<b>415</b>	<b>263</b>	<b>173.0</b>
Profit from financial activities before the loan-loss provision (1+2+3)	18,461	20,003	1,542	8.4

<sup>a</sup> Including profits/losses from the valuation and sale of tradable bonds and the sale of bonds available for sale and bonds held until maturity. In 2002 losses were realized as a result of this item in the amount of 326 million shekels.

SOURCE: Published financial reports

**Table A.7****The Financial Spread According to Indexation Type in the Five Major Banking Groups, 2003 and 2004 (NIS millions, in current prices)**

	Net financial income (1)		Average annual balance of assets (2)		Financial spread (1)/(2)=3	
	2003	2004	2003	2004	2003	2004
Type					percent	
Shekel unindexed	7,756	8,101	282,600	293,500	2.74	2.76
Shekel indexed	2,795	3,325	212,174	194,208	1.32	1.71
Foreign currency - local	2,694	3,351	400,927	409,398	0.67	0.82
Foreign currency - abroad	2,299	2,334	136,113	143,912	1.69	1.62
Other income <sup>a</sup>	2,917	2,892			0.00	0.00
<b>Total</b>	<b>18,461</b>	<b>20,003</b>	<b>1,031,814</b>	<b>1,041,018</b>	<b>1.79</b>	<b>1.92</b>

<sup>a</sup> Income from options, other derivatives and other financial income, such as unrealized profits and losses from the valuation of tradable bonds and commissions on financing transactions.

SOURCE: Published financial reports and processed data of the Research Unit of the Supervisor of the Banks.

**Table A.8**  
**Components of the Loan-Loss Provision for the Five Major Banking Groups, 2002-2004**  
**(NIS millions, current prices)**

	2002 <sup>a</sup>			2003 <sup>b</sup>			2004 <sup>c</sup>		
	The specific provision	The general and additional provision	Total	The specific provision	The general and additional provision	Total	The specific provision	The general and additional provision	Total
<b>Beginning-of-year balance of the provision</b>	<b>15,263</b>	<b>3,095</b>	<b>18,357</b>	<b>20,309</b>	<b>3,280</b>	<b>23,589</b>	<b>23,972</b>	<b>3,359</b>	<b>27,331</b>
Additions to the provision during the accounting year	7,763	234	7,997	6,941	172	7,113	6,588	100	6,688
Reduction of the provision	-766	-99	-865	-976	-95	-1,071	-1,592	-88	-1,680
Collection of debts which were written off in previous years	-52	0	-52	-62	0	-62	-50	0	-50
<b>The amount entered in the profit and loss statement</b>	<b>6,945</b>	<b>135</b>	<b>7,081</b>	<b>5,922</b>	<b>77</b>	<b>5,999</b>	<b>4,946</b>	<b>12</b>	<b>4,958</b>
Written-off debts	-1,375	0	-1,375	-2,440	0	-2,440	-2,009	0	-2,009
Erosion and adjustment of balances	-858	0	-858	144	0	144	81	0	81
<b>End-of-year balance of provision</b>	<b>19,975</b>	<b>3,230</b>	<b>23,205</b>	<b>23,916</b>	<b>3,357</b>	<b>27,273</b>	<b>26,990</b>	<b>3,371</b>	<b>30,361</b>

<sup>a</sup> In December 2003 prices.

<sup>b</sup> The differences between the end-of-year 2002 balances and the beginning-of-year 2003 balances are the result of the increase the of provisions at Bank Hapoalim due to companies that were consolidated for the first time.

<sup>c</sup> The differences between the end-of-year 2003 balances and the beginning-of-year 2004 balances are the result of the increase the of provisions at Bank Hapoalim due to companies that were consolidated for the first time.

SOURCE: Published financial reports



**Table A.9****Non-Interest Income and Operating Expenses of the Five Major Banking Groups, 2002-2004**

	Amount			Distribution (%)			Year-on-year change (%)	
	(NIS million, Dec. 2003 prices)							
	2002 <sup>a</sup>	2003	2004	2002	2003	2004	2003	2004
	(NIS millions, at current prices)			(percent)			(percent)	
<b>1. Non-interest income</b>								
Income from banking services								
Ledger fees	1,400	1,461	1,483	14.7	13.6	12.7	4.4	1.5
Payment services	1,858	1,835	1,875	19.5	17.1	16.0	-1.2	2.2
Credit cards	1,572	1,741	1,917	16.5	16.2	16.4	10.8	10.1
Credit services and contracts	665	741	793	7.0	6.9	6.8	11.4	7.0
Computerized services	283	213	216	3.0	2.0	1.8	-24.7	1.4
Foreign trade and special services	323	352	383	3.4	3.3	3.3	9.0	8.8
Other commissions <sup>b</sup>	902	904	853	9.5	8.4	7.3	0.2	-5.6
<b>Total income from banking services</b>	<b>7,003</b>	<b>7,247</b>	<b>7,520</b>	<b>73.5</b>	<b>67.5</b>	<b>64.4</b>	<b>3.5</b>	<b>3.8</b>
<b>Income from activity in the capital market</b>								
From activity in securities <sup>c</sup>	1,060	1,361	1,734	11.1	12.7	14.8	28.4	27.4
Provident and mutual fund fees	1,424	1,438	1,814	14.9	13.4	15.5	1.0	26.1
<i>of which</i> Provident fund fees	821	874	875	8.6	8.1	7.5	6.5	0.1
Mutual fund fees	603	564	939	6.3	5.3	8.0	-6.5	66.5
<b>Total income from activity in the capital market</b>	<b>2,484</b>	<b>2,799</b>	<b>3,548</b>	<b>26.1</b>	<b>26.1</b>	<b>30.4</b>	<b>12.7</b>	<b>26.8</b>
<b>Other income</b>								
Profit from compensation funds	-	455	138	0.0	4.2	1.2	-	-69.7
Profit from the sale of shares <sup>d</sup>	-168	35	273	-1.8	0.3	2.3	0.0	680.0
Others <sup>e</sup>	208	203	207	2.2	1.9	1.8	-2.4	2.0
<b>Total other income</b>	<b>40</b>	<b>693</b>	<b>618</b>	<b>0.4</b>	<b>6.5</b>	<b>5.3</b>	<b>1,632.5</b>	<b>-10.8</b>
<b>Total non-interest income</b>	<b>9,527</b>	<b>10,739</b>	<b>11,686</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>12.7</b>	<b>8.8</b>

(cont'd.)

**Table A.9** (cont'd.)**Non-Interest Income and Operating Expenses of the Five Major Banking Groups, 2002-2004**

	Amount			Distribution (%)			Year-on-year change (%)	
	(NIS million, Dec. 2003 prices)							
	2002 <sup>a</sup>	2003	2004	2002	2003	2004	2003	2004
	(NIS millions, at current prices)			(percent)			(percent)	
<b>2. Operating expenses</b>								
Salaries and related expenses <sup>f</sup>	10,795	10,827	11,410	62.9	60.6	60.3	0.3	5.4
Maintenance of buildings	3,136	3,343	3,391	18.3	18.7	17.9	6.6	1.4
Other expenses	3,244	3,694	4,119	18.9	20.7	21.8	13.9	11.5
Marketing and advertising	497	539	596	2.9	3.0	3.2	8.5	10.6
Computer expenses	544	580	698	3.2	3.2	3.7	6.6	20.3
Communications	488	500	504	2.8	2.8	2.7	2.5	0.8
Insurance	172	215	232	1.0	1.2	1.2	25.0	7.9
Office	220	233	238	1.3	1.3	1.3	5.9	2.1
Professional services	435	516	594	2.5	2.9	3.1	18.6	15.1
<b>Total operating expenses</b>	<b>17,175</b>	<b>17,864</b>	<b>18,920</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>4.0</b>	<b>5.9</b>
<b>Operating coverage rate<sup>g</sup> (percent)</b>	<b>55.5</b>	<b>60.1</b>	<b>61.8</b>					

<sup>a</sup> Including income from the activity of customers in securities, from financial instruments, guardian fees and underwriting and distribution of securities.

<sup>b</sup> Including primarily collection spreads and commissions on credit from the Ministry of Finance, handling fees for inheritances and estates, rental of safes, etc.

<sup>c</sup> Including income from the sale of shares that can be sold, from the adjustment of the fair value of tradable shares and dividends from tradable shares that can be sold.

<sup>d</sup> Including profit from the sale of assets that were received to pay off debts and rental of buildings that are not in use by the bank, dividends not from subsidiary/affiliated companies, etc.

<sup>e</sup> Including salary tax, compensation, pension and National Insurance.

<sup>f</sup> The ratio of operating and other income to operating and other expenses

SOURCE: Reports to the Supervisor of the Banks

**Table A.10**  
**Expenses for Employees of the Five Major Banking Groups, 1997 to 2004**

Year	Average number of posts <sup>b</sup>	Salaries		Related expenses <sup>c</sup> for employees <sup>c</sup>		Salaries and related expenses	
		Total (NIS millions)	Per post (NIS thousands)	Total (NIS millions)	Per post (NIS thousands)	Total (NIS millions)	Per post (NIS thousands)
1997	38,180	6,294	165	2,888	76	9,182	241
1998	38,230	6,341	166	2,955	77	9,296	243
1999	38,248	6,607	173	3,063	80	9,669	253
2000	39,251	7,220	184	3,557	91	10,777	275
2001	39,753	7,231	182	3,560	90	10,791	271
2002 <sup>a</sup>	39,531	6,738	170	3,929	99	10,666	270
2003	38,427	7,260	189	3,567	93	10,827	282
2004	38,170	7,720	202	3,690	97	11,410	299
Change from Previous Year (percent)							
1998	0.1	0.7	0.6	2.3	2.2	1.2	1.1
1999	0.0	4.2	4.1	3.6	3.6	4.0	4.0
2000	2.6	9.3	6.5	16.1	13.2	11.5	8.6
2001	1.3	0.1	-1.1	0.1	-1.2	0.1	-1.1
2002	-0.6	-6.8	-6.3	10.4	11.0	-1.2	-0.6
2003	-2.8	7.8	10.8	-9.2	-6.6	1.51	4.4
2004	-0.7	6.3	7.1	3.4	4.1	5.4	6.1

<sup>a</sup> Up until 2002, the amounts are adjusted for inflation according to the December 2003 index.

<sup>b</sup> The number of posts includes those in subsidiaries abroad and in the consolidated companies, translation of the cost of overtime and the budgets for outside workers required for regulation of regular personnel and installation projects.

<sup>c</sup> This item primarily includes payments for National Insurance, provisions for pension, vacations pay, compensation and voluntary retirement.

SOURCE: Published financial reports and reports to the Supervisor of the Banks.

**Table A.11****Risk-Adjusted Return on Capital (RAROC)<sup>a</sup>, 2000 to 2004**

Year	Rf (%)	Hapoalim	Leumi	Discount	Mizrahi	First Intl.	Total
2000	5.48	2.75	1.03	-1.43	1.30	2.96	1.58
2001	4.95	0.65	0.32	-0.91	0.57	0.23	0.19
2002	5.18	-0.31	-0.17	-0.53	0.62	-0.71	-0.33
2003	4.85	0.64	0.38	0.06	0.62	0.00	0.46
2004	4.23	1.19	0.92	0.43	1.23	0.29	1.03

<sup>a</sup> The adjusted return to risk calculated according to the following formula:  $RAROC = (ROE - R_f) / 2.33 * \sigma_{ROE}$  where:

ROE= The annual return on capital during the relevant year (in the numerator). Calculated as the average ROE for the previous four quarters.

$R_f$ = Risk-free rate of interest: the yield to maturity on 10-year CPI-indexed bonds (Galil). Calculated as the average over the relevant year.

$\sigma_{ROE}$ = The standard deviation of the returns on capital. Calculated on the basis of quarterly observations of the annual returns on capital (four previous quarters) over 7 years, ie 28 observations.

SOURCE: Published financial statements.

**Table A.12****Investment and Contribution to Net Income of Companies in which The Five Major Banks Have a Holding, and of the Parent Bank, 2003-2004**

	Book value (NIS mill., year-end)		Rate of change(%)	Contribution to net income <sup>a</sup> (NIS mill.)		Rate of change(%)	Composition of investments (%)	Return (%)		Return 1994-2004(%)			
	2003	2004		2004	2003		2004	Mean	S.D	S.D. <sup>b</sup>	Sharp index <sup>c</sup>		
<b>A. Main consolidated subsidiaries</b>													
Commercial banks	2,617	2,761	5.5	273	303	11.0	8.5	13.3	11.6	9.4	2.3	4.1	2.081
Mortgage banks	5,945	5,556	-6.5	430	295	-31.4	17.1	7.2	6.8	10.5	4.0	2.6	1.479
Holdings, investments, and others <sup>d</sup>	6,889	7,041	2.2	519	332	-36	21.7	9.6	4.8	6.0	3.1	1.9	0.426
Subsidiaries and financial companies abroad	8,698	9,383	7.9	259	1,092	321.6	29.0	3.1	12.6	7.0	7.4	0.9	0.312
Capital market (underwriting and management)	816	914	12.0	-30	93	410.0	2.8	-3.6	11.4	2.5	5.9	0.4	-0.370
Credit cards	840	1,131	34.6	131	148	13.0	3.5	17.4	17.6	14.3	10.6	1.3	0.910
Leasing	212	216	1.9	5	4	-20.0	0.7	2.4	1.9	6.6	10.4	0.6	0.187
Total	26,017	27,002	3.8	1,587	2,267	42.8	83.3	6.8	8.7	7.5	2.5	3.0	1.157
<b>B. Main companies included under an equity method</b>													
Commercial banks <sup>e</sup>	746	804	7.8	43	65	51.2	2.5	5.1	8.7	6.7	3.1	2.1	0.651
Nonfinancial and insurance companies <sup>f</sup>	1,602	1,698	6.0	280	344	22.9	5.2	19.0	21.5	9.2	8.9	1.0	0.509
Holdings, investments, and others (including abroad) <sup>g</sup>	777	1,056	35.9	59	256	333.9	3.3	7.8	32.9	4.8	11.0	0.4	0.014
Total main companies included on an equity basis	3,125	3,558	13.9	382	665	74.1	11.0	12.4	21.3	7.6	7.3	1.0	0.412
Total main companies in which banks have a holding	29,142	30,560	4.9	1,969	2,932	48.9	94.3	7.4	10.1	7.5	2.3	3.3	1.267
Other companies <sup>h</sup>	1,308	1,842	40.8	23	137	495.7	5.7	0.6	10.5				
Total companies in which banks have a holding	30,450	32,402	6.4	1,992	3,069	54.1	100.0	6.6	10.1	6.8	2.7	2.5	0.788
Parent bank <sup>i</sup>	11,346	11,918	5.0	1,193	2,085	74.8		15.4	18.4	11.1	7.4	1.5	0.871

(cont'd.)

**Table A.12** (cont'd.)**Investment and Contribution to Net Income of Companies in which The Five Major Banks Have a Holding, and of the Parent Bank, 2003-2004**

<sup>a</sup> Profit in held companies including "profit from ordinary and extraordinary operations"; does not include dividends or revenue from the sale of surplus holdings.

<sup>b</sup> The average yield divided by the standard deviation is a measure of the return on the investment adjusted for risk.

<sup>c</sup> "Holdings, investments and others" includes business development and investment finance banks, as well as holding and investment companies and other financial companies, primarily those of Bank Hapoalim.

<sup>d</sup> The holdings of Bank Discount in the First International Bank were not deducted from total investments and the contribution to profit.

<sup>e</sup> The return on investments in these companies is downwardly biased since the investment in non-banking companies does not require the maintenance of a minimum capital ratio. Therefore the capital investment in them can be fully utilized for profitable activities which was not taken into account in the above calculation of return.

<sup>f</sup> "Holdings, investments and others" includes business development and investment finance banks. Also included is the investment of Bank Mizrahi in Bank Adanim since it is an included company. The net profit from this investment in 2002 was NIS 6 million.

<sup>g</sup> Held companies that are not listed as principal companies in Note 6 of the published financial reports.

<sup>h</sup> The investment in the bank itself is derived from the deduction of the investment in held companies, according to book value, from total equity and differs from the definition of equity for the calculation of Section 23a of the Banking Law (licensing). The contribution to the net profit of the bank was calculated as the net profit from ordinary activities before tax with the addition of extraordinary profit. On a bank-by-bank basis, this is essentially the net profit from ordinary (and extraordinary) operations of the bank minus its (net) share in the profits from ordinary and extraordinary operations of all the held companies.

<sup>i</sup> The Sharpe index is calculated for the period 1994-2004; the risk-free interest rate that was used in the calculation of the index is 4.636 which is the average of the yield to maturity on 10-year CPI-indexed government bonds during the period.

<sup>j</sup> This category was reclassified and does not include the profits of Bank Mishkan following its merger with Bank Hapoalim on December 31, 2003. In 2004, the profit from the mortgage portfolio of Mishkan was included in Bank Hapoalim. This profit totaled NIS 110 million.

SOURCE: Published financial reports

**Table A.13****Assets and Liabilities of the Main Overseas Offices in Western Europe,<sup>a</sup> 2002-04**

(in original currencies)

	UK						Switzerland				
	2002	2003	2004	Change			2002	2003	2004	Change	
				2003	2004					2003	2004
	(£ million)			(percent)			(SFr million)			(percent)	
Credit to the public	1,363	1,358	1,447	-0.4	6.6		1,585	2,101	2,288	32.6	8.9
Cash and bank deposits	390	381	460	-2.3	20.7		884	754	1,005	-14.7	33.3
Securities	1,082	678	702	-37.3	3.5		619	669	693	8.1	3.6
<b>Total assets</b>	<b>2,889</b>	<b>2,498</b>	<b>2,660</b>	<b>-13.5</b>	<b>6.5</b>		<b>3,307</b>	<b>3,622</b>	<b>4,094</b>	<b>9.5</b>	<b>13.0</b>
Deposits of the public	1,175	1,152	1,343	-2.0	16.6		1,702	1,883	2,292	10.6	21.7
Deposits from banks	1,239	830	869	-33.0	4.7		768	903	955	17.6	5.8
<b>Total liabilities</b>	<b>2,748</b>	<b>2,357</b>	<b>2,519</b>	<b>-14.2</b>	<b>6.9</b>		<b>2,762</b>	<b>3,049</b>	<b>3,479</b>	<b>10.4</b>	<b>14.1</b>
Equity	141	144	151	2.1	4.9		545	573	615	5.1	7.3
Off-balance-sheet credit risk <sup>b</sup>	567	637	583	12.3	-8.5		425	595	519	40.0	-12.8
Activity in derivatives <sup>c</sup>	2,933	3,261	2,185	11.2	-33.0		4,541	3,543	4,123	-22.0	16.4

<sup>a</sup> Selected items.<sup>b</sup> Before applying the conversion and weighting coefficients.<sup>c</sup> Nominal value.

SOURCE: Reports to the Supervisor of the Banks.

**Table A.14****Main Items in the Profit and Loss Statements of the Main Overseas Offices in Western Europe,<sup>a</sup> 2002-04**

(in original currencies)

	UK					Switzerland				
	2002	2003	2004	Change		2002	2003	2004	Change	
				2003	2004				2003	2004
	(£ million)			(percent)		(SFr million)			(percent)	
Net interest income before loan-loss provision	49.9	51.6	52.7	3.4	2.1	44.9	43.7	47.2	-2.7	8.0
Loan-loss provision	1.1	10.6	5.5	863.6	-48.1	0.0	0.3	-3.4	6320.0	-
Operating fees	4.8	5.1	5.7	6.8	11.2	64.9	82.8	86.3	27.7	4.2
Other income	0.4	0.2	0.3	-41.0	27.1	87.3	13.0	15.4	-85.2	18.8
<b>Total non-interest and other income</b>	<b>5.8</b>	<b>10.3</b>	<b>5.9</b>	<b>77.6</b>	<b>-42.7</b>	<b>160.0</b>	<b>109.6</b>	<b>114.0</b>	<b>-31.5</b>	<b>4.0</b>
Salaries and related expenses	14.9	15.5	16.5	4.1	6.3	48.7	49.6	53.3	1.8	7.5
Other expenses	6.5	7.4	7.0	13.2	-4.8	80.6	50.1	44.6	-37.9	-10.9
<b>Total operating and other income</b>	<b>26.1</b>	<b>28.1</b>	<b>28.2</b>	<b>7.7</b>	<b>0.4</b>	<b>143.3</b>	<b>116.0</b>	<b>115.8</b>	<b>-19.1</b>	<b>-0.2</b>
Ordinary before-tax income	28.6	23.1	25.0	-19.2	8.2	61.5	36.9	48.8	-40.0	32.2
Provision for taxes on ordinary income	5.3	6.3	5.6	18.9	-11.1	4.3	7.3	8.6	69.8	17.8
<b>Net income</b>	<b>23.2</b>	<b>16.8</b>	<b>19.3</b>	<b>-27.6</b>	<b>14.9</b>	<b>57.2</b>	<b>29.6</b>	<b>40.2</b>	<b>-48.3</b>	<b>35.8</b>

<sup>a</sup> Selected items.

SOURCE: Reports to the Supervisor of the Banks.



**Table A.15**  
**Credit Risks in Overseas Offices, 2002–04**

	U.S.			Western Europe			Total		
	2002	2003	2004	2002	2003	2004	2002	2003	2004
	(percent)								
<b>Credit-assets ratio</b>									
Credit to public/total assets	33.7	33.0	33.1	43.8	52.3	52.1	36.7	38.3	38.6
<b>Quality of credit</b>									
Annual loan-loss provision/total credit at banks' responsibility	0.4	0.3	0.2	0.0	0.4	0.2	0.3	0.4	0.2
Problem debts/total credit at banks' responsibility	3.4	5.1	2.7	1.8	1.8	1.6	2.9	3.9	2.2
Charge-offs/total credit at banks' responsibility	0.4	0.5	0.2	0.1	0.3	0.3	0.3	0.4	0.2
<b>Concentration of credit</b>									
Share of credit to single borrowers (\$ 9 million or more each)	61.3	59.7	57.6	49.4	52.4	54.8	57.7	57.2	56.4
H-Index of by-industry credit concentration	0.177	0.182	0.172	0.152	0.163	0.173	0.162	0.167	0.160

SOURCE: Returns to the Supervisor of the Banks.

**Table A.16****Efficiency Profitability, and Risk Indices in Overseas Offices, 2002-04**

	US			Western Europe			overseas offices		
	2002	2003	2004	2002	2003	2004	2002	2003	2004
Interest-rate spread between credit (balance sheet at risk) and deposits of the public	2.42	1.55	2.12	1.60	1.56	1.82	2.20	1.48	2.04
Net interest margin on total active assets <sup>a</sup> and liabilities (including off-balance-sheet, percent)	1.57	0.86	1.80	1.22	1.34	1.52	1.48	1.01	1.72
Annual wage per employee post (\$'000s)	87	89	101	102	132	142	90	99	109
Financing coverage ratio <sup>b</sup>	1.33	1.29	1.39	0.76	0.79	0.90	1.12	1.10	1.22
Operating coverage ratio <sup>c</sup>	0.27	0.30	0.27	0.82	0.67	0.71	0.46	0.44	0.42
Efficiency ratio <sup>d</sup>	1.60	1.59	1.66	1.58	1.47	1.61	1.59	1.54	1.64
	(percent)								
Loan-loss provision/ total net interest income	7.99	6.56	4.22	0.66	13.71	5.05	6.35	8.55	4.44
Return on assets <sup>e</sup> (ROA)	0.44	0.54	0.61	0.98	0.51	0.78	0.59	0.53	0.66
Return on equity <sup>f</sup> (ROE) in subsidiaries only	7.2	6.7	10.2	10.9	5.2	7.6	8.4	6.1	9.1

<sup>a</sup> The financial spread calculated as the ratio of the profit from financial activity before the loan-loss provision to total financial assets.

<sup>b</sup> The ratio of the profit from financial activity before the loan-loss provision to total operating and other expenses.

<sup>c</sup> The ratio of operating and other income to operating and other expenses.

<sup>d</sup> The ratio of operating, financial and other income to operating and other expenses.

<sup>e</sup> Net profit (including tax credits and extraordinary profit) divided by end-of-year assets.

<sup>f</sup> Net profit divided by beginning-of-year capital.

SOURCE: Reports to the Supervisor of the Banks

**Table A.17****Balance of Credit<sup>a</sup> and Balances of Weighted Risk Credit<sup>b</sup> due to Off-Balance-Sheet Items  
Five Major Banking Groups, 2003 and 2004**

(NIS billions)

	Hapoalim		Leumi		Discount		Mizrahi		First International		Total Bank Groups	
	Balances	Risk Balances	Balances	Risk Balances	Balances	Risk Balances	Balances	Risk Balances	Balances	Risk Balances	Balances	Risk Balances
<b>2003</b>												
Guarantees and commitments to grant credit	24.4	22.4	21.8	18.4	11.9	9.1	7.9	7.9	6.1	5.5	72.2	63.4
<i>of which:</i>												
Guarantees to ensure credit	10.7	9.5	9.7	7.3	6.2	3.6	2.3	2.3	2.7	2.3	31.5	25.0
Commitments to grant credit or guarantee (of more than one year)	6.8	6.4	6.0	5.6	3.1	2.9	6.8	6.4	1.0	1.0	23.8	22.4
Derivatives <sup>c</sup>	19.4	7.6	11.7	5.6	4.8	2.1	3.7	2.1	4.7	2.3	44.3	19.6
Total	44.6	30.6	34.5	24.8	16.9	11.4	12.0	10.3	11.4	8.3	119.3	85.5
<b>2004</b>												
Guarantees and commitments to grant credit	26.4	22.8	24.4	20.3	13.4	10.5	8.3	8.3	6.3	5.5	78.9	67.4
<i>of which:</i>												
Guarantees to ensure credit	13.4	10.7	9.8	8.0	7.0	4.4	2.1	2.1	2.4	2.0	34.6	27.2
Commitments to grant credit or guarantee (of more than one year)	6.1	5.9	6.0	5.4	3.4	3.3	6.1	5.9	0.9	0.9	22.6	21.4
Derivatives <sup>c</sup>	19.0	8.9	12.8	5.9	5.4	2.5	5.2	3.3	4.9	2.8	47.2	23.5
Total	45.3	31.7	37.2	26.2	18.8	13.1	13.5	11.6	11.2	8.2	126.0	90.9

<sup>a</sup> Balances of the denominated value weighted by the exchange coefficients for credit, i.e., the equivalent value of the credit.<sup>b</sup> The weighted balances according to the implicit risk of the transaction and the other party in the transaction.<sup>c</sup> Future transactions for the purposes of the minimum capital ratio.

SOURCE: Published financial reports.

**Table A.18**  
**Ratio of Credit<sup>a</sup> to Output, by Industry, 1997–2004**

Sector	2004	2003	2002	2001	2000	1999	1998	1997
Agriculture	0.63	0.74	0.70	0.84	1.44	1.63	1.42	1.71
Manufacturing	1.25	1.37	1.44	1.46	1.18	1.30	0.99	0.82
Construction and real estate	4.15	4.54	4.53	4.50	3.98	3.50	2.80	2.68
Construction	3.76	4.12	4.30	4.37	3.97	3.47	2.80	2.57
Real estate	5.33	5.87	5.22	4.94	4.02	3.63	2.82	3.28
Water and electricity	0.75	0.76	0.92	0.87	0.69	0.67	0.53	0.56
Commerce and services	1.05	1.00	1.02	0.97	0.90	1.08	0.76	0.61
Commerce	1.24	1.26	1.32	1.31	1.21	1.20	1.04	0.89
Services	0.97	0.90	0.91	0.85	0.78	1.03	0.64	0.49
Hotels and catering	1.92	1.93	1.99	1.96	1.70	1.69	1.39	1.19
Financial services	2.45	1.67	1.83	1.62	1.43	2.33	1.17	0.74
Communications and computer services	0.64	0.83	1.04	1.11	1.01	0.92	0.65	0.37
Transport and storage	0.81	0.78	0.84	0.80	0.81	0.85	0.51	0.45
<b>Total</b>	<b>1.36</b>	<b>1.51</b>	<b>1.62</b>	<b>1.60</b>	<b>1.45</b>	<b>1.45</b>	<b>1.13</b>	<b>0.98</b>

<sup>a</sup> Includes off-balance-sheet credit.

SOURCE: Reports to the Supervisor of the Banks, the Central Bureau of Statistics, database of the Research Department of the Bank of Israel and processed data of the Research Unit of the Supervisor of the Banks.

**Table A.19****Distribution of Credit to the Public by Single-Borrower Indebtedness, the Five Major Banking Groups, 2003<sup>a</sup>-04**

Credit per borrower <sup>b</sup>	Balance of credit to the public and off-balance-sheet risk credit <sup>c</sup>		Number of borrowers		Average credit balance		Proportion of credit balance (%)		Proportion of borrowers (%)	
	2003	2004	2003	2004	2003	2004	2003	2004	2003	2004
(NIS thousands) <sup>d</sup>	(NIS millions)				(NIS thousands) <sup>c</sup>		(cumulative percent)		(cumulative percent)	
Up to 10	4,770	7,011	1,790,393	1,805,387	3	4	100.00	100.00	100.00	100.00
Over 10 to 20	11,209	10,053	890,267	687,478	13	15	99.39	99.14	63.76	62.38
Over 20 to 40	17,321	20,123	682,254	681,677	25	30	97.95	97.90	45.74	48.05
Over 40 to 80	32,605	36,310	650,239	640,470	50	57	95.73	95.43	31.93	33.85
Over 80 to 150	42,032	49,852	436,602	474,245	96	105	91.55	90.97	18.77	20.50
Over 150 to 300	53,450	59,677	269,987	283,094	198	211	86.16	84.84	9.93	10.62
Over 300 to 600	50,550	59,667	135,430	147,560	373	404	79.31	77.50	4.47	4.72
Over 600 to 1,200	32,076	32,899	45,885	41,511	699	793	72.82	70.17	1.73	1.65
Over 1,200 to 2,000	17,234	18,151	13,086	12,128	1,317	1,497	68.71	66.13	0.80	0.78
Over 2,000 to 4,000	23,336	25,709	9,768	9,460	2,389	2,718	66.50	63.90	0.53	0.53
Over 4,000 to 8,000	30,960	32,486	6,438	6,059	4,809	5,362	63.51	60.74	0.34	0.33
Over 8,000 to 20,000	53,575	59,661	4,919	4,896	10,891	12,186	59.54	56.74	0.21	0.20
Over 20,000 to 40,000	54,737	61,349	2,262	2,233	24,198	27,474	52.67	49.41	0.11	0.10
Over 40,000 to 200,000	179,131	181,895	2,534	2,297	70,691	79,188	45.65	41.87	0.06	0.06
Over 200,000 to 400,000	71,462	72,967	294	260	243,068	280,642	22.68	19.51	0.01	0.01
Over 400,000 to 800,000	62,013	55,728	126	103	492,167	541,049	13.52	10.55	0.00	0.00
Over 800,000 to 1,200,000	18,581	17,996	22	19	844,591	947,158	5.57	3.70	0.00	0.00
Over 1,200,000 to 1,600,000	9,686	4,194	8	3	1,210,750	1,398,000	3.18	1.49	0.00	0.00

(cont'd.)

**Table A.19** (cont'd.)**Distribution of Credit to the Public by Single-Borrower Indebtedness, the Five Major Banking Groups, 2003<sup>a</sup>-04**

Credit per borrower <sup>b</sup>	Balance of credit to the public and off-balance-sheet risk credit <sup>c</sup>		Number of borrowers		Average credit balance		Proportion of credit balance (%)		Proportion of borrowers (%)	
	2003	2004	2003	2004	2003	2004	2003	2004	2003	2004
(NIS thousands) <sup>d</sup>	(NIS millions)				(NIS thousands) <sup>c</sup>		(cumulative percent)		(cumulative percent)	
Over 1,200,000 to 1,600,000	9,686	4,194	8	3	1,210,750	1,398,000	3.18	1.49	0.00	0.00
Over 1,600,000 to 2,000,000	7,593	7,891	5	4	1,518,600	1,972,750	1.94	0.97	0.00	0.00
Over 2,000,000 to 2,400,000	5,368	-	2	-	2,684,000	-	0.97	-	0.00	-
Over 2,400,000 to 2,800,000	2,190	-	1	-	2,190,000	-	0.28	-	0.00	-
Over 2,800,000 to 3,200,000	-	-	-	-	-	-	-	-	-	-
Above 3,200,000	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>779,879</b>	<b>813,619</b>	<b>4,940,522</b>	<b>4,798,884</b>	<b>158</b>	<b>170</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>

<sup>a</sup> The data for 2003 relate to the categories of December 31, 2003.

<sup>b</sup> The data in the "up to 8,000 shekels" category are the sum 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).

<sup>c</sup> Includes the balance of credit to the public and the equivalent value of credit in off-balance-sheet financial instruments which were calculated according to the definitions used for calculating the limit on the indebtedness of the borrower; does not include investment of the public in bonds.

<sup>d</sup> The figures for 2003 are presented in December 2003 prices while the 2004 figures are the reported figures.

SOURCE: Published financial reports

**Table A.20****Exposure to Changes in CPI and the Exchange Rate, the Five Major Banking Groups, December 2003 and December 2004**

	NIS Million									
	Hapoalim		Leumi		Discount		Mizrahi		First International	
	2003	2004	2003	2004	2003	2004	2003	2004	2003	2004
<b>Unindexed segment</b>										
Assets less liabilities	-11,492	-5,260	-3,104	-4,208	-1,913	-3,419	-4,512	-8,132	-2,444	-3,659
Effect of futures and options	9,540	4,820	3,970	10,712	2,853	3,934	4,260	7,889	2,619	4,457
The financial capital classified as part of the unindexed segment <sup>a</sup>	0	0	866	6,504	940	515	0	0	175	798
Total position in segment	-1,952	-440	0	0	0	0	-252	-243	0	0
Change in CPI <sup>b</sup> (percent)	-0.79	-0.75	0.00	0.00	0.00	0.00	-0.79	-0.75	0.00	0.00
Value at risk <sup>c</sup>	15.38	3.29	0.00	0.00	0.00	0.00	1.99	1.82	0.00	0.00
<b>Indexed segment<sup>d</sup></b>										
Assets less liabilities	11,384	11,523	8,020	5,087	1,891	2,304	3,664	5,182	2,287	3,042
Effect of futures and options	-294	-1,426	-603	-2,469	-221	234	-725	-2,310	67	-1,409
The financial capital classified as part of the indexed segment <sup>a</sup>	10,061	11,618	8,216	2,924	1,163	2,086	2,597	2,644	2,108	1,620
Total position in segment	1,029	-1,521	-799	-306	507	452	342	228	246	13
<b>Foreign-currency segment<sup>e</sup></b>										
Assets less liabilities	10,169	5,355	4,166	8,549	2,125	3,717	3,445	5,594	2,440	3,035
Effect of futures and options	-9,246	-3,394	-3,367	-8,243	-2,632	-4,169	-3,535	-5,579	-2,686	-3,048
Total position in segment <sup>f</sup>	923	1,961	799	306	-507	-452	-90	15	-246	-13
Change in real exchange rate <sup>g</sup> (%)	-3.38	-3.38	-3.38	-3.38	4.65	4.65	4.65	-3.38	4.65	4.65
Value at risk <sup>c</sup>	31.23	66.35	27.03	10.35	23.56	21.01	4.18	0.51	11.43	0.60

(cont'd.)

**Table A.20** (cont'd.)**Exposure to Changes in CPI and the Exchange Rate, the Five Major Banking Groups, December 2003 and December 2004**

	Nis Million									
	Hapoalim		Leumi		Discount		Mizrahi		First International	
	2003	2004	2003	2004	2003	2004	2003	2004	2003	2004
Total financial capital	10,061	11,618	9,082	9,428	2,103	2,601	2,597	2,644	2,283	2,418
Total value at indexation-base risk <sup>b</sup>	46.6	69.6	27.0	10.4	23.6	21.0	6.2	2.3	11.4	0.6
As percentage of financial capital	0.46	0.60	0.30	0.11	1.12	0.81	0.24	0.09	0.50	0.02
As percentage of equity	0.32	0.43	0.19	0.07	0.37	0.31	0.15	0.06	0.31	0.02

<sup>a</sup> The financial capital was classified as shekel, indexed and unindexed in a way that minimized the total position in the unindexed segment.

<sup>b</sup> 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%.

<sup>c</sup> 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.

<sup>d</sup> Including the CPI/\$ indexation option.

<sup>e</sup> Including foreign-currency-linked.

<sup>f</sup> 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.

<sup>g</sup> 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%.

<sup>h</sup> 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 (full correlation, negative or positive, between the risks).

SOURCE: Published financial reports, data of the Central Bureau of Statistics and processed data of the Research Unit of the Supervisor of the Banks.



**Table A. 21****Exposure to Changes in Interest Rates Using the Historical Scenario Method, the Five Major Banking Groups, 2003- 04**

	Hapoalim			Leumi			Discount			Mizrahi			First International		
	2002	2003	2004	2002	2003	2004	2002	2003	2004	2002	2003	2004	2002	2003	2004
<b>Unindexed segment</b>															
Total exposure <sup>a</sup> (NIS million)	850	-3,176	-1,645	1,351	437	6,520	-675	492	247	-616	-654	-676	-174	-2,133	879
Duration of assets (years)	0.31	0.60	0.60	0.48	0.54	0.53	0.40	0.58	0.61	0.20	0.27	0.32	0.22	1.12	0.35
Duration of liabilities (years)	0.28	0.40	0.39	0.20	0.26	0.31	0.21	0.23	0.30	0.11	0.14	0.17	0.17	0.27	0.23
Duration of economic capital <sup>b</sup> (percent)	2.67	5.06	10.51	16.35	50.91	3.44	12.15	33.90	62.23	3.45	5.40	7.09	7.47	10.20	4.76
Modified duration of capital <sup>c</sup> (percent)	2.44	4.75	10.03	14.90	47.85	3.28	11.07	31.86	59.36	3.14	5.08	6.76	6.81	9.58	4.55
Duration gap (Dgap)	0.03	0.19	0.20	0.28	0.27	0.25	0.19	0.36	0.32	0.08	0.12	0.15	0.05	0.83	0.13
Maximum change in interest (percent)	2.51	1.61	1.61	2.51	1.61	1.61	2.51	1.61	1.61	2.51	1.61	1.61	2.51	1.61	1.61
Value at Risk <sup>d</sup>	52	243	266	504	337	345	188	253	236	49	54	74	30	330	64
<b>Indexed segment<sup>e</sup></b>															
Total exposure <sup>a</sup> (NIS million)	10,079	14,119	13,117	7,484	9,270	4,667	3,004	3,185	3,833	3,529	3,941	3,749	2,628	2,955	2,130
Duration of assets (years)	3.69	3.89	3.88	3.91	4.26	4.34	3.93	4.36	4.18	4.06	4.24	3.93	3.57	3.77	3.89
Duration of liabilities (years)	3.70	3.76	3.95	3.37	3.77	3.69	3.33	3.47	3.82	3.67	3.88	3.72	2.78	2.83	2.96
Duration of economic capital <sup>b</sup> (percent)	3.63	4.40	3.63	7.80	7.13	7.13	8.58	10.68	6.07	7.57	7.09	5.85	7.99	8.45	9.63
Modified duration of capital <sup>c</sup> (percent)	3.44	4.22	3.50	7.39	6.84	6.84	8.12	10.25	5.85	7.17	6.81	5.64	7.56	8.11	9.29
Duration gap (Dgap)	0.53	0.90	0.77	0.96	1.05	0.94	0.97	1.32	0.95	0.77	0.79	0.58	1.21	1.42	1.33
Maximum change in interest (percent)	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Value at Risk <sup>d</sup>	328	565	435	524	601	303	231	309	212	240	254	200	188	227	187

(cont'd.)

**Table A. 21** (cont'd.)**Exposure to Changes in Interest Rates Using the Historical Scenario Method, the Five Major Banking Groups, 2003- 04**

	Hapoalim			Leumi			Discount			Mizrahi			First International		
	2002	2003	2004	2002	2003	2004	2002	2003	2004	2002	2003	2004	2002	2003	2004
<b>Foreign-currency segment<sup>f</sup></b>															
Total exposure <sup>a</sup> (NIS million)	900	2,693	3,395	1,481	1,839	1,164	1,087	101	-189	56	-162	-43	238	-190	-116
Duration of assets (years)	0.62	1.11	1.08	0.52	0.79	0.62	1.62	2.11	1.40	0.41	0.51	0.45	0.29	0.36	0.25
Duration of liabilities (years)	0.42	0.78	0.75	0.49	0.63	0.56	0.92	1.05	1.01	0.41	0.31	0.36	0.28	0.32	0.30
Duration of economic capital <sup>b</sup> (percent)	25.73	16.02	13.00	2.80	10.08	6.17	44.51	707.89	145.89	0.45	23.08	43.91	1.15	4.11	-11.34
Modified duration of capital <sup>c</sup> (percent)	25.14	15.65	12.61	2.74	9.85	5.99	43.50	691.82	141.50	0.44	22.54	42.59	1.12	4.01	-11.00
Duration gap (Dgap)	0.20	0.35	0.35	0.04	0.18	0.06	0.72	1.07	0.39	0.00	0.19	0.09	0.01	0.04	-0.06
Maximum change in interest <sup>d</sup> (percent)	0.44	0.44	0.32	0.44	0.44	0.32	0.44	0.44	0.32	0.44	0.44	0.32	0.44	0.44	-0.91
Value at Risk	100	187	138	18	80	22	210	309	86	0	16	6	1	3	12
Total value at risk <sup>e</sup> (NIS million)	480	995	839	1,046	1,018	670	628	871	535	288	324	280	219	560	263
Total position <sup>h</sup> (NIS million)	11,829	13,635	14,867	10,316	11,546	12,350	3,416	3,778	3,891	2,969	3,124	3,029	2,692	632	2,893
Financial economic capital/VaR (percent)	4.06	7.30	5.64	10.14	8.82	5.43	18.39	23.06	13.75	9.71	10.37	9.24	8.14	88.66	9.11
Equity/VaR (percent)	3.55	6.74	5.16	7.72	7.04	4.39	11.40	13.50	7.83	7.76	7.79	6.76	6.43	15.21	6.74

<sup>a</sup> The present value of the assets and liabilities 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 Treasury bills in the unindexed segment, on 5-year indexed bonds in the indexed segment and on the 3-month LIBOR in the foreign currency segment.

<sup>b</sup> 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.

<sup>c</sup> 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.

<sup>d</sup> 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.

<sup>e</sup> Including the CPI/\$ indexation option.

<sup>f</sup> Including foreign-currency-indexed.

<sup>g</sup> The total value subject to interest rate risk obtained by simply adding the adjusted values 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).

<sup>h</sup> The difference between the present value of the financial assets and the present value of financial liabilities in all the segments.

SOURCE: Based on published financial statements.