Bank Hapoalim

Report on Risks

Pillar 3 Disclosure and Additional Information Regarding Risks

as at December 31, 2018

2018

bank hapoalim

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This is a translation of the Hebrew report and has been prepared for convenience only.
In case of any discrepancy, the Hebrew version will prevail.

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Report on Risks

We are honored to present the Report on Risks: Pillar 3 Disclosure and Additional Information Regarding Risks as at December 31, 2018 (hereinafter: the "Report on Risks" or the "Report").

The information in this Report, as required by the reporting directives of the Bank of Israel, includes disclosure requirements issued by the Basel Committee and risk disclosure requirements based on other sources, including disclosure requirements issued by the Financial Stability Forum (FSF) and disclosure requirements issued by a task force established by the Financial Stability Board (FSB) in order to improve risk disclosure at banking corporations.

The Report for 2018 is based on a new reporting format, pursuant to the directives of the Bank of Israel. The Report therefore contains many changes, primarily in the quantitative tables. In accordance with the reporting requirements, the new tables generally include comparative data for the preceding year, even if the data were not reported in the past.

The activity of the Isracard Group has been classified as a "discontinued operation" since the financial statements for the second quarter of 2018. The data of the Isracard Group are therefore not presented in most of the detailed information below, including restatement of comparative periods (except where otherwise noted). For further details, see Note 1G to the Financial Statements.

This Report on Risks is published within the Annual Report of Bank Hapoalim B.M., and contains extensive information regarding the management of risks and capital. This report should be perused in conjunction with the financial statements.

Sincerely yours,

Oded Eran	**Ari Pinto**	**Amir Bachar**
Chairman of the Board of Directors	President and Chief Executive Officer	Senior Deputy Managing Director Chief Risk Officer

Tel Aviv, March 17, 2019

A. Introduction

A.1. Forward-looking information

Most of the information in this report that does not refer to historical facts (even if it is based on processing of historical data) constitutes forward-looking information, as defined in the Securities Law, 1968. The actual results of the Bank may differ materially from those included in forward-looking information, including, among other factors, as a result of changes in capital markets in Israel and globally, macro-economic changes, changes in geopolitical conditions, regulatory changes, accounting changes, changes in taxation rules, and other changes not under the Bank's control, which may lead to the failure of estimates to materialize and/or to changes in the Bank's business plans. Forward-looking information is marked by words or phrases such as "forecast," "plan," "objective," "risk estimate," "scenario," "stress scenario," "risk assessment," "correlation," "distribution," "we believe," "expect," "predict," "estimate," "intends," "plans," "aims," "may change," "should," "can," "will," or similar expressions. Such forward-looking expressions involve risk and uncertainty, because they are based on management's estimates regarding future events, which include changes in the following parameters, among others: economic conditions, public tastes, interest rates in Israel and overseas, inflation rates, new legislation and regulation in the area of banking and the capital market, exposure to financial risks, the financial stability of borrowers, the behavior of competitors, aspects related to the Bank's image, technological developments, manpower-related matters, and other areas that affect the activity of the Bank and the environment in which it operates, the materialization of which is uncertain by nature. This information reflects the Bank's current viewpoint with regard to future events, which is based on estimates, and is therefore subject to risks and uncertainty, as well as to the possibility that expected events or developments may not materialize at all or may only partially materialize, or even that actual developments may be the opposite of expectations.

The information presented below is based, among other things, on information known to the Bank and based, among other things, on publications by various entities, such as the Central Bureau of Statistics, the Ministry of Finance, the Bank of Israel, the Ministry of Housing, and other entities that publish data and estimates regarding the Israeli and global capital markets.

A.2. Disclosure declaration

Pursuant to the instructions of the Bank of Israel, the disclosure declarations in the Annual Report of the Bank are also valid for the Report on Risks: Pillar 3 Disclosure and Additional Information Regarding Risks. Within the discussions of the Annual Report of the Bank, the Board of Directors of the Bank approved the publication of the Report on Risks: Pillar 3 Disclosure and Additional Information Regarding Risks as at December 31, 2018.

B. Principal supervisory ratios, risk-management review, and weighted risk-adjusted assets

B.1. Principal supervisory ratios

Table B-1: Principal supervisory ratios

	On a consolidated basis, as at				
	December 31, 2018	September 30, 2018	June 30, 2018	March 31, 2018	December 31, 2017
	NIS millions				
Available capital					
Common equity Tier 1 capital	**38,004**	38,112	37,178	36,637	36,582
Common equity Tier 1 capital before effect of transitional directives[1]	**37,547**	37,617	36,645	36,065	35,843
Tier 1 capital	**38,981**	39,089	38,155	37,614	37,803
Tier 1 capital before effect of transitional directives[1]	**37,547**	37,617	36,645	36,065	35,843
Total capital	**49,023**	49,723	48,771	46,630	47,531
Total capital before effect of transitional directives[1]	**41,466**	41,483	40,479	39,863	39,553
Risk-weighted assets					
Total risk-weighted assets (RWA)	**340,597**	336,678	333,206	331,539	324,772
Total risk-weighted assets (RWA) before effect of transitional directives[1]	**341,236**	337,370	333,951	332,337	325,616
Capital-adequacy ratios according to the directives of the Banking Supervision Department					
Common equity Tier 1 capital ratio	**11.16%**	11.32%	11.16%	11.05%	11.26%
Common equity Tier 1 capital ratio before effect of transitional directives[1]	**11.00%**	11.15%	10.97%	10.85%	11.01%
Tier 1 capital ratio	**11.44%**	11.61%	11.45%	11.35%	11.64%
Tier 1 capital ratio before effect of transitional directives[1]	**11.00%**	11.15%	10.97%	10.85%	11.01%
Total capital ratio	**14.39%**	14.77%	14.64%	14.06%	14.64%
Total capital ratio before effect of transitional directives[1]	**12.15%**	12.30%	12.12%	11.99%	12.15%
Common equity Tier 1 capital ratio required by the Banking Supervision Department[2]	**10.24%**	10.24%	10.23%	10.23%	10.23%
Available common equity Tier 1 capital ratio beyond the requirement of the Banking Supervision Department[2]	**0.92%**	1.08%	0.93%	0.82%	1.03%
Leverage ratios according to the directives of the Banking Supervision Department					
Total exposures	**518,980**	512,146	516,190	509,845	513,037
Total exposures before effect of transitional directives[1]	**519,236**	512,423	516,488	510,164	513,370
Leverage ratio	**7.51%**	7.63%	7.39%	7.38%	7.37%
Leverage ratio before effect of transitional directives[1]	**7.23%**	7.34%	7.10%	7.07%	6.98%

(1) Before the effect of the transitional directives, including the effect of the adoption of US GAAP on employee benefits, and before the effect of Efficiency Plan Adjustments.

(2) Including a capital requirement at a rate representing 1% of the balance of housing loans at the dates of the financial statements.

Table B-1: Principal supervisory ratios (continued)

	For the three months ended				
	December 31, 2018	September 30, 2018	June 30, 2018	March 31, 2018	December 31, 2017
Liquidity coverage ratio according to the directives of the Banking Supervision Department					
Total high-quality liquid assets	**106,375**	109,043	110,310	108,529	111,047
Total net cash outflows	**88,515**	89,726	89,479	91,418	90,712
Liquidity coverage ratio (in %)	**120%**	122%	123%	119%	122%

B.2. Risk assessment and management

The Bank performs comprehensive examinations to assess the risks to which it is exposed and to determine the materiality of such risks. Within the ICAAP (the Internal Capital Adequacy Assessment Process), the Bank defined the following risks as material risks: credit risk, concentration risk, market risk, investment risk, operational risk (including IT risk and cyber risk), counterparty risk, interest-rate risk in the banking book, liquidity risk, reputational risk, strategic and competitive risk, regulatory risk, and compliance risk. Other risks to which the Bank is exposed are handled directly as part of the management of its business: legal risk, economic risk, and environmental risk.

The risk-management strategy of the Bank Group is designed to support the achievement of the strategic objectives of the Group as a whole, while identifying and quantifying risks, establishing risk ownership, and maximizing business value, taking into consideration costs in terms of risk, by every responsible function at all levels of the organization.

Risk management at the Bank is based on a uniform methodology, from a comprehensive perspective, adapted to regulatory requirements, with the aim of supporting informed risk-taking in order to maximize the Group's profitability at a risk level aligned with its risk appetite.

The Bank actively takes risks, as allowed within its risk appetite and risk tolerance. Risks are taken while examining the adequacy of the benefit in business terms. Various banking activities also require the acceptance of a certain degree of risk, even if they are not necessarily profitable in themselves. Unacceptable risks are risks at a level that exceeds the maximum risk tolerance, as defined by the Board of Directors of the Bank, or risks that may impair the strategic position of the Bank to the extent of disruption of the successful continuation of its core activity.

In quantifying risk, the Bank generally endeavors to aggregate risks at the level of the Group as a whole. Accordingly, risk quantification and measurement are performed consistently at all of the legal and organizational entities in the Bank Group, to the extent possible. The Bank deviates from this principle when it is not feasible, or when the effort involved is disproportionate and therefore unfeasible from an economic perspective. Risk quantification is based on appropriate, accepted methods and models. To the extent possible, a range of tools or measurement methods are used, including expert assessments, in order to examine exposure from different perspectives.

B.2.a. Risk management system structure and organization

Risk management is performed based on a global view of the Bank's activity in Israel and of activity at the Bank's branches abroad, with due attention to the activity of subsidiaries with exposure significant for the Group. The subsidiaries are instructed to manage risks based on the risk strategy and policy of the Group, with adjustments according to the circumstances, which are reported to the parent company. Risks are managed separately by each company in the Bank Group, according to policy formulated by each company's board of directors. The Bank manages the various risks while using hedges for some risks. The Supervisor of Banks has set forth guidelines concerning risk management in the Proper Conduct of Banking Business Directives. The directives detail the requirements of the Supervisor for the management of the various risks to which a banking corporation is exposed, and stipulate fundamental principles for the management and control of risks, including suitable involvement in and thorough understanding of risk management by the board of directors of the banking corporation, the management of risks by a risk manager who is a member of the board of management, the employment of tools for the identification and measurement of risks, and the creation of means for supervision and control, including the existence of an independent risk-control function. The Bank operates in accordance with the guidelines of the Supervisor of Banks.

The approach taken with regard to control of all financial and operational risks at the Bank involves identification and assessment of the risks, and control of compliance with risk-appetite limits and with additional limits stipulated in the various internal regulations, through three lines of defense:

1. The first line of defense includes the business units within the Areas, including supporting and operational units, that create or take risks, as well as the internal control units within the Areas that provide internal control over the risk creators and risk takers. The management of the business line bears the primary responsibility for routine risk management, aimed at managing risks while striving to achieve strategic goals and business objectives, within the established risk appetite and in accordance with the internal risk regulations and regulatory directives. Controls in the first line of defense are formalized in working procedures.
2. The second line of defense consists of the control units at the Risk Management Area, which is independent of the business Areas. This line is also responsible for presenting an overview of risks; formulating methodologies for risk assessment and for economic capital allocation; independent risk assessment; analyzing the congruence of products and activities with the risk appetite and risk capacity limits established by the Board of Directors; and validating models. The second line of defense contains additional independent control functions, such as accountancy, legal counsel units, the secretariat of the Bank, and human resources.
3. The third line of defense consists of Internal Audit, which operates independently and objectively. Its goals include assisting the organization in achieving its goals through supervision and through ensuring that the instructions of the Board of Management and of the Board of Directors are implemented, and making recommendations for the reduction of risks through improved controls.

The Board of Directors of the Bank is responsible for delineating the overarching risk strategy and supervising the risk-management framework of the Group, directly or through the Risk Management and Control Committee. Main duties of the Board of Directors in the area of risk management:

- Establishing the risk appetite and risk capacity framework of the Group.
- Approving a risk-management policy consistent with the risk-appetite framework, including the establishment of risk limits in the various areas of activity and main risk areas.
- Approving the control concept framework for the Group and ensuring that it meets risk-management needs.

- Providing clear guidance to senior management with regard to risk management, based on the recommendations of the Board of Management Risk Management Committee, headed by the CEO, and ensuring that senior management takes the necessary actions in order to identify, measure, monitor, and control risks.
- Approving methodologies for risk assessment and control, and for the allocation of economic capital in respect of risks.
- Supervising and monitoring the implementation of the established risk-management policy; examining the actual risk profile, including at the level of the Group; and examining the processes and actions that the Bank must apply in order to comply with all regulatory directives concerning risk management.

Board of Directors' Committee on Risk Management and Control – The committee's mission is to assist the plenum of the Board of Directors in formulating the Bank's risk-management policy, including establishing risk limits in the various areas of activity, examining the Bank's risk profile, monitoring the implementation of the established risk-management policy, and examining the processes and actions to be implemented by the Bank in order to comply with all regulatory directives concerning risk management. The Board of Directors' Committee on Risk Management and Control and the plenum of the Board of Directors receive reports on risks and on the execution of approved policies at least once each quarter.

US Risk Management Subcommittee – The committee's mission is to supervise risk-management policy in the Bank's activity in the United States. The subcommittee examines the risk-management policy of the Bank's activity in the United States, and ascertains that the Bank's activity in the United States is conducted within the bounds of the risk-management policy that has been established.

Additional committees of the Board of Directors are engaged in matters related to risk management, most notably the Audit Committee and the Corporate Governance and Stakeholders Committee.

The Board of Management of the Bank, including the managements of the Areas, is responsible for formulating, instilling, and implementing the risk-management framework of the Group, directly or through committees acting on its behalf. Main duties of the Board of Management in the area of risk management:

- Designing a risk-management policy consistent with the risk-appetite framework established by the Board of Directors, including risk limits in the various areas of activity and key risk areas, and submitting this policy to the Board of Directors for approval.
- Establishing internal regulations and risk limits aligned with the policy, appropriate work methods for risk assessment, and decision-making processes based on an analysis of return/business benefit and risk, and receiving the appropriate reports, while ensuring compliance with risk-management policy objectives.
- Ensuring the existence of an internal process for capital assessment and for setting capital targets consistent with the risk profile of the corporation and with its control environment.
- Ensuring the existence of adequate resources for risk management at the corporation, including a framework of internal controls, and the existence of independent, effective, comprehensive control and reporting systems for risks.

The Board of Management Committee on Risk Management and Compliance, headed by the CEO – Responsible for designing the Bank's risk-management policy, risk limits, and reporting and control procedures, and for examining the Bank's overall risk profile and the interactions among the various risk types and factors.

Additional committees of the Board of Management operate in specific areas of risk, subject to the risk policies and limits established by the Board of Directors and the Board Committees. Committees have also been established that convene under certain conditions, including the Financial Crises Committee and the Banking Emergency Committee.

The Chief Risk Officer (CRO) and the member of the Board of Management responsible for the Risk Management Area is Dr. A. Bachar.
Financial risks are managed by designated members of the Board of Management and under their responsibility.
The principal members of the Board of Management responsible for managing credit risks are the Head of Corporate Banking, Mr. T. Cohen, and the Head of Retail Banking, Mr. R. Stein.
The member of the Board of Management responsible for managing market, investment, and liquidity risks and the Head of Financial Markets and International Banking is Mr. Y. Antebi.
Legal risk is managed by Attorney Y. Almog, Chief Legal Advisor.
Technological risk, including cyber risk, is managed by Ms. E. Ben-Zeev, Head of Information Technology.
Operational risk, excluding legal risk and technological risk, is managed by each member of the Board of Management in the area of activity for which he or she is responsible.

Risk Management Area – The activities and responsibilities of the Area are consistent with Proper Conduct of Banking Business Directive 310. The main objectives of the Area are: to instill an advanced culture of risk management and monitoring at the Bank Group, supporting informed risk-taking, with the aim of maximizing the profitability of the Group at a risk level aligned with its risk appetite; to establish risk-management and compliance policies at the level of the Group, in line with the goals of the Group and with the requirements of the Basel Committee and of relevant regulation; and to examine and monitor the overall risk profile of the Bank and its congruence with the risk appetite set by the Board of Directors. Towards that end, the Area develops and implements comprehensive quantitative risk-assessment methodologies and models, used to calculate economic capital, among other matters.
The Area ensures the existence and quality of the key risk-management processes of the Group: identification and assessment of risks, establishment of risk capacity and risk appetite limits, establishment of control mechanisms, monitoring of risks, and reporting. The Area leads and coordinates the ICAAP (the annual Internal Capital Adequacy Assessment Process, taking risks into account) and participates in capital management. The Area comprises four units, headed by the manager of the Area, who has the rank of a Member of Management: (1) the Credit Risk Management Unit, (2) the Operational and Market Risk Management Unit, (3) the Chief Compliance Officer and Securities Enforcement Unit, and (4) the Risk Integration Unit.
In general, reports of the Risk Management Area submitted to the Board of Directors' Committee on Risk Management and Control for discussion are also submitted to the plenum, as a written report or for discussion, as relevant. Pursuant to the policy of the Bank, the risk-reporting system has been established in a manner that allows effective communication both horizontally within the Group and vertically to higher levels of the management chain. The purpose of the reports is to escalate sensitive issues or weaknesses with the potential to cause risk; the reports are performed both on an individual basis and cumulatively, up to the level of the Group as a whole. The reporting system includes the presentation of weaknesses or limitations in risk estimates, as well as significant assumptions on which the estimates are based, and includes routine reports and ad-hoc reports according to need.

The Risk Management Area also operates several committees, headed by the Chief Risk Officer:
Board of Management Committee on Credit Policy Steering – The committee formulates the credit policy of the Bank.
Board of Management Committee on Credit Review – The committee discusses credit review reports prepared for major borrowers of Bank Hapoalim and for risk-based samples of the overall credit portfolio of the Bank, and examines the reliability of the credit rating and the appropriateness of the classifications and allowances of the Group.

Board of Management Committee on Debt Classification and Determination of the Allowance for Credit Losses – The committee is engaged in formulating methodology for the collective allowance, formulating policy for classifications and individual allowances, classifying credit, and determining individual allowances for credit losses, subject to the hierarchy of authority.

Validation Committee – The committee is responsible for monitoring the status of progress on the plan for validation and improvement of the models in use, approval of validation studies performed, and monitoring and approval of the set of material models in use.

Chart B-2: Risk and capital management governance diagram of the Bank

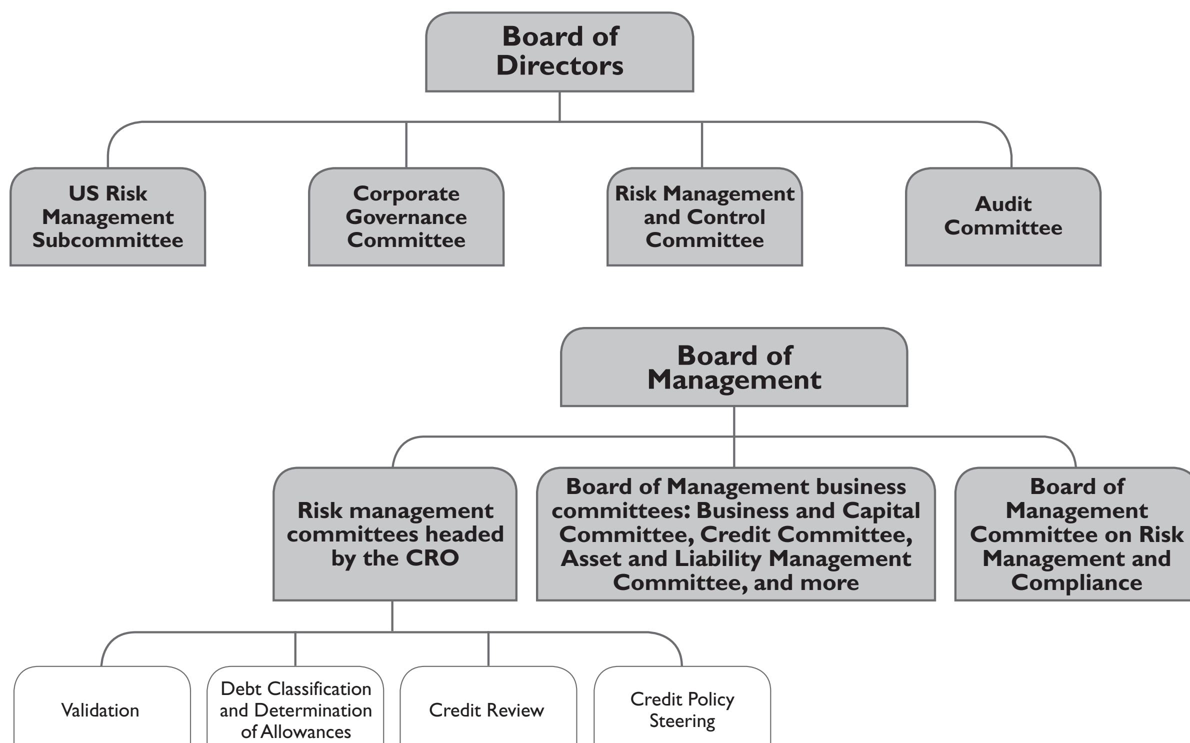
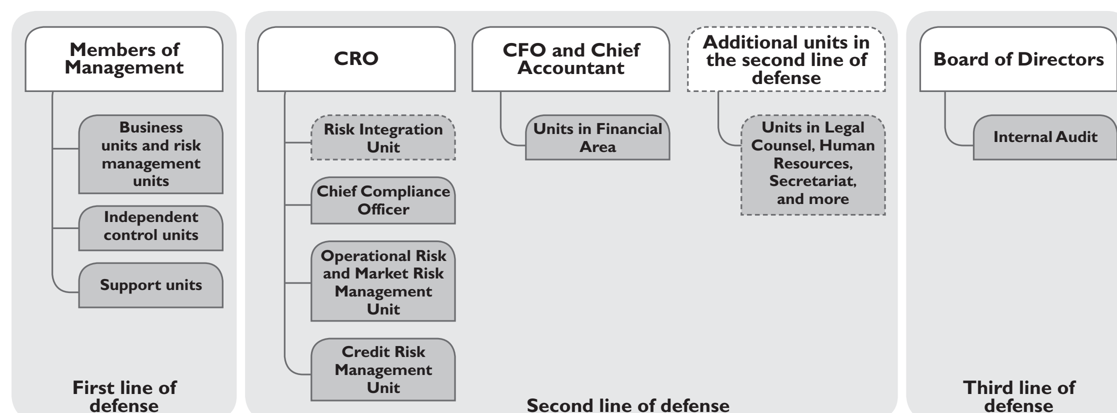


Chart B-3: Risk management organizational structure



B.3. Risk-management culture

The Group develops and maintains a risk-management culture that aids awareness of risk and appropriate behavior and judgment in connection with risk taking in the context of corporate governance, supports effective risk management, promotes appropriate risk taking, and ensures that emerging risks or risk-taking activities are identified, assessed, escalated, and addressed in a timely manner.

The risk-management culture instilled at the Bank Group emphasizes the importance of: (1) achieving the proper balance between compensation and risk, subject to the risk appetite; (2) an effective system of controls congruent with the scale and complexity of the Bank; (3) the ability to challenge the quality of risk models, the level of accuracy of the data, the ability of the available tools to measure risks correctly, and the justifications for taking risks; (4) monitoring violation of limits and divergence from established policies, and application of proportional disciplinary proceedings, as necessary; (5) cultivating integrity, with a focus on fair service to customers.

The material principles of the Bank's risk-management culture are also expressed in the implementation of the following guidelines:

- The members of the Board of Directors and senior management delineate the core values of the Bank and the expectations for its risk-management culture, and their conduct reflects the values that have been adopted: integrity, and rapidly addressing any instances of noncompliance that come to light.
- The members of the Board of Directors and Board of Management develop and apply an effective framework of risk appetite, backed by a clear declaration of risk appetite, as detailed above, which is the cornerstone of the Bank's risk-management strategy and is integrated with its overall business strategy.

Risk appetite: Risk appetite at the Bank constitutes an effective framework for risk management and a key tool linking the organization's strategy, capital allocation, and risk management. The risk-appetite document declares the risk appetite of the Bank and of the Group. The Board of Directors establishes the risk-appetite framework, taking into consideration the recommendations of the Chief Executive Officer, the Chief Risk Officer, and the Chief Financial Officer. The risk appetite is translated into targets and limits for the business lines. The risk-appetite document also establishes the roles and responsibilities of the Board of Directors and senior management in formulating the risk-appetite statement. The risk-appetite framework includes policies, processes, controls, and systems used to implement, communicate, and supervise risk appetite.

The risk-appetite framework includes a statement of risk appetite and risk capacity, risk limits, and descriptions of the roles and responsibilities of those charged with the implementation and control of the risk-appetite framework. The risk-appetite framework refers to the material risks to the Bank, and establishes the risk profile in alignment with the Bank's business strategy and risk capacity. An effective risk-appetite framework provides a shared structure and means for senior management and the Board of Directors to communicate, understand, and evaluate the level of risk that they are willing to accept. The framework explicitly defines the boundaries within which the Board of Management is expected to operate in order to realize the business strategy of the Bank.

The framework includes the following main components:

- Risk-appetite statement: Written formulation of the extent and types of aggregate risk that the Bank is interested in bearing in order to achieve its business objectives, including qualitative reports as well as quantitative metrics of profits, capital, risk indicators, liquidity, and other relevant means, as necessary, including:
    - Risk capacity: The maximum level of risk that the Bank is able to sustain without violating capital limits relevant to stress tests, including from the perspective of shareholders and customers. Compliance with the risk capacity shall be examined, among other matters, by applying stress tests designed to estimate the impact on the Bank's profit and capital adequacy as a result of the materialization of a stress scenario.

  - Risk appetite: The maximum total aggregate risk that the banking corporation is willing to bear, within its defined risk capacity, in order to achieve its business objectives in accordance with the strategic plan, under various constraints (such as sources of capital and liquidity, regulatory requirements, risk/return characteristics, etc.).
  - Risk limits: Quantitative indicators that give practical expression to the aggregate risk-appetite statement of the Bank.
- Remuneration: Documents of principles and standards for remuneration practices are aimed at ensuring effective remuneration management; correlation between remuneration, cautious risk taking, and effective supervision; and involvement of stakeholders in remuneration. The remuneration of employees in general, and of senior executives in particular, takes into consideration the risks taken by the employee on behalf of the Bank, and the employee's performance in terms of fulfillment of the risk policy, compliance, and other important policy rules of the Group. The Risk Management Area is involved in establishing remuneration policies and incentives in a manner that encourages performance and talent management, and reinforces the desired risk-management behavior (see the section on remuneration of employees).
- Responsibility: Risk governance is aimed at achieving full clarity regarding risk ownership, at all levels and in all processes.
- Effective communication and criticism: The risk-management culture of the Group promotes an environment of open communication and effective criticism, and encourages an atmosphere of open, constructive involvement.
- An orderly system of internal regulations of the Bank, including limits, authorizations, and escalation processes supporting risk management. Appropriate procedures exist for anonymous reports of suspicions, in order to support effective compliance with the risk-management framework.
- The code of ethics and conduct of the Bank encompasses standards, morals, colleague relationships, relationships with customers and suppliers, contribution to the community, and social and environmental responsibility. The code clarifies in the ways in which these commitments and values are reflected on the behavioral level during the Bank's routine work, so that alongside its aspiration to leadership and a thriving business, the Bank's actions are grounded in a commitment to morals and values. The code is updated from time to time, and related issues are formalized in designated guidelines.

The following risk management policy documents establish, among other matters, corporate governance, including the duties and responsibilities of the Board of Directors, the Chief Risk Officer, and the risk-management function; an independent evaluation of the corporate-governance framework for risk management; and the status, resources, authority, and independence of the risk management and internal audit functions, and their reports to the committees and to the Board of Directors.

- Bank Hapoalim Group risk appetite document;
- Bank Hapoalim Group risk management policy document;
- Bank Hapoalim Group credit risk management policy document;
- Bank Hapoalim Group treasury risk management policy document;
- Bank Hapoalim Group operational risk management policy document;
- Bank Hapoalim Group control concept policy document;
- Bank Hapoalim Group new product/activity launch policy document;
- Bank Hapoalim Group model risk management policy document;
- Bank Hapoalim Group compliance policy document;
- Bank Hapoalim Group counterparty risk management policy document;
- Bank Hapoalim Group digital banking risk management policy document;
- Bank Hapoalim Group reputational risk management policy document;

- Bank Hapoalim Group cyber risk management policy document;
- Charter of the Risk Management Area;
- Charters of the committees of the Board of Directors and committees of the Board of Management.

The structure and organization of the risk system and the risk-management culture described in this section are applicable to all types of risks and to all units of the Bank. Each type of risk is addressed further, separately, as relevant, later in this report.

B.4. Stress scenarios

In order to understand the possible consequences of various shocks for the financial robustness of the Bank, both given the existing balance sheet and upon the materialization of work plans and other business intentions, a process of stress testing is carried out. Three types of scenarios are examined at the Bank for this purpose: general systemic scenarios and reverse scenarios are applied to the entire Bank Hapoalim Group, while single-factor scenarios are applied at the level of the sector, transaction, borrower, or portfolio, in certain cases, according to predefined thresholds. The Bank adapts the range and characteristics of the scenarios to financial, political, and environmental developments in Israel and globally. In addition, the Bank implements the directives of the Bank of Israel and applies the uniform stress test established by the Banking Supervision Department, when required.

Goals of analysis of stress scenarios:

- Identification of risk concentrations and potential weaknesses in the Bank's portfolio;
- Examination of the effect of strategic decisions of the Bank;
- Integration in the planning process and examination of the effects of the business plan on potential exposures;
- Examination of the financial robustness of the Bank and evaluation of the potential damage that may be caused by extreme events of various types;
- Analysis of the sensitivity of the Bank to shocks or exceptional but possible events;
- Assessment of the materiality of the various risks;
- Examination of the Bank's compliance with its risk appetite and risk capacity, and breakdown of risk appetite by Area;
- Support for the business units in understanding the risk map of the various areas of activity and sectors;
- Support for the ICAAP and for the formulation of contingency plans in order to minimize the damage of extreme events.

Some of the scenarios are examined daily, while others are examined on a weekly, monthly, quarterly, or annual basis, as relevant. Assumptions, methodology, and results are discussed and approved by the Stress Scenarios and Risk Concentrations Committee and in meetings of the Board of Management and committees of the Board of Directors.

Capital management takes the results of various stress scenarios into consideration, in several ways: first, the capital target of the Bank is determined in view of the risk capacity, which establishes the minimum capital adequacy that the Bank is willing to reach in the event of a stress scenario. Second, capital planning includes contingency plans which the Bank can activate if a stress scenario materializes, in order to improve its capital adequacy. Stress scenarios are tested for each planning year, given the capital targets and expected capital ratio, in order to ascertain that the capital planning ensures compliance with the risk capacity throughout the years of the plan. The Bank also examines the effect of a moderate stress scenario, primarily consisting of changes in the financial markets, including changes in interest rates, spreads, exchange rates, and more, on the capital-adequacy ratio, in order to measure and limit the potential erosion of the capital-adequacy ratio. In liquidity management, the Bank examines internal and regulatory liquidity scenarios.

B.5. Severity of risk factors

Pursuant to the directive of the Bank of Israel, the principal risk factors to which the Group is exposed have been mapped. The risk factors and the Board of Management's estimates regarding the severity of the risk of each factor are listed in the following table. The scale for levels of severity of the risk factors is determined with reference to the risk appetite defined by the Bank. This scale consists of five levels of severity for each risk factor. Quantitative metrics have been established for three of the levels (low, medium, and high):

- **Low severity level –** The damage to annual profit due to an extreme event would be smaller than the average annual profit before tax in the ordinary course of business; in other words, an extreme event would not cause the Bank to move to a loss.
- **Medium severity level –** The damage to annual profit due to an extreme event would be larger than the average annual profit before tax in the ordinary course of business, and would therefore cause the Bank to move to a loss in at least one of the years of occurrence of the event, and would cause a decrease in the Tier 1 capital ratio; however, the capital ratio would not fall below the risk capacity that has been established (6.5%).
- **High severity level –** The damage to profit due to an extreme event would cause the Tier 1 capital ratio to fall below the risk capacity of the Bank.

In order to quantify the effect of the risk factors on the Bank's profit and capital ratio, systemic extreme scenarios and single risk factor scenarios were examined for most of the risk factors, and the scenario with the more severe effect was used in the risk-factor table. Note that this quantification refers to the effect on the capital of the Bank. Possible scenarios may involve a decrease in profit, or losses, with a non-negligible effect on the profitability of the Bank; however, the effect of these scenarios on capital adequacy is low, and they are therefore classified at a low level of severity. In addition, when the team of experts estimates that the quantitative indicators do not sufficiently express the severity of the risk factor, or when it is not possible to determine the risk level of a particular risk factor using reliable quantitative methods, the opinion of the team of experts is taken into consideration.

Each risk factor listed in the table below was tested in its own right, under an assumption of independence of each risk factor relative to the other risk factors listed in the table. However, for the risk factors "condition of the global economy" and "condition of the Israeli economy" in the table, systemic scenarios were tested to estimate the effect on profit and on the capital ratio of the combination of a number of risk factors. It is emphasized that the risk scenarios simulate a situation in which unexpected damages materialize beyond the expected level of damage events in the regular course of the Group's business.

The Bank also assesses the level of risk using another method, based on expert evaluations of the inherent risk level, the quality of risk management, the effectiveness of controls, and the residual risk. The inherent risk is the aggregate risk inherent in the activity in which the Bank engages, and is defined as the potential loss from this activity. Inherent risk is evaluated from a forward-looking perspective as well as in view of the past, but without taking management and control processes into consideration. In order to estimate the residual risk, taking into account management and control processes, evaluations by content experts from the second line of defense were added to the model, addressing the quality of risk management and the effectiveness of controls.

The combination of estimates using the two methods to obtain an overall assessment of residual risk, presented in the table below on a scale of five levels of severity, was performed as an expert evaluation, reflecting the input of the experts in the various areas, and is subject to all of the qualifications noted with respect to forward-looking information.

Table B-4: Severity of risk factors

	Risk factor	Risk effect
Financial risks		
1.	Credit risk (including counterparty risk)	Medium
1.1.	Risk in respect of the quality of borrowers and/or collateral	Medium
1.2.	Risk in respect of sectoral concentration	Medium
1.3.	Risk in respect of concentration of borrowers/borrower groups	Medium
2.	Market risk	Low-Medium
2.1.	Interest-rate risk	Low-Medium
2.2.	Inflation risk/exchange-rate risk	Low
2.3.	Share price and credit spread risk	Low-Medium
3.	Liquidity risk	Low-Medium
Operational and legal risks		
4.	Operational risk	Low-Medium
4.1.	Of which: cyber risk	Medium
4.2.	Of which: IT risk	Low-Medium
5.	Legal risk	Low
Other risks		
6.	Reputational risk	Low-Medium
7.	Strategic and competitive risk	Medium
8.	Regulatory and legislative risk	Medium
9.	Economic risk – condition of the Israeli economy	Medium
10.	Economic risk – condition of the global economy	Medium
11.	Compliance risk*	Medium

* Compliance risk also includes risks arising from the investigations by United States authorities, as noted in Notes 25D and 25E to the Financial Statements.

B.6. Top and emerging risks

Based on the recommendations of the FSB (Financial Stability Board), a top risk is defined as a development currently occurring in the business environment of the Bank that may adversely affect the Bank's results over the course of the coming year. By contrast, with respect to an emerging risk, there is greater uncertainty regarding the timing of materialization of the risk as an occurrence with a material effect on the strategy of the Bank.

Risk management at the Bank Group is described extensively later in this report.

The Board of Management and Board of Directors of the Bank discussed the effect of the top and emerging risks described below on the Bank; from time to time, they examine the need to adjust business strategy to such developments.

- **Compliance risk:** Pursuant to Proper Conduct of Banking Business Directive 308, compliance risk also includes risks related to the fairness of the Bank towards its customers, conflicts of interest, the prohibition of money laundering and financing of terrorism, provision of advice to customers, protection of privacy (excluding information-technology aspects), taxation aspects relevant to products or services for customers, or directives of a similar nature.

  The materialization of this risk globally is reflected in the continuing investigations of banks around the world, and the fines imposed on them in connection with the violation of laws or regulations, such as in the areas of assisting tax evasion, the prevention of terrorism financing, money laundering, and investigations of corruption. The Bank Group's business with American customers and the issue of FIFA are under investigation by United States government agencies. The Bank estimates that the aggregate total to be paid by the Bank Group in connection with the investigation of the Bank Group's business with American customers is likely to be significantly higher than the amount of the existing provision in the financial statements. Very significant fines may adversely affect the results of the Bank. At this time, it appears that a resolution or resolutions with the United States Department of Justice regarding this matter may be in the form of a deferred prosecution agreement or a plea agreement. The type of resolution, if attained, may also affect the Bank, in that a severe resolution may cause damage to the Bank's business. For details regarding the investigations of the United States authorities, see Note 25D and 25E to the Financial Statements.
- **Macro-economic environment:** The activity of the Bank is dependent on the business environment, in Israel and globally. The condition of the global economy; significant changes in monetary policies and interest-rate curves; market volatility; changes in prices of financial assets in Israel and worldwide, and in real-estate prices; and the economic, political, and security situation in Israel and in the region have the potential to affect the activity of the Bank. The Bank's multi-annual strategic plan includes certain assumptions regarding the macro-economic environment, taking into consideration the existing risks in the global and Israeli economy, and balances risk and return considerations.
- **Regulatory environment in Israel and overseas:** International regulatory reforms have implications for the business of the Bank, in Israel and globally. In Israel, several regulatory initiatives have been formulated over the last few years, with the primary aim of increasing competition in the banking system in Israel; several additional regulatory initiatives are in the process of being generated. The regulatory initiatives and trends, and specifically the mandatory separation of the Bank from its credit-card companies and the significant changes in this area of activity, as well as the mobility of bank accounts and open API, may affect the banking system in general and the Bank in particular. At this stage, it is too early to estimate and assess the effect thereof on the Bank. For details regarding the Law for Increasing Competition and Reducing Concentration in the Banking Market in Israel, 2017, see Note 35 to the Financial Statements.

- **Information security and cyber incident risk:** Increasing cyber threats to financial institutions have led to the channeling of resources in the banking industry to cope with this risk. The Bank applies frequent controls in all channels in order to prevent harmful penetration, activation of malicious software, and information leakage. The lines of defense consist of a large number of advanced information-security systems, deployed internally in the Bank's network as well as externally as a perimeter defense.
- **Competitive-strategic risk:** New competition from technological entities, new technologies, changes in customer behavior, and new business models in the financial sphere have the power to significantly affect the banking system, in Israel and worldwide, alongside the other regulatory and competitive changes in this field. The Bank works to update its strategic plan, while taking action in the areas of innovation, technology, the structure of its operations, and more, in order to respond to all such threats.

For details regarding legal proceedings, see Note 25 to the Financial Statements.

B.7. Review of weighted risk-adjusted assets

Table B-5: Review of weighted risk-adjusted assets

		Risk-weighted assets		Minimum capital requirements*
		December 31, 2018	September 30, 2018	**December 31, 2018**
		NIS millions		
1	Credit risk (standardized approach)**	**292,367**	287,830	**40,171**
6	Counterparty credit risk (standardized approach)	**6,949**	6,321	**955**
10	Credit valuation adjustment (CVA)	**3,327**	3,942	**457**
15	Settlement risk	**-**	-	**-**
16	Securitization exposures (standardized approach)	**143**	91	**20**
25	Amounts below deduction thresholds (subject to 250% risk weight)	**10,114**	10,398	**1,389**
	Total credit risk	**312,900**	308,582	**42,992**
20	Market risk (standardized approach)	**3,429**	3,913	**471**
24	Operational risk	**24,268**	24,183	**3,334**
27	Total	**340,597**	336,678	**46,797**

* A capital requirement is added to this requirement at a rate representing 1% of the balance of housing loans at the reporting date.

** Credit risk does not include counterparty credit risk, adjustment in respect of credit risk, settlement risk, securitization exposures, and amounts lower than the deduction thresholds.

For details regarding the connections between the financial statements and supervisory exposures, see Addendum A, below.

Table B-6: Change in risk-weighted assets during the period

	For the year ended December 31, 2018			
	Credit risk	Market risk	Operational risk	Total risk-adjusted assets
	NIS millions			
Balance as at December 31, 2017	**295,986**	**5,114**	**23,672**	**324,772**
Changes in portfolio volume[1]	**18,874**	**(1,685)**	**596**	**17,785**
Changes in portfolio quality[2]	**262**	**-**	**-**	**262**
Changes in methodology and policy[3]	**(4,007)**	**-**	**-**	**(4,007)**
Sales[4]	**(326)**	**-**	**-**	**(326)**
Effect of changes in exchange rates	**2,111**	**-**	**-**	**2,111**
Balance as at December 31, 2018	**312,900**	**3,429**	**24,268**	**340,597**

	For the year ended December 31, 2017			
	Credit risk	Market risk	Operational risk	Total risk-adjusted assets
	NIS millions			
Balance as at December 31, 2016	290,139	4,866	23,374	318,379
Changes in portfolio volume[1]	8,373	248	298	8,919
Changes in portfolio quality[2]	(195)	-	-	(195)
Changes in methodology and policy[3]	(84)	-	-	(84)
Sales[4]	(186)	-	-	(186)
Effect of changes in exchange rates	(2,061)	-	-	(2,061)
Balance as at December 31, 2017	295,986	5,114	23,672	324,772

(1) The category "changes in portfolio volume" refers to change arising from changes in total balances, exposures, or income, as relevant, and does not include changes resulting from change in the quality of the portfolio.
(2) The category "changes in portfolio quality" mainly refers to changes in the risk weight of transactions and customers resulting from changes in credit rating or classification.
(3) The category "changes in methodology and policy" mainly refers to the effect of changes in regulatory directives (see section C2(d), "Implementation and effect of regulatory directives regarding capital measurement and adequacy," below) and changes in methodologies.
(4) The category "sales" includes the effect of sales of loans.

For additional information regarding the connections between the financial statements and supervisory exposures, see Addendum A below.

C. Capital and leverage

C.1. Composition of capital

Table C-1: Composition of supervisory capital

		December 31, 2018		December 31, 2017		References to the supervisory balance sheet
		Balance	Amounts not deducted from capital which are subject to the requirements prior to the adoption of Directive 202, in accordance with Basel 3	Balance	Amounts not deducted from capital which are subject to the requirements prior to the adoption of Directive 202, in accordance with Basel 3	
		NIS millions				
	Common equity Tier 1 capital					
	Common equity Tier 1 capital – instruments and retained earnings					
1	Ordinary share capital issued by the banking corporation and premium on ordinary shares included in common equity Tier 1 capital	**8,135**		8,124		1+2
2	Retained earnings, including dividends proposed or declared after the balance sheet date	**30,565**	**-**	28,465	1	3
3	Accumulated other comprehensive income and disclosed retained earnings	**(1,156)**	**-**	(631)	(96)	4A+4B
5	Ordinary shares issued by subsidiaries of the banking corporation which were consolidated and are held by a third party (non-controlling interests)	**40**	**-**	70	18	5
6	Common equity Tier 1 capital before supervisory adjustments and deductions	**37,584**		36,028		
	Common equity Tier 1 capital – supervisory adjustments and deductions					
10	Deferred tax assets, realization of which depends on future profitability of the banking corporation, excluding deferred tax assets arising from timing differences	**34**	**-**	30	8	6
11	Total accumulated other comprehensive income in respect of cash-flow hedges of items not presented in the balance sheet at fair value	**(1)**	**-**	(1)	-	7
14	Unrealized profits and losses resulting from changes in the fair value of liabilities due to changes in the own credit risk of the banking corporation	**4**	**-**	7	2	8
16	Investment in own ordinary shares held directly or indirectly (including commitments to purchase shares under contractual agreements)	**-**	**-**	20	5	
21	Deferred tax assets arising from timing differences in amounts exceeding 10% of common equity Tier 1 capital	**-**	**-**	2	1	
26	Additional supervisory adjustments and deductions established by the Banking Supervision Department	**(457)**	**-**	(612)	(1)	
26C	Of which: additional supervisory adjustments to common equity Tier 1 capital	**(457)**	**-**	(612)	(1)	
26C	Of which: in respect of the efficiency plan	**(457)**		(610)		
26C	Of which: in respect of wage tax	**-**	**-**	(2)	(1)	
28	Total supervisory adjustments and deductions in common equity Tier 1 capital	**(420)**	**-**	(554)	15	
29	Common equity Tier 1 capital	**38,004**		36,582		

Table C-1: Composition of supervisory capital (continued)

		December 31, 2018		December 31, 2017		References to the supervisory balance sheet
		Balance	Amounts not deducted from capital which are subject to the requirements prior to the adoption of Directive 202, in accordance with Basel 3	Balance	Amounts not deducted from capital which are subject to the requirements prior to the adoption of Directive 202, in accordance with Basel 3	
		NIS millions				
	Additional Tier 1 capital					
	Additional Tier 1 capital – instruments					
33	Additional Tier 1 capital instruments issued by the corporation, which are eligible for inclusion in supervisory capital during the transitional period	**977**		1,221		9
36	Additional Tier 1 capital before deductions	**977**		1,221		
	Additional Tier 1 capital – deductions					
43	Total deductions from additional Tier 1 capital	**-**		-		
44	Additional Tier 1 capital	**977**		1,221		
45	Tier 1 capital	**38,981**		37,803		
	Tier 2 capital					
	Tier 2 capital – instruments and provisions					
47	Tier 2 capital instruments issued by the corporation, which are eligible for inclusion in supervisory capital during the transitional period	**57**		148		9
48	Tier 2 capital instruments issued by subsidiaries of the banking corporation to third-party investors	**6,074**		5,880		
49	Of which: Tier 2 capital instruments issued by subsidiaries of the banking corporation and held by third-party investors, which are gradually deducted from Tier 2 capital	**4,251**		5,880		9
50	Collective allowances for credit losses before the effect of related tax	**3,911**		3,700		10
51	Tier 2 capital before deductions	**10,042**		9,728		
	Tier 2 capital – deductions					
57	Total supervisory adjustments to Tier 2 capital	**-**		-		
58	Tier 2 capital	**10,042**		9,728		
59	Total capital	**49,023**		47,531		

Table C-1: Composition of supervisory capital (continued)

		December 31, 2018		December 31, 2017		References to the supervisory balance sheet
		Balance/ percent	Amounts not deducted from capital which are subject to the requirements prior to the adoption of Directive 202, in accordance with Basel 3	Balance/ percent	Amounts not deducted from capital which are subject to the requirements prior to the adoption of Directive 202, in accordance with Basel 3	
		NIS millions/percent				
	Risk-weighted assets					
	Total risk-weighted assets according to the requirements prior to the adoption of Directive 202, in accordance with Basel 3	**339,973**		324,295		
	Of which: credit risk assets	**312,276**		295,509		
	Of which: market risk assets	**3,429**		5,114		
	Of which: operational risk assets	**24,268**		23,672		
60	Total risk-weighted assets	**340,597**		324,772		
	Capital ratios and capital preservation cushions					
61	Common equity Tier 1 capital	**11.16%**		11.26%		
62	Tier 1 capital	**11.44%**		11.64%		
63	Total capital	**14.39%**		14.64%		
	Minimum requirements established by the Banking Supervision Department					
69	The required minimum common equity Tier 1 capital ratio is 10%. A capital requirement at a rate representing 1% of the balance of housing loans at the dates of the financial statements was added to this ratio.	**10.24%**		10.23%		
71	The required minimum total capital ratio is 13.5%. A capital requirement at a rate representing 1% of the balance of housing loans at the dates of the financial statements was added to this ratio.	**13.74%**		13.73%		
	Amounts below the deduction threshold (before risk weighting)					
72	Investments in the capital of financial corporations which do not exceed 10% of the ordinary share capital issued by the financial corporation and which are below the deduction threshold	**1,802**		2,310		
73	Investments in the capital of financial corporations which exceed 10% of the ordinary share capital issued by the financial corporation and which are below the deduction threshold	**656**		602		
75	Deferred tax assets arising from timing differences, below the deduction threshold	**3,645**		3,658		

Table C-1: Composition of supervisory capital (continued)

		December 31, 2018		December 31, 2017		References to the supervisory balance sheet
		Balance	Amounts not deducted from capital which are subject to the requirements prior to the adoption of Directive 202, in accordance with Basel 3	Balance	Amounts not deducted from capital which are subject to the requirements prior to the adoption of Directive 202, in accordance with Basel 3	
		NIS millions				
	Ceiling for inclusion of provisions in Tier 2					
76	Provision qualifying for inclusion in Tier 2, with reference to exposures under the standardized approach, before application of the ceiling	**3,919**		3,829		
77	Ceiling for inclusion of provision in Tier 2 under the standardized approach	**3,911**		3,700		
	Capital instruments not qualifying as supervisory capital, which are subject to the transitional directives					
82	Present ceiling amount for instruments included in additional Tier 1 capital subject to the transitional directives	**977**		1,221		
83	Amount deducted from additional Tier 1 capital due to the ceiling	**887**		1,188		
84	Present ceiling amount for instruments included in Tier 2 capital subject to the transitional directives	**6,102**		7,628		
85	Amount deducted from Tier 2 capital due to the ceiling	**-**		-		

For details regarding the connection between the balance sheet and the components of supervisory capital, see Addendum A, below.

Table C-2: Statement of changes in components of supervisory capital

	For the year ended December 31, 2018				
	Common equity Tier 1 capital	Additional Tier 1 capital	Total Tier 1 capital	Tier 2 capital	Total capital
	NIS millions				
Balance as at December 31, 2017	**36,582**	**1,221**	**37,803**	**9,728**	**47,531**
Changes in capital components					
Ordinary share capital	**1**	**-**	**1**	**-**	**1**
Premium on ordinary shares	**10**	**-**	**10**	**-**	**10**
Net profit for the period attributed to shareholders of the Bank	**2,595**	**-**	**2,595**	**-**	**2,595**
Dividend	**(496)**	**-**	**(496)**	**-**	**(496)**
Effect of adoption of accounting rules concerning employee benefits, included in retained earnings*	**1**	**-**	**1**	**-**	**1**
Unrealized losses from adjustments of securities available for sale to fair value	**(673)**	**-**	**(673)**	**-**	**(673)**
Unrealized gains in respect of cash-flow hedges	**-**	**-**	**-**	**-**	**-**
Translation adjustments of autonomous affiliated units overseas	**16**	**-**	**16**	**-**	**16**
Benefit due to share-based payment transactions	**(21)**	**-**	**(21)**	**-**	**(21)**
Proceeds on shares and amounts received in consideration for options to purchase shares	**-**	**-**	**-**	**-**	**-**
Effect of adoption of accounting rules concerning employee benefits, included in other comprehensive income*	**153**	**-**	**153**	**-**	**153**
Adjustments in respect of the effect of the efficiency plan	**(153)**	**-**	**(153)**	**-**	**(153)**
Non-controlling interests in share capital of consolidated subsidiaries*	**(30)**	**-**	**(30)**	**-**	**(30)**
Other	**-**	**-**	**-**	**-**	**-**
Total change before supervisory adjustments and deductions	**1,403**	**-**	**1,403**	**-**	**1,403**

* After adjustments, as required in the transitional directives in Directive 299.

Table C-2: Statement of changes in components of supervisory capital (continued)

	For the year ended December 31, 2018				
	Common equity Tier 1 capital	Additional Tier 1 capital	Total Tier 1 capital	Tier 2 capital	Total capital
	NIS millions				
Change due to the effect of supervisory adjustments and deductions					
Goodwill and intangible assets	-	-	-	-	-
Deferred taxes, realization of which is based on the future profitability of the banking corporation*	**4**	-	**4**	-	**4**
Deferred tax assets attributed to timing differences (over 10% of common equity Tier 1 capital)*	-	-	-	-	-
Pension fund with defined benefits recorded in the balance sheet as an asset	-	-	-	-	-
Total accumulated other comprehensive income in respect of cash flows of items not presented in the balance sheet at fair value*	-	-	-	-	-
Increase in capital due to securitization exposures	-	-	-	-	-
Unrealized gains and losses resulting from changes in the fair value of liabilities due to changes in the own credit risk of the Bank*	**(3)**	-	**(3)**	-	**(3)**
Self investment in ordinary shares (held directly or indirectly)*	**(20)**	-	**(20)**	-	**(20)**
Mutual cross-holdings in ordinary shares of financial corporations	-	-	-	-	-
Investments in share capital of financial corporations, where the investment does not exceed 10% of the capital of the financial corporation	-	-	-	-	-
Investments in share capital of financial corporations, where the investment exceeds 10% of the capital of the financial corporation	-	-	-	-	-
Threshold deduction – amount in excess of 15% of common equity Tier 1 capital	-	-	-	-	-
Others	-	-	-	-	-
Total change in supervisory adjustments and deductions	**(19)**	-	**(19)**	-	**(19)**
Decrease in supervisory capital instruments	-	**(244)**	**(244)**	**(1,715)**	**(1,959)**
Capital instruments issued	-	-	-	**1,818**	**1,818**
Change in collective allowances for credit losses before the effect of related tax	-	-	-	**211**	**211**
Other	-	-	-	-	-
Balance as at December 31, 2018	**38,004**	**977**	**38,981**	**10,042**	**49,023**

* After adjustments, as required in the transitional directives in Directive 299.

Table C-2: Statement of changes in components of supervisory capital (continued)

	For the year ended December 31, 2017				
	Common equity Tier 1 capital	Additional Tier 1 capital	Total Tier 1 capital	Tier 2 capital	Total capital
	NIS millions				
Balance as at December 31, 2016	35,045	1,465	36,510	11,609	48,119
Changes in capital components					
Ordinary share capital	(1)	-	(1)	-	(1)
Premium on ordinary shares	(21)	-	(21)	-	(21)
Net profit for the period attributed to shareholders of the Bank	2,660	-	2,660	-	2,660
Dividend	(861)	-	(861)	-	(861)
Effect of adoption of accounting rules concerning employee benefits, included in retained earnings*	1	-	1	-	1
Unrealized profits from adjustments of securities available for sale to fair value	155	-	155	-	155
Unrealized gains in respect of cash-flow hedges	1	-	1	-	1
Translation adjustments of autonomous affiliated units overseas	(20)	-	(20)	-	(20)
Benefit due to share-based payment transactions	(15)	-	(15)	-	(15)
Proceeds on shares and amounts received in consideration for options to purchase shares	-	-	-	-	-
Effect of adoption of accounting rules concerning employee benefits, included in other comprehensive income*	(145)	-	(145)	-	(145)
Adjustments in respect of the effect of the efficiency plan	(152)	-	(152)	-	(152)
Non-controlling interests in share capital of consolidated subsidiaries*	(46)	-	(46)	-	(46)
Other	-	-	-	-	-
Total change before supervisory adjustments and deductions	1,556	-	1,556	-	1,556

* After adjustments, as required in the transitional directives in Directive 299.

Table C-2: Statement of changes in components of supervisory capital (continued)

	For the year ended December 31, 2017				
	Common equity Tier 1 capital	Additional Tier 1 capital	Total Tier 1 capital	Tier 2 capital	Total capital
	NIS millions				
Change due to the effect of supervisory adjustments and deductions					
Goodwill and intangible assets	-	-	-	-	-
Deferred taxes, realization of which is based on the future profitability of the banking corporation*	3	-	3	-	3
Deferred tax assets attributed to timing differences (over 10% of common equity Tier 1 capital)*	-	-	-	-	-
Pension fund with defined benefits recorded in the balance sheet as an asset	-	-	-	-	-
Total accumulated other comprehensive income in respect of cash flows of items not presented in the balance sheet at fair value*	-	-	-	-	-
Increase in capital due to securitization exposures	-	-	-	-	-
Unrealized gains and losses resulting from changes in the fair value of liabilities due to changes in the own credit risk of the Bank*	(4)	-	(4)	-	(4)
Self investment in ordinary shares (held directly or indirectly)*	20	-	20	-	20
Mutual cross-holdings in ordinary shares of financial corporations	-	-	-	-	-
Investments in share capital of financial corporations, where the investment does not exceed 10% of the capital of the financial corporation	-	-	-	-	-
Investments in share capital of financial corporations, where the investment exceeds 10% of the capital of the financial corporation	-	-	-	-	-
Threshold deduction – amount in excess of 15% of common equity Tier 1 capital	-	-	-	-	-
Others	-	-	-	-	-
Total change in supervisory adjustments and deductions	19	-	19	-	19
Decrease in supervisory capital instruments	-	(244)	(244)	(1,954)	(2,198)
Capital instruments issued	-	-	-	-	-
Change in collective allowances for credit losses before the effect of related tax	-	-	-	73	73
Other	-	-	-	-	-
Balance as at December 31, 2017	36,582	1,221	37,803	9,728	47,531

* After adjustments, as required in the transitional directives in Directive 299.

C.2. Capital adequacy

C.2.a. The Bank's approach to capital-adequacy assessment

The Bank applies the capital measurement and adequacy directives based on the Basel directives, as published by the Banking Supervision Department and as integrated into Proper Conduct of Banking Business Directives 201-211 and the file of questions and answers.

The capital measurement and adequacy directives are based on three pillars:

- Pillar 1 – Includes the manner of calculation of the supervisory minimum capital requirements in respect of credit risks, operational risk, and market risk.
- Pillar 2 – Sets forth internal processes (the ICAAP – Internal Capital Adequacy Assessment Process) to be used by banks to assess the required capital in respect of risks in aggregate, including those not covered by Pillar 1 (such as credit concentration, interest-rate risk in the banking book, liquidity risks, settlement risks, and strategic risks), as well as a review process to be performed by the Banking Supervision Department.
- Pillar 3 – Market discipline; establishes the type and extent of information to be presented in reporting to the public on the risks to which banks are exposed. This pillar requires the disclosure of both quantitative and qualitative information, in order to enable the market to estimate the extent of the bank's exposure to risk factors.

C.2.b. Capital-adequacy target

Pursuant to the circular of the Banking Supervision Department concerning minimum capital ratios, the Bank, as a banking corporation of significant importance (a banking corporation whose total balance sheet assets on a consolidated basis constitute at least 20% of the total balance sheet assets of the banking system in Israel), is required to maintain a minimum common equity Tier 1 capital ratio of 10% and a minimum total capital ratio of 13.5%. A capital requirement at a rate representing 1% of the balance of housing loans at the dates of the financial statements was added to the minimum capital ratios.

Accordingly, the minimum common equity Tier 1 capital ratio and the minimum total capital ratio of the Bank required by the Banking Supervision Department, on a consolidated basis, based on data as at December 31, 2018, stand at 10.24% and 13.74%, respectively.

Pursuant to a resolution of the Board of Directors of the Bank, the target common equity Tier 1 capital ratio is 10.75% as of December 31, 2017.

C.2.c. Planning and management of capital by the Bank

Capital planning is an annual process with a rolling planning horizon of three years. Capital management is performed routinely, as an integral part of the Bank's strategic and financial plan. Capital planning at the Bank is based on the work plan of the Bank and on regulatory directives, which are translated into risk-adjusted assets and changes in the various tiers of capital, while maintaining safety margins. Various sensitivity tests are applied within the planning of capital and capital ratios. The Bank also routinely monitors actual results as compared to planning, and the gaps between results and planning, and, as necessary, examines the actions needed in order to maintain the established capital targets. The policy of the Bank is to maintain capital adequacy at a level higher than the minimum ratio required by the Banking Supervision Department, and not lower than the level of capital adequacy required to cover the risks, as assessed in the Internal Capital Adequacy Assessment Process (ICAAP). Within the ICAAP, the Bank also examines the effect of stress scenarios on capital-adequacy ratios; accordingly, a plan is in place for a return to regulatory capital adequacy in the case of a such a stress event.

Effective capital-management ensures:

- Efficient allocation of capital during the ordinary course of business of the Bank.
- A robust capital base serving as a cushion against unexpected risks to which the Bank is exposed, supporting business strategy, and allowing compliance at all times with the regulatory minimum capital requirement. For this purpose, the Bank takes into account not only the current status of capital but also future developments in the capital base and in capital requirements.

In order to maintain a thorough and effective capital-management process at the Bank, a specialized department manages the Bank's capital, reporting to the CFO. The department oversees routine administration and control of all matters related to the management and planning of capital at the Bank. Within this role, the department's responsibilities include capital planning, control over capital adequacy and compliance with risk-adjusted asset objectives, contingency plans for extreme scenarios, and proactive capital management according to needs. For that purpose, the department is responsible for monitoring developments in regulation in connection with capital management, in Israel and globally, and advanced capital-management methods at banks worldwide. The department is also responsible for the implementation of methodologies for the measurement of economic capital and economic profitability. These methodologies are used to make decisions according to risk-adjusted returns at the various levels of management at the Bank.

Issuance of subordinated notes with a loss-absorption mechanism

The Bank issued two series of subordinated notes, in the amount of approximately NIS 1.8 billion, which constitute part of the Tier 2 capital of the Bank, in April and June 2018. For details regarding issues of bonds and subordinated notes by Hapoalim Hanpakot, see the section "Bonds and subordinated notes" in the Report of the Board of Directors and Board of Management as at December 31, 2018.

Early redemption of capital notes in Tier 1 capital

The Bank carried out full early redemption of the subordinated notes in Series B (non-tradable), the balance of which as at December 31, 2018, totaled NIS 582 million, after the date of the financial statements, in February 2019.

Buybacks by banking corporations

In June 2018, the Bank completed the execution of a share buyback plan, within which 1 million ordinary shares of the Bank were acquired for the implementation of the equity compensation plans adopted by the Bank. The acquisition plan was executed according to the rules in the guidance provided by the Israel Securities Authority regarding "safe harbor" protection in buybacks, following the approval of the plan by the Board of Directors of the Bank, and in accordance with the approval granted to the Bank by the Banking Supervision Department. For further details, see the Immediate Report of the Bank dated May 24, 2018.

In February 2019, the Banking Supervision Department issued a circular updating Proper Conduct of Banking Business Directive 332, "Buybacks by Banking Corporations," according to which banks will be able to perform buybacks of securities that they issue, subject to the fulfillment of certain conditions. Until now, the existing directive prohibited banks from performing buybacks, other than in exceptional cases, whereas the Companies Law permits buybacks, subject to fulfillment of conditions for distribution.

The circular establishes conditions under which banking corporations can perform buybacks of securities that they issue, including the following, among other matters:

- The approval of the Banking Supervision Department for the buyback, based on a buyback plan presented by the bank, is required.
- The volume of the buyback in each plan shall not exceed 3% of the issued and paid-up share capital of the banking corporation.
- The banking corporation shall act in accordance with the safe-harbor protection mechanism published by the Israel Securities Authority, to ensure that it has legal protection against allegations of use of insider information.
- The buyback offer shall not be directed to a particular group of shareholders (except in the case of a shareholder who is a qualifying customer, as defined in the directive).
- The buyback plan shall be approved by the board of directors of the bank.

C.2.d. Implementation and effect of regulatory directives regarding capital measurement and adequacy

Improving operational efficiency

In January 2016, the Banking Supervision Department issued a letter on the subject, "Improving the operational efficiency of the banking system in Israel" (the "Efficiency Directive"). Pursuant to the Efficiency Directive, the boards of directors of banking corporations shall formulate a multi-year plan to improve efficiency. Banking corporations that meet the conditions established in the directive will be granted a relief allowing them to spread the effects of the plan over a period of up to five years in a straight line, for the purposes of the calculation of capital-adequacy ratios and of the leverage ratio. In October 2016, the Board of Directors of the Bank approved an efficiency plan at an estimated cost in the amount of NIS 762 million, net of tax effect, which was allocated to capital. The effect of the costs of the efficiency plan on the ratio of common equity Tier 1 capital to risk components, estimated at approximately 0.16% as at December 31, 2018, are being allocated in equal parts over five years, beginning in 2017.

Further to the Efficiency Directive, in June 2017, the Banking Supervision Department issued a letter entitled, "Improving the operational efficiency of the banking system in Israel – efficiency in the area of real estate," which encourages banking corporations to also examine, in addition to improved efficiency in personnel expenses, the possibility of reducing real-estate and maintenance costs of headquarters and management units, including through a reexamination of the geographical location of such units (hereinafter: "Real-Estate Efficiency").

In order to encourage the implementation of a plan for Real-Estate Efficiency, the Banking Supervision Department will approve reliefs for the banks in the area of capital adequacy.

The Banking Supervision Department has extended the period for implementation of the efficiency plan until December 31, 2019.

Capital requirements in respect of debts secured by residential properties

On March 15, 2018, the Banking Supervision Department issued an update of Proper Conduct of Banking Business Directive 203 concerning debts secured by residential properties, pursuant to which loans fully secured by mortgages on residential properties at a financing rate higher than 60% would be weighted at a rate of 60%. The directive took effect on the date of its publication, and applies to loans secured by residential properties granted as of March 15, 2018. The effect of the foregoing on the common equity Tier 1 capital ratio, as at December 31, 2018, is an increase of approximately 0.02%.

Guarantees pursuant to the Sale Law

On November 13, 2018, the Banking Supervision Department issued a circular updating the rate of the credit conversion factor for guarantees securing the investments of buyers of residences granted in accordance with the Sale Law. Pursuant to the circular, in guarantees as noted above, where the residence has not yet been transferred to the homeowner, the credit conversion factor is reduced from 50% to 30%. The effect of the circular, as at December 31, 2018, on the common equity Tier 1 capital ratio is an increase of approximately 0.12%, and the effect on the total capital ratio is an increase of approximately 0.15%.

The subsidiary of the Bank in Turkey

In January 2019, a letter was received from the Bank of Israel concerning the subsidiary of the Bank in Turkey, Bank Pozitif. In the letter, the Bank of Israel stated that the activity of the Bank in Turkey exposes it to significant risks, and therefore, until the realization of the full holdings of the Bank in Bank Pozitif, the Bank is required to increase the risk weighting rates of risk-adjusted assets in respect of this activity, in the calculation of the consolidated capital ratio only, as follows:

- Beginning January 1, 2020, risk-adjusted assets in respect of the activity of Bank Pozitif will be weighted at a rate of at least 300%.
- Beginning January 1, 2021, the risk-adjusted assets will be weighted at a rate of at least 600%.

The Bank is examining possibilities for the sale of its full holdings, and in accordance with its strategic plan, has decided to gradually reduce the credit portfolio.

The effect of this instruction on the common equity Tier 1 capital ratio, based on data as at December 31, 2018, is a decrease of approximately 0.05%, under the assumption of weighting of the risk-adjusted assets at 300%, and a decrease of approximately 0.13%, under the assumption of weighting of the risk-adjusted assets at 600%.

C.2.e. Basel 3 directives

The Basel 3 directives took effect on January 1, 2014. Implementation is gradual, in accordance with the transitional directives established in Proper Conduct of Banking Business Directive 299, "Capital Measurement and Adequacy – Supervisory Capital – Transitional Directives." In accordance with the transitional directives, the supervisory adjustments and deductions from capital, as well as non-controlling interests that do not qualify for inclusion in supervisory capital, were deducted from capital gradually, at a rate of 20% per annum, from January 1, 2014 to January 1, 2018. Capital instruments that no longer qualify as supervisory capital were recognized as of January 1, 2014, up to a ceiling of 80% of their balance in the supervisory capital as at December 31, 2013; this ceiling is being lowered by an additional 10% in each subsequent year, until January 1, 2022. Accordingly, in 2017, the rate of deductions from supervisory capital was 80%, and the ceiling for instruments qualifying as supervisory capital was 50%. In 2018, the rate of deductions from supervisory capital is 100%, and the ceiling for instruments qualifying as supervisory capital is 40%.

C.3. Leverage ratio

The Bank applies Proper Conduct of Banking Business Directive 218, "Leverage Ratio" (hereinafter: the "Directive"). The Directive establishes a simple, transparent, non-risk-based leverage ratio, which serves as a complementary measurement to risk-based capital requirements, and which is designed to limit the accumulation of leverage at banking corporations.

The leverage ratio is expressed as a percentage, and is defined as the ratio of the capital measurement to the exposure measurement. Capital, for the purpose of measurement of the leverage ratio, is Tier 1 capital, as defined in Proper Conduct of Banking Business Directive 202, taking into consideration the transitional arrangements that have been established. The total exposure measurement is the total of balance sheet exposures, exposures to derivatives and to securities financing transactions, and off-balance sheet items.

Table C-3: Comparison of balance sheet assets to exposure measurement, for the purposes of the leverage ratio

	December 31, 2018	December 31, 2017
	NIS millions	
Total consolidated assets as per published financial statements	**460,926**	454,424
Adjustment for investments in banking, financial, insurance, or commercial entities that are consolidated for accounting purposes but outside the scope of regulatory consolidation	**-**	-
Adjustment for fiduciary assets recognized on the balance sheet pursuant to the Public Reporting Directives, but excluded from the leverage ratio exposure measurement	**-**	-
Adjustments for derivative financial instruments[(1)]	**333**	(1,260)
Adjustments for securities financing transactions	**-**	-
Adjustments for off-balance sheet items	**54,608**	56,945
Other adjustments.	**3,113**	2,928
Exposure for the purposes of the leverage ratio	**518,980**	513,037

(1) The data include the effects of the directive, "Capital Requirements in Respect of Exposure to Central Counterparties," which was implemented beginning January 1, 2017.

Table C-4: Leverage ratio disclosure

	December 31, 2018	December 31, 2017
	NIS millions/percent	
On-balance sheet exposures		
On-balance sheet items (excluding derivatives and securities financing transactions, but including collateral)	**452,831**	444,685
Asset amounts deducted in determining Tier 1 capital	**(34)**	(30)
Total on-balance sheet exposures (excluding derivatives and securities financing transactions)	**452,797**	444,655
Derivative exposures		
Replacement cost associated with all derivatives transactions[(1)]	**5,717**	5,922
Add-on amounts for potential future exposure associated with all derivatives transactions	**6,704**	6,438
Gross-up for collateral provided in respect of derivatives deducted from balance sheet assets pursuant to the Public Reporting Directives	**-**	-
Deductions of receivables assets for cash variation margin provided in derivatives transactions	**(1,554)**	(1,728)
Exempted central counterparty leg of client-cleared trade exposures	**-**	-
Adjusted effective notional amount of written credit derivatives	**-**	121
Adjusted effective notional offsets and add-on deductions for written credit derivatives	**-**	-
Total derivative exposures	**10,867**	10,753
Securities financing transaction exposures		
Gross securities financing transaction assets (with no recognition of netting), after adjusting for sale accounting transactions	**708**	684
Netted amounts of cash payables and cash receivables of gross securities financing transaction assets	**-**	-
Central counterparty credit risk exposure for securities financing transaction assets	**-**	-
Agent transaction exposures	**-**	-
Total securities financing transaction exposures	**708**	684
Other off-balance sheet exposures		
Off-balance sheet exposure at gross notional amount	**185,688**	173,291
Adjustments for conversion to credit equivalent amounts	**(131,080)**	(116,346)
Off-balance sheet items	**54,608**	56,945
Capital and total exposures		
Tier 1 capital*	**38,981**	37,803
Total exposures*	**518,980**	513,037
Leverage ratio		
Leverage ratio pursuant to Proper Conduct of Banking Business Directive 218	**7.51%**	7.37%
Minimum leverage ratio required by the Banking Supervision Department	**6.00%**	6.00%

* These data also include Efficiency Plan Adjustments, established based on the letter of the Banking Supervision Department of January 12, 2016, "Improvement of the operational efficiency of the banking system in Israel." The effect of the costs of the efficiency plan on the leverage ratio as at December 31, 2018, estimated at approximately 0.09%, is allocated in equal parts over five years, beginning in 2017.

(1) The data include the effects of the directive, "Capital Requirements in Respect of Exposure to Central Counterparties," which was implemented beginning January 1, 2017.

D. Credit risk

Credit risk is the risk that a borrower or debtor may default on obligations to the Bank under a credit agreement. The credit portfolio is a major component of the asset portfolio of the Bank Group; therefore, deterioration in the stability of the various borrowers may have an adverse effect on the Group's asset value and profitability.
Activities that create credit risk include:

- **Balance sheet exposures –** Present liabilities to the Bank, such as credit and mortgages to the public, credit to banks and deposits with banks, credit to governments, investment in bonds (corporate and other), and the balance sheet part (market value) of derivatives and financial instruments.
- **Off-balance sheet exposures –** Potential (unrealized) liabilities to the Bank, such as guarantees, unutilized commitments to grant credit, unutilized credit facilities, and potential liabilities arising from changes in the value of transactions in derivative financial instruments. The credit risk arising from transactions in derivative financial instruments is counterparty risk – the risk that the counterparty to the transaction will default before the final settlement of cash flows in the derivatives transaction. Counterparty risk is addressed separately in Section E, below.

Another risk arising from the portfolio of credit exposures is concentration risk. Concentration risk arises from non-optimal diversification of specific risks in the credit portfolio, such that the credit portfolio is insufficiently diversified across the various risk factors; for example, when the credit portfolio is composed of a small number of borrowers (name concentration) or has a high degree of exposure to a particular economic sector (sector concentration).
In accordance with the reporting directives of the Bank of Israel, this section contains items to which the Basel credit-risk framework applies, pursuant to Proper Conduct of Banking Business Directive 203, unless explicitly noted otherwise.
For details regarding securitization exposures, see Addendum B, below.

D.1. Management of credit risks

The goal of credit-risk management is to allow the Group to operate, and to ensure that it operates, in accordance with the policies and strategic objectives established and within the risk appetite defined in the area of credit, from the level of the single transaction to the overview of the credit portfolio.
The Bank's credit risk management policy is based on diversification of the credit portfolio and controlled management of risks. Risk diversification is reflected by the distribution of the Bank's credit portfolio among different sectors of the economy, a large number of borrowers, different linkage segments, and different geographical regions overseas. The policy of distributing risks among economic sectors is based on an evaluation of anticipated developments in the different sectors. For this purpose, the Bank conducts industry-level surveys and economic feasibility studies to evaluate the risk and business potential related to activity in the various economic sectors. The Bank's business objectives are determined in accordance with these surveys and studies.
The credit management system monitors customers' credit exposure. Credit review systems identify, monitor, and report to the responsible function and to managers on negative signs related to borrowers. Credit risk management is based on the following principles:

- **Independence –** The principle of independence is an essential element of proper corporate governance, in order to prevent conflicts of interest and create a system of checks and balances. The goal of this principle is to ensure that the information regarding risks reported to management functions, and in particular to senior management and the Board of Directors, is objective and is not influenced by other considerations, in particular considerations of business success and remuneration for such success.

- **Hierarchy of authority –** The Bank has a hierarchy of authority that outlines a sequence of credit authorizations, according to the level of debt of the borrower or group, the risk rating, and problematic debt classifications, allowing control over the process of approving new credit transactions. The hierarchy of authority provides a definition of individual credit approval thresholds and thresholds for transfer to approval committees, as well as the composition of such committees.
- **Comprehensive view of the customer/group –** Management of risk groups encompassing several borrowers who are related in terms of risk, such as a company and its subsidiaries, a married couple, etc. The activity of customers and groups is overseen by a customer manager who is responsible for all activities of that borrower/group. Information systems continuously provide customer managers and their staff with a comprehensive view of the activity of the customer/group, including the level of credit risk, and in accordance with Proper Conduct of Banking Business Directive 313.
- **Credit policies and procedures –** The Board of Directors of the Bank sets forth the credit policy, which is examined and updated routinely, according to changes in the financial markets and in the economy. This policy includes various limits on the credit portfolio, in accordance with the risk appetite of the Bank, including exposure limits by economic sector, country, or financial institution, as a function of the risk level assessed by the Bank. Limits are also imposed on the maximum exposure to a single borrower, according to the credit rating assigned to the borrower, which reflects the borrower's risk level, as well as a maximum limit for a group of borrowers.

  Credit policy includes the credit risk management policy of the corporation; it formalizes and defines the rules applicable to all parties at the Bank involved with credit risk, and is designed to serve the business goals of Bank Hapoalim, in alignment with its risk policy and risk appetite, and in compliance with regulatory directives.

  Credit policy documents delineate the aspects relevant to each Area (customer type, economic sector, purpose of the loan, etc.), taking risk levels into consideration.

  Adherence to the guidelines of the credit policy in carrying out business operations allows rational management of credit and credit exposures, and serves as a tool for the management of credit risks.

  The credit policies and procedures are binding for everyone involved in the area of credit at the Bank. The policy specifies the principles and considerations related to credit granting, the authority to grant credit, prohibitions and limits applied to credit granting, and the internal regulations that establish the Bank's practices and principles in the areas of credit and collateral.

  The Risk Management Area is responsible for the overall policy of the Bank, and for formulating and coordinating the policies of the business units.
- **Controls and risk identification –** The process of reviewing and identifying credit risks is conducted by the three lines of defense. Controls are applied from the level of each individual credit item to the level of the portfolio, in the first and second lines of defense, according to materiality thresholds. The Credit Risk Management Unit leads and coordinates reports to the Board of Management and Board of Directors regarding trends and changes in the credit portfolio, including the level of credit risk in the portfolio, compliance with limits, special events, analysis of concentration, stress scenarios, and presentation of general risk indicators, in Israel and globally. In the third line of defense, Internal Audit is responsible, among other matters, for reviewing the implementation and effectiveness of risk-management procedures and risk-assessment methodologies, including the implementation of risk management and control policies at the Bank.

  The identification of credit risk in existing products is based on risk management, measurement, and control processes at the various levels. The identification of risk in new products relies on the policy for new products, which specifies the processes to be followed for each new product at the Bank in order to identify all risks involved in the product, assess the extent and materiality of such risk, and provide solutions for the measurement, control, and hedging of the risk.

A quarterly and annual process has been designed in order to identify risk concentrations and examine the potential implications of various shocks (financial, political, and others) for the financial robustness of the Bank. This process includes definition, examination, and reporting of the results of stress scenarios, and mapping of the effects on profit and on capital adequacy.

- **Credit risk is quantified and measured on several levels –** the level of the individual borrower, borrower groups by area of activity, sectors of the economy, segments of borrowers, products, and the overall portfolio of the Bank and of the Group. Processes for risk quantification and measurement and for the ranking of borrowers and of credit have been developed and implemented for each area of activity and type of credit. These processes combine assessments by credit experts with decision-making processes and advanced statistical models.
- **Identification and treatment of borrowers in distress –** The Bank has established policies and procedures for the identification and handling of borrowers in distress, including work processes for the identification and treatment of problematic credit, and examination of the fairness of the classification and allowance for such borrowers (for details, see the section "Problematic debts and borrowers in distress").
- **Uniform instruction and training –** Employees involved in the area of credit undergo training and instruction on credit, foreign trade, and mortgages. These sessions provide uniform training to all those involved in this area, imparting professional tools and teaching the Bank's policies and principles in the area of credit. Lessons-learned processes based on various credit events are conducted by the units and communicated to the relevant functions, in accordance with the internal regulations of the Bank.
- **Hedging and risk mitigation –** see below.

D.1.a. Structure and organization of the credit risk management function

Corporate governance for risk management relies on three lines of defense, which are clearly separated from one another.

The approach taken with regard to control of all financial risks at Bank Hapoalim involves identification and assessment of the risks, and control of compliance with the limits established in the various internal regulations, through three lines of defense. The lines of defense are presented below, according to the degree of their independence from the professional function responsible for taking the risk.

First line of defense

The business units are responsible for identifying, assessing, measuring, monitoring, mitigating, and reporting all risks inherent in products, activities, processes, and systems under their responsibility, as well as for managing an appropriate control environment in the context of risk management.

The first level of the first line of defense includes the units that manage business activity and create credit risks, in Israel and overseas.

Further controls are performed at the second level of the first line of defense, in addition to those carried out in the units that create risk as part of the routine management of their business. This line of defense includes the internal credit and control units within the business areas and at the bank's overseas offices:

- Credit System Operation Division – Corporate Banking Area;
- Corporate Credit Unit – Corporate Banking Area
- Retail Credit and Mortgages Division – Retail Banking Area;
- Overseas Credit Review Department – Financial Markets and International Banking Area;
- Banks and Financial Institutions Department – Financial Markets and International Banking Area;
- Exposure and Risk Management System – Financial Markets and International Banking Area.

Second line of defense

The second line of defense supplements the risk-management activities of the business lines. This function has a reporting structure that is independent of the business lines that generate risk; it is responsible for planning, maintaining, and continually developing the working framework for risk management at the banking corporation.

This line of defense includes:

- The Credit Risk Management Unit, which serves as the independent oversight unit for the management and analysis of credit risks, as part of the second line of defense. The unit reports to the Head of Risk Management and is independent of credit underwriting and approval processes.

  The unit is responsible for the following areas:
  - Developing methodologies for the identification, control, and management of credit risks.
  - Development of models for the allocation of economic capital in respect of credit risk to the various segments.
  - Monitoring credit exposure, the level of credit risk, and compliance with the credit limits of the Group on a monthly and quarterly basis.
  - Running extreme scenarios at the level of the Bank and the Group.
  - Monitoring, measuring, and managing credit concentration risk.
  - Responsibility for the credit policy of the Bank, and leading the processes of writing and updating the policy book.
  - Overseeing and reporting to the Board of Management and Board of Directors on the development of the credit portfolio of the business areas.
  - Applying controls and tests of various credit focus areas at the Bank, selected using risk-based samples; credit review activities at the branches and subsidiaries of the Bank overseas.
  - Challenging the business function in the approval of substantial credit exposures, in substantial changes in the terms of credit, in substantial additions to credit, and in decisions regarding debt arrangements for problematic credit.
  - Preparing a written opinion addressing credit applications and credit ratings, in which the transaction is analyzed and, as relevant, the judgment exercised by the business function is challenged.
  - Examining applications to upgrade ratings.
  - Overseeing credit classifications and credit losses.
  - Developing methodologies for the calculation of the collective allowance.
  - Overseeing reporting on the fairness of classifications and total allowances (collective and individual).
  - Development of models for the measurement of credit risk ratings, and pricing at the level of the individual borrower.
  - Validation of credit risk rating models, as part of the process of development and performance evaluation, on an annual basis.
  - Performing statistical analysis of the portfolio of exposures and of the various segments.

Third line of defense

Internal Audit operates independently and objectively as a third line of defense. Its goals include helping the organization achieve its objectives by recommending risk mitigation through improved controls. Internal Audit operates under laws, regulations, the Banking Rules (Internal Audit), Proper Conduct of Banking Business Directives, professional guidelines of the Institute of Internal Auditors in Israel, guidelines of the Board of Directors' Audit Committee and of the Board of Directors, and management needs.

D.1.b. Credit risk management tools

Credit exposures are automated, allowing analysis and reporting on various dimensions. Information systems continuously provide a comprehensive view of the activity of the customer/group, including the level of credit risk. The comprehensive view of corporate clients is overseen in accordance with Directive 313 of the Bank of Israel and the internal regulations of the Bank, in order to obtain a full picture of risk groups reflecting ownership relationships and economic dependency relationships. With regard to retail clients, the Bank has defined risk groups in order to also reflect family connections, joint banking activity, etc.

Alerts of events that may indicate worsening of the customer's condition are sent to the desktop of the officer responsible for that customer, based on internal systems and external information.

Credit risk management processes include models for estimating credit risk. Credit risk rating is used to identify changes in the risk level of the borrower and of the portfolio. The Credit Risk Management Unit has developed and implemented models for estimating credit risk, which establish ratings for borrowers and for credit. These models combine assessments by credit experts with advanced statistical models. The rating models are embedded in credit processes at the various Areas and integrated with the processes of making credit decisions, pricing credit, credit policy, identifying customers in distress, and monitoring the quality of the portfolio and of borrowers.

Risk at the level of the overall portfolio of the Group is monitored by the Credit Risk Management Unit. A summary report including credit exposures, risk in the portfolio, trends and changes, special events, and various indicators of risk levels is presented for discussion to the Board of Management of the Bank, the Credit Committee of the Board of Directors, and the Risk Management and Control Committee of the Board of Directors.

Additional credit risk management tools include analyses of concentration of the portfolio of exposures and analysis of extreme scenarios.

D.2. Hedges and risk mitigation

Bank Hapoalim manages credit collateral through a collateral system that includes conservative safety margins. Within collateral policy, principles and rules have been set forth to determine the value of collateral with respect to its type and the type of credit that it secures, such as: the estimated time range and expenses necessary for realization of the collateral, type of indexation, volatility in the value of the collateral, etc. Procedures have also been defined for the processing of collateral and for monitoring changes in collateral and in the value thereof.

Collateral received by the Bank to secure credit includes financial assets, real-estate assets, and other assets. Against credit granted to companies, the Bank also receives collateral in the form of general floating liens on the companies' assets.

The Bank examines the use of additional risk mitigation tools, as necessary, including loan sales, acquisition of insurance, and use of credit derivatives.

See "Credit risk mitigation," later in this section.

D.2.a. Problematic debts and borrowers in distress

The policy for debt classifications and allowances includes indicators for the identification of customers who, according to the Bank's evaluation, may default on their obligations to the Bank. In addition, the Credit Analysis Department and the Credit Review Department in the Risk Management Area determine, in the opinions they prepare regarding the various borrowers, whether customers who appear to be problematic should be escalated for examination, and whether they should be added to a watch list or their debt should be assigned a classification. Customers escalated for supervision and existing customers on the watch list are examined individually by a designated unit (the Classifications and Allowances Unit in the Risk Management Area) and discussed within the quarterly process of examining the fairness of classifications. These borrowers are supervised and monitored more closely, and the Bank works to reduce its exposure to them by redeeming credit from the borrowers' resources and/or by obtaining additional collateral from them. In certain cases, customers are transferred to a division specializing in monitoring and restructuring of customers' debt, or to debt collection units. In addition, the Bank regularly reviews the level of credit risk in borrower portfolios on the basis of conservative assumptions, classifies problematic credit risk according to the directives of the Bank of Israel and according to the established classification guidelines (under special supervision, substandard, or impaired), and records a sufficient allowance for credit losses in respect of the total credit risk at the Bank.

D.2.b. Classification definitions

Special supervision

Credit risk under special supervision includes balance sheet and off-balance sheet credit risk with potential weaknesses that should be given special attention by management. If not addressed, these potential weaknesses could result in deterioration of the probability of repayment of the credit or of the status of the Bank as a creditor at a certain future date. Off-balance sheet credit risk is classified as under special supervision if there is at least a possibility that the contingent liability in respect of the off-balance sheet item will be realized, and in addition, the debts that may be acquired as a result of the realization of the contingent liability fit the classification of debts under special supervision. Credit not examined individually (lower than NIS 1 million) is automatically classified as under special supervision when the debt is in arrears of more than 60 days, up to 89 days.

Substandard

Substandard credit risk includes balance sheet and off-balance sheet credit risk insufficiently protected by the present established value and repayment capability of the borrower or of the pledged collateral, if available. Credit risk assigned this classification must have well-defined weaknesses that jeopardize the realization of repayment of the debt, such that there is a clear possibility that the Bank may incur some degree of loss if the deficiencies are not remedied. Off-balance sheet credit risk is classified as substandard if there is at least a possibility that the contingent liability in respect of the off-balance sheet item will be realized, and in addition, the debts that may be acquired as a result of the realization of the contingent liability fit the classification of substandard debts.
Credit not examined individually (lower than NIS 1 million) is automatically classified as substandard when the debt is in arrears of 90 days or more.

Impaired debt

Credit risk is classified as impaired when, based on current information and events, the Bank expects to be unable to collect the full amounts owed to it according to the original contractual terms with the client. The decision to classify credit as impaired is based, among other factors, on the extent of arrears of the debt (90 days in arrears); an assessment of the financial condition and repayment capability of the borrower; the existence and condition of collateral; and the financial condition of guarantors, if any. In any case, debt assessed on an individual basis is classified as impaired when the principal or interest in respect of the debt is in arrears of 90 days or more. In addition, any debt the terms of which have been changed in the course of troubled debt restructuring is classified as impaired debt, unless a minimum allowance for credit losses was recorded before and after the restructuring, according to the method of the extent of arrears, pursuant to the appendix to Proper Conduct of Banking Business 314 concerning fair assessment of credit risks and fair measurement of debts.

Impaired debt regains the status of unimpaired debt only when there are no principal or interest components in respect of the debt that are due but have not been paid, and the Bank expects the remaining principal and interest to be repaid in full, in accordance with the terms of the contract.

In exceptional cases, exposures in arrears (over 90 days) are not considered impaired, when the Bank expects the full amount in arrears to be repaid using a cash-flow repayment source within a short period.

Definition of debt in arrears

Debt in arrears

Debt in which principal or interest have not been paid on time, in reference to the contractual repayment terms. A current account or a current drawing account shall be reported as a debt in arrears when the account remains continuously at a negative balance (in the absence of an approved credit facility), or in deviation from the approved credit facility, for 30 days or more; or if, within the credit facility, amounts are credited to the account that are lower than the negative balance and the credit facility, for a period of 180 days. Loans shall be reported as debt in arrears when the principal or interest have not been paid after 30 days have elapsed from the scheduled date of payment according to the contractual repayment terms of the debt.

Troubled debt restructuring

Debt is defined as troubled debt restructuring, and therefore as impaired debt, when two cumulative conditions are fulfilled: the customer is experiencing financial difficulties, and the Bank grants the borrower a concession within the troubled debt restructuring.

For the purposes of internal credit-risk estimate models, the Bank uses internal default definitions based on 90 days of arrears, and additional indicators of default. These indicators include accounting classification as impaired, but also additional indicators that indicate an inability to fulfill the terms of the credit. Pursuant to the Basel definitions, an impaired customer defined as income-bearing is not defined as in default.

Allowance for credit losses

Individual allowance

Debts in respect of which the allowance for credit losses is examined on an individual basis include debts with a total contractual balance (without deducting charge-offs, unrecognized interest, allowance for credit losses, or collateral), aggregated at the level of the customer, of more than NIS 1 million (at the consolidated credit-card company, more than NIS 500 thousand), as well as debts of customers undergoing troubled debt restructuring. An individual allowance for credit losses is considered for every debt classified as impaired.

The individual allowance for credit losses is assessed based on expected future cash flows, discounted at the original interest rate of the debt, or based on realization of the assets of the debtor. When it has been determined that repayment of the debt is contingent upon collateral, or when the Bank determines that seizure of an asset is expected, the individual allowance is assessed based on the fair value of the collateral pledged to secure the debt, following the application of cautious, consistent coefficients that reflect, among other factors, the volatility of the fair value of the collateral, the time that will elapse until the actual date of realization, and the expected costs of selling the collateral. The individual allowance required in respect of off-balance sheet credit instruments is assessed in accordance with the rules established in ASC 450, "Contingencies."

Collective allowance

The collective allowance for credit losses is calculated in order to reflect allowances for impairment in respect of credit losses not individually identified inherent in large groups of small debts with similar risk attributes, and in respect of debts examined individually and found to be unimpaired. The allowance for credit losses in respect of debts evaluated on a collective basis is calculated in accordance with the directive of the Banking Supervision Department, based on historical rates of charge-offs, in a breakdown by economic sector and by problematic and non-problematic credit, in the range of years in the period from January 1, 2011 to reporting date. The Bank uses a loss rate constituting the average rate of past charge-offs in this range of years. In addition to the calculation of a range of historical charge-off rates in the various economic sectors, the Bank also considers relevant environmental factors in determining the rate of the allowance, including trends in the volume of credit, conditions in the sector, macro-economic data, evaluation of the overall quality of credit in the economic sector, changes in volumes and trends of balances in arrears and impaired balances, and the effects of changes in credit concentration.

In this context, in accordance with the directives of the Supervisor concerning the collective allowance in respect of credit for the economic sector of private individuals, the Bank is required to take into consideration a qualitative adjustment rate of no less than 0.75% of the balance of unimpaired consumer credit. Credit risk arising from receivables in respect of bank credit cards without interest charges was excluded from this calculation.

Other-than-temporary impairment of bonds

The Bank uses the following two elements to determine whether impairment of bonds is other than temporary.

1. When one or more of the following criteria is fulfilled, impairment is recorded with no additional discretion exercised:
   - A decrease of 30% relative to the adjusted cost;
   - A decrease of 15% or more relative to the adjusted cost at six consecutive month ends;
   - Impairments recorded in the near past;
   - The security is sold at a loss after the balance sheet date;
   - The bond is classified as problematic by the Bank after acquisition;
   - The rating of the bond is downgraded to below Investment Grade.
2. In the event that a 15% decrease is observed relative to the adjusted cost, the business function is required to submit an opinion, including qualitative and quantitative criteria, as the basis for a recommendation whether to record impairment, as noted.

For further details regarding impairment of securities, see Note 1E to the Financial Statements, Section 8(b).

D.2.c. Portfolio quality analysis

Most of the indicators of portfolio quality showed improvement in 2018, as detailed in Tables 3-1 to 3-4 in the Report of the Board of Directors and Board of Management as at December 31, 2018.

Some indicators of credit risk decreased:

- The balance of unimpaired credit to the public, in arrears of 90 days or more, as a percentage of the balance of credit to the public.
- The allowance for credit losses in respect of credit to the public, as a percentage of the balance of credit to the public.
- The collective allowance for credit losses, as a percentage of the balance of credit to the public.
- Problematic credit risk in respect of the public, as a percentage of total credit risk in respect of the public.

A few indicators showed stability or a minor decrease:

- The balance of impaired credit to the public, as a percentage of the balance of credit to the public.
- NPL as a percentage of total credit to the public.
- Net charge-offs in respect of credit to the public, as a percentage of the average recorded balance of credit to the public.

Only one indicator increased:

- The provision (income) for credit losses as a percentage of the average recorded balance of credit to the public.

With regard to other indicators that refer to only to the risk in the portfolio of credit for private individuals, see Table D-10, below.

Table D-1: Credit quality of credit exposures

		December 31, 2018			
		Gross balances		Allowances for credit losses or impairment	Net balances
		Impaired or in arrears of 90 days or more	Others		
		NIS millions			
1	Debts, excluding bonds	**3,934**	**394,373**	**594**	**397,713**
2	Bonds	**-**	**47,860**	**-**	**47,860**
3	Off-balance sheet exposures	**-**	**185,769**	**81**	**185,688**
4	Total	**3,934**	**628,002**	**675**	**631,261**

		December 31, 2017			
		Gross balances		Allowances for credit losses or impairment	Net balances
		Impaired or in arrears of 90 days or more	Others		
		NIS millions			
1	Debts, excluding bonds	3,178	378,174	545	380,807
2	Bonds	-	57,594	-	57,594
3	Off-balance sheet exposures	-	173,394	103	173,291
4	Total	3,178	609,162	648	611,692

For details regarding changes in the inventory of impaired debts, see Table 3-3 in the section "Review of risks" in the Report of the Board of Directors and Board of Management as at December 31, 2018.

D.3. Credit risk exposures

Table D-2: Details of exposures by economic sector*

	December 31, 2018									
	Total credit risk[1]			Debts[2] and off-balance sheet credit risk (excluding derivatives)[3]						
								Credit losses for the year ended December 31, 2018[4]		
	Total	Credit execution rating[5]	Problematic[6]	Total	Of which: debts[2]	Problematic[6]	Impaired	Provision (income) for credit losses	Net charge-offs	Allowance for credit losses
	NIS millions									
In respect of borrower activity in Israel										
Public – commercial										
Agriculture	**2,862**	**2,776**	**111**	**2,846**	**2,229**	**111**	**13**	**(5)**	**(12)**	**24**
Mining and quarrying	**2,685**	**2,662**	**12**	**2,508**	**2,132**	**12**	**12**	**(2)**	**1**	**21**
Industry	**33,662**	**32,352**	**1,159**	**32,814**	**14,887**	**1,158**	**377**	**5**	**(15)**	**343**
Construction and real estate – construction[7]	**58,197**	**56,509**	**1,127**	**58,043**	**25,982**	**1,127**	**589**	**(99)**	**(134)**	**547**
Construction and real estate – real-estate activities	**24,568**	**24,065**	**603**	**24,423**	**19,629**	**592**	**313**	**(150)**	**(129)**	**287**
Electricity and water supply	**10,247**	**10,200**	**720**	**9,089**	**5,146**	**706**	**6**	**(20)**	**5**	**70**
Commerce	**37,113**	**35,736**	**805**	**36,977**	**25,962**	**805**	**215**	**4**	**103**	**774**
Hotels, hospitality, and food services	**11,267**	**10,798**	**470**	**11,132**	**9,845**	**470**	**205**	**41**	**31**	**105**
Transportation and storage	**10,711**	**10,268**	**110**	**10,504**	**7,555**	**110**	**84**	**48**	**32**	**64**
Information and communications	**6,691**	**6,394**	**285**	**6,637**	**4,194**	**285**	**227**	**145**	**99**	**248**
Financial services	**34,113**	**33,688**	**89**	**27,978**	**15,606**	**89**	**29**	**(20)**	**(1)**	**146**
Other business services	**15,839**	**15,272**	**148**	**15,776**	**11,619**	**148**	**94**	**72**	**57**	**153**
Public and community services	**8,247**	**7,790**	**53**	**8,227**	**6,590**	**53**	**22**	**(6)**	**(4)**	**52**
Total commercial[8]	**256,202**	**248,510**	**5,692**	**246,954**	**151,376**	**5,666**	**2,186**	**13**	**33**	**2,834**
Private individuals – housing loans	**74,636**	**73,635**	**526**	**74,636**	**69,955**	**526**	**-**	**40**	**5**	**366**
Private individuals – other	**63,331**	**60,746**	**873**	**63,321**	**42,963**	**873**	**694**	**458**	**473**	**892**
Total public – activity in Israel	**394,169**	**382,891**	**7,091**	**384,911**	**264,294**	**7,065**	**2,880**	**511**	**511**	**4,092**
Banks in Israel[9]	**3,852**	**3,852**	**-**	**1,223**	**111**	**-**	**-**	**-**	**-**	**-**
Israeli government	**34,485**	**34,485**	**-**	**1,092**	**1,092**	**-**	**-**	**-**	**-**	**-**
Total activity in Israel	[1]**432,506**	**421,228**	**7,091**	**387,226**	**265,497**	**7,065**	**2,880**	**511**	**511**	**4,092**

* Does not include the data of the Isracard Group, which constitutes a discontinued operation. Comparative figures have been restated accordingly. For details, see Note 1G to the Financial Statements.

(1) Balance sheet credit risk and off-balance sheet credit risk[3], including in respect of derivative instruments. Includes debts[2], bonds, securities borrowed or purchased under agreements to resell, assets in respect of derivative instruments, and credit risk in off-balance sheet financial instruments, as calculated for the purpose of the limit on borrower indebtedness, in the amount of NIS 265,497, 33,394, 708, 5,982, and 126,925 million, respectively.

(2) Credit to the public, credit to governments, and deposits with banks (excluding deposits with the Bank of Israel), excluding bonds, securities borrowed or purchased under agreements to resell, and assets in respect of activity in the Maof market (presented under the item "other assets").

(3) Credit risk in off-balance sheet financial instruments, as calculated for the purpose of the limit on borrower indebtedness.

(4) Including in respect of off-balance sheet credit instruments (presented in the balance sheet under the item "other liabilities").

(5) Credit risk for which the credit rating at the date of the report is congruent with the credit rating for the execution of new credit, according to the policy of the Bank.

(6) Balance sheet and off-balance sheet credit risk that is impaired, substandard, or under special supervision, including in respect of housing loans for which an allowance based on the extent of arrears exists, and housing loans for which an allowance based on the extent of arrears does not exist which are in arrears of 90 days or more.

(7) Including balance sheet credit risk in the amount of approximately NIS 423 million and off-balance sheet credit risk in the amount of approximately NIS 398 million extended to certain purchasing groups, which are currently in the process of construction. Also includes off-balance sheet credit risk in the amount of approximately NIS 6,026 million, in respect of which insurance was acquired from foreign insurance companies for the portfolio of Sale Law guarantees.

(8) The balance of commercial debts includes the balance of housing loans, in the amount of approximately NIS 10,987 million, of commercial borrowers, or extended to purchasing groups currently in the process of construction.

(9) Excluding cash balances of the Bank and deposits with the Bank of Israel, and before deducting the allowance for credit losses.

Table D-2: Details of exposures by economic sector* (continued)

	December 31, 2018									
	Total credit risk[1]			Debts[2] and off-balance sheet credit risk (excluding derivatives)[3]						
								Credit losses for the year ended December 31, 2018[4]		
	Total	Credit execution rating[5]	Problematic[6]	Total	Of which: debts[2]	Problematic[6]	Impaired	Provision (income) for credit losses	Net charge-offs	Allowance for credit losses
	NIS millions									
In respect of borrower activity overseas										
Public – commercial										
Agriculture	**432**	**430**	**1**	**432**	**228**	**1**	**1**	**-**	**-**	**1**
Mining and quarrying	**606**	**540**	**68**	**172**	**106**	**68**	**-**	**-**	**-**	
Industry	**4,335**	**3,785**	**43**	**3,870**	**2,424**	**43**	**35**	**14**	**19**	**12**
Construction and real estate	**10,356**	**9,761**	**390**	**10,144**	**7,371**	**390**	**87**	**6**	**(20)**	**73**
Electricity and water supply	**1,069**	**971**	**81**	**664**	**325**	**81**	**-**	**5**	**-**	**8**
Commerce	**3,655**	**3,243**	**90**	**3,302**	**2,655**	**90**	**19**	**9**	**1**	**23**
Hotels, hospitality, and food services	**3,127**	**2,720**	**91**	**3,127**	**2,539**	**91**	**90**	**16**	**(1)**	**26**
Transportation and storage	**663**	**557**	**81**	**538**	**406**	**81**	**81**	**27**	**(3)**	**32**
Information and communications	**1,368**	**1,297**	**116**	**921**	**553**	**116**	**71**	**13**	**13**	**4**
Financial services	**9,652**	**9,630**	**20**	**5,363**	**3,533**	**20**	**1**	**9**	**5**	**20**
Other business services	**743**	**717**	**25**	**725**	**487**	**25**	**-**	**-**	**-**	**10**
Public and community services	**1,190**	**1,123**	**66**	**1,069**	**714**	**66**	**17**	**2**	**-**	**10**
Total commercial[7]	**37,196**	**34,774**	**1,072**	**30,327**	**21,341**	**1,072**	**402**	**101**	**14**	**219**
Private individuals – housing loans	**477**	**471**	**3**	**477**	**455**	**3**	**-**	**-**	**-**	**2**
Private individuals – other	**358**	**330**	**18**	**357**	**175**	**18**	**18**	**(1)**	**23**	**12**
Total public – activity overseas	**38,031**	**35,575**	**1,093**	**31,161**	**21,971**	**1,093**	**420**	**100**	**37**	**233**
Banks overseas[8]	**28,168**	**28,168**	**-**	**14,710**	**13,980**	**-**	**-**	**(2)**	**-**	**2**
Governments overseas	**11,832**	**11,832**	**-**	**1,343**	**1,343**	**-**	**-**	**4**	**-**	**7**
Total activity overseas	**(1)78,031**	**75,575**	**1,093**	**47,214**	**37,294**	**1,093**	**420**	**102**	**37**	**242**
Total in Israel and overseas	**510,537**	**496,803**	**8,184**	**434,440**	**302,791**	**8,158**	**3,300**	**613**	**548**	**4,334**

* Does not include the data of the Isracard Group, which constitutes a discontinued operation. Comparative figures have been restated accordingly. For details, see Note 1G to the Financial Statements.

(1) Balance sheet credit risk and off-balance sheet credit risk, including in respect of derivative instruments. Includes debts[2], bonds, securities borrowed or purchased under agreements to resell, assets in respect of derivative instruments, and credit risk in off-balance sheet financial instruments, as calculated for the purpose of the limit on borrower indebtedness, in the amount of NIS 37,294, 21,201, 0, 4,552, and 14,984 million, respectively.

(2) Credit to the public, credit to governments, and deposits with banks, excluding bonds, securities borrowed or purchased under agreements to resell, and assets in respect of activity in the Maof market (presented under the item "other assets").

(3) Credit risk in off-balance sheet financial instruments, as calculated for the purpose of the limit on borrower indebtedness, excluding in respect of derivative instruments.

(4) Including in respect of off-balance sheet credit instruments (presented in the balance sheet under the item "other liabilities").

(5) Credit risk for which the credit rating at the date of the report is congruent with the credit rating for the execution of new credit, according to the policy of the Bank.

(6) Balance sheet and off-balance sheet credit risk that is impaired, substandard, or under special supervision, including in respect of housing loans for which an allowance based on the extent of arrears exists, and housing loans for which an allowance based on the extent of arrears does not exist which are in arrears of 90 days or more.

(7) The balance of commercial debts includes the balance of housing loans, in the amount of approximately NIS 57 million, of commercial borrowers, or extended to purchasing groups currently in the process of construction.

(8) Excluding cash balances of the Bank, and before deducting the allowance for credit losses.

Table D-2: Details of exposures by economic sector* (continued)

	December 31, 2017									
	Total credit risk[1]			Debts[2] and off-balance sheet credit risk (excluding derivatives)[3]						
								Credit losses for the year ended December 31, 2017[4]		
	Total	Credit execution rating[5]	Problematic[6]	Total	Of which: debts[2]	Problematic[6]	Impaired	Provision (income) for credit losses	Net charge-offs	Allowance for credit losses
	NIS millions									
In respect of borrower activity in Israel (continued)										
Public – commercial										
Agriculture	2,679	2,451	26	2,667	2,120	26	13	(9)	(9)	17
Mining and quarrying	2,705	2,651	27	2,446	2,173	27	26	(101)	(42)	23
Industry	31,603	29,931	1,012	30,800	14,748	1,012	267	(123)	(71)	319
Construction and real estate – construction[7]	60,347	58,145	1,104	60,309	22,866	1,104	678	(172)	(111)	535
Construction and real estate – real-estate activities	22,497	21,629	466	22,420	18,904	461	313	(209)	(99)	293
Electricity and water supply	9,428	9,270	793	7,345	4,614	765	41	48	2	91
Commerce	35,031	31,864	1,530	34,774	23,731	1,517	279	232	452	873
Hotels, hospitality, and food services	10,970	9,962	395	10,876	9,630	395	208	58	48	93
Transportation and storage	8,770	8,120	82	8,642	6,999	82	42	29	17	50
Information and communications	6,097	5,361	361	6,031	3,910	361	301	133	104	202
Financial services	31,007	30,742	88	25,841	14,217	88	31	(264)	(260)	167
Other business services	14,331	13,190	126	14,303	10,706	126	73	72	54	135
Public and community services	7,938	7,646	45	7,931	6,346	45	24	(2)	(3)	55
Total commercial[8]	243,403	230,962	6,055	234,385	140,964	6,009	2,296	(308)	82	2,853
Private individuals – housing loans	67,586	66,466	595	67,586	64,703	595	-	(14)	19	333
Private individuals – other	65,123	61,963	830	65,101	45,170	830	719	545	399	906
Total public – activity in Israel	376,112	359,391	7,480	367,072	250,837	7,434	3,015	223	500	4,092
Banks in Israel[9]	3,379	3,379	-	514	172	-	-	-	-	-
Israeli government	42,554	42,554	-	1,109	998	-	-	-	-	-
Total activity in Israel	[1]422,045	405,324	7,480	368,695	252,007	7,434	3,015	223	500	4,092

* Does not include the data of the Isracard Group, which constitutes a discontinued operation. Comparative figures have been restated accordingly. For details, see Note 1G to the Financial Statements.

(1) Balance sheet credit risk and off-balance sheet credit risk[3], including in respect of derivative instruments. Includes debts[2], bonds, securities borrowed or purchased under agreements to resell, assets in respect of derivative instruments, and credit risk in off-balance sheet financial instruments, as calculated for the purpose of the limit on borrower indebtedness, in the amount of NIS 252,007, 41,495, 684, 5,935, and 121,924 million, respectively.

(2) Credit to the public, credit to governments, and deposits with banks (excluding deposits with the Bank of Israel), excluding bonds, securities borrowed or purchased under agreements to resell, and assets in respect of activity in the Maof market (presented under the item "other assets").

(3) Credit risk in off-balance sheet financial instruments, as calculated for the purpose of the limit on borrower indebtedness, excluding in respect of derivative instruments.

(4) Including in respect of off-balance sheet credit instruments (presented in the balance sheet under the item "other liabilities").

(5) Credit risk for which the credit rating at the date of the report is congruent with the credit rating for the execution of new credit, according to the policy of the Bank.

(6) Balance sheet and off-balance sheet credit risk that is impaired, substandard, or under special supervision, including in respect of housing loans for which an allowance based on the extent of arrears exists, and housing loans for which an allowance based on the extent of arrears does not exist which are in arrears of 90 days or more.

(7) Including balance sheet credit risk in the amount of approximately NIS 243 million and off-balance sheet credit risk in the amount of approximately NIS 506 million extended to certain purchasing groups, which are currently in the process of construction. Also includes off-balance sheet credit risk in the amount of approximately NIS 13,705 million, in respect of which insurance was acquired from foreign insurance companies for the portfolio of Sale Law guarantees.

(8) The balance of commercial debts includes the balance of housing loans, in the amount of approximately NIS 9,285 million, of commercial borrowers, or extended to purchasing groups currently in the process of construction.

(9) Excluding cash balances of the Bank and deposits with the Bank of Israel, and before deducting the allowance for credit losses.

Table D-2: Details of exposures by economic sector* (continued)

	December 31, 2017									
	Total credit risk[1]			Debts[2] and off-balance sheet credit risk (excluding derivatives)[3]						
								Credit losses for the year ended December 31, 2017[4]		
	Total	Credit execution rating[5]	Problematic[6]	Total	Of which: debts[2]	Problematic[6]	Impaired	Provision (income) for credit losses	Net charge-offs	Allowance for credit losses
	NIS millions									
In respect of borrower activity overseas (continued)										
Public – commercial										
Agriculture	406	406	2	406	171	2	-	-	1	1
Mining and quarrying	439	379	62	148	51	62	-	-	-	-
Industry	4,838	4,594	68	4,008	2,535	68	68	6	2	19
Construction and real estate	7,567	7,416	142	7,381	4,978	142	16	(43)	(22)	52
Electricity and water supply	1,027	1,018	9	775	384	9	-	-	-	2
Commerce	2,634	2,161	88	2,535	2,044	88	19	-	(5)	16
Hotels, hospitality, and food services	2,029	1,740	32	2,029	1,766	32	31	2	1	11
Transportation and storage	437	366	41	365	332	41	26	16	16	2
Information and communications	1,240	1,132	28	994	563	28	-	-	-	3
Financial services	9,734	9,697	21	5,373	3,674	21	21	4	70	16
Other business services	884	884	-	788	580	-	-	(7)	(4)	2
Public and community services	963	928	34	835	658	34	9	(3)	-	9
Total commercial[7]	32,198	30,721	527	25,637	17,736	527	190	(25)	59	133
Private individuals – housing loans	486	469	2	486	473	2	-	-	-	-
Private individuals – other	1,320	1,217	36	1,320	459	36	36	4	2	34
Total public – activity overseas	34,004	32,407	565	27,443	18,668	565	226	(21)	61	167
Banks overseas[8]	37,337	37,337	-	24,536	23,915	-	-	-	-	4
Governments overseas	14,465	14,465	-	1,297	1,297	-	-	-	-	3
Total activity overseas	[1]85,806	84,209	565	53,276	43,880	565	226	(21)	61	174
Total in Israel and overseas	507,851	489,533	8,045	421,971	295,887	7,999	3,241	202	561	4,266

* Does not include the data of the Isracard Group, which constitutes a discontinued operation. Comparative figures have been restated accordingly. For details, see Note 1G to the Financial Statements.

(1) Balance sheet credit risk and off-balance sheet credit risk, including in respect of derivative instruments. Includes debts[2], bonds, securities borrowed or purchased under agreements to resell, assets in respect of derivative instruments, and credit risk in off-balance sheet financial instruments, as calculated for the purpose of the limit on borrower indebtedness, in the amount of NIS 43,880, 21,721, 0, 6,078, and 14,127 million, respectively.

(2) Credit to the public, credit to governments, and deposits with banks, excluding bonds, securities borrowed or purchased under agreements to resell, and assets in respect of activity in the Maof market (presented under the item "other assets").

(3) Credit risk in off-balance sheet financial instruments, as calculated for the purpose of the limit on borrower indebtedness, excluding in respect of derivative instruments.

(4) Including in respect of off-balance sheet credit instruments (presented in the balance sheet under the item "other liabilities").

(5) Credit risk for which the credit rating at the date of the report is congruent with the credit rating for the execution of new credit, according to the policy of the Bank.

(6) Balance sheet and off-balance sheet credit risk that is impaired, substandard, or under special supervision, including in respect of housing loans for which an allowance based on the extent of arrears exists, and housing loans for which an allowance based on the extent of arrears does not exist which are in arrears of 90 days or more.

(7) The balance of commercial debts includes the balance of housing loans, in the amount of approximately NIS 60 million, of commercial borrowers, or extended to purchasing groups currently in the process of construction.

(8) Excluding cash balances of the Bank, and before deducting the allowance for credit losses.

Table D-3: Exposures by remaining contractual term to maturity*

	December 31, 2018				
	Up to one year	One year to five years	Over five years	No maturity period	Total credit exposures
	NIS millions				
Balance sheet exposures					
Commercial	**88,536**	**62,445**	**29,574**	**5,701**	**186,256**
Private individuals – housing loans	**6,657**	**23,067**	**61,149**	**83**	**90,956**
Private individuals – other	**21,321**	**23,726**	**1,929**	**156**	**47,132**
Assets in respect of derivative instruments	**2,824**	**1,502**	**542**	**-**	**4,868**
Total public	**119,338**	**110,740**	**93,194**	**5,940**	**329,212**
Banks and governments	**103,413**	**32,259**	**10,532**	**70**	**146,274**
Total balance sheet credit exposure	**222,751**	**142,999**	**103,726**	**6,010**	**475,486**
Of which: bonds	**16,951**	**30,412**	**11,565**	**-**	**58,928**
Total off-balance sheet credit exposure	**105,232**	**52,501**	**6,908**	**-**	**164,641**

* Does not include data of the Isracard Group, which constitutes a discontinued operation. For details, see Note 1G to the Financial Statements.

D.3.a. Exposure to foreign countries

Balance sheet exposure to foreign countries as at December 31, 2018 amounted to NIS 47.9 billion, compared with NIS 58.3 billion at the end of 2017. The decrease mainly resulted from a decrease in deposits with the Federal Reserve, in the amount of approximately NIS 6.5 billion.

Off-balance sheet exposure to foreign countries as at December 31, 2018 amounted to NIS 20.3 billion, compared with NIS 25.7 billion at the end of 2017.

The Bank operates in accordance with an ordered policy that sets limits and terms for the exposure to foreign countries.

Table D-4: Total principal exposures to foreign countries[(1)(6)]

	December 31, 2018												
	Balance sheet exposure[(4)]									Off-balance sheet exposure[(2)(4)(5)]			
	Cross-border balance sheet exposure			Balance sheet exposure of the banking corporation's branches/ subsidiaries in foreign countries to local residents			Total balance sheet exposure	Problematic balance sheet credit risk[(4)]	Impaired debts[(4)]	Total off-balance sheet exposure	Of which: problematic off-balance sheet credit risk[(4)]	Cross-border balance sheet exposure	
	To governments[(3)]	To banks	To others	Balance sheet exposure before deduction of local liabilities	Deduction in respect of local liabilities	Net balance sheet exposure after deduction of local liabilities						Maturity up to one year	Maturity over one year
	NIS millions												
Country													
United States	**9,292**	**1,685**	**2,761**	**23,519**	**15,812**	**7,707**	**21,445**	**549**	**262**	**7,177**	**300**	**909**	**12,829**
Switzerland	**-**	**591**	**313**	**2,069**	**-**	**2,069**	**2,973**	**1**	**-**	**1,774**	**-**	**219**	**685**
England	**49**	**3,923**	**3,196**	**105**	**-**	**105**	**7,273**	**3**	**-**	**4,358**	**-**	**1,543**	**5,625**
Germany	**103**	**86**	**606**	**-**	**-**	**-**	**795**	**-**	**-**	**1,894**	**-**	**188**	**607**
France	**15**	**1,677**	**204**	**-**	**-**	**-**	**1,896**	**5**	**5**	**2,205**	**-**	**109**	**1,787**
Others	**968**	**4,655**	**7,374**	**585**	**15**	**570**	**13,567**	**242**	**112**	**2,921**	**-**	**3,334**	**9,663**
Total exposures to foreign countries	**10,427**	**12,617**	**14,454**	**26,278**	**15,827**	**10,451**	**47,949**	**800**	**379**	**20,329**	**300**	**6,302**	**31,196**
Of which: total exposure to PIIGS (Portugal, Ireland, Italy, Greece, and Spain)	**-**	**128**	**201**	**-**	**-**	**-**	**329**	**-**	**-**	**612**	**-**	**14**	**315**
Of which: total exposure to LDCs	**74**	**343**	**827**	**565**	**15**	**550**	**1,794**	**219**	**90**	**259**	**-**	**190**	**1,054**

The line "total LDCs" includes the total exposure to countries defined as Least Developed Countries (LDCs) in Proper Conduct of Banking Business Directive 315, "Supplementary Provision for Doubtful Debts."

Balance sheet exposure to a foreign country includes cross-border balance sheet exposure and balance sheet exposure of the branches/subsidiaries of the banking corporation in the foreign country to local residents. Cross-border balance sheet exposure includes balance sheet exposure of the branches/subsidiaries of the banking corporation in Israel to residents of the foreign country, and balance sheet exposure of the overseas branches/subsidiaries of the banking corporation to non-residents of the country in which the branch/subsidiary is located.

Balance sheet exposure of the banking corporation's branches/subsidiaries in a foreign country to local residents includes balance sheet exposure of the branches/subsidiaries of the banking corporation in that foreign country to the residents of the country, less liabilities of those branches/subsidiaries (the deduction is performed up to the level of the exposure).

(1) Based on the final risk, after the effect of guarantees, liquid collateral, and credit derivatives.
(2) Credit risk in off-balance sheet financial instruments, as calculated for the purpose of the limits on indebtedness of a borrower, according to Proper Conduct of Banking Business Directive 313.
(3) Governments, official institutions, and central banks.
(4) Balance sheet and off-balance sheet credit risk, problematic credit risk, and impaired debts are presented before the effect of the allowance for credit losses, and before the effect of collateral deductible for the purposes of the indebtedness of a borrower and of a group of borrowers.
(5) The balance of the off-balance sheet exposure to foreign countries includes a total of NIS 6,026 million, in 2018, in respect of the acquisition of insurance for the portfolio of Sale Law guarantees from international reinsurers (2017: NIS 13,705 million).
(6) Does not include data of the Isracard Group, which constitutes a discontinued operation. Comparative figures were restated accordingly. For details, see Note 1G to the Financial Statements.

Table D-4: Total principal exposures to foreign countries[1][6] (continued)

	December 31, 2017												
	Balance sheet exposure[4]									Off-balance sheet exposure[2][4][5]			
	Cross-border balance sheet exposure			Balance sheet exposure of the banking corporation's branches/ subsidiaries in foreign countries to local residents			Total balance sheet exposure	Problematic balance sheet credit risk[4]	Impaired debts[4]	Total off-balance sheet exposure	Of which: problematic off-balance sheet credit risk[4]	Cross-border balance sheet exposure	
	To governments[3]	To banks	To others	Balance sheet exposure before deduction of local liabilities	Deduction in respect of local liabilities	Net balance sheet exposure after deduction of local liabilities						Maturity up to one year	Maturity over one year
	NIS millions												
Country													
United States	11,107	2,500	2,223	26,541	11,562	14,979	30,809	254	123	7,610	188	1,630	14,200
Switzerland	-	575	41	3,617	-	3,617	4,233	-	-	3,897	-	129	487
England	80	4,568	3,269	45	1	44	7,961	-	-	3,679	-	1,621	6,296
Germany	131	493	396	-	-	-	1,020	-	-	4,155	-	493	527
France	49	1,691	305	-	-	-	2,045	7	5	4,062	-	311	1,734
Others	1,223	5,085	5,566	1,122	617	505	12,379	105	88	2,342	-	4,435	7,440
Total exposures to foreign countries	12,590	14,912	11,800	31,325	12,180	19,145	58,447	366	216	25,745	188	8,619	30,684
Of which: total exposure to PIIGS (Portugal, Ireland, Italy, Greece, and Spain)	-	98	104	-	-	-	202	-	-	134	-	75	128
Of which: total exposure to LDCs	53	608	721	1,106	617	489	1,871	70	53	757	-	396	986

The line "total LDCs" includes the total exposure to countries defined as Least Developed Countries (LDCs) in Proper Conduct of Banking Business Directive 315, "Supplementary Provision for Doubtful Debts."

Balance sheet exposure to a foreign country includes cross-border balance sheet exposure and balance sheet exposure of the branches/subsidiaries of the banking corporation in the foreign country to local residents. Cross-border balance sheet exposure includes balance sheet exposure of the branches/subsidiaries of the banking corporation in Israel to residents of the foreign country, and balance sheet exposure of the overseas branches/subsidiaries of the banking corporation to non-residents of the country in which the branch/subsidiary is located.

Balance sheet exposure of the banking corporation's branches/subsidiaries in a foreign country to local residents includes balance sheet exposure of the branches/subsidiaries of the banking corporation in that foreign country to the residents of the country, less liabilities of those branches/subsidiaries (the deduction is performed up to the level of the exposure).

(1) Based on the final risk, after the effect of guarantees, liquid collateral, and credit derivatives.
(2) Credit risk in off-balance sheet financial instruments, as calculated for the purpose of the limits on indebtedness of a borrower, according to Proper Conduct of Banking Business Directive 313.
(3) Governments, official institutions, and central banks.
(4) Balance sheet and off-balance sheet credit risk, problematic credit risk, and impaired debts are presented before the effect of the allowance for credit losses, and before the effect of collateral deductible for the purposes of the indebtedness of a borrower and of a group of borrowers.
(5) The balance of the off-balance sheet exposure to foreign countries includes a total of NIS 13,705 million in respect of the acquisition of insurance for the portfolio of Sale Law guarantees from international reinsurers.
(6) Does not include data of the Isracard Group, which constitutes a discontinued operation. Comparative figures were restated accordingly. For details, see Note 1G to the Financial Statements.

Table D-5: Changes in amount of balance sheet exposure to foreign countries with liquidity problems[(1)]

	For the year ended December 31, 2018			
	Ukraine	Venezuela	Argentina	Total
	NIS millions			
Amount of exposure at beginning of period	**28**	**3**	**3**	**34**
Net changes in amount of short-term exposure	**(24)**	**-**	**1**	**(23)**
Changes in other exposures:				
Added exposures	**-**	**-**	**-**	**-**
Accrued interest income	**1**	**-**	**-**	**1**
Amounts collected	**-**	**(1)**	**(1)**	**(2)**
Amount of exposure at end of period	**5**	**2**	**3**	**10**

	For the year ended December 31, 2017			
	Ukraine	Venezuela	Argentina	Total
	NIS millions			
Amount of exposure at beginning of period	35	3	6	44
Net changes in amount of short-term exposure	-	-	-	-
Changes in other exposures:				
Added exposures	-	-	-	-
Accrued interest income	1	-	-	1
Amounts collected	(8)	-	(3)	(11)
Amount of exposure at end of period	28	3	3	34

(1) Based on the final risk, after the effect of guarantees, liquid collateral, and credit derivatives.

For details regarding changes in the allowance for credit losses, analysis of aging (arrears) of credit exposures in arrears, and details of restructured credit exposures, see Note 29 to the Financial Statements, Sections A1, B1(a), and B2(c), respectively.

D.4. Additional information regarding exposures to credit risks

D.4.a. Construction and real estate

Overall credit risk in the construction and real-estate sectors totaled approximately NIS 93 billion as at December 31, 2018.

Table D-6: Segmentation of credit risk of the Bank Group in the construction and real-estate sectors, by principal area of activity**

	Balance as at December 31, 2018			Balance as at December 31, 2017		
	Balance sheet credit risk	Off-balance sheet credit risk	Total credit risk	Balance sheet credit risk	Off-balance sheet credit risk	Total credit risk
	NIS millions					
Construction for commerce and services	**2,074**	**831**	**2,905**	1,681	917	2,598
Construction for industry	**388**	**112**	**500**	302	134	436
Housing construction	**16,675**	***24,760**	**41,435**	14,062	*29,954	44,016
Yield-generating properties	**23,508**	**6,206**	**29,714**	21,368	5,262	26,630
Other	**10,497**	**8,070**	**18,567**	9,371	7,360	16,731
Total construction and real-estate sectors	**53,142**	**39,979**	**93,121**	46,784	43,627	90,411

* Includes off-balance sheet credit risk in the amount of approximately NIS 6,026 million, in respect of which insurance was acquired from foreign insurance companies for the portfolio of Sale Law guarantees (December 31, 2017: NIS 13,705 million).

** Does not include the data of the Isracard Group, which constitutes a discontinued operation. Comparative figures have been restated accordingly. For details, see Note 1G to the Financial Statements.

D.4.b. Credit risk in respect of exposures to borrowers and to groups of borrowers

Table D-7: Details of balances of balance sheet credit and off-balance sheet credit risk to borrowers whose indebtedness exceeds NIS 1,200 million, by sector of the economy

	December 31, 2018			
	Number of borrowers	Balance sheet credit risk	Off-balance sheet credit risk	Total
		NIS millions		
Economic sector				
Industry	**3**	**877**	**5,164**	**6,041**
Construction and real estate – construction	**-**	**-**	**-**	**-**
Construction and real estate – real-estate activities	**1**	**756**	**647**	**1,403**
Electricity and water supply	**1**	**1,276**	**2,315**	**3,591**
Financial services	**3**	**3,077**	**2,571**	**5,648**
Total	**8**	**5,986**	**10,697**	**16,683**

	December 31, 2017			
	Number of borrowers	Balance sheet credit risk	Off-balance sheet credit risk	Total
		NIS millions		
Economic sector				
Industry	2	858	3,877	4,735
Construction and real estate – construction	1	431	902	1,333
Construction and real estate – real-estate activities	1	552	752	1,304
Electricity and water supply	1	1,540	1,677	3,217
Financial services	4	3,376	3,771	7,147
Total	9	6,757	10,979	17,736

Credit risk in respect of exposure to borrower groups

The definition of capital in this context includes Tier 1 capital, plus Tier 2 capital, as published in the Financial Statements as at December 31, 2015. Tier 2 capital is being reduced in equal installments over twelve quarters, until it reaches zero on December 31, 2018.

The Bank conducts monitoring and control processes in order to examine compliance with the limits set forth in Directive 313 with regard to exposure to the indebtedness of borrower groups. As at the reporting date, the Bank is in compliance with the limits.

Table D-8: Details of credit risk balances for each group of borrowers whose net indebtedness on a consolidated basis exceeds 15% of the capital of the banking corporation (as defined in Directive 313)

	Balance sheet credit risk[1]	Off-balance sheet credit risk[1]	Of which: off-balance sheet credit risk in respect of derivative instruments[2]	Gross indebtedness[3]	Deductions[4]	Net indebtedness[5]	Percentage of regulatory capital
	NIS millions						
Borrower group A	4,169	3,178	405	7,358	22	7,335	18.77%
Borrower group B	2,642	3,459	349	6,102	8	6,094	15.59%

(1) After deduction of the balance of charge-offs and the allowance for credit losses calculated on an individual basis.
(2) Off-balance sheet credit risk in respect of derivative instruments, as calculated for the purposes of the limits on indebtedness of borrowers and of borrower groups.
(3) This amount includes third-party guarantees outside the group.
(4) Deductions permitted under Directive 313, mainly including deposits deposited at the Bank, bonds issued by the State of Israel, and deductible indemnity letters of the State of Israel or financial institutions.
(5) The data presented above represent exposure to borrower groups, and are stated after the permitted deductions pursuant to Directive 313, and after deduction of the allowance for credit losses calculated on an individual basis. These data are therefore not comparable with data regarding borrowers' indebtedness provided in other disclosures in the report.

D.4.c. Credit to private individuals (excluding housing)

Table D-9: Balance of credit to private individuals in Israel*

	Balance as at		Change	
	December 31, 2018	December 31, 2017		
	NIS millions			%
Balance sheet				
Negative balance in current accounts	**3,892**	3,525	367	10.41%
Loans[1]	**29,791**	31,470	(1,679)	(5.34%)
Of which: bullet and balloon loans	**114**	147	(33)	(22.45%)
Credit for purchases of motor vehicles[2]	**4,375**	4,593	(218)	(4.75%)
Debtors in respect of credit-card activity	**4,905**	5,582	(677)	(12.13%)
Total balance sheet credit risk	**42,963**	45,170	(2,207)	(4.89%)
Off-balance sheet				
Off-balance sheet credit risk	**20,368**	19,953	415	2.08%
Total credit risk	**63,331**	65,123	(1,792)	(2.75%)

* Does not include the data of the Isracard Group, which constitutes a discontinued operation. Comparative figures have been restated accordingly. For details, see Note 1G to the Financial Statements.
(1) Excluding loans for purchases of motor vehicles.
(2) Including loans granted for the purchase of motor vehicles or with a lien on a motor vehicle. For additional details, see Section 3.2.10, "Auto loans," below.

Table D-10: Information regarding problematic debts in respect of private individuals in Israel

	Balance as at		Change	Percentage of total balance sheet credit risk As at	
	December 31, 2018	December 31, 2017		**December 31, 2018**	December 31, 2017
	NIS millions				
Problematic credit risk	**873**	830	5.18%	**2.03%**	1.84%
Of which: impaired credit risk	**694**	719	(3.48%)	**1.62%**	1.59%
Debts in arrears of more than 90 days	**107**	97	10.31%	**0.25%**	0.21%
Net charge-offs for the period	**473**	399	18.55%	**1.10%**	0.88%
Allowance for credit losses	**892**	906	(1.55%)	**2.08%**	2.01%

The balance of loans to private individuals in Israel, including credit for the purchase of motor vehicles, decreased by 5.3% in 2018. Total balance sheet credit risk decreased by 4.89% (excluding a balance in respect of a discontinued operation).

The percentage of problematic credit risk increased by approximately 5.2% in 2018, due, among other factors, to the initial implementation of the automatic classification of debts lower than NIS 1 million as under special supervision in the first quarter of 2018, based on fixed criteria, which led to an increase in the balance of problematic debts in respect of private individuals. This figure was relatively stable in the second and third quarters, and decreased significantly in the fourth quarter.

Impaired credit risk decreased in 2018.

The percentage of debts in arrears of more than 90 days rose from 0.21% in December 2017 to 0.25% in December 2018.

The rate of net charge-offs was higher than in December 2017, indicating deterioration in the quality of this portfolio, which was also evident in 2017 and in 2016. The Bank has taken several measures to improve the quality of underwriting in credit to private individuals, and regularly monitors trends in this portfolio.

For further details, see the section "Credit risk" in the "Review of risks" in the Report of the Board of Directors and Board of Management as at December 31, 2018.

D.4.d. Risks in the housing loan portfolio

Table D-11: Development of the balance in the housing credit portfolio, by linkage base and as a percentage of the balance in the credit portfolio of the Bank

	Unlinked segment				CPI-linked segment				Foreign-currency segment		Total	
	Fixed interest rate		Floating interest rate		Fixed interest rate		Floating interest rate		Floating interest rate			
	Balance in NIS millions	Rate in %	Balance in NIS millions	Rate in %	Balance in NIS millions	Rate in %	Balance in NIS millions	Rate in %	Balance in NIS millions	Rate in %	Recorded debt balance in NIS millions	Rate of change during the period
Dec. 31, 2018	**14,503**	**17.8%**	**31,060**	**38.1%**	**13,539**	**16.6%**	**21,984**	**27.0%**	**368**	**0.5%**	**81,454**	**9.3%**
Dec. 31, 2017	12,455	16.7%	28,022	37.6%	12,988	17.4%	20,619	27.7%	437	0.6%	74,521	7.6%
Dec. 31, 2016	10,570	15.3%	25,360	36.6%	12,630	18.2%	20,120	29.1%	574	0.8%	69,254	3.0%

Risk quantification and measurement – housing credit portfolio

The Bank routinely monitors developments in the housing credit portfolio, and applies various measures to manage risk. Housing credit risks are examined individually, based on the policies and objectives established in the risk appetite set for housing credit, from the level of the individual transaction to an overview of the housing credit portfolio of the Bank.

Risk hedging: The Bank manages and hedges risk, among other means, through limits on various segments, as established in policy discussions of the Board of Management and the Board of Directors, overseen and led by the Risk Management Area. The limits address LTV rates, repayment capability, distribution of credit products in the portfolio, volume of problematic debt, loan durations, geographical distribution, rate of arrears, etc. These indicators are also monitored in comparison to the data of the banking system as a whole.

The Bank tracks conditions and changes in macro-economic indicators in general, and in the business environment of the industry in particular. Certain events require a reexamination of policy, such as a sharp increase in the floating interest rate or in inflation, an increase in unemployment in the Israeli economy, or a material change in housing prices. Data are reported on a monthly basis in an Area-level risk forum headed by the Head of Retail Banking, and on a quarterly basis as part of the report on developments in the credit portfolio and in credit risk to the Board of Management and Board of Directors.

The Bank uses a statistical model to measure the probability of default and the expected loss in the mortgage portfolio. In addition, stress scenarios are applied to the mortgage portfolio, and the effect on the portfolio and on the Bank as a whole is analyzed. These scenarios include a sharp decline in prices of homes, an increase in the interest rate, and an increase in the unemployment rate. In addition, insurance arrangements are in place (life insurance and building insurance).

Table D-12: Details of characteristics of housing credit granted by the Bank – percentage of total new loans executed

	For the year ended		
	December 31, 2018	December 31, 2017	December 31, 2016
Characteristics			
Financing rate over 60%	**32.5%**	27.5%	24.5%
Ratio of repayment to income greater than 40% (for purchases of homes and in monthly payments)	**0.1%**	0.0%	0.2%
Percentage with floating interest rates varying at a frequency of less than 5 years	**31.7%**	31.0%	30.0%
Percentage with floating rates	**58.8%**	57.0%	55.0%
Percentage of all-purpose loans	**6.1%**	6.4%	3.9%
Loans for investment purposes as a percentage of purchases of homes	**9.8%**	11.1%	14.6%
Principal planned for repayment after age 67 (excluding investments)	**7.2%**	6.6%	6.3%
Average original term to maturity of loans for purchases of homes, in years (excluding bridge loans)	**24.4**	23.8	23.2

The upward trend in the percentage of credit granted with a financing rate greater than 60% continued in 2018. The percentage of floating-rate loans rose. The percentage of loans granted with payments higher than 40% of income rose slightly, but remained low.

The percentage of principal scheduled for repayment after the age of 67 (excluding investments) increased, while loans for investment purposes as a percentage of purchases of homes and all-purpose loans decreased.

The average term to maturity of loans for purchases of homes (excluding bridge loans) has continued to increase.

D.1.e. Leveraged financing

Leveraged financing is managed and defined at the Bank in accordance with the directives of the Bank of Israel, and in particular, with Proper Conduct of Banking Business Directive 311 (Credit Risk Management), Proper Conduct of Banking Business Directive 323 (Limits on Financing of Equity Transactions), and Proper Conduct of Banking Business Directive 327 (Management of Leveraged Loans).

Among other matters, leveraged financing includes equity transactions (transactions for the acquisition of an equity interest in another corporation, acquisition of all or a significant part of the assets of another corporation, buybacks of issued shareholders' equity, or capital distribution – payment of a dividend, or another transaction aimed at increasing value for shareholders, as defined in Proper Conduct of Banking Business Directive 323), and financing for borrowers in various segments of specified economic sectors characterized by exceptional levels of certain parameters, relative to the accepted norms in the economic sectors, such as a high financing rate that deviates from the policy for the sector, and financing of mezzanine debt.

The Bank provides leveraged financing to its customers from time to time. An internal limit applies to leveraged financing as a percentage of the Tier 1 capital of the Bank. Developments in leveraged financing and compliance with the established limit are reported each quarter to the Board of Management and the Board of Directors of the Bank, for monitoring of the risks inherent in this type of financing.

Data regarding credit risks in respect of leveraged financing are presented below. The disclosure focuses on exposures of leveraged borrowers/transactions where the credit balance exceeds the amount of 0.5% of Tier 1 capital.

Table D-13: The Bank's exposures to leveraged financing, by economic sector of the borrower

	December 31, 2018			
	Number of borrowers	Balance sheet credit balance	Off-balance sheet credit balance	Total
		NIS millions		
Economic sector of the borrower				
Construction and real estate – construction	**1**	**257**	**-**	**257**
Construction and real estate – real-estate activities	**2**	**658**	**534**	**1,192**
Mining and quarrying	**2**	**1,361**	**38**	**1,399**
Information and communications	**1**	**266**	**-**	**266**
Commerce	**3**	**741**	**170**	**911**
Industry	**1**	**225**	**-**	**225**
Total	**10**	**3,508**	**742**	**4,250**

	December 31, 2017			
	Number of borrowers	Balance sheet credit balance	Off-balance sheet credit balance	Total
		NIS millions		
Economic sector of the borrower				
Construction and real estate – construction	1	387	-	387
Construction and real estate – real-estate activities	1	551	467	1,018
Hotels, hospitality, and food services	1	-	200	200
Mining and quarrying	2	1,481	19	1,500
Commerce	2	602	340	942
Industry	1	208	-	208
Total	8	3,229	1,026	4,255

D.5. Credit risk mitigation: standardized approach disclosures

The Bank applies the comprehensive standardized approach in order to determine risk weightings to apply to the counterparty. The standardized approach requires the use of independent ratings prepared by international rating agencies.

Pursuant to the Basel 3 directives, under certain conditions, certain collateral, such as guarantees, credit derivatives, and financial assets held as collateral, can be deducted from risk components for the purpose of calculating the capital-adequacy ratio.

The deduction of collateral for the calculation of the capital ratio is performed after using safety margins established in the directive. These margins take into account factors including the term to maturity of the collateral, any lack of congruity between the linkage terms of the collateral and of the credit that it secures, and volatility in the value of the collateral.

The qualifying financial collateral used by the Bank to calculate capital adequacy and risk mitigation includes deposits that constitute collateral by way of liens, bonds of banking corporations and governments under permanent liens, and shares under lien traded on the primary index. In addition, the Bank uses guarantees of banking corporations, which transfer the exposure from the segment of the guaranteed party to exposure to banking corporations.

Table D-14: Credit risk mitigation

		December 31, 2018								
		Unsecured	Secured							
		Total balance sheet balance	Total balance sheet balance	Of which: amount secured	Of which: by collateral		Of which: by financial guarantees		Of which: by credit derivatives	
					Balance sheet balance	Of which: amount secured	Balance sheet balance	Of which: amount secured	Balance sheet balance	Of which: amount secured
		NIS millions								
1	Debts, excluding bonds	**377,488**	**20,225**	**13,779**	**11,841**	**5,993**	**8,384**	**7,786**	**-**	**-**
2	Bonds	**47,860**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
3	Total	**425,348**	**20,225**	**13,779**	**11,841**	**5,993**	**8,384**	**7,786**	**-**	**-**
4	Of which: impaired or in arrears of 90 days or more	**3,358**	**62**	**45**	**62**	**45**	**-**	**-**	**-**	**-**

		December 31, 2017								
		Unsecured	Secured							
		Total balance sheet balance	Total balance sheet balance	Of which: amount secured	Of which: by collateral		Of which: by financial guarantees		Of which: by credit derivatives	
					Balance sheet balance	Of which: amount secured	Balance sheet balance	Of which: amount secured	Balance sheet balance	Of which: amount secured
		NIS millions								
1	Debts, excluding bonds	360,726	20,081	13,498	11,694	5,948	8,387	7,550	-	-
2	Bonds	57,594	-	-	-	-	-	-	-	-
3	Total	418,320	20,081	13,498	11,694	5,948	8,387	7,550	-	-
4	Of which: impaired or in arrears of 90 days or more	2,668	48	6	48	6	-	-	-	-

D.5.a. Implementation of external credit ratings

According to the external rating based standardized approach implemented at the Bank, credit-risk weightings are determined by methods including the attribution of exposure to the counterparty to a transaction, as stated in the directive, taking into account the external credit ratings established by external credit assessment institutions (ECAI), which are used for standardized measurement of credit risk.

ECAI ratings are used to determine the risk weights of the following counterparties:

- Sovereigns;
- Public sector;
- Corporations;
- Banking corporations.

In addition, the Bank uses insurance policies of credit-risk insurers with high international ratings to mitigate credit risk, so that the risk weight is based on the ratings of the insurers, rather than on the ratings of the counterparties.

For the purposes of the ratings, the Bank uses data from two rating agencies: Moody's Investor Service and Standard & Poor's Rating Group.

Table D-15: Mapping of ratings of the major international rating agencies

	Ratings by rating agencies		Risk weight		
	Moody's	S&P	Corporations	Banks	Sovereign
1	Aaa to Aa3	AAA to AA-	20%	20%	0%
2	A1 to A3	A+ to A-	50%	50%	20%
3	Baa1 to Baa3	BBB+ to BBB-	100%	100%	50%
4	Ba1 to Ba3	BB+ to BB-	100%	100%	100%
5	B1 to B3	B+ to B-	150%	100%	100%
6	Caa1 or lower	CCC+ or lower	150%	150%	150%

During the rating process, customers are identified and the appropriate rating is determined by matching the files of the ECAIs with the data of the counterparties. The data are entered into the calculation system, and the appropriate risk weight is assigned based on the rules established by the Banking Supervision Department. Accordingly, the lower of the credit ratings assigned by either of the two rating agencies noted above is selected.

When there is no rating for the counterparty, the risk weight is calculated according to the defaults defined in the directives of the Bank of Israel.

The risk weight for debts of Israeli banks with an original term to maturity of three months or less, denominated and financed in NIS, is 20%.

The risk weight for banks is determined by the risk weight of the country in which the bank is incorporated, and is one level below the risk weight derived from the sovereign rating.

For investments in issuances that have a specific issuance rating, the risk weight of the debt is based on such rating, except when the issuer is a banking corporation or a public-sector entity. In these cases, the risk weight is based on the issuer rating, rather than on the specific issuance rating.

D.5.b. Standardized approach – credit risk exposure and effects of credit risk mitigation

Table D-16: Credit risk exposure and effects of credit risk mitigation[1]

		December 31, 2018					
		Exposures before CCF and CRM		Exposures after CCF and CRM		RWA and RWA density	
		Balance sheet amount[2]	Off-balance sheet amount[2]	Balance sheet amount[3]	Off-balance sheet amount[3]	RWA	RWA density
		NIS millions/percent					
1	Sovereigns, central banks thereof, and national monetary authority	**117,570**	**2**	**116,615**	**-**	**1,474**	**1.3%**
2	Public-sector entities (PSE) other than the central government	**3,835**	**3,440**	**6,034**	**1,197**	**2,388**	**33.0%**
3	Banks (including multilateral development banks (MDB))	**12,881**	**1,749**	**17,340**	**2,029**	**5,332**	**27.5%**
5	Corporations	**95,860**	**65,656**	**92,565**	**28,643**	**115,197**	**95.0%**
6	Retail exposures to individuals	**65,645**	**44,931**	**59,370**	**5,042**	**48,309**	**75.0%**
7	Loans to small businesses	**9,740**	**3,755**	**8,902**	**754**	**7,242**	**75.0%**
8	Secured by a residential property	**80,326**	**5,162**	**80,326**	**764**	**44,578**	**55.0%**
9	Secured by commercial real estate	**39,980**	**60,346**	**39,871**	**14,789**	**54,660**	**100.0%**
10	Loans in arrears[4]	**3,420**	**-**	**3,188**	**-**	**4,167**	**130.7%**
11	Other assets	**12,172**	**460**	**11,636**	**230**	**9,020**	**76.0%**
12	Total	**441,429**	**185,501**	**435,847**	**53,448**	**292,367**	**59.8%**

		December 31, 2017					
		Exposures before CCF and CRM		Exposures after CCF and CRM		RWA and RWA density	
		Balance sheet amount[2]	Off-balance sheet amount[2]	Balance sheet amount[3]	Off-balance sheet amount[3]	RWA	RWA density
		NIS millions/percent					
1	Sovereigns, central banks thereof, and national monetary authority	127,047	112	126,202	56	1,440	1.1%
2	Public-sector entities (PSE) other than the central government	3,948	1,609	6,033	828	2,187	31.9%
3	Banks (including multilateral development banks (MDB))	14,170	876	18,539	1,443	5,861	29.3%
5	Corporations	87,167	60,019	83,990	34,290	107,129	90.6%
6	Retail exposures to individuals	66,664	43,596	60,378	4,989	49,025	75.0%
7	Loans to small businesses	10,778	3,954	9,808	841	7,987	75.0%
8	Secured by a residential property	73,517	3,279	73,517	611	40,987	55.3%
9	Secured by commercial real estate	36,028	59,276	35,676	12,716	48,392	100.0%
10	Loans in arrears[4]	2,716	-	2,541	-	3,245	127.7%
11	Other assets	12,445	397	12,445	199	9,663	76.4%
12	Total	434,480	173,118	429,129	55,973	275,916	56.9%

(1) The balances in the disclosure include balance sheet and off-balance sheet balances reflecting credit risk, excluding amounts of deferred taxes and investments in financial corporations below deduction thresholds (which are subject to a risk weight of 250%), exposures in respect of counterparty credit risk, and securitization exposures.
(2) The balances reflect the supervisory exposure amounts net of allowances and charge-offs, before credit conversion factors and before credit risk mitigation methods.
(3) The balances reflect the supervisory exposure amounts net of allowances and charge-offs, after credit conversion factors and after credit risk mitigation methods.
(4) Balance sheet and off-balance sheet balances were merged due to immateriality.

D.5.c. Standardized approach – exposures by asset type and risk weight

Table D-17: Standardized approach – exposures by asset type and risk weight[(1)(2)]

		December 31, 2018								
		0%	20%	35%	50%	60%	75%	100%	150%	Total amount of credit exposures (after CCF and after CRM)
		NIS millions								
1	Sovereigns, central banks thereof, and national monetary authority	**110,991**	**5,169**	**-**	**71**	**-**	**-**	**343**	**41**	**116,615**
2	Public-sector entities (PSE) other than the central government	**2,210**	**407**	**-**	**4,614**	**-**	**-**	**-**	**-**	**7,231**
3	Banks (including multilateral development banks (MDB))	**700**	**13,459**	**-**	**5,138**	**-**	**-**	**72**	**-**	**19,369**
5	Corporations	**-**	**5,993**	**-**	**2,437**	**-**	**-**	**112,778**	**-**	**121,208**
6	Retail exposures to individuals	**-**	**-**	**-**	**-**	**-**	**64,412**	**-**	**-**	**64,412**
7	Loans to small businesses	**-**	**-**	**-**	**-**	**-**	**9,656**	**-**	**-**	**9,656**
8	Secured by a residential property	**-**	**-**	**27,717**	**22,003**	**3,755**	**23,971**	**3,644**	**-**	**81,090**
9	Secured by commercial real estate	**-**	**-**	**-**	**-**	**-**	**-**	**54,660**	**-**	**54,660**
10	Loans in arrears	**-**	**-**	**-**	**-**	**-**	**-**	**1,231**	**1,957**	**3,188**
11	Other assets*	**3,166**	**-**	**-**	**-**	**-**	**-**	**8,060**	**640**	**11,866**
11A	* Of which: in respect of shares	**-**	**-**	**-**	**-**	**-**	**-**	**1,103**	**410**	**1,513**
12	Total	**117,067**	**25,028**	**27,717**	**34,263**	**3,755**	**98,039**	**180,788**	**2,638**	**489,295**

(1) The balances in the disclosure include balance sheet and off-balance sheet balances reflecting credit risk, excluding amounts of deferred taxes and investments in financial corporations below deduction thresholds (which are subject to a risk weight of 250%), exposures in respect of counterparty credit risk, and securitization exposures.
(2) The balances reflect the supervisory exposure amounts net of allowances and charge-offs, after credit conversion factors and after credit risk mitigation methods.

Table D-17: Standardized approach – exposures by asset type and risk weight[(1)(2)] (continued)

		December 31, 2017								
		0%	20%	35%	50%	60%	75%	100%	150%	Total amount of credit exposures (after CCF and after CRM)
		NIS millions								
1	Sovereigns, central banks thereof, and national monetary authority	121,090	4,634	-	41	-	-	493	-	126,258
2	Public-sector entities (PSE) other than the central government	2,135	589	-	4,137	-	-	-	-	6,861
3	Banks (including multilateral development banks (MDB))	337	13,906	-	5,319	-	-	420	-	19,982
5	Corporations	-	11,653	-	3,664	-	-	102,953	10	118,280
6	Retail exposures to individuals	-	-	-	-	-	65,367	-	-	65,367
7	Loans to small businesses	-	-	-	-	-	10,649	-	-	10,649
8	Secured by a residential property	-	-	27,292	18,388	-	24,830	3,618	-	74,128
9	Secured by commercial real estate	-	-	-	-	-	-	48,392	-	48,392
10	Loans in arrears	-	-	-	-	-	-	1,133	1,408	2,541
11	Other assets*	3,293	-	-	-	-	-	8,725	626	12,644
11A	* Of which: in respect of shares	-	-	-	-	-	-	1,732	427	2,159
12	Total	126,855	30,782	27,292	31,549	-	100,846	165,734	2,044	485,102

(1) The balances in the disclosure include balance sheet and off-balance sheet balances reflecting credit risk, excluding amounts of deferred taxes and investments in financial corporations below deduction thresholds (which are subject to a risk weight of 250%), exposures in respect of counterparty credit risk, and securitization exposures.

(2) The balances reflect the supervisory exposure amounts net of allowances and charge-offs, after credit conversion factors and after credit risk mitigation methods.

E. Counterparty credit risks

Counterparty risk is defined at the Bank according to the definition in Proper Conduct of Banking Business Directive 203, as the credit risk arising from transactions in derivative financial instruments. The risk is that the counterparty to the transaction will default before the final settlement of cash flows in the transaction. The market value of the transaction may be positive or negative for any of the parties to the transaction; the market value is not certain, and may change over time and according to movements in the underlying market-risk factors.

E.1. Management of counterparty risk

The goal of the management of this risk is to make it possible to take counterparty risks in an informed manner, through the establishment of a policy, a risk appetite and risk limits, and a risk-assessment methodology.

For the activity of Bank counterparties involving derivative financial instruments, the Bank has developed computerized models for assessing and controlling counterparty risk at the transaction level and the customer level. These models allow the Bank to regularly monitor counterparties' financial situation. In this activity, credit exposure at a particular date is defined as the total of the market value of the position plus potential risk of future losses arising from volatility of the underlying assets in the position of the counterparty, taking into account netting and correlation between the transactions; this represents the Bank's potential loss in the event of default by the counterparty.

The potential risk of future loss arising from transactions in derivative financial instruments in respect of the counterparty is measured by applying conservative haircuts to the nominal value of the transactions, or using the scenarios approach, in which the maximum potential exposure of the customer is calculated in a range of different market situations, or using an internal model developed at the Bank. The measurement method is matched to the counterparty, according to the nature of activity in the counterparty's derivatives portfolio and the agreements which the customer has signed with the Bank.

The purpose of these models is to express the exposure to counterparty risk in terms of credit exposure. Credit exposure is managed by the business units, according to a hierarchy of credit authority, and according to the assignment of the customer to the Corporate Banking Area, the Retail Banking Area, or the Financial Markets and International Banking Area. In this line of defense, control units exist to monitor exposures against limits and calculate collateral requirements.

Rules and working procedures have been established in order to determine the required level of collateral for such transactions, as well as rules regarding the actions necessary in order to close exposures.

The collateral policy is matched to the type of borrower and activity in the area of derivatives, subject to Proper Conduct of Banking Business Directive 330. Counterparty exposure limits are set by the appropriate credit authorities at the Bank.

The Market and Liquidity Risk Management Department in the Risk Management Area serves as the second line of defense, and is responsible for establishing methodology for the assessment of exposure to counterparty risk, instilling this methodology at the Bank, and calculating customers' credit exposure in respect of their activity in the dealing room, both for the purpose of collateral requirements and for the purpose of the allocation of economic capital.

The Bank's policy for activity in derivatives with financial institutions obligated to comply with capital-adequacy requirements is to operate within Credit Support Annex (CSA) agreements, in order to limit exposure. These agreements do not encompass conditions requiring an increase in collateral in the event of a downgrade of a rating. Operational aspects arising from this activity are examined and controlled routinely by a specialized unit.

In order to calculate credit risk exposure in respect of derivative financial instruments in the financial statements, the Bank implements the current exposure method, as established in Proper Conduct of Banking Business Directive 203. To manage and mitigate the risk, the Bank uses techniques that allow netting of derivatives transactions, in accordance with the directive, under the following conditions, among others:

- Existence of a netting contract or agreement with the counterparty creating a single legal obligation covering all of the included transactions, such that the banking corporation has the right to receive, or the obligation to pay, only the net amount of the positive and negative values, marked to market, of the single transactions included, in the event that the counterparty fails to meet its obligations due to one of the following reasons: default, bankruptcy, liquidation, or similar circumstances.
- Existence of written, reasoned legal opinions according to which, if the matter were brought to a legal test, the courts and the relevant administrative agencies would find that the banking corporation's exposure is a net amount, based on:
    - The law in the jurisdiction in which the counterparty is registered, and in the case of involvement of a foreign office of the counterparty, also the law in the jurisdiction in which the office is located;
    - The law applicable to the individual transactions;
    - The law applicable to any contract or agreement necessary in order to execute the actual offset.
- Existence of internal regulations aimed at ensuring that the legal characteristics of netting arrangements are examined in light of the possibility of changes in the relevant law. Among other matters, the regulations shall ensure the performance of recurring legal reviews.
- Existence of internal regulations aimed at ensuring that before the transaction is included in the netting set, the transaction is covered by legal opinions that fulfill the criteria established above.

Exposure to wrong-way risk is examined within the application of stress scenarios. This risk is escalated when scenario data consistently affect both the size of the exposure and default events.

Scenarios in which a situation may emerge where the Bank is obligated to increase the collateral deposited with counterparties are taken into consideration within the internal liquidity model, in order to ensure sufficient preparedness in the event of materialization of the scenario.

In addition to counterparty credit risk in respect of the risk of default, the Bank is required to allocate capital to cover the risk of credit valuation adjustment (CVA) losses, in respect of expected counterparty risk in over-the-counter (OTC) derivatives.

Table E-1: Analysis of exposure to counterparty credit risk based on the supervisory approach

		December 31, 2018				December 31, 2017			
		Replacement cost	Potential future exposure	EAD after CRM	RWA	Replacement cost	Potential future exposure	EAD after CRM	RWA
		NIS millions							
1	Present exposure method	**2,886**	**6,383**	**9,269**	**6,449**	3,214	6,169	9,383	6,071
3	Comprehensive approach to credit risk mitigation (for securities financing transactions (SFT))	**-**	**-**	**-**	**-**	-	-	-	-
6	Total	**2,886**	**6,383**	**9,269**	**6,449**	3,214	6,169	9,383	6,071

Table E-2: Capital allocation in respect of adjustment of revaluation to credit risk

		December 31, 2018		December 31, 2017	
		EAD after CRM	RWA	EAD after CRM	RWA
		NIS millions			
3	Total portfolios in respect of which CVA is calculated according to the standardized approach	**9,269**	**3,327**	9,383	3,692

Table E-3: Standardized approach – exposures to counterparty credit risk based on the supervisory portfolio and risk weights

	December 31, 2018								
	0%	2%	20%	50%	75%	100%	150%	Other	Total credit exposure
	NIS millions								
Sovereigns	**17**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**17**
Public-sector entities (PSEs) other than the central government	**-**	**-**	**-**	**1,071**	**-**	**-**	**-**	**-**	**1,071**
Banks (including multilateral development banks (MDB))	**-**	**-**	**2,286**	**309**	**-**	**42**	**-**	**-**	**2,637**
Corporations	**-**	**-**	**-**	**570**	**-**	**4,634**	**-**	**-**	**5,204**
Supervisory retail portfolios	**-**	**-**	**-**	**-**	**-**	**28**	**-**	**-**	**28**
Loans to small businesses	**-**	**-**	**-**	**-**	**-**	**10**	**-**	**-**	**10**
Secured by commercial real estate	**-**	**-**	**-**	**-**	**-**	**302**	**-**	**-**	**302**
Other assets	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Total	**17**	**-**	**2,286**	**1,950**	**-**	**5,016**	**-**	**-**	**9,269**

	December 31, 2017								
	0%	2%	20%	50%	75%	100%	150%	Other	Total credit exposure
	NIS millions								
Sovereigns	129	-	-	-	-	-	-	-	129
Public-sector entities (PSEs) other than the central government	-	-	-	1,969	-	-	-	-	1,969
Banks (including multilateral development banks (MDB))	-	-	2,191	376	-	18	-	-	2,585
Corporations	-	-	-	516	-	4,017	-	-	4,533
Supervisory retail portfolios	-	-	-	-	-	25	-	-	25
Loans to small businesses	-	-	-	-	-	10	-	-	10
Secured by commercial real estate	-	-	-	-	-	132	-	-	132
Other assets	-	-	-	-	-	-	-	-	-
Total	129	-	2,191	2,861	-	4,202	-	-	9,383

Table E-4: Composition of collateral in respect of exposure to counterparty credit risk

	December 31, 2018					
	Collateral used in derivatives transactions				Collateral used in securities financing transactions (SFTs)	
	Fair value of collateral received		Fair value of collateral deposited		Fair value of collateral received	Fair value of collateral deposited
	Disconnected	Not disconnected	Disconnected	Not disconnected		
	NIS millions					
Cash – local currency	**-**	**17**	**-**	**193**	**-**	**-**
Cash – other currencies	**-**	**1,112**	**-**	**1,361**	**-**	**-**
Local sovereign debt	**-**	**71**	**-**	**-**	**-**	**-**
Other sovereign debt	**-**	**-**	**-**	**-**	**-**	**-**
Debt of government agency	**-**	**-**	**-**	**-**	**-**	**-**
Corporate bonds	**-**	**-**	**-**	**-**	**-**	**-**
Shares	**-**	**131**	**-**	**-**	**-**	**-**
Other collateral	**-**	**-**	**-**	**-**	**-**	**-**
Total	**-**	**1,331**	**-**	**1,554**	**-**	**-**

	December 31, 2017					
	Collateral used in derivatives transactions				Collateral used in securities financing transactions (SFTs)	
	Fair value of collateral received		Fair value of collateral deposited		Fair value of collateral received	Fair value of collateral deposited
	Disconnected	Not disconnected	Disconnected	Not disconnected		
	NIS millions					
Cash – local currency	-	72	-	338	-	-
Cash – other currencies	-	541	-	1,390	-	-
Local sovereign debt	-	-	-	-	-	-
Other sovereign debt	-	-	-	-	-	-
Debt of government agency	-	-	-	-	-	-
Corporate bonds	-	-	-	-	-	-
Shares	-	471	-	-	-	-
Other collateral	-	-	-	-	-	-
Total	-	1,084	-	1,728	-	-

Table E-5: Exposures to credit derivatives

	December 31, 2018		December 31, 2017	
	Protection acquired	Protection sold	Protection acquired	Protection sold
	NIS millions			
Nominal amounts				
Credit default swap transactions on a single entity	-	-	50	121
Credit default swap transactions on an index	-	-	-	-
Total return swap transactions	-	-	-	-
Credit options	-	-	-	-
Other credit derivatives	-	-	-	-
Total nominal amounts	-	-	50	121
Fair values				
Positive fair value (asset)	-	-	-	-
Negative fair value (liability)	-	-	-	-

Table E-6: Exposures to central counterparties

		December 31, 2018		December 31, 2017	
		EAD after CRM	RWA	EAD after CRM	RWA
		NIS millions			
1	Exposures to a qualified central counterparty (total)	**2,949**	**500**	2,464	418
2	Exposures to transactions with a qualified central counterparty (excluding primary collateral and transfers to a risk fund), of which:	-	-	-	-
3	a. OTC derivatives	-	-	-	-
4	b. Transactions in marketable derivatives on the stock exchange	**855**	**17**	337	6
5	c. Securities financing transactions	-	-	-	-
6	d. Netting sets in which netting of productshas been approved	-	-	-	-
7	Disconnected primary collateral	-	-	-	-
8	Non-disconnected primary collateral	**1,644**	**33**	1,751	36
9	Financed transfers to a risk fund	**450**	**450**	376	376
10	Non-financed transfers to a risk fund	-	-	-	-
11	Exposures to an unqualified central counterparty (total)	-	-	-	-
12	Exposures to transactions with an unqualified central counterparty (excluding primary collateral and transfers to a risk fund), of which:	-	-	-	-
13	a. OTC derivatives	-	-	-	-
14	b. Transactions in marketable derivatives on the stock exchange	-	-	-	-
15	c. Securities financing transactions	-	-	-	-
16	d. Netting sets in which netting of products has been approved	-	-	-	-
17	Disconnected primary collateral	-	-	-	-
18	Non-disconnected primary collateral	-	-	-	-
19	Financed transfers to a risk fund	-	-	-	-
20	Non-financed transfers to a risk fund	-	-	-	-

F. Market risk

Market risk is the risk of loss or decline in value as a result of change in the economic value of a financial instrument, or of a particular portfolio, due to changes in prices, rates, spreads, and other market parameters. This includes:

- **Interest-rate risk –** The risk of loss or decline in value as a result of changes in interest rates in the various currencies;
- **Currency risk –** The risk of loss as a result of changes in exchange rates;
- **Inflation risk –** The risk of loss as a result of changes in the curve of CPI expectations;
- **Share price risk** – The risk of loss as a result of changes in stock prices or in stock indices;
- **Credit spread risk –** The risk of loss as a result of change in the spread between the yield to maturity of corporate bonds traded in the markets and the relevant risk-free interest rate;
- **Volatility risk –** The risk of loss as a result of changes in the volatility rates quoted in the market;
- **Basis spread risk –** The risk of loss as a result of changes in the spreads between different interest-rate curves or different interest bases.

The main risk factors to which the Bank is exposed are NIS interest rates in the linked and unlinked segments, inflation, the NIS/USD exchange rate, and spreads between different interest-rate curves.

F.1. Market risk

F.1.a. Management of market risk

Market risks are managed based on a global view of the Bank's activity in Israel and at its branches abroad, taking into account the activity of subsidiaries with significant exposures for the Group. Market risks are managed separately by each company in the Bank Group, according to policy established by each company's board of directors and in accordance with Group policy. The Bank has set risk limits for the Group that also apply to subsidiaries in which the risk level has been defined as significant for the Group. Market and liquidity risks are assessed and controlled based on a uniform methodology at the Group level, under the direction of the Risk Management Area, taking into account the size of capital and the unique characteristics of the activity of each company. Exposures to market risks of the Bank and the subsidiaries are examined by the Market and Liquidity Risk Management Department in the Risk Management Area, and reported to the Board of Management and the Board of Directors of the Bank at an appropriate frequency based on the risk level. The Financial Markets and International Banking Area is responsible for the management of exposures to market risks generated as a result of the activity of all of the business units of the Bank. Market risks in the banking book are managed by the Asset and Liability Management Division, and market risks in the trading book are managed by the Dealing Rooms and Brokerage Division. Market risk assessment and the complementary controls are performed in the Risk Management Area, by the Market and Liquidity Risk Management Department, independently and in addition to the monitoring and analysis performed as part of the activity of the Financial Markets and International Banking Area. Risk limits reflect the Bank's risk appetite for market risks – the level of risk which the Board of Directors and the Board of Management are willing to bear in the course of business operations in order to achieve returns or value. The limits are established by the Board of Directors and fixed in procedures, including, among other things, limits on the sensitivity of the Bank's economic value to changes in the principal risk factors and specific limits for each of the various activities. The Bank's market risk appetite is established in terms of VaR and/or sensitivities and/or scenarios. Market risk exposures are identified methodically, by collecting information from management systems of trading products and non-trading products. This information is analyzed in order to manage and assess the risk, using advanced automated systems suited to each need, based on commonly accepted pricing models. The models are subject to an orderly validation procedure.

F.1.b. Market risk management policy

Market risk management policy in the Bank Group is reflected in the Group risk-management policy and in quantitative limits; the main limits are described later in this section. Activity in the markets is intended both for hedging exposures that arise from the Bank's activity and service to its customers, and for managing positions within limits. In general, market risk management at the Group is aimed at increasing expected profits while maintaining approved, controlled risk levels. Exposure to these risks is not a primary source of revenue for the Bank.

A policy document for treasury risk management in the Group is presented to the Board of Directors for approval each year, within which, among other matters, risk procedures are approved, including limits and authorizations for the various activities; these include an overall framework for the risk estimate in the banking book at Bank Hapoalim, limits on the overall sensitivity of the Bank to risk factors, and risk limits for the various areas of trading activity, activity in the banking book, and investing activity. The document reflects the work plan of the Financial Markets and International Banking Area on this subject. The policy documents address events that require reporting, including a procedure for escalation to the Chief Executive Officer and to the Chairman of the Board of Directors, as relevant, including exceptional developments in the markets or other material events.

Table F-1: Main limits on exposures to market risks

	Limit	NIS millions	% of active financial capital
Overall Bank activity			
	Overall risk estimate (VaR)	**950**	
	Sensitivity of economic value to parallel changes of 1% in interest-rate curves:		
	Unlinked NIS	**720**	
	CPI-linked NIS*	***810**	
	Foreign currency	**500**	
	Sensitivity to 10% change in NIS/USD exchange rate	**500**	
	Linkage-base exposures by segment:		
	CPI-linked NIS		**+/-110**
	Foreign currency, including foreign-currency linked		**+/-30**
Of which: trading book			
	Overall risk estimate (VaR)	**100**	
	Sensitivity of economic value to parallel changes of 1% in interest-rate curves:		
	Unlinked NIS	**120**	
	Foreign currency	**70**	
	Value sensitivity to parallel and non-parallel change in NIS/USD basis swap spread curve	**180**	
	CPI exposure – net position limit	**4,000**	
	Linkage base exposure: foreign currency, including linked to foreign currency		**+/-10**
Income sensitivity in the banking book in Israel			
	Sensitivity of annual income to parallel changes of 1% in interest-rate curves:		
	Unlinked NIS	**600**	
	CPI-linked NIS	**300**	
	Foreign currency	**500**	

* This limit was raised to NIS 1,010 million, as of the beginning of 2019.

F.1.c. Means for policy supervision and realization

Activity that generates market risks is under the responsibility of the Board of Management Asset and Liability Management Committee. Policies, including the established limits, are submitted for discussion and approval to the committees of the Board of Management, the committees of the Board of Directors, or the plenum of the Board of Directors, as relevant. Ongoing activity is conducted by subcommittees, with the participation of senior officers of the Bank; one subcommittee is headed by the Head of Financial Markets and International Banking and another is headed by the Head of the Asset and Liability Management Division. A local committee also operates in New York. The committees operate on the basis of resolutions passed by the Board of Directors and by its committees regarding exposure to market risks, subject to the directives issued by the Banking Supervision Department or by the local regulator, as relevant.

The Board of Directors and the Risk Management and Control Committee receive reports on activity, exposures, results of operations, and execution of approved policy, at least once each quarter. These reports include: a review of topics discussed and reported in committees, including main resolutions; main exposures and risk levels utilized out of approved limits; results of operations; summary of events requiring a report, if any (losses, exceptions from procedures, exceptional events); applications for and approvals of expansion of activities; overview of market risk in the activity of the Bank and at subsidiaries with exposures significant for the Group; and additional reports, as relevant.

Risk assessment and control

First line of defense – the Financial Markets and International Banking Area and the offices: in addition to risk assessment, examination of results, and routine controls over compliance with limits, operational controls are applied by various units in the Financial Markets and International Banking Area and at the offices. The additional goals of these controls are to examine the correctness, completeness, and congruence of different databases in different reporting systems, and to identify operational errors.

Second line of defense – Risk Management Area: identification and assessment of risks, control over limits on the extent of risks, and reporting on findings are performed or controlled by the Market and Liquidity Risk Management Department in the Risk Management Area, independently of the routine analyses and reports performed as part of the activity of the first line of defense. The department also performs complementary control over market risks in the Group. The department is responsible for the formulation, maintenance, and routine development of the Group policy and of the methodology for the assessment of market risks in the Bank Group.

F.1.d. Market risk assessment methodology

The methodology used by the Bank to assess market risks has been approved by the Board of Directors and by the Board of Management. This methodology includes VaR calculations and the application of scenarios and stress tests to all trading portfolios and to the banking book. The market risk assessment methodology is congruent with the strategic objectives of the Bank and with the requirements of the Basel Committee, and complies with international standards.

VaR assessment methodology

A risk estimate in terms of VaR in trading activity is calculated at least once daily, for a horizon of ten business days, at a significance level of 99%. The higher of the risk-level outcomes of two commonly accepted risk-assessment methods (historical simulation, in which all observations are assigned equal weights; and Monte Carlo simulation, in which recent observations are assigned greater weight) is considered. This methodology is compatible with the relevant recommendations of the Basel Committee following the crisis in US markets. The estimate provides a relatively prompt alert of the level of market risk during periods of rising volatility. Full revaluation of the trading portfolio is performed at least once daily, under various scenarios, in order to generate an estimate.

In addition, a backtesting procedure is performed routinely in order to examine the validity of the risk-assessment model in the trading book. The number of deviations is examined based on criteria established in the recommendations of the Basel Committee; up to four deviations in approximately 250 observations annually is considered the "green zone" (at a significance level of 99%). The results of this test are reported annually to the Board of Management and to the Board of Directors. Based on the number of deviations in 2018, the model meets the acceptance criteria established by the Basel Committee. Deviations in the results of the model were examined by the Market and Liquidity Risk Management Department and were found to originate with exceptional volatility in the financial markets.
In addition, risk assessment of activity in the banking book using the VaR method is performed on a monthly basis, using the historical method, with a one-month horizon.

Limitations of the methodology for assessing risk in trading activity at the Bank

- The Monte Carlo simulation assumes a normal distribution of risk factors. This assumption does not always apply in reality.
- The historical simulation assumes that the historical behavior of the risk factors will recur in the future, which may not be the case.
- It is not possible to forecast a sudden change in a risk factor using either of the methods.
- With the use of a 99% significance level, losses that could occur beyond that level are ignored.
- The use of a horizon of ten business days implies an assumption that it is possible to hedge and sell positions within ten business days. In special products, in certain market situations, or during crisis periods, liquidity problems in the market may make it impossible to close or fully hedge positions within this timeframe.
- The risk estimate is calculated on positions only a few times in the course of the business day.

To mitigate the effect of these limitations, in addition, stress scenarios are applied in order to examine the potential loss in extreme cases, for all areas of trading activity, as detailed below.

Limitations of the methodology for assessing risk in the banking book

- The credit risk inherent in assets does not constitute a parameter in the calculations made for the purposes of assessing market risks, which focus on quantifying the market risks in the banking book.
- The information used for the risk estimates is assembled from various automated systems.
- Behavioral models are used to reflect the optionality of various products.
- The historical simulation assumes that the historical behavior of the risk factors will recur in the future, which may not be the case.
- With the use of a 99% significance level, losses that could occur beyond that level are ignored.

To mitigate the effect of these limitations, in addition, stress scenarios are applied in order to examine the potential loss in extreme cases, as detailed below, and the effect of a collapse of the behavioral assumptions is tested.

Methodology for the application of scenarios and stress tests

The methodology for the application of stress tests at the Bank is described in Section B.4 above. The market risk assessment methodology of the Bank is subject to the Group methodology, and includes the calculation of risk estimates in terms of VaR, as well as the application of scenarios and stress tests to trading portfolios and to the banking book.

- Sensitivity analysis – The sensitivity of the portfolio/activity to the various risk factors is tested by applying scenarios to one risk factor while the other risk factors are held constant. This allows an examination of the effect of the major risk factors on the portfolio. In option portfolios, the combined effect of more than one risk factor is also examined.

- Worst historical scenario based on the history of the last five years, with a horizon of ten business days, calculated for the trading book. Worst historical scenario based on history since 2007, with a horizon of one month, calculated for the banking book and for the Bank as a whole.
- Macro-economic scenarios – Subjective scenarios developed in collaboration with the Economics Department of the Bank and approved by the Stress Scenarios Committee.
- Fixed interest-rate scenarios – A set of scenarios in which the principal interest rates to which the Bank is exposed are stressed through parallel and non-parallel changes.
- Extreme scenarios based on a methodology similar to that used to create VaR scenarios, based on the volatility of risk factors during a period of stress in the markets (stressed VaR).
- Additional scenarios as necessary.

The principles guiding the establishment and application of the scenarios have been approved by the Board of Management Committee and by the Board of Directors.

F.2. Market risk in the trading book

Market risks in the trading book arise from the Bank's activity as a market maker, trader, and manager of positions on its own behalf. In general, this activity is based on dynamic management of positions by means of tradable, liquid financial instruments. Changes in the extent of exposures may be rapid, as a function of changes in the markets and of customers' activity. The extent of exposures can usually be changed quickly and the exposures can be adjusted to the desired position.

The Bank's risk level is measured and controlled according to procedures that include, among other things, limits on the risk estimate in terms of VaR and on the sensitivity of economic value to changes in the primary risk factors. A risk estimate using the VaR (value at risk) method assesses the maximum potential loss to a corporation resulting from the materialization of market risks within a given period of time and at a level of statistical significance predefined by the Bank and approved by the Board of Directors (see the risk estimate methodology above). The VaR estimate for trading activity is performed using a horizon of ten business days, indicating an assumption that it is possible to hedge and sell the positions within ten business days.

The main activity limits are described in the section, "Management of market risks," above. Risk assessments as well as limit control of trading positions are performed at least once daily, both by control units within the Financial Markets and International Banking Area and by units in the second line of defense.

Table F-2: Risk estimates of trading activity (VaR)

	December 31, 2018	**Average in 2018**
	NIS millions	
Total trading in dealing rooms	**22**	**19**

	December 31, 2017	Average in 2017
	NIS millions	
Total trading in dealing rooms	9	16

Table F-3: Sensitivity to changes in the exchange rates of foreign currencies with a significant volume of activity and to changes in the consumer price index*

	December 31, 2018		December 31, 2017**	
	10% increase	10% decrease	10% increase	10% decrease
	NIS millions			
USD	**113**	**60**	40	(8)
EUR	**15**	**16**	(2)	(19)
	3% increase	3% decrease	3% increase	3% decrease
CPI	**263**	**(455)**	241	(592)

* Does not include the data of the Isracard Group, which constitutes a discontinued operation. Comparative figures have been restated accordingly. For details, see Note 1G to the Financial Statements.

** Restated.

The table above presents an analysis of the sensitivity of the economic value of the Bank to changes in exchange rates, based on revaluation of all balance sheet and off-balance sheet instruments in the risk-management system, using prevalent models for revaluation of each instrument and using representative rates as the baseline exchange rate. For the purposes of the calculation, the portfolio is revalued again at an exchange rate reflecting an increase/decrease at the presented rate, with no additional assumptions. Sensitivity to the consumer price index is calculated according to the exposure of the Bank to the index, as detailed in Note 30 to the Financial Statements as at December 31, 2018, plus the effect of the CPI floor on the expected accounting profit.

Table F-4: Market risk under the standardized approach

The Bank is required to allocate capital in respect of market risk assets, on the basis of a standardized model defined by the Bank of Israel. The regulatory capital adequacy is calculated for interest-rate and share risks in the areas of trading alone, as defined above, and for currency risks in the banking book and in the trading book.

		December 31, 2018	December 31, 2017
		NIS millions	
	Direct products		
1	Interest-rate risk (general and specific)	**2,302**	2,754
2	Share position risk (general and specific)	**82**	134
3	Exchange-rate risk	**738**	900
4	Commodity risk	**-**	-
	Options		
5	Simplified approach	**-**	-
6	Delta-plus approach	**307**	1,326
7	Scenario approach	**-**	-
8	Securitization	**-**	-
9	Total	**3,429**	5,114

In the area of the activity of Bank customers involving derivative financial instruments, the Bank has developed computerized models for assessing and controlling counterparty credit risk, at the transaction level as well as at the customer level. Counterparty exposure limits are set by the appropriate credit authorities at the Bank. In addition, rules and working procedures have been established in order to determine the required level of collateral for such transactions, as well as rules regarding actions in order to close exposures to customers if necessary. The Bank's policy for activity in derivatives with financial institutions obligated to comply with capital-adequacy requirements is to operate within Credit Support Annex (CSA) agreements, in order to limit exposure. For additional information regarding counterparty credit exposures and the management thereof, see the section "Counterparty credit risk," above.

F.3. Interest-rate risk in the banking book

Interest-rate risk in the banking book refers to the potential effect of changes in the various interest-rate curves on the economic value of the Bank (i.e. change in the present value of assets and liabilities) and/or on net interest income (accounting income sensitivity). The risk emerges during the routine and proactive banking activity of the Bank, as a result of the provision of routine services to the general public and to the business and financial sectors, and from other activities; this includes interest-rate exposure arising from the management of the investment portfolio. The risk arises from differences in the structure of assets and liabilities – gaps between segments, durations, interest bases, interest-rate renewal dates, and more. Limits apply at the Bank both to the sensitivity of economic value and to the sensitivity of income (including financial subsidiaries under the Bank's management and subsidiaries with exposure significant for the Group) to scenarios of change in the shekel, CPI-linked, and foreign-currency interest-rate curves.

In calculating the exposure of the Bank to changes in interest rates in terms of economic value and fair value, the Bank calculates the effect of the change in the interest rate on all financial assets and liabilities, using the following models:

- Current-account model – Based on a statistical model and estimates, the Bank treats part of the positive current-account balances as stable and spreads them as liabilities over a longer period than the contractual maturity period.
- Mortgage early repayment model – The model includes assumptions regarding early repayment in respect of housing loans, according to the estimates of the Bank, supported by a statistical model based on historical analyses and additional assumptions.

These models are examined periodically and updated to reflect changes in the market and management estimates. The calculation of sensitivity of economic value is based, among other factors, on the discounting of expected cash flows by an interest-rate curve that does not take into account the credit risk margin of the counterparty. The calculation of stress scenarios is performed as noted in Section 1.1.D, above. The calculation of fair value is estimated using the present value of future cash flows, discounted at a rate reflecting the risk level inherent in the financial instrument, taking into consideration liabilities to employees, which are not used by the Bank in the management of economic value sensitivity. Pursuant to the Public Reporting Directives of the Bank of Israel, the Bank applies hypothetical shock and stress scenarios of changes in interest rates to the adjusted net fair value of the financial instruments used by the Bank. The shock and stress scenarios are calculated according to formulas established in the reporting requirements. The required scenarios are steepening (a decrease in the short-term interest rate and an increase in the long-term interest rate), flattening (an increase in the short-term interest rate and a decrease in the long-term interest rate), an increase in the short-term interest rate, and a decrease in the short-term interest rate. The scenarios were applied uniformly to all of the currencies included in the report to the public.

In the calculation of the sensitivity of accounting income as a result of changes in the interest-rate curve, the Bank assumes a fixed level of balances, and calculates the change in income as a result of a change in the interest rate, using assumptions regarding changes in deposit spreads and the transfer of monies from current accounts to deposits in some scenarios, and using interest-rate floors. Income sensitivity differs from value sensitivity in that it does not include changes in the discounted value of long-term assets and liabilities that are not measured in the statement of profit and loss on a fair-value basis.

Interest-rate risk management policy is aimed, in congruence with the objectives of the Bank, at achieving the desired structure of exposures in each segment (unlinked shekel; CPI-linked shekel; foreign currency and foreign-currency-linked), in accordance with estimates concerning market variables, and subject to limits. Sensitivity to interest rates is measured, in a controlled manner, at least once each month, with more frequent measurements for exposure management purposes. In general, the goal of interest-rate risk management in the Group is to allow service to customers while taking controlled risks.

Interest-rate risk in the banking book (non-trading market risk) at Bank Hapoalim is managed in the Financial Markets and International Banking Area by the Asset and Liability Management Division, and separately by each subsidiary in the Bank Group, according to policy established by each company's board of directors and in accordance with Group policy. The risk is assessed and controlled based on a uniform methodology at the Group level, under the direction of the Risk Management Area and the Financial Markets Area, taking into account the size of capital and the unique characteristics of the activity of each subsidiary. The subsidiaries' exposure to risk is examined by units at the Head Office and reported to the Board of Management and the Board of Directors of the Bank at an appropriate frequency based on the risk level. The Bank has set risk limits for the Group that also apply to subsidiaries the risk level of which has been defined as significant for the Group.

Market risk exposures are identified methodically, by collecting information from product management systems. This information is analyzed in order to manage and assess the risk, using advanced automated systems adapted to each need, based on commonly accepted models. The models are tested in an orderly validation procedure.

In the banking book in Israel, flows arising from assets and liabilities are generated and analyzed by a designated interest-rate risk management system for all banking products, according to dates of changes in the interest rate. Data are also received in separate files from the New York branch and from the subsidiaries with exposure significant for the Group. Concurrently, sensitivity calculations are performed at the Market and Liquidity Risk Management Department in the Risk Management Area, using the risk-management system.

Tools for the management and hedging of exposures in the banking book include pricing policy, bond portfolio management, issuance of debt instruments, off-balance sheet transactions, and more. The Bank's management of non-trading exposures is based, among other things, on forecasts and working assumptions regarding expected developments in financial and capital markets in Israel and worldwide. The Bank uses derivatives and applies hedge accounting rules to hedge part of the interest-rate sensitivity of long-term bonds in foreign currency. The effect of transactions executed in the markets is examined on a weekly basis by the Asset and Liquidity Management Division; the change in economic value arising from changes in markets on the banking book, including hedges, is examined on a monthly basis.

Table F-5: Adjusted* net fair value of the financial instruments of the Bank and its consolidated companies(1)

	December 31, 2018					December 31, 2017				
	Unlinked NIS	CPI-linked NIS	Foreign currency – USD	Foreign currency – other	Total	Unlinked NIS	CPI-linked NIS	Foreign currency – USD	Foreign currency – other	Total
	NIS millions									
Financial assets**	**313,939**	**49,240**	**63,595**	**11,526**	**438,300**	306,733	46,143	67,783	11,236	431,895
Other amounts receivable in respect of derivative, hybrid, and off-balance sheet financial instruments	**410,823**	**20,675**	**491,265**	**55,809**	**978,572**	366,773	24,985	411,674	42,763	846,195
Financial liabilities**	**265,737**	**41,949**	**83,531**	**15,145**	**406,362**	263,118	41,180	79,494	16,734	400,526
Other amounts payable in respect of derivative, hybrid, and off-balance sheet financial instruments	**433,474**	**20,029**	**472,939**	**51,272**	**977,714**	384,034	24,865	401,466	35,872	846,237
Net fair value of financial instruments	**25,551**	**7,937**	**(1,610)**	**918**	**32,796**	26,354	5,083	(1,503)	1,393	31,327
Effect of employee benefit liabilities	**(4,127)**	**-**	**-**	**-**	**(4,127)**	(4,619)	-	-	-	(4,619)
Effect of spreading over periods of on-demand deposits	**3,610**	**-**	**1,629**	**183**	**5,422**	1,122	-	1,210	-	2,332
Adjusted net fair value*	**25,034**	**7,937**	**19**	**1,101**	**34,091**	22,857	5,083	(293)	1,393	29,040
Of which: banking book	**25,620**	**7,202**	**(170)**	**911**	**33,563**	22,149	5,169	(711)	1,340	27,947

* Net fair value of financial instruments, excluding non-monetary items, and after the effect of employee benefit liabilities and spreading over periods of on-demand deposits. For further details regarding the assumptions used to calculate the fair value of financial instruments, see Note 32A to the Financial Statements.

** Excluding balance sheet balances of derivative financial instruments, fair value of off-balance sheet financial instruments, and fair value of hybrid financial instruments.

(1) Includes balances attributed to a discontinued operation. For details, see Note 1G to the Financial Statements.

Table F-6: Effect of scenarios of changes in interest rates on the adjusted* net fair value of the Bank and its consolidated companies**

	December 31, 2018					December 31, 2017				
	Unlinked NIS	CPI-linked NIS	Foreign currency – USD	Foreign currency – other	Total	Unlinked NIS	CPI-linked NIS	Foreign currency – USD	Foreign currency – other	Total
	NIS millions									
Parallel changes										
1% parallel increase	**771**	**(356)**	**142**	**69**	**626**	206	(255)	36	(109)	(122)
Of which: banking book	**782**	**(341)**	**158**	**69**	**668**	208	(238)	41	(116)	(105)
1% parallel decrease	**(798)**	**409**	**(178)**	**(92)**	**(659)**	(235)	270	(38)	110	107
Of which: banking book	**(837)**	**391**	**(146)**	**(92)**	**(684)**	(257)	252	(44)	110	61
Non-parallel changes										
Steepening(1)	**91**	**(292)**	**37**	**82**	**(82)**	(72)	(158)	21	41	(168)
Of which: banking book	**86**	**(276)**	**38**	**82**	**(70)**	(125)	(158)	10	44	(229)
Flattening(2)	**1**	**123**	**10**	**(42)**	**92**	148	122	(7)	(47)	216
Of which: banking book	**11**	**111**	**27**	**(42)**	**107**	165	110	7	(45)	237
Increase in short-term interest rate	**303**	**(181)**	**98**	**80**	**300**	143	168	7	(109)	209
Of which: banking book	**313**	**(184)**	**116**	**81**	**326**	163	164	24	(109)	242
Decrease in short-term interest rate	**(412)**	**134**	**(99)**	**(108)**	**(485)**	(259)	(147)	(16)	47	(375)
Of which: banking book	**(413)**	**138**	**(100)**	**(109)**	**(484)**	(266)	(158)	(15)	40	(399)

* Net fair value of financial instruments, excluding non-monetary items, and after the effect of employee benefit liabilities and spreading over periods of on-demand deposits.
** Includes balances attributed to a discontinued operation. For details, see Note 1G to the Financial Statements.
(1) Steepening – decrease in the short-term interest rate and increase in the long-term interest rate.
(2) Flattening – increase in the short-term interest rate and decrease in the long-term interest rate.

Table F-7: Effect of scenarios of changes in interest rates on interest income*

	December 31, 2018	December 31, 2017
	Total	
	NIS millions	
Parallel changes		
1% parallel increase	**1,360**	1,273
Of which: banking book	**1,390**	1,304
1% parallel decrease	**(1,159)**	(1,022)
Of which: banking book	**(1,171)**	(1,056)

* Does not include the data of the Isracard Group, which constitutes a discontinued operation. Comparative figures have been restated accordingly. For details, see Note 1G to the Financial Statements.

Income sensitivity in 2018 in the table above was calculated according to the management approach, which includes assumptions regarding models of current-account balances and the change in spreads of deposits with changes in the interest rate, in some of the scenarios, and involves the use of interest-rate floors. The sensitivity of the trading book was calculated using the MTM approach. Data for 2017, provided as comparative figures, were calculated using the same assumptions defined for 2018 with regard to models of current-account balances.

Table F-8: Total exposure of the Bank and its consolidated companies to changes in interest rates[(1)]

	December 31, 2018				
	On demand up to 1 month	Over 1 month up to 3 months	Over 3 months up to 1 year	Over 1 year up to 3 years	Over 3 years up to 5 years
	NIS millions				
Reported amounts					
Financial assets*	**283,865**	**19,299**	**31,816**	**39,422**	**33,590**
Other amounts receivable**	**230,014**	**260,686**	**165,602**	**208,413**	**57,340**
Financial liabilities*	**232,782**	**23,137**	**57,981**	**36,003**	**28,639**
Other amounts payable**	**232,206**	**262,328**	**148,965**	**208,694**	**61,457**
Exposure to changes in interest rates	**48,891**	**(5,480)**	**(9,528)**	**3,138**	**834**
Additional details of exposure to changes in interest rates					
a. By nature of activity					
Exposure in the banking book	**58,961**	**2,159**	**(29,699)**	**2,943**	**1,625**
Exposure in the trading book	**(10,070)**	**(7,639)**	**20,171**	**195**	**(791)**
b. By linkage base					
Israeli currency unlinked	**52,836**	**(8,541)**	**(10,515)**	**(4,292)**	**(31)**
Israeli currency CPI-linked	**165**	**(672)**	**4,502**	**1,412**	**(255)**
Foreign currency (including foreign currency linked)	**(4,110)**	**3,733**	**(3,515)**	**6,018**	**1,120**
c. Effects on exposure to changes in interest rates					
Effect of employee benefit liabilities	**-**	**119**	**348**	**675**	**568**
Effect of spreading over periods of on-demand deposits	**(63,511)**	**-**	**20,772**	**12,181**	**11,450**
Effect of early repayments of housing loans	**50**	**101**	**369**	**468**	**(197)**

* Excluding balance sheet balances of derivative financial instruments, fair value of off-balance sheet financial instruments, and fair value of hybrid financial instruments. After the effect of spreading over periods of on-demand deposits.

** Amounts receivable and payable in respect of derivative, hybrid, and off-balance sheet financial instruments, after the effect of employee benefit liabilities.

*** Weighted average by fair value of effective average duration.

(1) Includes balances attributed to a discontinued operation. For details, see Note 1G to the Financial Statements.

General notes

(1) Further details regarding the exposure to changes in the interest rate in each segment of the financial assets and financial liabilities, according to the various balance sheet items, will be provided upon request.

(2) In this table, the data by period represent the present value of future cash flows of each financial instrument (excluding non-monetary items) and of other amounts receivable and payable, after the effect of employee benefit liabilities and of the spreading over periods of on-demand deposits, as explained in footnote 3 below, capitalized at the interest rates discounting them to the fair value included in respect of the financial instrument in Note 32A to the Financial Statements, in consistency with the assumptions used to calculate the fair value of the financial instrument.

(3) The present value of cash flows arising from on-demand deposits was calculated according to the assumptions regarding terms to maturity used by the Bank in interest-rate risk management.

(4) The internal return rate is the interest rate for discounting of the expected cash flows from the financial instrument to the fair value included in respect thereof in Note 32A to the Financial Statements.

(5) The effective average duration of a group of financial instruments constitutes an approximation of the change, in percent, in the fair value of the group of financial instruments which would be caused by a small change (an increase of 0.1%) in the internal return rate of each of the financial instruments.

Over 5 years up to 10 years	Over 10 years up to 20 years	Over 20 years	No maturity period	Total fair value	Internal rate of return	Effective average duration	Total fair value	Internal rate of return	Effective average duration
December 31, 2018							December 31, 2017		
NIS millions					**%**	**Years**	NIS millions	%	Years
17,396	**5,923**	**942**	**6,047**	**438,300**	**3.26%**	**1.02**	431,895	2.74%	0.99
55,132	**1,277**	**108**	**-**	**978,572**		**0.89**	846,195		1.01
20,552	**1,759**	**1**	**90**	**400,944**	**1.94%**	**1.01**	398,194	1.23%	1.09
65,219	**2,396**	**572**	**-**	**981,837**		**1.08**	850,856		1.07
(13,243)	**3,045**	**477**	**5,957**	**34,091**			29,040		
(12,002)	**3,091**	**528**	**5,957**	**33,563**		*****(2.42)**	27,947		***0.43
(1,241)	**(46)**	**(51)**	**-**	**528**		*****7.95**	1,093		***3.96
(9,172)	**1,243**	**(28)**	**3,534**	**25,034**		*****(3.59)**	22,856		***(1.02)
204	**1,832**	**518**	**233**	**7,939**		*****4.62**	5,083		***5.17
(4,275)	**(30)**	**(13)**	**2,190**	**1,118**		*****(18.84)**	1,101		***6.63
1,004	**1,058**	**355**	**-**	**4,127**	**1.98%**	**8.54**	4,619	1.55%	8.39
13,686	**-**	**-**	**-**	**(5,422)**	**1.75%**	**1.10**	(2,332)	1.70%	0.95
(307)	**(321)**	**(56)**	**-**	**107**	**(0.03%)**	**(0.06)**	104	(0.10%)	(0.20)

F.4. Share and credit spread risk – investment risk

Investment risk is defined at the Bank as exposure to the stock market, to credit spreads, and to credit risk in the bond and stock markets in the banking book of the Group (as a result of holdings in these products, the Bank may also be exposed to interest-rate risks and/or currency risks and/or liquidity risks, which are managed separately). According to the definition at the Bank, Israeli government bonds in NIS and in foreign currency and government bonds of the country in which a branch/subsidiary operates, held by the branch/subsidiary, do not bear investment risk, and are therefore not included in the measurement of investment risk at the Bank.

Investment risk arises at the Group in three frameworks:

1. An investment portfolio managed under the responsibility of the Financial Markets and International Banking Area. in general, these investments are performed through tradable securities.
2. Non-tradable investments, usually performed through the subsidiary Poalim Capital Markets (PCM), according to policy established periodically by the board of directors of PCM, in conformity with the policy of the Group.
3. Affiliates: strategic holdings in shares of subsidiaries. For details, see Note 15 to the Financial Statements.

The Group holds shares and bonds, primarily for investment purposes, a decrease in the value of which may damage the profit and loss of the Bank and/or the capital of the Bank.

F.4.a. Management of investment risk

Investment portfolio management at the Bank is a tool for the management of liquidity surpluses, and another tool for the management of exposures to interest rates, linkage bases, and liquidity in the banking book. In general, the investment portfolio consists of products traded on the financial markets, for which price quotes can be obtained.

The investment framework was established from a global, systemic perspective, with the approval of the Board of Directors of the Bank, and includes limits on the volume of the investment and on risk indicators, including limits on risk appetite and on risk capacity in terms of stress scenarios, and individual limits for the various investment segments, including volume limits by type, geographical diversification limits, rating limits, and more. Investments are performed through specified permitted instruments.

Risk is managed under the overarching responsibility of the Financial Markets and International Banking Area, with respect to the implementation of policy in the Group, allocation of the limits approved by the Board of Management and Board of Directors, monitoring, guidance, and reporting. Management in practice is performed by the Nostro Investment Management Unit in the Financial Markets and International Banking Area, using dedicated systems. In addition, investment activity is permitted at a limited number of subsidiaries. Managerial responsibility for the activity of each subsidiary rests with the member of the Board of Management who oversees that company.

In the second line of defense, the Market and Liquidity Risk Management Department in the Risk Management Area is responsible for formulating methodology for the assessment of investment risks and for independent risk assessment and control. This department also challenges the business function and provides an independent review, pursuant to Proper Conduct of Banking Business Directive 311, prior to material investments.

This activity is subject to all relevant directives and laws in this area, in Israel and in the country in which the branch/subsidiary conducting the activity is located. Due to the complexity of the regulatory directives, specific regulatory procedures have been established for this activity.

Investment risks are identified and measured methodically, by collecting information from the Bank's systems. This information is analyzed using the Bank's risk-management systems, and reported periodically to the committees of the Board of Management and of the Board of Directors.

Shares for which a fair value is available are stated in the balance sheet at their fair value on the reporting date. Shares for which no fair value is available are stated in the balance sheet at cost. Unrealized profits or losses from adjustments to fair value are not included in the statement of profit and loss, and are reported net, deducting an appropriate reserve for tax, in a separate item of equity within accumulated other comprehensive income.

Impairment of securities available for sale: Each reporting period, the Board of Management of the Bank determines whether declines in the fair value of securities classified into the available-for-sale portfolio are other than temporary. This examination includes several stages and principles, in accordance with the policy established at the Bank. When other-than-temporary impairment occurs in a security, the cost of the security is written down to its fair value at the balance sheet date and used as the new cost base. The amount of the write-down is charged to the statement of profit and loss. For further details regarding impairment of securities, see Note 1E to the Financial Statements, Section 8(b).

F.4.b. Positions in shares in the banking book

Table F-9: Details of the Bank's investments in shares in the banking book

	December 31, 2018		December 31, 2017	
	Balance sheet value and fair value	Capital requirements[1]	Balance sheet value and fair value	Capital requirements[1]
	NIS millions			
Investments classified into the trading portfolio	**41**	**[2]12**	67	[2]18
Investments classified into the available-for-sale portfolio	**1,513**	**237**	2,159	326
Total investments in shares	**1,554**	**249**	2,226	344
Of which: traded on a stock exchange	**534**		1,378	
Privately held	**1,020**		848	
Unrealized gains (losses) included in supervisory capital	**(16)**		320	

(1) The capital requirements were calculated in accordance with the minimum total capital ratio required by the Banking Supervision Department, at 13.74% as at December 31, 2018, and 13.73% as at December 31, 2017. The required minimum total capital ratio is 13.5%. A capital requirement at a rate representing 1% of the balance of housing loans at the dates of the financial statements was added to this ratio.
(2) Including capital allocation with respect to specific market risk and general market risk.

For details regarding investments of the Bank, see Note 12 to the Financial Statements as at December 31, 2018.

G. Liquidity risk

Liquidity risk – Liquidity risk is defined as present or future risk to the stability and profits of the Bank arising from an inability to sustain the cash flow required for its needs. Liquidity risk at the Bank is examined from a broader perspective, encompassing the ability to repay liabilities on schedule, including during times of stress, without damage to routine operations within the business plans of the Bank and without incurring exceptional losses.

Refinancing risk – The risk of inability to raise new resources to replace resources that have matured, or the risk that the reissue may be performed at durations and terms that damage the Bank's net interest income. This risk is managed as part of liquidity risk. In light of the financing sources of the Bank, the Bank does not view this risk as a material risk in its own right. The Bank accords high importance to raising resources that are stable and highly diversified.

Table G-1: Liquidity coverage ratio – limited banking corporation and consolidated subsidiaries, for the three-month period

	For the quarter ended December 31, 2018*	
	Total unweighted value**	Total weighted value***
Total high-quality liquid assets		
Total high-quality liquid assets (HQLA)		**106,375**
Cash outflows		
Retail deposits from individuals and from small business customers, of which:	**195,062**	**15,032**
Stable deposits	**63,494**	**3,175**
Less stable deposits	**93,346**	**10,710**
Deposits for a period greater than 30 days (Section 84 of Proper Conduct of Banking Business Directive 221)	**38,222**	**1,147**
Unsecured wholesale financing, of which:	**107,845**	**69,011**
Operational deposits (all counterparties) and deposits in networks of cooperative banks	**1,738**	**435**
Non-operational deposits (all counterparties)	**105,776**	**68,245**
Unsecured debts	**331**	**331**
Secured wholesale financing	**8**	**-**
Additional liquidity requirements, of which:	**118,042**	**27,613**
Outflows related to derivative exposure and other collateral requirements	**19,765**	**17,957**
Outflows related to loss of funding on debt products	**-**	**-**
Credit and liquidity facilities	**98,277**	**9,656**
Other contractual funding obligations	**15,827**	**15,827**
Other contingent funding obligations	**55,580**	**1,834**
Total cash outflows		**129,317**
Cash inflows		
Secured lending (e.g. reverse repos)	**894**	**894**
Inflows from fully performing exposures	**29,486**	**22,556**
Other cash inflows	**21,795**	**17,352**
Total cash inflows	**52,175**	**40,802**

	Total adjusted value****
Total high-quality liquid assets (HQLA)	**106,375**
Total net cash outflows	**88,515**
Liquidity coverage ratio (%)	**120%**

* Includes balances attributed to a discontinued operation. See Note 1G to the Financial Statements.

** Unweighted values were calculated as outstanding balances maturing or callable within 30 days (for inflows and outflows), based on an average of daily observations.

*** Weighted values were calculated after the application of respective haircuts or inflow and outflow rates (for inflow and outflow), based on an average of daily observations.

**** Adjusted values were calculated after the application of: (1) haircuts and inflow and outflow rates; and (2) any applicable caps (i.e. caps on level 2B and level 2 assets for HQLA and a cap on inflows).

Table G-1: Liquidity coverage ratio – limited banking corporation and consolidated subsidiaries, for the three-month period (continued)

	For the quarter ended December 31, 2017*	
	Total unweighted value**	Total weighted value***
Total high-quality liquid assets		
Total high-quality liquid assets (HQLA)		111,047
Cash outflows		
Retail deposits from individuals and from small business customers, of which:	187,302	14,849
Stable deposits	60,226	3,011
Less stable deposits	91,948	10,784
Deposits for a period greater than 30 days (Section 84 of Proper Conduct of Banking Business Directive 221)	35,128	1,054
Unsecured wholesale financing, of which:	114,678	76,553
Operational deposits (all counterparties) and deposits in networks of cooperative banks	1,623	406
Non-operational deposits (all counterparties)	112,889	75,981
Unsecured debts	166	166
Secured wholesale financing	56	-
Additional liquidity requirements, of which:	104,601	21,365
Outflows related to derivative exposure and other collateral requirements	14,230	12,507
Outflows related to loss of funding on debt products		
Credit and liquidity facilities	90,371	8,858
Other contractual funding obligations	15,020	15,020
Other contingent funding obligations	57,339	1,913
Total cash outflows		129,700
Cash inflows		
Secured lending (e.g. reverse repos)	688	688
Inflows from fully performing exposures	33,381	26,643
Other cash inflows	15,659	11,657
Total cash inflows	49,728	38,988

	Total adjusted value****
Total high-quality liquid assets (HQLA)	111,047
Total net cash outflows	90,712
Liquidity coverage ratio (%)	122%

* Includes balances attributed to a discontinued operation. See Note 1G to the Financial Statements.

** Unweighted values were calculated as outstanding balances maturing or callable within 30 days (for inflows and outflows), based on an average of daily observations.

*** Weighted values were calculated after the application of respective haircuts or inflow and outflow rates (for inflow and outflow), based on an average of daily observations.

**** Adjusted values were calculated after the application of: (1) haircuts and inflow and outflow rates; and (2) any applicable caps (i.e. caps on level 2B and level 2 assets for HQLA and a cap on inflows).

The Bank calculates its stand-alone and consolidated liquidity ratios daily, with a division into NIS and foreign currency, and monitors this ratio at its subsidiaries (which are required to comply with internal liquidity limits adapted to the nature of their activity). These ratios are reported as an average of the daily observations. The number of observations used to calculate the averages in the reported quarter is 64. Credit-card companies are exempt from independent calculations, but are included in the consolidated data.

The average ratio during the quarter (the average of the daily observations) is 120%, consolidated, and 118% for the stand-alone banking corporation, while the minimum requirement is 100%. This ratio decreased slightly during the quarter, in comparison to the preceding quarter. The decrease mainly resulted from an increase in credit which was slightly higher than the increase in deposits. There is some volatility from day to day during the month, and some interchange between NIS and foreign currency, mainly due to activity in derivatives.

The liquid assets of the Bank mainly consist of Israeli government bonds in NIS and in foreign currency, US government bonds in foreign currency, and deposits with central banks (the Bank of Israel and the Federal Reserve). Part of the liquid assets are held by the Bank, and part are held by the subsidiaries. The Bank takes into consideration possible restrictions on the transfer of liquidity between some subsidiaries and the Bank itself, particularly banking subsidiaries overseas. Accordingly, some of the subsidiaries hold liquid assets for times of crisis (or a credit line from the parent company), according to need, and the Bank does not rely on these assets. The Bank manages the liquidity coverage ratio, and accordingly its liquid assets, with a separation of NIS and foreign currencies. For details of liquid assets by level and for pledged and unpledged assets, see tables below. The Board of Directors of the Bank has adopted an internal limit stricter than the regulatory LCR requirement, both for the stand-alone banking corporation and consolidated.

The main source of funding of the Bank is deposits from retail customers and small businesses in Israel, which generate low liquidity risk relative to other resources. In addition, the Bank obtains financing through issues, deposits from corporate and financial companies, and more. Funding in foreign currency includes deposits of private customers and corporate clients in Israel, foreign residents, Israeli companies abroad, issues of CDs and other instruments secured by the FDIC in the United States, issues of bonds abroad, and additional resources. Changes in international operations have led to certain changes in the composition of resources at the overseas offices. For details, see the section "International activity" in the chapter "Activity segments based on management approach" in the Corporate Governance Report. Deposits from corporate and financial entities with a maturity date of up to one month are subject to high outflow coefficients, pursuant to the directive, and therefore have a relatively large contribution to cash outflow. The Bank monitors the concentration of funding sources, in various breakdowns, in both NIS and foreign currency, and complies with the internal limits in this area. The Bank does not rely on funding from the capital market as a major financing source.

Derivatives create a large inflow and a large outflow, and lead to redirection of liquid assets and net cash outflow between NIS and foreign currency, but their net contribution in all currencies is low. In the calculation of liquid assets, the Bank does not include collateral which it is required to deposit against derivatives activity; volatility in the volume of this deposit is taken into consideration, as required in the directive.

Liquidity and refinancing risks are managed based on a global view of the Bank's activity in Israel, at its overseas branches, and at subsidiaries with significant liquidity risk for the Group. Liquidity risk at the Bank, in foreign currency and in NIS, is managed and controlled routinely at the Asset and Liability Management Division, in accordance with Group policy, with the aim of ensuring the ability to cope competitively even in exceptional supply and demand situations in the financial markets. Current liquidity management is under the responsibility of the Asset and Liability Management Division, and is executed through NIS and foreign-currency liquidity units, and through corresponding units at the subsidiaries. Reports to Board of Management committees are submitted on a monthly basis; reports to Board of Directors committees are submitted on a quarterly basis. Additional reports to internal functions for monitoring and management purposes are submitted more frequently. The business plan of the Bank takes expected business changes, future liquidity requirements, and future liquidity risks into consideration, in order to ensure that the Bank continues to comply with all limits. The Market and Liquidity Risk Management Department in the Risk Management Area routinely monitors liquidity using internal and environmental parameters, independently reports the risk level to the committees of the Board of Management and the Board of Directors, and challenges the parameters in the various models related to liquidity.

In addition to the measurement of the liquidity ratio according to Proper Conduct of Banking Business Directive 221, as described above, the Bank applies additional tools and monitors additional indicators of liquidity risk. In accordance with Proper Conduct of Banking Business Directive 342, "Liquidity Risk Management," the Bank applies an internal liquidity risk assessment model, in addition to the regulatory model. The internal model reflects the approach of the Board of Management with regard to the behavioral characteristics of financial assets and liabilities. This model is based on the proven stability of deposits at the Bank, and includes different scenarios with respect to rollover and maturity rates of assets and liabilities. In general, while in the ordinary course of business the Bank assumes very high rollover of deposits and credit, in stress scenarios the Bank assumes an exit of deposits, according to types of customers and deposits; utilization of credit lines beyond the usual levels; declines in value of assets; and additional coefficients. These coefficients are examined annually by the Board of Management and Board of Directors of the Bank. In each scenario, the liquidity gap for a period of up to one month against liquid assets is examined, and a liquidity ratio is calculated; this ratio is not to fall below the minimum level specified in the directive. The scenarios applied in the internal model refer to different market conditions, and specifically to a Bank scenario, a system scenario, and a combined scenario. The scenarios differ primarily in the assumptions with regard to rollover of deposits and haircuts for liquid assets. The Bank also applies models for longer and shorter periods; an NSFR-based model for a period of one year; depositor concentration indices; an alert system, including a system that monitors indicators that may point to a risk of a crisis situation, with an action plan; and more. Some of these indicators are subject to internal and/or regulatory limits. The Bank also monitors various liquidity ratios at the subsidiaries (which are required to comply with both internal liquidity limits adapted to the nature of their operations, and the limits of the local regulator).

The Bank maintains a liquidity cushion for stress situations; maintains a balance sheet structure, and in particular a resource structure, that brings liquidity risk to the preferred level; monitors early-warning systems to identify stress situations in the liquidity environment as early as possible; and maintains a contingency plan for crisis situations, which includes the convening of committees, reporting requirements, and a series of steps for coping with a possible crisis, according to scenarios.

The Bank is in compliance with all regulatory and internal liquidity limits. These include, among others, short-term models, such as the LCR and an internal thirty-day model; medium-term models, such as the NSFR-like internal model (financing sources stable for over a year divided by financing needs stable for over a year, as defined at the Bank, in the vein of the recommendations of the Basel Committee); and limits that refer to the long term. In accordance with Proper Conduct of Banking Business Directive 221, as at December 31, 2018, the Bank holds consolidated liquid assets (primarily reserves at central banks, tradable securities backed by sovereigns and central banks, and coins and bills) for times of crisis (after haircuts) in the amount of NIS 107,060 million, in addition to liquid bonds not recognized for the purposes of the calculation of liquid assets. Part of the liquid assets are held by the Bank, and part are held by the subsidiaries. The Bank takes into consideration possible restrictions on the transfer of liquidity between some subsidiaries and the Bank itself, particularly banking subsidiaries overseas. Accordingly, some of the subsidiaries hold liquid assets for times of crisis (or a credit line from the parent company – the Bank), according to need, and the Bank does not rely on these assets. In light of the assumptions regarding rollover of deposits in the ordinary course of business, and other assumptions, the Bank does not foresee liquidity problems that would necessitate the use of the liquid assets; however, it is prepared for the required scenarios.

Table G-2: Details of liquid assets, by level, as required in the Basel directives

	Balance as at December 31, 2018	**Average in the quarter ended December 31, 2018**
	NIS millions	
Level 1 assets	**105,564**	**105,039**
Level 2A assets	**1,181**	**1,030**
Level 2B assets	**315**	**306**
Total HQLA	**107,060**	**106,375**

	Balance as at December 31, 2017	Average in the quarter ended December 31, 2017
	NIS millions	
Level A assets	113,583	110,254
Level B1 assets	605	585
Level B2 assets	202	208
Total HQLA	114,390	111,047

A regulatory limit applies in Switzerland and in New York to the use of the liquidity reserve of these entities. The Bank's scenarios assume the use of liquidity of the subsidiaries / New York branch, taking the limits of each entity into consideration.

Table G-3: Pledged and unpledged available assets*

	Fair value balance as at December 31, 2018		
	Total balance in the balance sheet	Of which: pledged**	Of which: unpledged
	NIS millions		
Cash and deposits with banks	**84,459**	**1,704**	**82,755**
Israeli government bonds	**32,639**	**3,606**	**29,033**
Foreign government bonds	**10,489**	**161**	**10,328**
Bonds of financial institutions in Israel	**512**	**-**	**512**
Bonds of foreign financial institutions	**8,273**	**-**	**8,273**
Bonds of others in Israel	**141**	**-**	**141**
Bonds of foreign others	**2,541**	**43**	**2,498**
Shares of others	**1,521**	**-**	**1,521**
Total securities	**56,116**	**3,810**	**52,306**

* In addition, other assets in the amount of NIS 543 million are pledged.
** Includes surplus pledges.

	Fair value balance as at December 31, 2017		
	Total balance in the balance sheet	Of which: pledged**	Of which: unpledged
	NIS millions		
Cash and deposits with banks	86,093	1,063	85,030
Israeli government bonds	40,597	3,734	36,863
Foreign government bonds	13,168	183	12,985
Bonds of financial institutions in Israel	496	-	496
Bonds of foreign financial institutions	6,327	355	5,972
Bonds of others in Israel	402	-	402
Bonds of foreign others	2,226	41	2,185
Shares of others	2,200	-	2,200
Total securities	65,416	4,313	61,103

* In addition, other assets in the amount of NIS 1,356 million are pledged.
** Includes surplus pledges.

H. Operational risk

Operational risk is defined as the risk of loss that may be caused by failed or faulty internal processes, human actions, system malfunctions, or external events. The definition includes legal risk, but does not include strategic risk or reputational risk. Failures related to one of the aforesaid factors may cause damage to profitability. The Bank operates control units, including Information Systems Security and Cyber Defense, Business Continuity, Security, the Compliance Officer, and Anti-Money Laundering and Terrorism Financing Prevention, as well as comprehensive procedures and systems in areas related to banking activity, management of human resources, process control, emergency operation, and more.

H.1. Management of operational risks

Operational risk management strategy is aimed at supporting the achievement of the Group's strategic objectives and maximizing business value, while taking into consideration the costs in terms of risk, by all responsible parties at all levels of the organization. The managerial process is oriented towards execution based on the designation of risk ownership. The goal is for communication and rational treatment of operational risks to contribute to managerial decision-making, based on considerations of business value versus cost in terms of risk, both at the level of the management of the organization and at the level of the various units.

The goals of operational risk management are:

- To ensure effective supervision and management of operational risks in all units of the Group, including risk ownership and decision-making based on cost-benefit considerations.
- To ensure effective identification and communication of operational risks in all substantial business operations of the Group and the supporting units, with the aim of establishing operational risk appetite congruent with the approved strategic objectives of each unit in the Group.
- To establish an internal control structure promoting appropriate values of a culture of awareness, transparency, and efficiency with respect to operational risks within the Group.
- To optimally manage and allocate regulatory capital and economic capital for operational risks.

Responsibility for routine management of operational risk and for activities aimed at mitigating the risk lies with the Area managers and the managers of subsidiaries in the Bank Group. These activities are overseen by the Operational Risk Management Department in the Operational Risk and Market Risk Management Unit, within the Risk Management Area. Routine activity is conducted in the Bank's units and in the Group by a network of operational risk controllers, based on the matrix management principle; controllers report organizationally to Area managers or CEOs of subsidiaries, and receive methodology guidance from the Operational Risk Management Department.

Operational risk management activity is supervised and directed by three forums:

- The Board of Directors' Committee on Risk Management and Control;
- The Board of Management Committee on Risk Management and Compliance, headed by the CEO;
- The Subcommittee on Operational Risk Management.

The operational risk management policy was approved by the Board of Management and the Board of Directors of the Bank. The policy document serves as a framework for operational risk management within the Group, in accordance with uniform principles and reporting duties aimed at complying with the Basel 2 Sound Practices standards. The Bank's activity in this area is conducted according to the rules of Proper Conduct of Banking Business Directive 206, "Capital Measurement and Adequacy – Operational Risk," which refers, among other matters, to regulatory capital allocation in respect of operational risks, and Proper Conduct of Banking Business Directive 350, "Operational Risk Management," which is congruent with the updated guidelines in the Basel document of June 2011 on sound practice for operational risk management.

The Bank operates in accordance with the Basel 2 standardized approach and the corresponding requirements of the Proper Conduct of Banking Business Directives. The strategic plan for the coming years includes, among other matters, extension and expansion of some of the activities, and adjustment for updates of the relevant documents and regulatory guidelines. The following projects and activities, among others, are underway as part of this plan:

- Collection of information regarding operational events in the Bank Group. A database for this purpose was established in late 2002, and is used, among other things, to analyze events, trends, and patterns and to support the mapping and assessment of operational risks to which the Group is exposed.
- Analysis of risk scenarios in activities and processes from a forward-looking perspective.

- Key risk indicators (KRIs) for operational risks have been specified, as part of the development of a monitoring and control infrastructure, with respect to products, processes, or institutional risks. The KRI is a metric that can be measured in quantitative terms, and may also include qualitative information indicating the presence of a particular factor or trend. Thresholds have been set for follow-up, escalation, and treatment, as relevant.
- Lessons-learned processes applied to operational events; relevant information shared among units; organizational learning.
- Quarterly reports are submitted to the Subcommittee on Operational Risk Management, the Board of Management Committee on Risk Management and Compliance, the Board of Directors' Committee on Risk Management and Control, and the plenum of the Board of Directors. The reports include updates on the implementation of the standardized approach in the Group, work plans, the status of projects in progress, information about operational events, assessments of potential risks, trends, changes in the risk profile, and comparative external information.

Routine procedures are performed to identify, map, and assess operational risks and controls at the units of the Bank and the Group, including mapping of the risk of embezzlement and fraud. This activity is conducted based on a uniform methodology in line with the requirements of the Basel Committee and the directives of the Bank of Israel on this matter, including monitoring of the implementation of the recommendations. A comprehensive mapping process of operational risks in all units of the Group is performed every three years. Subsequently, the findings are maintained, updated, and expanded through additional analyses, depth analyses, and risk analyses regarding new products and activities.

The goal of this activity is to identify material risk areas, define risk ownership, assess risks (average and extreme), assess the existing controls, and differentiate low risks from material risks that require additional examination and action, based on cost-benefit considerations, according to the following main ways of coping with risks:

- Minimization of the risk through the application of additional controls.
- Transfer of the risk to a third party (e.g. insurance, outsourcing).
- Absorption of the risk, with quantification thereof.
- Reduction of the activity that creates the risk.

Additional related activities:

- An automated operational risk management system (PAMELA) has been implemented at the units of the Group. The system operates in the areas of collection of information regarding operational events, mapping and assessment of risks and controls, collection of KRIs (key risk indicators), action items, lessons learned, and reports.
- Formulation and implementation of a comprehensive framework of principles and standards for a uniform control concept within the Bank Group. Within this framework, control committees convene and a periodic process is conducted to evaluate the effectiveness of controls.
- Launches of new products or activities, in accordance with the defined policy for the launch of a new product in the Bank Group, are accompanied by examination and analysis of the relevant operational risks involved in the product or activity.
- Definition of a methodological infrastructure for the management of operational risks in material IT processes.
- A special requirement is established in the policy for advance examination prior to outsourcing of an activity, taking into consideration the risks unique to outsourcing.
- Special attention, including the formulation of a dedicated policy, has been devoted to the management of digital banking risks, in accordance with the guidelines in Proper Conduct of Banking Business Directive 367, "Digital Banking."

The operational risk profile is monitored periodically in relation to the operational risk appetite established in the policy, using various parameters, at the level of the Group as a whole and at the level of specific units and processes. The Bank allocates capital in respect of operational risk assets, on the basis of a standardized model defined by the Bank of Israel. Reports on compliance with risk-appetite limits are submitted on a quarterly basis, within the consolidated risk document.

The Bank uses quantitative measures of operational risk appetite that refer to the following parameters: extent of operational damages relative to gross income, according to the Basel standardized approach; rate of increase in damages from year to year; risk scenarios rated at a very high risk level at the level of the Bank Group; and assessment of stress scenarios. In an examination of these parameters, no deviations from the established risk-appetite limits were observed.

H.2. Information technology risks

The Bank is dependent upon IT systems and infrastructures for its various activities. Information-technology risk is the risk of damage to the proper activity of the Bank and to customer service, loss, or damage to reputation, due to inadequacy or failure of the IT systems and infrastructures of the Bank. In general, the Bank maintains its information systems and infrastructures, adopts new technologies, and continually acts to provide technological infrastructures in order to allow the operation of its business and the promotion of strategic initiatives at the various Areas, in accordance with the information-technology management policy of the Bank. This policy addresses matters including information and cyber security aspects, principles for backup and recovery in cases of malfunction or disaster, outsourcing and cloud computing, policy for the development and use of new technologies in digital banking, and the management of IT risks. In addition, in order to cope with the challenges of the future, simplify and improve the efficiency of technological platforms, improve response capabilities, and build new abilities, the Bank has decided to carry out a multi-year project for the modernization of its central IT systems.

IT risks are examined routinely, based on accepted methodologies, on the level of material IT processes conducted at the Bank as well as on the level of the information systems and infrastructures used at the Bank. Risks arising from material IT processes are addressed as part of the control approach implemented at the Information Technology Area, by several dedicated professional units reporting to the management of the Area. These units act in accordance with the various regulatory guidelines, such as Proper Conduct of Banking Business Directives 357 and 361. The units include the Information Systems Security and Cyber Defense Department; the Planning and Control, Development Control, and Business Continuity Unit; and the IT Risk Management Unit.

H.3. Information security and cyber risks

Cyber risk is the risk of damage, including disruption, disturbance, shutdown of operations, theft of property, collection of intelligence, or damage to reputation or the confidence of the public as a result of a cyber event. Cyber activity is conducted as required in the directives of the Bank of Israel, including Proper Conduct of Banking Business Directive 361, "Cyber Defense Management"; Proper Conduct of Banking Business Directive 363, "Supply Chain"; the Protection of Privacy Law, 1981; and other laws, as relevant, with the aim of protecting the information-technology system and minimizing risks. Information security and cyber risks at the Bank are managed by the Information Security and Cyber Defense Unit in the Information Technology Area.

The sophistication and severity of cyber attacks on the global financial sector have grown in recent years. The technological developments and the expansion of digital services, on one hand, and the advanced tools available to attackers, on the other hand, have led to higher exposure to cyber risks.
The Bank invests extensive resources (both human and technological) in strengthening its information security and cyber defense system, in order to cope with the development of these threats. The Bank's defense framework consists of layers of protection using advanced technologies. The Bank operates cyber defense processes in order to minimize the risk of penetration, unauthorized access to information systems, and materialization of attacks, and to ensure the correctness, availability, and confidentiality of its databases. Concurrently, the Bank operates processes to discover and identify cyber events, at all times, including the operation of the Information Security Event Center. The Bank also prepares to contain cyber events and minimize the damage to the assets of the Bank and its customers. The Bank continually works to identify targets to defend, threats, risks, and the effectiveness of defenses, and to build work plans for improvement of the defensive framework accordingly.
The Cyber Risk Management Unit was established in the Risk Management Area during 2018. The unit establishes indices and methodologies for the evaluation of the maturity of defenses, analyzes the business implications of cyber scenarios, challenges the defense system, and examines developments in the area of cyber risk relevant to the technological and business systems of the Bank.

H.4. Cloud computing risks

The Bank of Israel issued an update of a Proper Conduct of Banking Business Directive, numbered 362(2), in November 2018. This directive eliminates the need to request the approval of the Bank of Israel for material cloud computing, and transfers the authority for management and decision to the Bank. The Bank continues to apply cloud computing in certain areas, and is examining additional uses, with appropriate attention to the derived operational risks, and in accordance with regulatory guidelines, with the aim of allowing realization of the business advantages of the use of cloud-computing services while prudently managing the risks and complying with regulatory requirements.

H.5. Emergency preparedness

The Bank maintains and implements a continuous plan for emergency preparedness and business continuity (BCMP – business continuity management plan), in accordance with the Bank of Israel's Directive 355, "Business Continuity Management"; Directive 357, "Information Technology Management"; and additional expansions. The Bank's preparedness is based on detailed action plans, working procedures, and periodic tests and drills, defined in a system of emergency procedures. As part of its emergency preparedness, the Bank conducted a lateral process to establish policies, define reference scenarios, map and analyze critical processes and the resources required for the recovery of such processes during an emergency (BIA), and update its action plans based on the prevalent methodologies globally. The action plan involves all Areas of the Bank, through Area-level business continuity officers and designated teams. The BCP is led by a specialized Business Continuity Management Unit, which reports to the Head of Business Continuity of the Bank and to the head of the Bank Emergency Committee (the Head of Information Technology).

The business continuity policy has also been adopted by the subsidiaries in Israel and globally, and at the Bank's overseas branches, in congruence with the corporate-governance policy and the guidelines of the Bank of Israel. In addition, the Bank holds periodic emergency drills covering operational scenarios as well as complex business scenarios, with the participation of the various units, from branches, regional managements, units, and Areas to the Board of Management of the Bank. The Bank has established a new remote central IT site, to ensure the availability and protection of its information systems and of the information itself.

The Israel Standards Institute has affirmed that the business continuity management system of the Bank complies with the requirements of the international standard ISO 22301.

As part of its preparedness for business continuity, the Bank is prepared to handle a range of possible scenarios. With respect to emergency scenarios that may cause the Bank to incur significant damage, red-alert systems are monitored and detailed business continuity contingency plans are in place. Extreme scenarios are reviewed and discussed periodically by the Committee on Extreme Scenarios and Risk Concentrations. The activation of a contingency plan is under the responsibility of the Board of Management or of the designated Board of Management committee responsible for the financial aspects of crisis situations; note that a charter for the establishment of such a committee is also part of the contingency plans.

H.6. Insurance

The Bank has a banking insurance policy to hedge operational risks, which includes: (1) banking insurance to cover damages that may arise from embezzlement by employees, loss of documents, forged documents, etc.; this policy includes coverage for damages due to computer crimes caused to the Bank and/or its customers as a result of penetration of the computer systems of the Bank by an unauthorized third party; (2) professional liability insurance, to protect against claims filed by customers regarding damage caused by negligent banking actions. These insurance policies are subject to exclusions common in insurance policies of banking corporations in Israel (including an exclusion of damage arising from violation of the directives related to money laundering and terrorism financing).

In addition, the insurance structure of the Bank also includes property insurance, third-party insurance, employers' liability, directors' and officers' liability insurance, and additional insurance policies.

The liability limits in the policies were established by the Bank based on an assessment of the risk involved in the activity of the Group, as part of its overall risk-management policy. Within the fulfillment of the Sound Practice requirements under the Basel guidelines, cooperation and exchanges of information are maintained between the Operational Risk Management Department and the unit that handles banking insurance.

I. Compliance risk

Compliance risk is the risk of imposition of a legal or regulatory sanction, material financial loss, or reputational damage which the banking corporation may suffer as a result of a failure to comply with the compliance directives, as defined in Proper Conduct of Banking Business Directive 308.

Pursuant to Proper Conduct of Banking Business Directive 308, compliance risk also includes risks related to the fairness of the Bank towards its customers, conflicts of interest, the prohibition of money laundering and financing of terrorism (including with respect to tax laws), provision of advice to customers, securities enforcement, protection of privacy (excluding information-technology aspects), the US FATCA directives and the international CRS directives, and taxation aspects relevant to products or services for customers, or directives of a similar nature.

Compliance risk also includes the reputational risk that accompanies failure to comply with such directives.

The Bank applies a policy of compliance with all legal and regulatory directives, and works to implement this policy at its units and among its employees. For the purposes of risk management, the key compliance risks against which the Bank seeks to defend itself can be described as the following:

- The risk of material damage arising from a regulatory order of any government agency due to noncompliance of the Bank or of any of its employees with directives concerning the prohibition of money laundering and terrorism financing, or deficiencies in processes designed to ensure such compliance, or the absence of such processes;
- The risk of material damage arising from a regulatory order of a regulatory agency due to improper activity of the Bank or of any of its employees in relation to customers of the Bank, tax issues, or noncompliance with legal directives in these contexts;
- The risk of material damage arising from a regulatory order of a regulatory agency due to noncompliance of the Bank or of any of its employees with securities laws;
- The risk of material damage arising from a class-action suit due to noncompliance with directives that regulate the relationship between the Bank and its customers;
- The risk of a criminal suit against the Bank or against its senior executives due to noncompliance with the law.

Risk indicators are used, among other means, to identify key areas of compliance risk and to monitor their development. The key risk areas and the magnitude of the risks stemming from these areas may change in accordance with changes in regulation, enforcement, the activity of the Bank and of its customers, market developments, etc. The Bank uses quantitative and qualitative indicators to measure this risk. These include developments in regulation and enforcement, changes in customers and in certain products, findings of controls and audits, gap surveys, and more.

The Chief Compliance Officer of the Bank serves in this position, pursuant to Proper Conduct of Banking Business Directive 308, among other matters, as the officer responsible for the duties set forth in the Prohibition of Money Laundering and Prevention of Terrorism Financing Law; as the supervisor of securities enforcement, pursuant to the Law for More Efficient Enforcement Procedures at the Israel Securities Authority; and as the responsible officer pursuant to FATCA. The Chief Compliance Officer and Securities Enforcement Unit consists of the Anti-Money Laundering Unit; the Securities Enforcement and International Compliance Unit; the Customer Relations, Consumer Protection Directives, and Subsidiaries Unit; the International Taxation Compliance Unit; and the Administrative Unit.

The mission of the Chief Compliance Officer Unit is to support the achievement of the strategic and business objectives of the Group, while minimizing exposure to compliance and reputational risks. The objectives of the Chief Compliance Officer Unit are:

- To lead a policy of full implementation of legislation at all units of the Bank, in Israel and worldwide, with an understanding of the needs of the business units and support for their activity;
- To identify, document, and actively assess compliance risks inherent in the business operations of the Bank, using a risk-based approach;
- To monitor and examine compliance in the Bank Group through sample testing, and to report the findings to the organs of the Bank.

The responsibility for routine management of the compliance aspects of risk at the Bank and for the execution of activities aimed at minimizing this risk lies with the Area managers and the managers of subsidiaries in the Bank Group. Professional responsibility in this field, as a second line of defense, rests with the Chief Compliance Officer Unit in the Risk Management Area. Routine activity is conducted at the Bank's units and in the Group by a network of compliance officers, based on the matrix management principle, with organizational subordination to Area heads or CEOs of subsidiaries and professional subordination to the Chief Compliance Officer Unit.

The activity of the Chief Compliance Officer and Securities Enforcement Unit is supervised within corporate governance, through:

- The Board of Directors' Committee on Risk Management and Control;
- The Board of Management of the Bank, headed by the CEO;
- Reports, at least once annually, to senior management and to the Board of Directors on compliance issues.

The compliance policy of the Group sets rules regarding all of the component areas of the compliance issues described above. This policy includes rules regarding corporate governance and the interaction with subsidiaries and branches outside Israel, and is based on legislation and regulation in Israel and in the relevant locations. The Bank Group has established an infrastructure to oversee the disclosure requirements with respect to individuals and corporations in the context of FATCA, and is continuing the process of automating the requirements arising from this legislation and from the Israeli regulation in this area. Similarly, the Bank Group is establishing infrastructure to address disclosure requirements with respect to individuals and corporations in the area of CRS. Israeli law requires financial institutions in Israel to report financial accounts of customers with foreign tax residency, within the CRS treaty for exchanges of information, which Israel has signed. The Income Tax Regulations (Implementation of a Uniform Standard for Reporting and Due Diligence of Information on Financial Accounts), 2019, were passed by the Finance Committee of the Knesset on January 1, 2019. The Bank has also established an overall policy of declared funds, including with regard to foreign-resident customers, aimed at reducing exposure to the presence of unreported funds in the accounts of foreign residents throughout the Bank Group.

J. Legal risk

Legal risk includes, among other matters, legal claims, rulings, inability to enforce contracts, and exposure to fines, penalties, or punitive damages as a result of supervisory actions and private settlements that may disrupt or adversely affect the activity of the Bank Group. The Group has a structure of internal and external legal counsel in order to contend with this risk.

The Bank takes a broad approach to legal risks, such that these risks encompass risks arising from primary and secondary legislation and regulatory directives, including risks arising from a lack of knowledge regarding the directives of local or foreign law applicable to the activity of the Bank or of the Group, or misinterpretation thereof; rulings of courts, tribunals, and other entities with quasi-judicial authority; actions that are not backed by legal counsel; flawed legal counsel; and risks arising from legal proceedings.

Pursuant to Proper Conduct of Banking Business Directive 350, legal risk is intertwined with operational risk.

Legal risk is managed in accordance with the legal risk exposure management policy document. Subsidiaries in Israel and overseas are required to adopt the aforesaid policy document and formulate their own policy documents accordingly.

Legal counsel submits a quarterly report to the Board of Management and to the Risk Management Committee of the Board of Directors regarding legal risks that have materialized, in comparison to prior estimates on this matter, as well as statistical information regarding the various types of legal proceedings opened or concluded during the relevant period.

For additional information regarding legal risk, see Note 25 to the Financial Statements.

K. Reputational risk

Reputational risk is defined as present or future risk of damage to income or capital as a result of a negative image in the eyes of relevant stakeholders, such as customers, parties to transactions, shareholders, investors, or regulatory agencies. This risk, which usually accompanies other activities and other risks, may materialize in various ways, such as customer departures, new regulation, and more.

The reputational risk management policy of the Bank Group has been approved by the Board of Management and the Board of Directors, and is implemented by the units of the Group.

The reputational risk management strategy of the Bank Hapoalim Group states that reputational risks should be prevented, minimized, and controlled. Accordingly, the following objectives have been set at the level of the Group with respect to reputational risk:

- To ensure effective supervision and management of reputational risk.
- To ensure effective communication and identification of reputational risk, with the aim of establishing a reputational risk appetite, in accordance with the strategic goals approved for each unit.
- To establish an internal control structure, with the aim of promoting a culture and values of awareness, transparency, and effectiveness in coping with reputational risks.

The Board of Directors and the Board of Management are responsible for promoting high standards of ethics and integrity and for establishing a culture that emphasizes the importance of internal controls.

L. Regulatory risk

Regulatory risk is risk to the Group's income and/or capital arising from legislative processes and/or draft directives of various regulatory agencies that cause changes in the Group's business environment. Such changes may occasionally influence the Group's ability to offer certain services and/or may obligate the Group to carry out technological and other investments at considerable cost, while disrupting schedules for development of other planned services.

L.1. Restrictions and supervision of the activity of the banking corporation

The Bank operates under laws, regulations, and directives, some of which are unique to the banking system, and some of which, even if not unique, affect material parts of its activity. The Banking Ordinance, the various banking laws, and the Proper Conduct of Banking Business Directives issued from time to time by the Supervisor of Banks constitute the central legal foundation for the Bank Group's activity. Among other matters, they define the boundaries of the activities permitted to the Bank, the activities permitted to the subsidiaries and related companies of the Bank Group, the terms of control and ownership of such companies, the relationships between the Bank and its customers, the usage of the Bank's assets, and the manner of reporting such activity to the Supervisor of Banks and to the public.

In addition, the Bank is subject to extensive legislation regulating its activity in the capital market, both on behalf of its customers and on its own behalf (e.g. in the areas of investment advising and customer portfolio management, pension advising, securities laws, and restrictions on insurance activity).

Other laws on specific topics impose specific duties and rules on banks, including the Bank. Examples include the legislation related to the prohibition of money laundering and terrorism financing, the Credit Data Law, legislation related to housing loans, guarantee laws, etc.

Additional legislation related to the Bank's activity has a strong influence on its conduct. Noteworthy in this area are execution laws, liquidation and receivership laws, laws referring to specific segments (local authorities, mortgage takers, home buyers, the agricultural sector), and various tax laws.

The Bank's activity is subject to supervision and auditing by the Banking Supervision Department, as well as by other supervisory agencies in specific areas of activity, such as the Israel Securities Authority; the Capital Market, Insurance, and Savings Authority; the Privacy Protection Authority; the Money Laundering Prohibition Authority; and the Supervisor of Competition. These agencies carry out audits at the Bank, from time to time, concerning the various areas of activity. The Bank and its subsidiaries work to comply with the duties imposed upon them under the said legal provisions.

L.2. Regulatory risk management methods

The Regulation Unit assesses and manages regulatory risks by monitoring, identifying, collecting information, assessing, reporting, conducting follow-ups, and applying controls with respect to regulatory developments, as they emerge. The unit serves as the liaison between the internal units of the Bank and the regulator during the formulation of legislation, with the aim of giving voice to a professional opinion, to lower the risk of non-optimal regulation. The unit also supplies opinions, as relevant, with regard to the effect of forthcoming regulation on the expected business conduct of the various units of the Bank. The unit operates in full cooperation with the relevant professional units of the Bank and at the subsidiaries and offices in Israel and overseas, in order to ensure that regulation is implemented fully and in an effective manner in business terms. With regard to compliance with regulatory directives, see "Compliance risk," above.

For details regarding material regulatory initiatives with an effect on the activity of the Bank during the reported period, see Note 35 to the Financial Statements.

M. Economic risk

Risk factors in the economic environment are identified by the Economics Department, which tracks current economic and financial data in Israel and worldwide and professionally evaluates the implications of the data. The department maps potential risks in the economy and in the financial markets, and reports to the relevant teams and committees. Concurrently, the department prepares a set of stress scenarios with a possible but low probability of future materialization, which in its opinion may have significant economic and financial consequences for the economy and for the Bank. The stress scenarios are updated annually, according to the risk map, and approved by the authorized parties, in accordance with procedures. Concurrently, the Economics Department examines a series of warning indicators that may signal an increase in the probability of a stress scenario. Warning indicators are reported routinely to the Board of Management Committee on Risk Management.

The Bank translates the market conditions in the scenarios into the impact on its business activity, according to the various risk areas, and examines the effect on its profitability, capital, and capital adequacy, while monitoring risks and segments that may be affected by economic changes in Israel and worldwide, and adapting its policies and control activities as necessary. Among other factors, the Bank examines the securities in its investment portfolio in Israel and overseas, its exposure to foreign financial institutions, and risk areas in the credit portfolio that may be influenced by such developments, and routinely complies with the liquidity requirements, as required by the supervisory directives.

For details regarding conditions in the Israeli and global economy, see the section "Economic review" in the Report of the Board of Directors and Board of Management as at December 31, 2018.

N. Strategic risk

Strategic risk is material present or future risk to profits, capital, reputation, or status that may be caused by changes in the business environment; faulty business decisions; improper implementation of strategy or business decisions; or failure to respond to changes in the industry (e.g. competitors' actions), the economy, or technology. Strategic risk is also a function of the congruence of the organization's strategic objectives with its environment, adaptation of the business plans that it develops to achieve these objectives, resource allocation, and quality of implementation. As such, this risk constitutes forward-looking information.

The strategic plan of the Bank is a three-year plan approved by the Board of Management and the Board of Directors, and examined and adjusted annually to changes in the business environment in Israel and globally, changes in the Bank's competitive environment, and changes in the Bank's objectives.

The process of formulating the strategic plan encompasses a general examination of the corporation's business and the relevant strategic risks, and a comprehensive planning process. Within the annual planning process, the Board of Management of the Bank examines the future competitive landscape, and builds strategic plans accordingly, in order to respond by preparing as necessary for this future.

The annual strategic planning process consists of four main stages, each of which addresses a different aspect of strategic risk management and assessment:

Stage 1 – Identification of the strategic risks to the Bank in its competitive environment. Examination of the factors influencing the Bank's competitive ability and future growth potential, including an examination of global and local trends and the current situation at the Bank. At this stage, according to the findings, the Board of Management and the Board of Directors establish the key strategic goals as well as additional emphases to be addressed during the preparation of the strategic plans. Once every several years (and as necessary), the Board of Management and the Board of Directors also establish the strategic themes for the Bank, which serve as the strategic framework on which the work plans are constructed.

Stage 2 – Formulation and approval of the strategic plan. The Bank formulates all of its strategic plans in accordance with the strategic emphases established, synchronized with the financial objectives, taking risk aspects into consideration. The Risk Management Area presents challenges with regard to this activity.

Stage 3 – Implementation of strategic planning. The strategy of the Bank is embedded in the strategic maps using the BSC (Balanced Score Card) methodology. The strategic emphases and plans of the Bank are reflected in the BSC maps. The BSC maps consist of goals, indices, and measurable objectives for each index (on both the process level and the level of business results), derived from the strategy, designed to motivate the behavior and performance of the various units, and used to monitor the implementation of the strategic plan and track strategic risk. Significant deviation from the objectives established in the BSC maps may be an indication of partial realization of the strategic plan, and therefore raises concern over an increase in strategic risk.

Stage 4 – Linking of the measurement of the BSC indices to the remuneration of officers and senior executives. In order to ensure the importance of the strategic objectives, most of the BSC indices are linked to the personal objectives of the heads of the Areas and of senior executives, including risk-management indices.

O. Environmental risk

Environmental risk to the Bank is the risk of loss as a result of directives related to the protection of the environment and the enforcement thereof, which may materialize if the Bank bears direct responsibility for an environmental hazard, including the possibility that the Bank may be required to remove an environmental hazard, or may be liable to a third party in respect of an environmental hazard, or as a result of the impairment of realized collateral. This risk may also materialize indirectly as a result of the deterioration of the financial condition of another entity due to environmental costs stemming from directives related to the protection of the environment. Reputational risk may also materialize as a result of the association of the Bank to a party causing environmental damage.

Environmental risks related to large credit portfolios are monitored by the Corporate Banking Area. Environmental risk related to the Bank's own activity is under the responsibility of the Head of Corporate Social Responsibility.

In recognition of its social responsibility, and based on an understanding of the importance of maintaining environmentally sustainable policies, the Bank has formulated a comprehensive, ordered environmental policy. This policy is implemented through an organizational structure and areas of responsibility, procedures, processes, and monitoring systems. As part of the process of managing and assessing its environmental conduct, the Bank received certification under the ISO 14001 standard, which is revalidated annually, in a comprehensive review by a licensed international firm. An extensive description of activities in connection with the environment is presented in the Corporate Social Responsibility Report of Bank Hapoalim, published annually in accordance with the most advanced GRI standard.

The Bank has established policies, working procedures, and methodologies for the identification, specification, and management of environmental risks, in order to address the effect of environmental risk on the credit risk of major borrowers. During the formulation of the process of writing the policies and working procedures, prevalent methodologies at banks overseas were examined, and experts in this field were consulted. The methodology for identification of environmental risks includes, among other matters, reference to the potential environmental risk in an economic sector, as well as individual reference to environmental risks that may have a material effect on the corporation, based on its business activity. The management of environmental risks is part of the overall management of credit risks at the Bank; an assessment of environmental risk is included in evaluations of the quality of credit granted to customers by the Bank.

The Bank, or any senior officer of the Bank, were not a party, during the reported period, to any material legal or administrative proceedings related to the environment.

P. Remuneration disclosure

For details regarding remuneration for interested parties and officers of the Bank, in accordance with Regulations 21 and 22 of the Securities Regulations (Periodic and Immediate Reports), 1970, see the section on corporate governance, audit, and additional information regarding the Bank's business and the management thereof in the Annual Report of the Bank for 2017.

P.1. Entities supervising remuneration

The entities supervising remuneration are the Board of Directors of the Bank, through the Remuneration Committee of the Board of Directors. The Remuneration Committee consists of three members, which included, in 2018, two external directors and an additional director. The chairman of the committee is an external director. The powers of the Remuneration Committee are those granted to it in accordance with the applicable law – inter alia, in accordance with the directives of the Companies Law, 1999, and the directives of the Supervisor of Banks (Proper Conduct of Banking Business Directive 301 and Proper Conduct of Banking Business Directive 301A), and as defined in the procedures of the Bank. The Remuneration Committee supervises the implementation of the remuneration policy and of the remuneration plans, and for that purpose is assisted by the risk management, control, and audit functions of the Bank. The Remuneration Committee, with the assistance of the risk management, control, and audit functions of the Bank, as necessary, has designed and designs the means of control to ensure that the principles of the remuneration policy are maintained, in such a manner as to ensure on a regular basis that the actual remuneration of the officers, the risk and performance indicators, and the results thereof are consistent with the chosen remuneration mechanisms and with the policy objectives.

The committee is also assisted in its work by external advisors – economic (Cognum Financial Consulting Ltd.) and legal (Goldfarb Seligman Law Offices) – who advise the committee with respect to the remuneration policy and remuneration plans in accordance with applicable laws, and in connection with information required by the committee in order to make informed decisions, remuneration approval processes at the Bank, and various controls, all as required by the applicable laws.

The remuneration policy of the Bank contains a chapter addressing the Bank Group, which applies similar principles to those of the Bank's remuneration policy to selected subsidiaries of the Bank in Israel; with respect to the overseas subsidiaries and overseas branches of the Bank, there are certain adjustments which apply, in order to adjust the remuneration to the laws that apply in the relevant country and to the terms of the labor market there.

The key employees of the Bank include the following employees: the Chairman of the Board of the Bank; the CEO of the Bank; members of the Board of Management of the Bank; other executives who report directly to the CEO of the Bank; a group of employees under executive personal contracts who report to members of the Board of Management and who are not officers; and several employees in the nostro, dealing rooms, OTC, and derivatives units who are not officers or senior executives.

P.2. Planning and structure of remuneration processes

The main characteristics and objectives of the policy are described below, including a reference to the way in which the Bank ensures that employees engaged in risk management and compliance are remunerated without dependence upon the business under their supervision.

General information – The Bank aspires to remunerate officers and executives for their work and contribution to the Bank, and to retain them over the long term, while creating appropriate incentives and linking their best interests with the best interests of the Bank and of its stakeholders, in alignment with the goals of the Bank, its work plans, and its policies, from a long-term perspective. The remuneration policy is consistent with the Bank's vision and strategy and with its work plans and risk appetite. Its purpose is to lead to maximization of the Bank's value, while emphasizing the Bank's stability and the interchange between achieving returns and taking risks.

The main goals of the remuneration policy are:

- To motivate officers to act to create long-term economic value for the Bank and its stakeholders, in a manner that strengthens the connection between remuneration and the creation of value for the stakeholders in general and for shareholders of the Bank in particular.
- To adjust the remuneration to the Bank's vision, to the overall strategic plan of the Bank and of its secondary units, and to the work plan derived from the strategic plans. Accordingly, remuneration incentives shall also be adjusted to the long-term objectives formulated in the strategic plan and in periodic work plans.
- To adjust the total remuneration to the risk appetite of the Bank.
- To maintain the Bank's competitiveness in recruiting and retaining high-quality personnel for senior executive positions; the remuneration amounts shall be proportionate and shall take into consideration the terms of the market and the structure of remuneration at the Bank.
- To comply with regulatory requirements. Officers' remuneration shall include a component reflecting attainment of the general objectives of the Bank with respect to risk management and compliance with laws, regulatory directives, and the procedures of the Bank.
- To promote a remuneration structure that prevents harm to working relationships at the Bank.
- To adjust remuneration to the type of officers' activities and responsibilities, and to their skills.
- Remuneration for the organizational functions that are involved in supervision and control shall be determined based on standards that take into consideration the importance and sensitivity of these roles. The bonus budget for these functions shall be determined according to the cost of capital, and based on the attainment of key performance indicators (hereinafter: "KPIs"), to be established in advance by the supervisors of the executives in the supervision and control functions, according to the role of the executive.

P.3. Inclusion of existing and future risks in the remuneration process

The annual and multi-annual work plans are constructed, among other matters, with reference to the volume and types of the risks that the Bank is willing to undertake. The achievement of objectives of the work plan, including capital-adequacy targets, and the achievement of a surplus return over the required cost of capital set the threshold for the distribution of bonuses. This objective is also achieved through a ceiling on variable remuneration, and through postponement of the payment of part of the annual bonus, in certain cases, which is contingent on the Bank's performance in future years, so that executives are exposed to the consequences of materialization of the risks that they take, and their remuneration decreases if or when the risks materialize in the future.

Risk management, control, and audit functions at the Bank assisted the Board of Directors of the Bank and the Remuneration Committee of the Board of Directors in ensuring that risk indicators and performance indicators used in the remuneration mechanisms of the officers are consistent with the objectives of the remuneration policy and provide assurance of the effectiveness of the remuneration mechanisms.

The principal risks taken into consideration by the Bank in applying remuneration indicators include credit and concentration risks, market risks, operational risks, and compliance risks.

P.4. The connection between performance during the measured period and remuneration levels

The main performance indicator for the Bank is the attainment of the required rate of return on equity, as detailed in the Bank's remuneration policy. The main individual performance indicators are established according to the work plans of the Bank, and are drawn from different fields, such as finance; customers; processes, including long-term projects; and technological infrastructures and human resources. Lateral objectives are also integrated in the individual objectives, based on the needs of the organization, such as objectives related to efficiency, employee satisfaction, and intra-organizational service.

Once annually, during the process of approval of annual bonuses, an examination is performed to ensure that the parameters that determine the extent of remuneration are consistent with the indicators of success of the strategic plan of the Bank.

In exceptional cases, the objectives shall be presented for discussion at the end of the year, in aggregate, in order to make changes.

P.5. Adjustment of remuneration to long-term performance

On December 19, 2016, the general meeting of shareholders of the Bank approved the officer remuneration plan of the Bank, for a period of three years, in alignment with the Financial Corporations Officer Remuneration Law (Special Approval and Non-Deduction of Expenses for Tax Purposes due to Exceptional Remuneration), 2016 (hereinafter: the "Remuneration Limit Law") and the ceiling established therein (the "Remuneration Ceiling"); the Companies Law, 1999 (the "Companies Law"); and the Banking Corporation Remuneration Policy Directive (the "2016 Remuneration Policy"). On November 29, 2016, the Bank adopted a comprehensive new remuneration policy for its senior executives and employees who are not officers (all parts of the remuneration policy for all populations shall hereinafter be referred to, jointly, as the "2016 Remuneration Policy"), as well as a remuneration plan consistent with this policy (the "2016 Plan").

In general, variable remuneration shall consist, among other components, of an annual bonus contingent upon the financial performance of the Bank, based on risk-adjusted profit and the cost of capital of the Bank, and shall also be determined according to the attainment of measurable quantitative and qualitative individual key performance indicators (the model for establishing the bonus budget for traders differs from the foregoing description, and takes into account factors including the specific performance of the group and room to which they belong).

50% of the annual bonus shall be spread over three years, in a manner that compensates for unsatisfactory performance during that period, if any, and shall be paid in share-based instruments (usually in the form of restricted stock units (RSU), with a vesting condition of an ROE difference of no less than -5%), provided that the variable remuneration in a given year is higher than 1/6 of the fixed remuneration in that year; otherwise, the deferral shall not be performed, all subject to the applicable law. Pursuant to the 2016 Remuneration Policy and the 2016 Plan of the Bank, deferral of 50% of the annual bonus, as noted, shall only occur if the variable remuneration is greater than 40% of the fixed remuneration. In the event of an annual net loss from regular activities, or a material deviation from the capital-adequacy ratio, the deferred payment shall be deferred until annual profit is presented, or until the deviation from capital adequacy ceases, as the case may be.

Pursuant to the 2016 Remuneration Policy, the Remuneration Committee and the Board of Directors shall be authorized to subtract up to 50% of the annual bonus of an executive, in cases in which the financial or business position of the Bank makes it necessary, and/or due to reasons related to the functioning of the executive or reasons to be explained by such organs.

The 2016 Remuneration Policy states that in the event that the audited financial statements of the Bank for a given year are amended, such that if the amount of the bonus owed to the executive in respect of that year had been calculated based on the amended data the executive would have received a bonus in a different amount, the executive shall reimburse the Bank for, or the Bank shall pay the executive, as relevant, the difference between the amount of the bonus received or the amount unpaid by the Bank, as relevant, and the amount to which the executive is entitled based on the said amendment, provided that, if the executive has left the Bank, no more than three years have elapsed from the end of the executive's employment at the Bank. There are also additional directives concerning the obligation of reimbursement of variable remuneration, according to the Banking Corporation Remuneration Policy Directive.

P.6. Variable remuneration

Subject to the foregoing, under certain circumstances, half of the variable remuneration is paid in cash, and the other half is paid as deferred remuneration.

The deferred variable remuneration is usually paid in the form of restricted stock units. However, at the Bank's subsidiaries in general, and at the subsidiaries overseas in particular, it is possible for such remuneration to be paid in the form of phantom restricted stock units (or to be deferred and paid in cash). The foregoing also applies to employees on assignment overseas for the Bank, for tax reasons.

Table P-1: Remuneration in respect of the reported year for senior officers and other key employees (in NIS millions)

	2018		2017	
	Senior officers	Other key employees	Senior officers	Other key employees
Amount of remuneration				
Fixed remuneration				
Number of employees	**23**	**210**	20	213
Total fixed remuneration	**37**	**233**	36	222
Of which: cash-based	**32**	**209**	32	198
Of which: deferred	**-**	**-**	-	-
Of which: shares or other share-based instruments	**5**	**9**	2	9
Of which: deferred	**-**	**-**	-	-
Of which: other forms	**-**	**15**	2	15
Of which: deferred	**-**	**-**	-	-
Variable remuneration				
Number of employees	**23**	**197**	20	208
Total variable remuneration	**7**	**42**	6	40
Of which: cash-based	**7**	**40**	4	37
Of which: deferred	**-**	**-**	-	4
Of which: shares or other share-based instruments	**-**	**2**	-	2
Of which: deferred	**-**	**2**	-	2
Of which: other forms	**-**	**-**	2	1
Of which: deferred	**-**	**-**	-	-
Total remuneration	**44**	**275**	42	262

Table P-2: Special payments in the reported year to senior officers and other key employees (in NIS millions)

	2018					
	Guaranteed bonuses		Signing bonuses		Severance pay	
	Number of employees	Total	Number of employees	Total	Number of employees	Total
Senior officers	**-**	**-**	**-**	**-**	**3**	**7**
Other key employees	**-**	**-**	**-**	**-**	**17**	**12**

	2017					
	Guaranteed bonuses		Signing bonuses		Severance pay	
	Number of employees	Total	Number of employees	Total	Number of employees	Total
Senior officers	-	-	-	-	1	-
Other key employees	-	-	-	-	25	14

Table P-3: Deferred remuneration for senior officers and other key employees (in NIS millions)

	2018				
	Total unpaid amount of deferred remuneration balance	Of which: total unpaid amount of balance of deferred remuneration and retained remuneration exposed to explicit and/or implicit retroactive adjustments	Total amount of amendment performed during the year due to explicit retroactive adjustments	Total amount of amendment performed during the year due to implicit retroactive adjustments**	Total amount of deferred remuneration paid during the reported year
Deferred remuneration and retained remuneration					
Senior officers					
Cash	**-**	**-**	**-**	**-**	**2**
Shares*	**-**	**-**	**-**	**-**	**-**
Share-based instruments	**2**	**2**	**-**	**-**	**5**
Other	**-**	**-**	**-**	**-**	**-**
Other key employees					
Cash	**3**	**2**	**-**	**-**	**10**
Shares*	**-**	**-**	**-**	**-**	**-**
Share-based instruments	**10**	**10**	**-**	**-**	**18**
Other	**1**	**-**	**-**	**-**	**2**
Total	**16**	**14**	**-**	**-**	**37**

	2017				
	Total unpaid amount of deferred remuneration balance	Of which: total unpaid amount of balance of deferred remuneration and retained remuneration exposed to explicit and/or implicit retroactive adjustments	Total amount of amendment performed during the year due to explicit retroactive adjustments	Total amount of amendment performed during the year due to implicit retroactive adjustments**	Total amount of deferred remuneration paid during the reported year
Deferred remuneration and retained remuneration					
Senior officers					
Cash	-	-	-	-	-
Shares*	-	-	-	-	-
Share-based instruments	8	8	-	-	6
Other	-	-	-	-	-
Other key employees	9	9	-	-	12
Cash					
Shares*	-	-	-	-	-
Share-based instruments	27	27	-	1	24
Other	1	-	-	-	1
Total	45	44	-	1	43

* Does not exist at the Bank.

** Contingent RSU forfeited due to partial attainment of the ROE difference that would grant entitlement to the maximum amount.

Q. Addendums

Q.1. Connections between the financial statements and supervisory exposures

Table Q-1: Connection between the balance sheet and supervisory capital components

	December 31, 2018*	December 31, 2017	References to components of supervisory capital
	Consolidated supervisory balance sheet		
	NIS millions		
Assets			
Cash and deposits with banks*	**84,481**	86,114	
* Of which: collective allowance for credit losses included in Tier 2 capital	**(1)**	(3)	10
Securities*	**56,149**	65,442	
* Of which: investments in capital of financial corporations that do not exceed 10% of the share capital of the financial corporation	**578**	1,057	
* Of which: investments in capital of financial corporations that exceed 10% of the share capital of the financial corporation, and do not exceed the deduction threshold	**41**	-	
* Of which: other securities	**55,530**	64,385	
Securities borrowed or purchased under agreements to resell	**708**	684	
Credit to the public	**300,870**	282,507	
* Of which: investments in capital of financial corporations that exceed 10% of the share capital of the financial corporation, and do not exceed the deduction threshold	**553**	457	
* Of which: investments in capital of financial corporations that do not exceed 10% of the share capital of the financial corporation	**1,224**	1,253	
Allowance for credit losses*	**(3,997)**	(3,844)	
* Of which: collective allowance for credit losses included in Tier 2 capital	**(3,395)**	(3,170)	10
* Of which: allowance for credit losses not included in supervisory capital	**(602)**	(674)	
Net credit to the public	**296,873**	278,663	
Credit to governments	**2,428**	2,292	
* Of which: collective allowance for credit losses included in Tier 2 capital	**(7)**	(3)	10
Investment in equity-basis investees*	**109**	203	
* Of which: investments in capital of financial corporations that exceed 10% of the share capital of the financial corporation, and do not exceed the deduction threshold	**62**	145	
Buildings and equipment	**3,467**	3,392	
Assets in respect of derivative instruments	**10,534**	12,013	
Other assets*	**6,177**	5,621	
* Of which: deferred tax assets**	**3,679**	3,699	
** Of which: deferred tax assets attributed to timing differences, over 10% of common equity Tier 1 capital	**-**	-	
** Of which: deferred tax assets excluding those attributed to timing differences	**34**	38	6
** Of which: other deferred tax assets	**3,645**	3,661	
* Of which: additional other assets	**2,498**	1,922	
Total assets	**460,926**	454,424	

* These balances include the activity of the credit-card companies, which is classified in the financial statements as a discontinued operation.

Table Q-1: Connection between the balance sheet and supervisory capital components (continued)

	December 31, 2018*	December 31, 2017	References to components of supervisory capital
	Consolidated supervisory balance sheet		
	NIS millions		
Liabilities and capital			
Deposits from the public	**352,342**	347,351	
Deposits from banks	**5,228**	4,149	
Deposits from the government	**208**	320	
Securities lent or sold under agreements to repurchase	**-**	367	
Bonds and subordinated notes*	**30,024**	29,058	
* Of which: subordinated notes not recognized as supervisory capital	**8,263**	7,571	
* Of which: subordinated notes recognized as supervisory capital**	**7,108**	7,249	
** Of which: qualifying as supervisory capital components	**1,823**	-	
** Of which: not qualifying as supervisory capital components and subject to transitional directives	**5,285**	7,249	9
Liabilities in respect of derivative instruments*	**9,676**	12,049	
* Of which: in respect of own credit risk	**4**	9	8
Other liabilities	**25,792**	25,126	
* Of which: collective allowance for credit losses included in Tier 2 capital	**508**	524	10
Total liabilities	**423,270**	418,420	
Shareholders' equity*	**37,544**	35,863	
* Of which: ordinary share capital and premium, retained earnings, other comprehensive loss, and capital reserves**	**37,544**	35,863	
** Of which: ordinary share capital	**1,334**	1,333	1
** Of which: premium on ordinary shares	**6,801**	6,791	2
** Of which: retained earnings	**30,565**	28,466	3
** Of which: accumulated other comprehensive loss***	**(1,194)**	(786)	4A
*** Of which: adjustments for presentation of securities available for sale at fair value	**(163)**	510	
*** Of which: net losses in respect of cash-flow hedges	**(1)**	(1)	7
*** Of which: net adjustments from translation, after hedge effects	**(37)**	(53)	
** Of which: capital reserves from a benefit due to share-based payment transactions	**38**	59	4B
Non-controlling interests*	**112**	141	
* Of which: non-controlling interests attributable to common equity Tier 1 capital	**40**	70	5
* Of which: non-controlling interests not attributable to supervisory capital	**72**	71	
Total capital	**37,656**	36,004	
Total liabilities and capital	**460,926**	454,424	

* These balances include the activity of the credit-card companies, which is classified in the financial statements as a discontinued operation.

Table Q-2: Connections between the financial statements and supervisory exposures

	December 31, 2018					
	Balance sheet balances as reported in the published financial statements and according to the supervisory consolidation base	Balance sheet balances of items:				
		Subject to a credit risk limit	Subject to a counterparty credit risk limit	Subject to a securitization limit	Subject to a market risk limit	Not subject to capital requirements or subject to deduction from the capital base
	NIS millions					
Assets						
Cash and deposits with banks	**84,481**	**84,481**	**-**	**-**	**-**	**-**
Securities	**56,149**	**49,771**	**-**	**-**	**6,378**	**-**
Securities borrowed or purchased under agreements to resell	**708**	**708**	**-**	**-**	**-**	**-**
Credit to the public	**300,870**	**300,771**	**-**	**99**	**-**	**-**
Allowance for credit losses	**(3,997)**	**(594)**	**-**	**-**	**-**	**(3,403)**
Net credit to the public	**296,873**	**300,177**	**-**	**99**	**-**	**(3,403)**
Credit to governments	**2,428**	**2,428**	**-**	**-**	**-**	**-**
Investment in equity-basis investees	**109**	**109**	**-**	**-**	**-**	**-**
Buildings and equipment	**3,467**	**3,467**	**-**	**-**	**-**	**-**
Assets in respect of derivative instruments	**10,534**	**-**	**10,534**	**-**	**-**	**-**
Other assets	**6,177**	**5,887**	**-**	**-**	**-**	**290**
Total assets	**460,926**	**447,028**	**10,534**	**99**	**6,378**	**(3,113)**
Liabilities						
Deposits from the public	**352,342**	**-**	**-**	**-**	**-**	**-**
Deposits from banks	**5,228**	**-**	**-**	**-**	**-**	**-**
Deposits from the government	**208**	**-**	**-**	**-**	**-**	**-**
Securities lent or sold under agreements to repurchase	**-**	**-**	**-**	**-**	**-**	**-**
Bonds and subordinated notes	**30,024**	**-**	**-**	**-**	**-**	**-**
Liabilities in respect of derivative instruments	**9,676**	**-**	**-**	**-**	**-**	**-**
Other liabilities	**25,792**	**-**	**-**	**-**	**-**	**-**
Total liabilities	**423,270**	**-**	**-**	**-**	**-**	**-**

Table Q-2: Connections between the financial statements and supervisory exposures (continued)

	December 31, 2017					
	Balance sheet balances as reported in the published financial statements and according to the supervisory consolidation base	Balance sheet balances of items:				
		Subject to a credit risk limit	Subject to a counterparty credit risk limit	Subject to a securitization limit	Subject to a market risk limit	Not subject to capital requirements or subject to deduction from the capital base
	NIS millions					
Assets						
Cash and deposits with banks	86,114	86,114	-	-	-	-
Securities	65,442	60,232	-	-	5,210	-
Securities borrowed or purchased under agreements to resell	684	684	-	-	-	-
Credit to the public	282,507	282,507	-	-	-	-
Allowance for credit losses	(3,844)	(545)	-	-	-	(3,299)
Net credit to the public	278,663	281,962	-	-	-	(3,299)
Credit to governments	2,292	2,292	-	-	-	-
Investment in equity-basis investees	203	203	-	-	-	-
Buildings and equipment	3,392	3,392	-	-	-	-
Assets in respect of derivative instruments	12,013	-	12,013	-	-	-
Other assets	5,621	5,250	-	-	-	371
Total assets	454,424	440,129	12,013	-	5,210	(2,928)
Liabilities						
Deposits from the public	347,351	-	-	-	-	-
Deposits from banks	4,149	-	-	-	-	-
Deposits from the government	320	-	-	-	-	-
Securities lent or sold under agreements to repurchase	367	-	-	-	-	-
Bonds and subordinated notes	29,058	-	-	-	-	-
Liabilities in respect of derivative instruments	12,049	-	-	-	-	-
Other liabilities	25,126	-	-	-	-	-
Total liabilities	418,420	-	-	-	-	-

Table Q-3: Main sources of differences between supervisory exposure amounts and balance sheet balances in the financial statements

	December 31, 2018				
	Total	Items to which the following apply:			
		Credit risk limit	Counterparty credit risk limit	Securitization limit	Market risk limit
	NIS millions				
Amount of balance sheet balance of assets according to supervisory consolidation base	**460,926**	**443,915**	**10,534**	**99**	**6,378**
Amount of balance sheet balance of liabilities according to supervisory consolidation base	**-**	**-**	**-**	**-**	**-**
Total net amount according to supervisory consolidation base	**460,926**	**443,915**	**10,534**	**99**	**6,378**
Off-balance sheet amounts	**186,039**	**53,449**	**12,354**	**94**	**-**
Additional differences caused by different netting rules	**(18,216)**	**(7,546)**	**(10,670)**	**-**	**-**
Differences caused by provisions	**3,403**	**3,403**	**-**	**-**	**-**
Other differences	**119**	**119**	**-**	**-**	**-**
Exposure amounts taken into account for supervisory purposes	**632,271**	**493,340**	**12,218**	**193**	**6,378**

	December 31, 2017				
	Total	Items to which the following apply:			
		Credit risk limit	Counterparty credit risk limit	Securitization limit	Market risk limit
	NIS millions				
Amount of balance sheet balance of assets according to supervisory consolidation base	454,424	437,201	12,013	-	5,210
Amount of balance sheet balance of liabilities according to supervisory consolidation base	-	-	-	-	-
Total net amount according to supervisory consolidation base	454,424	437,201	12,013	-	5,210
Off-balance sheet amounts	173,805	55,973	12,093	87	-
Additional differences caused by different netting rules	(19,937)	(7,678)	(12,259)	-	-
Differences caused by provisions	3,299	3,299	-	-	-
Other differences	228	228	-	-	-
Exposure amounts taken into account for supervisory purposes	611,819	489,023	11,847	87	5,210

Note:
Includes amounts below deduction thresholds (subject to a risk weight of 250%) not included in Table D-16.

Q.1.a. Establishing the fair value of financial instruments

Pursuant to ASC 820-10 (FAS 157), fair value is defined as the price that would be obtained from the sale of an asset, or that would be paid to transfer a liability, in an ordinary transaction between market participants at the date of measurement. In order to assess fair value, the standard requires the maximum possible use of observable inputs, and minimum use of unobservable inputs. Observable inputs represent information available in the market and received from independent sources, whereas unobservable inputs reflect the assumptions of the Bank. ASC 820-10 specifies a hierarchy of measurement techniques, based on whether the inputs used to establish fair value are observable or unobservable. These types of inputs form the following fair-value hierarchy:

- Level 1 data: Prices quoted (unadjusted) in active markets for identical assets or liabilities, accessible to the Bank at the measurement date.
- Level 2 data: Directly or indirectly observable inputs regarding the asset or liability other than quoted prices included in Level 1.
- Level 3 data: Unobservable inputs regarding the asset or liability.

The hierarchy requires the use of observable market inputs when such information is available. In the classification of the data used to measure fair value into the different levels of the fair-value hierarchy, the Bank classifies the overall fair-value measurement as the lowest level of an input significant for the overall measurement.

Fair-value measurements of financial instruments are performed without taking a blockage factor into consideration, both for financial instruments evaluated according to Level 1 data and for financial instruments evaluated according to Level 2 or 3 data, with the exception of situations in which a premium or discount would be taken into account in the fair-value measurement by market participants in the absence of Level 1 data.

Assessment of credit risk and nonperformance risk

FAS 157 (ASC 820) requires the Bank to reflect credit risk and nonperformance risk in measuring the fair value of debt, including derivative instruments, issued by the Bank and measured at fair value. Nonperformance risk includes the credit risk of the Bank, but is not limited to this risk alone.

The Bank assesses credit risk in derivative instruments in the following manner:

- When sufficient liquid collateral exists in respect of the exposure, specifically securing the derivative instrument at a high degree of legal certainty, the Bank takes such collateral into consideration in determining the credit risk.
- When exposure in respect of the counterparty is material, the Bank performs a fair-value assessment based on indications of the quality of credit of the counterparty from transactions in an active market, insofar as such indications are available with reasonable effort. The Bank derives these indications, among other matters, from prices of debt instruments of the counterparty traded in an active market, and from prices of credit derivatives the basis for which is the quality of credit of the counterparty. If no such indications exist, the Bank calculates the adjustments based on internal ratings (e.g. estimates of expected default rates and rates of credit losses in the event of default).

The calculation is performed based on an internal model that assumes various scenarios regarding the value of the transactions.

Q.2. Securitization exposures

The volume of the Bank's exposure in respect of securitization is approximately NIS 286 million.

1. The Bank supplies liquidity lines to securitization entities in which third parties serve as the sponsors. The lines supplied by the Bank constitute a relatively small share of the total liquidity lines of these securitization entities. The Bank does not supply credit reinforcement to these entities. The total liquidity lines supplied to securitization entities, as described above, as at December 31, 2018, amounted to NIS 187 million (approximately USD 50 million), compared with NIS 173 million (approximately USD 50 million) at the end of 2017. No withdrawals were performed on any of these lines up to December 31, 2018. The risk weight applied to the amount of the exposure in respect of liquidity lines is determined according to the highest risk weight assigned to a single exposure covered by the instrument.
2. During the second quarter of 2018, the Bank entered into a transaction for the financing of receivables portfolios as an investor, within which the Bank granted loans in a total amount of approximately NIS 120 million, backed by receivables portfolios transferred by the initiator to a special purpose entity (SPE).. The balance of the transaction as at December 31, 2018 totaled NIS 99 million. The risk weight applied to the amount of the exposure in respect of the transaction is determined according to the risk weight derived from the A- rating assigned by the rating agency S&P Global Ratings.