

## Risks Report as of September 30, 2018

This translation of the financial statement is for convenience purposes only.  
The only binding version of the financial statement is the Hebrew version.

This report includes additional information to the Bank's financial statements and is compiled in conformity with directives of the Supervisor of Banks, which include disclosure requirements of Basel Pillar 3 and additional disclosure requirements of the Financial Stability Board (FSB). The following reports are available on ISA's MAGNA website: This Risks Report and other supervisory information about supervisory capital instruments issued by the Bank (hereinafter: "the Reports"). In conformity with instructions of the Supervisor of Banks, the condensed financial statements for the interim period and the aforementioned Reports are also available on the Bank website:  
[www.mizrahi-tefahot.co.il](http://www.mizrahi-tefahot.co.il) about the bank > investor relations > financial statements.



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## General mapping of quantitative and qualitative information included in the Risks Report

This Risks Report includes disclosure requirements made by the Basel Committee in conjunction with Pillar 3 and other disclosure requirements, based on other sources, in conformity with directives and instructions of the Supervisor of Banks.

Below is a general mapping table which specifically identifies information not required in conjunction with Pillar 3, but which is based on other sources – primarily disclosure requirements of the Financial Stability Board ("FSB"). The table also provides a mapping of tables (schedules) included in this report.

Chapter	Other disclosure requirements (primarily FSB requirements) <sup>(1)</sup>	Quantitative information provided in this chapter
<b>Forward-Looking Information</b>		
<b>Scope</b>		
<b>Summary risk profile for the Bank</b>		
<b>Corporate governance for risks management at the Bank Group</b>		
<b>Risk culture</b>	- Description of the risk culture at the Bank	
<b>Regulatory capital</b>		- Composition of supervisory capital - Capital components included on the Bank's consolidated balance sheet
	- Movement in supervisory capital	- Movement in supervisory capital
<b>Capital adequacy</b>	- Capital planning	
		- Risk assets and capital requirements with respect to credit risk by exposure group - Risk assets and capital requirements with respect to market risk and operational risk - Tier I capital and total capital, Tier I capital ratio and total capital ratio
	- Risk assets by operating segment	- Risk assets by operating segment
	- Movement in risk assets	- Movement in risk assets
<b>Leverage ratio</b>		- Comparison of assets on balance sheet and exposure measurement for leverage - Composition of exposures and leverage ratio
<b>Credit risk</b>		- Composition of credit exposure by exposure group - Composition of exposures by geographic region - Composition of credit exposures by contractual term to maturity - Impaired credit risk and credit risk for credit in arrears but not impaired - Change in balance of provision for credit losses - Credit exposures before and after credit risk mitigation by risk weighting - Credit exposures by risk mitigation type - Credit exposure with respect to derivatives

Chapter	Other disclosure requirements (primarily FSB requirements) <sup>(1)</sup>	Quantitative information provided in this chapter
<b>Market risk and interest risk</b>	<ul style="list-style-type: none"> <li>- Description of market risks to which the Bank is exposed</li> <li>- Market risks management policy</li> <li>- Means of supervision over and implementation of market risk policy</li> <li>- Measurement of market and credit risks exposure and their management using models for risks management</li> <li>- Nature of interest risk in Bank portfolio</li> </ul>	<ul style="list-style-type: none"> <li>- Capital requirements with respect to interest risk, equity risk and foreign currency exchange rate risk</li> </ul>
<b>Operational risk</b>		
<b>Liquidity and financing risk</b>	<ul style="list-style-type: none"> <li>- Financing risk</li> <li>- Description of the Bank's liquidity requirements</li> </ul>	<ul style="list-style-type: none"> <li>- Liquidity coverage ratio</li> </ul>
<b>Shares</b>		<ul style="list-style-type: none"> <li>- Fair value of investments in shares and capital requirements with respect there to</li> </ul>
<b>Other risks</b>	<ul style="list-style-type: none"> <li>- Description of other key risks</li> </ul>	

(1) All other information in this chapter is in conformity with disclosure requirements in conjunction with Basel Pillar 3.

## Risks Report

This report includes additional information to the condensed consolidated financial statements of Bank Mizrahi Tefahot Ltd. and its subsidiaries as of September 30, 2018. The condensed financial statements and additional information to the condensed financial statements, including the Report of the Board of Directors and Management, this Risks Report and other supervisory disclosures have been approved for publication by the Bank's Board of Directors at its meeting held on November 12, 2018.

The Risks Report and other supervisory disclosures are compiled in conformity with directives of the Supervisor of Banks, which include disclosure requirements of Basel Pillar 3 and other disclosure requirements of the Financial Stability Board (FSB).


All of these reports are also available on the Bank's website.

[www.mizrahi-tefahot.co.il](http://www.mizrahi-tefahot.co.il) >> about the bank >> investor relations >> financial statements.

The disclosure in this report is designated to allow users to evaluate significant information included with regard to implementation of the framework for capital measurement and adequacy and to implementation of provisions of "Basel III: A global regulatory framework for more resilient banks and banking systems".

As directed by the Supervisor of Banks, additional information with regard to risks is provided in the Report of the Board of Directors and Management in the financial statements as of September 30, 2018, in the following chapters:

- Chapter "Overview, targets and strategy" / major risks
- Chapter "Explanation and analysis of results and business standing" / Key and emerging risks
- Chapter "Risks Overview"



**Moshe Vidman**  
Chairman of the Board  
of Directors



**Eldad Fresher**  
President & CEO



**Doron Klauzner**  
Vice-president, Chief  
Risks Officer (CRO)

Approval date:

Ramat Gan, November 12, 2018

## Forward-Looking Information

Some of the information in the Risks Report, which does not relate to historical facts, constitutes "forward-looking information", as defined in the Securities Law, 1968 (hereinafter: "the Law").

Actual Bank results may materially differ from those provided in the forward-looking information due to multiple factors including, inter alia, changes in local and global capital markets, macro-economic changes, geo-political changes, changes in legislation and regulation and other changes outside the Bank's control, which may result in non-materialization of estimates and/or in changes to business plans.

Forward-looking information is characterized by the use of certain words or phrases, such as: "we believe", "expected", "forecasted", "estimating", "intending", "planning", "readying", "could change" and similar expressions, in addition to nouns, such as: "plan", "goals", "desire", "need", "could", "will be". These forward-looking information and expressions involve risks and lack of certainty, because they are based on current assessments by the Bank of future events which includes, inter alia: Forecasts of economic developments in Israel and worldwide, especially the state of the economy, including the effect of macroeconomic and geopolitical conditions; changes and developments in the inter-currency markets and the capital markets, and other factors affecting the exposure to financial risks, changes in the financial strength of borrowers, the public's preferences, legislation, supervisory regulations, the behavior of competitors, aspects related to the Bank's image, technological developments and human resources issues.

The information presented here relies, inter alia, on publications of the Central Bureau of Statistics and the Ministry of Finance, on data from the Bank of Israel data, the Ministry of Housing and others who issue data and assessments with regard to the capital market in Israel and overseas as well as forecasts and future assessments on various topics, so that there is a possibility that events or developments predicted to be anticipated would not materialize, in whole or in part.

## Scope

The application scope refers to how the working framework specified by the Basel Committee for measurement and capital adequacy is applied, as well as other requirements specified by the Committee with regard to leverage ratio and liquidity coverage ratio.

Provisions of Proper Banking Conduct Directives 201-211 "Measurement and Capital Adequacy" apply to the Bank Group and in particular to the Bank – Bank Mizrahi Tefahot Ltd. – the parent company of the Group. Group companies to which the framework applies, in accordance with the supervisory consolidation basis, are the companies consolidated with the Bank's consolidated financial statements. There are no differences in the consolidation basis between accounting practices and the work framework.

Below are major Bank Group companies, how they are weighted and their lines of business:

	Operating sector
Fully-consolidated subsidiary	
Bank Yahav for Government Employees Ltd.	Commercial bank
Tefahot Insurance Agency (1989) Ltd.	Insurance agency
Mizrahi International Holding Company Ltd. (B.V. Holland)	International holding company
Etgar Investment Portfolio Management Company of the Mizrahi Tefahot Group Ltd.	Portfolio management company
Mizrahi Tefahot Issue Company Ltd.	Issuance company
Mizrahi Tefahot Trust Company Ltd.	Trust company
Associated companies (weighted by risk)	
Psagot Jerusalem Ltd. ("Psagot")	Land for construction
Rosario Capital Ltd. ("Rosario")	Underwriting company
Mustang Mezzanine Fund Limited Partnership	Extending credit
Planus Technology Fund	Extending credit
Major subsidiary of a subsidiary (United Mizrahi Overseas International Holding Ltd. (BV Holland))	
United Mizrahi Bank (Switzerland) Ltd.	Commercial bank

To the best of the knowledge of Bank management, and relying on legal counsel, there are no prohibitions or significant restrictions on transfer of funds or supervisory capital between Bank Group companies.

### Basel and capital requirements

The Basel Committee is an international body established in 1974 by the central banks of different countries. The Committee's decisions and recommendations, although they have no binding legal validity, prescribe the supervisory regulations acceptable to the supervisory bodies of the banking systems in a majority of countries throughout the world. On June 26, 2004, the Basel Committee published recommendations intended to assure proper regulation for arranging the rules of capital adequacy of banks in different countries (hereinafter: "Basel II"). These directives are governed in Israel by Proper Banking Conduct Directives 201-211. These directives are designed to address failures discovered in management and risks control processes during the global financial crisis, the Sub Prime crisis, which took place at the end of the first decade of this century. The directives include a set of amendments to the Basel II directive, including: Strengthening of capital base, Tier I capital, which is the primary loss absorption component, increase in minimum capital ratios, specification of new benchmarks and methodologies for handling liquidity risk, including the liquidity ratio under stress for one month (LCR) and Net Stable Funding Ratio (NSFR), reinforced methodology for handling counter-party risk (including capital allocation for this risk as part of Pillar 1), specification of the leverage ratio as a new ratio as part of risks management benchmarks, reinforcing processes for conducting stress testing and other processes designed to improve risks management and control capacity at financial institutions. According to the Committee-specified schedule, this directive has been gradually applied world-wide starting in 2013. Most of Proper Banking Conduct Directive (201-211) was amended in 2013 in conformity with the Basel III directives and a applied as from January 1, 2014 (for more information see chapter "Capital Adequacy").



## **Key recommendations of the Basel Committee**

The Basel directives consist of three pillars:

**Pillar 1 – minimum capital** – minimum capital allocation requirements with respect to credit risk, market risk and operational risk. Pursuant to the Supervisor of Banks' directives, capital allocations in Pillar 1 are calculated using statistical models specified in the directive.

**Pillar 2 – Supervision and control process over capital adequacy** – the Internal Capital Adequacy Assessment Process (ICAAP) conducted by the Bank, as well as the Supervisory Review and Evaluation Process (SREP) conducted by the Bank of Israel, designed to review the process and capital allocation conducted by the Bank. These processes are designed to ensure that the bank's total capital is in line with its risk profile and risk appetite, specified capital targets and its business targets according to the strategic plan, beyond the minimum capital requirements which the Bank should hold according to Pillar 1. This pillar also includes qualitative reviews of risks management processes, risks control and corporate governance related to risks management at the Bank.

**Pillar 3 – "market discipline"** – reporting and disclosure to the regulating authority and to the public. In this context, extensive, detailed and in-depth disclosure is provided with regard to the risk level and risks management processes at the Bank, so as to allow the public to better understand the risks, how they are managed and the capital buffer maintained by the Bank with respect to them.

The Bank applies these requirements and other disclosure requirements as noted in this Risks Report.

## Summary risk profile for the Bank

### Key data

Below is key data relevant for the Bank's risk profile (NIS in millions):

	For the quarter ended September 30, 2018	For the quarter ended June 30, 2018	For the quarter ended March 31, 2018	For the quarter ended December 31, 2017	For the quarter ended September 30, 2017	For the quarter ended June 30 2017	For the quarter ended March 31, 2017
<b>Key supervisory and financial ratios</b>							
<b>Available capital</b>							
Tier I capital <sup>(1)</sup>	14,951	14,508	14,436	14,333	14,055	13,920	13,533
Tier I capital before effect of transitional provisions	14,755	14,295	14,188	13,986	13,685	13,550	13,277
Total capital	19,825	19,368	19,249	19,584	18,658	18,408	17,975
Total capital before effect of transitional provisions	17,843	17,369	17,215	17,004	16,056	15,806	15,486
<b>Risk weighted assets</b>							
Total risk weighted assets (RWA)	147,872	145,784	142,129	140,524	138,363	137,151	133,783
<b>Capital adequacy ratio (in %)</b>							
Tier I capital ratio <sup>(1)</sup>	10.11	9.95	10.16	10.20	10.16	10.15	10.12
Tier I capital ratio before effect of transitional provisions	9.96	9.79	9.96	9.92	9.86	9.85	9.92
Total capital ratio	13.41	13.29	13.54	13.94	13.48	13.42	13.44
Total capital ratio before effect of transitional provisions	12.05	11.90	12.09	12.07	11.58	11.50	11.56
Tier I capital ratio required by Supervisor of Banks	9.84	9.84	9.86	9.86	9.86	9.87	9.87
Available Tier I capital ratio, beyond what is required by the Supervisor of Banks	0.27	0.11	0.30	0.34	0.30	0.28	0.25
<b>Leverage ratio</b>							
Total exposure	273,087	269,911	265,621	261,504	261,982	257,012	256,712
Leverage ratio (in %) <sup>(2)</sup>	5.47	5.38	5.40	5.50	5.40	5.40	5.20
Leverage ratio before effect of transitional provisions (in %)	5.40	5.30	5.34	5.35	5.22	5.27	5.17
<b>Liquidity coverage ratio<sup>(3)</sup></b>							
Total high-quality liquid assets	40,361	39,599	40,648	39,938	39,976	41,800	39,980
Total outgoing cash flows, net	33,417	32,875	32,545	33,796	34,308	34,171	33,965
Liquidity coverage ratio (in %)	121	120	125 <sup>(7)</sup>	118	117	122	118
<b>Performance benchmarks</b>							
Net profit return on equity <sup>(4)(5)</sup>	13.4	<sup>(8)</sup> 6.1	10.3	11.2	<sup>(9)</sup> 8.0	12.7	10.4
Profit return on risk assets <sup>(5)(6)</sup>	1.24	0.58	0.97	1.05	0.76	1.19	0.97
Deposits from the public to loans to the public, net	101.7	101.5	101.9	101.4	103.1	102.0	104.4
<b>Key credit quality benchmarks</b>							
Ratio of balance of provision for credit losses to total loans to the public	0.81	0.81	0.81	0.81	0.81	0.82	0.84
Ratio of impaired debts or debts in arrears 90 days or longer to loans to the public	1.17	1.12	1.09	1.02	0.97	0.89	0.95
Expenses with respect to credit losses to loans to the public, net for the period <sup>(5)</sup>	0.13	0.19	0.18	0.13	0.09	0.09	0.12
Of which: With respect to commercial loans other than housing loans	0.27	0.49	0.49	0.35	0.24	0.20	0.35
Of which: With respect to housing loans	0.05	0.04	0.02	0.02	0.02	0.04	–
Ratio of net accounting write-offs to average loans to the public <sup>(5)</sup>	0.09	0.11	0.13	0.11	0.09	0.09	0.11

	For the nine months ended September 30 2018	For the nine months ended September 30 2017	For the year ended December 31, 2017
<b>Performance benchmarks</b>			
Net profit return on equity <sup>(4)(5)</sup>	( <sup>(8)</sup> 9.7	10.1	10.2
Profit return on risk assets <sup>(5)(6)</sup>	0.93	0.97	0.99
<b>Key credit quality benchmarks</b>			
Expenses with respect to credit losses to loans to the public, net for the period <sup>(5)</sup>	0.16	0.10	0.11
Of which: With respect to commercial loans other than housing loans	0.40	0.26	0.27
Of which: With respect to housing loans	0.04	0.02	0.02
Ratio of net accounting write-offs to average loans to the public <sup>(5)</sup>	0.11	0.09	0.09

#### Financial ratios indicate:

- Given the significant increase in revenues, with the cost-income ratio for this quarter at 54.5%, we present a net profit return on equity at 13.4%.
- The Bank's capital adequacy increased over the last quarter by more than 10 percentage points, increasing the safety margins above the required minimum of 9.84%.
- The ratio of expenses with respect to credit losses to total loans to the public, net in the first nine months of 2018 was affected by some maximization of collection of previously written-off debts up to now, reaching a ratio of 0.16%.

Items of profit and loss, balance sheet items and various financial ratios are analyzed in detail in the Report of the Board of Directors and Management, in chapter "Explanation and analysis of results and business standing" and in chapter "Risks overview", as the case may be.

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- 1) The Bank has no equity instruments included in "Additional Tier I capital", so that total Tier I capital equals total Tier I equity.
  - (2) Leverage Ratio – ratio of Tier I capital (according to Basel rules) to total exposure. This ratio is calculated in conformity with Proper Banking Conduct Directive 218
  - (3) Liquidity Coverage Ratio – ratio of total High-Quality Liquid Assets to net cash outflow. This ratio is calculated in conformity with Proper Banking Conduct Directive 221, in terms of simple averages of daily observations during the reported quarter.
  - (4) Net profit attributable to shareholders of the Bank.
  - (5) Calculated on annualized basis.
  - (6) Net profit to average risk assets.
  - (7) Includes the effect of implementation of Bank of Israel guidelines to apply a reduced withdrawal rate with respect to operational deposits, as from the first quarter of 2018.
  - (8) In the second quarter of 2018, net profit return on equity was impacted by an additional provision amounting to NIS 425 million (USD 116.5 million) with respect to the US DOJ investigation. Net profit return from the Bank's current operations, excluding the aforementioned provision, taking into account the provisions for bonus payments in line with operating profitability in that quarter and related tax Quarter expenses, was as follows:  
**Return on equity the second quarter of 2018 14.1%.**  
**Return on equity for the first nine months of 2018 12.3%.**
  - (9) Expenses with respect to the MOU signed with the Employees' Union and with respect to the negative known CPI in the third quarter of 2017, resulted in a decrease in return by 4.6 percentage points.

Below is the capital for calculating the capital ratio after supervisory adjustments and deductions:

	September 30, 2018	September 30, 2017	December 31, 2017
Tier I shareholders' equity	14,951	14,055	14,333
Tier II capital	4,874	4,603	5,251
<b>Total capital</b>	<b>19,825</b>	<b>18,658</b>	<b>19,584</b>

Total credit risk to the public<sup>(1)</sup>:

	September 30, 2018	September 30, 2017	December 31, 2017
Total credit risk to the public	251,761	234,027	235,153

(1) For more information about total credit risk to the public, see the chapter "Risks overview" in the Report by the Board of Directors and Management.

Risk assets and capital requirements with respect to credit risk, market risk, CVA risk and operational risk are as follows (NIS in millions):

	September 30, 2018	September 30, 2018	September 30, 2017	September 30, 2017	December 31, 2017	December 31, 2017
	Weighted risk asset balances	Capital requirement <sup>(1)</sup>	Weighted risk asset balances	Capital requirement <sup>(2)</sup>	Weighted risk asset balances	Capital requirement <sup>(3)</sup>
Credit risk	136,742	18,242	128,229	17,131	129,996	17,367
Market risk	1,462	195	1,213	162	1,605	214
CVA risk with respect to derivatives <sup>(4)</sup>	353	47	589	79	529	71
Operational Risk <sup>(5)</sup>	9,315	1,243	8,332	1,113	8,394	1,121
<b>Total risk assets</b>	<b>147,872</b>	<b>19,727</b>	<b>138,363</b>	<b>18,485</b>	<b>140,524</b>	<b>18,773</b>

(1) The capital requirement was calculated at 13.34% of risk asset balances.

(2) The capital requirement was calculated at 13.36% of risk asset balances.

(3) The capital requirement was calculated at 13.36% of risk asset balances.

(4) Credit Value Adjustments – mark to market with respect to credit risk of counter-party, in conformity with Basel III provisions.

(5) Capital allocation with respect to operational risk was calculated using the standard approach.

The change in risk assets in the third quarter of 2018 is primarily due to growth in loans to corporations and in the housing loans portfolio and due to impact of transactions for sale of loans and credit risk conducted in the third quarter.

## Risks assessment

Efficient, comprehensive risks management is a key foundation for ensuring the Bank's stability. Risks management processes at the Bank are designed to identify and quantify all risks associated with Bank operations and to support achievement of the Bank's business objectives. The Bank is exposed to a succession of risks which may potentially impact its financial results and its image. The Bank exposed to financial risks, such as: credit risks and market and interest risks, as well as non-financial risks, such as: compliance risks, operating, legal, reputational risks etc.

Risks management at the Bank is conducted from a comprehensive viewpoint and in conformity with regulatory requirements, so as to support achievement of the Group's strategic objectives, while assuming risks in an informed manner and maintaining a risk level in line with the overall risk appetite specified by the Bank Board of Directors.

The Bank has specified a framework for risks management and control by the Group, which includes mapping of material risks and their materiality threshold, as well as assignment of Risk Owners for all risks. For each risk, the potential impact to business operations over the coming year is assessed.

The table below lists the risk factors and management assessment of the impact of each risk factor, on a scale of five risk levels: low, low-medium, medium, medium-high, high.

The Bank defines the risk levels based on the (potential) impact to Bank capital.

The risk level for each of the risks is assessed based on the outcome of monitoring the various quantitative risk benchmarks specified by the Bank, including the direction of their development over the past year, as well as based on a qualitative assessment of risks management and the effectiveness of control circles, in coordination with the ICAAP process conducted by the Bank and its results. A process including self-assessment of risk levels, quality of risks management and control processes, including the direction of the risks evolution for the coming year and alignment with work plans of the various departments. These results are extensively discussed by management and by the Board of Directors.

As part of these processes, the Bank reviews the top risks, existing (or new) risks which may materialize over the coming 12 months which potentially may materially impact the Bank's financial results and stability, primarily credit risk, market risk and interest risk and liquidity risk. The Bank also identifies emerging risks, which may materialize over the longer term and subject to uncertainty with regard to their nature and impact on the Bank. Among these risks are information

security and cyber risks, IT risk, reputation risk, legal risk and the group of compliance risks, including conduct risk, which is addressed within this framework and security risk – business of served entity.

Below is a mapping of risk factors, their potential impact on the Bank Group and executives appointed Risk Owners for each risk factor:

Risk factor <sup>(1)</sup>	Risk factor impact	Risk Owner
Overall effect of credit risks	Low-medium	Manager, Business Division
Risk from quality of borrowers and collateral	Low-medium	
Risk from industry concentration	Low-medium	
Risk from concentration of borrowers/ borrower groups	Low	
Risk with respect to mortgage portfolio	Low	
Overall effect of market risk	Low-medium	Manager, Financial Division
Interest risk	Medium	
Inflation risk	Low-medium	
Exchange rate risk	Low	
Share price risk	Low	
Liquidity risk	Low-medium	Manager, Financial Division
Overall effect of operational risk	Medium	Manager, Risks Control Division
Cyber and information security	Medium	Manager, Risks Control Division
Information technology risk	Medium	Manager, Mizrahi-Tefahot Technology Division Ltd.
Legal risk	Medium	Chief Legal Counsel
Compliance and regulatory risk	Low-medium	Manager, Risks Control Division
AML and cross-border risk	Low-medium	Manager, Risks Control Division
Reputational risk <sup>(2)</sup>	Low-medium	Manager, Marketing, Promotion and Business Development Division
Strategic-business risk <sup>(3)</sup>	Medium	President & CEO

(1) Assessment of the effect of the aforementioned risk factors takes into account the risks associated with the US DOJ investigation as well as all action taken by the Bank to defend its position with regard to that investigation. For more information about developments in the US DOJ investigation and for more information about a motion for approval of a derivative claim on this matter, see Note 10.B. sections 3.A and 4 to the financial statements.

(2) The risk of impairment of the Bank's results due to negative reports about the Bank.

(3) The definition of strategic-business risk includes the capital planning and management process. See Note 9 to the financial statements.

## Major developments in the Bank's risk profile

### Developments in the strategic plan as presented on financial statements for the second quarter of 2018

On August 7, 2018, the Bank received notice given by the US DOJ to the Bank's legal counsel, including a proposed settlement of the investigation into the Bank Group's business with its US clients. The financial statements as of June 30, 2018 include an additional provision amounting to NIS 425 million (USD 116.5 million) with respect to the investigation. The cumulative provision with respect to this investigation as of June 30, 2018 amounted to NIS 593.5 million (USD 162.6 million). For more information see Note 10.B.4 to the financial statements as of June 30, 2018.

In the financial statements as of June 30, 2018, the capital adequacy presented was: Tier I capital ratio – 9.95% and total capital ratio – 13.29% (see Note 9 to the financial statements as of June 30, 2018). The Bank reported that it was acting to increase the safety margins for these capital ratios and at that time estimated that the Tier I capital ratio should exceed 10% in the third quarter of 2018.

The Bank further estimated that it was capable of achieving the outline for the five-year strategic plan for 2013-2017, by using diverse tools, as needed, in the course of its current business operations (tools regularly used in the past).

The Bank's dividends policy is to distribute dividends, as from 2018, with respect to quarterly earnings, at 40% of net profit attributable to shareholders of the Bank. The dividends policy is subject to the Bank achieving a ratio of Tier I capital to risk components as required by the Supervisor of Banks and maintaining appropriate safety margins.

Considering the foregoing, the Bank's Board of Directors at that time had not declared any dividends with respect to earnings in the second quarter of 2018.

The Bank estimated, at that time, that it would be able to resume its dividends distribution policy in 2019, subject to provisions and conditions specified in the strategic plan, including statutory provisions and restrictions stipulated by the Supervisor of Banks.

### Developments in the strategic plan in the third quarter of 2018

- On the financial statements for the third quarter of 2018, capital adequacy is presented as follows: Tier I capital ratio – 10.11% and total capital ratio – 13.41% (see Note 9 to these financial statements).
- The Bank's Board of Directors has not declared any dividends with respect to earnings in the third quarter of 2018.

The Bank's aforementioned estimates remain unchanged with regard to the capacity to achieve the the outline for the strategic plan for 2017-2021 and to return to the dividends policy in 2019.

For more information see Note 10.B.4 to the financial statements.

This information constitutes forward-looking information, as defined in the Securities Law, 1968, based on assumptions, facts and data (hereinafter jointly: "assumptions") underlying the strategic plan and elaborated therein, which may not materialize due to factors not entirely under the Bank's control and may cause the strategic plan, including with regard to the dividend distribution policy, not to materialize.

The Bank's capital planning, submitted to the Bank of Israel, was based on the Bank's strategic plan and for a three-year planning horizon, indicates that the Bank has a sufficient capital absorption cushion to face the range of risks associated with Bank operations, even in case of stress events. Moreover, the Tier I capital ratio for each year of the scenario is not lower than 6.5% (capital ratio restriction for threat condition, a test conducted under strict assumptions with regard to potential impact to the Bank). As part of capital planning, stress scenarios are conducted under strict, conservative assumptions which analyze the portfolio, under extreme macro-economic conditions, including assumption of clients failing to recover, continued growth of risk assets, failure to use internal hedging existing in the structure of assets and liabilities and the assumption that no management action is taken to minimize the damage, i.e. management is passive throughout the plan period. The conclusion, as noted above, is that the Bank maintains managerial cushions beyond the required capital throughout the entire planning horizon,. The capital reviewed in this process (Pillar 2) includes additional capital allocations beyond Pillar 1, against other risks (such as: interest risk in Bank portfolio and concentration risk) and risk for which insufficient capital was allocated in Pillar 1, according to Bank estimates (such as: credit risks and operational risks). We emphasize that the potential loss due to the mortgage portfolio, as estimated by the Bank by various methods, is substantially lower than the required capital allocation in Pillar 1 and therefore, the Bank has additional built-in capital cushions with respect to mortgages, even in Pillar 1.

In January 2018, the capital planning including data for the Igud transaction was submitted to the Bank of Israel. For more information about the transaction to acquire Bank Igud, see chapter "Business goals and strategy" of the 2017 Report of the Board of Directors and Management. Note that all aspects and risks associated with this transaction are regularly reviewed by the Risks Control Division, which accompanies this process from the viewpoint of various risks associated with realization of this transaction. In addition to the ICAAP process, as directed by the Bank of Israel, system-wide stress testing is conducted, based on uniform macro-economic scenarios for all banks. These scenarios are specified by the Bank of Israel and simulate normal business conditions and a hypothetical stress scenario. In this way, the Bank estimates the impact of these scenarios on key items on the financial statements and on key financial ratios over a three-year period. The outcome of the Bank's most recent scenario (submitted to Bank of Israel in February 2017) shows that the damage of this scenario to the Bank is low in relation to Bank capital and profit and relative to the average impact level across the banking system. These results are primarily due to the low credit risk level due to the Bank being oriented towards retail business with a significant mortgage component and high operating margin and operating efficiency, compared to the banking system. It is also due to dynamic, flexible management of sources and uses, while maintaining a low risk appetite in exposures to counter parties, including banks and sovereigns, as well as management of a debentures portfolio, mostly for investment of excess liquidity, in high-quality assets with minimal credit risk. The Bank of Israel issued a new system-wide scenario in August 2018, reviewing the effect of a macro-economic stress scenario involving a local shock based on geo-political events. The Bank is preparing to implement the scenario and its outcome would be provided to the Supervisor of Banks by year end.

In the third quarter of 2018, most benchmarks were at a safe distance from the risk appetite specified by the Board of Directors and in conformity with business operations, based on the strategic plan outline and on current work plans. The Bank regularly reviews the risk benchmarks and adapts them to current business operations as necessary, subject to and in line with the Bank's overall risk appetite for various risks. In view of developments in the US DOJ investigation, the Bank updated its assessment of various risk factors in the second quarter, and this assessment remained unchanged in the third quarter of this year. For more information about developments in the investigation by the US Department of Justice, see Note 10.B.4 and Note 9 to the financial statements.

Information about developments in risk is presented below and in the chapter "Risk overview" of the Report by the Board of Directors and Management.

The Bank regularly monitors the liquidity environment and conditions in various markets, with increased attention to events which may impact the liquidity environment and the markets.

In the third quarter of 2018, the Bank maintained a relatively high liquidity coverage ratio at 121% on average, similar to the average in the second quarter of this year (120%), providing a safety margin over the required regulatory liquidity coverage ratio (100%) and over the safety margin specified by the Board of Directors.

This ratio includes the effect of application of Bank of Israel directives with regard to applying a reduced redemption rate for certain deposits by provident funds and study funds, as from the first quarter of 2018.

In the third quarter of 2018, there were no systemic events in the banking system in Israel or world-wide which materially affected the Bank's business conduct and risk profile, including the liquidity risks.

On January 21, 2018, the Bank of Israel issued a draft directive concerning "Credit card issuers – changes to Supervisor of Banks' directives following implementation of the Increased Competition and Reduced Concentration in Israeli Banking Act". The objective of the Act is to separate credit card issuers from banks.

On July 2, 2018, the Bank of Israel issued a revision of several Proper Banking Conduct Directives (203, 313, 221 and 470) which concern credit card issuers. The key revision in these regulations is a significant reduction in current liquidity requirements for credit card issuers. These regulations are effective as from February 1, 2019.

As from February 1, 2019, after implementation of the revision, the settlement effect would (apparently) apply monthly, on the 2<sup>nd</sup> day of each month. The effect of this revision on the liquidity coverage ratio is assessed to be a decrease by 6 basis points on the 1<sup>st</sup> day of the month (instead of 3 basis points currently); later in the month, this effect is offset until it is fully offset on the 20<sup>th</sup> day of the month.

In recent years, ISA has taken steps to regulate the ETN market in Israel and to increase supervision thereof, through an amendment to the Mutual Investment Act. This amendment, approved by the Knesset Finance Committee on May 1, 2018, which should gradually become effective in early October 2018, applies the Mutual Investment Act to ETNs. The Act stipulates limitations on holding of various assets, such that the amendment would change the mix of deposits with banks by such entities, with the expectation of significant deposit withdrawals across the banking system. The Bank is preparing to address these effects in timely manner and is acting pursuant to a well-ordered work plan to reinforce and maintain the liquidity ratios with appropriate safety margins.

On November 1, 2018, the Supervisor of Banks issued a draft amendment of Proper Banking Conduct Directive 203 "Capital Adequacy". The draft includes a revision of the Credit Conversion Factor (CCF) applied to guarantees to secure investments by apartment buyers pursuant to the Sale Act. According to this revision, the CCF for Sales Act guarantees with respect to apartments yet to be delivered would be 30% (instead of 50% currently). Implementation of this directive will be reflected in the financial statements for 2018.

The Bank believes that application of this directive would result in a decrease in risk assets amounting to NIS 950 million (an increase by 0.07% in Tier I capital ratio).

In conformity with Bank policy, the market risk in the negotiable portfolio is minimal. The bank portfolio is exposed to increase in the interest rate curve due to the relatively long-term structure of uses (the mortgage portfolio) against short- and medium-term sources. Assessment of Bank exposure to interest risks in the third quarter of 2018 remains Medium, with no material change to exposure and risk values are within the specified risk appetite range. Note that the Bank is reconsidering the model for credit balances in checking accounts, after the validation process of this model revealed that it reflected a highly conservative assessment of client behavior.

Model risk – The models validated in the third quarter of 2018 were found to be valid and appropriate for their intended use, except for the checking account model, as noted above, and no models were found whose use was inappropriate. The validation outcomes are regularly addressed with Bank departments for implementation and improvement of model quality.

In the third quarter of 2018, the Bank continued to deploy, implement and use advanced models under development for optimal analysis and management of retail credit, including an update and re-definition of some risk benchmarks. As from the start of the third quarter, actual current management at the Retail Division is primarily based on the MADHOM system (for client management, rating and pricing). As part of this effort, the Bank's Training Center developed a customized activity for deployment of diverse uses of the model outcomes at branches.

The credit risk profile of individual clients, based on the internal model, shows a risk level which is not high and stable over time. For more information about loans to individuals, see chapter "Credit risk" below and chapter "Risks overview" on the Report of the Board of Directors and Management.

Business loans are managed using a range of risk benchmarks and its risk level is low-medium.

The overall risk associated with the mortgage portfolio is low, with continued stability in leading benchmarks, LTV and repayment ratios. The current provision recorded in this portfolio in the third quarter of 2018 is very low, but slightly higher than the previous quarter, due *inter alia* to maximization of collection of past debts.

In the third quarter of 2018, the Bank continued to reduce credit risk by selling credit risk for both housing loans and business credit.

On October 23, 2017, the Bank of Israel issued Proper Banking Conduct Directive 330, concerning management of credit risk associated with client trading of derivative instruments and securities. This directive governs the management framework for credit risk associated with client activity in the capital market, with special emphasis on clients engaged in speculative activity. The effective start date of the directive is July 1, 2018. The Bank has implemented this directive as required, including an update to the credit management policy and setting of the risk appetite.

The Bank continues to upgrade the framework for handling "emerging" risks, such as compliance and regulatory risk, AML risk and cross-border risk – while allocating the required resources for addressing these risks. Note that the Bank has zero appetite for non-compliance with applicable regulatory directives of the Bank of Israel. Bank operations with regard to these risks are primarily qualitative actions designed to create the required framework for addressing these emerging risks.

With regard to virtual currency transactions, it is Bank policy to prohibit any activity in this area by any Bank clients.

The Bank's operational risk profile, including information security and cyber risks, is estimated to be medium. The Bank constantly strives to improve monitoring, management and control of these risks – which increase with technological advances and with the expansion of Bank business. Furthermore, the Bank regularly reviews attack events around the world and regularly learns lessons and improves its cyber defenses. In the first nine months of 2018 there were no significant operating events at the Bank, including in information security and cyber.

Following events at various banks in Israel, where unauthorized transactions were entered in trading systems based on internet communications of external providers, of material amounts, the Bank of Israel instructed the banks to conduct an extensive review in order to estimate the potential damage that may be incurred by the Bank due to unauthorized activity by the provider on trading systems in the trading room. The outcome of the review conducted in the first half of 2018 and provided to the Bank of Israel, shows that, according to Bank assessment, the scope and quality of controls implemented by the Bank across all lines of defense are in line with the nature of activity and the overall operating risk in online platforms is not high.

The Bank is at a high state of readiness for business continuity in case of emergency and conducts diverse drills to test the Bank's emergency readiness. In the second quarter of 2018, a comprehensive annual exercise took place, which included exercise of various components of the business continuity plan, including exercise of trading room in emergency, situation room, emergency teams and forums. A mobile branch and the Technology Division's production floor were also part of the exercise. This was due to implementation of the work plan for business continuity plan maintenance and exercise. In the second and third quarters, the Bank conducted cyber drills and in the third quarter, the Bank took part in a sector-wide cyber drill, led by the Bank of Israel together with FS-ISAC (Financial Services Information Sharing & Analysis Center), which reviewed attack scenarios and disruption to monetary activity of the Bank in several business lines, with emphasis placed on the payment system.

For developments with regard to acquisition of Bank Igud, see chapter "Strategic Risk" below.



## Corporate governance for risks management at the Bank Group

### Risks exposure and their management

The Bank complies with Proper Banking Conduct Directive 310 "Risks Management", which specifies the principles for risks management and control in the Israeli banking system and stipulates the standards required of the banks for creating their risks management framework to be in line with regulatory requirements, the Bank's risk profile and its business targets.

### Corporate governance of risks management

The Bank's risks management setup consists of all management and control layers at the Bank, from the Bank's Board of Directors, management and business units to control functions and Internal Audit. The Risks Control Division (headed by the Bank's CRO) is the overall entity tasked with risk management and control at the Bank.

The Bank has defined 3 lines of defense (LOD) in addition to the Board of Directors' lines of defense, which is responsible for specifying an appropriate culture and framework for handling risks and management, which is responsible for implementing the framework principles specified by the Board of Directors. These lines of defense are intended to ensure that the Bank has deployed an appropriate framework for risks management and control.

### Lines of Defense

Line	Function	Reporting to	Role
First line	Lines of business	Line of business manager reports to the President & CEO	Unit management is fully responsible for risks management and for implementing an appropriate control environment for its operations
Second line	Risks Control Division, which is the primary function, and other units.	President & CEO	The Risks Control Division, headed by the CRO, acts in concert with other divisions, including the Accounting and Financial Reporting Division and the Legal Division, the Bank Secretary's office, part of the Human Resources Division, some units of the Planning, Operations and Client Assets Division and the Public Ombudsman Unit, in order to assist management in promoting an integrated, cross-corporate vision of risks, plan and develop the risks management framework, challenge and ensure completeness and effectiveness of the risks management framework and internal controls and review of this framework in view of the strategic plan, annual work plan and the Bank's business targets.
Third line	Internal Audit	Bank's Board of Directors	Review the effectiveness and efficiency (mostly in retrospect) of risks management processes, identify weaknesses in internal controls which may impact the effectiveness of control and monitoring remedial action taken for such identified weaknesses.

Different interfaces have been specified between the lines of defense, including forums and reporting channels deployed under normal and emergency conditions. Communication about risks between the different lines of defense is designed to ensure the information flow which allows the Bank to address the material risks for its operations, or the potential for development of such events, while achieving the Bank's business targets.

The functions involved in risks management and control at the Bank are as follows:

#### Bank's Board of Directors

The primary roles of the Board of Directors are to set the Bank's risk strategy and risk appetite and to approve the risk management framework, as included on the Bank's policy documents, to guide the Bank in its regular operations. The Board of Directors must supervise management actions and their consistency with Board policy, ensure that clear areas of responsibility and reporting paths are in place at the Bank, instill an organizational culture which demands implementation of high standards of professional behavior and integrity and ensure that the Bank is operating in compliance with the Law and regulation.

The Board of Directors operates multiple professional committees, tasked with conducting comprehensive and in-depth discussion of the various matters before they are brought for discussion and approval by the Board plenum.

### **Risks Management Committee**

This committee discusses issues concerning risks management and control at the Bank, including capital planning and management.

The committee is responsible for approval of the Bank's risks mapping and approval of dedicated policy documents for each of the Bank's material risks. These documents specify the nature of the risk and the risk appetite adjusted for strategic operations, as well as the risk management processes and methods applied by the Bank to mitigate it, including effective monitoring and control processes.

The committee conducts a quarterly discussion of the Bank's risks document, which presents an overview of all risks and their evolution over time, with emphasis on events in the reported quarter, on the quarterly risks document and on the annual ICAAP document and results of the effect of the Bank of Israel Uniform Macro-economic Stress Scenario, as applied to Bank data profitability and stability of Bank capital.

The committee regularly receives extended reviews on various topics. The committee also discusses new products subject to approval by the Board of Directors, new and revised regulatory directives and guidance with regard to risks management at the Bank, significant debriefs which took place with regard to risks management and any other topic of relevance to risks management.

### **Audit Committee**

The Audit Committee is tasked with supervising the work of the Bank's Internal Auditor and that of the Bank's Independent Auditor. Thus, the committee discusses the Bank's financial statements and risks report and makes its recommendation to the Board of Directors with regard to its approval. The Audit Committee discusses audit reports of the Internal Auditor, the Independent Auditor as well as those of the Supervisor of Banks or any other competent authority. The Audit Committee points out faults in business management at the Bank, including those arising from organizational shortcomings, in consultation with the Internal Auditor or with the Independent Auditor and proposes to the Board of Directors ways to amend them.

### **Credit Committee**

The committee is responsible for approval of the credit policy document. It is also tasked with approval of credit applications which deviate from limits specified in the credit policy. The committee also discusses credit control reports and current credit reports, as well as general credit-related topics.

### **Remuneration Committee**

The committee discusses the remuneration policy and makes its recommendations to the Board of Directors. The committee also approves the terms and conditions of contracting with officers.

### **President & CEO**

The Bank President & CEO is responsible for on-going management of Bank affairs, subject to policies set by the Board of Directors and subject to guidance from it, in particular with regard to implementing the Bank's strategy and business plans. In this regard, the President & CEO is responsible for management of all risks at the Bank and for leadership of management and Risk Owners in comprehensive and integrative management of risks and capital and implementation of an effective internal controls system.

The Bank President & CEO receives regular, current reviews and reports about the Bank's risk profile in such layout and timing as stipulated by Board resolutions and in conformity with Proper Banking Conduct Directives. The Bank President & CEO is responsible for reporting to the Board of Directors, in conformity with the outline specified in Bank procedures, including reporting concerning risk management by the Bank and, in particular, any unusual events and/or deviations from the risk appetite.

### **Bank management**

Bank management is tasked with ensuring that Bank operations are in conformity with the business strategy and targets specified by the Board of Directors and within the specified risk appetite. In this context, Bank management is tasked with deploying an organizational risks management culture across the Bank and all its employees, as well as with acting to implement the systems and processes required for effective, efficient risks management.

The Bank's organizational structure is designed to support achieving the Bank's business targets while maintaining proper risks management and control processes.

Note that in similar fashion to business processes, risks management processes are not static, but rather change and evolve constantly, both due to local regulation and/or global practice and in conformity with business needs.

The Bank operates risks management committees at all management levels. These committees act as professional management forums, designed to foster discussion of issues related to risks management and control and to promote the necessary moves for on-going upgrade of the Bank's risks management framework.

Chief management committees include: The Supreme Credit Committee, the Asset and Liability Management Committee, the Overseas Affiliates Committee, the Management Committee for Risk Management, which discusses the quarterly Risks Document. The Chief Risks Officer and other representatives of the Risks Control Division, as the case may be, are also members of these committees. The committees operate in normal times and during emergency, in conformity with detailed procedures.

### **Chief Risks Officer**

The Risks Control Division Manager is also the Bank's Chief Risks Officer (CRO). The Division is a key foundation of the Bank's second line of defense, acts independently of the risk-taking units and the CRO has direct access to the Bank Board of Directors.

The CRO is responsible for maintaining appropriate risk management and control at the Bank, for maintaining a Bank-wide reporting platform, with active involvement in the capital planning process and responsibility to ensure that all processes are adhered to, so as to ensure that the Bank is compliant with the risk appetite, in line with its risk profile, as approved by the Board of Directors.

The CRO is responsible for ensuring that processes are in place for identification, measurement, control, mitigation and regular reporting of risks inherent across all business operations at the Bank.

The CRO is responsible for specifying the Bank's risk appetite framework, including leading the creation of the various policy documents, challenging capital management and challenging the work plans. Also analysis of material failure events and debriefing and learning lessons arising from such events.

The CRO is directly responsible for multiple risks associated with internal controls risks at the Bank. He is also responsible for control over credit risks and credit analysis, as an independent party to credit approval.

### **Internal Audit Division**

Internal Audit is the third line of defense within corporate governance for risks management, for testing the effectiveness of internal controls at the Bank. This activity, typically in retrospect, uses diverse tools, including: The risks-focused work plan, based *inter alia* on the outcome of the ICAAP process, debriefs and ad-hoc reviews. The Audit findings and recommendations are sent to the Chairman of the Board of Directors, Chairman of the Audit Committee, Bank President & CEO and to relevant recipients at the Bank and implementation of these recommendations is monitored.

For more information about operations of the Internal Audit Division, see chapter "Corporate governance" in the financial statements.

### **Other forums for risks management and control operating at the Bank**

As part of corporate governance for risks management and in line with the Bank's risk management framework policy, the Bank has other forums for risks and capital management and control, including:

Management committee for risks management – discuss the risk profile, risk level and exposures vs. the risk appetite. Development of risk values during the reviewed period and significant events which impacted the risk profile.

Management committee for operational risks – advisory committee to Bank management on management, control and monitoring of operational risks and fraud and embezzlement risks.

Internal controls forum – maintaining integration of diverse Bank entities responsible for implementing an internal controls framework at the Bank.

Capital planning and management forum – for monitoring development of Bank capital in view of Bank targets.

Risks monitoring forum – diverse forums, led by the Chief Risks Officer together with business unit managers, tasked with approval of risk management methodologies, stress scenarios and their outcomes, model validation and implementation recommendations, approval of policy documents and procedures and aspects of operational risks, including the risks map, risks assessment surveys, significant events and lesson learning processes, and other various issues arising from risks management and internal controls of each business unit.

- Dedicated compliance-related forums, including cross-border risks management.
- Credit stress testing forum – approve and develop methodologies and models for credit stress testing, review of accepted practices and improved usefulness of the outcome of stress testing for setting the risk appetite.
- Operational risk steering committee – advisory committee to the CRO on operational risk.
- Cyber and information security steering committee – advisory committee to the CRO on cyber and information security risk.

## **The Code of Ethics**

Full transparency is a prerequisite of corporate governance, and in particular as it relates to efficient risks management. Policies of proper disclosure of events, support processes and appropriate organizational structure create regular work interfaces which support the Board of Directors and allow it to discharge its duties. The Bank's Board of Directors and management promote, throughout the organization, a high level of ethics and integrity. One of the key means for instilling ethics and integrity is the preparation of the Bank's Code of Ethics and its deployment among all Bank employees.

The Bank operates an Ethics Committee, headed by the Bank Secretary. The Ethics Committee convenes monthly, consists of representatives from HQ units and branches, and acts to regularly deploy the Code of Ethics by publishing dilemmas to Bank staff, discussing dilemmas raised from the field and reviewing the deployment process of the Code of Ethics.

Values in the Bank's Code of Ethics include: reliability, loyalty, maintaining human dignity, excellence, integrity, fairness, transparency and commitment – are integrated in support of Bank strategy as a personal, human bank.

## **Bank remuneration policy**

For more information about the Bank's remuneration policy, see chapter "Remuneration" in the 2017 Risks Report on the Bank website.

## **Corporate governance of risks management at subsidiaries**

As part of overall Group risks management at the Bank, risks management policy is coordinated with Bank subsidiaries. Supervision and control over subsidiaries is regular and reports are received from subsidiaries listing their exposure to various risks factors. Reports by Bank subsidiaries are incorporated into the Bank's quarterly risks document.

## **Risks management tools**

The Bank has a risks management and control framework, adapted for market conditions, for the Bank's business targets and for Bank of Israel directives. This framework consists of multiple layers operating in tandem at Bank units, designed to ensure that the Bank can manage, measure and mitigate its risks during normal operation and in case of an internal or external stress event or emergency.

The key layers and principles put in place are as follows:

- Mapping and identification of risks to which the Bank is exposed – the risks identification process is a key, basic process designed to ensure proper mapping of the risks to which the Bank is exposed, with reference to dynamic changes in the business environment and in Bank operations. The Bank conducts a structured risks mapping and identification process, at least once per year, specifying for each risk whether it is material for Bank operations, based on a materiality threshold of the potential damage to Bank capital, under normal course of business and under stress scenarios. For every material risk mapped, the Bank appoints a member of Executive Management as Risk Owner.
- Setting the risk appetite – The overall risk appetite specified by the Bank's Board of Directors reflects the exposure limits which the Board is willing to assume, under normal circumstances and under stress conditions. Risk appetite is defined in qualitative and quantitative terms and is directly aligned with the Bank's business strategy and the required liquidity and capital for achieving the strategic objectives.
- The Bank's overall risk appetite is a cornerstone of Bank operations and does not change frequently. It is Bank policy with regard to risk appetite to maximize return / benefit at a relatively low risk level.
- The Board of Directors has specified a map of guiding principles, that specifies the Bank's strategic business operations and related overall risk appetite, with reference to "risk" and "potential impact to Bank return / benefit" benchmarks. The specific risk appetite for each risk is derived from one or more of the guiding principles of the Bank's strategic operations, including multiple qualitative and quantitative benchmarks that support achievement of the business objectives within the risk appetite limits. Bank management has zero risk appetite for deviation from Board restrictions, so that management has imposed its own restrictions for some risk benchmarks. Management restrictions were set lower than the Board restrictions. These restrictions serve to alert before reaching within range of the risk appetite specified by the Board of Directors.
- Policies documents for management of various risks – For each material risk, the Board of Directors issues a specific policy document, which sets out the risk management framework, specific risk appetite and required principles for addressing such risk, including the forums and functions responsible for management and control of such risk, how the risk is measured, business and regulatory requirements and ways to reduce and mitigate such

risk. The policies documents are typically compiled using the Four Ms methodology, which the Bank specified to be the methodology for risk analysis and management, as follows:

- **Material** – review whether the risk is material for Bank operations, under normal circumstances or in case of emergency.
- **Measured** – mapping of key measurement methods, systems and models used by the Bank.
- **Managed** – mapping and definition of risk management and control methods.
- **Mitigated** - mitigation methods that allow the Bank to minimize its risk exposure. Mitigation methods, whether financial or non-financial, include: hedging transactions, training, debriefs, lesson learning processes and existence of forums created to address risk evolution under normal conditions and in an emergency.

Furthermore, Bank management has specified procedures, to ensure that the specified lines of defense properly implement the principles enshrined in policy.

- Risk profile – the risk profile reflects the Bank's actual exposure, vis-à-vis the specified risk appetite, in line with targets in the strategic plan and work plan and in line with development of macro-economic conditions, including the potential for realization of "reasonable" stress scenarios (other than threat scenarios). The Bank's quarterly risks document is the main reporting tool by Bank management with regard to the risk profile given the risk appetite and compliance with the risk appetite. This document also presents a qualitative and quantitative view over development of all risks benchmarks specified; in discussions, emphasis is placed on benchmarks which are getting close to the risk appetite, the implications of such closeness on the risk profile and action required in order to reduce the risk level.
- Stress scenarios are an important tool, in addition to current risk benchmarks, for risks management and control at the Bank and for risk assessment from current and future viewpoints. Stress scenarios reveal material risk concentrations, provide a tool to support business decision making and an additional tool for risk measurement in quantitative models for identification of risk not identified by the model due to inherent model-related limitations. The Bank has a diverse range of stress scenarios, applied to assess the potential impact of various risks to the Bank's business and financial targets. The major stress scenarios used by the Bank in its normal operations – and as part of capital planning within ICAAP – are applied at various severity levels and over various time horizons, based on a variety of methods such as: sensitivity analysis; subjective scenarios; historical stress scenarios based on prior stress events in the local or international market, while recreating past events and testing their impact on the Bank's current portfolio; macro scenarios, based on Bank assumptions or on scenarios provided by the Bank of Israel to the entire banking system (such as: uniform macro-economic stress scenario, where the Bank has developed equations to translate the effect of macro-economic factors on the portfolio). Stress scenarios are applied at multiple levels: portfolio or transaction level, risk level, segment or sector level, system-wide scenarios which assess the impact for multiple risks concurrently, with reference to the links between different risks. Also, scenarios for the Bank as a whole (such as: threat scenario).
- Internal Capital Adequacy Assessment Process (ICAAP) – the ICAAP document which describes this process is submitted annually to Bank management, to the Bank's Board of Directors and to the Bank of Israel, presenting a summary of the internal process conducted by the Bank to evaluate its capital adequacy. The Bank's capital planning process, conducted over a three-year planning horizon, is designed to ensure that the Bank maintains adequate capital to support all risks associated with Bank operations, under normal conditions in line with the Bank's strategic plan and under stress events (for more detail see chapter "Capital adequacy"). In addition, review of the risks management and mitigation processes, which include self-assessment of risks, the quality of risks management and the direction of risks evolution by risk controllers and risk owners, as well as independent review by Internal Audit to assess the effectiveness of the Bank's internal controls framework.
- Model validation (model risk) – The Bank has a structured process for mapping the required models in the validation process; The models are classified based on regulatory requirements and on severity levels. Model validation is conducted prior to start of use and on regular (periodic) basis. The frequency of validation processes is determined based on regulatory directives and on materiality of the model. The models are validated based on the model validation methodology for the various components, while maintaining the principles of role separation.
- IT systems to support risks management and control – The Bank has many measurement systems used to estimate all material risks to which the Bank is exposed, as well as IT systems to support risk monitoring and reporting. In general, it is Bank policy to manage and to monitor risks using controlled, computer-based systems with minimal dependence on manual processes and with near-real time update frequency.

## Risks management culture

The Bank Group constantly acts to develop and reinforce its risks management processes, to create a risks management culture in line with Bank operations and in support of achieving the Bank's business targets.

Risks management is an integral part of regular Bank operations and the Risks Control Division is involved in material processes at the Bank in all areas. This activity is reflected, *inter alia*, in these processes:

- Challenging of business and strategic processes – The Risks Control Division challenges the annual work plans, based on the Bank's strategic plan. The Division also monitors heat maps to identify major risks associated with operations of the various divisions, monitor and mitigate such risks and their impact on realization of business plans.
- Approval process for new product / activity – The launch of a new product or activity at the Bank (as well as revision of an existing one) in order to achieve business targets has the potential for deviating from the specified risk management and control framework and in particular, from the risk appetite. Therefore, the Bank's Board of Directors and management have specified, in the policy on risk management framework, how the Bank addresses a new product or activity, used by the Bank to assess the impact of launching the new product or activity on the entire list of risks mapped by the Bank, including reference to operating, technology and accounting aspects associated with such launch. The effect of the new product / activity on the Bank's current risk profile determines how it would be approved: those having material effect on the Bank's risk profile are approved by the Board of Directors.
- Risks surveys – periodic processes whereby risks surveys are conducted in various areas: Both operational, including information security surveys, and with regard to compliance and internal control. These surveys are supporting tools for dynamic, active management of the risks map.
- Debriefs and ad-hoc tests – A continuous internal process maintained by the various lines of defense conducts debriefs and ad-hoc tests, following internal or external events, including events which occur in the global banking system. Learning lessons from these events, to be applied by the Bank. Material debriefs conducted with regard to risks management are brought for discussion by the Bank's Board of Directors.
- Reporting chain – Risks communication is a key pillar of the Bank's capacity to manage its risks. The Bank has a specified set of reports, in the policy on risks management framework, specifying the required reports under normal conditions, in a state of alert and under stress (emergency) conditions between all lines of defense specified by the Bank, as needed and in conformity with potential situations.
- Emergency conduct – The Bank has policy documents and structured procedures to ensure business continuity in times of emergency, both systemic emergencies, such as: geo-political event, earthquake etc. and Bank-specific events, such as: failure of Bank systems. The Bank also has a procedure for business activity in case of a financial stress event in the markets. Special emergency forums would be activated at the Bank by the Risk Owners in case of occurrence, or potential occurrence, of such events related to credit, market and liquidity risk. Policy documents and procedures prepared by Bank units establish potential emergency plans which the Bank could activate should such events occur.
- Training – Maintaining a comprehensive training system, consisting of different means, including: remote eLearning kits, custom training with regard to risks management, emphasizing regulation and internal controls, dedicated seminars etc. In addition, constant contact is maintained between Risk Owners at headquarters and field units, in particular with representatives of each Bank unit appointed to be responsible for various risk areas, to disseminate operating principles and to communicate information to the various units.

For more information about remuneration policy for all Bank employees other than officers for 2017-2019, approved by the Board of Directors on March 20, 2017, see Note 22 to the 2017 financial statements.

For more information about the remuneration structure at the Bank and how it supports the risk culture, see chapter "Remuneration" in the 2017 Risks Report on the Bank website.

## Regulatory capital

### Regulatory capital structure

Supervisory capital is composed of two tiers: Tier I capital (including Tier I capital and Tier I additional capital) and Tier II capital.

Tier I capital includes equity attributable to shareholders of the Bank and the interests of external shareholders in equity of subsidiaries (excess capital at subsidiaries is not taken into account).

Tier I capital includes supervisory adjustments and deductions from capital – goodwill, investments in capital components of financial institutions, cumulative other comprehensive income with regard to cash flow hedges for items not presented at fair value on the balance sheet and adjustments with respect to liabilities for derivative instruments, due to change in the Bank's credit risk (DVA).

Additional Tier I capital consists of equity instruments which fulfill the requirements specified in the directives. As of September 30, 2018, the Bank had no equity instruments included in additional Tier I capital.

Tier II capital consists of a group provision for credit losses and equity instruments which fulfill the specified requirements.

Restrictions on capital structure:

- Tier II capital shall not exceed 100% of Tier I capital after required deductions from such capital.
- Capital instruments qualified for inclusion in Tier II capital shall not exceed 50% of Tier I capital after required deductions from such capital.

Below is a summary of supervisory capital components, capital ratios to risk components for the Group and minimum supervisory capital ratios specified by the Supervisor of Banks (NIS in millions):

	September 30, 2018 Balance	September 30, 2018 Amounts not deducted from equity, subject to required treatment prior to adoption of Directive 202, in conformity with Basel III	September 30, 2017 Balance	September 30, 2017 Amounts not deducted from equity, subject to required treatment prior to adoption of Directive 202, in conformity with Basel III	December 31, 2017 Balance	December 31, 2017 Amounts not deducted from equity, subject to required treatment prior to adoption of Directive 202, in conformity with Basel III
Tier I capital before regulatory adjustments and deductions	15,047	–	14,157	81	14,431	81
Total regulatory adjustments to and deductions from Tier I capital	96	–	102	4	98	3
Tier I shareholders' equity	14,951	–	14,055	85	14,333	84
Tier II capital	4,874	1,786	4,603	2,233	5,251	2,233
Total capital	19,825	1,786	18,658	2,318	19,584	2,317
Total risk weighted assets	147,872	–	138,363	–	140,524	–
Ratio of Tier I capital to risk components	10.11%		10.16%		10.20%	
Ratio of total capital to risk components	13.41%		13.48%		13.94%	
Minimum Tier I capital ratio required by Supervisor of Banks	9.84%		9.86%		9.86%	
Minimum overall capital ratio required by Supervisor of Banks	13.34%		13.36%		13.36%	

For more information and detailed composition of supervisory capital, in conformity with disclosure requirements of Basel Pillar 3, as of September 30, 2018 compared to September 30, 2017 and to December 31, 2017, see appendix below.

Report on movements in supervisory capital during the period, including changes to Tier I capital, Tier I capital and Tier II capital (NIS in millions):

	September 30, 2018	September 30, 2017	December 31, 2017
<b>Tier I capital</b>			
Balance as of January 1	14,333	13,318	13,318
Issuance of ordinary share capital and share premium	16	13	16
Change in capital reserve from benefit from share-based payment transactions	(16)	(7)	8
Net profit for the period	1,004	982	1,347
Dividends declared or distributed this year	(247)	(256)	(334)
Adjustments from translation of financial statements of associated companies	1	(1)	(2)
Capital reserve from securities available for sale	(56)	31	13
Capital reserve from cash flows hedging	(1)	–	(5)
Capital reserve with respect to employees' rights	(30)	(76)	(85)
Others, including regulatory adjustments	(103)	23	11
Non-controlling interests	48	28	42
<b>Deductions</b>			
Accumulated other comprehensive income with respect to cash flows of items not listed at fair value on the balance sheet	–	(2)	2
Accumulated gains or losses from changes to fair value of liabilities, arising from change to the Bank's credit risk	2	2	2
<b>Balance as of end of period</b>	<b>14,951</b>	<b>14,055</b>	<b>14,333</b>
<b>Tier II capital</b>			
Balance as of January 1	5,251	4,888	4,888
Deduction of equity instruments	(625)	(447)	(464)
Movement in group provision for credit losses	68	46	33
Issue of debentures with contingent conversion	180	116	794
<b>Balance as of end of period</b>	<b>4,874</b>	<b>4,603</b>	<b>5,251</b>

### Capital adequacy

The Bank regularly monitors its capital adequacy and leverage ratio, in order to ensure compliance with requirements of the Supervisor of Banks, as well as to prepare in advance to respond to evolution of risk assets and capital requirements at the Bank. To this end, the Bank's Board of Directors has specified a policies document which set the principles required for management of the capital adequacy ratio and the leverage ratio, as well as the Bank's capital targets ("risk appetite"), which provide a safety margin beyond the minimum regulatory requirements for capital and leverage. Also included are the required reports and actions to be taken should the capital ratio drop below the minimum required. Capital management and planning is conducted by a special forum headed by the Manager, Finance Division (CFO) and including the Manager, Risks Control Division (CRO), Manager, Accounting and Financial Reporting Division (Chief Accountant) and managers of business divisions at the Bank. On-going capital planning is based on the working assumptions in the Bank's five-year strategic plan, for growth targets in both risk assets and profitability, subject to capital and leverage targets and to the dividend distribution policy.

As part of application of Basel II, Pillar 2, the Bank submits annually its ICAAP document, which is the internal assessment process for risk and capital, conducted by the Bank. This process is designed to ensure that the Bank's overall capital is in line with its risk profile, with capital targets specified and with targets of the strategic plan. This is done both in the normal course of business and under stress scenarios. This pillar also includes qualitative reviews of risks management processes, risks control and corporate governance related to risks management at the Bank. In January 2018, the Bank submitted its ICAAP document for 2017 to the Bank of Israel. This document consists of several chapters which describe corporate governance for risks management at the Bank, the capital targets and targets of the strategic plan, as well as developments during the year in management of various risks identified and mapped by the Bank, as well as processes for improvement and usability planned for the coming year.

The core of this document is the internal capital planning process conducted over a three-year planning horizon, from June 30, 2017 through June 30, 2020. This framework was used to calculate the required capital allocation with respect to each of the risks, from the requirements specified in Pillar 1 with additional capital required with respect to Pillar 2. Pillar 2 includes capital allocation for risks not included in Pillar 1, such as: credit concentration risk and interest risk in the bank portfolio as well as additional capital allocation for risks included in Pillar 1, where the Bank believes the capital allocated is insufficient and inappropriate for the Bank's risk profile. The capital allocation is calculated both for normal



conditions and for stress scenarios. Stress scenarios are applied in different ways, from single-risk scenarios through systemic scenarios to threat testing. These tests are designed to ensure that the Bank has sufficient capital buffers to survive even holistic scenarios which have minimum likelihood of materialization – stress events across all aspects of the Bank's risk profile, including effects with respect to risks for which no capital allocation was made in previous stages, such as: reputation and liquidity risk. The limit set for Tier I capital ratio under a threat scenario is a minimum of 6.5%.

### **Basel III**

In late 2010, the Basel Committee adopted a new directive, known as Basel III. This directive, originated by the recent crisis in global markets, consists of multiple amendments to the Basel II directive, including: Strengthening of capital base, increase in minimum capital ratios, specification of new benchmarks and methodologies for handling liquidity risk, reinforced methodology for handling counter-party risk (including capital allocation for this risk as part of Pillar 1), specification of the leverage ratio as a new ratio as part of risks management benchmarks, reinforcing processes for conducting stress testing and other processes designed to improve risks management and control capacity at financial institutions. According to the Committee-specified schedule, this directive has been gradually applied world-wide starting in 2013.

As from January 1, 2014, the Bank applies provisions for capital measurement and adequacy, based on Basel III provisions, as published by the Supervisor of Banks and as incorporated in Proper Banking Conduct Directives 201-211.

Below are major updates and effects of application of the directives with regard to capital adequacy measurement:

- Stricter criteria for recognizing capital components to be included under Tier I capital.
- Additional capital allocation with respect to CVA losses (Credit Value Adjustments) – losses due to revaluation at market value with respect to counter-party credit risk – In addition to a capital requirement with respect to default risk arising from counter-party credit risk under the standard approach, an additional capital allocation is required to cover the risk of potential loss which may arise from marking to market value of OTC derivatives.
- Stricter, revised criteria for recognition of debt instruments as capital instruments included under additional Tier I capital and Tier II capital. CoCo capital instruments (Contingent convertible capital instrument) include loss absorption provisions, including discontinuation of interest payments to holders of such instruments (only exists in additional Tier I capital) and principal loss absorption provisions, whereby these would be converted to shares or principal reduction should the Tier I capital ratio drop below a quantitative trigger specified, or when notice is given by the Supervisor of Banks, whereby activation of principal loss absorption provisions is required in order to maintain stability of the banking corporation, known as a Bank "non existence" event. The quantitative triggers specified for additional Tier I capital and Tier II capital are at 7% and 5%, respectively. As of June 30, 2018, the Bank had no equity instruments included in additional Tier I capital.
- Elimination of the distinction made by the previous directive, between Tier II capital types (lower Tier II and upper Tier II), so that Tier II capital is now uniform.
- Subordinated notes, recognized as Tier II capital instruments under the previous directives, no longer qualify as supervisory capital under the current directives, primarily due to lacking loss absorption provisions. Therefore, transitional provisions have been specified, whereby such instruments would be recognized as Tier II capital at 80% of their balance as of December 31, 2013, reduced annually by 10% through January 1, 2022.
- Group provision for credit losses – The amount of the group provision would be recognized as Tier II capital up to 1.25% of weighted risk assets for credit risk. On the other hand, the provision amount was added to the weighted risk assets for credit risk.
- Deferred taxes due to temporary differences – Deferred taxes due to temporary differences (and up to 10% of Tier I capital) – weighted at 250% risk weighting.

After the Supervisor of Banks issued its directives with regard to adoption of Basel III recommendations in Israel, the Bank's Board of Directors resolved, on August 14, 2013, to adopt a target for Tier I capital ratio to risk components, as of December 31, 2014 of 9% or higher – while maintaining appropriate safety margins.

On September 28, 2014, the Supervisor of Banks issued a circular updating Proper Banking Conduct Directive 329, whereby the target Tier I capital ratio and the target ratio of total capital to risk components ratio would include an addition equal to 1% of the housing loan portfolio balance.

The minimum Tier I capital ratio and the minimum total equity ratio required by the Supervisor of Banks, on a consolidated basis, in conformity with data as of the reporting date, are 9.84% and 13.34%, respectively.

This target may change based on actual data for the housing loan portfolio and for total risk assets.

For more information about the dividend policy, see chapter "Major developments in the Bank's risk profile" above, Note 9 the financial statements and chapter "Dividends" in the Report of the Board of Directors and Management.

Risk assets under Pillar 1 include risk assets with respect to credit risk, market risk, operational risk and counter-party CVA derivative risk. Credit risk is the material risk for the Bank and risk assets with respect to this risk account for 92% of all risk assets.

Composition of risk assets and capital requirements with respect to credit risk by exposure group are as follows (NIS in millions):

Exposure group	September 30, 2018 Weighted risk asset balances	September 30, 2018 Capital requirement <sup>(1)</sup>	September 30, 2017 Weighted risk asset balances	September 30, 2017 Capital requirement <sup>(2)</sup>	December 31, 2017 Weighted risk asset balances	December 31, 2017 Capital requirement <sup>(3)</sup>
Sovereign debts	876	117	749	100	688	92
Public sector entity debts	494	66	821	110	766	102
Banking corporation debts	794	106	909	121	927	124
Corporate debts	41,066	5,478	37,253	4,977	37,362	4,992
Debts secured by commercial real estate	2,418	323	2,185	292	2,459	328
Retail exposure to individuals	14,861	1,982	13,604	1,817	14,217	1,899
Loans to small businesses	7,022	937	6,769	904	6,858	916
Residential mortgages	64,616	8,620	61,396	8,203	62,265	8,319
Other assets	4,595	613	4,543	607	4,454	595
<b>Total</b>	<b>136,742</b>	<b>18,242</b>	<b>128,229</b>	<b>17,131</b>	<b>129,996</b>	<b>17,367</b>

(1) The capital requirement was calculated at 13.34% of risk asset balances.

(2) The capital requirement was calculated at 13.36% of risk asset balances.

(3) The capital requirement was calculated at 13.36% of risk asset balances.

The primary exposure group consists of residential mortgages, the Bank's core activity. The residential mortgage portfolio accounts for 65% of the Bank's loan portfolio and the risk weighting is on average 52%, so that the risk asset weighting for residential mortgages is 47% of risk assets with respect to credit. This coefficient reflects the lower risk associated with this segment, compared to other debt, given the extensive borrower diversification as well as the solid collateral at high ratios compared to debt.

Risk assets and capital requirements with respect to market risk, CVA risk and operational risk are as follows (NIS in millions):

Exposure group	September 30, 2018 Weighted risk asset balances	September 30, 2018 Capital requirement <sup>(1)</sup>	September 30, 2017 Weighted risk asset balances	September 30, 2017 Capital requirement <sup>(2)</sup>	December 31, 2017 Weighted risk asset balances	December 31, 2017 Capital requirement <sup>(3)</sup>
Market risk	1,462	195	1,213	162	1,605	214
CVA risk with respect to derivatives <sup>(4)</sup>	353	47	589	79	529	71
Operational Risk <sup>(5)</sup>	9,315	1,243	8,332	1,113	8,394	1,121
<b>Total</b>	<b>11,130</b>	<b>1,485</b>	<b>10,134</b>	<b>1,354</b>	<b>10,528</b>	<b>1,406</b>
<b>Total risk assets</b>	<b>147,872</b>	<b>19,727</b>	<b>138,363</b>	<b>18,485</b>	<b>140,524</b>	<b>18,773</b>

(1) The capital requirement was calculated at 13.34% of risk asset balances.

(2) The capital requirement was calculated at 13.36% of risk asset balances.

(3) The capital requirement was calculated at 13.36% of risk asset balances.

(4) Credit Value Adjustments – mark to market with respect to credit risk of counter-party, in conformity with Basel III provisions.

(5) Capital allocation with respect to operational risk was calculated using the standard approach.

Capital allocation with respect to market risk includes interest risk in the negotiable portfolio, calculated under the standard model using the effective duration method, risk with respect to currency exposure and risk in the option portfolio, calculated under the standard model using the Gamma Vega method, is low. This result reflects Bank policy on market risks management and the low risk appetite specified for such risks. Note that interest risk in the bank portfolio is addressed under Pillar 2 capital allocation.

Capital allocation with respect to CVA risk is very low, reflecting the Bank's conservative policy on transactions involving derivatives with counter-parties with low credit risk.

Capital allocation with respect to operational risk was calculated using the standard approach. According to this approach, the Bank was segmented into eight lines of business, as stipulated by the Bank of Israel, with a standard risk weighting assigned to each line of business, reflecting its sensitivity to loss with respect to operational risk. Risk weightings range from 12% for retail banking to 18% for corporate financing. Bank operations are mostly in the retail segment, so that most of the operational risk assets are with respect to this line of business; the Bank's overall average risk weighting is 12.5%.

Below is the capital for calculating the capital ratio after supervisory adjustments and deductions:

	September 30, 2018	September 30, 2017	December 31, 2017
Tier I shareholders' equity	14,951	14,055	14,333
Tier II capital	4,874	4,603	5,251
<b>Total capital</b>	<b>19,825</b>	<b>18,658</b>	<b>19,584</b>

Ratio of capital to risk components (in percentage)

	As of September 30, 2018	As of September 30, 2017	As of December 31, 2017
Ratio of Tier I capital to risk components	10.11	10.16	10.20
Ratio of total capital to risk components	13.41	13.48	13.94
Minimum Tier I capital ratio required by Supervisor of Banks <sup>(1)</sup>	9.84	9.86	9.86
Total minimum capital ratio required by the Supervisor of Banks <sup>(1)</sup>	13.34	13.36	13.36

#### Significant subsidiaries

Bank Yahav for Government Employees Ltd. and its subsidiaries

Ratio of Tier I capital to risk components	9.49	9.34	9.27
Ratio of total capital to risk components	13.53	13.53	13.01
Minimum Tier I capital ratio required by Supervisor of Banks	9.00	9.00	9.00
Total minimum capital ratio required by the Supervisor of Banks	12.50	12.50	12.50

(1) Capital ratios required by the Supervisor of Banks as from January 1, 2015. As from January 1, 2015, an additional capital requirement was added to these ratios at 1% of the housing loan balance.

## Additional information about capital adequacy

Below is information about risk weighted assets by supervisory operating segment (NIS in millions):

As of September 30, 2018

	House-holds	Private banking	Micro busi-nesses	Small busi-nesses	Medium busi-nesses	Large busi-nesses	Instituti-onal investors	Financial manage-ment	Overseas opera-tions	Total amount	Total percen-tage
Credit risk (including CVA)	82,208	28	7,273	9,467	6,491	21,005	2,155	4,541	3,927	137,095	93%
Market risk	–	–	–	–	–	–	–	1,462	–	1,462	1%
Operational risk	5,526	2	489	636	436	1,413	145	404	264	9,315	6%
<b>Total</b>	<b>87,734</b>	<b>30</b>	<b>7,762</b>	<b>10,103</b>	<b>6,927</b>	<b>22,418</b>	<b>2,300</b>	<b>6,407</b>	<b>4,191</b>	<b>147,872</b>	<b>100%</b>
<b>Total percentage</b>	<b>59%</b>	<b>–</b>	<b>5%</b>	<b>7%</b>	<b>5%</b>	<b>15%</b>	<b>2%</b>	<b>4%</b>	<b>3%</b>	<b>100%</b>	<b>100%</b>

As of September 30, 2017

	House-holds	Private banking	Micro busi-nesses	Small busi-nesses	Medium busi-nesses	Large busi-nesses	Instituti-onal investors	Financial manage-ment	Overseas opera-tions	Total amount	Total percen-tage
Credit risk (including CVA)	77,832	18	7,074	7,912	6,546	19,434	2,037	4,630	3,335	128,818	93%
Market risk	–	–	–	–	–	–	–	1,213	–	1,213	1%
Operational risk	5,021	1	453	474	420	1,245	130	374	214	8,332	6%
<b>Total</b>	<b>82,853</b>	<b>19</b>	<b>7,527</b>	<b>8,386</b>	<b>6,966</b>	<b>20,679</b>	<b>2,167</b>	<b>6,217</b>	<b>3,549</b>	<b>138,363</b>	<b>100%</b>
<b>Total percentage</b>	<b>60%</b>	<b>–</b>	<b>5%</b>	<b>6%</b>	<b>5%</b>	<b>15%</b>	<b>2%</b>	<b>4%</b>	<b>3%</b>	<b>100%</b>	<b>100%</b>

As of December 31, 2017

	House-holds	Private banking	Micro busi-nesses	Small busi-nesses	Medium busi-nesses	Large busi-nesses	Instituti-onal investors	Financial manage-ment	Overseas opera-tions	Total amount	Total percen-tage
Credit risk (including CVA)	79,098	29	6,998	8,370	6,595	19,508	2,153	4,500	3,274	130,525	93%
Market risk	–	–	–	–	–	–	–	1,605	–	1,605	1%
Operational risk	5,025	2	444	532	419	1,239	137	388	208	8,394	6%
<b>Total</b>	<b>84,123</b>	<b>31</b>	<b>7,442</b>	<b>8,902</b>	<b>7,014</b>	<b>20,747</b>	<b>2,290</b>	<b>6,493</b>	<b>3,482</b>	<b>140,524</b>	<b>100%</b>
<b>Total percentage</b>	<b>60%</b>	<b>–</b>	<b>5%</b>	<b>6%</b>	<b>5%</b>	<b>15%</b>	<b>2%</b>	<b>5%</b>	<b>2%</b>	<b>100%</b>	<b>100%</b>

As noted above, operations are mostly in the retail segment (including housing loans); so that the household segment accounts for 60% of risk assets at the Bank.

Below is the movement in weighted risk assets during the period, for each type of weighted risk asset:

	September 30, 2018	September 30, 2017	December 31, 2017
<b>Movement in credit risk assets</b>			
Balance as of January 1	130,526	122,605	122,605
Change in credit exposure risk assets	6,085	5,434	8,224
Change in securities exposure risk assets	134	117	161
Change in derivatives exposure risk assets	(56)	(20)	29
Change in off-balance sheet exposure risk assets	441	681	(346)
Change in CVA	(176)	(47)	(107)
Regulatory changes	–	–	–
Other effects	141	48	(41)
Credit risk assets at end of period	137,095	128,818	130,525
<b>Movement in operational risk assets</b>			
Balance as of January 1	8,394	8,113	8,113
Change in revenues from financing operations (including commissions)	1,169	780	885
Change in non-interest financing revenues	(328)	(626)	(704)
Change in gross revenues of subsidiaries	80	65	100
Operational risk assets at end of period	9,315	8,332	8,394
<b>Movement in market risk assets</b>			
Balance as of January 1	1,605	1,184	1,184
Change in equity risk	9	(46)	–
Change in basis risk	(15)	59	38
Change in interest risk – general market risk	(7)	16	240
Change in options risk	(130)	–	143
Market risk assets at end of period	1,462	1,213	1,605

#### Leverage ratio

On April 28, 2015, the Supervisor of Banks issued a new Proper Banking Conduct Directive 218 concerning "Leverage ratio". This directive adopts the Basel Committee recommendations with regard to leverage ratio, stipulated in January 2014.

The leverage ratio is reflected in percent, defined as the ratio of Tier I capital to total exposure. Total exposure for the Bank is the sum of balance sheet exposures, exposures to derivatives and to securities financing transactions and off-balance sheet items.

According to the directive, banking corporations must maintain a leverage ratio of 5% or higher on a consolidated basis, as from January 1, 2018. Banking corporations which comply with the requirement upon publication of the directive may not drop below the threshold stated in the regulation. Any banking corporation which does not meet the requirements of this directive is required to increase its leverage ratio at fixed quarterly steps by January 1, 2018.

The Bank's leverage ratio, on the issue date of this directive, was higher than 5% – so that this minimum leverage ratio applies to the Bank as from the issue date of this directive.

The leverage ratio is managed as part of capital management by the capital planning and management forum.

The Bank's leverage ratio as of September 30, 2018 is 5.47%, compared to 5.48% as of December 31, 2017 and 5.36% as of September 30, 2017.

Below is information about the Bank's leverage ratio:

Comparison of assets on balance sheet and exposure measurement for leverage ratio (NIS in millions)	September 30, 2018	September 30, 2017	December 31, 2017
Total assets in consolidated financial statements	248,831	239,578	239,572
Adjustments with respect to investments in banking, finance, insurance or commercial entities consolidated for accounting purposes but not within the scope of consolidation for supervisory purposes	–	–	–
Adjustments with respect to trust assets recognized on the balance sheet in conformity with Public Reporting Directives but not included in the exposure measurement of leverage ratio	–	–	–
Adjustments with respect to financial derivative instruments	1,203	808	1,197
Adjustments with respect to securities financing transactions	–	–	–
Adjustments with respect to off-balance sheet items <sup>(1)</sup>	21,736	20,328	19,474
Other adjustments	1,317	1,268	1,261
Exposure for leverage ratio	273,087	261,982	261,504

(1) Conversion of off-balance sheet exposures to equivalent credit amounts, in conformity with Basel rules for capital adequacy measurement.

Composition of exposures and leverage ratio (NIS in millions)	September 30, 2018	September 30, 2017	December 31, 2017
<b>Balance sheet exposure</b>			
Assets on balance sheet <sup>(1)</sup>	247,062	236,770	237,029
Amounts with respect to assets deducted to determine Tier I capital	(87)	(87)	(87)
<b>Total balance sheet exposure</b>	<b>246,975</b>	<b>236,683</b>	<b>236,942</b>
<b>Exposure with respect to derivatives</b>			
Cost of replacement with respect to all derivative transactions	1,460	1,154	1,326
Amounts added with respect to future potential exposure with respect to all derivative transactions	2,011	2,750	2,487
Gross-up of collateral provided with respect to derivatives, deducted from assets on the balance sheet in conformity with Public Reporting directives	–	–	–
Deduction of debtor assets with respect to variable cash collateral provided in conjunction with derivative transactions	–	–	–
Exempt central counter-party leg of commercial exposure settled by the client	–	–	–
Effective adjusted nominal amount of credit derivatives written	290	680	776
Adjusted effective nominal offsets and deduction of additions with respect to credit derivatives written	–	–	–
<b>Total exposure with respect to derivatives</b>	<b>3,761</b>	<b>4,584</b>	<b>4,589</b>
<b>Exposure with respect to securities financing transactions</b>			
Gross assets with respect to securities financing transactions (without offsets), after adjustment for transactions accounted for as an accounting sale	615	387	499
Offset amounts of cash payable and cash receivable from gross assets with respect to securities financing transactions	–	–	–
Credit risk exposure for central counter-party with respect to securities financing assets	–	–	–
Exposure with respect to transactions as agent	–	–	–
<b>Total exposure with respect to securities financing transactions</b>	<b>615</b>	<b>387</b>	<b>499</b>
<b>Other off-balance-sheet exposures</b>			
Off-balance sheet exposure at gross nominal value	66,508	60,678	57,365
Adjustments with respect to conversion to credit equivalent amounts	(44,772)	(40,350)	(37,891)
<b>Off-balance sheet items</b>	<b>21,736</b>	<b>20,328</b>	<b>19,474</b>
<b>Capital and total exposure</b>			
Tier I capital	14,951	14,055	14,333
<b>Total exposure</b>	<b>273,087</b>	<b>261,982</b>	<b>261,504</b>
<b>Leverage ratio</b>			
Leverage ratio in conformity with Proper Banking Conduct Directive 218	5.47%	5.36%	5.48%

(1) Excluding derivatives and securities financing transactions, including collateral.

## Credit risk

This chapter discusses credit risk, in conformity with disclosure requirements of the Basel Committee and the FSB; the chapter structure and topic order (adjusted for the nature of Bank operations) are also in conformity with these requirements. The following topics are included in the chapter Credit Risk:

Credit risk management –	qualitative disclosure
Housing loan risk management –	qualitative disclosure
Retail credit risk management (excluding housing loans) –	qualitative disclosure
Credit risk analysis –	quantitative disclosure
Credit risk mitigation using the standard approach –	qualitative disclosure
Housing loan risk mitigation –	qualitative disclosure
Credit risk mitigation using the standard approach –	quantitative disclosure
Credit risk mitigation using the standard approach (ratings) –	qualitative disclosure
Credit risk analysis using the standard approach (ratings) –	quantitative disclosure
Counter-party credit risk	

### Credit risk management

Credit is at the core of banking operations and therefore, credit risk is the major risk addressed by the banking system. Accordingly, the lion's share of risk assets allocated by the Bank in Tier I is with respect to credit risk.

Mizrahi-Tefahot Group is a conservative, stable banking group thanks, *inter alia*, to the composition of its credit portfolio, which is oriented more towards retail and mortgage operations, which account for more than 75% of credit activity at the Bank Group. In conformity with principles of the Bank's five-year strategic plan, issued in November 2016, the Bank strives to maintain and establish its leadership position in the retail sector and to increase focus on and expand operations of the business segments.

Credit risk is the risk that a borrower or counter-party of the Bank would not fulfill its obligations towards the Bank. Credit risk is a material risk to Bank operations. This risk is affected by multiple factors: Business risk due to client activities, concentration risk due to over-exposure to a borrower / borrower group and to economic sectors, geographic concentration risk, risk due to exogenous changes which mostly involve changes to the borrower's macro-economic environment, overseas credit risks and operational risks which, should they materialize, would have implications for credit risks. Moreover, such risk is interrelated to multiple other risks, such as market and interest risk, liquidity risk, compliance risks etc.

The Bank's strategic plan has material effect on the nature of credit operations, risk level and business focus on various segments.

Group operations with regard to loans to the public are managed by client attributes and types of banking services these clients require:

For more information about client attributes in each segment, see chapter "Supervisory Operating Segments" in the Report by the Board of Directors and Management.

The Bank's Board of Directors is responsible for setting the Bank's credit policies, which prescribe principles and rules for making credit available and for the management and control over the loan portfolio, in order to preserve its quality and mitigate its inherent risk. These principles and rules enable controlled management of the risks involved in granting loans to borrowers, at the level of the individual borrower, group of borrowers and the level of economic and business sectors – to the level of the entire portfolio. The need to revise the policies is reviewed throughout the year, in view of developments in the business environment in which the Bank and Bank's clients operate, given changes to the risk profile in view of the risk appetite specified and in view of regulatory changes, if any. The Manager, Business Division is the Risk Owner for credit risk, including credit concentration and environmental credit risk. The Manager, Risks Control Division (CRO) is responsible for the policy document on credit risk management. The Bank's Board of Directors approves the Bank's credit policy at least once a year. The credit policies includes other policy documents which discuss the relevant risks to the Bank's credit operations, including: Credit concentration policy, which ensures that the credit concentration level at the Bank is regularly managed and monitored; derivatives policy, which stipulates the principles for management and monitoring of Bank clients with derivatives activity; collateral policy, which stipulates the principles required for management of client collateral, safety factors required by transaction type and risk factors; and the environmental risks policy.

Risk appetite consists of a long list of benchmarks and risk factors relevant to the Bank's credit operations, including: Economic sectors, borrower groups, risk factors in the mortgage portfolio, unique activity types, quality of credit portfolio, overseas operations etc. and other risk factors relevant for the Bank's credit risk profile and its business operations. Credit risk is also monitored using a range of stress tests, which estimate the potential impact of stress events on the Bank's credit portfolio. This is done, *inter alia*, in order to review Bank resilience to various stress events and as part of the ICAAP process.

The Board of Directors discharges its role with regard to credit through the Board of Directors' Credit Committee, the Audit Committee and the Risks Management Committee. The credit policies document is discussed by the Board Credit Committee and by the Board Risks Management Committee, prior to being approved by the Board plenum.

The Supreme Credit Committee is the most senior forum for credit approval at the Bank. This Committee, headed by the President & CEO, consists of managers of the Business Division, Finance Division, Retail Division, Risks Control Division and Legal Counsel Division, as well as sector managers in the Business Division.

### **First line of defense – credit-related business lines at the Bank**

Credit at the Bank involves several key areas, supported by an organizational structure based on divisions and units with specific specializations, with credit extended to clients in various operating segments divided among different divisions (Retail, Business, Finance) and within those divisions, among different organizational units. Lines of business management are fully responsible for risks management and for implementing an appropriate control environment for its operations. The professional units in each of these client segments are responsible for regularly verification, monitoring and control of exposure to clients and operating segments for which they are responsible. This line of defense includes specific control units, such as division controllers, control over clients capital market exposures and other control functions. A set of procedures ensures the actual implementation of policy guidelines.

### **Second line of defense**

#### **Risks Control**

The Risks Control Division acts as the Bank's independent risks management function, thus serving as the second line of defense within corporate governance for risks management. Division operations and responsibilities include the following: With regard to credit risk management, the Division operates through multiple independent units:

- Credit risks control – *post-factum* assessment, independent of Bank entities which approve credit, of the borrower quality and quality of the Bank's credit portfolio.
- Analysis – a professional entity tasked with producing an independent opinion for credit to material clients, as part of the credit approval process.

### **Accounting and Financial Reporting Division – Chief Accountant**

The Chief Accountant is responsible for appropriate credit classification and for determination of provisions for credit losses.

#### **Legal Division**

Responsible for statutory provisions and legislative changes that impact Bank operations and for providing current legal counsel to Bank units, as well as handling lawsuits brought against the Bank.

### **Third line of defense – Internal Audit**

Internal Audit serves as the third line of defense within corporate governance for risks management, conducting audits of credit risk management as part of its annual work plan.

As part of the credit granting process, transaction data is reviewed in accordance with criteria specified by the Bank. The decision making process for granting credit is hierarchical, from branch level to Board of Directors level. Each unit which provides credit monitors on a regular basis credit repayment in accordance with terms agreed as well as the financial status of the client, based on their level of indebtedness. Any findings requiring action are reported to the relevant credit entity. In addition, as noted above, the credit granting process involves the Analysis Department, which is part of the Bank's risks management function. This involvement includes (with regard to major credit exposures and to economic sectors, as stipulated by Bank of Israel directives and Bank procedures) independent analysis of credit applications and presentation of conclusions and recommendations in a written document attached to the credit application and brought for discussion by the appropriate credit committee.

The Bank operates on multiple levels to monitor and mitigate credit risk in as much as possible, from the credit approval stage, required collateral and financial covenants specified in accordance with procedures, authorization and diversification policies specified by the Bank, through to regular control by business units and dedicated control units. This is done with constant effort invested in improving the professional expertise of those involved with credit, by means of banking courses and training, as well as professional seminars at all levels. Concurrently, the Bank invests extensive resources in improving its control mechanisms and IT systems available to decision makers in the credit sector.



## **Key processes involved in credit risk management and control at the Bank:**

**Considerations in extending credit** – The considerations involved in granting credit are based mainly on the quality of the client, his reliability, financial strength, liquidity, repayment ability, seniority in the industry, length of time with the Bank, behavior in the account and on the quality of the collateral. Likewise, the Bank works to match credit type and terms to client needs. In cases in which loans are issued based solely on the quality of the borrower, without requiring full or partial collateral coverage, the Bank may specify certain covenants, such as maintaining certain financial ratios.

**Procedures** – Procedures for granting credit and for processing credit and collateral, as well as the relevant IT systems, are regularly reviewed and updated to adapt them to the changing business environment, while learning lessons from different events. These procedures serve to implement the policy principles set by the Bank's Board of Directors.

**Risks diversification** – The Bank's credit policies have been based for years on diversification and controlled management of risks. Risks diversification is reflected in different ways: Diversification of the loan portfolio across economic sectors, including increased exposure to specific sectors, diversification across client size groups, diversification across different linkage bases, geographic diversification if applicable (construction sector).

**Authority to grant credit** – In order to streamline the decision-making process as it relates to granting credit while minimizing risk, a ranking of authority was determined for officers and credit committees at different levels, up to the level of the Board of Directors and its Credit Committee.

In general, credit-granting decisions, beginning from the region level, are made by credit committees in order to minimize the risk in relying on the judgment of a single individual. The credit authorizations include restrictions on credit limit as well as on the percentage of unsecured credit that each authorized official is permitted to approve, and other guidelines were prescribed relating to the prerogative to exercise authority in certain situations. These authorizations are reviewed from time to time and revised as needed.

**Borrower rating** – The Bank has developed a system for rating business borrowers, based on a computer-based model that combines quantitative and qualitative assessments of borrower, which has been adapted for a range of business borrowers in various economic sectors. The Bank regularly maintains the different existing models and develops new models, and acts to adapt, update and improve them in line with changes in the business environment.

The objective of the rating system is to provide for credit risks management and to support decision making processes. The system determines the rating of a borrower as a function of the quality of the client, the collateral furnished and the amount of credit received. Concurrently, the Bank has developed its ability to rate clients in the mortgage segment and in the retail segment using advanced models. Each of these segment clients is assigned a credit rating which reflects the theoretical likelihood of the client being in default. The borrower rating models are subject to periodic validation, in conformity with Bank of Israel directives, which are carried out by the Risks Control Division.

In 2016, the Retail Division started using a new computer system, the MADHOM system (for client management, rating and pricing) which is being gradually put into use, designed to allow the Division to manage its clients by different criteria, including client rating, and to use the new rating models as a decision-support tool for underwriting and credit pricing for clients of the division. In the third quarter of 2018, use of this system was significantly expanded, such that current management of credit to clients of the Retail Division is essentially based on outputs of this system. Concurrently, the Bank continues to develop and to upgrade capabilities of the system and advanced modules for various segments.

**Credit in the construction and real estate sector** – credit operations in this sector account for a significant component of credit operations of the Business Division. In financing the construction and real estate industry, specific analysis and monitoring tools are used to assist the Bank in reaching decisions on the granting of financial support to the various projects. Construction financing in this industry is focused mainly on residential construction in areas with strong demand and mid-level prices. In addition, the financing is allocated between geographic regions, based inter alia on relevant demand. In providing credit for construction, the Bank focuses on the financial support method (closed assistance). The application of this method is designed to reduce the exposure to risks in the granting of the loans, because it incorporates current and close monitoring of the progress of the financed project, both before the loans are provided, and as the project receives the financial support, while maintaining a distinction between the financed projects and the business risks inherent in the other activities of the developer-borrower. The Bank is assisted by outside construction supervisors, and also relies on liens on the land in the project, to secure the loans. Loans are issued for financed projects only by business centers and branches with professional knowledge of the subject, and under the supervision of the construction and real estate sector. The Bank also sets policies and rules for financing other real estate transactions, such as financing for rental properties, Construction, purchase groups, urban renewal, National Zoning Plan 38 etc. The Bank has dedicated units at the Business Division and the Retail Division aimed at providing a response to smaller-scale projects.

For more information about credit risk in the construction and real estate economic sector in Israel, see chapter "Credit risk" in the Report of the Board of Directors and Management.

**Currency exposure in credit** – Borrowers with currency exposure are offered means of safety and protection (hedging transactions) in order to reduce their exposure, in addition to other measures that the Bank adopts to minimize the risk of the Bank's exposure from the activities of these customers. Guidelines were prescribed for the monitoring, control, and supervision of the activities of borrowers whose debts to the Bank are sensitive to exchange rate fluctuations, including

the creation of simulations and future scenarios of changes in exchange rates. Special controls are also used for clients, when securities form a significant element of their collateral.

**Learning lessons** – credit control processes are conducted from extending credit to credit repayment. However, sometimes credit is not repaid as required and special treatment is necessary. Learning lessons is a process designed to identify inappropriate credit behavior in order to avoid repeating mistakes. The lesson learning process is incorporated into Bank procedures. Lessons are learned with regard to clients specified by a team which includes representatives from all Bank divisions and led by the Special Client Sector in the Business Division. As well as by dedicated teams in each division. These findings are disseminated to relevant recipients at the Bank for implementation of the conclusions among those involved in extending credit at the Bank.

**Monitoring and control** – Control over credit operations is a key component in maintaining quality of credit extended by the Bank to clients, including maintaining the quality of collateral required to secure credit repayment. The Bank continuously acts to identify and locate, as soon as possible, any indications of impairment of borrowers' repayment capacity or any deterioration in the state of their collateral. The Bank applies different control mechanisms, including internal controls within the credit management chain – i.e. first line controls – which are regularly conducted by branches, regions, headquarters and specific units involved, and controls by entities external to the credit process, i.e. second-line controls. See more information below.

### **Integrated forums for credit risks management and control**

The Bank has established various forums for credit risks management, which integrate the Bank's three lines of defense. The forums related to credit at the Bank are:

**Risks Monitoring Forum for credit and credit concentration** – managed by the Manager, Risks Control Division – which discusses aspects related to the overall framework for addressing risk, including rating aspects.

**Credit stress testing forum** – this forum, headed by the CRO, is designed to develop and approve methodologies and models for credit stress testing for the various segments (business credit, mortgages, commercial credit and credit to banks and governments). The forum is also presented with stress testing carried out by the Bank and in conformity with accepted practice. The forum acts to improve usability of the outcome of stress testing, current risk management by the first line of defense and setting of the risk appetite.

**Watch List Forum** – This forum is for each of the business divisions (Business Division, Retail Division and Finance Division), for the Risks Control Division and for the Accounting and Financial Reporting Division – and is convened quarterly. The client population discussed by this forum includes clients with high risk attributes, such as those with low rating or with other risk attributes (such as: restricted / AML suspects), failure to comply with financial covenants etc. including cases proactively placed on the list by credit handling entities. These discussions include an individual review of each client, their financial condition and the issue of credit risk to the Bank and the steps to be taken to mitigate such risk.

**Emergency Credit Forum** – This forum, headed by the Manager, Business Division and attended by representatives from the business divisions and from risks control, acts when unusual conditions evolve, providing a professional framework for addressing emergencies and realization of stress conditions.

**Lessons Learned Forum** – Includes representatives from the Special Client Sector, from headquarters of the Business Division, from headquarters of the Retail Division, representatives from the Risks Control Division and other relevant participants involved with specific credit. The team summarizes and analyzes material credit failure events, reaches conclusions and issues recommendations for implementation of the lessons learned – at client level and at Bank level.

Concurrently with the foregoing, both the Business Division and the Retail Division include division controllers. Control is also exercised by dedicated Bank units, including headquarter units of the Business Division. The Business Credit Control Department of the Business Division uses computer systems to discover and alert to unusual accounts and clients, including based on information external to the Bank. Control is applied to banking operations in accounts flagged due to risk indications, based on criteria specified by the Bank for the population defined as under control, as well as for all Bank clients by means of IT systems which provide alerts. As from the first quarter of 2018, the Capital Market Exposure Department reports to the Business Credit Control Department. The Department controls compliance with covenants, compliance with facilities and deviations. In the Real Estate sector, a dedicated control unit operates to control and review various aspects with regard to handling of real estate transactions by the Bank.

The Risks Control Division is a control entity for credit risk within the second defensive line. This Division includes two specialized departments, reporting directly to the Manager, Risks Control Division (the Bank's CRO): the Analysis Department and the Credit Risks Control Department. The Analysis Department conducts independent analysis of major credit applications (exposure in excess of NIS 25 million. For new clients, lower exposures are also reviewed) and presents its recommendations as part of the credit approval process, as an independent party, to the Credit Committee of the Business Division, to the Supreme Credit Committee and to the Board of Directors' Credit Committee. The analysis recommendations include a recommendation as to actual approval of the application, and as to any further conditions or restrictions to be considered as a condition for approval of the credit application. The department representative regularly attends meetings of the aforementioned credit committees.

The Credit Risks Control Department operates in conformity with Proper Banking Conduct Directive 311, by sample rating of borrower quality retroactively and by reviewing the quality of the Bank's loan portfolio, based on an annual work plan approved by the Board's Risks Management Committee and by the Board of Directors. The work plan of the Bank's Credit Control Department regularly includes the following:

- Monitoring low-rated borrowers.
- Credit control at London and Los Angeles branches via external entities which are professionally guided by the Credit Risks Control Department in Israel.
- Testing of reliability and quality of rating provided by the first line and their implications for the Bank's loan portfolio.
- Analysis of the Bank's loan portfolio – and in particular, analysis of its mortgage portfolio – including evolution of housing loans granted and loan composition by various risk factors.
- Components of credit policy and restrictions on risk appetite adopted by the Bank in the relevant area.

**Monitoring and control systems** – the Bank Group regularly uses computer systems for management and control of credit risk. These computer systems provide control tools for personnel, including the specific unit assigned with identifying and controlling credit risks, to identify loans that exceed credit limits or are under-collateralized, as well as tools for identifying credit-risks developments resulting from the existence of various parameters in client-account development and management. There are several significant systems which play an important role in processes of credit management, risks management and control, including a system to calculate the required capital allocation with respect to credit risk, systems for identifying and alerting credit risks, for providing alert information, automatic debt classification system, a computer system for control and management of all accounts under legal proceedings and a system for monitoring financial covenants, which is linked to the Bank's infrastructure systems.

**Environmental risks** – Environmental risk to the Bank is the risk of loss which may be incurred due to deterioration in the borrower's financial position due to high costs incurred as a result of environmental hazard and regulation concerning environmental protection, or due to impairment of collateral exposed to environmental risk or to the Bank being indirectly liable for an environmental hazard caused by a project funded by the Bank. Environmental risk also includes other risks derived from this risk (goodwill, third party liability etc.) In recent years, global awareness of the potential financial exposure arising from regulations related to environmental protection has grown.

In conformity with directives of the Supervisor of Banks, banks are required to act to incorporate management of exposure to environmental risk within all risks at the Bank, including specification of work processes for identification of significant risk when granting significant credit and inclusion of risk assessment, if any, within periodic assessment of quality of credit extended. The Bank's policies documents include dedicated environmental risks policies, including methodology for identification, assessment and handling of environmental risk with material impact.

## **Handling of non-performing loans and collection of debts**

The handling of problem loans requires special focus and professionalism, other than the level that approved or processed the credit extended and collateral received. Initial identification is typically computer-based by designated departments for identification and control in the Business Division and in the Retail Division. Identified clients are handled by the Special Client Sector of the Business Division (first line).

In order to identify credit risk materializing, or which may materialize, at the Bank, the Bank regularly conducts a process to review and identify debts, based on specified criteria. Some of these criteria require debt to be classified as problematic debt, while others provide a warning and allow the professional entity to exercise discretion. Debts are reviewed by a ranking of authorizations specified in Bank procedures. This authorization ranking includes individual authorizations, from branch and headquarters staff, to authorizations at higher levels with regard to classifications and provisions granted to committees headed by the Manager, Accounting and Financial Reporting Division and to the Bank management committee. The Chief Accountant forms a second line in the classification and provision setting process; he is responsible, in conformity with Proper Banking Conduct Directive 311, for being the independent factor in charge of classification and setting the provision for credit losses.

A computer system which supports application of measurement and disclosure provisions for impaired debts, credit risk and provision for credit losses, including in identification and control processes, carries out logical, criteria-based testing and determines defaults for debts classification as debts under special supervision, inferior debt, impaired debt or debt in restructuring, as required.

Identification of housing loans (mortgages) with risk attributes is automated by identifying criteria for arrears and other qualitative criteria. In early stages of arrears, the Bank mostly applies automated collection processes. Later on, the Bank applies proactive processes, both internal and external, including legal proceedings, if needed.

In order to increase fairness and transparency in debt collection proceedings from households and small businesses, the Bank of Israel issued on February 1, 2017 a new Proper Banking Conduct Directive 450, concerning debt collection proceedings.

This directive governs the actions to be taken by the Bank in the course of debt collection from clients who failed to meet the terms of their loan or credit facility approved in their account.

The directive introduces several changes to handling of clients by the branch and later on, to legal handling by the Special Client Sector; The directive became effective on February 1, 2018.

The Bank is applying this directive as required.

**Identification and classification of problematic debts** – The Bank classifies all problematic debt and problematic off-balance sheet credit items under: special supervision, inferior or impaired. Debt under special supervision is debt with potential weaknesses, which require special attention by Bank management. Should these weaknesses not be addressed, the likelihood of debt repayment may deteriorate. Inferior debt is debt insufficiently secured by collateral or by debtor repayment capacity, and for which the Bank may incur a loss if faults are not corrected.

In conformity with Bank policy, debt in excess of NIS 700 thousand is classified as impaired when, based on current information and events, it is expected that the Bank will be unable to collect all amounts due pursuant to contractual terms of the debt contract. In any case, debt in excess of NIS 700 thousand is classified as impaired when its principal or interest is in arrears over 90 days, unless the debt is well secured and is in collection proceedings. Further, any debt whose terms and conditions have been changed in conjunction with restructuring of problematic debt would be classified as impaired debt, unless prior to and following such restructuring, a provision for credit losses by extent of arrears was made with respect to the debt pursuant to the appendix to Proper Banking Conduct Directive 314 on problematic debt in housing loans.

Debt under NIS 700 thousand in arrears 90 days is assessed on a Group basis and in such case, is classified as inferior debt.

Decisions with regard to debt classification are made based, *inter alia*, on assessment of the borrower's financial standing and repayment capacity, any collateral and its status, the financial standing of guarantors, if any and their commitment to support the debt and the borrower's capacity to obtain financing from third parties.

**Provision for credit losses** – upon application of the directive for measurement and disclosure of impaired debts, credit risk and provision for credit losses on January 1, 2011, the Bank implemented a computer system for identification and classification of debts where risk of credit losses exists or may emerge. The system is connected to various infrastructure systems at the Bank, combining data to allow for debts review designed to assess their robustness and expected cash flows. The new system applies automated processes for identification, review, classification and determination of provisions, including process documentation and hierarchical approvals based on authorities specified in Bank procedures. The system also allows for handling problematic debts not identified by the automated identification processes, but rather using qualitative tests of the Bank's loan portfolio.

The decision about the amount of provision for credit losses is derived from the quality of credit and collateral, the financial and legal standing of the borrower and guarantors, as well as environmental and sector conditions in the client environment.

The Bank has put in place procedures for classification of credit and for measurement of provision for credit losses, in order to maintain an appropriate provision to cover expected credit losses with regard to the Bank's loan portfolio. Further, the Bank has put in place procedures to be followed, an appropriate provision to cover expected credit losses with regard to off-balance sheet credit instruments (such as: commitments to provide credit, unutilized credit facilities and guarantees).

The required provision to cover expected credit losses from the credit portfolio is estimated under one of the following tracks: "individual provision" or "group provision". Further, the Bank reviews the overall appropriateness of the provision for credit losses.

Such review of debts in order to determine the provision and debt handling is consistently applied to all debts in excess of NIS 700 thousand and in conformity with the Bank's credit management policy – and no transition is made, during the debt term, between the individual review track and the group-based review track – unless in case of restructuring of problematic debt, as noted above.

For more information about individual provision, group-based provision, provision with respect to housing loans and provision with respect to off-balance sheet credit, see Note 1 to the 2017 financial statements.

### **Credit risk management – housing**

In conjunction with credit risks management, the Bank takes various actions to manage, control and mitigate risks associated with provision of housing loans. The Bank estimates the risk profile associated with provision of housing loans as low, due to the high level of client diversification, geographic diversification of borrowers, relatively low leverage, which recently has decreased even further due to Bank of Israel directives, intensive review procedures of borrower quality and their repayment capacity, and securing credit with property as collateral.

The Bank acts regularly to control and manage the risk associated with housing loans, for which the Retail Division, the Risks Control Division and other Bank entities are responsible. This activity includes portfolio analysis by inherent risk

factors (LTV, repayment ratio, geographic location, loan age, income decile etc.) and carrying out a variety of stress tests to review the impact of macro-economic factors on portfolio risk – primarily the impact of unemployment and interest rates. The Bank has developed an advanced model for rating housing loans, which includes a rating for each loan and calculation of potential loss in case of failure. This model is in addition to the Bank's existing monitoring tools.

In March 2018, the Bank of Israel revised its directives on credit risks for housing loans.

According to this revision, housing loans with LTV ratio higher than 60% would be assigned a 60% risk weighting, compared to 75% prior to this revision.

## **Risk appetite in mortgage segment**

As part of its credit risk policies, the Bank has set various restrictions on housing loan operations, to account for major risk factors. These factors are reviewed from time to time and additional restrictions are imposed as needed, i.e. based on the actual risk profile of the mortgage portfolio and its trend, as well as on regulatory directives from the Bank of Israel.

The risk appetite for mortgages is defined using multiple risk benchmarks, which apply to credit risk and concentration risk aspects at regular performance level. These benchmarks include: differential risk premium (reflecting the risk of the mortgagee), the LTV ratio, property location (geographic risk), credit quality benchmark (see below under Credit Control), loan repayment to income ratio, loan purpose, loan term, loan track mix, property type, document quality, normative interest rate, financial wealth and cross restrictions on combinations of multiple parameters.

The Bank constantly monitors the risk profile of the mortgage portfolio and its development over time, in view of the specified risk appetite. In particular, this monitoring is conducted through the Bank's quarterly risks document which is presented to and approved by the Board of Directors and its Risks Management Committee. Such monitoring reveals that leading risk benchmarks continue to remain relatively low. These benchmarks include: LTV ratios, repayment ratio, rate of oblige in default and, in particular, the rate of arrears for new loans (one year since origination), which is testimony to the high quality of underwriting at the Bank. Note that the average LTV ratio for the Bank's mortgage portfolio (at end of September 2018) was 53% (reflecting the LTV ratio upon loan origination). The Bank also estimates the "actual" LTV ratio for the portfolio, based on changes to property values, based on estimates by the Central Bureau of Statistics against the outstanding portfolio balances. This ratio is lower than the original LTV ratio due to the constantly higher housing prices, reflected by the mortgage inventory. These data support the Bank's estimate that the potential for loss due to the Bank's mortgage portfolio, even in scenarios involving material decline in housing prices, is low. In addition, the Bank regularly reviews its mortgage portfolio under stress conditions, including under significant change in macro-economic conditions, using multiple methodologies. The outcome of stress testing indicates that portfolio risk is stable and low, and that the potential impact of a severe stress event in the market is low..

## **Means for risk management in housing loans**

### **Underwriting process**

#### **Criteria for loan approval**

The Bank has specified uniform, quantitative criteria for review and approval of housing loan applications. Along with the uniform criteria, decision makers at the Bank exercise their judgment. The guiding criteria for granting housing loans have been determined, inter alia, based on the following:

- Accumulated experience at the Bank with regard to housing loans, including lessons learned over time with regard to parameters which determine borrower quality and quality of loan collateral.
- Results of current credit reviews which include, inter alia, review of changes to credit quality in certain sectors.
- The loan portfolio is reviewed by a special-purpose nation-wide review center.
- Assessment of credit risks in different areas of the country, due to security-related and other events.
- During evaluation of the loan application, three key parameters are assessed: Borrower quality and repayment capacity, including future repayment capacity given higher interest rates, proposed property collateral and the nature of the transaction. For commercial banking, prime importance is usually assigned to the loan purpose. In the mortgage business, the main weighting in making credit decisions lies in assessment of borrower quality, because practically all of the loans are extended for purchase of real estate by households. However, for general-purpose loans, self-construction loans and non-standard loans, a weighting is assigned to the nature and quality of the transaction when making a decision.
- Collateral and guarantors form a safety net for the Bank in a specific transaction, in case the monthly repayment does not go according to plan.
- Decision making by the Bank involves a process of review of transaction data against predetermined criteria. Decision making with regard to credit is hierarchical and, to a large extent, corresponds to the Bank's management ranking. There are multiple approval levels and the application is routed to the required level based on application data.

These criteria are regularly updated in line with market developments and the portfolio's risk profile.

### **Credit authority**

The Bank has created a ranking of authority for approval of housing loans (at branch, region and headquarters level). The authorized entity to approve the loan is determined based on data in the loan application and on its inherent risk (data about borrowers, LTV ratio, risk premium and nature of the transaction). To enhance control over approval of complex, high-risk loans and loans to specific populations (such as: large loans, transactions between family members, acquisition through a Trust, loans with pledged collateral being a property in high-risk locations etc.), such applications are sent for approval by the Underwriting and Control Department operating in the mortgage headquarters sector.

In addition, a major part of the loan origination process is conducted by the National Review Center. This Center controls the appropriateness of the loan origination process, including compliance with Bank procedures and various directives.

### **Model for determination of differential risk premium**

The Bank has developed a model for calculation of differential risk premium, based on past empirical data, for rating transaction risk at the loan application stage. For each application, an individual risk premium is calculated based on all risk factors identifiable in client information and attributes of the desired transaction.

This risk premium reflects an estimate of overall transaction risk, allowing for assessment of client odds of being in arrears on the loan or becoming insolvent – at the outset of the application stage. This premium is used for both credit decision making and for pricing of client interest rate. The Bank completed a significant, comprehensive upgrade to the model and has started preparing for its implementation. Full implementation is expected in 2019.

### **Built-in controls in loan origination system**

The Bank manages its mortgage operations using a dedicated computer system developed for this purpose, which includes the following built-in real-time controls:

- Ensure information completeness required for loan and activities required in preparation of the material, review and approval of the loan.
- Rigid, real-time control over transactions by authorizations. Use of this preventive control methodology significantly reduces the need for discovery controls after loan origination.
- Work flow process with real-time control over execution of all required tasks at each stage of the loan origination process, sending the application to the authorized entity for performing the required actions at each stage of the loan approval process.

Use of this system has resulted in improved control in different stages of the loan origination process, while achieving uniformity among different Bank branches.

### **Mortgage-related training**

The Bank's Training Center delivers courses for training, development and improvement of all those involved in provision of housing loans. Training content is determined in cooperation with the Mortgage Headquarters Sector, and staff at headquarters participates in training delivery to bankers. These courses include, inter alia, special emphasis on risks management. In addition, the mortgage operations are included within the Bank-specified framework for handling operational risk and staff at the mortgage headquarters take part in training designated for this area.

### **Professional conferences**

The Retail Division regularly holds professional conferences for managers and bankers. In these conferences, extensive reviews of developments in the mortgage market are presented, along with steps to be taken to handle the risks associated with such developments.

### **Regular monitoring of borrower condition and of the housing loan portfolio**

Credit control is a key factor in maintaining quality of credit provided by the Bank to its clients. Control over housing loans is exercised at the individual loan level as well as for the entire mortgage portfolio.

The Bank acts to identify as early as possible any symptoms indicating a decline in borrower repayment capacity, in order to identify as soon as possible any credit failure situation. The Bank applies multiple control types, including regular internal controls at branches, regions and headquarters.

The Bank maintains control over quality of new credit provided by branches, by means of a monthly Credit Quality report, which includes all loans originated by the Bank between 6-18 months prior to the reported date which are over 3 months in arrears. This report is designed to assist branches in reducing the extent of arrears, and to increase awareness of problematic loans by those originating and approving loans in order to learn lessons for future credit approval. Along with the individual report, listing loans, details of arrears etc., a statistical report is also produced, showing the extent of arrears at each branch, compared to the region and to the Bank as a whole, and compared to previous months. Management of the Retail Division regularly monitors handling of debts in arrears, using this report.

For the entire mortgage portfolio, control is maintained of restrictions imposed by the Bank's risk appetite, both at the Retail Division and at the Risks Control Department and Credit Control Department of the Risks Control Division.

In addition, a credit control report is produced semi-annually by the Risks Control Division, which extensively reviews the development of the housing loan portfolio's risk profile over the reviewed period. This review includes the risk appetite, credit quality, analysis of major risk attributes and risk factors, overview of arrears and debt collection, special populations, purchase groups and stress testing. This includes analysis of the development of housing loans extended, the Bank's share of the banking system and credit composition by various criteria. This report is discussed by the Supreme Credit Committee (a management committee) and by the Board of Directors' Risks Management Committee and is then presented to the Bank's Board of Directors.

## **Entities participating in risk management and control for housing loans**

### **Mortgage Management Department of the Retail Division**

This department handles different events which occur during the loan term, whether initiated by the Bank or by the borrower. One of the key tasks is monitoring of collateral provided. During loan origination, the Bank usually receives interim collateral, and the final collateral is expected to be received during the loan term. The department also monitors receipt of life and property insurance policies during the loan term.

### **The National Review Center of the Retail Division**

Loan files are sent to this Center prior to origination. These files are reviewed by the Center, in order to verify that the branch did carry out the actions required according to Bank procedures, regulations and instructions of the loan approver.

### **Collection Department**

The Bank operates a dedicated Collection Department, which handles debts collection from borrowers in arrears and realization of properties. Processing is automatically launched once the client fails to make a mortgage payment for the first time. If this failure is not resolved, processing continues by the Telephone Collection Center (prior to filing a law suit), designed to reach payment arrangements with clients. If such an arrangement with borrowers cannot be reached, the debt is processed by the Bank's Collection Department, which includes a dedicated department in the Special Client Sector, for handling mortgage debtors. If needed, legal action is brought against debtors.

### **Arrears Forum**

The Arrears Forum convenes monthly, headed by the Manager, Business Division, and reviews the current state of affairs with regard to collection in the previous month, implications on the financial statements and on the provision for credit losses. The Forum specifies targets for debts processing and for reducing arrears.

### **Legal Division**

As part of the underwriting process, collateral for non-standard loans (such as: transactions involving family members) and high-value loans are reviewed by the Mortgage Advisory Department, a dedicated department in the Legal Division. This test complements the loan approval and review conducted at the branch and the regional underwriting department.

### **Risks Control Division**

The Risks Control Division monitors the quality of the Bank's loan portfolio and the evolution of the Bank portfolio's risk profile, in view of the specified risk appetite. The division is responsible for regular execution of stress scenarios of the Bank's mortgage portfolio, in coordination with the Mortgage Headquarters sector, while challenging multiple risk factors in this portfolio. Some stress scenarios are executed using advanced methods and using current data from advanced models developed by the Bank. The Bank's stress testing includes the Bank of Israel uniform scenario (a uniform macro-economic scenario for the entire banking system). In this scenario, the potential loss by the Bank due to extreme changes in the current macro-economic situation is calculated, accounting for a very high level of unemployment compared to the current situation as well as sharply lower housing prices. These stress tests indicate that the risk level of the portfolio is low.

### **Credit risks and credit concentration monitoring forum**

The Bank operates a forum for monitoring credit risks, headed by the Manager, Risks Control Division, which promotes issues such as: review of credit policy and, in particular, changes to the risk appetite specified there, analysis of credit portfolio risk level, application of advanced modeling approaches, supervision of design and application process of stress testing, findings of model validation processes for extending credit and monitoring of the risk profile of the Bank's loan portfolio.

### **Internal Audit**

The work plan for Internal Audit with regard to loans includes, *inter alia*, reference to review of the policy and of entities involved in loan approval, origination, administration and control.

## **Retail credit risk management (excluding housing loans)**

### **Loans to individuals**

The individual client segment is highly diversified – both by number of clients and by geographic location, with most clients in this segment being salaried employees with an individual or a joint household account. A recession in non-banking operations is a major risk factor for the individual client segment and higher unemployment has material impact on the likelihood of default.

Credit policy and work procedures at the Bank with regard to extending credit, including to individual clients, is based on several principles – both with regard to proper credit underwriting and adapting credit to client needs and repayment capacity. These include: review of credit objective, requested LTV ratio, loan term, analysis of the client's repayment capacity and repayment sources for all of their indebtedness, with review of various economic parameters of the client and based on the Bank's familiarity with the client and past experience working with them.

The Bank regularly monitors the risk level in the loan portfolio to individuals, including by using a model for credit rating of individual clients and by conducting various stress tests, including custom tests in conformity with Bank of Israel directives, which include scenarios such as: economic recession and significant increase in unemployment.

### **Loans to small businesses**

The micro and small business segment is highly diversified in terms of clients in various economic sectors, mostly in small industry, trade, business and financial services. Financing in the micro and small business segment is mostly provided for short terms, for current operations and for financing of working capital, covering gaps in cash flows, financing trade receivables, inventory and import activities. Such financing is provided against appropriate collateral, such as checks for collateral / checks receivable, invoices, pledging of contracts and current liens.

As part of the credit underwriting process, the Bank analyzes the merchant's business activity, including by comparison to their economic sector. In this regard, and subject to review of repayment capacity and repayment sources, the credit amount and type are customized for the client needs.

Major risk factors in operations of the small business segment are: macro-economic deterioration which would result in recession, which would have across-the-board impact on businesses operating in this segment; dependence on key persons in the business (primarily owners and managers); dependence on individual suppliers / clients who may face default.

The Bank regularly monitors the risk level in the credit portfolio for micro and small businesses, including through custom credit rating models and by monitoring high-risk economic sectors and setting restrictions for activities and differential credit authorizations for different management levels.

In order to optimally support these operations, the Bank acted to improve infrastructure, banking processes and credit underwriting processes.

In the third quarter of 2018, the Bank continued development of computer-based processes for credit applications and a model to determine differential interest authorizations. Other improvements, involving reinforcement of control processes, usability deployment and documentation are incorporated in the Bank's work plans.



## Credit risk analysis

Below is the composition of credit exposure by exposure group and by balance sheet item, before provision for credit losses (NIS in millions)<sup>(1)</sup>:

September 30, 2018

	Sover- eigns	Public sector	Banking corpora- tions	Corpora- tions	Secured by comme- rcial real estate	Retail for individuals	Small business	Housing loans	Others	Gross credit expo- sure <sup>(2)</sup>	Average gross credit expo- sure
Loans <sup>(3)</sup>	40,112	731	1,591	32,826	2,480	19,896	10,150	124,778	–	232,564	227,995
Securities <sup>(4)</sup>	9,635	176	–	17	–	–	–	–	–	9,828	9,460
Derivatives <sup>(5)</sup>	314	151	811	2,468	–	13	5	–	–	3,762	3,853
Other off- balance-sheet exposures	146	166	142	45,442	553	10,581	3,660	5,818	–	66,508	63,855
Other assets <sup>(6)</sup>	–	–	–	–	–	–	–	–	4,860	4,860	4,690
<b>Total</b>	<b>50,207</b>	<b>1,224</b>	<b>2,544</b>	<b>80,753</b>	<b>3,033</b>	<b>30,490</b>	<b>13,815</b>	<b>130,596</b>	<b>4,860</b>	<b>317,522</b>	<b>309,852</b>

September 30, 2017

	Sover- eigns	Public sector	Banking corpora- tions	Corpora- tions	Secured by comme- rcial real estate	Retail for individuals	Small business	Housing loans	Others	Gross credit expo- sure <sup>(2)</sup>	Average gross credit expo- sure
Loans <sup>(3)</sup>	40,315	1,378	1,761	28,066	2,147	18,452	9,865	119,271	–	221,255	216,363
Securities <sup>(4)</sup>	10,631	–	18	17	–	–	–	–	–	10,666	10,573
Derivatives <sup>(5)</sup>	80	160	983	2,350	–	18	5	–	–	3,596	3,903
Other off- balance-sheet exposures	191	111	75	42,328	639	9,702	3,377	4,255	–	60,678	60,221
Other assets <sup>(6)</sup>	–	–	–	–	–	–	–	–	4,647	4,647	4,638
<b>Total</b>	<b>51,217</b>	<b>1,649</b>	<b>2,837</b>	<b>72,761</b>	<b>2,786</b>	<b>28,172</b>	<b>13,247</b>	<b>123,526</b>	<b>4,647</b>	<b>300,842</b>	<b>295,697</b>

December 31, 2017

	Sover- eigns	Public sector	Banking corpora- tions	Corpora- tions	Secured by comme- rcial real estate	Retail for individuals	Small business	Housing loans	Others	Gross credit expo- sure <sup>(2)</sup>	Average gross credit expo- sure
Loans <sup>(3)</sup>	38,898	1,248	1,613	28,798	2,441	19,165	9,984	120,399	–	222,546	217,600
Securities <sup>(4)</sup>	9,636	173	–	17	–	–	–	–	–	9,826	10,423
Derivatives <sup>(5)</sup>	97	160	880	2,653	–	18	5	–	–	3,813	3,885
Other off- balance-sheet exposures	125	95	70	38,608	524	9,866	3,421	4,656	–	57,365	59,650
Other assets <sup>(6)</sup>	–	–	–	–	–	–	–	–	4,784	4,784	4,667
<b>Total</b>	<b>48,756</b>	<b>1,676</b>	<b>2,563</b>	<b>70,076</b>	<b>2,965</b>	<b>29,049</b>	<b>13,410</b>	<b>125,055</b>	<b>4,784</b>	<b>298,334</b>	<b>296,224</b>

- (1) After deduction of accounting write-offs and before provision for credit losses on individual and group basis.
- (2) Balance of on- and off-balance sheet balances, after on- and off-balance-sheet offsets, excluding impact of credit risk mitigation, conversion factors and risk weighting factors, as defined under Basel rules.
- (3) Includes loans to the public, loans to governments, deposits with banks and borrowed securities.
- (4) Excludes balances deducted from the capital basis and investment in securities in the negotiable portfolio.
- (5) Includes face value of derivative instruments (including credit derivative instruments), after effect of add-on factors and positive fair value of derivative instruments.
- (6) Excludes derivatives and balances deducted from the capital basis, including cash, investment in shares, fixed assets and investment in investees.

Composition of exposures by geographic region and – for significant regions – by major type of credit exposure (NIS in millions); This information lists total exposure to foreign countries and exposure to countries for which total exposure to each country exceeds 1% of total consolidated assets or 20% of capital, whichever is lower:

	Balance sheet exposure	Off-balance sheet exposure <sup>(1)</sup>	Impaired debts
<b>As of September 30, 2018</b>			
USA	9,153	562	–
France	1,354	3,388	2
Germany	320	4,196	–
UK	1,836	1,112	–
Other	2,510	1,105	2
Total exposure to foreign countries	15,176	10,363	4
Of which: Total exposure to LDC countries	446	139	–

	Balance sheet exposure	Off-balance sheet exposure <sup>(1)</sup>	Impaired debts
<b>As of September 30, 2017</b>			
USA	5,925	1,370	–
UK	1,306	2,926	–
Other	3,644	4,270	–
Total exposure to foreign countries	10,875	8,566	–
Of which: Total exposure to LDC countries	538	153	–

	Balance sheet exposure	Off-balance sheet exposure <sup>(1)</sup>	Impaired debts
<b>As of December 31, 2017</b>			
USA	4,806	654	–
France	1,437	2,565	–
Germany	331	2,999	–
Other	3,436	1,661	–
Total exposure to foreign countries	10,010	7,879	–
Of which: Total exposure to LDC countries	546	149	–

(1) The balance of off-balance sheet exposure includes NIS 7,918 million with respect to acquiring insurance from international reinsurers for the portfolio of Sales Act guarantees for borrowers in the real estate sector in Israel (as of December 31, 2017: NIS 5,237 million; as of September 30, 2017: NIS 5,616 million).

The exposure presented above represents, in accordance with directives of the Supervisor of Banks, exposure based on final risk. The party bearing the final risk is an individual, business, institution or instrument which provides "credit reinforcement" to the Bank, such as guarantees, collateral, insurance contracts or credit derivatives. When no "credit reinforcement" exists, the party bearing the final risk is the debtor.

For more information see "Exposure to Foreign Countries" in the Report by the Board of Directors and Management.

Composition of credit exposure before provision for credit losses<sup>(1)</sup>, by contractual term to maturity, by major gross credit exposure type, is as follows:

**Gross credit (NIS in millions)<sup>(2)</sup>:**

September 30, 2018

	Up to 1 year	1-5 years	Over 5 years	Without maturity	Total
Loans <sup>(3)</sup>	76,768	30,451	125,185	160	232,564
Securities <sup>(4)</sup>	3,915	5,094	819	–	9,828
Derivatives <sup>(5)</sup>	2,925	747	90	–	3,762
Other off-balance-sheet exposures	53,914	11,639	955	–	66,508
Other assets <sup>(6)</sup>	2,202	1,145	121	1,392	4,860
<b>Total</b>	<b>139,724</b>	<b>49,076</b>	<b>127,170</b>	<b>1,552</b>	<b>317,522</b>

September 30, 2017

	Up to 1 year	1-5 years	Over 5 years	Without maturity	Total
Loans <sup>(3)</sup>	74,303	28,879	117,908	165	221,255
Securities <sup>(4)</sup>	2,345	7,817	504	–	10,666
Derivatives <sup>(5)</sup>	2,408	1,060	128	–	3,596
Other off-balance-sheet exposures	44,903	14,327	1,448	–	60,678
Other assets <sup>(6)</sup>	2,127	998	130	1,392	4,647
<b>Total</b>	<b>126,086</b>	<b>53,081</b>	<b>120,118</b>	<b>1,557</b>	<b>300,842</b>

December 31, 2017

	Up to 1 year	1-5 years	Over 5 years	Without maturity	Total
Loans <sup>(3)</sup>	72,352	30,122	119,905	167	222,546
Securities <sup>(4)</sup>	2,485	6,406	935	–	9,826
Derivatives <sup>(5)</sup>	2,658	1,017	138	–	3,813
Other off-balance-sheet exposures	42,266	14,783	316	–	57,365
Other assets <sup>(6)</sup>	2,276	940	133	1,435	4,784
<b>Total</b>	<b>122,037</b>	<b>53,268</b>	<b>121,427</b>	<b>1,602</b>	<b>298,334</b>

(1) After deduction of accounting write-offs and before provision for credit losses on individual and group basis.

(2) Balance of on- and off-balance sheet balances, after on- and off-balance-sheet offsets, excluding impact of credit risk mitigation, conversion factors and risk weighting factors, as defined under Basel rules.

(3) Includes loans to the public, loans to governments, deposits with banks and borrowed securities.

(4) Excludes balances deducted from the capital basis and investment in securities in the negotiable portfolio.

(5) Includes face value of derivative instruments (including credit derivative instruments), after effect of add-on factors and positive fair value of derivative instruments.

(6) Excludes derivatives and balances deducted from the capital basis, including cash, investment in shares, fixed assets and investment in investees.

Below is a summary of impaired credit risk and non-impaired credit risk by major sector (NIS in millions):

September 30, 2018

	Impaired <sup>(2)</sup> debts <sup>(1)</sup>	Non impaired debts In arrears 90 days or longer <sup>(3)</sup>	Non impaired debts In arrears 30 to 89 days <sup>(4)</sup>
<b>Borrower activity in Israel</b>			
Total commercial	748	41	161
Private individuals – housing loans	52	<sup>(6)</sup> 1,292	<sup>(5)</sup> 504
Private individuals – other	71	25	89
Total public – activity in Israel	871	1,358	754
Total public – activity overseas	5	1	5
Banks and governments	–	–	–
Total	876	1,359	759

September 30, 2017

	Impaired <sup>(2)</sup> debts <sup>(1)</sup>	Non impaired debts In arrears 90 days or longer <sup>(3)</sup>	Non impaired debts In arrears 30 to 89 days <sup>(4)</sup>
<b>Borrower activity in Israel</b>			
Total commercial	521	65	159
Private individuals – housing loans	41	<sup>(6)</sup> 1,024	<sup>(5)</sup> 441
Private individuals – other	73	25	73
Total public – activity in Israel	635	1,114	673
Total public – activity overseas	4	–	–
Banks and governments	–	–	–
Total	639	1,114	673

December 31, 2017

	Impaired <sup>(2)</sup> debts <sup>(1)</sup>	Non impaired debts In arrears 90 days or longer <sup>(3)</sup>	Non impaired debts In arrears 30 to 89 days <sup>(4)</sup>
<b>Borrower activity in Israel</b>			
Total commercial	617	42	140
Private individuals – housing loans	33	<sup>(6)</sup> 1,071	<sup>(5)</sup> 390
Private individuals – other	70	22	73
Total public – activity in Israel	720	1,135	603
Total public – activity overseas	3	1	–
Banks and governments	–	–	–
Total	723	1,136	603

(1) Loans to the public, loans to governments, deposits with banks and other debts, except for debentures and securities borrowed or acquired in conjunction with resale agreements, except for deposits with Bank of Israel.

(2) Generally, impaired debts do not accrue interest revenues. For information about certain impaired debts restructured using problematic debt restructuring, see Note 13.B.2.c. to the financial statements.

(3) Classified as problematic non-impaired debts. Accruing interest revenues.

(4) Accruing interest revenues. Debts in arrears 30 to 89 days amounting to NIS 56 million was classified as problematic non-impaired debts (as of September 30, 2017: NIS 53 million; as of December 31, 2017: NIS 63 million).

(5) In conformity with Public Reporting Directives, excludes the balance of housing loans in arrears up to 2 months.

(6) Includes balance of housing loans amounting to NIS 89 million provided for by extent of arrears of borrower, for which an agreement has been signed for repayment of arrears by the borrower, where a change was made to the repayment schedule for the outstanding loan balance not yet due (as of September 30, 2017: NIS 107 million; as of December 31, 2017: NIS 102 million).

## Provision by extent of arrears

Below are details of the provision for credit losses with respect to housing loans for which a minimum provision for credit losses was made by extent of arrears, in accordance with appendix to Proper Banking Conduct Directive 314, as of September 30, 2018 (NIS in millions):

	Extent of arrears In arrears Extent of 90 days or arrears longer In arrears 30 90 days to to 89 days <sup>(1)</sup> 6 months		Extent of arrears In arrears Extent of 90 days or arrears longer In arrears 6-15 6-15 months		Extent of arrears In arrears Extent of 90 days or arrears longer In arrears 15-33 15-33 months		Extent of arrears In arrears Extent of 90 days or arrears longer In arrears Over 33 Over 33 months		Extent of arrears In arrears Extent of 90 days or arrears longer In arrears Total over Total over 90 days		Balance with respect to refinanced loans in arrears <sup>(2)</sup>	Total
	8	18	18	14	226	276	43					
Amount in arrears	8	18	18	14	226	276	43	327				
Of which: Balance of provision for interest <sup>(3)</sup>	–	–	–	1	111	112	6	118				
Recorded debt balance	508	655	322	88	134	1,199	96	1,803				
Balance of provision for credit losses <sup>(4)</sup>	–	–	39	41	101	181	44	225				
Debt balance, net	508	655	283	47	33	1,018	52	1,578				

(1) In conformity with Public Reporting Directives, excludes the balance of housing loans in arrears up to 2 months.

(2) Loans for which an agreement was signed for repayment of arrears by borrower, where a change was made in the repayment schedule for the loan balance not yet due.

(3) With respect to interest on amounts in arrears.

(4) Excludes balance of provision for interest.

Below is a summary of movement in provision for credit losses for the nine months ended (NIS in millions):

### Provision for credit losses - September 30, 2018

	Loans to the public Commercial		Loans to the public Housing		Loans to the public Individual – other		Loans to the public Total		Banks and governments	Total
	699	630	245	1,574	1	1,575				
Balance of provision for credit losses at start of period	699	630	245	1,574	1	1,575				
Expenses with respect to credit losses	118	34	80	232	1	233				
Net accounting write-offs	(82)	(5)	(67)	(154)	–	(154)				
Balance of provision for credit losses at end of period	735	659	258	1,652	2	1,654				
Of which: Individual provisions	126	3	19	148	–	148				
Of which: With respect to off balance sheet credit instruments	90	–	10	100	–	100				

### Provision for credit losses - September 30, 2017

	Loans to the public Commercial		Loans to the public Housing		Loans to the public Individual – other		Loans to the public Total		Banks and governments	Total
	724	615	208	1,547	2	1,549				
Balance of provision for credit losses at start of period	724	615	208	1,547	2	1,549				
Expenses with respect to credit losses	21	18	93	132	–	132				
Net accounting write-offs	(48)	(8)	(62)	(118)	–	(118)				
Balance of provision for credit losses at end of period	697	625	239	1,561	2	1,563				
Of which: Individual provisions	102	4	14	120	–	120				
Of which: With respect to off balance sheet credit instruments	87	–	9	96	–	96				

For more information about movement in the provision for credit losses see Notes 6 and 13 to the financial statements.

## Credit risk mitigation using the standard approach

The Bank Group takes different actions to mitigate risks associated with extending credit and with credit concentration. Below is a description of tools applied by the Bank Group to mitigate risks associated with extending credit and with credit concentration. Below is a description of major tools used to mitigate risk in conjunction with the Bank's credit policies.

**Collateral** – Collateral received by the Bank is designed to secure repayment of credit extended by the Bank to the client, in case of insolvency. The quality and extent of collateral required from the client is determined based on the basic borrower attributes, transaction attributes and materiality of the risk of the client being unable to repay the credit. The higher the risk, the larger and more liquid collateral required by the Bank.

Bank policies and procedures specify the asset types which may be recognized as collateral for providing credit. The commonly used collateral types at the Bank are: Deposits, securities, liens on real estate, vehicles, , credit vouchers, checks, bank guarantees and State, institutional, corporate or individual guarantees. As part of the collateral policies, rules and principles were prescribed as to the level of reliance on each type of collateral, with regard to its character, marketability, price volatility, promptness of realization and legal status, in addition to assessing the repayment ability of a client as a criterion for issuing the loans.

There are also other collateral types, such as a floating lien, receivables and/or financial and operating covenants imposed on the client to secure their capacity to repay their debt to the Bank.

The collateral is matched, as far as possible, to the type of credit that it secures, while taking into account the period of time, types of linkage, character of loans and their purpose, as well as how quickly it can be realized. Collateral coefficients determine the extent to which the Bank is willing to rely on specific collateral to secure credit. The value of the collateral, with the use of safety factors, is, as far as possible, calculated automatically by the IT systems. The safety factors for different types of collateral are examined once a year and are approved by the Board of Directors' Credit Committee, by the Risks Management Committee and by the Board of Directors. There is also collateral in place which is not accounted for in calculating safety factors, but only used to reinforce existing collateral. The Bank also approves, on a limited, case-by-case basis, the granting of credit solely on the basis of the borrower's obligation.

Bank procedures specify rules for ongoing collateral management, including updates to the value of collateral: Deposits and bank guarantees are regularly updated based on their terms and conditions ; collateral consisting of negotiable securities is regularly updated based on their market value ; with regard to collateral consisting of real estate, the procedure determines the date for valuation by a licensed assessor in accordance with the type of credit secured by the property. This assessment is validated in cases specified in Bank policies, by the Bank's internal assessment unit. Valuation is also carried out in case of concern regarding material impairment of the collateral, which may cause the Bank to face shortage of collateral.

As stated above, including in the chapter on Basel Committee Recommendations, the Bank makes extensive use of collateral not recognized under credit mitigation rules of Basel II (real estate, liens on automobiles, personal guarantees) in order to mitigate credit risk.

**Guarantors** – Sometimes, the Bank requires clients to provide guarantees or guarantors to secure credit. There are different types of guarantees, such as personal guarantees, various bank guarantees, State guarantees, insurance policies or letters of indemnification.

**Credit syndication** – The Bank participates in syndication through a professional department which allows the Bank to lead syndications of significant credit volumes. Syndicated financing allows the risk to be diversified among multiple financing providers in large credit transactions.

**Debts sharing / sale** – Another tool used to mitigate credit risk is sharing / selling parts of the Bank's credit portfolio in certain segments to financial institutions. In recent years, the Bank has established the business, legal and operational infrastructure for selling of credit risk. Selling / sharing risk is possible by way of outright sale or by way of sharing the risk. This operation is spearheaded by the Syndication Department of the Corporate Sector in the Business Division.

On December 28, 2016, the Bank acquired an insurance policy for credit exposure due to guarantees provided by the Bank pursuant to the Sale Act (Apartments) (Securing Investments of Home Buyers), 1974 and obligations to issue such guarantees.

The aforementioned transaction was made through an insurance company which is a wholly-owned subsidiary of the Bank which, concurrently, has contracted with international reinsurers with a high international rating.

The insurance policy provides the Bank with coverage should the Bank be required to pay due to forfeiture of the guarantees; it is primarily intended to reduce risk assets with respect to credit exposure due to these guarantees.

In the second quarter of 2018, the Bank increased the coverage ratio of the insurance policy from 80% to 90% for guarantee amounting to NIS 15.5 billion.

In the third quarter, the Bank purchased a rider to the existing insurance policy, so that it would also apply to other types of guarantees associated with projects, amounting to NIS 1.8 billion.

The insurance policy was primarily acquired in order to reduce risk assets with respect to credit exposure arising from such guarantees, in conformity with Proper Banking Conduct Directive 203 "Capital measurement and adequacy".

**Concentration** – The materiality of credit concentration risk for the Bank requires various entities at the Bank to monitor and take action so as to allow the Bank to control such risk concentrations.

To this end, the Bank specifies in its credit policies the risk appetite for various areas related to credit, including credit concentration.

**Risk diversification** - The Bank's credit policies are based on diversification and controlled management of risk.

Risks diversification is characterized by several aspects:

- Diversification of the loan portfolio among the different economic sectors, including limiting exposure in certain sectors.
- Diversification of size groups of clients.
- Diversification of linkage segments.
- Restrictions on exposure to specific operating segments.
- Restrictions on exposure to individual borrowers and borrower groups.
- Geographic diversification where relevant (construction industry, mortgages).

**Economic sectors** – The Bank's Executive Management and Board of Directors hold discussions on the issue of credit to certain industrial sectors, as is necessary, mainly as it relates to industries that are sensitive to fluctuations in business cycles. Credit policies for the sensitive industries are set on the basis of an economic analysis of the developments forecast for these industries. The Bank maintains distribution of indebtedness among different sectors, so as not to create exceptional indebtedness according to provisions of Proper Banking Conduct Directive 315. Loans to certain sectors, such as diamonds, construction (including their sub-sectors) – are handled by professional units or by personnel specializing in these industries. Specific rules and procedures have been prescribed for these specific sectors, beyond those relating to the issue of credit, in order to deal with their special credit risks. In the diamond sector, the Bank prefers to require collateral external to the sector, in order to mitigate and hedge the credit risk.

**Major clients** – The Bank provides credit to large clients through the Corporate sector, which operates teams with sector expertise. Occasionally the Bank limits its share of credit to a major client relative to total extent of credit to that client in the banking system, and in some cases, in order to participate in financing of certain transactions, the Bank requires a financing package to be put in place with participation of other banks (under consortium agreements). The Bank strictly complies with limits on indebtedness of a borrower and a group of borrowers, as well as on total indebtedness of major borrowers and groups of borrowers whose net indebtedness to the Bank exceeds 10%, pursuant to Proper Banking Conduct Directive 313.

**Linkage sectors** – This distribution is also reflected in providing credit in various linkage segments, so that part of the credit is more susceptible to fluctuations in the Consumer Price Index (CPI-linked credit), some is more susceptible to changes in the prime lending rate (non-linked NIS-denominated credit), and some – to foreign currency exchange rate fluctuations (foreign-currency denominated credit or linked to foreign-currency exchange rate).

**Geographic diversification** – The Bank strictly maintains geographic diversification with regard to credit for construction and mortgages, in order to reduce over-concentration in extending credit.

## **Credit risk mitigation – housing**

### **Collateral**

In accordance with Bank procedures for mortgages, loans are only provided if secured by property collateral. In some cases, the Bank demands guarantors for the debt, in addition to property collateral.

For verification of information about the property offered to the Bank as collateral and to determine its value, an assessor's visit to the property is normally required, providing a report which describes the property, its location, physical condition and market value. Assessors are party to an agreement with the Bank and act in accordance with Bank guidance, including a structured procedure for conducting assessments, identifying exceptions etc.

The common practice for assessment in the mortgage sector is to use an abbreviated assessment. However, the Bank requires an extended assessment for some of the loans for purchase of existing apartments, self-construction or general-purpose loans with high-risk property types, which includes additional tests subject to criteria set for this matter.

### **Insurance**

According to Bank procedures, all properties serving as collateral must be insured under property insurance. In addition, the borrowers are insured by life insurance assigned to the Bank in case of death prior to complete repayment of the loan.

For some loans (usually loans with LTV ratio higher than 75%), the Bank contracted with EMI Corp., which provides credit insurance in case the proceeds from realization of the property collateral for the loan should fail to cover the outstanding loan amount. This credit insurance process is a key risk mitigator.

## **Loan to Value (LTV) ratio**

The maximum LTV ratio approved by the Bank is determined by the credit policies and is periodically reviewed. Generally, the Bank requires borrowers to contribute part of the financing for the acquisition. This self-equity payment forms a safety cushion in case the property is realized during a down-turn in the real estate market. Furthermore, the rate of the borrower's participation is a further indication of the borrower's financial robustness. As from November 1, 2012, the Bank restricted the LTV ratio for approval of applications for housing loans, pursuant to the Bank of Israel directive on this matter. The LTV ratio for loans to acquire rights to real estate constituting a "single apartment" (as defined in the directive)

shall not exceed 75%, for an "alternative apartment" (as defined in the directive), the LTV ratio shall not exceed 70%, and for acquisition of an investment property, general-purpose loan or loan extended to foreign residents – the LTV ratio shall not exceed 50%.

Below is the composition of net credit exposure<sup>(1)</sup> by risk mitigation type (NIS in millions):

September 30, 2018

	Gross credit exposure <sup>(1)</sup>	Exposure covered by guarantees <sup>(2)</sup> Amounts derecognized	Exposure covered by guarantees <sup>(2)</sup> Amounts added	Exposure covered by qualified financial collateral	Net credit exposure
Sovereign debts	50,207	(550)	54	–	49,711
Public sector entity debts	1,224	–	458	(1)	1,681
Banking corporation debts	2,543	–	322	–	2,865
Corporate debts	80,668	(15,430)	15,477	(8,556)	72,159
Debts secured by commercial real estate	3,032	(12)	–	(252)	2,768
Retail exposure to individuals	30,471	(5)	–	(2,039)	28,427
Loans to small businesses	13,768	(48)	–	(2,096)	11,624
Residential mortgages	130,593	(266)	–	(501)	129,826
Other assets	4,860	–	–	–	4,860
<b>Total</b>	<b>317,366</b>	<b>(16,311)</b>	<b>16,311</b>	<b>(13,445)</b>	<b>303,921</b>

September 30, 2017

	Gross credit exposure <sup>(1)</sup>	Exposure covered by guarantees <sup>(2)</sup> Amounts derecognized	Exposure covered by guarantees <sup>(2)</sup> Amounts added	Exposure covered by qualified financial collateral	Net credit exposure
Sovereign debts	51,217	(333)	316	(16)	51,184
Public sector entity debts	1,649	–	407	(1)	2,055
Banking corporation debts	2,838	–	205	(1)	3,042
Corporate debts	72,702	(12,385)	12,239	(9,227)	63,329
Debts secured by commercial real estate	2,786	(8)	–	(238)	2,540
Retail exposure to individuals	28,157	(5)	–	(2,182)	25,970
Loans to small businesses	13,204	(38)	–	(2,032)	11,134
Residential mortgages	123,522	(398)	–	(600)	122,524
Other assets	4,647	–	–	–	4,647
<b>Total</b>	<b>300,722</b>	<b>(13,167)</b>	<b>13,167</b>	<b>(14,297)</b>	<b>286,425</b>

December 31, 2017

	Gross credit exposure <sup>(1)</sup>	Exposure covered by guarantees <sup>(2)</sup> Amounts derecognized	Exposure covered by guarantees <sup>(2)</sup> Amounts added	Exposure covered by qualified financial collateral	Net credit exposure
Sovereign debts	48,756	(504)	39	–	48,291
Public sector entity debts	1,676	–	569	(1)	2,244
Banking corporation debts	2,563	–	250	(1)	2,812
Corporate debts	69,997	(11,319)	11,366	(6,338)	63,706
Debts secured by commercial real estate	2,965	(6)	–	(232)	2,727
Retail exposure to individuals	29,032	(1)	–	(2,089)	26,942
Loans to small businesses	13,362	(39)	–	(2,101)	11,222
Residential mortgages	125,054	(355)	–	(569)	124,130
Other assets	4,784	–	–	–	4,784
<b>Total</b>	<b>298,189</b>	<b>(12,224)</b>	<b>12,224</b>	<b>(11,331)</b>	<b>286,858</b>

(1) Balances of on- and off-balance sheet balances, after on- and off-balance-sheet offsets, after provision for credit losses, excluding impact of credit risk mitigation, credit conversion factors and risk weighting factors, as defined under Basel rules.

(2) Mitigating credit risk by using guarantees results in exposures moving from their original exposure group to exposure groups with a lower risk weighting factor. Consequently, sometimes the extent of exposure in a given exposure group, after credit risk mitigation, is higher than the extent of exposure in this group before risk mitigation.



## Credit risk using the standard approach

Calculation of credit risk using the standard approach is based on external credit ratings assigned by External Credit Assessment Institutions (ECAI). The Bank uses rating data from two rating - Moody's and S&P.

Ratings from these rating agencies are used to determine the risk weighting of the following exposure groups:

- Sovereigns
- Public sector
- Banking corporations
- Corporations

The appropriate risk weighting is assigned based on counter-party data.

The risk weighting for banks is assigned based on the risk weighting of the country where the bank is incorporated and is one notch lower than the risk weighting for the rating of said country.

For investment in issuances with a specific issue rating, the risk weighting for the debt shall be based on this rating, unless the issuer is a banking corporation or a public sector entity. In such cases, the risk weighting would be based on the issuer rating, rather than on the specific issue rating.

The following table maps the ratings by international rating agencies used by the Bank:

Moody's	S&P
Aaa to Aa3	AAA to AA-
A1 to A3	A+ to A-
Baa1 to Baa3	BBB+ to BBB-
Ba1 to Ba3	BB+ to BB-
B1 to B3	B+ to B-
Caa1 or lower	CCC+ or lower

Note that the majority of credit risk at the Bank is not rated by an external rating.

### Analysis and preparation of frameworks

As part of the Bank's business operations, in order to prepare operating frameworks for credit exposure and other risks with regard to foreign banks and financial institutions, the Bank uses ratings from leading international rating agencies: Fitch, Moody's and S&P, which are used by the Bank for analysis as well as for setting exposure limits.

When preparing the operating framework for Israeli banks, the Bank is also assisted by ratings from rating agencies S&P Ma'alot and Midroog.

## Credit risk analysis using the standard approach

Below is composition of credit exposure amounts<sup>(1)</sup> by exposure group and weighting, before and after credit risk mitigation<sup>(2)</sup> (NIS in millions):

### Before credit risk mitigation

September 30, 2018

	0%	20%	35%	50%	60% <sup>(3)</sup>	75%	100%	150%	250%	1250%	Gross credit exposure	Deducted from equity	Total
<b>Rated exposures:</b>													
Sovereign debts	45,750	3,742	–	–	–	–	654	61	–	–	50,207	–	50,207
Public sector entity debts	176	–	–	1,048	–	–	–	–	–	–	1,224	–	1,224
Banking corporation debts	–	1,867	–	477	–	–	185	–	–	–	2,529	–	2,529
Corporate debts	–	536	–	662	–	–	22	–	–	–	1,220	–	1,220
<b>Total</b>	<b>45,926</b>	<b>6,145</b>	<b>–</b>	<b>2,187</b>	<b>–</b>	<b>–</b>	<b>861</b>	<b>61</b>	<b>–</b>	<b>–</b>	<b>55,180</b>	<b>–</b>	<b>55,180</b>
<b>Non-rated exposures:</b>													
Banking corporation debts	–	–	–	14	–	–	–	–	–	–	14	–	14
Corporate debts	–	–	–	–	–	–	79,015	433	–	–	79,448	–	79,448
Debts secured by commercial real estate	–	–	–	–	–	–	3,020	12	–	–	3,032	–	3,032
Retail exposure to individuals	–	–	–	–	–	30,358	24	89	–	–	30,471	–	30,471
Loans to small businesses	–	–	–	–	–	13,578	48	142	–	–	13,768	–	13,768
Residential mortgages	–	–	55,715	28,875	3,185	40,532	1,859	427	–	–	130,593	–	130,593
Other assets	1,908	–	–	–	–	–	1,811	75	1,063	3	4,860	87	4,947
<b>Total</b>	<b>1,908</b>	<b>–</b>	<b>55,715</b>	<b>28,889</b>	<b>3,185</b>	<b>84,468</b>	<b>85,777</b>	<b>1,178</b>	<b>1,063</b>	<b>3</b>	<b>262,186</b>	<b>87</b>	<b>262,273</b>
<b>Total</b>	<b>47,834</b>	<b>6,145</b>	<b>55,715</b>	<b>31,076</b>	<b>3,185</b>	<b>84,468</b>	<b>86,638</b>	<b>1,239</b>	<b>1,063</b>	<b>3</b>	<b>317,366</b>	<b>87</b>	<b>317,453</b>

## After credit risk mitigation

September 30, 2018

	0%	20%	35%	50%	60% <sup>(3)</sup>	75%	100%	150%	250%	1250%	Gross credit exposure	Deducted from equity	Total
<b>Rated exposures:</b>													
Sovereign debts	45,803	3,742	–	–	–	–	166	–	–	–	49,711	–	49,711
Public sector entity debts	568	–	–	1,047	–	–	–	–	–	–	1,615	–	1,615
Banking corporation debts	–	1,867	–	477	–	–	184	–	–	–	2,528	–	2,528
Corporate debts	–	14,922	–	1,542	–	–	287	–	–	–	16,751	–	16,751
<b>Total</b>	<b>46,371</b>	<b>20,531</b>	<b>–</b>	<b>3,066</b>	<b>–</b>	<b>–</b>	<b>637</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>70,605</b>	<b>–</b>	<b>70,605</b>
<b>Non-rated exposures:</b>													
Public sector entity debts	–	–	–	66	–	–	–	–	–	–	66	–	66
Banking corporation debts	–	294	–	43	–	–	–	–	–	–	337	–	337
Corporate debts	–	–	–	–	–	–	55,006	402	–	–	55,408	–	55,408
Debts secured by commercial real estate	–	–	–	–	–	–	2,756	12	–	–	2,768	–	2,768
Retail exposure to individuals	–	–	–	–	–	28,326	13	88	–	–	28,427	–	28,427
Loans to small businesses	–	–	–	–	–	11,442	47	135	–	–	11,624	–	11,624
Residential mortgages	–	–	55,308	28,840	3,185	40,209	1,858	426	–	–	129,826	–	129,826
Other assets	1,908	–	–	–	–	–	1,811	75	1,063	3	4,860	87	4,947
<b>Total</b>	<b>1,908</b>	<b>294</b>	<b>55,308</b>	<b>28,949</b>	<b>3,185</b>	<b>79,977</b>	<b>61,491</b>	<b>1,138</b>	<b>1,063</b>	<b>3</b>	<b>233,316</b>	<b>87</b>	<b>233,403</b>
<b>Total exposure</b>	<b>48,279</b>	<b>20,825</b>	<b>55,308</b>	<b>32,015</b>	<b>3,185</b>	<b>79,977</b>	<b>62,128</b>	<b>1,138</b>	<b>1,063</b>	<b>3</b>	<b>303,921</b>	<b>87</b>	<b>304,008</b>

(1) Balance of on- and off-balance sheet balances, after on- and off-balance-sheet offsets, after provision for credit losses, excluding impact of credit conversion factors and risk weighting factors, as defined under Basel rules.

(2) Mitigation using guarantees, credit derivatives and other qualified collateral.

(3) In conformity with the Supervisor of Banks' circular dated March 15, 2018, housing loans secured by a mortgage on residential property, with an LTV ratio higher than 60%, originated as from the circular issue date, will be assigned a 60% risk weighting.

## Before credit risk mitigation

September 30, 2017

	0%	20%	35%	50%	75%	100%	150%	250%	1250%	Gross credit exposure	Deducted from equity	Total
<b>Rated exposures:</b>												
Sovereign debts	47,447	3,153	–	–	–	398	219	–	–	51,217	–	51,217
Public sector entity debts	–	–	–	1,649	–	–	–	–	–	1,649	–	1,649
Banking corporation debts	–	2,097	–	523	–	198	–	–	–	2,818	–	2,818
Corporate debts	–	353	–	45	–	–	–	–	–	398	–	398
<b>Total</b>	<b>47,447</b>	<b>5,603</b>	<b>–</b>	<b>2,217</b>	<b>–</b>	<b>596</b>	<b>219</b>	<b>–</b>	<b>–</b>	<b>56,082</b>	<b>–</b>	<b>56,082</b>
<b>Non-rated exposures:</b>												
Banking corporation debts	–	7	–	13	–	–	–	–	–	20	–	20
Corporate debts	–	–	–	–	–	72,165	139	–	–	72,304	–	72,304
Debts secured by commercial real estate	–	–	–	–	–	2,772	14	–	–	2,786	–	2,786
Retail exposure to individuals	–	–	–	–	28,049	22	86	–	–	28,157	–	28,157
Loans to small businesses	–	–	–	–	13,070	25	109	–	–	13,204	–	13,204
Residential mortgages	–	–	55,692	26,956	38,904	1,627	343	–	–	123,522	–	123,522
Other assets	1,619	–	–	–	–	1,948	79	1,001	–	4,647	87	4,734
<b>Total</b>	<b>1,619</b>	<b>7</b>	<b>55,692</b>	<b>26,969</b>	<b>80,023</b>	<b>78,559</b>	<b>770</b>	<b>1,001</b>	<b>–</b>	<b>244,640</b>	<b>87</b>	<b>244,727</b>
<b>Total</b>	<b>49,066</b>	<b>5,610</b>	<b>55,692</b>	<b>29,186</b>	<b>80,023</b>	<b>79,155</b>	<b>989</b>	<b>1,001</b>	<b>–</b>	<b>300,722</b>	<b>87</b>	<b>300,809</b>

## After credit risk mitigation

September 30, 2017

	0%	20%	35%	50%	75%	100%	150%	250%	1250%	Gross credit exposure	Deducted from equity	Total
<b>Rated exposures:</b>												
Sovereign debts	47,759	3,156	–	–	–	266	3	–	–	51,184	–	51,184
Public sector entity debts	336	–	–	1,649	–	–	–	–	–	1,985	–	1,985
Banking corporation debts	–	2,097	–	522	–	197	–	–	–	2,816	–	2,816
Corporate debts	–	4,204	–	8,432	–	–	–	–	–	12,636	–	12,636
<b>Total</b>	<b>48,095</b>	<b>9,457</b>	<b>–</b>	<b>10,603</b>	<b>–</b>	<b>463</b>	<b>3</b>	<b>–</b>	<b>–</b>	<b>68,621</b>	<b>–</b>	<b>68,621</b>
<b>Non-rated exposures:</b>												
Public sector entity debts	–	–	–	–	–	–	–	–	–	–	–	–
Banking corporation debts	–	166	–	60	–	–	–	–	–	226	–	226
Corporate debts	–	–	–	–	–	50,589	104	–	–	50,693	–	50,693
Debts secured by commercial real estate	–	–	–	–	–	2,526	14	–	–	2,540	–	2,540
Retail exposure to individuals	–	–	–	–	25,877	8	85	–	–	25,970	–	25,970
Loans to small businesses	–	–	–	–	11,040	19	75	–	–	11,134	–	11,134
Residential mortgages	–	–	55,089	26,922	38,551	1,622	340	–	–	122,524	–	122,524
Other assets	1,619	–	–	–	–	1,948	79	1,001	–	4,647	87	4,734
<b>Total</b>	<b>1,619</b>	<b>166</b>	<b>55,089</b>	<b>27,052</b>	<b>75,468</b>	<b>56,712</b>	<b>697</b>	<b>1,001</b>	<b>–</b>	<b>217,804</b>	<b>87</b>	<b>217,891</b>
<b>Total exposure</b>	<b>49,714</b>	<b>9,623</b>	<b>55,089</b>	<b>37,655</b>	<b>75,468</b>	<b>57,175</b>	<b>700</b>	<b>1,001</b>	<b>–</b>	<b>286,425</b>	<b>87</b>	<b>286,512</b>

- (1) Balance of on- and off-balance sheet balances, after on- and off-balance-sheet offsets, after provision for credit losses, excluding impact of credit conversion factors and risk weighting factors, as defined under Basel rules.
- (2) Mitigation using guarantees, credit derivatives and other qualified collateral.

## Before credit risk mitigation

December 31, 2017

	0%	20%	35%	50%	75%	100%	150%	250%	1250%	Gross		Total
										credit exposure	Deducted from equity	
<b>Rated exposures:</b>												
Sovereign debts	45,135	3,041	–	–	–	381	199	–	–	48,756	–	48,756
Public sector entity debts	173	–	–	1,473	–	–	–	–	–	1,646	–	1,646
Banking corporation debts	–	1,718	–	607	–	214	–	–	–	2,539	–	2,539
Corporate debts	–	882	–	38	–	–	–	–	–	920	–	920
<b>Total</b>	<b>45,308</b>	<b>5,641</b>	<b>–</b>	<b>2,118</b>	<b>–</b>	<b>595</b>	<b>199</b>	<b>–</b>	<b>–</b>	<b>53,861</b>	<b>–</b>	<b>53,861</b>
<b>Non-rated exposures:</b>												
Banking corporation debts	–	11	–	13	–	–	–	–	–	24	–	24
Corporate debts	–	–	–	–	–	68,782	295	–	–	69,077	–	69,077
Debts secured by commercial real estate	–	–	–	–	–	2,955	10	–	–	2,965	–	2,965
Retail exposure to individuals	–	–	–	–	28,915	28	89	–	–	29,032	–	29,032
Loans to small businesses	–	–	–	–	13,174	42	146	–	–	13,362	–	13,362
Residential mortgages	–	–	55,463	27,348	40,230	1,665	348	–	–	125,054	–	125,054
Other assets	1,778	–	–	–	–	1,986	77	941	2	4,784	87	4,871
<b>Total</b>	<b>1,778</b>	<b>11</b>	<b>55,463</b>	<b>27,361</b>	<b>82,319</b>	<b>75,488</b>	<b>965</b>	<b>941</b>	<b>2</b>	<b>244,328</b>	<b>87</b>	<b>244,415</b>
<b>Total</b>	<b>47,086</b>	<b>5,652</b>	<b>55,463</b>	<b>29,479</b>	<b>82,319</b>	<b>76,083</b>	<b>1,164</b>	<b>941</b>	<b>2</b>	<b>298,189</b>	<b>87</b>	<b>298,276</b>

## After credit risk mitigation

December 31, 2017

	0%	20%	35%	50%	75%	100%	150%	250%	1250%	Gross credit exposure	Deducted from equity	Total
<b>Rated exposures:</b>												
Sovereign debts	45,173	3,041	–	–	–	72	5	–	–	48,291	–	48,291
Public sector entity debts	680	–	–	1,471	–	–	–	–	–	2,151	–	2,151
Banking corporation debts	–	1,718	–	607	–	213	–	–	–	2,538	–	2,538
Corporate debts	–	11,850	–	436	–	–	–	–	–	12,286	–	12,286
<b>Total</b>	<b>45,853</b>	<b>16,609</b>	<b>–</b>	<b>2,514</b>	<b>–</b>	<b>285</b>	<b>5</b>	<b>–</b>	<b>–</b>	<b>65,266</b>	<b>–</b>	<b>65,266</b>
<b>Non-rated exposures:</b>												
<b>Non-rated exposures:</b>												
Public sector entity debts	–	–	–	63	–	30	–	–	–	93	–	93
Banking corporation debts	–	173	–	101	–	–	–	–	–	274	–	274
Corporate debts	–	–	–	–	–	51,149	271	–	–	51,420	–	51,420
Debts secured by commercial real estate	–	–	–	–	–	2,718	9	–	–	2,727	–	2,727
Retail exposure to individuals	–	–	–	–	26,840	14	88	–	–	26,942	–	26,942
Loans to small businesses	–	–	–	–	11,044	39	139	–	–	11,222	–	11,222
Residential mortgages	–	–	54,924	27,315	39,879	1,665	347	–	–	124,130	–	124,130
Other assets	1,778	–	–	–	–	1,986	77	941	2	4,784	87	4,871
<b>Total</b>	<b>1,778</b>	<b>173</b>	<b>54,924</b>	<b>27,479</b>	<b>77,763</b>	<b>57,601</b>	<b>931</b>	<b>941</b>	<b>2</b>	<b>221,592</b>	<b>87</b>	<b>221,679</b>
<b>Total exposure</b>	<b>47,631</b>	<b>16,782</b>	<b>54,924</b>	<b>29,993</b>	<b>77,763</b>	<b>57,886</b>	<b>936</b>	<b>941</b>	<b>2</b>	<b>286,858</b>	<b>87</b>	<b>286,945</b>

- (1) Balance of on- and off-balance sheet balances, after on- and off-balance-sheet offsets, after provision for credit losses, excluding impact of credit conversion factors and risk weighting factors, as defined under Basel rules.
- (2) Mitigation using guarantees, credit derivatives and other qualified collateral.

## Counter-party credit risk

Counter-party credit risk (CCR) is the risk that the counter-party to a transaction will be in default before final clearance of the transaction cash flows. Economic loss would be incurred only when the transaction with the counter-party would have a positive economic value upon such default. The market value of the transaction, which may be positive or negative for either party, actually depends on volatility of market factors. Should the counter-party be in default, and the transaction have a positive fair value, this may cause the Bank to incur a loss, liquidity issues and difficulties in carrying out further transactions. Counter-party risk may be affected by other risks, including: credit risk, market risk, liquidity risk, operational risk and reputational risk of the counter-party to the transaction. Counter-party risk has been defined as a material risk at the Bank. The Risk Owner is the Manager, Finance Division.

The Bank has set specific policies on addressing counter-party risk for banks and sovereigns and another document, which is part of the Bank's credit policies, concerns client activities in financial derivatives. The risk appetite associated with activities in derivatives is reflected in restrictions imposed on instruments and currencies. The trading in derivative instruments is part of the Bank's management of assets and liabilities, and is subject to restrictions prescribed by the Board of Directors. The Bank trades in these derivative instruments, both for its clients and for its own account, as part of the management of basis and interest exposure in the various linkage segments. The risk appetite refers to operations of the Bank's Financial Management Sector. These investments are individually reviewed by the Risks Management Committee, headed by the Manager, Finance Division, and are submitted for approval by the Asset and Liability Management Committee headed by the President. Various procedures ensure that the Bank may offer to clients a wide range of financial instruments – while maintaining an appropriate framework for addressing such risk.

Exposure to banks and foreign countries involves multiple risk factors, including country risk with regard to economic standing, geo-political standing and transfer risk, arising from administrative restrictions on transfer of foreign currency. In these operations, the Bank's risk appetite, as included in the policy document, involves routing most of the proactive operations to developed nations rated A or higher and to major banks in these countries. Operations are carried out while maintaining proper diversification of exposures to banks and sovereigns. The Bank has very little business with less developed nations rated lower, only in response to client needs.

Risk measurement is based on stress tests which are conducted regularly in view of specific restrictions imposed on activity with the counter-party as well as on aggregate, with restrictions on total portfolio exposure. In cases such as OTC derivatives, where a market price may not be quoted, pricing and exposure estimation are based on commonly used pricing models. These models are regularly validated by the Bank's Validation Department. For business with banks and sovereigns, the Bank has developed an internal model for calculating facilities with each counter-party, based on the quality, rating and capital of such banks and sovereigns.

In order to estimate exposure, the Bank uses diverse systems, as in its business operations, with control based on information available in these systems and on a special control system developed by the Bank to estimate client exposure and to alert any deviations. The control mechanism for operations with foreign banks relies on special reports created in the Bank's infrastructure system and exception reports generated to monitor business in Israel and overseas, including a Banks Report, which lists all exposures to banks as well as deviation reports, which reflect deviations from agreed facilities, if any. In addition, another control system is in place in the trading room, which includes a feature to present an overview of trading facilities with banks and sovereigns.

The Bank regularly adjusts its exposure to banks and countries and regularly reviews publications about ratings of financial institutions to which the Bank is exposed, through the Financial Institution Relations Department of the Finance Division. Other indicators based on market benchmarks are regularly reviewed to alert any events which may indicate change in the financial standing of major financial institutions to which the Bank is exposed.

The Bank's current risk profile indicates that most of the Bank's exposure to counter-party risk is to foreign corporations and banks, with a non-material exposure level. The Bank also has low exposure to sovereigns.

The Bank regularly reviews and monitors the action required to mitigate this risk. Note that in the first nine months of 2018, similar to the previous year, the Bank emphasized monitoring of the effects of political and economic events, mostly in Europe, on Bank operations with counter-parties exposed to such effects. The Bank's risk level with regard to these events is low. Note that in the third quarter, exposure to Turkey was specifically reviewed due to the crisis in this country. Bank policy is highly conservative and Bank exposure to any activity which may be impacted by the crisis in Turkey is minimal.

**Restrictions and controls** – The Bank has operations involving financial derivative instruments, mostly vis-à-vis clients, which are required to maintain capital adequacy or to maintain collateral based on scenarios. These operations are regularly monitored by the Bank on intra-day basis by a dedicated control system developed by the Bank. The Bank has relatively little activity vis-à-vis clients who are mostly engaged in trading financial derivative instruments and short-selling or with clients who are not subject to capital requirements or collateral. These clients are closely monitored at a higher frequency than other clients.

At the Bank, a limit restriction applies for banks and sovereigns, including reference to derivatives. Furthermore, a restriction applies to customer facilities based on certain parameters. The Risks Control Division includes a dedicated department, specialized in control of exposure arising from capital market operations, which daily reviews clients active in this field. Furthermore, as part of Risks Control Division operations, the trading room operations are controlled, including testing of compliance with various restrictions prescribed by the Board of Directors and Executive Management.

**Risk mitigation** - in order to participate in capital market activity, clients are required to provide collateral in accordance with Bank procedures. In its activities vis-à-vis banks and sovereigns, the Bank signs ISDA agreements and CSA annexes. This allows for setting off transactions, so that the amount exchanged between parties to the transaction is limited to the net exposure



amount, thereby reducing exposure of either party. CSA addendums regulate funds transfer between parties to a transaction whenever exposure reaches a certain predefined level, thereby reducing counter-party exposure.

On July 2, 2017, the Supervisor of Banks issued a letter concerning capital requirements with respect to exposure to central counter-parties. In the letter, the Supervisor of Banks stated that given the declaration by ISA and in conformity with directives of the Basel Committee on Bank Supervision (BCBS), the stock exchange clearinghouse and the MAOF clearinghouse would be classified as qualifying central counter-parties for calculation of capital requirements with respect to exposure to central counter-parties, as stated in Addendum III to Regulation 203.

Below is the composition of exposures related to counter-party credit risk (NIS in millions):

September 30, 2018

	Interest contracts	Foreign currency contracts	Contracts for shares	Commodity contracts	Credit derivatives <sup>(2)</sup>	Total
Par value of derivative instruments after impact of add-on factor	120	1,307	873	2	–	2,302
Positive fair value, gross, of derivatives <sup>(1)</sup>	747	1,604	647	2	4	3,004
Effect of offset agreements	(517)	(967)	(60)	–	–	(1,544)
Total exposure with respect to derivative instruments	350	1,944	1,460	4	4	3,762
Collateral with respect to derivative instruments (before safety factors)	(44)	(696)	(1,123)	(3)	–	(1,866)
Impact of safety factors on collateral	20	239	508	–	–	767
Total current credit exposure after credit risk mitigation	326	1,487	845	1	4	2,663

September 30, 2017

	Interest contracts	Foreign currency contracts	Contracts for shares	Commodity contracts	Credit derivatives <sup>(2)</sup>	Total
Par value of derivative instruments after impact of add-on factor	149	1,957	643	2	–	2,751
Positive fair value, gross, of derivatives <sup>(1)</sup>	1,277	1,977	485	1	4	3,744
Effect of offset agreements	(808)	(1,729)	(53)	(1)	2	(2,589)
Total exposure with respect to derivative instruments	618	2,205	1,075	2	6	3,906
Collateral with respect to derivative instruments (before safety factors)	(21)	(764)	(621)	(2)	–	(1,408)
Impact of safety factors on collateral	3	212	249	–	–	464
Total current credit exposure after credit risk mitigation	600	1,653	703	-	6	2,962

December 31, 2017

	Interest contracts	Foreign currency contracts	Contracts for shares	Commodity contracts	Credit derivatives <sup>(2)</sup>	Total
Par value of derivative instruments after impact of add-on factor	144	1,708	633	2	–	2,487
Positive fair value, gross, of derivatives <sup>(1)</sup>	973	2,045	647	1	5	3,671
Effect of offset agreements	(643)	(1,619)	(82)	(1)	–	(2,345)
Total exposure with respect to derivative instruments	474	2,134	1,198	2	5	3,813
Collateral with respect to derivative instruments (before safety factors)	(33)	(728)	(784)	(2)	–	(1,547)
Impact of safety factors on collateral	10	184	353	–	–	547
Total current credit exposure after credit risk mitigation	451	1,590	767	–	5	2,813

(1) Includes exposure arising from counter-party credit risk with respect to client activity on the stock exchange, calculated based on stock exchange rules.

(2) The Bank's credit derivatives operations are not classified as brokerage operations. For information about transactions to buy and sell credit protection, see Note 11.B. to the financial statements.

## Securitization

The Bank does not operate in the field of asset securitization. It is Bank policy to avoid, in principle, investment in complex securitization instruments.

## Market risk and interest risk

### Market and interest risk management in the bank portfolio

Market risk – This is the risk of loss from on- and off-balance sheet positions, arising from change in fair value of financial instruments, due to change in market risk factors (interest rates, exchange rates, inflation, prices of equities and commodities). The Bank has no exposure to commodities and its exposure to equities is not material, so that Bank exposure to such risk is primarily due to basis risk – the risk exists when the Bank's assets and liabilities are denominated in different currencies or are in different linkage segments – and from interest rate risk, which the risk to Bank profit (change in revenues) or to Bank capital, primarily due to fluctuations in interest rates, fluctuations of various curves used by the Bank in its business operations or from the fact that a change in interest rates may result in a change in composition of the Bank's assets and liabilities due to exercise of options for early repayment due to change in market interest rates. Changes in interest rates impact Bank profits (change in revenues) and the value of Bank assets (change in fair value).

Market risk and interest risk form an integral part of banking business and of management of Bank assets and liabilities. However, excessive market risk and/or interest risk may expose the Bank to loss and may pose a threat to Bank capital. Therefore, the Bank's Board of Directors and management have specified, in the Bank's structured process for risks mapping and identification, that market risk and interest risk are material risks and that management of these risks is critical for stability of the Bank, especially in view of the low interest rate environment and the potential for change in market interest trend. Therefore, the Bank's Board of Directors issued a special policies document on handling of market risk and interest risk, which stipulate the principles whereby the Bank should act in order to identify, measure, monitor, review and control the market risk and interest risk on a regular basis, both in the normal course of business and in times of stress. Management of these risks is designed to maintain a reasonable risk level, in conformity with the exposure caps, i.e. the risk appetite specified for these risks, while taking advantage of opportunities and constant monitoring of the risk profile, so that the Bank would not be exposed to significant losses.

Management of market risk and interest risk at the Bank consists of two main risk focus points: the bank portfolio and the negotiable portfolio. The negotiable portfolio includes portfolios managed by the Trading Room (portfolio of debentures held for trading by the Interest Trade Unit (market maker), derivative transactions classified under Trading Room portfolios and interest options classified under Trading Room portfolios), as well as portfolios of debentures held for trading and strategy in Israeli and foreign currency, managed by the Asset Management Department, as well as derivatives used for executing strategies. The portfolio also includes hedging transactions for instruments included in the negotiable portfolio. This portfolio is small relative to activity in the bank portfolio and is associated with low risk.

The bank portfolio, which is the Bank's primary activity, consists of all transactions not included in the negotiable portfolio, including financial derivative instruments used to hedge the bank portfolio. This portfolio is exposed to interest and inflation risk. The measure of exposure which the Bank wishes to retain is due to the Bank's business operations and is reflected in the Bank's financial statements. This exposure is limited by the risk appetite, specified individually for market risk and interest risk in the bank portfolio, which is reviewed by the Bank daily, using various tools and models. Any deviation from or even getting close to the specified exposure limits are regularly reported and immediately addressed, in conformity with principles specified in the policy document created by the Bank.

Market risk and interest risk are managed at Group level, including the Bank's overseas affiliates and subsidiaries. Policy principles were specified in line with Bank strategy and with regulatory requirements, i.e. Proper Banking Conduct Directives of the Bank of Israel, relevant Basel Committee directives and in line with globally accepted best practice. The Bank of Israel directives relevant for market risk management are: Proper Banking Conduct Directive 339 "Market Risks Management"; Proper Banking Conduct Directive 333 "Interest Risk Management", which expands the regulations with regard to interest risk, mostly with regard to Bank activity in the bank portfolio; and Proper Banking Conduct Directive 208 "Capital Measurement and Adequacy", with regard to definition of revaluation management and capital allocation under Pillar 1 with respect to the negotiable portfolio.

The directive includes the Basel II directives with regard to definition of the negotiable portfolio, management and its revaluation and stipulates that inclusion of an instrument and/or position in the negotiable portfolio is subject to compliance with objective criteria (free of any treaty which restricts their negotiability or which may be fully hedged) and subjective criteria (trading intent or hedging of other components in the negotiable portfolio, active portfolio management and frequent, accurate valuation of the portfolio).

The Bank is required to allocate capital with respect to interest risk and equities in the negotiable portfolio, for exchange rate risk for all banking activities and for options risk. The Bank uses the effective duration method in measuring interest risk, and the Delta Plus method in measuring options risk. This method quantifies the risk associated with operations of the options portfolio based on the discounting values. These reflect the sensitivity of the options portfolio to movements in the underlying asset and in standard deviation.

Capital allocation for currency exposure (basis risk) is at 8% of the net open position in each currency. No capital allocation is made for inflation exposure (NIS / CPI position). As part of the provisions of this directive.

Bank operations in the negotiable portfolio are subject to restrictions which reflect low risk appetite and therefore, the Bank's capital allocation with respect to market risk is very low.

The bank portfolio includes the positions not classified as negotiable positions in the negotiable portfolio. The Bank handles interest risk in the bank portfolio and overall additional capital allocation with respect there to, in conformity with

Basel Pillar 2. Capital allocation in conformity with Basel Pillar 2 is reviewed both under scenarios which reflect the normal life state and under stress scenarios, including systemic scenarios and threat scenarios. This is done as part of the ICAAP process, as described in chapter "Capital adequacy".

The Bank structure, which is weighted towards the mortgage portfolio, produces long-term uses for which the Bank requires sources. Due to incomplete alignment of the average duration of uses and the average duration of sources, the Bank's economic value is exposed to increase in interest rate curves.

## Developments in market and interest risk

This risk is monitored on a regular basis, both in managing interest risk for the overall portfolio in VAR terms, and in EVE (Economic Value of Equity) terms, as well as another range of scenarios which mostly reflect stress conditions.

For more information about these models, their use and limitations – see below.

Overall market risk is categorized as Low-Medium. The market risk in the negotiable portfolio is minimal, in line with Bank policy. The bank portfolio is exposed to increase in the interest rate curve due to the relatively long-term structure of uses (the mortgage portfolio) against shorter term sources. Assessment of Bank exposure to interest risks in the third quarter of 2018 remains Medium. Exposure is monitored using various benchmarks in the normal course of business and under stress conditions.

The risk profile is within the specified risk appetite ranges.

The Bank regularly acts to raise sources for medium and long terms. The Bank uses these sources to manage interest risk exposure within the specified risk appetite.

## Linkage segment management

Currency exposures – It is Bank policy to maintain minimal (operating) currency positions, except for specific strategic positions approved by the different committees and/or Trading Room positions, in conformity with approved risk restrictions. Foreign currency strategic positions are capped by a Stop Loss mechanism to restrict and reduce risk.

Inflation exposure – The risk appetite varies with expected profit from holding a position and the Bank's capacity to reduce the exposure within a reasonable time frame. This exposure is included among the risk appetite benchmarks and models applied by the Bank to all market risks. Risk is assessed as Low-Medium, reflecting the exposure and expected inflation.

## Means of supervision over and implementation of the policy

The Bank has put in place an organizational structure for management of market risks and interest risks in the bank portfolio, which includes the Board of Directors, management and the three lines of defense. This structure is supported by special committees and forums, created for such risks management and in order to create an internal controls system, designed to prevent deviation from Bank policy in its activity in the negotiable portfolio and in the bank portfolio.

Upon any unusual occurrence in the capital market, such as an unexpected change in interest rates, shake-ups in the foreign currency markets, changes in fiscal and/or monetary policies, the special committees and forums created by the Bank for such situations, convene for a special discussion in order to reach the decisions required by these occurrences.

Below is the organizational structure created at the Bank for management and control of market risk and interest risk:

**Bank's Board of Directors** – The Bank's Board of Directors approves, at least once a year, the policy document which incorporates how exposure to market risk and interest risk in the bank portfolio should be managed, after it has been approved by Bank management and by the Board's Risks Committee. This document outlines, *inter alia*, the authority ranking for market risks management, the risk appetite (exposure restrictions) and the frequency of discussions and reporting of exposure status at different levels. The risk appetite framework specified by the Board of Directors was broadened by management guidelines (restrictions), set lower than the Board of Directors restrictions, in order to allow exposure to be reduced even before it deviates from the risk appetite specified by the Board of Directors. The risk appetite is specified under normal and stress conditions, by a range of benchmarks which restrict market risk; in addition, specific risk appetite benchmarks were specified with respect to interest risk in the bank portfolio and with respect to Bank activity in the negotiable portfolio. The Board of Directors restrictions and management guidelines reflect the risk appetite, which is consistent with the business strategy, liquidity planning, financing sources and capital planning at the Bank.

The Board's Risks Management Committee is an advisory entity for the Board plenum with regard to market risks and interest risks in the bank portfolio. There were no deviations from the specified risk appetite in the third quarter of 2018. The Bank continues to implement interest risk management principles, as published in the Basel Committee's position paper dated April 2016.

The market and interest risk profile is monitored on a daily level by the Finance Division and the Risks Control Division; on a weekly level by the Risks Management Committee, headed by the Manager, Finance Division; and on a monthly level by the Management Committee for the Management of Assets and Liabilities, headed by the Bank President & CEO. The market and interest risk profile in the bank portfolio is presented to the Bank's Board of Directors using the Bank's quarterly Risks Document. The discussion by the Board of Directors covers development of the risk profile, major action taken by the Bank in the different portfolios during the reviewed period and of market developments, in particular risks in markets in Israel and overseas which may potentially impact the business profile of Bank operations and its

market and interest risk profile in the bank portfolio and Bank sensitivity to changes in risk factors. Any deviation, should it occur, is to be reported to the Board of Directors, along with action taken to eliminate it.

As noted, the Bank maintains interfaces vis-à-vis subsidiaries with regard to setting risk appetite for the Group. Reports by Group entities about the risk profile in view of the risk appetite are presented in the Bank's quarterly Risks Document.

**The Bank President & CEO** – heads the Asset and Liability Management Committee (ALMC), which is the advisory entity to the President & CEO with regard to market risks. This committee generally meets once a month, or more frequently, when special developments in the various markets occur or are forecast. The President & CEO, in conformity with the Exposures Procedure and subject to restrictions imposed by the Board of Directors, has the decision-making authority with regard to management of market exposures. The Bank's risks management policies are discussed, formulated, and monitored by the Management Committee for the Management of Assets and Liabilities.

### **First line of defense – Lines of business management**

The Manager, Finance Division (CFO) is the manager of market, interest and liquidity risks at the Bank. The Risks Management Committee serves as the advisory body for the Division Manager. The Committee convenes weekly to discuss current aspects of the management of assets and liabilities.

The Manager, Finance Division specifies guidelines for current operations of market and interest risks management, subject to restrictions specified by the Board of Directors and by management.

When a financial event is identified and declared, which requires special preparation, the Manager, Finance Division convenes – with approval of the President & CEO, a special forum to discuss and make decisions on how to handle the event. The operation of this forum is incorporated in a specific procedure.

The Financial Management Sector of the Finance Division is the entity which manages exposure to market, interest and liquidity risks on a regular basis and acts to implement the policies and the decisions made, for management of these risks and control required based on operations of the first line of defense, in conformity with Bank of Israel directives.

### **Second line of defense – Risks Management Function**

The Manager, Risks Control Division (the Chief Risks Officer – CRO) is responsible for the overall Risk Owner framework. The Risks Monitoring Forum for market, interest and liquidity risks, serves as the advisory body to the Chief Risks Officer with regard to management of Bank exposure to market and interest risks in the bank portfolio, which is convened at least once every two months. The Forum, including *inter alia* representatives from the Financial division and from the Risks Control Division, regularly monitors the market and interest risk profile of both the Bank portfolio and the negotiable portfolio, including individual activity in the trading room, as well as the outcomes of stress scenarios; The Forum also discusses and specifies methodology for risks management and control, including measurement methods which can support portfolio monitoring activity and addresses various aspects arising from management and control of market, interest and liquidity risks, including conclusions from relevant model validation processes, conducted by the Risks Control Division; Control and monitoring of market and interest risk exposures is conducted by the second line of defense by: A unit for control of market and liquidity risks and by the Trading Room Control Department, used as a middle line for monitoring trading room activity, including with regard to matters related to compliance and administrative enforcement.

### **Third line of defense – Internal Audit**

Internal Audit serves as the third line of defense within corporate governance for risks management at the Bank, conducting regular control to review and assess the effectiveness of internal controls at the Bank, in accordance with the multi-annual work plan of the Internal Audit Division.

### **Hedging and risks mitigation policy**

A major tool for management and mitigation of interest risk is setting shadow prices at the Bank (transfer pricing). Shadow prices are determined daily at the Bank by the Asset and Liability Management Department of the Financial Management Sector and reflect the needs for management of various exposures under the policy on risk / reward management.

Another tool is buying / selling government debentures. The Asset and Liability Management Department of the Financial Management Sector also manages the interest and/or basis position through forward contracts, swap transactions and options. The advantages of using these tools stem from the ability of rapid execution at large amounts, which allows the Bank to "move positions" within a reasonable time frame for asset and liability management. In addition, these transactions are unfunded, are highly liquid and are conducted through the Bank's trading room.

Derivatives transactions, which are identified as hedging balance sheet positions in accordance with accounting rules, are to be specified as hedge accounting transactions, in accordance with the Bank's hedging procedure. Hedge effectiveness is the degree of correlation between changes in fair value or between cash flows of the hedged item and of the hedging derivative. The hedge is considered highly effective if the changes in fair value or cash flows of the hedged item, are nearly fully set off by changes in fair value or cash flows of the hedging instrument. Hedge effectiveness is tested quarterly.

Derivatives in the bank portfolio used for economic hedging of balance sheet activity, or which cannot be defined as an accounting hedge, impact accounting profit and loss. The gap derives from difference in accounting treatment between balance sheet items and derivatives other than accounting hedges. This effect is regularly monitored and managed subject to guidelines specified by management, by the Financial Management Sector and is reported and discussed by various risks management committees.

At least once a year, the Bank reviews the underlying assumptions of models used to manage market and interest risks, including behavioral assumptions made in order to determine forecasting of certain instruments. The sensitivity of risk values to changes in behavioral assumptions are reviewed regularly.

The Bank reviews the concentration of interest risk by linkage segment and by major instrument type. The concentration map is discussed annually by risks management committees.

## Tools for risk measurement management

Measurement of market and interest risks is supported by a wide range of information systems, models, processes, risk benchmarks and stress tests. The information systems involved in the calculation are regularly reviewed, through internal controls processes at the Bank, including specific surveys for monitoring activities and information and continuous validation processes, in order to ensure completeness and accuracy of data and calculations.

Market risk in both portfolios (bank and negotiable) are managed overall by using the VAR model and stress tests. For application of these models, the Bank's available capital is defined as a non-linked NIS-denominated source. The Bank operates within the Board of Directors' specified risk appetite for and interest market risk in terms of VAR and stress tests. The risk appetite stipulates that the VAR for all of the Bank's activities in one-month investments, will not exceed 11% of shareholders' equity, and that the maximum loss in stress tests, the highest of all calculation methods, will not exceed 18% of equity. Management has also specified guidelines for these two restrictions. The Bank maintains a risk profile that is within these restrictions.

The VAR model is a statistical model that estimates the loss expected for the Bank in a certain investment period and at a predetermined statistical level of assurance. This model measures risk level in terms of money, where the Bank aligns the investment horizon for the portfolios reviewed using this benchmark. The Bank applies a method that combines the historical method and the analytical method, for effective monitoring of risk factors. The VAR calculation is in addition to a back testing calculation, designed to review the quality of its calculation estimates, i.e. review the model forecast, compared to actual results. The Bank specified the risk appetite in terms of VAR for its entire portfolio and uses this benchmark as another tool for monitoring its activities in various option portfolios.

Stress testing – These are various methods designed to estimate the Bank's expected loss as a result of sharp fluctuations in prices of market risks factors. This model estimates, using different methods, the potential loss at the left tail of the distribution, i.e. beyond the significance level determined in calculating the VAR. The Bank's stress test methods are two-fold: Subjective methods, reliant on an economic outline specified by Bank experts, adjusted for specific risk concentrations existing in the portfolio, and therefore deemed by the Bank to be "the worst scenario", and objective methods, which rely, *inter alia*, on past stress events and scenarios as well as on scenarios stipulated by the Bank of Israel in Directive 333 for interest risk management, where the curve moves in parallel throughout its length at rates of between 1% and 4%.

As part of testing the left-hand tail of distribution of the Bank portfolio, the Bank reviews other benchmarks, such as Stressed VAR, which estimates the expected VAR in case of a return of market conditions during the 2008-2009 financial crisis, as well as the Expected Shortfall VAR, a benchmark which estimates the average loss, beyond the specified significance level (average for the left-hand tail), so as to assign a weight to extreme events which are beyond the significance level and are not reflected in the VAR calculation.

Interest risk is managed using two approaches: the earnings approach and the economic value approach. The Bank has specified the economic value approach to be the key method for risk management – but has developed another model, based on the earnings approach.

Under the earnings approach – The financing margin is the difference between (cumulative) interest revenues received across all uses and (cumulative) interest expenses paid across all sources. The financing margin model allows the Bank to review expected earnings under different operating assumptions (turnover under different balances, for both assets and liabilities, changes in interest rate curves, assuming operations in conformity with work plans), including sensitivity analysis to changes in various interest rate curves.

The calculation is made by advanced computer systems developed by the Bank, at the individual transaction level. This model serves as a decision support system for Risk Owners at the Bank. The calculation is made from the individual transaction level, which allows for segmentation and analysis by different criteria, such as: instrument type, linkage basis, term to maturity etc.

The earnings approach is applied at two levels: static and dynamic. At the static level – calculation of net financing revenues for the Bank at a certain point in time. At the dynamic level – calculation of financing revenues under different interest operating scenarios for the coming year.

Economic value approach – EVE (Economic Value of Equity) is a model which reflects the economic value approach. This is the Bank's main model for estimating interest risk in the bank portfolio. The EVE model reviews the effect of changes to interest rate curves on the economic value of the bank portfolio, the negotiable portfolio and the overall portfolio (negotiable + bank), under various assumptions with regard to changes in interest rate curves (by segment, such as: derivatives, deposits and mortgages, by linkage basis). Assumptions about changes to the interest rate curve under normal and stress situations, including corresponding upwards/downwards shifts of the interest rate curve at high rates and scenarios involving steeper and flatter interest rate curves.

The economic value of the different portfolios is calculated as the present value of cash flows from Bank assets (exposed to changes in interest rates), net of the present value of cash flows from Bank liabilities (exposed to changes in interest rates). The change in economic value due to changes in interest rate curves (the EVE benchmark) is calculated as the

difference between future cash flows of asset and liabilities discounted at current interest rates, and the difference discounted at expected interest rates under interest rate scenarios. Future forecasting of financial instruments is made in conformity with generally accepted practice around the world for calculating fair value. Financial instruments bearing fixed interest are forecast to final maturity, in conformity with the maturity schedule; financial instruments bearing variable interest are forecast to the nearest interest rate adjustment date. The fixed spread over the variable interest anchor is calculated through final maturity. Cash flow discounting is applied using Zero Coupon (risk-free curves) for the various linkage bases.

The Bank reviews the EVE benchmark, including with separation of principal and interest effects, used as an additional tool to make proactive decisions on management of interest rate positions. One of these scenarios is a scenario involving a parallel move of the curves by 2%. This scenario, which reflects a stress event, was specified by the Bank of Israel as a scenario which requires the Bank to report to the Supervisor of Banks in case its result reaches 20% of the Bank's core capital.

In order to measure risk in the overall portfolio, the Bank adds to interest risk in the bank portfolio the restrictions for the negotiable portfolio under stress / normal conditions.

### **Nature and scope of reporting systems for market risk and interest risk**

The Bank uses a system which enables management and control of market and interest risk, using a single system, as well as calculating the required capital adequacy with respect to market risk. In general, calculations of market risk values are automatically generated by the system daily. The Bank has a comprehensive database for market data and positions, used for these calculations.

### **Restrictions of models used by the Bank to manage market and interest risk**

The main models used by the Bank to estimate market and interest risk, as with all models, have restrictions which may be due to model assumptions, input values used or mismatch between the models and market conditions, in particular with regard to stress conditions. The Bank is aware of these restrictions and therefore backs these models with other tools and processes. The VAR model is not appropriate for use under stress conditions, since it relies on historical data, which may not incorporate an estimate of the potential for an extreme market event. Use of stress tests, which are "forward-looking", i.e. do not rely on historical data, completes the VAR model. The Bank has developed various methods for conducting stress testing in support of VAR calculation. The Bank also uses methods based on earnings analysis to provide another view of its risk profile, other than through a model based on economic value. These methods include the NII (Net Interest Income) benchmark, which estimates the expected change in financing revenues under a scenario of change in interest rates and the short / long risk benchmark, which estimates Bank exposure to changes in financing costs. Another limitation is the use of behavioral models to create compositions of instruments which include such components. Another component of the Bank's capacity to identify and handle model restrictions is the constant validation process applied by the Bank to models being used, which reviews all model components: Moreover, regularly conducting sensitivity tests to results of estimation of risk values under various behavioral assumptions.

### **Handling of inherent behavioral options in on-balance sheet instruments**

Some instruments have inherent options which are sensitive to change in interest rates. Forecasting such instruments requires use of behavioral assumptions which are based on models and/or empirical calculations made by the Bank. These models are subject to constant validation, including back testing, designed to review the forecast vs. actual conditions.

Below is a mapping of major inherent behavioral options:

#### **Early repayment of mortgages – behavioral model**

Mortgages are spread over the contractual maturity, in addition to behavioral assumptions based on an empirical review of borrower behavior in the various linkage segments. Parameters of the behavioral model are reviewed monthly and brought for discussion by the relevant management committees.

#### **Deposits – behavioral model**

The Bank offers a wide range of deposits with inherent behavioral options: withdrawal at periodic exit points, regular exercise of liquid options and future deposits by standing order. The expected future cash flows with respect to these deposits is based on historical behavioral analysis of options exercise, withdrawal and deposit by depositors. These data are regularly reviewed, as part of testing the model assumptions.

#### **Checking account – credit balance**

Credit balances of checking accounts not expected to be impacted by change in interest rate are assigned based on empirical review of the behavior of such balances. The Bank is reviewing the assignment model, as recommended by the validation process which highlighted the over-conservative approach of the current model.

## Market risk analysis

Below is the capital requirement due to market risk by risk component (NIS in millions):

Risk component <sup>(4)</sup>	September 30, 2018 Capital requirements <sup>(1)</sup>	September 30, 2018 Capital requirements <sup>(1)</sup>	September 30, 2018 Capital requirements <sup>(1)</sup>	September 30, 2017 Capital requirements <sup>(2)</sup>	September 30, 2017 Capital requirements <sup>(2)</sup>	September 30, 2017 Capital requirements <sup>(2)</sup>	December 31, 2017 Capital requirements <sup>(3)</sup>	December 31, 2017 Capital requirements <sup>(3)</sup>	December 31, 2017 Capital requirements <sup>(3)</sup>
	Specific risk	General risk	Total	Specific risk	General risk	Total	Specific risk	General risk	Total
Interest risk <sup>(5)</sup>	–	150	150	–	128	128	–	152	152
Equity risk	1	1	2	–	–	–	–	–	–
Foreign currency exchange rate risk	–	43	43	–	34	34	–	62	62
<b>Total market risk</b>	<b>1</b>	<b>194</b>	<b>195</b>	<b>–</b>	<b>162</b>	<b>162</b>	<b>–</b>	<b>214</b>	<b>214</b>

(1) The capital requirement was calculated at 13.34%.

(2) The capital requirement was calculated at 13.36%.

(3) The capital requirement was calculated at 13.36%.

(4) Risk associated with options activity is included under the different components, and was calculated using the Delta Plus approach, as defined in the Supervisor of Banks' directive.

(5) Calculated using the Effective Duration approach, as defined in the Supervisor of Banks' directive.

Below is the VAR for the Bank Group (NIS in millions):

	First nine months 2018	First nine months 2017	All of 2017
At end of period	563	463	533
Maximum value during period	(FEB) 640	(APR) 781	(APR) 781
Minimum value during period	(JAN) 549	(FEB) 388	(FEB) 388

Market risk is primarily due to interest risk in the bank portfolio, as presented below.

Back-testing of the historical-analytic VAR model shows one case in which the daily loss exceeded the forecast VAR value. This number of cases is within the criteria specified by the Basel Committee for review of the VAR model quality.

## Analysis of interest risk in bank portfolio

Below is the effect<sup>(1)</sup> of a parallel shift of the curve by 2% on the economic value of the Bank's portfolio in EVE terms (NIS in millions):

Change in fair value - September 30, 2018

	Israeli currency Non-linked	Israeli currency Linked to CPI	Foreign currency Dollar	Foreign currency EUR	Other	Total
2% increase	(249)	(1,954)	47	(37)	1	(2,192)
Decrease of 2%	721	2,367	(30)	41	(1)	3,098
<b>September 30, 2017</b>						
2% increase	(721)	(911)	49	(33)	1	(1,615)
Decrease of 2%	1,269	1,161	(26)	38	(1)	2,441
<b>December 31, 2017</b>						
2% increase	(714)	(1,112)	26	(47)	(1)	(1,848)
Decrease of 2%	1,285	1,408	(5)	53	2	2,743

(1) Calculated based on current data used for actual interest risk management.

In preparing the mortgage repayment cash flows forecast for the Bank, assumptions with regard to the prepayment rate and manner are taken into account. Market risk in the Bank's negotiable portfolio, primarily composed of portfolios managed in the trading room, is managed by means of quantitative limitations specified for each portfolio based on its activity.

Overall risk values in the third quarter of 2018 were higher than in the corresponding period last year, primarily due to current mortgage operations, partially offset by raising sources for long terms, derivative transactions and sale of mortgage portfolios.

## Share price risk

Bank policy with regard to investment in non-banking corporations is to realize the current portfolio and individually review any new investments. Shares of non-banking corporations in which the Bank invested were acquired for the purpose of earning capital gains, and are presented at fair value in the available-for-sale security portfolio and under investment in associated companies, where the Bank has a material investment in such entity. Investments in non-banking corporations are managed by the Business Banking Division. The steering committee for investments in non-banking corporations convenes quarterly and advises Bank management on investments in non-banking corporations. The steering committee is responsible for management and maintenance of the existing portfolio, trying to improve it so as to allow for rational realization of this portfolio within a reasonable time frame but with no specified schedule, in order to allow for maximum returns. Quarterly reports are provided to the Risks Control Division and to other divisions. About 1% of these investments in non-banking corporations are negotiable and presented at their market value. The remainder of these investments are presented at cost or at their carrying amount. In case of impairment of a non-temporary nature, in accordance with management's assessment, a provision for impairment of the investment is recorded as a loss in the Bank's accounts.

For more information about equity investments in the bank portfolio, see chapter "Major investees" on the Report by the Board of Directors and Management. and Note 5 to the financial statements.

Below is information about the composition of equity investments in the bank portfolio:

September 30, 2018

	Fair value	Capital requirement <sup>(1)</sup>
Shares	57	8
Venture capital / private equity funds	67	9
Total investment in shares in bank portfolio	124	17

September 30, 2017

	Fair value	Capital requirement <sup>(2)</sup>
Shares	58	8
Venture capital / private equity funds	65	9
Total investment in shares in bank portfolio	123	17

December 31, 2017

	Fair value	Capital requirement <sup>(3)</sup>
Shares	56	7
Venture capital / private equity funds	74	10
Total investment in shares in bank portfolio	130	17

(1) The capital requirement was calculated at 13.34%.

(2) The capital requirement was calculated at 13.36%.

(3) The capital requirement was calculated at 13.36%.



## Operational risk

### Operational risk management

Operational risk is defined by the Bank of Israel as the risk of loss due to inappropriateness or failure of internal procedures, people or systems.

or due to external events.

The Bank has defined a framework for management of operational risks, which includes a definition of corporate governance that specifies the roles and responsibilities of the lines of defense and the importance of deploying an appropriate operational risk management culture at the Bank.

The Bank actively handles operational risk in order to support operations of the business units, to improve major business processes associated with their operations and thus, to increase business value, rather than only reduce expected loss due to operational risk.

With the developments in global markets and the higher complexity of financial activity and supporting technological infrastructure, an understanding has emerged, that Bank exposure to potential loss due to failures in regular operating activity may impact the business activity. Operating failure events which occurred at financial institutions in recent years have increased legislator awareness and financial institutions' awareness of operating failure events, to the large potential for damage which may be caused by such operational risk event and to their main attributes, as follows:

- Operating events may occur in all areas of activity and in all Bank units.
- Operational risk may potentially impact earnings, revenues, capital and reputation of the Bank.
- Operational risk has inter-relationships with other risks, such as market risk, credit risk, liquidity risk, reputation risk and other risks. Thus, for example, an operational risk event may cause reputation risk to materialize, after which the Bank may face a liquidity event.
- A significant share of operating failures has very low probability but relatively large damage potential – which may even threaten Bank stability.
- Operational risk has diverse instances, from human error, malfunction in technological systems, fraud, embezzlement, war, fire, robbery etc.
- Operating events sometimes occur which are not under control of the financial institution, and may develop as a result of external events, some of which are unforeseen, with chances of occurring which cannot be estimated in advance, such as: natural disaster (earthquake, flooding), security event.

The Bank actively handles operational risk in order to support operations of the business units, to improve major business processes associated with their operations and thus, to improve their business performance and to minimize the expected loss due to operational risk.

The Bank has a special policies document for addressing operational risk. The Operational Risk Owner at the Bank is the Manager, Risks Control Division – who is also the Bank's Chief Risks Officer. The framework stipulated also includes the framework required for handling fraud and embezzlement risks, which are part of the operational risk categories according to Bank of Israel directives.

The framework for handling operational risk is based on three lines of defense:

- **First line of defense** Includes all business and operational units at the Bank. These units are responsible for managing operational risk in accordance with principles specified in the operational risk policy document. In particular, the Technology Division, which is the first line for management of cyber and information security risk, business continuity and IT, as well as Mizrahi Tefahot Security Services, which forms the first line for security and safety management.
- **Second line of defense** The Risks Control Division, and in particular the Operational Risks Department of the Risks Control Division, is tasked with a comprehensive view and monitoring of the operational risk handling framework and with responsibility for handling risk in view of activities in the first line, through a range of processes, tools and methods, including: Locating major risk hubs in business operations of the first line, through collection of actual operating failure data and conducting specific surveys for identification of potential future failures, as well as adapting the operational risk handling framework to Bank needs, in line with business development at the Bank and with regulatory requirements. The Division also strives for integration between various entities at the Bank, which have monitoring roles for risks adjacent to operational risk (compliance, business continuity, technology, information security and cyber security, SOX) as part of the deployment of the Bank's internal control system.
- The second line of defense for cyber and information security risk is the Cyber and Information Security Department of the Risks Control Division, headed by the Bank's Information Security Officer. This Department works in tandem with cyber defense at the Technology Division, along with all Bank units.
- The Process Engineering Division is responsible for overall management of business continuity, or on-going Bank preparedness for business continuity in case of emergency.
- The SOX Department of the Accounting Division is responsible for effectiveness of controls and procedures concerning disclosure and effectiveness of internal controls over financial reporting at the Bank.

- The Training Department of the Human Resources Division acts to reinforce professional knowledge and to reduce operating failures arising from lack of knowledge and awareness.
- **Third line of defense:** Internal Audit conducts audits of operational risk management in order to ascertain the effectiveness of handling such risk, in accordance with the work plan.

Bank policy determined the Bank's operational risk appetite in multiple qualitative and quantitative aspects, under normal business conditions and under stress conditions. The Bank's risk tolerance in specific risk categories of operational risk has also been specified. This risk is regularly monitored by review of failure events which caused loss, which are managed based on the different operational risk categories.

The policy specifies the channels for management and reporting of operational risk, designed to ensure proper risk management for all products, activities, processes and material systems of the Bank. To this end, the Bank operates forums at all levels, tasked with handling operational risk:

- Management committee for operational risk – this committee serves as management's key managerial tool for management and monitoring of operational risk at the Bank. The Committee is part of the management committee for risks management.
- Operational Risk Steering Committee – serves as an advisory committee to the Chief Risk Officer with regard to operational risk management. The committee includes relevant representatives from business units, from control units and an observer from the audit unit..
- Operational risk monitoring forums – Dedicated forums headed by the Chief Risk Officer, with each of the relevant Bank divisions (Business, Finance, Retail, Planning and Operations, Client Assets and Technology). These forums are intended to discuss internal controls aspects, in particular aspects arising from the operational risk management framework, including results of risks assessment surveys, material events and results of debriefs.

For risk management at Bank units, the Bank appointed operational risk trustees. The operational risk trustees, most of whom operate in the first line of defense, are responsible for handling operational risk and IT risk at their unit. Trustees report any event related to operational risk into a special system – the Operational Risks Portal (PASTEL). This system is used by the Bank for analysis and reporting of operational risk by different criteria. Trustee reports are disseminated to a pre-specified list of managers at the Bank and each event is assigned a severity level, in addition to the event description. There are over 200 operational risk trustees working at the Bank, most of them at Bank branches. They are in regular contact with the Operational Risk Department of the Risks Control Division.

The Bank conducts surveys to identify and map operational risks at various divisions, as a continuous process focused on mapping and assessment of material risks at each unit. The Bank strives to specify, where possible, Key Risk Indicators (KRI) in order to identify the materialization of such risks even before they materialize. The survey results and action items are discussed, as part of self-assessment processes, by specific forums, attended by managers of the surveyed units and representatives from the Risks Control Division.

In addition to these surveys, the Bank also analyzes external events in Israel and overseas, which may provide information about potential circumstances and damage which may result in materialization of operational risk. Such analysis serves the Bank in implementation of appropriate steps for parallel processes within the Bank.

The Bank allocates capital with respect to operational risk using the standard approach. According to this approach, the Bank was segmented into eight lines of business, as stipulated by the Bank of Israel, with a standard risk weighting assigned to each line of business, reflecting its sensitivity to loss with respect to operational risk. This segmentation and treatment of the required capital allocation are incorporated in a specific policies document which governs the aspects required for capital allocation using the standard approach and, in particular, specified the lines of business in Bank operations.

The Bank framework for handling operational risk is reviewed quarterly, as part of the Bank's Risks Document. The risk profile is presented in this context, i.e. the actual loss level, in view of the risk appetite and the most material events which occurred during the quarter are also presented and analyzed.

See below for developments in legal risk.

The Bank is acting to improve the effective handling of fraud and embezzlement risk. As part of this effort, the Bank applies a range of business rules designed to identify unusual activity. Handling of fraud and embezzlement is in conformity with a specific operational risks management framework policy document, using a framework which integrates several entities at the Bank: Risks Controls, information security and cyber, human resources and the Technology Division.

The third line of operation in the area of operational risks is that of internal audit, which acts independently. The operational risk policies specifies the role of Internal Audit as the entity in charge of carrying out periodic audits of risk management processes, debriefing of fraud and embezzlement events, participation as observer on committees and involvement with the Internal Controls Forum.

## **Operational risk mitigation**

Due to the significance of operational risk, the Bank takes different steps to mitigate this risk. The most important step is to instill a corporate culture which promotes strong awareness of operational risk, and of deployment of risk-mitigating processes. The operational risk trustees, across the Bank, are the long arm of the Operational Risk Owner in this process.

The Bank conducts special training sessions for these trustees including, *inter alia*, specific training with regard to debriefing and the lesson learning process.

Changes to revised processes and new processes with potential for materialization of operational risk undergo a structured process of approval by business entities and by control entities, prior to launch, using a checklist – and are sent for approval by the Steering Committee. This mechanism is used to review all aspects of the change, ensuring a professional review of the root risk and how to mitigate it.

One of the tools used by the Bank is debriefing and lesson learning flowing internal and/or external events. Conclusions formulated by this process are incorporated into work processes, systems, training content and procedures – and are also disseminated using the operational risk system to internal controls trustees for deployment at their units.

The Bank has established policies and operating plans for a time of emergency, for backup, recovery and business continuity in case of physical damage to Bank infrastructure. This plan, supported by emergency procedures and pre-appointed officers, is exercised annually and the conclusions from such exercises is incorporated into the action plan.

**Mitigating operational risk through insurance** - the Bank is insured under a banking insurance policies, against damage which may be incurred in the course of normal operations, as a result of human error, fraud, embezzlement etc. The Bank acquires an officers' insurance policies, which applies to all officers at the Bank and at the different Bank Group companies, which provides insurance coverage for personal claims which may be filed against officers with respect to their actions in the course of their position with Group companies. Obtaining such an officer liability insurance policy is subject to approval by the General Meeting of Bank shareholders.

The Bank has obtained specific insurance policies for property damage and liability, which provide insurance coverage of Bank property and liability. The Bank has a specific policies document which governs insurance aspects related to Bank operations.

## **Business continuity**

The Bank applies Proper Banking Conduct Directive 355 concerning "Management of business continuity".

In the third quarter of 2018, the Bank continued to implement the drill plan, including drills for operating a mobile branch, call-up drills, cyber drill together with the Cyber Unit and also continued to implement the annual work plan, including revision and improvement of procedures and emergency files.

The Bank concluded the data collection process, as part of business implication analysis (BIA), as part of the multi-year maintenance plan, the conclusions from which will be presented to management by end of 2018.

## **Information security and cyber security**

Directive 361 with regard to Cyber Defense Management provides guidelines for proper management of cyber risks, which require expansion and adjustment of the IT risks management framework with regard to the threat space perception and the required defensive capabilities. Accordingly, the Bank has approved strategy and comprehensive cyber defense policies and has specified the defense lines for their implementation, has appointed an Information Security and Cyber Defense Manager, reporting to the Manager, Risks Control Division – responsible, *inter alia*, for setting policies on information security and cyber defense at the Bank, development of a cyber defense work plan, monitoring the implementation of this work plan and review of the effectiveness of systems and processes for information security and cyber defense.

The relationships and information flow between these units have been specified in procedures, including reference to: information security, physical security, IT governance, IT operations, risks management, fraud, human resource management, business continuity, client relationship management, spokesperson operations and legal counsel.

Information security and cyber defense policies at the Bank are implemented, *inter alia*, by the Mizrahi Tefahot Technology Division Ltd. As part of this effort, the management concept applied includes guidelines for management of cyber security. Application of these guidelines and ensuring that they are current while incorporating them into strategic decisions and business and operational activity at the Bank – will ensure the consistency and integrity of the cyber security management concept over time.

The information security and cyber security policy is based on the following principles:

- Mapping and identifying cyber risks.
- Establishing an effective set of controls with cross-organizational integration of technology, human resources, processes and procedures.
- Specifying mechanisms to protect client and business activities in the online domain, in conformity with Proper Banking Conduct Directive 367.
- Proactive cyber security implemented through mapping and knowledge of the environment, forecasting and study of threats, weighting of the current situation report, development of responsiveness processes, use of techniques for deception, diversion and delay, resilience and recovery capacity, conducting processes of investigation, debriefing and execution of judgment.
- Implementation of multi-layer security in several circles and disciplines (both logical and physical), from the external system accessible to clients and through to internal systems, information and intelligence sharing.
- Using a system for monitoring, control and response for management of cyber events with integrated, corporate-wide view of components such as human resources, means of communications and procedures.

- Periodic and current reporting of risks management as a whole.
- Current analysis and assessment of cyber threats and exercising all those involved in handling cyber events.
- Development of stress scenarios related to information security and cyber.
- Improvement and enhanced controls among Bank suppliers, so as to reduce risk in the supply chain.

In addition, the Bank's On line Banking sector is certified under the information security management standard ISO 27001. The direct banking systems at the Bank include authentication processes and tools in conformity with Proper Banking Conduct Directive 367.

In the first quarter of 2018, as part of an extensive wave of fraud attempts in the banking system, multiple attempts were made to transfer funds from client accounts which were victims of a phishing attack, where their account credentials and credit card information were stolen by using a fake website.

These attempts were effectively identified by the defense systems applied by the Bank to protect its client accounts.

The Bank immediately notified the clients whose accounts showed suspicious login or transfer attempts and instructed these clients to cancel their credit cards.

This event was reported to relevant parties at the Bank and elsewhere. No damage was incurred by the Bank nor by Bank clients.

In the third quarter of 2018, the Bank's defense systems identified and foiled two attempts to defraud clients and to steal funds from their accounts. No damage was incurred by the Bank nor by Bank clients.

### **Information technology risk**

In recent years, the risks associated with IT management have increased, due to development and deployment of new technologies and evolution of new risk and threats. Other than under routine conditions, the IT management framework addresses system failures, such as: system faults and preparation for emergency situations. This is also intended to ensure that the Bank maintain business continuity during an alert or emergency. This may mitigate reputation risks and business risks which could arise under such conditions.

The Technology Division Manager is responsible for management of IT assets and the management framework is specified in a special policies document, in line with principles specified in policy documents on risks management and control at the Bank. The IT asset management policy is in line with requirements of the Supervisor of Banks and, in particular, with the principles stipulated in Proper Banking Conduct Directive 357 "IT management"; Proper Banking Conduct Directive 350 "Operational risk management"; Proper Banking Conduct Directive 355 "Business continuity management" and Proper Banking Conduct Directive 361 "Cyber security management". The Bank has minimal risk appetite for this risk, which is included, as noted above, under management of risk appetite under routine conditions and under stress conditions, for operational risk.

Given current developments in the financial market, the age of current Bank systems and transition of Bank Yahav to a new platform, the Bank is reviewing the feasibility of transition of the Bank's capital market system to the capital market module of the new platform.

### **Legal risk**

Proper Banking Conduct Directive no. 350 concerning "Operational risks" defines legal risk as including absence of potential for legal enforcement of an agreement and "including, but not being limited to exposure to fines or penalties arising from supervisory action, as well as from individual arrangements".

The Bank's Legal Division regularly analyzes the legal risk components, the risk boundaries (arising, for example, from the counter-party identity, from creation of collateral etc.) as well as specific risk attributes while reviewing its risk level and exposure with attention to the different lines of business at the Bank. The Bank's Legal Division applies internal processes to ensure regular monitoring of developments in legislation, rulings and other regulatory provisions which could have implications for the day-to-day activities of the Bank Group. In this context, the Legal Division provides guidance to relevant Bank entities with regard to implementation of the implications arising from these developments. The Legal Division provides regular counsel to different Bank units, including to some subsidiaries. This is done, *inter alia*, by providing opinions, editing and updating legal documents, support for updates to procedures etc. The Bank has specified procedures to help in minimizing legal risk, including regulating the interface between the Legal Division and different Bank departments. The Legal Division is also involved in training delivered to branches, at the Bank's Training Center and in compiling professional eLearning kits for imparting the legal knowledge required for regular Bank operations. Similar reference is made for Bank affiliates overseas (branches and subsidiaries), with these affiliates receiving assistance from local external attorneys approved by the Bank's Legal Division. The Bank's overseas subsidiaries and affiliates have adopted similar procedures with regard to management of legal risk, and provide immediate and quarterly reports to the Legal Risk Owner of the Bank with regard to any legal risks identified in these entities.

Following developments in the investigation by the US DOJ, the Bank has reviewed the need to revise the impact of various risk factors and increased, on the financial statements for the second quarter, the impact of legal risk from low-medium to medium. For more information about developments in the investigation by the US Department of Justice, see Note 10.B.4 to the financial statements.

## Liquidity and financing risk

### Management of liquidity and financing risk

Liquidity risk results from uncertainty as to the availability of sources and the ability to realize assets within a specified period of time and at a reasonable price. Liquidity risk is managed in conjunction with Proper Banking Conduct Directive 310 "Risks management", Directive 342 "Liquidity risk management" and Directive 221 "Liquidity coverage ratio". The risk is managed subject to the limitations of the Board of Directors and Executive Management in an effort to minimize the losses deriving from an investment of surplus liquidity in assets that are highly liquid, but have a low yield.

Liquidity risk management is governed by a policies document submitted annually or more frequently for approval by the Board of Directors. The policies document covers how risk is managed, including roles and responsibilities of the various organs, the regular management of liquidity risk, all parameters used for risk measurement in the normal course of business and under various stress scenarios, restrictions specified by the Board of Directors and by management, including restrictions on source concentration and composition, as well as a detailed emergency plan for handling a liquidity crisis, including various states of alert for liquidity risk management and potential means under each scenario type and the estimated time for execution.

The Bank's Board of Directors sets strategy for liquidity risk management and the risk appetite in conformity with regulatory requirements, using a range of restrictions on three risk dimensions: Normal course of business, scenarios (liquidity coverage ratio and minimum liquidity ratio – internal model) and concentration. Bank management has specified a further set of restrictions to serve as management guidelines – beyond those specified by the Board of Directors.

Current and periodic management of liquidity risk is conducted on a Group basis, with due attention to legal, regulatory and operating restrictions on the capacity to transfer liquidity. The management is conducted in conjunction with the general risks management framework at the Bank. This framework consists of the first line of defense – Risk Owners at the Finance Division; the second line of defense – risk controllers at the Risks Control Division; and the third line of defense – Internal Audit. Regular management includes monitoring of restrictions set by the Board of Directors and management as well as risk indicators, including with regard to financing source concentration, liquidity exposures at Bank and Group level as well as liquidity gaps resulting from on- and off-balance sheet operations.

The Bank's liquidity management is proactive and strict, including diverse tools for mitigating liquidity risk, both in using detailed models in different world situations, in strict maintenance of liquid means with minimal credit risk which may be immediately realized, and in active management of sources for diversification and extension of the term to maturity and diversification of sources. The Bank has a Liquidity Forum, which convenes daily, under the responsibility of the Finance Division, which discusses the liquidity situation and strives to align the liquidity "needs" of different Bank units with the liquidity "providers" and liquidity managers. In addition, a forum headed by the Finance Division Manager operates at the Bank, for regular monitoring of the implementation of the minimum liquidity ratio directive (Directive 221) and compliance with targets for all business units at the Bank for raising and management of resources. The Risks Control Division also conducts regular, independent controls over risk benchmarks, risk development and event debriefs, as needed.

The Bank has developed an internal model to estimate the liquidity needs and liquid resources, as required by Directive 342 and in accordance with Basel provisions, which specified internal, system and integrated stress scenarios for Israeli currency and foreign currency, from a one-month perspective, for calculating the minimum liquidity ratio – the ratio of liquidity cushion to net forecasted outflows under these scenarios. This is based on behavioral attributes of depositors and on risk focal points, in line with the various scenarios.

The Bank also applies models for longer and shorter terms, such as Net Stable Funding Ratio (NSFR) – the ratio of stable financing sources (Available Amount of Stable Funding) – existing sources which are highly likely to be available to the banking corporation within 1 year or longer to total long-term uses (Required Amount of Stable Funding) – existing uses which the banking corporation is likely to be required to fund within 1 year or longer). The estimation is based on the latest directives issued by the Basel Committee on this matter. As noted above, restrictions have been specified by the Board of Directors and by management for liquidity ratios under various scenarios, including for terms other than one month and in the normal course of business.

The Bank also applies tools for monitoring liquidity risk using endogenous and exogenous indicators, which may point to an increase in risk up to crisis status. The Bank developed an integrated benchmark for monitoring financial markets in Israel, in order to identify any instability in the financial system in Israel – this benchmark is a decision-support tool for declaring a state of alert due to systemic failure. There were no unusual events observed in the first nine months of 2018.

The Bank's Board of Directors and management receive various reports at daily, weekly, monthly and quarterly frequency – including reports of unusual events in liquidity management and unusual developments in the Bank's liquid sources. There were no deviations from the Board of Directors' limitations recorded in the first nine months of 2018.

The Bank's emergency financing plans refer to management of each emergency and specify the management team responsible for handling it (by level). These plans include detailed specification of additional liquid means for use in emergency as well as a list of operative steps (and the entity authorized to launch them), also referring to management of communications, both internal and external.

For Amendment 29 of the Mutual Investment Act which applies to ETFs restrictions as to the investment rate and holdings of various assets, see chapter "Corporate Governance, Audit, Other Information about the Bank and Management thereof" (Legislation and Supervision of Bank Group Operations) of the financial statements as of September 30, 2018.

## Financing risk

Financing risk arises from shortage of financing sources or too high costs to raise sources. This risk is managed, as part of the liquidity risk, using Board and management restrictions on concentration of financing sources and through reduced dependence on material counter-parties.

Concentration of financing sources is monitored through a wide range of restrictions set by the Board of Directors, management as well as by key risk indicators, classified into several sub-categories: Size, client type, individual depositor, number of clients, product and average deposit term. A "super-benchmark" was defined, which averages all indicators related to concentration of financing sources. Current management of source composition includes setting policies on source diversification and financing terms as well as setting specific targets for risk benchmarks. Concentration is monitored daily and is regularly managed and reported.

The Bank's main financing sources are stable and diverse sources for different time horizons – retail and business deposits, long-term deposits from financial institutions and issues of debentures and notes. The Bank sees the great importance of diversification of its financing sources and acts proactively to identify sources for longer terms, including through a wide range of deposits offered by the Bank to its clients, deposits with unique attributes, which allow clients to benefit from relatively high interest over the long term with optional liquidity during the deposit term. In the third quarter of 2018, the Bank continued diversifying its financing sources and reducing concentration risk.

Furthermore, exposure to derivatives is regularly managed, in line with the exposure to each counter-party, counter-party collateral is immediately increased or collateral is immediately demanded from the counter-party.

For more information about financing sources, see chapter "Developments in financing sources" in the Report by the Board of Directors and Management.

## Liquidity coverage ratio

Proper Banking Conduct Directive 221 "Liquidity coverage ratio" stipulates minimum liquidity ratios under stress scenario, for 30 days ("Regulatory LCR") of high-quality liquid assets to liquidity needs over this time period. As from January 1, 2017, the minimum required is 100%. As part of its risks management policy, the Bank's Board of Directors specified that additional safety cushions are to be maintained, beyond the regulatory minimum ratio; so that the target liquidity coverage ratio for the Bank and the Group would be 5% higher than the minimum required. This ratio is managed and reported for all currencies in aggregate and for NIS separately, both at Bank level and on Group basis. The ratio for the bank solo and the consolidated ratio are calculated daily and reported as the average of daily observations over 90 days prior to the report date. This directive is in addition to liquidity risk management using internal models, as stipulated by Directive 342, as described above.

In the third quarter of 2018, the Bank maintained appropriate liquidity by investing excess liquidity in liquid assets of very high quality – Level 1 assets. The average (consolidated) liquidity coverage ratio for the third quarter of 2018 was 121%. In this quarter, there were no recorded deviations from ratio restrictions.

The major factors affecting the liquidity coverage ratio results are composition of Bank sources and uses. High-Quality Liquid Assets ("HQLA") are Level 1 assets, which are typically highly negotiable and associated with low risk. These include cash, current accounts and deposits with central banks, debentures of sovereigns with a 0% risk weighting and debentures of the State of Israel. Cash outflows primarily consist of unsecured wholesale financing – deposits which corporations and financial institutions deposited with the Bank, as well as outflows with respect to exposure to derivatives. Cash inflows primarily consist of credit receipts and inflows with respect to exposure to derivatives.

Below are details of liquid assets by level, as required by Directive 221 (NIS in millions):

	September 30, 2018	Average for third quarter of 2018
Level 1 assets	42,366	40,349
Level 2a assets	12	12
Level 2b assets	–	–
Total HQLA	42,378	40,361

The ratio is primarily cyclical and may be forecast based on internal estimates by the Bank. The key factor which affects evolution of this ratio over time is growth in Bank business, both in raising and management of source composition and increase in uses. The Bank's Board of Directors and management have specified an additional safety margin over and above the required minimum ratio, so that the effective restrictions used for current management are higher than stipulated by the aforementioned directive.

Below is information about the liquidity coverage ratio<sup>(1)</sup> (NIS in millions):

For the three months ended September 30, 2018

	Total unweighted value <sup>(2)</sup> (Average)	Total weighted value <sup>(3)</sup> (Average)
<b>Total high-quality liquid assets</b>		
Total high-quality liquid assets		40,361
<b>Outgoing cash flows</b>		
Retail deposits from individuals and from small businesses, of which:		
Stable deposits	99,470	6,040
Less stable deposits	29,785	1,489
Deposits for terms longer than 30 days	31,696	3,411
Unsecured wholesale financing, of which:	37,989	1,140
Deposits for operational needs (all counter-parties) and deposits with networks of co-operative banking corporations	45,650	29,329
Deposits other than for operational needs (all counter-parties)	1,471	368
Unsecured debts	43,858	28,640
Secured wholesale financing	321	321
Additional liquidity requirements, of which:	–	216
Outflows with respect to derivatives exposure and other collateral requirements	80,342	19,366
Credit lines and liquidity	15,036	15,036
Other contingent financing obligations	35,558	2,401
Total outgoing cash flows	29,748	1,929
		54,951
<b>Incoming cash flows</b>		
Secured loans	653	284
Inflows from regularly repaid exposures	7,716	5,578
Other incoming cash flows	20,896	15,672
Total incoming cash flows	29,265	21,534
		Total adjusted value <sup>(4)</sup>
Total high-quality liquid assets		40,361
Total outgoing cash flows, net		33,417
Liquidity coverage ratio (%)		121

(1) Information is presented in terms of simple averages of daily observations during the reported quarter. The number of observations used in calculating the averages in the third quarter of 2018 is 73.

(2) Unweighted values are to be accounted for as outstanding balances payable or which may be payable by the holder, within 30 days (for both inflows and outflows).

(3) Weighted values are to be accounted for after applying appropriate security factors or inflow / outflow rates (for inflows and outflows).

(4) Adjusted value are to be calculated after applying: Safety factors and inflow / outflow rates; and all applicable restrictions (i.e. restriction on High-Quality Liquid Assets and restriction on inflows, as specified in Proper Banking Conduct Directive 221).

Below is information about liquidity coverage ratio<sup>(1)</sup> (NIS in millions):

For the three months ended September 30, 2017

	Total unweighted value <sup>(2)</sup> (Average)	Total weighted value <sup>(3)</sup> (Average)
<b>Total high-quality liquid assets</b>		
Total high-quality liquid assets		39,976
<b>Outgoing cash flows</b>		
Retail deposits from individuals and from small businesses, of which:	95,295	5,888
Stable deposits	28,801	1,440
Less stable deposits	31,817	3,408
Deposits for terms longer than 30 days	34,677	1,040
Unsecured wholesale financing, of which:	45,688	29,773
Deposits other than for operational needs (all counter- parties)	44,821	28,906
Unsecured debts	867	867
Secured wholesale financing	–	148
Additional liquidity requirements, of which:	68,372	15,067
Outflows with respect to derivatives exposure and other collateral requirements	10,970	10,970
Credit lines and liquidity	30,148	2,259
Other contingent financing obligations	27,254	1,838
<b>Total outgoing cash flows</b>		<b>50,876</b>
<b>Incoming cash flows</b>		
Secured loans	386	148
Inflows from regularly repaid exposures	7,504	5,322
Other incoming cash flows	15,574	11,098
<b>Total incoming cash flows</b>	<b>23,464</b>	<b>16,568</b>
		Total adjusted value <sup>(4)</sup>
Total high-quality liquid assets		39,976
Total outgoing cash flows, net		34,308
Liquidity coverage ratio (%)		117

(1) Information is presented in terms of simple averages of daily observations during the reported quarter. The number of observations used in calculating the averages in the third quarter of 2017 is 74.

(2) Unweighted values are to be accounted for as outstanding balances payable or which may be payable by the holder, within 30 days (for both inflows and outflows).

(3) Weighted values are to be accounted for after applying appropriate security factors or inflow / outflow rates (for inflows and outflows).

(4) Adjusted value are to be calculated after applying: Safety factors and inflow / outflow rates; and all applicable restrictions (i.e. restriction on High-Quality Liquid Assets and restriction on inflows, as specified in Proper Banking Conduct Directive 221).



Below is information about liquidity coverage ratio<sup>(1)</sup> (NIS in millions):

For the three months ended December 31, 2017

	Total unweighted value <sup>(2)</sup> (Average)	Total weighted value <sup>(3)</sup> (Average)
<b>Total high-quality liquid assets</b>		
Total high-quality liquid assets		39,938
<b>Outgoing cash flows</b>		
Retail deposits from individuals and from small businesses, of which:	96,011	5,920
Stable deposits	28,718	1,436
Less stable deposits	31,730	3,417
Deposits for terms longer than 30 days	35,563	1,067
Unsecured wholesale financing, of which:	45,666	29,476
Deposits other than for operational needs (all counter- parties)	45,596	29,406
Unsecured debts	70	70
Secured wholesale financing	–	142
Additional liquidity requirements, of which:	72,132	19,668
Outflows with respect to derivatives exposure and other collateral requirements	15,544	15,544
Credit lines and liquidity	29,522	2,195
Other contingent financing obligations	27,066	1,929
<b>Total outgoing cash flows</b>		<b>55,206</b>
<b>Incoming cash flows</b>		
Secured loans	380	144
Inflows from regularly repaid exposures	7,945	5,542
Other incoming cash flows	20,333	15,724
<b>Total incoming cash flows</b>	<b>28,658</b>	<b>21,410</b>
		<b>Total adjusted value<sup>(4)</sup></b>
Total high-quality liquid assets		39,938
Total outgoing cash flows, net		33,796
<b>Liquidity coverage ratio (%)</b>		<b>118</b>

(1) Information is presented in terms of simple averages of daily observations during the reported quarter. The number of observations used in calculating the averages in the fourth quarter of 2017 is 77.

(2) Unweighted values are to be accounted for as outstanding balances payable or which may be payable by the holder, within 30 days (for both inflows and outflows).

(3) Weighted values are to be accounted for after applying appropriate security factors or inflow / outflow rates (for inflows and outflows).

(4) Adjusted value are to be calculated after applying: Safety factors and inflow / outflow rates; and all applicable restrictions (i.e. restriction on High-Quality Liquid Assets and restriction on inflows, as specified in Proper Banking Conduct Directive 221).

## Other risks

### Compliance and regulatory risk

Bank business operations are subject to regulation. Compliance risk is the risk of imposition of legal or regulatory sanctions, material financial loss or impact to reputation, which the Bank may incur due to its failure to comply with compliance provisions.

The Bank is acting in conformity with Proper Banking Conduct Directive 308, which applies the obligations for compliance risk management to all compliance directives, including laws, rules and regulations (including positions stated by the Supervisor of Banks in conjunction with handling public inquiries), internal procedures and the Code of Ethics which apply to banking operations at the Bank.

Compliance provisions also include the following laws: ISA Enforcement Proceeding Streamlining Act (Legislative Amendments), 2011; Securities Law 1968; Mutual Investment Act, 1994; Arrangement of Engagement in Investment Consultancy, Investment Marketing and Management of Portfolios Act, 1995 (hereinafter: "the Advisory Act"); hereinafter jointly – "securities laws" as well as the Restrictive Trade Practices Act, 1988. Compliance with these laws is also addressed in conjunction with the "Internal Enforcement Program" for Securities Law and for the Restrictive Trade Practices Act, respectively.

Compliance risk includes conduct risk.

The Bank has minimal risk appetite for compliance and regulatory risk, with regard to compliance with statutory provisions applicable to the Bank. Therefore, the Bank has specified that any faults discovered in compliance with statutory provisions would be addressed by Bank units as a top priority. The Bank has specified a multi-annual work plan, which includes required action for reducing compliance risk.

The compliance and regulatory Risk Owner for the Bank is the Manager, Risks Control Division. The Compliance Officer is responsible for continuous management of this risk.

Compliance and regulation risk is managed by three lines of defense:

**The first line of defense** includes business units and other risk-taking units at the Bank, which are responsible for reducing and controlling compliance risk. Shall act with responsibility, fairness and transparency vis-à-vis their clients and would place the clients at the center of their banking activities.

**The second line of defense** includes the Risks Control Division and the Compliance Division, as well as other "second line" units (part of the Human Resources and Administration Division, Accounting and Financial Reporting Division, Planning and Operations Division, Legal Division, Bank Secretary), which are responsible for some compliance areas. The Compliance Division is responsible for deployment of an organizational culture of compliance with procedures and with the Law and fair dealing with clients across all Bank departments, for identification of compliance risk through, *inter alia*, implementation of risk-based controls over the relevant departments and through analysis of findings provided by departments in the second line of defense.

**Third line of defense** – consists of Internal Audit, which conducts independent audit of the compliance function and on compliance aspects at various bank units, including review of the appropriateness and effectiveness of the Compliance Function, including review of controls in line with estimated risk level.

The Manager, Risks Control Division and CRO of the Bank serves as the person in charge of enforcement of securities law and anti-trust law. As stipulated by Directive 308 ("Compliance Officer"), the Bank appointed a Chief Compliance Officer, who heads the Compliance Division (reporting to the Manager, Risks Control Division). Their role is to assist the Bank's Board of Directors and Bank management in effectively managing compliance risk.

The Bank operates in conformity with policies on compliance and regulation risk management, approved by the Bank's Board of Directors. The Compliance Officer acts in conformity with a letter of appointment approved by the Board of Directors, to deploy a compliance culture at the Bank, its subsidiaries and overseas affiliates by implementing a Group policy, to deploy a compliance culture across the organization and to supervise implementation of appropriate compliance processes at subsidiaries and affiliates. Compliance risk is managed by identification, documentation and assessment of compliance risk associated with business operations of the Bank, including developments related to new products, business conduct, lines of business or new clients, or to material changes to any of the above, through various measurement methods.

The Bank deals fairly with all stake holders. The value of fairness is enterprise-wide and is based on application of basic values: integrity, fairness and transparency. The Bank strives to maintain a fair relationship with its clients and with other stake holders, places the client at the center of its business operations and strictly adheres to business fairness in all its operations. Fairness is a basic value in the Bank's Code of Ethics.

The Bank also maintains effective, current enforcement programs for securities law and for anti-trust law, adapted for the Bank and its unique circumstances, as part of overall risks management at the Bank. This is designed to ensure compliance with these laws and to avoid violation thereof. The Chief Enforcement Officer, through the Compliance Officer, handles issues of Bank compliance with obligations arising from securities law in general and in accordance with the enforcement program in particular. The Chief Enforcement Officer is the person responsible, on behalf of Bank management, for on-going implementation of the enforcement program and its deployment across the Bank.

The Compliance Division maps compliance risks in various areas, takes action in order to reduce them and carries out training to deploy the compliance policy across the Bank. The Compliance Officer is a member of different forums at the Bank, in order to ensure an enterprise-wide view of various compliance aspects. In order to ensure compliance with all statutory provisions, as noted above, the Compliance Officer maintains a control system in line with control plans. These controls are designed to verify compliance of Bank branches and departments with various statutory provisions, as well as the effectiveness of controls applied by the various business and headquarters departments.

The inherent compliance risk is not low, due to increased regulation and new directives issued with high frequency.

Compliance risk remained unchanged in the first nine months of 2018 and is defined as low-medium; the Bank believes it is trending downwards.

The decrease is due, *inter alia*, to further addressing the risks classified as High and further increase in control and training, further increased efficiency of work processes in this area and focused management, including improvement of client accounts where documents and data were found to be missing.

On July 8, 2018, the Bank received a demand from ISA for payment of a monetary sanction amounting to NIS 220 thousand, due to breach of Section 4 of the ISA directive concerning "Client referral to portfolio management services" – whereby investment advisors are prohibited from discouraging clients from contracting with a particular portfolio management company.

## **Cross-border risk**

Cross-border risk is the risk of financial loss (including due to legal proceedings, fines or sanctions imposed by statutory authorities or others in Israel and in other countries) and of impact to reputation, arising from the Bank's failure to comply with statutory provisions originating in other countries – whether provisions binding on the Bank or provisions which are not binding, but failure to comply with them may cause the Bank to incur damage, or from overseas activities of Bank clients in contravention of any statutory provisions.

Cross-border risk includes, *inter alia*, risk of damage, including impact to reputation, due to lawsuits or other enforcement proceedings brought by authorities in other countries, with regard to foreign tax laws applicable to certain Bank clients, AML and terror financing laws, sanctions imposed by international bodies and foreign authorities or other laws. Cross-border risk also applies at the Bank's overseas affiliates; in transactions with clients who are foreign residents; in business operations conducted by Bank representatives in foreign countries; and with regard to funds of Israeli clients invested overseas.

Cross-border risk includes the risk arising from obligations arising from US tax laws applicable to Bank Group operations outside of the USA (the Foreign Account Tax Compliance Act – "FATCA" and Qualified Intermediary – "QI"). This risk is also due to obligations stipulated by the Common Reporting Standard (CRS) issued by the OECD.

The Bank has zero appetite for cross-border risk. Therefore, the Bank has specified that any faults discovered with regard to cross-border risk would be addressed by Bank units as a top priority. The Bank has specified a multi-annual work plan for the Compliance Function, which includes required action for reducing compliance risk across the Bank.

The cross-border Risk Owner for the Bank is the Manager, Risks Control Division. The Compliance Officer is responsible for continuous management of this risk.

Cross-border risk is managed by three lines of defense:

The first line of defense includes business units and other risk-taking units at the Bank, is responsible for reducing and controlling cross-border risk. The first line of defense includes International Operations, which is responsible for operations of tourist and private banking branches in Israel and for overseas affiliates of the Bank, through the local compliance unit of each affiliate. The first line of defense also includes the Retail Division and the Business Division in their operations involving relevant clients.

**The second line of defense** is based on the Compliance Division under the Risks Control Division, which is responsible for deploying an organization-wide compliance culture with procedures and laws, for identification and assessment of cross-border risk, for delivering appropriate training and for specifying procedures. To this end, the Compliance Division is assisted by the Legal Division, the Planning and Operations Division which supports the implementation of processes and IT systems and the Technology Division, which develops computer-based tools for risk identification, monitoring and mitigation.

The third line of defense is Internal Audit, which conducts periodic audit of the management of cross-border risk.

The Bank applies the statutory provisions for implementation of the FATCA agreement and provides timely reports to the Israeli Tax Authority/ The Bank is compliant with terms and conditions of the QI agreement and is preparing to implement the CRS regulations.

International entities, including OFAC (of the US Department of Treasury) and the European Union have imposed international sanctions on countries, organizations and individuals. As part of management of its international financial operations and maintaining proper business relations with correspondent banks, the Bank is compliant with these sanctions, even though they do not apply directly to the Bank. As part of management of cross-border risk, the Bank especially monitors and reviews any monetary transactions where any party to such transaction is located in a country subject to international sanctions.

The Bank has branches that specialize in managing accounts for foreign-resident clients. Accounts for foreign residents are opened and managed at these branches.

Cross-border risk remained unchanged in the first nine months of 2018 and is defined as low-medium. The Bank continues to prepare and to manage risk by, *inter alia*, revising procedures, automating work processes, delivering training and assigning specialized branches to do business with such clients. In the current quarter, multiple efforts were completed to review files, improve client data and have clients sign forms in order to comply with regulatory requirements.

## **Anti-money laundering risk**

AML and terror financing risk is the risk of financial loss and impact to reputation, which the Bank may incur due to breach of various statutory provisions regarding the Bank's obligations with regard to AML and terror financing.

The Bank has zero risk appetite with regard to AML risk.

The AML Risk Owner for the Bank is the Manager, Risks Control Division.

The Compliance Division acts to deploy statutory provisions on this matter.

AML risk is managed by three lines of defense:

**First line of defense** – consists of branches and business units that apply immediate controls to their operations. These operations include compliance trustees at branches and regional compliance controllers, who apply current controls to branches, in conformity with the Control Specification of the Compliance Division. And support for compliance aspects in the branch network.

**Second line of defense** – consists of the Compliance Division, which is responsible for reporting to the AML Authority and for applying appropriate controls, for deployment of relevant statutory provisions and for delivering training designed to improve knowledge on this subject. The Legal Division is responsible for management of general statutory provisions applicable to the Bank, as part of the second line of defense. The Compliance Division, guided by and in coordination with the Legal Division, reviews the regulatory provisions in this field and acts to implement them, with concurrent assessment of AML risk, in conjunction with the Bank Group's overall compliance risk. Moreover, the Compliance Division prepares a specific risk assessment with regard to AML based, *inter alia*, on the national risk assessment in Israel.

**Third line of defense** – consists of Internal Audit, which conducts independent audit of the first line of defense and of the Compliance Function, including review of the appropriateness and effectiveness of the Compliance Function, including review of controls in line with estimated risk level.

The Bank regards itself as a partner in the international AML and terror financing effort and takes part in the international effort against bribery and corruption, acting to identify, monitor and follow up on activities and clients that may be exposed to bribery and corruption. The Bank also avoids any activities opposed to the international sanctions regime of OFAC (of the US Department of Treasury) and of the European Union.

The Bank operates computer systems for identifying unusual activity and for monitoring the handling of extraordinary reports provided to the AML Authority by the Compliance Division. In the first half of 2018, the Bank completed deployment of a new AML system – MEA, that superseded existing systems for identification of unusual activity and for reporting.

The Division also applies various controls to activity in different accounts, based on their risk profile, and also provides regular advice to branches and delivers customized training to various Bank employees, based on their position. Moreover, in line with Bank policy, a knowledge test is administered once every two years to all Bank employees.

The Bank applies on a Group basis, with required changes, its policies in this area as well as statutory provisions, at its subsidiaries and branches in Israel and overseas.

When opening an account, as well as during normal business operations, the Bank acts to identify clients who may be exposed to offering, accepting or brokering bribes.

AML risk remained unchanged in the first nine months of 2018, due to continued intensive training and deployment activity, along with risk-focused controls and taking effective action to avoid recurrence of extraordinary events and compliance failures. The technology-based system for identifying and reporting unusual activity is in regular use at branches and allows for close monitoring of banking activity. This is along with the increase in business activity and in view of further increased regulatory activity reflected, *inter alia*, in new directives being issued frequently, which the Bank is preparing for.

## Reputation risk

The Bank has mapped reputation risk as a material risk, because past events indicate that impact to the reputation of a financial institution may result in significant loss of value. Reputation risk is a stand-alone risk, but may also arise from materialization of other risks at the Bank, such as materialization of an operational risk event. Furthermore, impact to Bank reputation may bring about the materialization of other risks, in particular liquidity risk – with growing demand by clients to withdraw deposits.

The Bank has defined its risk appetite for reputation risk as minimal. In recent years, the Bank took action to put in place a framework for handling reputation risk. The Bank considers that this risk should be addressed based on similar principles to those used to address other risks, such as credit risk or market risk – even though this risk is considered harder to quantify. Therefore, similarly to other risks, the Bank's Board of Directors has created a dedicated policy document for addressing reputation risk, which specifies guidelines for risk management, risk appetite, risk measurement and ways to mitigate risk. Accordingly, the Bank incorporated reputation risk into its regular risks management processes, including the process for approval of new products or activities and in self-assessment processes conducted by the Bank and has put in place a framework for regular measurement of this risk. The Bank emphasizes creation of a reporting chain and the required activity under stress conditions, in order to mitigate the impact of such risk, should it materialize. This activity requires identification of risk materialization at its early stages, in order to allow for qualitative and quantitative tools to be applied as early as possible, in order to address this risk. The policy refers to all Bank subsidiaries and stipulates mandatory reporting and the required actions in case of an event classified as a reputation event. The Bank regularly coordinates with Bank Yahav on this matter.

The Reputation Risk Owner is the Manager, Marketing, Promotion and Business Development Division at the Bank.

Reputation risk is managed in conformity with the policy on three levels: In advance (under normal conditions), in real time (alert condition) and in retrospect.

Bank policy also defines the roles of the Risk Owner and stipulates how the risk should be addressed under normal conditions and in case of a stress event. The Risk Owner heads the Reputation Risk Committee, which regularly convenes quarterly and as needed, in case of concern about materialization of a stress event. The Committee routinely discusses the outcome of continuous monitoring of this risk which is conducted, *inter alia*, based on internal and external information sources, through surveys and studies, online discourse, media review and reports by other Risk Owners at the Bank. The work process under stress conditions, i.e. in case of an event which may impact reputation, is incorporated in a specific reporting and action procedure. The objective of this procedure is to define how information is located, the reporting chain, including declaration of a reputation event, how to act during the event and how to declare the event ended, including debriefing and other assessment to review the impact of the event on Bank image, once the event has ended. The Bank has also specified, as part of its business continuity plan, the creation of a media command post, headed by the Risk Owner, which would allow the Bank to handle reputation risk in case of emergency.

The Bank routinely measures its reputation risk in the capital market, in the public and among clients and the business community. This measurement is based on specific quarterly studies which review public opinion (Bank clients and those of other banks), on monthly monitoring of on line discourse, on satisfaction surveys among Bank clients etc. Reports with regard to reputation risk are sent to Bank management and to the Board of Directors in the quarterly Risks Document – as is the case for all risks mapped by the Bank.

Following developments in the investigation by the US DOJ, the Bank has reviewed the need to revise the impact of various risk factors and increased, on the financial statements for the second quarter, the impact of reputation risk from low-medium to medium. For more information about developments in the investigation by the US Department of Justice, see Note 10.B.4 to the financial statements.

## Strategic-business risk

Strategic-business risk is the risk, in real time or potentially in future, of impact to Bank profits, capital or reputation, due to erroneous business decisions, improper deployment of decisions or insufficient preparation for changes in the business environment. This means the risk that the Bank chose the wrong strategy or that the Bank would not be able to implement the business and strategic plan as planned. The materiality of strategic risk requires the Bank to take measures which would allow it to manage this risk and take steps for assessment and early identification of events which may preclude implementation of the strategy.

The Bank operates in conformity with the outline of a five-year strategic plan, most recently approved by the Bank Board of Directors on November 21, 2016, whose principles have been made public. Material deviation from Bank strategy is subject to approval by the Bank's Board of Directors. This risk is monitored by the Planning, Operations and Client Asset Division (hereinafter: "the Planning and Operations Division") and is challenged by the Risks Control Division.

The Strategic Risk Owner is the President & CEO; based on his guidance, management periodically reviews the implementation of the strategy: monitoring of regulatory, economic or technology developments which affect the strategy and initiating annual work plans derived from and in conformity with the strategic plan. In addition, the Planning and Operations Division and the Risks Control Division regularly and independently monitor strategic risk from different control aspects, primarily the following: achievement of targets, risk mapping and identification, stress testing, threat tests and continuous monitoring of the risk profile in view of the Bank's risk appetite. In addition to continuous monitoring of the implementation of work plans and aligning them with the strategic outline, the Bank also monitors developments of external factors which may impact the Bank's strategic risk. The work plans of Bank divisions are adapted, when needed, to the changing business environment in order to achieve business targets and the strategic outline. The Bank is prepared for emergencies so as to reduce the impact to the Bank's business and strategic plan, should extreme economic or geo-political conditions evolve.

Following developments in the investigation by the US DOJ, the Bank has reviewed the need to revise the impact of various risk factors and increased, on the financial statements for the second quarter, the impact of strategic risk from low-medium to medium. For more information about developments in the investigation, see Note 10.B.4 to the financial statements. See also chapter "Business goals and strategy" of the Report of the Board of Directors and Management.

On May 30, 2018, the acting Anti-Trust Supervisor issued a decision objecting to the merger of Bank Igud with and into Bank Mizrahi-Tefahot. Since the conditions precedent for publication of the Tender Offer have not been fulfilled, in conformity with provisions of the Agreement, the Agreement is deemed null and void as of June 27, 2018, and none of the parties has any obligations pursuant to the Agreement nor any claim against the other parties to the Agreement. On August 5, 2018, the Bank and shareholders of Bank Igud signed an addendum to the agreement, whereby the parties agreed to appeal the decision, jointly with Bank Igud. Such an appeal was filed with the Anti-Trust Court on September 6, 2018.

Realization of the Igud acquisition transaction, should it be realized, would challenge the Bank, due to the operating merger of the two banks, along with continued achievement of objectives in Mizrahi Tefahot's current strategic plan.

This information constitutes forward-looking information, as defined in the Securities Law, 1968, based on assumptions, facts and data (hereinafter jointly: "assumptions") brought before the Bank's Board of Directors. These assumptions may not materialize due to factors not all of which are under the Bank's control.

### **Developments in the business environment which may impact strategic risk**

- In recent years, the global economy has been unstable and economic growth has been more moderate, along with a near-zero interest rate environment and moderate growth in global demand, as well as increased geo-political tension around the world, due to the emergence of Islamic fundamentalism. The economic growth rate in Israel has slowed down in recent years, due to more moderate export growth. The Bank regularly monitors the potential implications of a global and local economic slow-down, which may lead to deterioration in the financial standing of households or may impact business activity in various economic sectors. In particular, the Bank is preparing for a potential change in the interest rate trends in the Israeli economy. Following the higher interest rate environment in the USA.
- Growing competition in the financial system, in view of expanded operations of non-banking entities, especially in the credit market and given the entry of technology companies into the financial brokerage area, in particular for the household and small business segments.
- The impact of regulatory provisions in core areas of banking operations, including the potential impact of the Increased Competition and Reduced Concentration in Israeli Banking Act. The objective of this Act is to increase competition in retail banking services, with reference to both supply (adding new players) and demand (increasing consumer capacity to compare the costs of financial services).

### **Remuneration**

See also analysis of material developments in revenues, expenses and other comprehensive income on the Report of the Board of Directors and Management.

For more information about remuneration policy for all Bank employees other than officers for 2017-2019, approved by the Board of Directors on March 20, 2017, see Note 22 to the 2017 financial statements.

## Appendix – Composition of supervisory capital

Below is the detailed composition of supervisory capital, in conformity with disclosure requirements of Basel Pillar 3 as of September 30.

In order to present the connection between the Bank's consolidated balance sheet and supervisory capital components, the following table includes references to another table, later in this chapter (hereinafter: "Stage 2"). This other table lists the balance sheet items which include the supervisory capital components.

According to the directives, each line of this table should be completed, even if the supervisory capital component or the supervisory adjustment are zero or negligible.

	September 30, 2018 Amounts not deducted from equity, subject to required treatment prior to adoption of Directive 202, in conformity with Basel III NIS in millions	September 30, 2018 Amounts not deducted from equity, subject to required treatment prior to adoption of Directive 202, in conformity with Basel III NIS in millions	References from step 2	
<b>Tier I shareholders' equity: Instruments and retained earnings</b>				
1	Ordinary share capital issued by the banking corporation and ordinary share premium for shares included in Tier I capital	2,245	–	1+2
2	Retained earnings, including dividends proposed or declared after the balance sheet date	12,580	–	3
3	Accumulated other comprehensive income and retained earnings for which disclosure has been given	(197)	–	4
4	Tier I capital instruments issued by the banking corporation, eligible for inclusion in regulatory capital during transitional period	–	–	
5	Ordinary shares issued by consolidated subsidiaries of the banking corporation, which are held by a third party (non-controlling interests)	419	–	5
6	Tier I capital before regulatory adjustments and deductions	15,047	–	
<b>Tier I shareholders' equity: Regulatory adjustments and deductions</b>				
7	Stabilizing valuation adjustments	–	–	
8	Goodwill, net of related deferred tax liability, if applicable	87	–	6
9	Other intangible assets, other than mortgage-servicing rights, net of related deferred tax liability	–	–	7+8
10	Deferred tax assets that rely on future profitability of the banking corporation for realization, excluding those arising from temporary differences	–	–	9
11	Accumulated other comprehensive income with respect to cash flows hedging of items not listed at fair value on the balance sheet	3	–	10
12	Shortfall of provisions to expected losses	–	–	
13	Increase in shareholders' equity due to securitization transactions	–	–	
14	Unrealized gains / losses from changes to fair value of liabilities arising from change to own credit risk of the banking corporation. In addition, with regard to liabilities with respect to derivative instruments, all debt value adjustments (DVA) arising from own credit risk of the banking corporation is to be deducted	6	–	11
15	Excess deposits over provision, net of deferred tax liabilities to be settled should the asset become impaired or be disposed in conformity with Public Reporting Directives	–	–	12+13
16	Investment in own ordinary shares, held directly or indirectly (including commitment to purchase shares subject to contractual obligations)	–	–	
17	Reciprocal cross-holdings in ordinary shares of financial corporations	–	–	

	September 30, 2018 September 30, 2018 Balance Sheet NIS in millions	September 30, 2018 Amounts not deducted from equity, subject to required treatment prior to adoption of Directive 202, in conformity with Basel III NIS in millions	References from step 2	
18	Investments in the capital of financial corporations not consolidated in the public financial statements of the banking corporation, where the banking corporation does not hold more than 10% of the issued ordinary share capital of the financial corporation	–	–	14
19	Investments in the capital of financial corporations not consolidated in the public financial statements of the banking corporation, where the banking corporation holds more than 10% of the issued ordinary share capital of the financial corporation	–	–	
20	Mortgage servicing rights whose amount exceeds 10% of Tier I capital	–	–	
21	Deferred tax assets arising from temporary differences, whose amount exceeds 10% of Tier I capital	–	–	
22	Amount of mortgage servicing rights, deferred tax assets arising from temporary differences and investments that exceed 10% of the ordinary share capital issued by financial corporations, which exceeds 15% of Tier I capital of the banking corporation	–	–	
23	Of which: With respect to investments that exceed 10% of the ordinary share capital issued by financial corporations	–	–	
24	Of which: With respect to mortgage servicing rights	–	–	
25	Of which: Deferred tax assets arising from temporary differences	–	–	
26	Regulatory adjustments and other deductions stipulated by the Supervisor of Banks	–	–	
26.A	Of which: With respect to investments in capital of financial corporations	–	–	
26.B	Of which: With respect to mortgage servicing rights	–	–	
26.C	Of which: Additional regulatory adjustments to Tier I capital, not included in sections 25.A and 25.B. Regulatory adjustments to Tier I capital, subject to required treatment prior to adoption of Directive 202, in conformity with Basel III	–	–	
27	Deductions applicable to Tier I capital, due to insufficient additional Tier I and Tier II capital to cover deductions	–	–	
28	Total regulatory adjustments to and deductions from Tier I capital	96	–	
29	Tier I shareholders' equity	14,951	–	
<b>Additional Tier I capital: Instruments</b>				
30	Additional Tier I capital instruments issued by the banking corporation and premium on such instruments	–	–	
31	Of which: Classified as equity in conformity with Public Reporting Regulations	–	–	15a+16a
32	Of which: Classified as liabilities in conformity with Public Reporting Directives	–	–	
33	Additional Tier I capital instruments issued by the banking corporation, eligible for inclusion in regulatory capital during transitional period	–	–	15a+16a
34	Additional Tier I capital instruments issued by subsidiaries of the banking corporation, held by third party investors	–	–	17
35	Of which: Additional Tier I capital instruments issued by subsidiaries of the banking corporation, held by third party investors, subject to phase-out from additional Tier I capital	–	–	



	September 30, 2018 Amounts not deducted from equity, subject to required treatment prior to adoption of Directive 202, in conformity with Basel III NIS in millions	September 30, 2018 Balance in conformity with NIS in millions	References from step 2
36	Tier I capital, before deductions	–	–
<b>Additional Tier I capital: Deductions</b>			
37	Investment in own additional Tier I capital instruments, held directly or indirectly (including commitment to purchase such instruments subject to contractual obligations)		–
38	Reciprocal cross-holdings in additional Tier I capital instruments	–	–
39	Investments in the capital of financial corporations not consolidated in the public financial statements of the banking corporation, where the banking corporation does not hold more than 10% of the issued ordinary share capital of the financial corporation	–	–
40	Investments in the capital of financial corporations not consolidated in the public financial statements of the banking corporation, where the banking corporation does not hold more than 10% of the issued ordinary share capital of the financial corporation	–	–
41	Other deductions stipulated by the Supervisor of Banks	–	–
41.A	Of which: With respect to investments in capital of financial corporations	–	–
41.B	Of which: Other deductions from Tier I capital, not included in section 1.A	–	–
	Other deductions from Tier I capital, subject to required treatment prior to adoption of Directive 202, in conformity with Basel III	–	–
	Of which: Additional regulatory adjustments to Tier I capital, not included in section 38.A	–	–
42	Deductions applicable to additional Tier I capital, due to insufficient Tier II capital to cover deductions	–	–
43	Total deductions from additional Tier I capital		–
44	Additional Tier I capital		–
45	Tier I capital	14,951	–
<b>Tier II capital: Instruments and provisions</b>			
46	Instruments issued by the banking corporation (not included in Tier I capital) and premium on such instruments	584	– 18a
47	Tier II capital instruments issued by the banking corporation, eligible for inclusion in regulatory capital during transitional period	1,786	1,786 18b
48	Tier II capital instruments issued by subsidiaries of the banking corporation to third party investors	1,006	– 19
49	Of which: Tier II capital instruments issued by subsidiaries of the banking corporation, held by third party investors, subject to phase-out from Tier II capital	–	–
50	Group provisions for credit losses by effect of related tax	1,498	– 20
51	Tier II capital, before deductions	4,874	1,786
<b>Tier II capital: Deductions</b>			
52	Investment in own Tier II capital instruments, held directly or indirectly (including commitment to purchase such instruments subject to contractual obligations)	–	–
53	Reciprocal cross-holdings in Tier II capital instruments of financial corporations	–	–
54	Investments in the capital of financial corporations not consolidated in the public financial statements of the banking corporation, where the banking corporation does not hold more than 10% of the issued ordinary share capital of the financial corporation	–	–

	September 30, 2018 September 30, 2018 Balance Sheet NIS in millions	September 30, 2018 Amounts not deducted from equity, subject to required treatment prior to adoption of Directive 202, in conformity with Basel III NIS in millions	References from step 2
55	Investments in the capital of financial corporations not consolidated in the public financial statements of the banking corporation, where the banking corporation holds more than 10% of the issued ordinary share capital of the financial corporation	–	–
56	Other deductions stipulated by the Supervisor of Banks	–	
56.A	Of which: With respect to investments in capital of financial corporations	–	
56.B	Of which: Other deductions from Tier II capital, not included in section 51.A Regulatory adjustments to Tier II capital, subject to required treatment prior to adoption of Directive 202, in conformity with Basel III	–	
57	Total deductions from Tier II capital		
58	Tier II capital	4,874	1,786
59	Total equity	19,825	1,786
	Total risk weighted assets in conformity with treatment required prior to adoption of Directive 202, in conformity with Basel III		
60	Total risk weighted assets	147,872	

#### Capital ratios and capital conservation buffer

61	Tier I shareholders' equity	10.11%
62	Tier I capital	10.11%
63	Total capital	13.41%
64	Not applicable	–
65	Not applicable	–
66	Not applicable	–
67	Not applicable	–
68	Not applicable	–

#### Minimum requirements stipulated by the Supervisor of Banks

69	Minimum Tier I shareholders' equity ratio required by Supervisor of Banks	9.84%
70	Minimum Tier I capital ratio required by Supervisor of Banks	9.84%
71	Minimum overall capital ratio required by Supervisor of Banks	13.34%

#### Amounts below deduction threshold (before risk weighting)

72	Investments in capital of financial corporations (other than banking corporations and their subsidiaries), that do not exceed 10% of ordinary share capital issued by the financial corporation and that are below the deduction threshold		–
73	Investments in Tier I capital of financial corporations (other than banking corporations and their subsidiaries), that do exceed 10% of ordinary share capital issued by the financial corporation and that are below the deduction threshold	2	–
74	Mortgage servicing rights		–
75	Deferred tax assets arising from temporary differences, that are below the deduction threshold	1,061	–

	September 30, 2018 September 30, 2018 Balance NIS in millions	Amounts not deducted from equity, subject to required treatment prior to adoption of Directive 202, in conformity with Basel III NIS in millions	References from step 2
<b>Cap for inclusion of provisions in Tier II</b>			
76	Provision eligible for inclusion in Tier II with respect to exposures subject to standardized approach, prior to application of cap	1,498	–
77	Cap on inclusion of provisions in Tier II under standardized approach	1,709	–
78	Provision eligible for inclusion in Tier II with respect to exposures subject to internal ratings-based approach, prior to application of cap		–
79	Cap on inclusion of provisions in Tier II under internal ratings-based approach		–
<b>Equity instruments not eligible as regulatory capital subject to transitional provisions</b>			
80	Current cap for instruments included in Tier I capital that are subject to transitional provisions		–
81	Amount deducted from Tier I shareholders' equity due to cap		–
82	Current cap for instruments included in additional Tier I shareholders' equity that are subject to transitional provisions		–
83	Amount deducted from additional Tier I capital due to cap		–
84	Current cap for instruments included in Tier II shareholders' equity that are subject to transitional provisions	1,786	–
85	Amount deducted from Tier II capital due to cap	833	–



	September 30, 2017	September 30, 2017	December 31, 2017	December 31, 2017	
	September 30, 2017	September 30, 2017	December 31, 2017	December 31, 2017	References
	Balance	Balance	Balance	Balance	from step 2
	NIS in	NIS in	NIS in	NIS in	
	millions	millions	millions	millions	
16	Investment in own ordinary shares, held directly or indirectly (including commitment to purchase shares subject to contractual obligations)	—	—	—	—
17	Reciprocal cross-holdings in ordinary shares of financial corporations	—	—	—	—
18	Investments in the capital of financial corporations not consolidated in the public financial statements of the banking corporation, where the banking corporation does not hold more than 10% of the issued ordinary share capital of the financial corporation	—	—	—	—
19	Investments in the capital of financial corporations not consolidated in the public financial statements of the banking corporation, where the banking corporation holds more than 10% of the issued ordinary share capital of the financial corporation	—	—	—	—
20	Mortgage servicing rights whose amount exceeds 10% of Tier I capital	—	—	—	—
21	Deferred tax assets arising from temporary differences, whose amount exceeds 10% of Tier I capital	—	—	—	—
22	Amount of mortgage servicing rights, deferred tax assets arising from temporary differences and investments that exceed 10% of the ordinary share capital issued by financial corporations, which exceeds 15% of Tier I capital of the banking corporation	—	—	—	—
23	Of which: With respect to investments that exceed 10% of the ordinary share capital issued by financial corporations	—	—	—	—
24	Of which: With respect to mortgage servicing rights	—	—	—	—
25	Of which: Deferred tax assets arising from temporary differences	—	—	—	—
26	Regulatory adjustments and other deductions stipulated by the Supervisor of Banks	—	—	—	—
26.A	Of which: With respect to investments in capital of financial corporations	—	—	—	—
26.B	Of which: With respect to mortgage servicing rights	—	—	—	—
26.C	Of which: Additional regulatory adjustments to Tier I capital, not included in sections 25.A and 25.B.	—	—	—	—
	Regulatory adjustments to Tier I capital, subject to required treatment prior to adoption of Directive 202, in conformity with Basel III	—	—	—	—
27	Deductions applicable to Tier I capital, due to insufficient additional Tier I and Tier II capital to cover deductions	—	—	—	—

14

		September 30, 2017 Amounts not deducted from equity, subject to required treatment	September 30, 2017 Amounts not deducted from equity, subject to required treatment	December 31, 2017 Amounts not deducted from equity, subject to required treatment	December 31, 2017 Amounts not deducted from equity, subject to required treatment	References from step 2
		September 30, 2017 Balance NIS in millions	September prior to adoption of Directive 202, in conformity with Basel III NIS in millions	December 31, 2017 Balance NIS in millions	December prior to adoption of Directive 202, in conformity with Basel III NIS in millions	
28	Total regulatory adjustments to and deductions from Tier I capital	102	4	98	3	
29	Tier I shareholders' equity	14,055	85	14,333	84	
<b>Additional Tier I capital: Instruments</b>						
30	Additional Tier I capital instruments issued by the banking corporation and premium on such instruments	–	–	–	–	
31	Of which: Classified as equity in conformity with Public Reporting Regulations	–	–	–	–	15a+16a
32	Of which: Classified as liabilities in conformity with Public Reporting Directives	–	–	–	–	
33	Additional Tier I capital instruments issued by the banking corporation, eligible for inclusion in regulatory capital during transitional period	–	–	–	–	15a+16a
34	Additional Tier I capital instruments issued by subsidiaries of the banking corporation, held by third party investors	–	–	–	–	17
35	Of which: Additional Tier I capital instruments issued by subsidiaries of the banking corporation, held by third party investors, subject to phase-out from additional Tier I capital	–	–	–	–	
36	Tier I capital, before deductions	–	–	–	–	
<b>Additional Tier I capital: Deductions</b>						
37	Investment in own additional Tier I capital instruments, held directly or indirectly (including commitment to purchase such instruments subject to contractual obligations)	–	–	–	–	
38	Reciprocal cross-holdings in additional Tier I capital instruments	–	–	–	–	
39	Investments in the capital of financial corporations not consolidated in the public financial statements of the banking corporation, where the banking corporation does not hold more than 10% of the issued ordinary share capital of the financial corporation	–	–	–	–	
40	Investments in the capital of financial corporations not consolidated in the public financial statements of the banking corporation, where the banking corporation does not hold more than 10% of the issued ordinary share capital of the financial corporation	–	–	–	–	
41	Other deductions stipulated by the Supervisor of Banks	–	–	–	–	
41.A	Of which: With respect to investments in capital of financial corporations	–	–	–	–	
41.B	Of which: Other deductions from Tier I capital, not included in section 1.A	–	–	–	–	

	September 30, 2017	September 30, 2017	December 31, 2017	December 31, 2017	References from step 2
	September 30, 2017	September 30, 2017	December 31, 2017	December 31, 2017	
	Balance	Balance	Balance	Balance	
	NIS in millions	NIS in millions	NIS in millions	NIS in millions	
	September 30, 2017	September 30, 2017	December 31, 2017	December 31, 2017	
	Balance	Balance	Balance	Balance	
	NIS in millions	NIS in millions	NIS in millions	NIS in millions	
Other deductions from Tier I capital, subject to required treatment prior to adoption of Directive 202, in conformity with Basel III	–	–	–	–	
Of which: Additional regulatory adjustments to Tier I capital, not included in section 38.A	–	–	–	–	
42 Deductions applicable to additional Tier I capital, due to insufficient Tier II capital to cover deductions	–	–	–	–	
43 Total deductions from additional Tier I capital	–	–	–	–	
44 Additional Tier I capital	–	–	–	–	
45 Tier I capital	14,055	85	14,333	84	

#### Tier II capital: Instruments and provisions

46 Instruments issued by the banking corporation (not included in Tier I capital) and premium on such instruments	599	–	1,259	–	18a
47 Tier II capital instruments issued by the banking corporation, eligible for inclusion in regulatory capital during transitional period	2,233	2,233	2,233	2,233	18b
48 Tier II capital instruments issued by subsidiaries of the banking corporation to third party investors	328	–	329	–	19
49 Of which: Tier II capital instruments issued by subsidiaries of the banking corporation, held by third party investors, subject to phase-out from Tier II capital	–	–	–	–	
50 Group provisions for credit losses by effect of related tax	1,443	–	1,430	–	20
51 Tier II capital, before deductions	4,603	2,233	5,251	2,233	

#### Tier II capital: Deductions

52 Investment in own Tier II capital instruments, held directly or indirectly (including commitment to purchase such instruments subject to contractual obligations)	–	–	–	–	
53 Reciprocal cross-holdings in Tier II capital instruments of financial corporations	–	–	–	–	
54 Investments in the capital of financial corporations not consolidated in the public financial statements of the banking corporation, where the banking corporation does not hold more than 10% of the issued ordinary share capital of the financial corporation	–	–	–	–	
55 Investments in the capital of financial corporations not consolidated in the public financial statements of the banking corporation, where the banking corporation	–	–	–	–	

	September 30, 2017 Amounts not deducted from equity, subject to required treatment	September 30, 2017 Amounts not deducted from equity, subject to required treatment	December 31, 2017 Amounts not deducted from equity, subject to required treatment	December 31, 2017 Amounts not deducted from equity, subject to required treatment	References from step 2
	September 30, 2017 Balance NIS in millions	September 30, 2017 Balance NIS in millions	December 31, 2017 Balance NIS in millions	December 31, 2017 Balance NIS in millions	
	holds more than 10% of the issued ordinary share capital of the financial corporation				
56	Other deductions stipulated by the Supervisor of Banks	–	–	–	–
56.A	Of which: With respect to investments in capital of financial corporations	–	–	–	–
56.B	Of which: Other deductions from Tier II capital, not included in section 51.A	–	–	–	–
	Regulatory adjustments to Tier II capital, subject to required treatment prior to adoption of Directive 202, in conformity with Basel III	–	–	–	–
57	Total deductions from Tier II capital	–	–	–	–
58	Tier II capital	4,603	2,233	5,251	2,233
59	Total equity	18,658	2,318	19,584	2,317
	Total risk weighted assets in conformity with treatment required prior to adoption of Directive 202, in conformity with Basel III		–		
60	Total risk weighted assets	138,363	–	140,524	

#### Capital ratios and capital conservation buffer

61	Tier I shareholders' equity	10.16%	10.20%	–
62	Tier I capital	10.16%	10.20%	–
63	Total capital	13.48%	13.94%	–
64	Not applicable	–	–	–
65	Not applicable	–	–	–
66	Not applicable	–	–	–
67	Not applicable	–	–	–
68	Not applicable	–	–	–

#### Minimum requirements stipulated by the Supervisor of Banks

69	Minimum Tier I shareholders' equity ratio required by Supervisor of Banks	9.86%	9.86%	–
70	Minimum Tier I capital ratio required by Supervisor of Banks	9.86%	9.86%	–
71	Minimum overall capital ratio required by Supervisor of Banks	13.36%	13.36%	–



	September 30, 2017	September 30, 2017	December 31, 2017	December 31, 2017	References from step 2
	September 30, 2017	September 30, 2017	December 31, 2017	December 31, 2017	
	Balance	Balance	Balance	Balance	
	NIS in millions	NIS in millions	NIS in millions	NIS in millions	
<b>Amounts below deduction threshold (before risk weighting)</b>					
			0	–	
72					
73		–		–	
74	2	–	2	–	
75					
	998	–	940	–	
<b>Cap for inclusion of provisions in Tier II</b>					
76					
	1,443	–	1,430	–	
77					
	1,603	–	1,625	–	
78					
		–		–	
79					
		–		–	
<b>Equity instruments not eligible as regulatory capital subject to transitional provisions</b>					
80					
81					
82					
83					
84					
	2,233	–	2,233	–	
85					
	444	–	447	–	

Below are supervisory capital components, as included on the Bank's consolidated balance sheet<sup>(1)</sup>.

According to disclosure requirements of Pillar 3, the relationship between the balance sheet, as it appears on the Bank's financial statements, and supervisory capital components must be presented in the above table. The following table shows the Bank's consolidated balance sheet in detail, listing the balance sheet items which include the supervisory capital components (NIS in millions):

	Consolidated supervisory balance sheet As of September 30, 2018	Consolidated supervisory balance sheet As of September 30, 2017	Consolidated supervisory balance sheet As of December 31, 2017	References to supervisory regulatory capital components
<b>Assets</b>				
Cash and deposits with banks	42,423	42,578	41,130	
Securities	10,093	10,938	10,133	
Of which: Investments in equity of financial corporations, not exceeding 10% of share capital of each financial corporation	–	–	–	14
Of which: Investments in equity of financial corporations, exceeding 10% of share capital of each financial corporation, not exceeding the deduction threshold	–	–	–	
Of which: Other securities	10,093	10,938	10,133	
Securities loaned or purchased in resale agreements	115	2	76	
Loans to the public	191,348	180,086	182,602	
Provision for credit losses	(1,552)	(1,465)	(1,484)	
Of which: Group provision for credit losses included in Tier II	(1,404)	(1,355)	(1,348)	20
Of which: Provision for credit losses not included in regulatory capital	(148)	(110)	(136)	
Loans to the public, net	189,796	178,621	181,118	
Loans to Governments	569	426	456	
Investments in associated companies	32	33	32	
Of which: Investments in equity of financial corporations, exceeding 10% of share capital of each financial corporation, not exceeding the deduction threshold	2	2	2	
Of which: Investments in other associated companies	30	31	30	
Buildings and equipment	1,360	1,359	1,403	
Intangible assets and goodwill	87	87	87	
Of which: Goodwill	87	87	87	6
Of which: Other intangible assets	–	–	–	7
Assets with respect to derivative instruments	2,604	3,808	3,421	
Other assets	1,752	1,726	1,716	
Of which: Deferred tax assets	1,061	998	940	
Of which: Deferred tax assets, other than those arising from temporary differences	–	–	–	9
Of which: Deferred tax liability with respect to intangible assets	–	–	–	8
Of which: Other deferred tax assets	1,061	998	940	
Of which: Excess deposit over provision	–	–	–	12
Of which: Other additional assets	691	728	776	
<b>Total assets</b>	<b>248,831</b>	<b>239,578</b>	<b>239,572</b>	

	Consolidated supervisory balance sheet As of September 30, 2018	Consolidated supervisory balance sheet As of September 30, 2017	Consolidated supervisory balance sheet As of December 31, 2017	References to supervisory regulatory capital components
<b>Liabilities and Equity</b>				
Deposits from the public	192,943	184,221	183,573	
Deposits from banks	655	1,462	1,125	
Deposits from the Government	44	60	51	
Securities loaned or sold in conjunction with repurchase agreements	—	—	—	
Debentures and subordinated notes*	29,769	29,129	29,923	
Of which: Subordinated notes not recognized as regulatory capital	1,461	769	919	
Of which: Subordinated notes recognized as regulatory capital	3,376	3,160	3,821	
Of which: Qualifying as supervisory capital components	1,590	927	1,588	16a,18a
Of which: Not qualifying as regulatory capital components and subject to transitional provisions	1,786	2,233	2,233	16b,18b
Liabilities with respect to derivative instruments	2,836	3,293	3,082	
Of which: With respect to internal credit risk	6	10	10	11
Other liabilities	7,451	7,387	7,491	
Of which: Deferred tax liability arising from retirement	—	—	—	13
<b>Total liabilities</b>	<b>233,698</b>	<b>225,552</b>	<b>225,245</b>	
<b>Equity attributable to shareholders of the banking corporation</b>				
Of which: Ordinary share capital	14,441	13,399	13,685	
Of which: Ordinary share capital	14,628	13,715	13,980	
Of which: Retained earnings	2,196	2,176	2,180	1
Of which: Cumulative other comprehensive loss	12,580	11,541	11,828	3
Of which: Losses with respect to adjustments with respect to employee benefits	(197)	(53)	(93)	4
Of which: Unrealized gains from adjustment to fair value of available-for-sale securities	(130)	(65)	(81)	
Of which: Net losses from cash flow hedges	(70)	4	(14)	
Of which: Net losses from translation adjustments of financial statements	3	9	4	10
Of which: Capital reserves	(1)	(1)	(2)	
Of which: Preferred share capital	49	51	65	2
Of which: Qualifying as supervisory capital components	—	—	—	
Of which: Not qualifying as regulatory capital components and subject to transitional provisions	—	—	—	15a
Of which: Other equity instruments	—	—	—	
Of which: Qualifying as supervisory capital components	—	—	—	
Of which: Not qualifying as regulatory capital components and subject to transitional provisions	—	—	—	15b
Non-controlling interests	692	627	642	
Of which: Non-controlling interests attributable to Tier I shareholders' equity	419	442	451	5
Of which: Non-controlling interest attributable to additional Tier I capital	—	—	—	17
Of which: Non-controlling interests attributable to Tier II capital	—	—	—	19
Of which: Non-controlling interests not attributable to regulatory capital	273	185	191	
<b>Total shareholders' equity</b>	<b>15,133</b>	<b>14,026</b>	<b>14,327</b>	
<b>Total liabilities and equity</b>	<b>248,831</b>	<b>239,578</b>	<b>239,572</b>	

## Glossary and index of terms included in the Risks Report

Below is a summary of terms included on the Risks Report:

### 1. Terms with regard to risks management at the Bank and to capital adequacy

<b>B</b>	<b>Back testing</b> – A process for assessment of appropriateness of model results, which includes a comparison of model forecasts and actual results.
	<b>Basel – Basel II / Basel III</b> – Framework for assessment of capital adequacy and risk management, issued by the Basel Committee on Bank Supervision.
<b>C</b>	<b>CRM</b> – Credit risk mitigation – Methods for reducing credit risks, such as: Insuring credit exposure through a guarantee or a deposit.
	<b>CVA</b> - Credit Valuation Adjustment – CVA is the component of the fair value of a derivative, which accounts for the credit risk of the counter-party to the transaction. CVA risk is the risk of loss due to mark-to-market with respect to expected counter-party risk for OTC derivatives. This means – loss due to impairment of fair value of derivatives, due to an increase in counter-party credit risk (such as: lower rating).
	<b>Counter-party credit risk</b> – The risk that the other party to a transaction would be in default before final settlement of cash flows in the transaction.
<b>E</b>	<b>Expected Shortfall VAR</b> – A model which estimates the average loss for the VAR model, beyond the confidence level specified in the VAR model.
	<b>EVE</b> – Economic Value of Equity – The economic value approach to analysis and estimation of the effect of changes in interest rates on the fair value of assets, liabilities and off-balance sheet positions of the Bank.
<b>H</b>	<b>HQLA</b> – High-Quality Liquid Assets which may be easily and quickly converted into cash at a small loss (or no loss) under a stress scenario.
<b>I</b>	<b>ICAAP</b> – Internal Capital Adequacy Assessment Process by the Bank. This process includes, <i>inter alia</i> , setting capital targets, capital planning processes and review of capital status under various stress scenarios. This process is part of Pillar 2 of the Basel II directive.
<b>K</b>	<b>KPI</b> – Key performance indicators, used as a tool to formulate insights about the status of process execution across the Bank.
<b>L</b>	<b>Loan To Value Ratio (LTV)</b> – The ratio between the approved facility when extended and the asset value
<b>M</b>	<b>Minimum capital ratio</b> – This ratio reflects the minimum supervisory capital requirements which the Bank is required to maintain in conformity with Proper Banking Conduct Directive 201.
<b>P</b>	<b>Pillar 2</b> – The second pillar of the Basel II project, refers to the Supervisory Review Process. This part consists of the following basic principles: The Bank shall conduct the ICAAP process, as defined above. The Supervisor shall conduct a process to assess the ICAAP process conducted by the Bank, to review the Bank's capacity to monitor and achieve supervisory capital ratios. The Bank is expected to operate above the specified minimum capital ratios.
	<b>Pillar 3</b> – The third pillar of the Basel II project, designed to promote market discipline by developing a set of disclosure requirements, which would allow market participants to assess the capital, risk exposure and risk assessment processes – and use these to assess the Bank's capital adequacy.
<b>R</b>	<b>Risk assets</b> – These consist of credit risk, operational risk and market risk, calculated using the standard approach as stated in Proper Banking Conduct Directives 201-211. <b>Risks document</b> – A document which concisely presents the Bank's risk profile, in order to allow the Board of Directors to monitor action taken by management and to ensure that such action is in line with the risk appetite and with the risks management framework approved by the Board of Directors. The Risks Document is compiled and presented to the Board of Directors quarterly.
<b>S</b>	<b>Standard approach</b> – An approach used to calculate the required capital with respect to credit risk, market risk or operational risk. Calculation of capital allocation is based on a formula, which is based on supervisory assessment components which have been specified by the Supervisor of Banks. <b>Stress tests</b> – A title for various methods used to assess the financial standing of a banking corporation under a n extreme scenario. <b>Stressed VaR</b> – Estimate of the Value at Risk (VAR) based on historical data which describe a relevant crisis period.
	<b>Subordinated notes</b> – Notes whose rights are subordinated to claims by other Bank creditors, except for other obligations of the same type.
	<b>Supervisory capital (total capital)</b> – Supervisory capital consists of two tiers: Tier I capital, which includes Tier I shareholders' equity and additional Tier I capital. Tier II equity: As defined in Proper Banking Conduct Directive 202 "Measurement and capital adequacy – supervisory capital".
<b>V</b>	<b>VAR</b> – A model used to estimate overall exposure to diverse market risk factors. The VAR (Value at Risk) obtained by the model is a statistical estimate of the maximum expected loss for the Bank due to materialization of market risks factors in a given time period at a pre-determined statistical confidence level

## 2. Terms with regard to banking and finance

<b>A</b>	<b>Average effective duration</b> – The average term to maturity of debentures. Measured in years, by weighting principal and interest payments for the debenture over its term to final maturity. The average effective duration of a debenture reflects the financial instrument's sensitivity to changes in interest rates. Average effective duration is calculated as the ratio between the weighted average debenture payouts to its price.
<b>C</b>	<b>Credit underwriting</b> – A process which includes analysis and assessment of credit risk inherent in a transaction and approval of such transaction in conformity with policy and procedures, in order to extend credit.
<b>D</b>	<b>Debt under restructuring</b> – Problematic debt under restructuring is defined as debt for which, for economic or legal reasons related to financial difficulties of the debtor, the Bank has made a concession by way of modification to terms and conditions of the debt, designed to make it easier for the debtor to make cash payments in the near term (reduction or postponement of cash payments due from the debtor), or by way of receiving other assets as debt repayment (in whole or in part). <b>Debt under special supervision</b> – Debt under special supervision is debt with potential weaknesses, which require special attention by Bank management. Should these weaknesses not be addressed, the likelihood of debt repayment may deteriorate.
	<b>Derivatives</b> – A financial instrument or contract whose value changes in response to changes in the price of the underlying asset (a financial instrument, physical asset, index, credit rating or other underlying asset), requires a small or minimal initial investment, compared to other contract types, and is expected to be settled on a future date.
	<b>Debentures</b> – Securities which are obligations by the issuer to pay to the debenture holder the principal issued plus interest, on specified dates or upon realization of a specified condition.
<b>F</b>	<b>Financial instrument</b> – A contract that creates a financial asset for one entity and a financial liability or capital instrument for another entity.
<b>I</b>	<b>ISDA</b> – An agreement which covers transactions in derivatives between banks and allows for aggregation and offset into a single amount of net obligations of either party to all transactions together, upon occurrence of a bankruptcy event or another event which qualifies for transaction closing, according to the agreement. <b>Indebtedness</b> – On- and off-balance sheet credit, as defined in Proper Banking Conduct Directive 313.
	<b>Inferior debt</b> – Inferior debt is debt insufficiently secured by collateral or by debtor repayment capacity, and for which the Bank may incur a loss if faults are not corrected, including debt over NIS 700 thousand which is 60-89 days in arrears.
	<b>Impaired debt</b> – Debt is classified as impaired when its principal or interest is in arrears over 90 days, unless the debt is well secured and is in collection proceedings. Further, any debt whose terms and conditions have been changed in conjunction with restructuring of problematic debt would be classified as impaired debt, unless prior to and following such restructuring, a provision for credit losses by extent of arrears was made with respect to the debt pursuant to the appendix to Proper Banking Conduct Directive 314 on problematic debt in housing loans.
<b>O</b>	<b>Off-balance sheet credit</b> – Contracting for providing credit and guarantees (excluding derivative instruments).
<b>P</b>	<b>Problematic debt</b> – Debt classified under one of the following negative classifications: special supervision, inferior or impaired.
<b>R</b>	<b>Recorded debt balance</b> – The debt balance, including recognized accrued interest, premium or discount yet to be amortized, net deferred commissions or net deferred costs charged to the debt balance and yet to be amortized, net of the debt amount subject to accounting write-off.
<b>S</b>	<b>Syndication</b> – A loan extended jointly by a group of lenders.

## 3. Terms with regard to regulatory directives

<b>FF</b>	<b>FATCA</b> - Foreign Accounts Tax Compliance Act – The US Foreign Accounts Tax Compliance Act stipulates mandatory reporting to the US tax authority (IRS) of accounts held by US persons with foreign financial institutions (outside the USA).
<b>L</b>	<b>LCR</b> – Liquidity Coverage Ratio is defined as the ratio of High Quality Liquid Assets and net cash outflow for the next 30 days, under a stress scenario. This ratio is a benchmark for the Bank's capacity to fulfill its liquidity needs for the coming month.

## 4. Other terms

<b>ABC</b>	<b>SOX</b> – US legislation, partially adopted by the Bank of Israel, designed to regulate responsibilities and internal controls over financial reporting and disclosure at the organization.
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