

AKTIA BANK PLC

Capital and Risk Management Report 2018

Aktia

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1. Highlights of 2018

Mikko Ayub, new CEO at Aktia

On 6 August 2018, the Board of Aktia Bank Plc appointed Mikko Ayub (M.Sc., MBA) as its new Chief Executive Officer. Mikko Ayub moved to Aktia from Nordea Bank, where he had been Executive Advisor for the Commercial and Business Banking operations, and before that, he was responsible for the Markets operations in Finland, the Baltics and Russia. Mikko Ayub started as CEO on 1 October 2018.

Aktia renews its Executive Committee

On 23 November 2018, Aktia Bank Plc announced that the Bank will renew its Executive Committee to more efficiently implement its strategy. As of 1 January 2019, Aktia will have three business areas: Private Customers, Corporate Customers and Asset Management. Aktia has also renewed the composition of the Executive Committee.

Aktia decreased its holding in Aktia Real Estate Agency

Aktia Bank Plc decreased its holding in Aktia Real Estate Agency Ltd to 19 % at the beginning of July. The change in the ownership structure supports the implementation of Aktia's new strategy and will improve Aktia Real Estate Agency's possibilities within its own sector. The transaction will have no significant impact on the Group's result and financial position. The close cooperation between Aktia Bank and the Real Estate Agency continues even after the change in the ownership structure.

Aktia divested its holding in Folksam Non-Life Insurance Company

In October, Aktia Bank Plc made an agreement to sell its remaining 10 % holding in Folksam Non-Life Insurance Company Ltd to Fennia Mutual Insurance Company. Aktia Bank is now completely focused on carrying out the strategy, which focuses on asset management and financing solutions, while competitive non-life insurance and pension insurance products are offered through partners.

Combining the R and A shares

Aktia Bank Plc's Annual General Meeting approved the Board of Directors' proposal that the company's R and A shares should be combined without increasing the share capital, so that after the combination, the company will have only one share class. The Annual General Meeting also accepted the amended Articles of Association and the directed, payment-free issue of new shares to the holders of R shares so that the owners of R shares each received three new payment-free shares for every batch of 25 R shares that they own. All in all, 2,383,851 new shares were issued to the holders of R shares. The combination was registered on 12 April 2018. Trading with the new shares together with the existing shares commenced on 13 April 2018 under the ISIN code FI4000058870 and the trading symbol AKTIA.

Expanding to international markets

Aktia expanded sales of its specialist knowledge of emerging market government bonds to international markets. The new cooperation with the German company Universal-Investment GmbH, the largest independent manager in German-speaking Europe that offers investment services, continued. The company has over EUR 340 billion in assets under management and offers its customers over 1,000 private-label funds and mandates. Universal-Investment GmbH manages and distributes Aktia's funds through its sales organization to institutional investors in German-speaking Europe.

Aktia's asset management at the top of Finnish fixed-income fund management again

Aktia was again chosen as the Best Finnish Fixed Income Manager in Morningstar's competition "Finland Awards 2018". Additionally, the Aktia Corporate Bond+ fund finished among the three best funds in the Fixed Income Funds category. Asset Management at Aktia has been at the top in Morningstar's surveys since 2013. The longstanding success proves the outstanding expertise within Aktia. Aktia's Wealth Management has specialised in three main areas within fixed income fund management: global inflation, European corporate bonds and government bonds issued in emerging markets.

Aktia Bank introduced a new share savings plan

To support the implementation of Aktia's new strategy, the Board of Aktia Bank Plc decided to introduce a new long-term share savings plan for the employees of the Aktia Group. The aim is to encourage Aktia's employees to invest in and hold the company's shares, and with that, to align the interests and engagement of the staff and management towards value development and increased shareholder value.

Business environment

The financial development in Finland was relatively good during 2018, but the uncertainty in the world economy weighed down the outlook. Statistics Finland's meter of the economic situation showed 3.2 % growth during October compared to the previous year, and the corresponding number in November 2018 was 1.8 %. In December, employment rates increased to 72.5 %. The unemployment rate also decreased significantly during 2018, and during the last quarter, unemployment decreased to 6.6 %. The prices for older row houses and apartments have increased by under 1 % during the third quarter of the 2018. The aggregated numbers are due to vast regional differences. Prices in the Helsinki region increased by 2.2%, while prices decreased by 0.3 % in the rest of the country.

Rating

On 2 July 2018, the credit institution Moody's Investors Service upgraded (and confirmed on 28 December 2018) the long and short-term deposit ratings of Aktia Bank from A3/P-2 to A1/P-1 and the long-term senior unsecured debt rating from A3 to A1. The baseline credit assessment was upgraded to a3. The outlook for the long-term deposit and senior unsecured debt ratings was changed from positive to stable. Moody's Investors Service confirmed the rating of Aaa for Aktia Bank's long-term covered bonds. The main reason for the upgraded rating was the consistent improvement in Aktia's independent financial performance during the last two years, including successful diversification of the Bank's mixed income through expanding asset management operations.

On 18 December 2018, Standard and Poor's confirmed its ratings of Aktia Bank Plc's creditworthiness. The ratings are A- for long-term borrowing and A2 for short-term borrowing, both with a stable outlook.

Profit 2018

The Group's operating profit was EUR 67.6 (49.1) million. The Group's profit was EUR 56.0 (39.3) million. Operating profit excluding items affecting comparability increased by 9 % to EUR 65.4 (59.9) million.

Income

The Group's operating income was at the same level as last year and amounted to EUR 210.1 (210.3) million. Operating income excluding items affecting comparability, however, decreased to EUR 206.1 (210.0) million. Net interest income decreased by 4 % to EUR 85.9 (89.6) million. The net interest income from lending and borrowing increased by 2 % to EUR 70.1 (69.1) million, even though last year includes interest income EUR 2.0 million from unwound mortgage bank loans. Continued low market interest rates, and thereby lower interest income from the Bank's liquidity portfolio, decreased the Group's net interest income by EUR 6.6 million. Interest income from the 2012 unwound interest rate hedges decreased by EUR 4.1 million. In June, the European Central Bank established the expense for Aktia's TLTRO refinancing operations, and during the period, a positive impact on the net interest income of EUR 3.5 million was recognised. Net commission income increased by 5 % to EUR 95.6 (91.4) million. Net commission income from borrowing and lending amounted to EUR 13.8 (12.1) million, which corresponds to a 14 % increase. Commission income from mutual funds, asset management and securities brokerage increased by 10 % to EUR 59.6 (54.2) million. Card and other payment service commissions increased by 18 % to EUR 24.4 (20.7) million. The net income from life insurance decreased by 20 % to EUR 21.4 (26.6) million. The actuarially calculated result has increased from last year, while the net income from investment activities has decreased. The transition to IFRS 9 caused increased volatility in the net income from life insurance and, the period includes value changes of EUR -4.6 million. Net income from financial transactions was EUR 4.9 (0.8) million. In November, Aktia divested the rest of its holdings in Folksam Non-Life Insurance, which resulted in a EUR 4.0 million sales profit. Net income from hedge accounting was EUR -0.4 (-0.3) million. Other operating income amounted to EUR 2.3 (1.5) million and includes a EUR 1.1 million sales gain from the divestment of Aktia Real Estate Agency.

Expenses

The operating expenses were EUR 143.0 (160.7) million. Operating expenses excluding items affecting comparability decreased by 6 % to EUR 141.2 (150.0) million. The staff expenses were EUR 66.7 (79.1) million. The period includes costs for restructuring, amounting to EUR 1.8 (9.2) million. Comparable staff expenses decreased by 7 % to EUR 64.9 (69.9) million. IT expenses decreased by 16 % to EUR 25.6 (30.5) million due to lower operating costs. Depreciation of tangible and intangible assets amounted to EUR 12.4 (9.5) million, of which depreciation for the core banking system amounted to EUR 6.1 (3.0) million. Other operating expenses were EUR 38.3 (41.7) million and include the EU statutory expense to the fund for financial stability: EUR 2.3 million. The biggest decreases are attributable to marketing and rental expenses. The reference period includes EUR 1.4 million in costs for restructuring. Last year includes a EUR 0.5 million impairment of tangible assets, which relates to restructuring costs. Write-downs on credits and other commitments were still low and amounted to EUR -0.8(-0.6) million.

Balance sheet and off-balance sheet commitments

The Group balance sheet total at the end of December was EUR 9,266 (9,550) million. Deposits from the public and public sector entities decreased to EUR 3,963 (4,119) million. At the end of December, Aktia's market share of deposits was 3.3 (3.5) %. In total, the value of bonds issued by the Aktia Group was EUR 2,460 (2,451) million. Of these, EUR 1,666 (1,669) million was in covered bonds issued by Aktia Bank. Total Group lending to the public amounted to EUR 6,106 (5,839) million at the end of December, an increase of EUR 267 million. Loans to private households accounted for EUR 4,756 (4,714) million, or 77.9 (80.7) % of the loan book. The housing loan book totalled EUR 4,698 (4,655) million, of which the share for households was EUR 3,958 (3,971) million. Aktia's new lending to private households amounted to EUR 811 (838) million. At the end of December, Aktia's market share in housing loans to households stood at 4.1 (4.2). Corporate lending accounted for 11.6 (10.1) of Aktia's loan book. Total corporate lending amounted to EUR 707 (592) million. Loans to housing companies increased by 23 %, totalling EUR 604 (491) million and making up 9.9 (8.4) of Aktia's total loan book. The Group's total managed assets amounted to EUR 10,973 (10,563) million.

Aktia Bank's liquidity portfolio, which consists of interest-bearing securities, was EUR 1,368 (1,816) million. The short-term financing requirement was financed with repurchase agreements to a value of EUR 99 (146) million. To monitor liquidity risks, a "survival horizon" is used. The survival horizon measures how long the cash flows of the liquidity reserve will last to cover the contractual outgoing cash flow from the capital market without access to new financing. On 31 December 2018, the Bank Group would survive for over 21 months in a scenario with completely closed capital markets. In addition, the liquidity risk is followed up by the liquidity coverage ratio (LCR). On 31 December 2018, the LCR was 134 (161) %. The LCR level fluctuates, among other things, because of the maturity structure of the covered bonds issued by the Bank.

Capital adequacy and solvency

At the end of the period, the Common Equity Tier 1 capital ratio of Aktia Bank Group (Aktia Bank Plc and all its subsidiaries except Aktia Life Insurance Ltd) was 17.5 (18.0). Common Equity Tier 1 capital increased by EUR 8.7 million during the period, which improved the CET1 capital ratio by 0.4 percentage points. Risk-weighted assets increased by EUR 119.0 million, which reduced the CET1 capital ratio by 1.0 percentage points. The change is mainly attributable to the risk weight floor of 15 % for mortgage loans, which increased risk-weighted assets by EUR 225.9 million. During the period, the corporate exposures also increased. Aktia Bank Group's leverage ratio was 4.7 (4.5) % based on end-of-quarter figures.

For Aktia Life Insurance, the solvency ratio was 229.8 (199.2) %. The solvency ratio without transitional measures was 141.5 (117.9) %.

The financial conglomerate's capital adequacy ratio was 166.1 (164.5) %. The financial conglomerate's capital adequacy increased during the period due to an increase in the conglomerate's capital. The statutory minimum stipulated in the Act on the Supervision of Financial and Insurance Conglomerates is 100 %.

More detailed information concerning Aktia's strategy and the financial year can be found in Aktia's Annual Reports and Accounts Announcements, and at www.aktia.com.

Key metrics (at consolidated Group level) are presented in Table 1.1.

Table 1.1 Key metrics

EUR million	31 Dec 2018	30 Sep 2018	30 Jun 2018	31 Mar 2018	31 Dec 2017
Available capital (amounts)					
Common Equity Tier 1 (CET1)	384,2	376,4	377,2	371,6	375,5
Tier 1	384,2	376,4	377,2	371,6	375,5
Total capital	451,7	454,4	466,1	471,6	486,5
Risk-weighted assets (amounts)					
Total risk-weighted assets (RWA)	2199	2262	2318	2272	2 080
Risk-based capital ratios as a percentage of RWA					
Common Equity Tier 1 ratio (%)	17,5	16,6	16,3	16,4	18,0
Tier 1 ratio (%)	17,5	16,6	16,3	16,4	18,0
Total capital ratio (%)	20,5	20,1	20,1	20,8	23,4
Additional CET1 buffer requirements as a percentage of RWA					
Capital conservation buffer requirement (%)	2,5	2,5	2,5	2,5	2,5
Countercyclical buffer requirement (%)	0,05	0,05	0,05	0,05	0,06
Pillar 2 requirement (SREP, %)	1,75	1,75	1,75	1,75	1,75
Total of bank 'CET1-specific' buffer requirements (%) (row 8 + row 9 + row 10)	4,30	4,30	4,30	4,30	4,31
CET1 available after meeting the bank's minimum capital requirements (%)	9,8	8,9	8,6	8,7	10,3
EU CRR leverage ratio					
Total EU CRR leverage ratio exposure measure	8111	8132	8140	8143	8 259
EU CRR leverage ratio (%) (row 2 / row 13)	4,7	4,6	4,6	4,6	4,5
Liquidity coverage ratio					
Total HQLA	901	924	849	835	1 163
Total net cash outflow	630	723	719	621	722
LCR ratio (%)	134	118	128	143	161 %
Net stable funding ratio					
Total available stable funding	6402	6572	6451	6331	6 438
Total required stable funding	5366	5394	5354	5267	5 276
NSFR ratio	119	122	120	120	122

2. Introduction

Aktia Bank Plc, with Finnish business ID 2181702-8, provides these public disclosures according to Part Eight of Regulation (EU) No 575/2013, commonly referred to as the Capital Requirements Regulation (CRR), on its consolidated basis.

This disclosure constitutes a comprehensive disclosure of risks, risk management and capital management. It includes disclosures or references to other disclosures, required according to Part Eight of the CRR, and tables especially recommended by European Banking Authority (EBA) guidelines on disclosure requirements under Part Eight of the CRR. An overview of information exempted from disclosure due to being non-material, proprietary or confidential can be found in Appendix 6c. The disclosures are made annually in conjunction with the date of publication of Aktia Group's financial statements. For the items where Aktia has assessed that more frequent disclosures are needed, information is given in the interim financial reports or on the Investor Relations pages at www.aktia.com.

By approving this report, the Board of Directors approves the formal statement of key risks in Section 2, and formally declares the adequacy of risk management arrangements given Aktia's risk profile. The Board of Directors has approved for the Group principles for publication of disclosures according to Part Eight of the CRR, Article 435(1).

The figures in this report are based on economic information that is presented and audited in the Annual Report 2018. This report is not externally audited; however, control mechanisms, internal control processes and policies provide certainty to stakeholders about the accuracy and relevance of this report. All figures in this report are as of year-end 2018, unless otherwise stated.

2.1 Description of Aktia Group

Aktia Group provides financial services to its customers, mainly to private persons and families, entrepreneurs and small companies. In October 2017, Aktia launched its new strategy and the new financial objectives for the period until 2022. The strategy is based on increasing and securing customers' wealth, offering them personal service and tailored solutions for investments and financing, as well as continuously developing our service model, our service offering and our digital concepts.

Aktia Bank is active in the Finnish retail market, with a focus on growth areas in Finland such as the Helsinki Metropolitan Area, the coastal area and selected inland growth centres. The majority of Finland's population lives in these areas. Households accounts for 78 % of the loan portfolio and 71 % of the deposit stock. Corporates account for 21 % of the loan portfolio. Aktia has established a position as one of the leading asset and fund management groups in Finland. Aktia has about 350,000 private customers and about 30,000 corporate customers. They are served at branch offices and via comprehensive web and telephone services. Aktia is a listed company; the majority of its shares are owned by savings bank foundations, institutions, companies and private individuals.

Aktia Group focuses primarily on banking, asset management and life insurance operations. Risks and risk management are thus a substantial part of Aktia's operating environment and business activities. The main areas of risk are credit, interest and liquidity risks in banking activities, and interest and other market risks, as well as insurance risks in the life insurance business. All of the Group's operations are exposed to business and operational risks.

Aktia Bank plc is the parent company of Aktia Group. The regulatory reporting, capital adequacy calculations, as well as internal risk and capital allocation assessments are compiled for the Bank Group. The Bank Group includes Aktia Bank plc and all its subsidiaries, excluding insurance holdings (the subsidiary Aktia Life Insurance Ltd); see Table 2.1.

Table 2.1. Differences in the basis of consolidation for accounting and prudential purposes

Owner	Company	Branch	Voting power	Accounting consolidation	Prudential consolidation in accordance with CRR
Aktia Bank Plc	Aktia Corporate Finance Ltd	Financing	100%	purchase method	fully consolidated
	Aktia Finance Ltd	Financing	100%	purchase method	fully consolidated
	Aktia Fund Management Company Ltd	Investment funds	100%	purchase method	fully consolidated
	Aktia Asset Management Ltd	Asset management	76%	purchase method	fully consolidated
	Aktia Life Insurance Ltd	Insurance	100%	purchase method	not consolidated, holdings partially deducted from own funds
Aktia Life Insurance Ltd	Keskinäinen Kiinteistö Oy Tikkurilantie 141	Real estate	100%	purchase method	not consolidated
	Keskinäinen Kiinteistö Oy Areenakatu 4, Turku	Real estate	100%	purchase method	not consolidated
	Kiinteistö Oy Keinusaaren Toimistotalo 1, Helsinki	Real estate	50%	equity method	not consolidated
	Kiinteistö Oy Skanssinkatu, Turku	Real estate	50%	equity method	not consolidated
	Kiinteistö Oy Lempäälän Rajamäentie, Helsinki	Real estate	50%	equity method	not consolidated
	Asunto Oy Helsingin Tuulensuoja, Helsinki	Real estate	50%	equity method	not consolidated
	Keskinäinen Kiinteistö Oy Sähkötie 14-16, Turku	Real estate	33%	equity method	not consolidated
	Kiinteistö Oy Lahden BW Tower, Helsinki	Real estate	33%	equity method	not consolidated
	Kiinteistö Oy Helsingin Gigahertsi, Helsinki	Real estate	33%	equity method	not consolidated

2.2 Statement of key risks in Aktia's operations

The results and capital adequacy of the banking business are affected primarily by business volumes, deposit and lending margins, the balance sheet structure, the general interest rate level, write-downs and cost efficiency. Fluctuating results in banking operations may occur as a result of sudden credit or operational risk outcomes. Business risks in the form of changes in volumes and interest margins change slowly, and they are managed through diversification and adjustment measures.

The results of asset management operations are mainly affected by trends in the business volumes, commission levels and cost efficiency. Opportunities for improving, customising

and developing new products and processes help reduce the business risks. Negative trends in the valuation of assets under management might also affect customers' decisions on whether to invest in funds and other investment products.

Life insurance operations are based on bearing and managing the risk of loss events, as well as the risks involved on the asset side and, on the other hand, on liabilities. Volatility in solvency and the results from life insurance operations can be attributed primarily to market risks in the investment assets and to the interest rate risk in technical provisions. The policyholder bears the market risk of investments that act as cover for unit-linked policies, while the company bears the risk of that part of the investment portfolio that covers technical provisions for interest-linked policies.

Table 2.2 Risk definitions and risk profile

Risk	Definition	Risk profile
General	Risk refers to a calculated or unexpected event that has a negative impact on results (loss) or capital adequacy/solvency. The term covers both the probability of an event taking place, as well as the impact of the event taking place.	Aktia focuses primarily on banking, asset management, life insurance operations and real estate agency services. Risks and risk management are thus a substantial part of Aktia's operating environment and business activities. The main areas of risk are credit, interest and liquidity risks in the banking sector, and interest and other market risks and insurance risks in the life insurance business. All of the Group's operations are exposed to business and operational risks.
Credit risk	The risk of loss due to the debtor failing to fulfil obligations towards Aktia. Counterparty risk is a part of credit risk and is defined as the risk of loss or negative valuation differences due to deterioration of the counterparty's credit worthiness. Credit risk also includes concentration risk and settlement risk.	Aktia's lending is dominated by private individuals, households and small-sized companies. Lending to customers is mainly mortgage lending where security is predominantly real estate. The lending process comprises evaluation and rating of each customer where the ability for debt repayment is in focus. The bank is exposed to counterparty risk through derivative contracts, which is mitigated by collateral arrangements according to agreements with each counterparty. Counterparties are selected through an evaluation process focusing on their ratings and they are mainly systemically important financial institutions.
Market risk	Market risk is divided into interest, exchange rate, equity and real estate risks. Market risk refers to changes in the value of assets or liabilities, including the effects of correlation and volatility, that have a negative effect on the result or equity/solvency.	Aktia's market risk is mainly structural interest rate risk in its balance sheet, while exchange rate risk is low, as lending and funding is mainly euro-denominated. No trading activities are carried out by the Group. Aktia is also exposed to market risk in its investment activities in the bank and in Aktia Life Insurance. Limits are set for the market risk annually by the Board of directors and then monitored and their utilisation is reported regularly. Market risk for the Group is stress-tested regularly to monitor the impact of a severe downturn in market conditions.
Funding and liquidity risk	The risk that the Group will not be able to meet its payment obligations, the availability and cost of refinancing, as well as differences in maturity between assets and liabilities.	Liquidity risks arise because the maturity structures on the asset and liability sides of the balance sheet do not coincide, as lending is generally longer term than deposits. To ensure market-related refinancing, the bank strives to maintain a diverse range of financing sources and an adequate diversification across different markets and investors. Aktia maintains a liquidity buffer for which a target is set annually by the Board of Directors. The liquidity buffer consists almost entirely of securities which are eligible as pledges to the central bank.
Insurance risk	Insurance risk refers to the risk that claims to be paid out to policyholders exceed the expected amount. The risk is divided into underwriting risk and technical provision risk.	Aktia Life Insurance provides voluntary pension insurance, life insurance and savings insurance. Due to laws regarding insurance contracts provisions, the company has quite limited scope to influence premium levels. The sufficiency of premiums is monitored on a yearly basis. For new policies, the company is free to set the premium levels, which are decided by the Life Insurance Board. Reinsurance is used to limit the liability, ensure that the solvency capital is adequate, and to prevent profit fluctuation.
Operational risk	Operational risks refer to risk of loss arising from unclear or incomplete instructions and internal processes, unreliable information, human error, deficient systems or external events.	The framework for managing the operational risks of the Group has been established by the Board of Directors. The responsibility for managing operational risks lies with the risk owner, i.e. the management of the different business areas and their organisation. Risk assessments are performed by the risk owners and their organisation with the help of standard assessment models. Adequate internal instructions, continuity planning for all critical functions and standard processes for approval of new products, processes and services are applied at a Group level.
Other	Other risks include business risk, strategic risk and reputational risk. Business risk refers to risk of decreased income and increased costs due to decreasing volumes, price pressures or competition. Strategic risk is closely related to business risk and is defined as risk of losses due to mistaken business decisions or failure to react to the changes in society, the regulatory system or the banking sector, while reputational risk is a decline in confidence towards the Group due to negative publicity.	Business and strategic risk are predominantly risks that, when realised, have an impact on the group's performance and profitability. Reputational risk is similar but can, in addition, have an impact on the group's liquidity. Business risk is reduced by diversification in operations, as well as strategic risk. Some strategic risks can also be realised as operational risk incidents, and they are managed by the same measures as mentioned above. Reputational risk is mitigated by transparency and providing timely information to all parties with interest in the group. Aktia has published an information policy which can be accessed on the group's website.

2.3 Legal and governance structure

Figure 2.3 Aktia Group’s legal structure

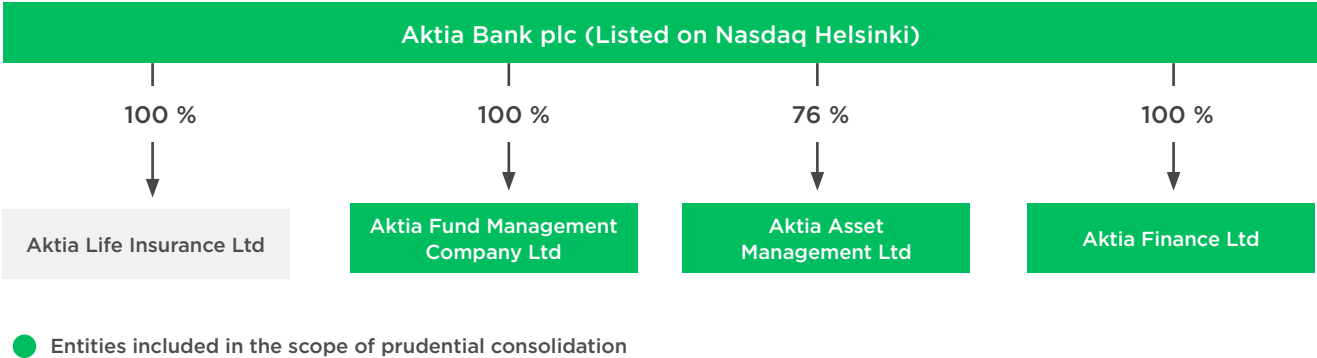


Figure 2.4 Aktia Group’s Governance structure



3. Governance of risk

3.1 Risk management

The Group is managed in the manner of an industrial group, which means that the parts of the Group complement each other, work in synergy, and promote competitive advantages as a group. In the subsidiaries, their Boards of Directors and CEOs are responsible for adherence to strategies and guidelines and policies set at Group level.

3.1.1 Board of Directors

The Board of Directors of Aktia Bank plc oversees that the Aktia Group is managed efficiently and follows prudent business principles in accordance with the provisions of applicable laws and the Articles of Association. The Board of Directors approves the Bank's business strategy, strategic objectives, risk strategy and systems for management and governance, as well as monitoring and overseeing them. The Board of Directors also appoints Aktia's Managing Director.

The Group's strategy governs all risk-taking, and the Board of Directors has the responsibility for the Group's risk management and the resources it requires. The Board of Directors annually approves the Group's risk management framework, including strategies, goals and limits for managing the operations. The risk appetite is approved and translated into key risk indicators (KRIs), guidelines and limits for business units.

The Board of Directors regularly monitors the Group's compliance with the risk policy, and its risk positions. Utilisation of limits and KRIs are reported to the Board of Directors at least quarterly.

The Board of Directors approves and monitors the Group's internal capital assessment, including stress tests, in order to measure the adequacy of capital, taking into account the Group's risk positions.

3.1.2 Board's Risk Committee

The Group's Board of Directors appoints a Risk Committee from among its members to prepare risk-related matters for the Board's consideration, including the Group's risk management framework, and to make individual credit decisions in accordance with the principles and limits accepted by the Board. The Risk Committee also prepares the internal capital assessments (ICAAP) for the Group and for the life insurance subsidiary (ORSA), liquidity and funding issues, and the recovery and continuity plans for the Group.

The Board's Risk Committee consists of four members of the Board with expertise in the field of risk management, lending and investment activities. The Risk Committee met 11 times during 2018. In these meetings, the Committee also discussed and made 21 decisions on credit applications, as well as preparing and updating several new policies and guidelines during 2018, and discussing risk-related information.

3.1.3 Executive Committee

The Managing Director is appointed by the Board of Directors. The Managing Director is responsible for the day-to-day management of the Aktia Group in accordance with instructions issued by the Board of Directors.

The Executive Committee members manage their respective business areas or support functions. Certain matters related to lending and the handling of the Group's asset and liability management, financing, liquidity and market risks as well as administration are dealt with by committees consisting of Executive Committee members and others appointed by the Managing Director. The Managing Director is, among other things, responsible for organising the risk management processes, including matters relating to internal capital assessment and further delegation of risk mandates.

3.1.4 Asset and Liability Management Committee

A committee for asset and liability management (ALM) is appointed by the Managing Director. The ALCO meets approximately once a month in meetings dedicated to ALM-, capital- and risk-related matters. The role of these meetings is to handle and prepare issues for decisions by the Board of Directors as well as to make decisions, based on a mandate delegated by the Board of Directors, regarding internal credit and market risk models and parameters used in scenario analysis. The ALCO comprises 3 members of the Executive Committee. The head of Risk Control is also a member of the ALCO.

3.1.5 The Group's Risk Control function

The Group's Risk Control function reports to the Board of Directors. Risk Control monitors risk management in the business units and is responsible for securing appropriate calculations, analysis and monitoring of risks in all areas of the Group's operations, including subsidiaries. Risk Control assesses the Group's overall risk position in relation to the strategy and

risk appetite decided by the Board of Directors. Risk Control is responsible for preparing the Group's risk management framework, which is annually approved by the Board of Directors. The Group's internal capital assessment and liquidity planning process is coordinated by Risk Control, and it evaluates the impacts of different stress tests and scenarios on the capital adequacy and liquidity position, as well as on the result of the financial conglomerate and Group companies. Risk Control also has the responsibility for coordinating and updating the Group's recovery plan according to the Bank Recovery and Resolution Directive and national legislation, and for monitoring the indicators in the plan.

Regarding the fund and asset management subsidiaries, the independent risk control function is responsible for monitoring and reporting risk limits related to the mutual funds and asset management activities. In addition, the middle office function monitors daily risk limits of all asset management customers of Aktia. Risk limits are reported to the Boards of Directors of the two subsidiaries Aktia Fund Management Company Ltd and Aktia Asset Management Ltd.

Administratively, the Group's Risk Control function is subordinate to the Managing Director.

3.1.6 Three lines of defence

The primary responsibility for internal control lies with the business units responsible for the day-to-day running of business, operating processes and their control, as well as risk management measures. Risk management is the key element of internal control. The control functions consist of the Group's Risk Control unit, the Compliance function, Financial Reporting and Analysis, as well as the independent Actuarial function in Aktia Life Insurance Ltd, which are independent of the business units. In addition, there are persons responsible for control functions in three of the subsidiaries: Aktia Life Insurance, Aktia Fund Management Company and Aktia Asset Management Company Ltd. These persons report to the Board of Directors of each of the subsidiaries.

In providing financial solutions to its customers, Aktia is exposed to various risks. Risks and risk management are thus a substantial part of Aktia's operating environment and business activities. The term "risk management" refers to all activities involved in taking, reducing, analysing, measuring, controlling and monitoring risks. The risk culture in Aktia Group is based on high ethical principles and integrity in all its operations. The personnel are well aware of the significance of internal control, their own roles and responsibilities, and the code of conduct.

Figure 3.1. Lines of defence

First line of defence – business units

The first line of defence comprises business units and support units. Risk management is a part of internal control and, therefore, the business units bear the responsibility for risk management measures. The business units are responsible for building up processes and competence for risk management and internal control, identifying and analysing risks, and making decisions on how risk will be dealt with through pricing, covenants, pledges or other risk-reducing policies.

Second line of defence – Risk Control, Compliance function, Independent Actuary function, Financial Reporting and Analysis

The second line of defence comprises the independent control functions Risk Control, Compliance function, Financial Reporting & Analysis and Actuary function.

The role of the Risk Control function is to oversee that appropriate methods, analysis and monitoring of risks is implemented in all the Group's business operations and to assess the Group's overall risk position. In addition, Risk Control makes proposals for key risk indicators for the Group's risk appetite. Risk Control reports directly to the Group's Board of Directors. There is an independent risk management control function, as well in the subsidiaries Aktia Fund Management Company Ltd and Aktia Asset Management and an independent actuary function in Aktia Life Insurance.

The role of the Compliance function is to ensure that the rules, especially regarding customer protection, market conduct and anti-money laundering, are adhered to within the Group's activities. The Compliance function also assists the operational management and line managers in the application of internal rules and by identifying, handling and reporting on risks related to inadequate compliance. The Compliance function reports directly to the Group's Board of Directors.

Financial Reporting and Analysis is responsible for economic data, analyses made of the current and future situations, and financial reporting to different authorities and other functions. Financial Reporting and Analysis was part of the second line of defence until the end of 2018.

Third line of defence – Internal Audit

The third line of defence comprises the Group's Internal Audit function, which is independent and separate from other functions, ensuring appropriate internal control and risk management. Internal Audit also contributes through permanent changes in business activities. Internal Audit is responsible for an independent assessment and evaluation of all operations in Aktia Group, including the adequacy and quality of the Group's internal controls, risk management and of the control functions. Internal Audit reports directly to the Board of Directors.

3.2 Internal control and risk management system associated with the financial reporting process

Internal controls in the financial reporting process are based on the following underlying principles: having clear roles, a clear division of responsibility, sufficient understanding of operations in the parts of the organisation concerned, and comprehensive and regular reporting procedures in the Aktia Group.

To ensure that the financial reporting is accurate, system-based internal controls, duality and reconciliation have also been built into all key processes where information is recorded. Internal control is supported by observations made by the Group's Internal Audit function, which, by means of random sampling, verifies the accuracy of information flows and the sufficiency of the level of control.

The Aktia Group's operational financial reporting organisation consists of an accounts unit at Group level that is in charge of external as well as internal financial reporting. The unit's remit includes consolidation, budgeting, internal performance monitoring, updating of accounting principles, and internal financial reporting guidelines and instructions. For each business segment and key individual subsidiaries within these units, segment controllers have been appointed with responsibility for financial monitoring and analysis. The Group's reports are compiled centrally and are based on a common financial reporting system covering external as well as internal reporting, which helps to ensure that day-to-day financial reporting is handled in a uniform manner.

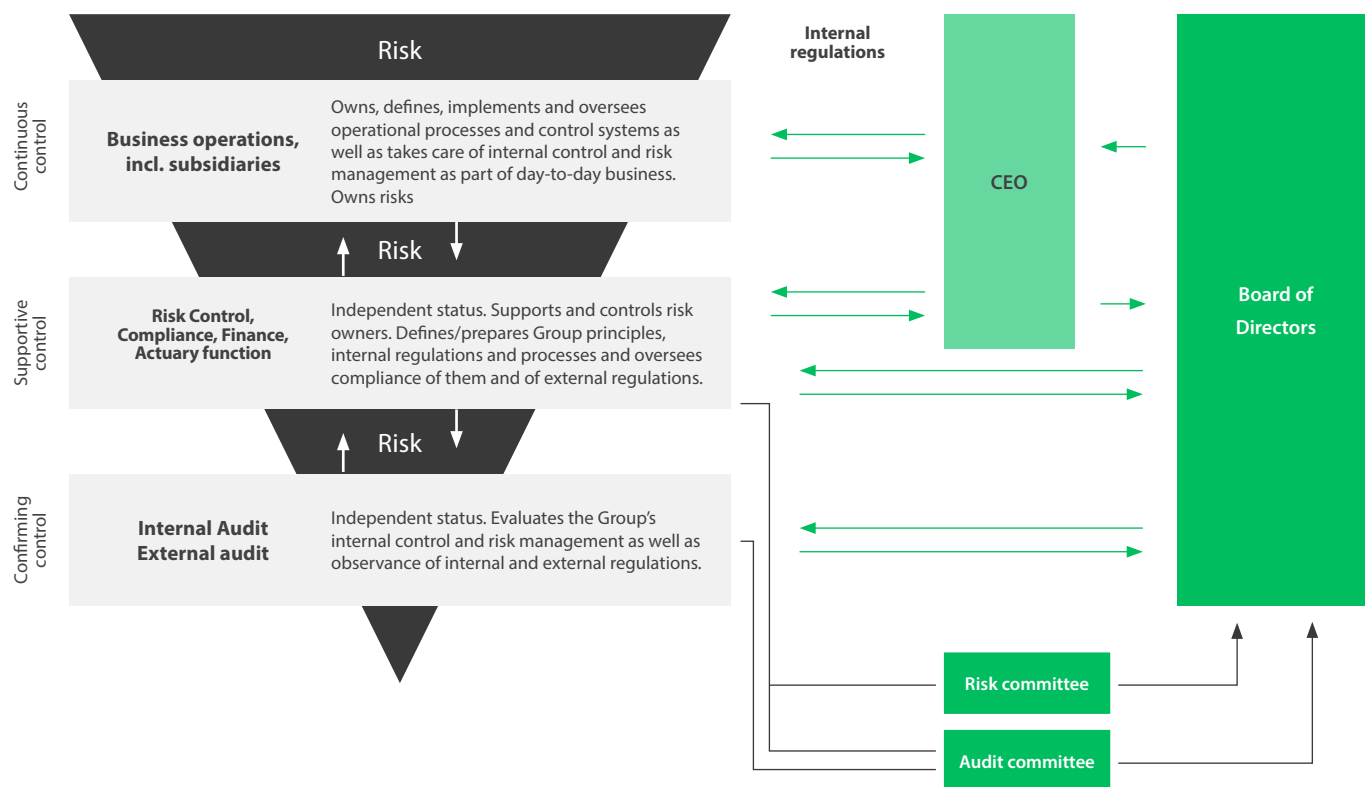
Important parts of current accounting activities in companies within the Aktia Group have been outsourced to external companies that provide accountancy services. These accountancy services also include the maintenance of securities, purchasing and fixed asset ledgers, and the preparation of accounts in accordance with Finnish accounting standards. The services are rendered in accordance with agreements entered into between the parties and comply with the guidelines and

directives issued by the Financial Supervisory Authority and other authorities. In order to develop and assess cooperation, meetings are arranged regularly with service providers. The Aktia Group is represented on the Board of Directors of PP-laskenta Oy, which operates the Aktia Group's outsourced bookkeeping services.

Within the Aktia Group, duties and responsibilities have been organised so that people involved in the financial reporting process only have very restricted rights of use to the different production systems and business applications in the respective business area. The Aktia Group's Chief Accounting Officer, who is in charge of internal and external financial management, is not involved in making direct business decisions. His incentive is mainly independent of factors driving the business. The Chief Accounting Officer reports to the Chief Financial Officer of the Aktia Group, who is a member of the Executive Committee.

The Aktia Group's internal reporting and monthly financial statements are based on the same structure and are prepared using the same standards as applied to the official interim financial statements and annual accounts. The monthly reports, supplemented by comparative analysis of previous periods, the budget, planned projects and central key figures for analysing the respective business segment, are currently distributed to the Aktia Group's Board of Directors and management, selected key personnel and the auditors.

The Aktia Group's financial development and performance is addressed each month by the Group's executive committee. A similar, detailed review takes place on a quarterly basis by the Group's Board of Directors and its Audit Committee in the form of interim reports and an annual report. The annual report is revised and the interim reports are reviewed by the Group's external auditors, who report their observations to the Audit Committee. New or revised accounting principles are to be dealt with and approved by the Group's Board of Directors and its Audit Committee.

Figure 3.2 Aktia Group internal control and risk management

4. Capital management

Aktia's CET1 ratio remained at a good level in 2018 despite increased regulatory requirements. Capital management aims to ensure that the capital adequacy is sufficient to support the business strategy and to provide buffers during times of stress. The MREL requirement entered into force in Q4 2018.

4.1 Capital position

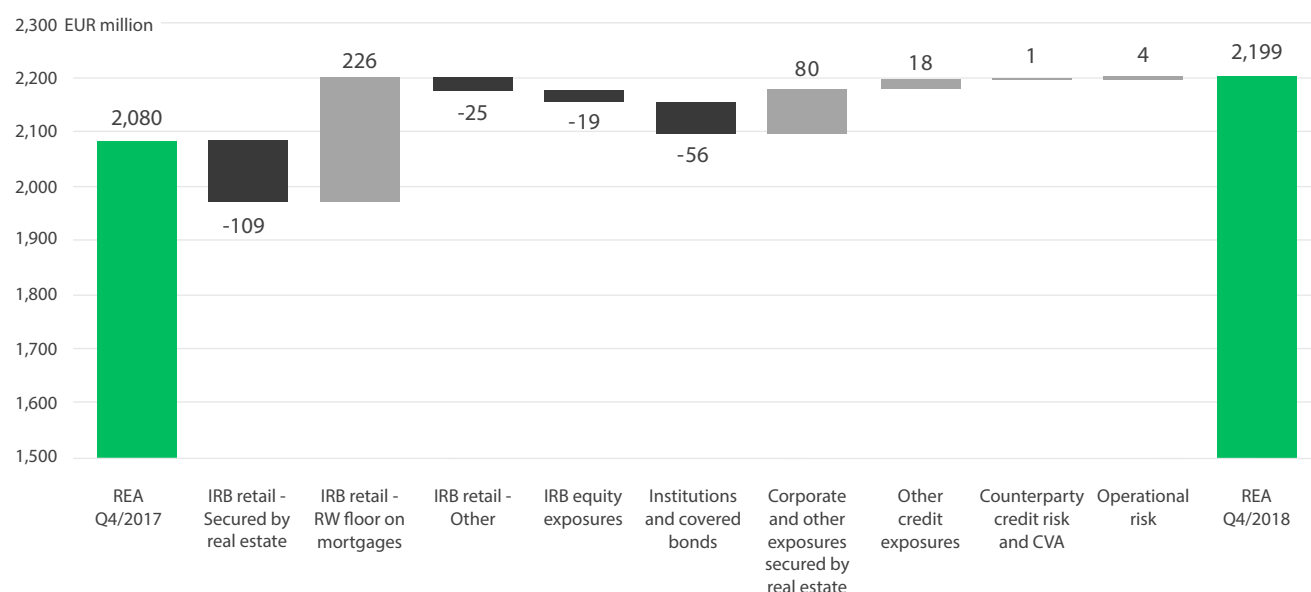
4.1.1 Minimum capital requirements

The regulatory minimum capital requirements for Aktia Bank Group are stated in the EU Capital Requirements Regulation (No 575/2013), which is supplemented by the implementation of the national options by the Finnish regulators. The Capital Requirements Directive (CRD) (2013/36/EU) is implemented in the Finnish Credit Institutions Act and stipulates the powers to set the additional buffer requirements in Finland.

The Financial Supervisory Authority in Finland has granted Aktia Bank Group permission to apply the internal ratings-based (IRB)

Table 4.1 Minimum capital requirements and REA

(EUR million)	31 Dec 2018			31 Dec 2017		
	Minimum capital requirement	REA	Credit exposure	Minimum capital requirement	REA	Credit exposure
Credit risk	146.6	1,832.1	8,140.4	137.4	1,717.9	8,313.3
- of which counterparty credit risk	0.5	6.6	21.6	0.5	6.6	22.9
IRB	75.8	947.2	4,905.9	70.0	874.5	4,842.1
- of which retail	66.9	836.0	4,863.1	59.5	744.3	4,794.4
- of which secured by immovable property	61.8	772.5	4,705.1	52.4	655.4	4,630.8
- of which other retail	3.5	44.1	134.8	4.7	58.9	131.4
- of which SME	1.5	19.4	23.2	2.4	30.0	32.2
- of which equity	8.9	111.2	42.8	10.4	130.2	47.6
Standardised	70.8	884.9	3,234.5	67.5	843.4	3,471.3
- of which central governments or central banks	0.1	0.8	456.1	0.0	0.0	488.6
- of which regional governments or local authorities	0.1	0.7	301.5	0.1	1.3	264.3
- of which multilateral development banks	0.0	0.0	15.2	0.0	0.0	51.0
- of which international organisations	0.0	0.0	66.7	0.0	0.0	128.0
- of which institutions	5.3	65.7	240.0	8.8	109.8	433.9
- of which corporate	22.7	283.7	309.6	18.1	226.8	229.1
- of which retail	8.2	102.3	142.9	6.9	86.6	127.2
- of which secured by mortgages on immovable property	25.9	323.1	917.4	24.0	299.8	839.3
- of which in default	0.6	7.5	6.7	0.7	9.3	9.0
- of which associated with particularly high risk	0.0	0.0	0.0	0.0	0.0	0.0
- of which covered bonds	5.7	71.5	714.9	6.7	83.6	836.4
- of which equity	0.0	0.0	0.0	0.0	0.0	0.0
- of which other items	2.4	29.4	63.5	2.1	26.0	64.6
Credit value adjustment risk	1.1	13.4		1.0	12.4	
Market risk	0.0	0.0		0.0	0.0	
Settlement risk	0.0	0.0		0.0	0.0	
Operational risk (basic indicator approach)	28.3	353.6		28.0	349.9	
Total	175.9	2,199.2		166.4	2,080.2	

Figure 4.2 Split of REA changes

approach to retail and equity exposures. This represents 57 % of the Bank Group's credit risk exposure. The rest of the credit exposures are calculated with the standardised approach (SA). For counterparty credit risk in the OTC derivatives, the mark-to-market method is applied to calculate the exposure value. The capital requirement for the credit valuation adjustment risk is calculated with the standardised method. The basic indicator approach was used for operational risks. There are no capital requirements for market risks because of the small trading book and limited foreign exchange (FX) positions. Aktia Bank Group has no investments in securitisation positions, and it has no securitised exposures.

The Solvency II framework entered into force for insurance companies on 1 January 2016. The Solvency II requirements are stated in Commission Delegated Regulation (EU) 2015/35 and in the Insurance Companies Act. For the financial conglomerate, Aktia uses the consolidation method, as stipulated in the Act on the Supervision of Financial and Insurance Conglomerates.

Table 4.1 presents the composition of Aktia Bank Group's minimum capital requirement. The table also presents the changes in credit exposures and the split between calculation approaches. Figure 4.2 summarises the changes in REA during the year. The REA of retail portfolios decreased during the year due to improved credit quality. The IRB risk weight floor of 15 % on the residential mortgage loans entered into force in the beginning of 2018. This increased the REA of residential mortgage loans by EUR 225.9 million. Corporate lending continued to increase during 2018, which led to growth in corporate and real estate secured REA. The bank's liquidity portfolio reduced in size during 2018, which led lower REA in institution and covered bond asset classes. The total amount of REA grew by 6 % during the year.

4.1.2 Own funds

Table 4.4 presents a summary of Aktia Bank Group's own funds and their development in 2018. The total amount of the Bank Group's own funds decreased by EUR 34.8 million during 2018. CET1 capital increased by EUR 8.7 million. The profit after dividend increased the CET1 capital. Unrealised gains on available-for-sale assets reduced due to maturing fixed-income investments. The intangible assets to be deducted also reduced during the year due to the depreciation of investment in the core banking system. The deduction of significant holdings of financial entities relates to holdings in Aktia Life insurance Ltd. The amount above the 10 % threshold is deducted from CET1 capital, and the remaining part is risk-weighted at 250 %. Aktia Bank Group issued no new Tier 2 instruments during 2018. The amount recognised in the Bank Group's own funds of previously issued Tier 2 instruments decreased by EUR 43.5 million due to the maturity haircut.

Table 4.3 Non-deducted participations in insurance undertakings*

EUR million	Value
Holdings of own funds instruments of a financial sector entity where the institution has a significant investment not deducted from own funds (before risk-weighting)	39
Total RWAs	98

*EU-INS1

Table 4.4 Summary of consolidated own funds and movements during 2018

Aktia Bank Group	Own funds 31 Dec 2017	Development in 2018	Own funds 31 Dec 2018
Equity	163.0	0.0	163.0
Reserves, retained earnings and profit after dividend	291.1	11.6	302.7
Unrealised gains on FVOCI financial assets	8.9	-4.9	4.0
Intangible assets	-68.4	4.0	-64.4
EL shortfall	-9.8	-2.1	-11.9
Significant holdings in financial sector entities	-7.9	0.8	-7.1
Other items	-1.6	-0.5	-2.1
CET1 total	375.5	8.7	384.2
Tier 1 capital	375.5	8.7	384.2
Tier 2 instruments	111.0	-43.5	67.5
Own funds	486.5	-34.8	451.7

Table 4.5 Combined capital requirement as of 31 dec 2018

	Pillar 1 minimum requirement	Pillar 2 requirement	Buffer requirements				Total capital requirement
			Capital Conservation	Counter- cyclical	O-SII	Systemic risk	
CET1 capital	4.50	1.75	2.50	0.05	0.00	0.00	8.80
AT1 capital	1.50	0.00					1.50
Tier 2 capital	2.00	0.00					2.00
Total	8.00						12.30

Appendix 2 presents the full disclosure of items and deductions in the Group's own funds. Appendices 3 and 4 include the disclosure of the terms of CET1 and Tier 2 instruments included in own funds. The full terms and conditions of capital instruments can be found at www.aktia.com (only in Swedish and Finnish).

4.1.3 Buffer requirements

The Basel III framework introduced a series of buffer requirements that increase the 8 % minimum capital requirement set by the CRR. In the European Union, the buffers are included in the CRD, which means that implementation of buffers can vary between member states. In Finland, the capital conservation buffer, countercyclical capital buffer and buffer requirement for systemically important institutions were previously implemented. In 2017, the systemic risk buffer

requirement was also implemented in Finnish legislation. During 2018, the FIN-FSA set the individual systemic risk buffer requirements, which will enter into force on 1 July 2019. For Aktia, a 1 % systemic risk buffer requirement was set. Table 4.5 illustrates the current buffer requirements. All buffer requirements should be covered with CET1 capital. The countercyclical capital buffer requirement is an institution-specific requirement calculated based on the weighted average of the relevant credit exposures and individual buffer requirements set in different jurisdictions. In Finland, the board of the Financial Supervisory Authority has currently set the requirement to 0 % for Finnish exposures. However, for example in Sweden and Norway, a 2.0 % requirement has been set. This requirement also applies to certain exposures, mainly in the Bank Group's liquidity portfolio. Tables 4.6 and 4.7 summarise the calculation of institution-specific countercyclical capital buffer requirement, as stipulated in EU Regulation 2015/1555.

Table 4.6. Geographical distribution of credit exposures relevant for the calculation of the countercyclical capital buffer (consolidated)**31 Dec 2018**

General credit exposures			Trading book exposure		Securitisation exposure		Own funds requirements				Own funds requirement weights	Countercyclical capital buffer rate
EUR million	Exposure value for SA	Exposure value IRB	Sum of long and short position of trading book	Value of trading book exposure for internal models	Exposure value for SA	Exposure value for IRB	Of which: General credit exposures	Of which: Trading book exposures	Of which: Securitisation exposures	Total		
Breakdown by country												
Finland	1,490.9	4,878.0	0.0	0.0	0.0	0.0	116.6	0.0	0.0	116.6	82.6 %	0.000 %
Norway	248.9	2.2	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	1.4 %	2.000 %
Sweden	153.5	11.4	0.0	0.0	0.0	0.0	1.4	0.0	0.0	1.4	1.0 %	2.000 %
Hong Kong	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 %	1.875 %
Czech Republic	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 %	1.000 %
Iceland	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 %	1.250 %
United Kingdom	35.7	3.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.3	0.2 %	1.000 %
Lithuania	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 %	0.500 %
Other countries	580.7	10.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	20.9	14.8 %	0.000 %
Total	2,509.7	4,905.9	0.0	0.0	0.0	0.0	141.2	0.0	0.0	141.2	100.0 %	

Table 4.7 Amount of institution-specific countercyclical capital buffer (consolidated)

EUR million	31 Dec 2018
Total risk exposure amount	2,199.2
Institution specific countercyclical buffer rate	0.05 %
Institution specific countercyclical buffer requirement	1.1

In 2016, based on the Credit Institution Act, the Financial Supervisory Authority made a decision on a discretionary buffer requirement on a consolidated level (regulatory Pillar 2 capital requirement). The requirement is based on the outcome of the supervisory review and evaluation process (SREP). The total Pillar 2 requirement is 1.75 % and covers the concentration risk in credit risk (1.0 %) and the interest rate risk in the banking book (0.75 %). For those risks, there are no explicit capital requirements in the CRR. The Pillar 2 requirement must be met with CET1 capital.

The requirement entered into force on 30 June 2017 and increased the Bank Group's minimum capital requirement as well as the minimum capital requirement for the financial conglomerate.

4.1.4 Capital ratios and leverage ratio

Table 4.8 shows the development of capital ratios. The consolidated CET1 capital ratio reduced by 0.6 percentage points during the period. The increase in the CET1 capital improved the ratio by 0.4 percentage points, and the growth in the REA reduced the CET1 capital ratio by 1.0 percentage points.

The development of the leverage ratio is presented in Table 4.9. The leverage ratio improved slightly during the period, as a result of both the improved Tier 1 capital and the reduced amount of exposures. Appendix 5 presents the information as stated in the implementing technical standards with regard to disclosure of the leverage ratio (EU Regulation 2016/200).

4.1.5 Aktia Life Insurance and the financial conglomerate

As of 1 January 2016, the life insurance company follows the Solvency II Directive, in which the solvency calculations deviate from previous solvency requirements, as technical provisions are measured at market value. According to Solvency II, the

Table 4.8 Development of capital ratios

Capital adequacy, %	31 Dec 2018	30 Sep 2018	30 Jun 2018	31 Mar 2018	31 Dec 2017
Aktia Bank Group					
CET1 capital ratio	17.5	16.6	16.3	16.4	18.0
Tier 1 capital ratio	17.5	16.6	16.3	16.4	18.0
Total capital ratio	20.5	20.1	20.1	20.8	23.4
Aktia Bank					
CET1 capital ratio	16.9	16.4	15.9	15.8	17.9
Tier 1 capital ratio	16.9	16.4	15.9	15.8	17.9
Total capital ratio	20.0	19.9	19.7	20.1	23.2
Aktia Asset Management					
CET1 capital ratio	11.2	11.4	11.4	11.3	10.0
Tier 1 capital ratio	11.2	11.4	11.4	11.3	10.0
Total capital ratio	11.2	11.4	11.4	11.3	10.0

Table 4.9 Development of Leverage Ratio

Aktia Bank Group					
EUR million	31 Dec 2018	30 Sep 2018	30 Jun 2018	31 Mar 2018	31 Dec 2017
Tier 1 capital, fully phased	384	376	377	372	375
Total exposure	8,111	8,132	8,140	8,143	8,259
Leverage ratio, %	4.7	4.6	4.6	4.6	4.5

company calculates its solvency capital requirement (SCR) and minimum capital requirement (MCR) and identifies its available solvency capital within Solvency II. Aktia Life Insurance applies the standard formula for SCR, with consideration of the transitional measure for technical provisions in accordance with the permission granted by the Financial Supervisory Authority.

At the end of the period, SCR amounted to EUR 76,4 (85.1) million, MCR to EUR 22.7 (23.9) million and the available capital to EUR 175.5 (169.5) million. Thus, the solvency ratio was 229.8 (199.2) %. Without transitional measures SCR amounted to EUR 89.0 (98.6) million, MCR to EUR 24.7 (26.1) million and the available capital to EUR 125.8 (116.3) million. The solvency ratio without transitional measures was 141.5 (117.9) %.

The financial conglomerate's capital adequacy ratio was 166.1 (164.5) %. The financial conglomerate's capital adequacy increased during the period, due to an increase in the conglomerate's capital. The statutory minimum stipulated in the Act on the Supervision of Financial and Insurance Conglomerates is 100 %.

4.1.6 Transition to IFRS 9

The IFRS 9 *Financial Instruments* standard was approved by the EU in November 2016, and it replaces IAS 39 *Financial Instruments: Recognition and measurement*. The Aktia Group implemented IFRS 9 when the standard became mandatory on 1 January 2018. The difference in the book value of financial assets and liabilities was booked to retained earnings and to the fund at fair value in equity at the implementation of IFRS 9. Comparative figures according to IFRS 9 have not been recalculated for the previous year.

IFRS 9 introduces new requirements for recognition and measurement of financial assets and liabilities. The model for risk management and the characteristics of financial instruments in respect of future cash flows have an impact on the classification of the Group's financial assets and liabilities. The Group's financial assets are, as of 1 January 2018, classified in the categories "amortised cost", "fair value through other comprehensive income", and "fair value through the income statement". The reporting of financial assets according to a mixed business model, where changes in fair value according to IFRS 9 are reported through other comprehensive income, corresponds to the reporting of financial assets available for sale according to the previous IAS 39 standard.

The new rules for recognition and measurement with the transition to IFRS 9 led to a small reclassification from the previous category "financial assets available for sale" to the categories "financial assets measured at amortised cost" and "financial assets measured at fair value through the income statement". The reclassifications had no significant impact on the Group's result or financial position with the transition to IFRS 9.

Differing from the previous model concerning provisions for credit losses based on occurred events, the requirements concerning impairment in IFRS 9 are based on a model for expected credit losses (ECL). Calculation of provisions for expected credit losses comprises financial assets measured at amortised cost and financial assets measured at fair value through other comprehensive income, as well as financial guarantees and loan commitments. The implementation of ECL models in accordance with IFRS 9 marginally decreased the provisions for write-downs. The decrease had no significant impact on the Group's result or financial position with the transition to IFRS 9.

The effects of reclassification and revaluation of financial assets and new model for write-downs slightly reduced the Group's equity. The transition to IFRS 9 had a marginal impact on the Bank Group's and financial conglomerate's capital adequacy. The transition to IFRS 9 had no impact on the solvency of Aktia Life Insurance.

The EU has agreed on transitional measures to mitigate the negative impacts of ECL accounting from IFRS 9 on banks' CET1 capital. The transitional period covers a five-year period from 2018 to 2022. Banks can decide if they will apply the transitional measures. Aktia has decided not to apply the transitional measures.

4.2 Capital management and internal capital requirements

4.2.1 Capital management

Capital management assesses the Group's capitalisation in relation to the risks of operations. The aim is to support business strategies and secure adequate capital structure even during weaker periods of the economic cycle. The objective is to find a balance between effective use of capital and the financial stability required by internal and external counterparties. Capital management aims to identify material risks as a whole and to assess their extent and the capital they require. The planning of operations is forward-looking and uses the annually produced strategic plan as the starting point.

The Group's Executive Committee is responsible for preparing the Board's annual strategic planning process, and for the accompanying capital planning and allocation. The Board's Risk Committee prepares the decisions to be made in the Group's Board of Directors. The Group's Internal Audit function conducts an annual evaluation of the capital management process. The rules of procedure for the Board of Directors and its Risk Committee closely define the process and decision-making within the capital management process. The Group's independent Risk Control unit is responsible for ensuring that the Group's material risks are identified, measured and reported consistently, correctly and adequately. The unit is also responsible for preparing proposals for internal capital requirements and capital adequacy targets.

A strategic business plan regarding volumes and risk levels in the near future is used as the starting point for capital planning. The plan is used as the basis for creating capital adequacy forecasts for the Group. In addition to base scenarios, stress tests are carried out in order to assess how weaker periods of the economic cycle affect capital adequacy.

The risk of excessive leverage is managed as part of the capital management process. The future development of the leverage ratio is estimated based on the strategic business plan. The plan incorporates the growth targets for exposure amount as well as the anticipated developments in capital measure. As part of the process, the targets for the leverage ratio and the liability structure are also defined. The asset encumbrance ratio is a key metric and limits the amount of covered bond funding.

The level of leverage is monitored quarterly and reported to the Board of Directors. The leverage ratio is also an indicator in the Group's recovery plan, and alarm zones have been set for the ratio. The recovery plan describes actions that the management can take in order to increase capital or reduce the exposures.

4.2.2 Capital policy

The stress scenarios and sensitivity analyses are used to derive the Group's capital adequacy targets. The purpose of capital adequacy targets is to ensure the availability of sufficient capital buffers in cases where unexpected losses occur. The capital adequacy targets also take into account the targets for external ratings and the impacts of any foreseeable changes in regulatory requirements. The capital adequacy targets are set for the long term, but the actual buffer can vary over an economic cycle.

Aktia's target for the Common Equity Tier 1 capital ratio is at 1.5–3 percentage points over regulatory requirements. The target was set in 2017, when the Board of Directors approved the renewed strategy and the new financial objectives for Aktia Bank up until 2022.

In 2018, as part of the yearly capital management process, the Board of Directors supplemented the framework with targets for Tier 1 and total capital. The target for Tier 1 capital ratio is at 1.5–3 percentage points over regulatory requirements. For total capital ratio, the target is set at 2.0–3.5 percentage points over regulatory requirements.

The Bank Group's target for the leverage ratio is 3.5 % at a minimum. The solvency ratio target, including the transitional measures, for Aktia Life Insurance is 125 % at a minimum. The capital adequacy target for the financial conglomerate is to exceed 120 %.

The Group's dividend policy states that the pay-out ratio should be between 60 % and 80 % of the profit after taxes for the period.

There are no current or foreseen material practical or legal impediments to the prompt transfer of excess own funds or repayment of liabilities between Aktia Bank Plc and its subsidiaries. Each legal entity must fulfil its individual capital requirements and have sufficient liquidity to operate. Aktia Bank Plc and all its subsidiaries are incorporated in Finland; thus, there is no need for cross-border transfers within the Group.

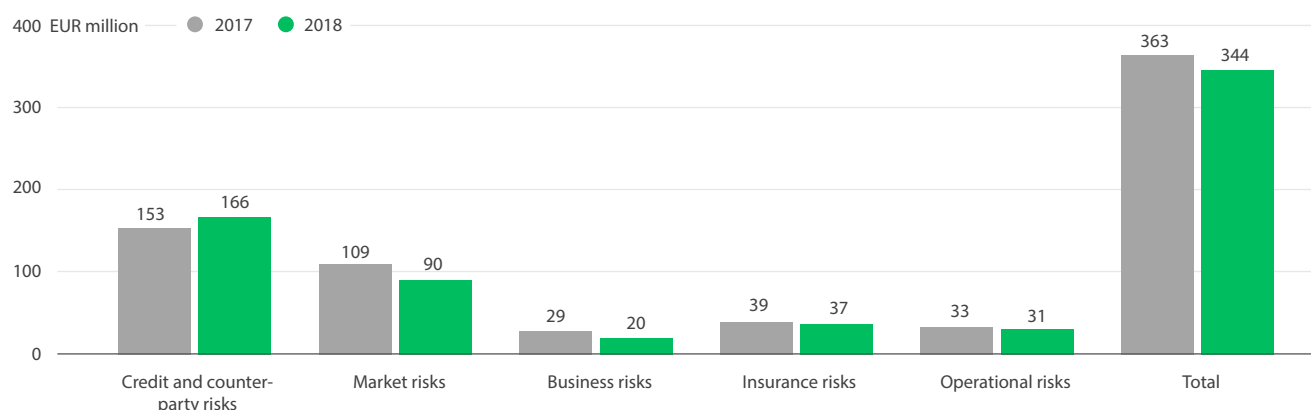
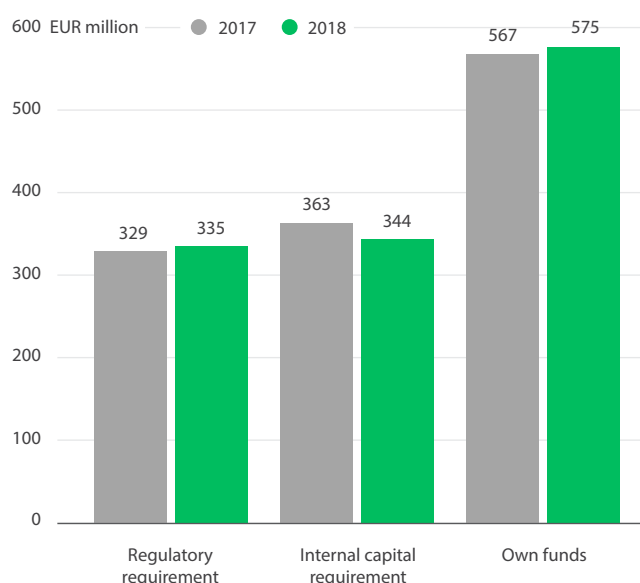
4.2.3 Internal capital requirements

The internal assessment of capital requirements for the Group is an important element of capital management. The internal capital requirement reflects the Group's capital adequacy more comprehensively than the regulatory capital requirements (Pillar 1), because it also takes into account risks not included in them. The internal capital requirement encompasses all of the Group's material risks.

The Bank Group's internal capital requirement is based on the "Pillar 1 plus Pillar 2" method. Pillar 1 sets the minimum regulatory capital requirements for credit risks and operational risks. In Pillar 2, the capital requirement is supplemented with internal capital requirements for other risks as well as areas that are covered insufficiently under Pillar 1. The main principles of the methodology remained unchanged during the year, but there are some changes in the detailed parameters and assumptions within individual risk models.

The Pillar 1 requirements for credit risks are based on a combination of the Standard Approach and Aktia's IRB models. Pillar 2 adds the capital requirement for concentration risk, since the Pillar 1 methods are based on the assumption that the credit portfolios are perfectly diversified across counterparties, regions and industries. Aktia uses an internal model to measure single-name concentrations in corporate and liquidity portfolios, as well as product and geographical concentrations, in the banking book.

Aktia has no trading book, which means that there is no Pillar 1 requirement for market risk. The market risk in the banking book is captured in the Pillar 2 requirements. The Pillar 2 models measure the spread, equity, FX and real estate risks in the FVTPL and FVOCI portfolios. Market risk also includes the interest rate risk in the banking book. The model for structural interest risk in the banking book also includes the Bank Group's liquidity portfolio. The aggregation of market risk requirements assumes a correlation structure between various components of market risk.

Figure 4.10 Internal capital requirement by risk type**Figure 4.11 Group's own funds compared to internal capital requirement**

Business risk in banking is measured with a scenario model that takes into account changes in customer behaviour and pricing, the cost of funding and the competitive situation, which affects net interest income. The model also incorporates adverse scenarios in non-interest income and operating costs. The model does not capture the effects of credit and market risks on P&L. The liquidity risk is covered partly in the model as rising funding costs.

The Bank Group's total internal capital requirement is the sum of different Pillar 1 and Pillar 2 requirements, i.e. no inter-risk diversification is assumed. The internal capital requirement for Aktia Life Insurance is part of its ORSA (Own Risk and Solvency Assessment) process. The capital requirements are based on internal risk models that cover business, market, underwriting and operational risks. The model takes into account both intra- and inter-risk correlations.

The results of the Bank Group and Aktia Life Insurance are aggregated to a Group requirement. The results are then compared to the capital position of the Group. The Group's own funds are based on the adjusted value of equity and subordinated debt. The equity is adjusted by including the changes in fair value of investments measured at amortised cost in Aktia Life insurance and deducting the dividend proposal, intangible assets and EL shortfall. Also deducted are other life insurance-related items that are not considered to be own funds in the Solvency regulation. The Group's own funds include the mark-to-market effect of technical provisions. Capital instruments that are not freely transferable to cover losses within the Group are deducted from the Group's own funds to the extent they exceed internal capital requirements. Risk limits have been set based on the internal capital requirements. The limit establishes the maximum amount of capital that can be utilised for one specific risk type. The limit framework also incorporates the targets for capital adequacy.

4.2.4 Stress testing

Aktia carries out regular stress testing and scenario analysis to analyse the capital position and to identify risks. The process is conducted at different levels. Stress tests are carried out to measure the risk in certain positions or at company and Group level to capture the enterprise level of risk.

The stress scenarios focus on the key risk factors of the Group. The majority of the loan book is secured by residential or commercial real estate; thus, declining real estate prices combined with rising default rates have a material impact on the loan losses. The development of short-term interest rates affects the level of interest income for the mainly Euribor-linked loan book. On the other hand, the long-term rates have an impact on the values of the fixed-income portfolios in Aktia Bank and Life Insurance. In the Solvency II regime, the interest rates also affect the present value of the interest-linked technical provisions.

Other market risk factors include credit spreads, equity and commercial real estate prices. Movements in credit spreads have an impact on both the value of the fixed-income portfolios as well as Aktia's own funding prices. In Aktia Life Insurance, movements in FX rates also have a material impact.

Other key stress factors relate to the development of business volumes on and off the balance sheet and their pricing. Also, rising operating costs impact the overall profitability of the Group. The calculation process starts from the Group's rolling financial forecasts, which include baseline assumptions of business volumes and profitability. The stress scenarios cover a rolling three-year period. The severity of the scenarios can be adjusted to meet different needs for stress testing. Different P&L items are recalculated in the scenario based on the selected risk factors.

The stressed net interest income (NII) is based on assumptions on the business volumes and margins of both interest-bearing assets and liabilities in the scenario. The selected interest rate scenario affects the repricing of the balance sheet. The asset and liability management (ALM) model that calculates the NII estimate also provides the dynamic balance sheet estimates, which are also used as a basis for the credit risk REA estimates.

Loan loss estimates of the loan book are based on the IFRS 9 ECL models. Credit risk scenarios are based on a two-factor model where one factor drives the point-in-time estimates of PD and cure rates, and the other the collateral values behind the loss given default (LGD) estimates. The ECL estimates can be supplemented by additional defaults in the corporate portfolio. The RW estimates for the current and future IRB portfolios are based on the TTC PD and downturn LGD models, and collateral value-stressed RWs for other portfolios that are under the SA. Combined with the balance sheet estimate, an REA estimate is obtained.

In addition to NII, the market risk factors mainly affect the unrealised profits and losses measured at fair value. The market risk factors are the main drivers of solvency stress in Aktia Life Insurance. The life insurance company has a special ALM tool to measure the dynamic impact of the scenarios on its solvency ratios.

Based on the selected scenario, a stressed balance sheet, P&L and risk metric estimates are calculated. Combined with the scenario assumptions on the capital policy (i.e. dividend pay-out and new issues of various capital instruments), capital ratios for Aktia Bank and Life Insurance and the financial conglomerate are derived. The results are then compared to the target and the alarm zones set by the Board of Directors.

The stress scenario methodology is also used to calculate the regulatory stress test exercises on an ad-hoc basis. The stress factors are adjusted according to the given scenarios. The tool can also be used to carry out reverse stress tests. In particular, this method is used to design the stress scenarios that are required to test the recovery and resolution options.

4.2.5 Recovery and resolution planning

Capital management tools are also used to assess different alternative actions that the Executive Committee can take in situations where capital adequacy is at risk. Aktia Group has structured a recovery plan. The recovery plan consists of plans and actions for the Group to recover from serious financial difficulties. The Board and its risk committee quarterly monitor changes in capital adequacy and, within the framework of the capital management process, also the effects of various stress tests. The recovery plan sets different indicators that monitor the Group's capital adequacy, liquidity, asset quality and profitability, as well as the status of the economy and financial markets. Various alarm zones have been set for the indicators to ensure prompt implementation of recovery actions. The recovery actions include means by which capital requirements can be reduced, the Group's own funds increased, the liquidity situation improved and profitability improved.

During the second quarter of 2017, the Financial Stability Board set the minimum requirement for Aktia Bank for eligible liabilities that can be written down (MREL requirement). The requirement set is twice the minimum capital requirement, including the total buffer requirement according to the Finnish Credit Institutions Act; however, at least 8 % of the balance sheet total. The requirement entered into force on 31 December 2018.

Table 4.12 Consolidated MREL requirement

(EUR million)	31 Dec 2018	31 Dec 2017
MREL requirement		
RWA-based	539.7	512.1
Balance sheet-based	645.5	659.4
Own funds and eligible liabilities		
CET1	384.2	375.5
AT1 instruments	0.0	0.0
Tier 2 instruments	148.3	211.3
Non-preferred senior	0.0	0.0
Other liabilities	660.6	566.1
Total	1,193.1	1,152.8

5. Credit risk

Aktia's loan portfolio consists mainly of retail loans with real estate collateral. Strong loan-to-value ratios and a low risk levels contribute to the high credit quality of Aktia's credit portfolio.

Credit risk is defined as the risk of losses brought about by debtors failing to fulfil their obligations towards Aktia, while counterparty risk is defined as the risk of losses or negative valuation differences due to deterioration of the counterparty's credit worthiness. Credit and counterparty risks are measured by assessing the probability of default and any losses incurred by such. The probability of default is measured using scoring or rating models, and the loss given default (LGD) is measured by taking into account the realisation value of the collateral and the anticipated recovery, with deductions for recovery costs. Each year, the Group's Board of Directors determines the credit policy, including the risk appetite, and revises both the credit risk strategy and delegation of decision-making. The regulation of counterparty risks is managed in a similar manner.

Credit risks occur in banking operations, while counterparty risks occur in both banking and insurance operations.

The limit structure restricts credit and counterparty risks in both banking and insurance operations, individually and also at conglomerate level, through restrictions on the total exposure to individual counterparties, and restrictions on the portfolio level concerning concentrations, credit quality, geographical region and unrated counterparties.

5.1 Management, governance and measurement of credit risk

The line organisation assesses the credit risk in each individual transaction and bears the overall responsibility for credit risks in its own customer base. The Group's Risk Control unit is responsible for ensuring that the models and methods used for measuring credit risk are comprehensive and reliable. The Risk Control unit is also responsible for performing independent risk analysis and reporting.

Credit risks are reported to the Group's Board of Directors and its risk committee every quarter. Position- and aggregate-level credit risk reporting is available daily to the business personnel involved in the credit process and to the Executive Committee. Every year, Risk Control carries out a comprehensive validation of all credit risk models, and the results are reported to both the Board of Directors and members of the Executive Committee in ALCO. In addition, Risk Control continuously monitors that the models are functioning normally, and these the results of the monitoring are reported quarterly to both the Board of Directors and the management of the Group.

5.1.1 Credit risks in the banking business

The Group's credit risk policy includes appetite for credit risk for households and corporate customers. Loans are provided to households – the majority of which are secured against real estate collateral. Housing finance, as well as other financing for households, including credit cards and consumption loans, is arranged directly from Aktia Bank's balance sheet. The net value of exposures at the end of the period was EUR 8,598.1 million (Table 5.1).

Small businesses and entrepreneurs make up the main target group for Aktia's corporate business, and the long-term aim is to develop broad cross-selling of bank and insurance solutions. Activities are adjusted locally, within Aktia's regions, to benefit from the best competence and customer relationships. The debtor's ability to repay the debt, good knowledge of the customer, a complete understanding of the customer's business situation, as well as a dualistic decision-making process, limited risk-taking, diversification and risk-based pricing, are central elements of the Group's credit policy, together with the drive for sustained profitability.

Total and average net amount of exposures are presented in Table 5.1.

A geographical breakdown of exposures is presented in Table 5.2.

The concentration of exposures by industry or counterparty types is presented in Table 5.3.

The maturity of exposures is presented in Table 5.4.

The Bank Group's total exposures by exposure class before and after the effect of risk mitigation techniques are presented in Table 5.5.

Table 5.1 Total and average net amount of exposures***31 Dec 2018**

EUR million	Net value of exposures at the end of the period	Average net exposures over the period
Retail	4,863.1	4,862.1
Secured by real estate property	4,705.1	4,707.6
SMEs	176.8	183.3
Non-SMEs	4,528.3	4,524.3
Other retail	158.0	154.6
SMEs	23.2	24.8
Non-SMEs	134.8	129.8
Equity	42.8	47.8
Total IRB approach	4,905.9	4,909.9
Central governments or central banks	391.8	309.4
Regional governments or local authorities	281.0	251.4
Multilateral development banks	15.2	35.7
International organisations	66.7	87.0
Institutions	427.9	522.1
Corporates	466.3	509.6
Of which SMEs	172.6	61.9
Retail	296.3	297.1
Of which SMEs	71.5	74.3
Secured by mortgages on immovable property	961.2	914.0
Of which SMEs	417.7	379.0
Exposures in default	7.5	8.9
Covered bonds	714.9	783.4
Other exposures	63.5	64.1
Total standardised approach	3,692.2	3,782.7
Total	8,598.1	8,692.6

* EU CRB-B

Table 5.2 Geographical breakdown of exposures*

31 Dec 2018

Exposure classes, EUR million	Net value												Total
	Finland	Norway	France	Sweden	Canada	Germany	Poland	United Kingdom	Spain	Netherlands	Austria	Other countries	
Central governments or central banks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Institutions	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Corporates	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Retail	4,823.5	2.2	1.1	11.2	0.6	2.0	0.1	3.0	1.3	0.5	0.7	16.7	4,863.1
Equity	40.5	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	42.8
Total IRB approach	4,864.0	2.2	1.1	11.4	0.6	2.0	0.1	3.0	1.3	0.5	0.7	18.8	4,905.9
Central governments or central banks	302.7	0.0	59.2	0.0	0.0	0.0	1.0	0.0	10.9	0.0	15.0	3.0	391.8
Regional governments or local authorities	251.3	0.0	0.0	0.0	0.0	29.7	0.0	0.0	0.0	0.0	0.0	0.0	281.0
Public sector entities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Multilateral development banks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.2	15.2
International organisations	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	66.7	66.7
Institutions	69.6	12.1	116.3	55.9	78.8	30.4	0.0	9.6	0.0	20.7	0.0	34.4	427.9
Corporates	466.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	466.3
Retail	293.7	0.1	0.4	0.6	0.0	0.1	0.0	0.2	0.1	0.0	0.0	1.0	296.3
Secured by mortgages on immovable property	959.5	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	961.2
Exposures in default	7.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5
Items associated with particularly high risk	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Covered bonds	68.0	248.3	68.3	152.3	0.0	0.0	53.7	34.3	19.9	10.5	12.1	47.5	714.9
Claims on institutions and corporates with a short-term credit assessment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Collective investments undertakings	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Equity exposures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other exposures	48.6	0.6	0.7	1.0	0.1	0.3	0.1	1.4	0.0	0.0	0.0	10.7	63.5
Total standardised approach	2,467.2	261.0	245.2	209.8	79.0	60.6	54.8	45.5	30.9	31.2	27.2	179.9	3,692.2
Total	7,331.2	263.3	246.4	221.2	79.6	62.5	54.9	48.5	32.2	31.8	27.9	198.7	8,598.1

* EU-CRB-C

Table 5.3 Concentration of exposures by industry or counterparty types***31 Dec 2018**

EUR million	Total IRB approach				Total standardised approach					Total
	Retail	Equity	Institutions	Corporates	Retail	Secured by mortgages on immovable property	Exposures in default	Covered bonds	Other exposures	
Agriculture, forestry and fishing	66.3	0.0	0.0	1.3	6.3	35.7	0.0	0.0	0.0	109.6
Mining and quarrying	0.0	0.0	0.0	0.0	0.5	0.1	0.0	0.0	0.0	0.6
Manufacturing	13.5	0.0	0.0	27.4	7.1	12.0	1.6	0.0	0.0	61.6
Electricity, gas, steam and air conditioning supply	0.4	0.0	0.0	18.6	0.0	0.3	0.0	0.0	0.0	19.3
Water supply	1.0	0.0	0.0	3.7	0.5	0.0	0.0	0.0	0.0	5.3
Construction	26.4	0.0	0.0	31.3	14.1	10.6	0.3	0.0	0.0	82.6
Wholesale and retail trade	29.1	0.0	0.0	5.6	11.8	9.6	0.0	0.0	0.0	56.1
Transport and storage	15.6	0.0	0.0	10.6	10.8	4.1	0.0	0.0	0.0	41.2
Accommodation and food service activities	9.2	0.0	0.0	0.0	0.6	2.4	1.6	0.0	0.0	13.8
Information and communication	4.5	0.4	0.0	2.3	1.5	0.7	0.0	0.0	0.0	9.5
Finance and Insurance	1.5	41.9	427.9	70.1	1.5	184.2	0.0	714.9	0.0	1,442.0
Real estate activities	89.1	0.2	0.0	237.8	8.9	622.7	0.2	0.0	0.0	958.9
Professional, scientific and technical activities	15.5	0.2	0.0	6.9	6.2	2.2	0.6	0.0	0.0	31.6
Administrative and support service activities	6.4	0.0	0.0	7.8	2.3	4.8	0.0	0.0	0.0	21.4
Public administration and defence, compulsory social security	4.2	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	4.3
Education	1.8	0.0	0.0	2.8	0.5	4.5	0.0	0.0	0.0	9.6
Human health services and social work activities	7.4	0.0	0.0	6.4	1.6	10.4	0.5	0.0	0.0	26.2
Arts, entertainment and recreation	7.1	0.0	0.0	3.7	1.6	4.2	2.0	0.0	0.0	18.5
Other services	9.6	0.0	0.0	2.1	0.7	9.9	0.0	0.0	0.0	22.4
Households	4,554.5	0.0	0.0	5.9	219.4	42.7	0.6	0.0	0.0	4,823.1
Central and regional governments	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	672.8	672.8
Multilateral developments banks and international institutions	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	81.9	81.9
Other	0.0	0.0	0.0	22.0	0.1	0.0	0.0	0.0	63.5	85.7
Total	4,863.1	42.8	427.9	466.3	296.3	961.2	7.5	714.9	818.2	8,598.1

* EU-CRB-D

Table 5.4 Maturity of exposures***31 Dec 2018**

Exposure classes, EUR million	Net value of exposures					Total
	On demand	≤ 1 year	> 1 year ≤ 5 years	> 5 years	Not stated maturity	
Central governments or central banks						0.0
Institutions						0.0
Corporates						0.0
Retail	32.3	54.7	242.7	4 424.6	0.0	4,754.3
Equity	0.0	0.0	0.0	0.0	42.8	42.8
Total IRB approach	32.3	54.7	242.7	4 424.6	42.8	4,797.0
Central governments or central banks	284.8	35.6	65.3	3.8	2.4	391.8
Regional governments or local authorities	0.0	159.5	112.5	4.0	0.0	276.0
Public sector entities	0.0	0.0	0.0	0.0	0.0	0.0
Multilateral development banks	0.0	15.2	0.0	0.0	0.0	15.2
International organisations	0.0	31.4	15.2	20.1	0.0	66.7
Institutions	0.2	155.4	178.0	93.5	0.0	427.1
Corporates	9.3	23.2	193.0	105.6	0.0	331.0
Retail	2.6	2.3	28.8	108.4	0.0	142.1
Secured by mortgages on immovable property	8.6	17.5	291.8	556.8	0.0	874.7
Exposures in default	0.5	1.5	1.5	3.7	0.0	7.2
Items associated with particularly high risk	0.0	0.0	0.0	0.0	0.0	0.0
Covered bonds	0.0	89.4	494.1	131.3	0.0	714.9
Claims on institutions and corporates with a short-term credit assessment	0.0	0.0	0.0	0.0	0.0	0.0
Collective investments undertakings	0.0	0.0	0.0	0.0	0.0	0.0
Equity exposures	0.0	0.0	0.0	0.0	0.0	0.0
Other exposures	19.3	0.0	0.0	0.0	44.2	63.5
Total standardised approach	325.1	531.1	1,380.2	1,027.3	46.6	3,310.3
Total	357.4	585.8	1,622.9	5,451.9	89.3	8,107.3

* EU-CRB-E

Table 5.5 The bank group's total exposures by exposure class before and after the effect of risk mitigation techniques

31 Dec 2018

Exposure classes, EUR million	Contractual exposure	Impairment	Net exposure	Financial guarantees and other substitutions	Exposure after substi- tution	Financial collateral	Exposure af- ter collateral	Risk- weighted amount	Capital requirement 8 %
Credit risk, IRB approach									
Retail, secured by immovable property non-SME	4,535.3	-7.0	4,528.3	0.0	4,528.3	0.0	4,528.3	465.3	37.2
Retail, secured by immovable property SME	177.8	-1.0	176.8	0.0	176.8	0.0	176.8	81.3	6.5
Retail, other non-SME	139.2	-4.4	134.8	0.0	134.8	0.0	134.8	44.1	3.5
Retail, other SME	24.8	-1.6	23.2	0.0	23.2	0.0	23.2	19.4	1.5
Retail, residential mortgages, risk-weight 15%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	225.9	18.1
Equity exposures	42.8	0.0	42.8	0.0	42.8	0.0	42.8	111.2	8.9
Total exposures, IRB approach	4,919.8	-14.0	4,905.9	0.0	4,905.9	0.0	4,905.9	947.2	75.8
Credit risk, standardised approach									
Central governments and central banks	391.8	0.0	391.8	64.3	456.1	0.0	456.1	0.8	0.1
Regional governments and local authorities	281.0	0.0	281.0	23.0	304.0	0.0	304.0	0.7	0.1
Multilateral development banks	15.2	0.0	15.2	0.0	15.2	0.0	15.2	0.0	0.0
International organisations	66.7	0.0	66.7	0.0	66.7	0.0	66.7	0.0	0.0
Credit institutions	428.0	-0.1	427.9	-28.9	399.0	-158.7	240.3	65.7	5.3
Corporates	468.1	-1.8	466.3	-52.8	413.5	-43.4	370.1	283.7	22.7
Retail exposures	298.7	-2.4	296.3	-5.1	291.2	-8.6	282.7	102.3	8.2
Secured by immovable property	961.2	0.0	961.2	0.0	961.2	0.0	961.2	323.1	25.9
Exposures in default	28.7	-21.2	7.5	-0.6	6.9	-0.1	6.8	7.5	0.6
Covered bonds	714.9	0.0	714.9	0.0	714.9	0.0	714.9	71.5	5.7
Other items	63.5	0.0	63.5	0.0	63.5	0.0	63.5	29.4	2.4
Total exposures, standardised approach	3,717.8	-25.5	3,692.2	0.0	3,692.2	-210.8	3,481.5	884.9	70.8
Total exposures	8,637.6	-39.5	8,598.1	0.0	8,598.1	-210.8	8,387.3	1,832.1	146.6

5.2 Credit risk approach

Aktia has received approval from the Finnish Financial Supervisory Authority to use the internal ratings-based (IRB) approach to calculate the capital requirement for retail exposures. The standardised approach is used for other exposures. Aktia Bank has submitted an IRB approach application regarding corporate exposures (foundation internal ratings-based approach, F-IRB) and unsecured credit (advanced internal ratings-based approach, A-IRB) to the Financial Supervisory Authority.

5.3 Development of exposure and RWA

5.3.1 Lending to households

Total Group lending to the public amounted to EUR 6,106 (5,839) million at the end of 2018, an increase of EUR 267 million. Loans to private households accounted for EUR 4,756 (4,714) million, or 77.9 (80.7) % of the loan book. The housing loan book totalled EUR 4,698 (4,655) million, of which households accounted for EUR 3,958 (3,971) million. Aktia's new lending to households amounted to EUR 811 (838) million.

5.3.2 Corporate lending

Corporate lending accounted for 11.6 (10.1) % of Aktia's loan book. Total corporate lending amounted to EUR 707 (592) million. Loans to housing companies increased by 23 % to EUR 604 (491) million, making up 9.9 (8.4) % of Aktia's total loan book.

5.3.3 Concentration risks in lending

As a locally operating financial institution, Aktia is exposed to certain concentration risks. Concentration risks are governed by Group's credit risk policy, which imposes rules and restrictions for individual counterparty level and portfolio level.

Aktia's level of credit risk is sensitive to changes in both domestic employment rates and housing prices. In addition, Aktia has a strong market position in some areas, which creates a certain geographical concentration risk. As the volumes in these branches are small in relation to the overall portfolio and as Aktia does not operate in locations that are highly dependent on a small number of employers, these geographical concentration risks are deemed to be of minor importance for household lending.

In relation to Aktia's total corporate portfolio, the exposure in primarily construction and property financing constitutes a concentration risk.

An overview of CRM techniques is presented in Table 5.6.

The Bank Group's total risk exposure and risk mitigation is presented in Table 5.7.

Credit risk exposure and CRM effects in the standardised approach are presented in Table 5.8.

Exposures by asset classes and risk weights in the standardised approach are presented in Table 5.9.

Table 5.6 CRM techniques – Overview*

31 Dec 2018

EUR million	Exposures unsecured – Carrying amount	Exposures secured	Exposures secured by collateral	Exposures secured by financial guarantees	Exposures secured by credit derivatives
Total loans**	808.9	5,798.5	4,679.5	373.7	0
Total debt securities	1,307.1	53.6	-	53.6	0
Total exposures	2,116.1	5,852.0	4,679.5	427.2	0
Of which defaulted	3.6	38.6	36.2	0.6	0

*EU-CR3

** Row Total loans includes off balance sheet exposures

Table 5.7 The bank group's total risk exposure and risk mitigation**31 Dec 2018**

Exposure classes, EUR million	Contractual exposure	Impairment	Net exposure	of which secured by financial guarantees	of which secured by collateral	Average weighted LGD
Credit risk, IRB approach						
Retail - Secured by immovable property non-SME	4,535.3	-7.0	4,528.3	215.8	4,286.7	16.7 %
Retail - Secured by immovable property SME	177.8	-1.0	176.8	4.5	163.7	25.8 %
Retail - Other non-SME	139.2	-4.4	134.8	101.7	15.0	26.8 %
Retail - Other SME	24.8	-1.6	23.2	13.4	3.2	69.6 %
Equity exposures	42.8	-	42.8	-	-	
Total exposures, IRB approach	4,919.8	-14.0	4,905.9	335.5	4,468.7	
Credit risk, standardised approach						
Central governments and central banks	391.8	-	391.8	-	-	
Regional governments and local authorities	281.0	-0.0	281.0	-	-	
Multilateral development banks	15.2	-	15.2	-	-	
International organisations	66.7	-	66.7	-	-	
Credit institutions	428.0	-0.1	427.9	33.3	158.7	
Corporates	468.1	-1.8	466.3	52.8	43.4	
Retail exposures	298.7	-2.4	296.3	5.0	8.6	
Secured by immovable property	961.2	-	961.2	-	-	
Exposures in default	28.7	-21.2	7.5	0.6	0.1	
Covered bonds	714.9	-	714.9	-	-	
Other items	63.5	-	63.5	-	-	
Total exposures, standardised approach	3,717.8	-25.5	3,692.2	91.8	210.8	
Total exposures	8,637.6	-39.5	8,598.1	427.2	4,679.5	

Table 5.8 Standardised approach – Credit risk exposure and CRM effects***31 Dec 2018**

Exposure classes, EUR million	Exposures before CCF and CRM		Exposures post CCF and CRM		RWAs and RWA density	
	On-balance-sheet amount	Off-balance-sheet amount	On-balance-sheet amount	Off-balance-sheet amount	RWAs	RWA density
Central governments or central banks	391.8	0.0	456.1	0.0	0.8	0,2 %
Regional governments or local authorities	276.0	5.0	299.0	2.5	0.7	0,2 %
Public sector entities	0.0	0.0	0.0	0.0	0.0	0,0 %
Multilateral development banks	15.2	0.0	15.2	0.0	0.0	0,0 %
International organisations	66.7	0.0	66.7	0.0	0.0	0,0 %
Institutions	427.1	0.7	238.2	1.8	65.7	27,4 %
Corporates	331.0	135.3	240.7	68.9	283.7	91,6 %
Retail	142.1	154.2	129.6	13.3	102.3	71,6 %
Secured by mortgages on immovable property	874.7	86.5	874.7	42.7	323.1	35,2 %
Exposures in default	7.2	0.2	6.5	0.2	7.5	112,1 %
Higher-risk categories	0.0	0.0	0.0	0.0	0.0	0,0 %
Covered bonds	714.9	0.0	714.9	0.0	71.5	10,0 %
Institutions and corporates with a short-term credit assessment	0.0	0.0	0.0	0.0	0.0	0,0 %
Collective investments undertakings	0.0	0.0	0.0	0.0	0.0	0,0 %
Equity	0.0	0.0	0.0	0.0	0.0	0,0 %
Other items	63.5	0.0	63.5	0.0	29.4	46,4 %
Total	3,310.3	382.0	3,105.1	129.4	884.9	27,4 %

* EU-CR4

Table 5.9 Standardised approach - exposures by asset classes and risk weights*

31 Dec 2018

Exposure classes, EUR million	Risk weight																Total	Of which unrated
	0 %	2 %	4 %	10 %	20 %	35 %	50 %	70 %	75 %	100 %	150 %	250 %	370 %	1250 %	Others	Deducted		
Central governments or central banks	452.1	0.0	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	456.1	0.0
Regional governments or local authorities	297.3	0.0	0.0	0.0	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	301.5	0.0
Public sector entities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Multilateral development banks	15.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.2	0.0
International organisations	66.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	66.7	0.0
Institutions	0.0	0.0	0.0	0.0	180.8	0.0	59.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	240.0	10.8
Corporates	0.0	0.0	0.0	0.0	0.0	0.0	3.5	0.0	0.0	306.1	0.0	0.0	0.0	0.0	0.0	0.0	309.6	267.8
Retail	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	142.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	142.9	142.9
Secured by mortgages on immovable property	0.0	0.0	0.0	0.0	0.0	649.9	267.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	917.4	917.4
Exposures in default	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.1	1.6	0.0	0.0	0.0	0.0	0.0	6.7	6.7
Higher-risk categories	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Covered bonds	0.0	0.0	0.0	714.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	714.9	56.0
Claims on institutions and corporates with a short-term credit assessment	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Collective investments undertakings	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Equity	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other items	4.4	0.0	0.0	0.0	37.0	0.0	0.0	0.0	0.0	22.0	0.0	0.0	0.0	0.0	0.0	0.0	63.5	63.5
Total	835.7	0.0	0.0	714.9	226.1	649.9	330.1	0.0	142.9	333.3	1.6	0.0	0.0	0.0	0.0	0.0	3,234.5	1,465.1

* EU-CR5

5.4 Rating and scoring

The purpose of corporate ratings and credit scoring is to predict the likelihood that a customer will not be able to meet its credit obligations towards the Bank, i.e. to estimate the probability of default. Ratings and credit scores constitute an integral part of the credit process, e.g. for credit approval, pricing, dunning procedures and monitoring, risk reporting, and capital adequacy calculations. Ratings are used for corporate exposures, while credit scoring is used for retail exposures.

Aktia uses external long-term issue and issuer ratings from Moody's Investors Service for calculating the risk weight according to the SA. The external ratings are used for sovereign-type exposure classes (exposure classes (a)–(e) according to Article 112 of the CRR) as well as for corporate, institution and covered bond exposure classes. The counterparties with external ratings are mainly derivative counterparties or part of the liquidity portfolio. The mapping of ratings follows the ECAI mapping published by the EBA. Tables 5.10 and 5.11 present the mapping of exposure values to credit quality steps.

Exposures in the standardised approach before credit risk mitigation distributed by credit quality step (EUR million) are presented in Table 5.10.

Exposures in the standardised approach after credit risk mitigation distributed by credit quality step (EUR million) are presented in Table 5.11.

RWA flow statements of credit risk exposures under the IRB approach are presented in Table 5.12.

Credit risk exposures by exposure class and PD range in the IRB approach are presented in Table 5.13.

Specialised lending and equities in IRB are presented in Table 5.14. The equity exposures are treated under the simple risk weight approach. The 250 % risk weight group refers to the holdings in Aktia Life insurance Ltd which are not deducted from CET1 capital.

Backtesting of IRB parameters per retail subportfolio is presented in Table 5.15.

Table 5.10 Exposures in the standardised approach before credit risk mitigation distributed by credit quality step

31 Dec 2018

Exposure classes, EUR million	Credit quality step					Total
	1	2	3	4 to 6	Unrated	
Central governments or central banks *	387.8	4.0	0.0	0.0	0.0	391.8
Regional governments or local authorities *	281.0	0.0	0.0	0.0	0.0	281.0
Multilateral development banks *	15.2	0.0	0.0	0.0	0.0	15.2
International organisations *	66.7	0.0	0.0	0.0	0.0	66.7
Institutions	238.4	174.1	9.1	0.0	6.4	427.9
Corporates	0.0	0.0	50.0	0.0	416.3	466.3
Retail	0.0	0.0	0.0	0.0	296.3	296.3
Secured by mortgages on immovable property	0.0	0.0	0.0	0.0	961.2	961.2
Exposures in default	0.0	0.0	0.0	0.0	7.5	7.5
Covered bonds	658.9	0.0	0.0	0.0	56.0	714.9
Other items	0.0	0.0	0.0	0.0	63.5	63.5
Total	1,647.9	178.1	59.1	0.0	1,807.2	3,692.2

31 Dec 2017

Exposure classes, EUR million	Credit quality step					Total
	1	2	3	4 to 6	Unrated	
Central governments or central banks *	401,0	0,0	0,0	0,0	0,0	401,0
Regional governments or local authorities *	240,7	0,0	0,0	0,0	0,0	240,7
Multilateral development banks *	51,0	0,0	0,0	0,0	0,0	51,0
International organisations *	128,0	0,0	0,0	0,0	0,0	128,0
Institutions	306,9	287,5	26,4	0,0	82,0	702,8
Corporates	0,0	0,0	50,0	0,0	362,5	412,5
Retail	0,0	0,0	0,0	0,0	276,1	276,1
Secured by mortgages on immovable property	0,0	0,0	0,0	0,0	903,0	903,0
Exposures in default	0,0	0,0	0,0	0,0	9,5	9,5
Covered bonds	772,0	0,0	0,0	0,0	64,3	836,4
Other items	0,0	0,0	0,0	0,0	64,6	64,6
Total	1 899,5	287,5	76,4	0,0	1 762,1	4 025,5

*Exposures that receive a fixed 0 % risk weight according to CRR have been reported in step 1.

Table 5.11 Exposures in the standardised approach after credit risk mitigation distributed by credit quality step (EUR million)**31 Dec 2018**

Exposure classes, EUR million	Credit quality step					Total
	1	2	3	4 to 6	Unrated	
Central governments or central banks *	452.1	4.0	0.0	0.0	0.0	456.1
Regional governments or local authorities *	304.0	0.0	0.0	0.0	0.0	304.0
Multilateral development banks *	15.2	0.0	0.0	0.0	0.0	15.2
International organisations *	66.7	0.0	0.0	0.0	0.0	66.7
Institutions	167.8	55.7	6.0	0.0	10.8	240.3
Corporates	0.0	0.0	50.0	0.0	320.1	370.1
Retail	0.0	0.0	0.0	0.0	282.7	282.7
Secured by mortgages on immovable property	0.0	0.0	0.0	0.0	961.2	961.2
Exposures in default	0.0	0.0	0.0	0.0	6.8	6.8
Covered bonds	658.9	0.0	0.0	0.0	56.0	714.9
Other items	0.0	0.0	0.0	0.0	63.5	63.5
Total	1,664.7	59.7	56.0	0.0	1,701.1	3,481.5

31 Dec 2017

Exposure classes, EUR million	Credit quality step					Total
	1	2	3	4 to 6	Unrated	
Central governments or central banks *	488.6	0.0	0.0	0.0	0.0	488.6
Regional governments or local authorities *	266.8	0.0	0.0	0.0	0.0	266.8
Multilateral development banks *	51.0	0.0	0.0	0.0	0.0	51.0
International organisations *	128.0	0.0	0.0	0.0	0.0	128.0
Institutions	257.1	90.5	1.9	0.0	85.1	434.6
Corporates	0.0	0.0	50.0	0.0	278.2	328.2
Retail	0.0	0.0	0.0	0.0	259.7	259.7
Secured by mortgages on immovable property	0.0	0.0	0.0	0.0	903.0	903.0
Exposures in default	0.0	0.0	0.0	0.0	9.0	9.0
Covered bonds	772.0	0.0	0.0	0.0	64.3	836.4
Other items	0.0	0.0	0.0	0.0	64.6	64.6
Total	1,963.6	90.5	51.9	0.0	1,663.9	3,769.8

*Exposures that receive a fixed 0 % risk weight according to CRR have been reported in step 1.

Table 5.12 RWA flow statements of credit risk exposures under the IRB approach***31 Dec 2018**

EUR million	RWA amounts	Capital requirements
RWAs as at the end of the previous reporting period	874.5	70.0
Asset size	12.3	1.0
Asset quality**	-165.4	-13.2
Model updates***	-	-
Methodology and policy***	-	-
Acquisitions and disposals	0.0	0.0
Foreign exchange movements	0.0	0.0
Other****	225.9	18.1
RWAs as at the end of the reporting period	947.2	75.8

* EU-CR8

** Asset quality improved during the year mainly in retail portfolios where past due dates and average LTV ratios were at historically low levels.

*** not reported due to information systems issues

**** FIN-FSA has set a minimum risk weight level of 15% for residential mortgage loans applicable to credit institutions that have adopted the internal ratings-based approach for the calculation of capital requirements. The decision on the 15% minimum risk weight entered into force from 1 January 2018, and will be valid for two years.

Table 5.13 IRB approach – Credit risk exposures by exposure class and PD range*

31 Dec 2018

PD scale, EUR million	Original on-balance sheet gross exposure	Off-balance sheet exposures pre CCF	Average CCF	EAD post CRM and post-CCF	Average PD	Number of obligors	Average LGD	Average maturity	RWAs	RWA density	EL	Value adjustments and provisions
Retail - Secured by immovable property SME												
0.00 to < 0.15	0.1	0.2	100 %	0.2	0.10 %	43.0	25.69 %		0.0	5 %	0.0	
0.15 to < 0.25	0.5	0.2	100 %	0.7	0.21 %	65.0	22.74 %		0.1	8 %	0.0	
0.25 to < 0.50	2.0	1.3	100 %	3.3	0.39 %	167.0	27.54 %		0.5	14 %	0.0	
0.50 to < 0.75	7.7	1.7	100 %	9.3	0.64 %	268.0	27.03 %		1.9	20 %	0.0	
0.75 to < 2.50	86.1	10.7	100 %	96.8	1.38 %	1519.0	26.45 %		31.2	32 %	0.4	
2.50 to < 10.00	48.4	5.7	100 %	54.1	4.47 %	774.0	24.36 %		32.0	59 %	0.6	
10.00 to < 100.00	9.5	0.6	100 %	10.1	22.02 %	166.0	24.54 %		11.0	109 %	0.5	
100.00 (Default)	3.2	0.0	100 %	3.3	100.00 %	60.0	30.71 %		4.7	145 %	1.0	
Sub-total	157.4	20.4	100 %	177.8	5.24 %	3,062.0	25.82 %	0.0	81.3	46 %	2.5	-1.0
Retail - Secured by immovable property non-SME												
0.00 to < 0.15	2,872.6	41.0	100 %	2,913.6	0.07 %	33,063.0	16.33 %		84.5	3 %	0.3	
0.15 to < 0.25	385.4	4.4	100 %	389.8	0.20 %	2,924.0	17.03 %		27.8	7 %	0.1	
0.25 to < 0.50	546.7	4.7	100 %	551.4	0.36 %	14,454.0	17.12 %		61.4	11 %	0.3	
0.50 to < 0.75	154.2	4.3	100 %	158.5	0.66 %	2,882.0	17.63 %		27.8	18 %	0.2	
0.75 to < 2.50	281.6	8.9	100 %	290.5	1.39 %	3,838.0	17.18 %		80.8	28 %	0.7	
2.50 to < 10.00	105.2	1.4	100 %	106.7	4.28 %	3,601.0	17.68 %		60.3	57 %	0.8	
10.00 to < 100.00	90.2	0.1	100 %	90.2	47.58 %	955.0	17.77 %		79.4	88 %	7.2	
100.00 (Default)	34.7	0.0	100 %	34.7	100.00 %	410.0	26.81 %		43.3	125 %	7.8	
Sub-total	4,470.5	64.8	100 %	4,535.3	2.03 %	59,245.0	16.72 %	0.0	465.3	10 %	17.5	-7.0

* EU-CR6

PD scale, EUR million	Original on-balance sheet gross exposure	Off-balance sheet exposures pre CCF	Average CCF	EAD post CRM and post-CCF	Average PD	Number of obligors	Average LGD	Average maturity	RWA	RWA density	EL	Value adjustments and provisions
Retail - Other SME												
0.00 to < 0.15	0.0	0.1	100 %	0.1	0.07 %	14.0	45.18 %		0.0	12 %	0.0	
0.15 to < 0.25	0.1	0.0	100 %	0.1	0.18 %	8.0	23.47 %		0.0	9 %	0.0	
0.25 to < 0.50	0.1	0.5	100 %	0.6	0.30 %	35.0	83.37 %		0.2	36 %	0.0	
0.50 to < 0.75	0.4	1.3	100 %	1.7	0.61 %	61.0	63.71 %		0.8	45 %	0.0	
0.75 to < 2.50	5.8	3.4	100 %	9.2	1.27 %	300.0	58.18 %		5.7	62 %	0.1	
2.50 to < 10.00	5.1	0.9	100 %	6.0	3.60 %	180.0	48.89 %		4.5	76 %	0.1	
10.00 to < 100.00	4.3	0.8	100 %	5.1	19.65 %	179.0	60.16 %		5.8	113 %	0.4	
100.00 (Default)	1.9	0.0	100 %	1.9	100.00 %	99.0	75.56 %		2.4	123 %	1.6	
Sub-total	17.6	7.2	100 %	24.8	9.31 %	876.0	69.60 %	0.0	19.4	78 %	2.2	-1.6

PD scale, EUR million	Original on-balance sheet gross exposure	Off-balance sheet exposures pre CCF	Average CCF	EAD post CRM and post-CCF	Average PD	Number of obligors	Average LGD	Average maturity	RWA	RWA density	EL	Value adjustments and provisions
Retail - Other non-SME												
0.00 to < 0.15	10.4	3.3	100 %	13.7	0.07 %	33,198.0	48.10 %		1.3	10 %	0.0	
0.15 to < 0.25	1.3	0.5	100 %	1.8	0.21 %	2,887.0	43.93 %		0.4	20 %	0.0	
0.25 to < 0.50	22.9	0.9	100 %	23.8	0.39 %	11,207.0	29.58 %		4.4	18 %	0.0	
0.50 to < 0.75	14.8	1.2	100 %	16.0	0.62 %	3,165.0	13.86 %		3.2	20 %	0.0	
0.75 to < 2.50	55.6	8.8	100 %	64.4	1.39 %	10,025.0	18.41 %		17.9	28 %	0.2	
2.50 to < 10.00	4.5	2.0	100 %	6.5	4.35 %	4,813.0	58.22 %		6.4	99 %	0.2	
10.00 to < 100.00	7.5	0.0	100 %	7.6	35.36 %	4,488.0	44.38 %		4.5	60 %	0.4	
100.00 (Default)	5.6	0.0	100 %	5.6	100.00 %	886.0	79.24 %		6.1	110 %	4.6	
Sub-total	122.6	16.6	100 %	139.2	5.61 %	70,669.0	26.83 %	0.0	44.1	32 %	5.4	-4.4

PD scale, EUR million	Original on-balance sheet gross exposure	Off-balance sheet exposures pre CCF	Average CCF	EAD post CRM and post-CCF	Average PD	Number of obligors	Average LGD	Average maturity	RWA	RWA density	EL	Value adjustments and provisions
Equity												
	42.8	0.0		42.8					111.2	260 %	0.1	
Total (all portfolios)	4,811.0	108.9	100 %	4,919.8	2.31 %	133,852.0	17.83 %	0.0	721.4	15 %	27.7	-14.0

Table 5.14 IRB (specialised lending and equities)*

31 Dec 2018

Equities under the simple risk-weighted approach						
Categories, EUR million	On-balance sheet amount	Off-balance sheet amount	Risk weight	Exposure amount	RWA	Capital requirements
Exchange-traded equity exposures	0.0	0.0	190 %	0.0	0.1	0.0
Private equity exposures	0.0	0.0	290 %	0.0	0.0	0.0
Other equity exposures	46.2	0.0	250 %	39.0	97.8	7.8
Other equity exposures	3.6	0.0	370 %	4.0	13.4	1.1
Total	49.8	0.0		43.0	111.2	8.9

* EU-CR10

Table 5.15. IRB approach – Backtesting of PD per exposure class*

31 Dec 2018

Retail portfolio	Estimated PD**	Average Default Rate	Estimated LGD**	Realized LGD
Household loans	1.18 %	0.51 %	29.6 %	8.9 %
Retail SME	2.51 %	0.56 %	46.9 %	16.8 %
Other Retail	4.96 %	3.09 %	28.8 %	1.5 %

* EU-CR9

** PD and LGD estimates reflect those used in the capital adequacy calculations and include cyclical adjustments and conservatism buffers

5.4.1 Scoring

Models or scorecards used in the retail portfolio, including both households and SMEs, are based on statistical models in order to predict the likelihood of retail customer exposures defaulting within one year from the time of estimation. Risk points generated by the scorecards are mapped to a master scale, which consists of 13 risk grades: A1–C4 for non-defaulted customers, and D for defaulted customers.

Aktia uses two types of scoring models in its business: application models and behavioural models. Application models are used for screening and pricing exposures during the loan origination process, as they are designed to estimate credit quality over time, while behavioural models are used for risk monitoring due to their sensitivity to changes in customer behaviour. The set of models for SMEs is different to that used for households, as the credit risk predictors and credit processes differ for these two obligor types. As Aktia uses an exposure level default definition for households, the model performance

is further optimized by dividing the portfolio into groups, with their own scorecards based on product characteristics and behavioural information.

The scorecards are developed based on application data and internal behavioural data. The scorecards also take into account the credit policy and process used, as the effects of these are reflected in the data used for modelling. As part of the application data, credit bureau information is used in the scoring process. The set of models of the retail portfolio is basically designed to optimize risk differentiation based on portfolio characteristics and information available.

Six months from loan origination, the application score is replaced with a behavioural score. The behavioural score is recalculated on a continuous basis based on the most recent data and customer information.

5.5 Collateral

The valuation and administration of collateral is very important for managing credit risk. Rules and authorisations concerning the valuation of collateral and the updating of collateral values have been established. In keeping with the principle of prudence, collateral values are calculated by subtracting a haircut from the market value. The extent to which this prudent collateral value is lower is indicative of the volatility in the collateral's market value, liquidity, and the expected recovery time and fulfilment. Under the SA, real estate collateral, certain guarantees and financial securities are taken into account in the capital adequacy calculation. Under the IRB approach, credit risk mitigants affect the capital adequacy calculation through the LGD estimate. As of 31 March 2010, collateral valuations older than three years have been updated on a regular basis.

Loans to households are mainly granted against prudent collateral, which means that any reduction in market values less than the haircut does not directly result in a collateral shortfall.

For corporate financing purposes, collateral is valued in accordance with separate rules, also taking into account a valuation buffer specific to the collateral, to allow determination of a prudent value. Particularly when valuing fixed assets relating to a business, the interaction between the value of the fixed assets and the company's business opportunities is taken into account.

5.5.1 Loan-to-value ratio of collateral

The loan-to-value ratio is defined as the relationship between the outstanding loan amount and the market value of the loan's pledged collateral.

The majority of the Bank's collateral stock is made up of residential real estate. Trends in housing prices are thus important factors in the Bank's risk profile. During 2018, developments in housing prices within Aktia's main business areas remained at a stable level.

The loan-to-value distribution of the retail mortgage loan book is presented in Table 5.16.

Table 5.16 Loan-to-value distribution* of the retail mortgage loan book

LTV Band	31 Dec 2018	31 Dec 2017
0-50 %	83,9 %	84,6 %
50-60 %	8,3 %	7,9 %
60-70 %	4,2 %	4,0 %
70-80 %	1,4 %	1,3 %
80-90 %	0,7 %	0,6 %
90-100 %	0,2 %	0,2 %
>100 %	1,5 %	1,4 %
Total	100 %	100 %

* The table shows the distribution of exposures by LTV band. Example: A mortgage exposure of EUR 60,000 to finance a property worth EUR 100,000 (LTV 60%) is distributed EUR 50,000 to the "LTV 0-50%" bucket and EUR 10,000 to the "LTV 50-60%" bucket.

5.6 Estimation and validation of credit risk parameters

All credit risk models used for IRB purposes are validated annually, and central model performance metrics are reported quarterly to both the Board of Directors and the management of the Group. Validation is performed by the Risk Control function, and includes both quantitative and qualitative assessments of model performance and parameters. The majority of quantitative tests performed during annual validation are performed and analysed by the Risk Control function quarterly. Key monitoring metrics are reported to the Board of Directors and the management of the Group.

Rating and scoring models are translated into probability of default (PD) estimates for risk management purposes. PD models are calibrated using both point-in-time (PIT) and through-the-cycle (TTC) calculations. PIT PD estimates are used for short-term risk assessment and monitoring and validation of default rates (DR), while TTC PD estimates are used for PD classification and regulatory capital calculations. LGD estimates are derived for both PIT and downturn scenarios, and they are used similarly to PD estimates. LGD estimates reflect the quality and characteristics of the collaterals and pledges connected to exposures.

5.7 Loan portfolio, impaired loans and loan losses

Problem loans are regularly monitored both in the business units through delinquency lists and alerts, and at portfolio level in the Group's Risk Control unit. Internal policies and tools have been put in place to enable early-stage identification of customers whose credit standing no longer corresponds to their level of indebtedness. Quickly reacting to such situations is in both the customer's and bank's best interests.

According to the Group's accounting principles, on each reporting date, an assessment of whether a significant increase in the credit risk of a receivable has occurred is performed. The assessment is primarily based on the change in the probability of default since initial recognition and on whether the borrower has a delinquent loan payment (30 days) or is subject to forbearance measures. For non-defaulted loans whose credit risk has not increased significantly (ECL Stage 1), the expected credit losses for a period of 12 months are calculated. For non-defaulted loans whose credit risk has increased significantly (ECL Stage 2), as well as for defaulted loans (ECL Stage 3), the expected credit losses for the remaining lifetime of the loan are calculated. A loan is considered to be in default if a significant loan payment is delinquent by 90 days or more. A loan is also considered to be in default if a significant loan payment is delinquent by less than 90 days, and if the borrower is subject to bankruptcy or debt restructuring, or the borrower's ability to settle his or her loan obligations to their fullest extent is considered unlikely.

Credit quality of exposures by exposure class and instrument is presented in Table 5.17.

Credit quality of exposures by industry or counterparty types is presented in Table 5.18.

Credit quality of exposures by geography is presented in Table 5.19.

Ageing of past-due exposures is presented in Table 5.20.

Non-performing and forborne exposures are presented in Table 5.21.

Changes in the stock of general and specific credit risk adjustments are presented in Table 5.22.

Changes in the stock of defaulted and impaired loans and debt securities are presented in Table 5.23.

Loans past due by time overdue and ECL stages are presented in Table 5.24.

Credit exposures per PD class and ECL stage are presented in Table 5.25.

Credit exposures (incl. off-balance sheet items) per LGD and ECL stage are presented in Table 5.26.

Credit exposures (incl. off-balance sheet items) per stage migration reason are presented in Table 5.27.

Table 5.17 Credit quality of exposures by exposure class and instrument***31 Dec 2018**

EUR million	Gross carrying values of		Specific credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges of the period	Net values
	Defaulted exposures	Non-defaulted exposures				
Retail	45.4	4,831.7	14.0			4,863.1
Secured by real estate property	37.9	4,675.2	8.0			4,705.1
SMEs	3.3	174.5	1.0			176.8
Non-SMEs	34.7	4,500.6	7.0			4,528.3
Other retail	7.5	156.5	6.0			158.0
SMEs	1.9	22.9	1.6			23.2
Non-SMEs	5.6	133.7	4.4			134.8
Equity	0.0	42.8	0.0			42.8
Total IRB approach	45.4	4,874.4	14.0	7.2	-2.1	4,905.9
Central governments or central banks	0.0	391.8	0.0			391.8
Regional governments or local authorities	0.0	281.0	0.0			281.0
Multilateral development banks	0.0	15.2	0.0			15.2
International organisations	0.0	66.7	0.0			66.7
Institutions	0.0	428.0	0.1			427.9
Corporates	0.0	468.1	1.8			466.3
Of which: SMEs	0.0	173.9	1.3			172.6
Retail	0.0	298.7	2.4			296.3
Of which: SMEs	0.0	72.8	1.3			71.5
Secured by mortgages on immovable property	0.0	961.2	0.0			961.2
Of which: SMEs	0.0	417.7	0.0			417.7
Exposures in default	28.7	0.0	21.2			7.5
Covered bonds	0.0	714.9	0.0			714.9
Other exposures	0.0	63.5	0.0			63.5
Total standardised approach	28.7	3,689.1	25.5	1.0	1.1	3,692.2
Total	74.1	8,563.5	39.5	8.1	-1.0	8,598.1
Of which: Loans	73.6	6,081.5	38.6	8.1	-0.7	6,116.6
Of which: Debt securities	0.0	1,360.8	0.1	0.0	-0.2	1,360.7
Of which: Off-balance-sheet exposures	0.4	491.1	0.8	0.0	-0.1	490.8

* EU-CR1-A

Table 5.18 Credit quality of exposures by industry or counterparty types***31 Dec 2018**

EUR million	Gross carrying values of		Specific credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges	Net values
	Defaulted exposures	Non-defaulted exposures				
Agriculture, forestry and fishing	1.4	108.8	0.6	0.0	0.0	109.6
Mining and quarrying	0.0	0.6	0.0	0.0	0.0	0.6
Manufacturing	2.9	60.0	1.3	0.0	-0.1	61.6
Electricity, gas, steam and air conditioning supply	0.0	19.3	0.0	0.0	0.0	19.3
Water supply	0.3	5.0	0.0	0.3	0.1	5.3
Construction	2.8	82.3	2.5	0.3	0.2	82.6
Wholesale and retail trade	1.0	55.9	0.8	1.9	-0.1	56.1
Transport and storage	1.5	41.0	1.3	0.0	-0.2	41.2
Accommodation and food service activities	3.2	11.7	1.1	0.1	1.1	13.8
Information and communication	1.0	9.4	0.9	0.1	0.0	9.5
Finance and Insurance	0.9	1,442.2	1.1	0.1	-0.1	1,442.0
Real estate activities	1.4	959.6	2.1	0.2	0.1	958.9
Professional, scientific and technical activities	12.2	31.1	11.7	2.0	0.0	31.6
Administrative and support service activities	0.0	21.5	0.1	0.0	0.0	21.4
Public administration and defence, compulsory social security	0.0	4.3	0.0	0.0	0.0	4.3
Education	0.2	9.5	0.2	0.0	0.1	9.6
Human health services and social work activities	0.7	25.7	0.2	0.0	0.0	26.2
Arts, entertainment and recreation	5.7	16.4	3.5	0.0	0.2	18.5
Other services	0.0	22.4	0.1	0.0	0.0	22.4
Households	38.6	4,796.2	11.7	3.1	-2.2	4,823.1
Central and regional governments	0.0	672.8	0.0	0.0	-0.1	672.8
Multilateral developments banks and international institutions	0.0	81.9	0.0	0.0	0.0	81.9
Other	0.0	85.7	0.0	0.0	-0.1	85.7
Total	74.1	8,563.5	39.5	8.1	-1.0	8,598.1

* EU-CR1-B

Table 5.19 Credit quality of exposures by geography***31 Dec 2018**

EUR million	Gross carrying values of		Specific credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges	Net values
	Defaulted exposures	Non-defaulted exposures				
Finland	74.0	7,296.6	39.5	8.1	-1.0	7,331.2
Norway	0.0	263.3	0.0	0.0	0.0	263.3
France	0.0	246.4	0.0	0.0	0.0	246.4
Sweden	0.0	221.2	0.0	0.0	0.0	221.2
Canada	0.0	79.6	0.0	0.0	0.0	79.6
Germany	0.0	62.5	0.0	0.0	0.0	62.5
Poland	0.0	54.9	0.0	0.0	0.0	54.9
United Kingdom	0.0	48.5	0.0	0.0	0.0	48.5
Spain	0.0	32.2	0.0	0.0	0.0	32.2
Netherlands	0.0	31.8	0.0	0.0	0.0	31.8
Austria	0.0	27.9	0.0	0.0	0.0	27.9
OTHER COUNTRIES	0.0	198.7	0.0	0.0	0.0	198.7
Total	74.1	8,563.5	39.5	8.1	-1.0	8,598.1

* EU-CR1-C

Table 5.20 Ageing of past-due exposures***31 Dec 2018**

Categories, EUR million	Gross carrying values					
	≤ 30 days	> 30 days ≤ 60 days	> 60 days ≤ 90 days	> 90 days ≤ 180 days	> 180 days ≤ 1 year	> 1 year
Loans	9.5	12.4	6.3	8.5	6.7	46.0
Debt securities	0.0	0.0	0.0	0.0	0.0	0.0
Total exposures	9.5	12.4	6.3	8.5	6.7	46.0

* EU-CR1-D

Table 5.21 Non-performing and forborne exposures*

31 Dec 2018

EUR million	Gross carrying amount of performing and non-performing exposures							Accumulated impairment and provisions and negative fair value adjustments due to credit risk				Collaterals and financial guarantees received	
				Of which non-performing				On performing exposures		On non-performing exposures		On non-performing exposures	Of which forborne exposures
		Of which performing but past due > 30 days and ≤ 90 days	Of which performing forborne	Of which defaulted	Of which impaired	Of which forborne		Of which forborne		Of which forborne			
Debt securities	1,360.8	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Loans and advances	6,155.2	17.1	48.0	81.5	73.6	73.9	10.9	5.6	0.0	33.0	4.3	45.2	50.5
Off-balance-sheet exposures	491.6	0.0	0.0	0.0	0.4	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0

* EU-CR1-E

Table 5.22 Changes in the stock of general and specific credit risk adjustments***31 Dec 2018**

EUR million	Accumulated specific credit risk adjustment	Accumulated general credit risk adjustment
Opening balance	46.7	0.0
Increases due to amounts set aside for estimated loan losses during the period	8.0	0.0
Decreases due to amounts reversed for estimated loan losses during the period	-7.4	0.0
Decreases due to amounts taken against accumulated credit risk adjustments	-7.8	0.0
Transfers between credit risk adjustments	0.0	0.0
Impact of exchange rate differences	0.0	0.0
Business combinations, including acquisitions and disposals of subsidiaries	0.0	0.0
Other adjustments	0.0	0.0
Closing balance	39.5	0.0
Recoveries on credit risk adjustments recorded directly to the statement of profit or loss	0.0	0.0
Specific credit risk adjustments directly recorded to the statement of profit or loss	0.0	0.0

*EU-CR2-A

Table 5.23 Changes in the stock of defaulted and impaired loans and debt securities***31 Dec 2018**

EUR million	Gross carrying value defaulted exposures
Opening balance	84.8
Loans and debt securities that have defaulted or impaired since the last reporting period	15.2
Returned to non-defaulted status	15.9
Amounts written off	7.8
Other changes	-2.2
Closing balance	74.1

*EU-CR2-B

Table 5.24 Loans past due by time overdue and ECL stages**1 Jan 2018**

Days, EUR million	Stage 1	Stage 2	Stage 3	Total
≤ 30	12.0	7.1	1.8	20.8
of which households	10.6	6.0	1.8	18.5
> 30 ≤ 90	0.0	13.5	4.3	17.8
of which households	0.0	12.7	3.7	16.3
> 90	0.0	0.0	32.4	32.4
of which households	0.0	0.0	26.6	26.6

31 Dec 2018

Days, EUR million	Stage 1	Stage 2	Stage 3	Total
≤ 30	3.2	5.1	0.0	8.3
of which households	2.9	5.1	0.0	8.0
> 30 ≤ 90	0.0	18.1	0.1	18.2
of which households	0.0	17.8	0.1	17.9
> 90	0.0	0.0	34.1	34.1
of which households	0.0	0.0	27.3	27.3

Table 5.25 Credit exposures (incl. off-balance sheet items) per PD and ECL stage

	12 month ECL	Lifetime ECL not credit- impaired	Lifetime ECL credit- impaired	Total
Corporate				
PD grades A	162.6	18.2	0.0	180.8
PD grades B	737.7	0.0	0.0	737.7
PD grades C	537.3	25.8	0.1	563.3
Default	0.0	0.0	26.7	26.7
	1,437.6	44.1	26.8	1,508.5
Loss allowance (ECL)	-1.9	-1.4	-21.0	-24.3
Carrying amount	1,435.7	42.7	5.8	1,484.1
Households				
PD grades A	3,474.6	7.9	0.0	3,482.4
PD grades B	967.7	7.1	0.0	974.8
PD grades C	529.7	83.1	4.8	617.5
Default	0.0	0.0	45.7	45.7
	4,971.9	98.0	50.4	5,120.4
Loss allowance (ECL)	-0.7	-2.3	-11.9	-14.9
Carrying amount	4,971.3	95.7	38.5	5,105.5
Other				
PD grades A	0.0	0.0	0.0	0.0
PD grades B	0.0	0.0	0.0	0.0
PD grades C	48.3	0.0	0.0	48.3
Default	0.0	0.0	0.0	0.0
	48.3	0.0	0.0	48.3
Loss allowance (ECL)	0.0	0.0	0.0	0.0
Carrying amount	48.2	0.0	0.0	48.2

Table 5.26 Credit exposures (incl. off-balance sheet items) per LGD and ECL stage

	12 month ECL	Lifetime ECL not credit- impaired	Lifetime ECL credit- impaired	Total
Corporate				
LGD class 1 (low)	0.0	0.0	0.0	0.0
LGD class 2	0.0	0.0	0.0	0.0
LGD class 3	756.9	24.1	0.4	781.4
LGD class 4	211.4	8.2	6.7	226.3
LGD class 5 (high)	469.3	11.8	19.7	500.8
	1,437.6	44.1	26.8	1,508.5
Loss allowance (ECL)	-1.9	-1.4	-21.0	-24.3
Carrying amount	1,435.7	42.7	5.8	1,484.1
Households				0.0
LGD class 1 (low)	107.5	19.9	7.8	135.2
LGD class 2	2,120.3	19.0	8.4	2,147.6
LGD class 3	2,458.0	44.8	12.8	2,515.6
LGD class 4	49.4	2.0	6.4	57.8
LGD class 5 (high)	236.7	12.4	15.0	264.1
	4,971.9	98.0	50.4	5,120.4
Loss allowance (ECL)	-0.7	-2.3	-11.9	-14.9
Carrying amount	4,971.3	95.7	38.5	5,105.5
Other				0.0
LGD class 1 (low)	0.0	0.0	0.0	0.0
LGD class 2	0.0	0.0	0.0	0.0
LGD class 3	0.1	0.0	0.0	0.1
LGD class 4	0.6	0.0	0.0	0.6
LGD class 5 (high)	47.5	0.0	0.0	47.5
	48.3	0.0	0.0	48.3
Loss allowance (ECL)	0.0	0.0	0.0	0.0
Carrying amount	48.2	0.0	0.0	48.2

Class 1	Risk free, e.g. state guarantee
Class 2	Low risk, e.g. share in housing co-operative
Class 3	Medium risk, e.g. other real estate security
Class 4	Increased risk, other guarantees
Class 5	High risk, no collateral

Table 5.27 Credit exposures (incl. off-balance sheet items) per stage migration reason

	Exposure	ECL
Corporate		
Stage 1	1,437.6	1.9
Stage 2: 30 DPD*	0.0	0.0
Stage 2: Other	44.0	1.4
Stage 3	26.8	21.0
Total	1,508.5	24.3
Households		
Stage 1	4,971.9	0.7
Stage 2: 30 DPD*	20.7	0.8
Stage 2: Other	77.4	1.5
Stage 3	50.4	11.9
Total	5,120.4	14.9
Other		
Stage 1	48.3	0.0
Stage 2: 30 DPD*	0.0	0.0
Stage 2: Other	0.0	0.0
Stage 3	0.0	0.0
Total	48.3	0.0

* Days past due

5.8 Counterparty credit risk

Aktia uses the mark-to-market method for calculating counterparty credit risk exposure amounts for OTC derivatives. For securities financing transactions (SFTs), the financial collateral comprehensive method is used.

Derivative contracts are used to ensure an adequate level of net interest income in a low interest rate scenario. In addition, interest rate derivatives are brokered with certain local banks.

Counterparty risk in derivative contracts is the risk of a counterparty not fulfilling its contractual obligations to Aktia when a contract has a positive market value. The counterparty exposures are measured and followed up daily.

To limit and reduce counterparty risks, individual collateral arrangements are used, in accordance with ISDA/CSA (credit support annex) conditions. The ISDA/CSA agreement allows the use of close-out netting agreements, where all positive and negative market values under an agreement can be netted at the counterparty level.

The Group has netting and collateral agreements in place with all counterparties that are credit institutions. The collateral used is mainly cash, but government securities can also be used. At year-end, all received and placed collateral was in cash. In connection with the updating of the variation margin in the ISDA/CSA agreements, rating-based thresholds or minimum

transfer amounts have been significantly reduced. If Aktia were downgraded, the impact would be limited. A one-notch downgrade would result in a EUR 1 million outflow of collateral. Furthermore, all rating-triggered termination events were removed from the agreements.

Counterparty risk in SFTs is limited and reduced in Aktia by using the Global Master Repurchase Agreement with all counterparties. The market value change in the repurchased securities is limited in this agreement, which triggers one of the counterparties to place more collateral when the threshold amount is exceeded.

Aktia had no outstanding credit default swaps at year-end.

In addition to the capital requirement for counterparty risk, derivative transactions result in capital requirements for value change risks related to the counterparty's credit quality (credit valuation adjustment, CVA). The capital requirement for CVA was EUR 1.1 (1.0) million. The Bank is also ready to start to clear derivatives via central counterparties, a clearing house, which then would lower the capital requirement.

The CVA capital charge is presented in Table 5.28.

Derivative contracts are presented in Table 5.29.

Composition of collateral for exposures to counterparty credit risk is presented in table 5.30.

Table 5.28. CVA capital charge*

31 Dec 2018

EUR million	EAD post-CRM	RWA
Total portfolios subject to the advanced CVA capital charge	0.0	0.0
(i) VaR component (including the 3 x multiplier)	0.0	0.0
(ii) Stressed VaR component (including the 3 x multiplier)	0.0	0.0
All portfolios subject to the Standardised CVA capital charge	21.6	13.4
Total subject to the CVA capital charge	21.6	13.4

*EU-CCR2

Table 5.29. Derivative contracts, credit risk mitigation effects

Credit risk mitigation effects, EUR million	31 Dec 2018	31 Dec 2017
Gross positive fair value of contracts	70.0	84.0
Close out netting benefits	-0.4	-5.8
Value after close out netting benefits	69.6	78.2
Received collaterals	-64.0	-76.6
Value after close out netting and received collaterals	5.6	1.7

Table 5.30. Composition of collateral for exposures to counterparty credit risk*

Type of collateral used, EUR million	Collateral used in derivative transactions				Collateral used in SFTs	
	Fair value of collateral received		Fair value of posted collateral		Fair value of collateral received	Fair value of posted collateral
	Segregated	Unsegregated	Segregated	Unsegregated		
Cash	0.0	64.0	0.0	5.4	98.8	0.0
Covered bonds	0.0	0.0	0.0	0.0	0.0	99.0
Total	0.0	64.0	0.0	5.4	98.8	99.0

*EU-CCR5B

6. Market risk

The Bank Group aims to have low market risks and low volatility in its earnings. During the year, the market risk exposures were kept at low levels. Market risks in the Bank Group mainly arise from the interest rate risk in the banking book.

Market risks arise from price and volatility changes in the financial markets. Market risks are divided into interest rate risks, foreign exchange rate risk, and equity and real estate risks.

No trading activities are carried out by the Aktia Group.

6.1 Management, governance and measurement of market risk

The Aktia Group's limit system restricts the size of the exposure to market risks. The main market risk for the Group arises from the interest rate risk. Measurement methods, limits and strategy are prepared in the Executive Committee and the Board's Risk Committee and are thereafter established by the Board of Directors. The Group's Asset and Liability Management Committee is responsible for the operational management of internal group investment assets within the given guidelines and limits. The Bank's Treasury unit carries out transactions in order to manage the structural interest rate risk based on the established strategy and limits.

The Group's Risk Control unit, which continuously monitors the market risks and the associated limits, is responsible for reporting on these risk factors to the Board and the Executive Committee.

6.2 Interest rate risk in the banking book

The main market risk in the Aktia Group is the interest rate risk in the banking book, the structural interest rate risk. Structural interest rate risk arises from mismatches between interest fixing periods and the repricing of assets and liabilities. As well as matching interest fixing periods in lending and borrowing through business management, derivative instruments and fixed-rate investments in the liquidity portfolio are also utilised, with the aim of maintaining net interest income at a stable level and protecting financial performance against sustained low interest rates. The interest rate risks in the Aktia Group are

measured through the change in net interest income and in the net present value of the balance sheet. The interest rate risk in the Bank is continuously monitored by the Treasury unit.

6.2.1 Change in expected earnings (net interest income risk)

Change in expected earnings (i.e. the structural interest rate risk) are simulated using a dynamic asset and liability risk management model. The model takes into account the effects on the structure of the balance sheet, starting from planned growth and simulated customer behaviour. In addition, various interest rate scenarios for dynamic or parallel changes in interest rates are applied. Table 6.1 shows the net effect on the net interest of a parallel shift in the interest rate curve by 100 basis points, both up and down. The table shows that lower market interest rates would have a detrimental effect on net interest rate development, while higher market interest rates would strengthen net interest rate development in the long term. Sensitivity to net interest income (NII) is the result of any mismatch between the interest rate fixing periods for assets and liabilities. The repricing risk in the Bank's demand deposits is normally an important part of the NII sensitivity analysis. The NII risk is calculated and monitored regularly, at least on a monthly basis.

Table 6.1 Structural interest rate risk

Interest sensitivity analysis with a parallel shift in the interest rate curve with 100bps

EUR million Period	Interest rate change	Change in net interest income			
		31 Dec 2018		31 Dec 2017	
		Down	Up	Down	Up
Changes during the next 12 months		0.0	8.1	-0.5	9.0
Changes during 12-24 months		0.6	22.8	-2.5	23.0

6.2.2 Change in economic value

The change in economic value (EV) method is used to calculate the net present value (NPV) of the Bank's interest rate-sensitive items. The EV method measures the NPV for existing assets and liabilities under different interest rate scenarios, ignoring future business flows. However, customer behaviour is taken into account in different interest rate scenarios, e.g. in a low interest rate environment, deposits are modelled to be less sensitive. Customer behaviour for loan prepayments has also been included in the NPV model. The bank has set up limits how much

the NPV can change in a stressed interest rate scenario. Table 6.2 shows the net change in economic value stressed by an interest rate change by 100 basis points, both up and down. The NPV risk is calculated and monitored on a monthly basis.

Table 6.2 Interest rate risk, Net Present Value (NPV)

NPV change in a stressed interest rate scenario with 100 bps both up and down.	Change in economic value compared with the total own funds in %	
	31 Dec 2018	31 Dec 2017
- 100 bps	5.7 %	0.5 %
+ 100 bps	8.9 %	9.4 %

Repricing gap analysis in the Bank Group is presented in table 6.3.

6.3 Foreign exchange rate risk

Foreign exchange (FX) risk is the risk of a negative change in the value of the Bank Group's FX positions caused by fluctuations in exchange rates, particularly against the euro.

Within the banking business, FX transactions are based on customer requirements, which is why most activity involves the Nordic currencies and the US dollar. The guiding principle in managing FX risks is matching. The Treasury unit is responsible for managing the Bank's day-to-day FX position, subject to the limits set.

The FX exposure is insignificant. At year-end, total net FX exposure for the Bank Group amounted to EUR 3.6 (3.5) million.

6.4 Equity and real estate risk

Equity risk relates to changes in value due to fluctuations in share prices. Real estate risk refers to risk associated with a fall in the market value of real estate assets.

No equity trading or investments in real estate are carried out by the Bank Group.

The exposures for equity holdings are insignificant. At the end of the year, real estate holdings amounted to EUR 0.0 (0.1) million, and investments in shares necessary for the business amounted to EUR 3.6 (9.3) million, which decreased as a result of the sale of the holding in Folksam Non-Life Insurance.

Table 6.3 Repricing gap analysis in the Bank Group

EUR million, 31 Dec 2018	Interest rate fixing period						Non-repricing	Total
	Within 3 months	3-6 months	6-12 months	1-2 years	2-5 years	>5 years		
Interest bearing assets	2,867.8	1,805.6	2,029.4	155.8	663.3	243.0		7,764.9
Non-interest bearing asset							304.3	304.3
Total assets	2,867.8	1,805.6	2,029.4	155.8	663.3	243.0	304.3	8,069.2
Interest bearing liabilities	1,184.9	963.7	429.2	1,002.7	3,146.2	680.0		7,406.8
Non-interest bearing liabilities							662.5	662.5
Total liabilities and equity	1,184.9	963.7	429.2	1,002.7	3,146.2	680.0	662.5	8,069.2
Off-balance sheet items, net	-934.0	-428.0	0.0	580.0	679.0	103.0		0.0
Exposure	748.8	413.9	1,600.3	-266.9	-1,803.9	-334.0	-358.1	
Cumulative exposure		1,162.8	2,763.0	2,496.1	692.1	358.1	0.0	

EUR million, 31 Dec 2017	Interest rate fixing period						Non-repricing	Total
	Within 3 months	3-6 months	6-12 months	1-2 years	2-5 years	>5 years		
Interest bearing assets	3,183.2	1,706.7	1,976.6	182.1	529.4	379.1		7,957.1
Non-interest bearing asset							285.1	285.1
Total assets	3,183.2	1,706.7	1,976.6	182.1	529.4	379.1	285.1	8,242.1
Interest bearing liabilities	1,604.5	1,014.2	428.8	1,194.7	2,615.7	701.9		7,559.8
Non-interest bearing liabilities							682.4	682.4
Total liabilities and equity	1,604.5	1,014.2	428.8	1,194.7	2,615.7	701.9	682.4	8,242.1
Off-balance sheet items, net	-934.0	-428.0	0.0	580.0	679.0	103.0		0.0
Exposure	644.7	264.5	1,547.8	-432.6	-1,407.3	-219.8	-397.3	
Cumulative exposure		909.2	2,457.0	2,024.4	617.0	397.3	0.0	

6.5 Measurement and stress testing of the market risk in financial assets available for sale

Interest rate risk consists of changes in the value of financial assets measured at fair value through other comprehensive income due to interest rate fluctuations or changes in the credit spread. The size and maturity of the liquidity portfolio is restricted, and the risk level is managed with a capital limit based on dynamic interest rate shocks (described in more detail in section 6.5.1). In line with the accounting rules, the impact of the rate shock is taken into account only for financial assets measured at fair value through other comprehensive income.

The size of the credit spread risk depends on the prospects for the counterparty, the instrument's seniority, and whether or not the investment has collateral. Regarding contracts traded on active markets, the market constantly values the risk, making credit spread a component of the instrument's market price, and this credit spread is thus usually regarded as part of the market risk.

Changes in market interest rates or credit spreads affect the market value of fixed-income securities. Interest rate fluctuations and the ECL (expected credit loss), the market value adjustments according to the IFRS 9 rules, are reported in the fund at fair value after the deduction of deferred tax, while any write-downs are shown in the income statement.

6.5.1 Sensitivity analysis for interest rate risk, credit spread risk and equity

Interest rate risk: In the sensitivity analysis, interest rate risk is stressed through absolute change factors calculated from the Euribor–euro swaps curve for each rate maturity. The factors are determined from historical data and recalibrated annually. The downward stress represents the 0.5th percentile of the absolute change, and the upward stress the 99.5th percentile. However, due to the current low level of interest rates, a minimum of 100 basis points upwards and 50 basis points downwards is applied for each maturity. Negative result rates are allowed with no flooring, as well as stressing already negative rates.

Credit spread risk: In the sensitivity analysis, credit spread risk is stressed through absolute change factors calculated from a set of collective yield curves from the market. Each security is mapped to the most appropriate curve in the set using factors such as type of investment and rating. The factors are determined from historical data and recalibrated annually. The (upward) stress represents the 99.5th percentile of the absolute changes of the yield curve level, from which the risk-free component has been subtracted.

Equity risk: In the sensitivity analysis, equity risk is calculated simply as a percentage decrease in the market value. The factor is chosen by expert judgement, but it is based on historical data. For listed equities, the factor is 50 %, and for non-listed equities the factor is 60 %.

Table 6.4 Sensitivity analysis for market risks

Banking Group	Assets available for sale 2018		2017	
	EUR million	%	EUR million	%
Market value 31.12.	1,124.0	100.0 %	1,445.4	100.0 %
IR risk up (normal method)	-23.7	-2.1 %	-27.8	-1.9 %
IR risk up (100 bp)	-23.7	-2.1 %	-27.8	-1.9 %
IR risk down (normal method)	18.1	1.6 %	23.3	1.6 %
Spreadrisk	-23.4	-2.1 %	-27.0	-1.9 %
Equity risk	-2.2	-0.2 %	-5.6	-0.4 %
Real estate risk	0.0	0.0 %	0.0	0.0 %

7. Liquidity risk and funding

Aktia's liquidity position remained strong. To ensure sufficient liquidity to support its core operations in stressed financial conditions, the Bank holds a large liquidity reserve.

Liquidity risk is defined as the risk that the Group will not be able to meet its payment obligations as they fall due or that it will be able to meet liquidity obligations only at increased cost.

7.1 Management, governance and measurement of liquidity risk

In the Bank Group, liquidity risks arise because the maturity structures on the asset and liability sides of the balance sheet do not coincide, since lending is generally longer-term than deposits. To ensure market-related refinancing, the Bank strives to maintain a diverse range of funding sources and adequate diversification across different markets and investors. This ensures that the Bank can keep its core business intact for a very long period of time, even if there is extensive disruption in the financial markets. Liquidity risk also occurs if liquid assets are largely concentrated with certain counterparties or in particular instruments or markets.

7.1.1 Management of liquidity risk

Good diversification between different types of sources of funding in various markets and forms of funding instruments is a key component of the funding strategy.

The most important sources of funding are deposits from households, and from small and medium-sized enterprises, as well as covered bonds. During the financial period, Aktia Bank issued a new long-term covered bond with a value of EUR 500 million and a maturity of five years in order to replace a covered bond loan of the same size that was repaid during the period. The stock of covered bonds secured by residential real estate totalled EUR 1,648 (1,648) million. At year-end, Aktia Bank's cover pool of eligible assets, mortgage loans, amounted to EUR 4,242 (4,170) million.

The financing is supplemented by other well-diversified borrowing, such as bonds and certificates of deposit issued on the domestic market, as well as deposits by Finnish institutional investors. The issue of bonds under the domestic programme

amounted to EUR 208 (235) million, which relates to subordinated debts. The Bank will also receive financing from the European Investment Bank within the framework of their programmes for financing small businesses and environmental projects.

In order to achieve a sound funding balance, Aktia actively works to broaden its refinancing base. Over the financial period, Aktia Bank issued new, long-term, unsecured senior bonds worth EUR 250 million. The issues were made in order to replace long-term, unsecured senior bonds that were repaid during the financial period, as well as to ensure that the Bank complies with future regulatory requirements. Long-term, unsecured senior bonds amounted to EUR 807 (806) million.

The diversified funding structure is complemented by a liquidity portfolio comprising highly liquid assets. The portfolio acts as a liquidity buffer against short-term liquidity fluctuations and possible market disruptions in the refinancing market, and it can, if necessary, be realised or used as collateral for financing, either in the market through "repurchase agreements" or by the central bank.

Concentration risks in the liquidity portfolio

Concentrations risk in the liquidity portfolio is managed by limits that are prepared by the Group's Asset and Liability Management Committee and thereafter established by the Board of Directors. Limits are set for e.g. country, counterparty, issuer and instrument types.

The distribution of Aktia Bank's funding sources is presented in Figure 7.1 and the maturity of long-term funding in Figure 7.2.

Figure 7.1 Funding sources

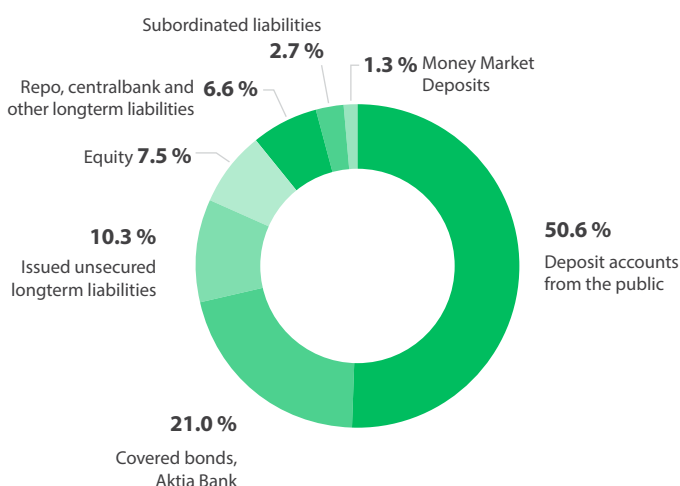
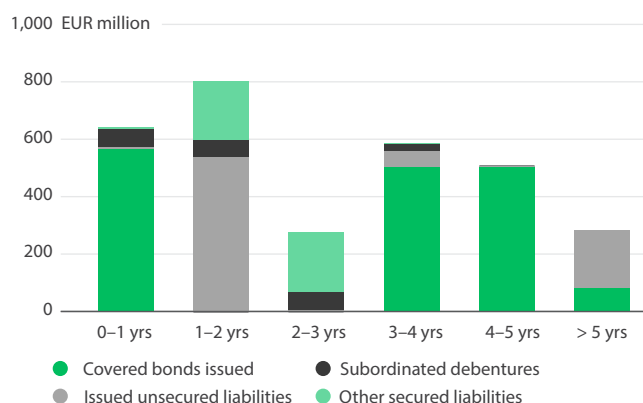


Figure 7.2 Maturity structure for the long-term funding

7.1.2 Governance of liquidity risk

Funding and liquidity risk management is governed by policies and limits established by the Board. The Group's Asset and Liability Management Committee is responsible for managing financing and liquidity risks. The Group's Risk Control unit, which continuously monitors liquidity risks and the associated limits, reports on these to the Board and the Executive Committee. The Treasury unit is responsible for maintaining the Bank's day-to-day liquidity and constantly monitors how Aktia's wholesale assets and liabilities mature. Developments and pricing in the deposit stock are also followed closely. The treasury unit implements the adopted measures to change the liquidity position.

Internal liquidity adequacy assessment process

The Bank Group's liquidity needs are assessed annually in the internal liquidity adequacy assessment process (ILAAP). The Aktia Group's Head of Treasury has the overall responsibility for the ILAAP, including responsibility for the operational liquidity planning and management, as well as for the funding strategy, while the Aktia Group's Head of Risk is responsible for ensuring that the Group has an effective control process, including a process for liquidity management. Risk Control assesses whether significant internal or external changes have occurred that would require an update of the ILAAP, which are reported to the executive management.

Contingency plan

The Bank Group has a contingency plan for managing liquidity crises. The contingency plan contains a clear division of responsibility and instructions for how the Bank should improve a possible liquidity deficit. The plan indicates appropriate measures to handle the various types of crisis situations. Risk Control monitors that a financing continuity plan exists, is sufficient in scope, includes adequate measures and is regularly updated.

7.1.3 Measurement of liquidity risk

The liquidity risk is measured on both short-term and long-term bases. To ensure funding in situations where Aktia is in urgent need of cash and normal funding sources do not suffice, Aktia holds a liquidity reserve. The Board of Directors sets the minimum level for the liquidity reserve. The liquidity reserve consists of highly liquid assets that can easily be sold or used as collateral in funding operations.

Liquidity reserve and stress tests

The liquidity portfolio consists of highly liquid assets to meet liquidity needs in stressed situations. The unencumbered financial assets in the liquidity portfolio, which as described above can be used as a liquidity reserve, including cash and holdings in the central bank, amounted to a market value of about EUR 965 (1,365) million.

Table 7.3. Liquidity reserve, market value

EUR million	31 Dec 2018	31 Dec 2017
Cash and holdings in central banks	246.7	240.7
Securities issued or guaranteed by sovereigns, central banks or multilateral development banks	204.7	342.5
Securities issued or guaranteed by municipalities or Public sector entities	236.4	246.0
Covered bonds	240.8	422.4
Own covered bonds	0.0	0.0
Securities issued by credit institution	36.6	94.8
Securities issued by financial corporates	0.0	10.0
Total	965.1	1,356.4

To monitor liquidity risks, a "survival horizon" is used. The survival horizon measures how long the cash flows of the liquidity reserve will last to cover the contractual outgoing cash flow from the capital market without access to new financing. On 31 December 2018, the Bank Group would survive for over 21 months in a scenario with completely closed capital markets.

Aktia performs stress tests regularly to measure how liquidity disturbances affect the survival horizon in the liquidity reserve.

In these tests, the Bank constructs unlikely but still possible adverse scenarios that would trigger a range of risk drivers. The major risk drivers are:

- Withdrawals of deposits by clients
- Severe utilisation of retail customer credit lines
- Higher collateral requirements due to increased margin calls
- Market disruption resulting in a general fall in the prices of the assets in the liquidity portfolio

The stress tests carried out by the Bank have indicated a good payment capacity even if several different events that have a negative effect on liquidity were to occur simultaneously.

Liquidity ratios

Furthermore, liquidity risks are measured and monitored with the help of the liquidity coverage ratio (LCR) and net stable funding ratio (NSFR). The LCR measures the short-term liquidity risk and aims to ensure that Aktia Bank's liquidity reserve consisting of unencumbered high-quality assets is large enough to meet short-term net outflows in stressed situations in the next 30 days. The internal LCR limit for the Aktia Group is that the ratio must be equal to or more than 110%.

The NSFR measures the structural liquidity risk by measuring the matching of receivables and liabilities with a maturity of over one year on Aktia Bank's balance sheet with the purpose of ensuring that long-term lending is, to a safe extent, financed by long-term funding,

The level of the LCR will fluctuate over time, depending, among other things, on what the maturity structure of the Bank's issued securities looks like. Table 7.4 presents the development of the LCR and NSFR in 2018 for Aktia Bank Group.

Table 7.5 presents detailed information about the liquidity coverage ratio (LCR) according to the EBA's guidelines. The figures presented in the table are from the end of each quarter.

Table 7.4. LCR and NSFR

	31 Dec 2018	30 Sep 2018	30 Jun 2018	31 Mar 2017	31 Dec 2017
LCR %	134 %	118 %	128 %	143 %	161 %
NSFR %	119 %	122 %	120 %	120 %	122 %

EUR million

Liquidity coverage ratio (LCR)	31 Dec 2018	31 Dec 2017
Liquid assets, level 1	808.9	1,113.4
Liquid assets, level 2	25.8	49.3
Total liquid assets	834.7	1,162.7
Total cash outflows	747.4	873.9
Total cash inflows	126.6	151.8
Net cash outflows	620.8	722.0
Liquidity coverage ratio (LCR), %	134 %	161 %

Table 7.5. LCR disclosure*

EUR million Quarter ending on:	Total unweighted value				Total weighted value			
	31 Mar 2018	30 Jun 2018	30 Sep 2018	31 Dec 2018	31 Mar 2018	30 Jun 2018	30 Sep 2018	31 Dec 2018
High-quality liquid assets								
Level 1 assets					663,1	595,8	601,2	651,5
Level 1CB assets					186,5	282,7	191,0	157,4
Level 2A assets					51,0	45,1	56,9	25,8
Total high-quality liquid assets (HQLA)					900,5	923,6	849,0	834,7
Cash-outflows								
Retail deposits	3 321,0	3 382,7	3 402,5	3 406,1	244,4	248,3	251,4	253,1
Stable deposits	2 057,7	2 101,3	2 106,5	2 074,6	102,9	105,1	105,3	103,7
Less stable deposits	1 263,3	1 281,4	1 296,0	1 331,5	141,5	143,3	146,1	149,4
Unsecured wholesale funding	673,7	752,8	777,3	653,7	465,2	516,4	537,7	439,1
Non-operational deposits (all counterparties)	624,0	739,3	678,6	627,9	428,7	514,8	450,9	425,3
Unsecured debt	49,7	13,5	98,7	25,8	36,5	1,6	86,8	13,7
Secured wholesale funding					6,7	1,1	7,2	3,5
Additional requirements	20,7	19,6	19,1	12,7	20,7	19,6	19,1	12,7
Outflow related to derivatives and other collateral requirements	20,7	19,6	19,1	12,7	20,7	19,6	19,1	12,7
Other contractual and contingent funding obligation	447,6	467,0	437,3	379,9	43,1	59,9	65,2	39,1
Total cash outflows					780,1	845,3	880,6	747,4
Cash inflows								
Inflows from non-financial customers	37,3	26,8	30,7	28,5	20,7	15,0	17,0	16,1
Inflows from financial customers	26,0	17,6	21,4	18,2	26,0	17,6	18,1	18,2
Inflows from securities maturing within 30 days	103,1	89,5	126,3	92,3	103,1	89,5	126,3	92,3
Total cash inflows	166,4	134,0	178,4	139,0	149,8	122,2	161,5	126,6
Inflows subject to 75% cap	166,4	134,0	178,4	139,0	149,8	122,2	161,5	126,6
					Total adjusted value			
Total high-quality liquid assets (HQLA)					900,5	923,6	849,0	834,7
Total net cash outflows					630,4	723,1	719,1	620,8
Liquidity coverage ratio (%)					143 %	128 %	118 %	134 %

* EU LIQ1

7.2 Asset encumbrance

Another important part of Aktia's liquidity management consists of retaining significant volumes of unutilised collateral that can be used in the event of disruptions in the financial markets. One prerequisite for being able to pledge additional collateral is for the Bank to have collateral at its disposal from the outset. The Bank therefore retains substantial volumes of unencumbered

assets that could be used as collateral in the issue of covered bonds and highly liquid securities with high credit ratings. The majority of the encumbered assets consist of Aktia Bank's cover pools, which comprise mortgage loans provided as collateral for outstanding covered bonds. Aktia maintains a certain level of over-collateralisation (on top of the level required by the supervisory authority) in the cover pool to be able to withstand a significant price fall in the real estate market.

Table 7.6. Disclosure on asset encumbrance, Median value 2018, EUR Million

Assets*	Carrying amount of encumbered assets	of which notionally eligible EHQLA and HQLA	Fair value of encumbered assets	of which notionally eligible EHQLA and HQLA	Carrying amount of unencumbered assets	of which EHQLA and HQLA	Fair value of unencumbered assets	of which EHQLA and HQLA
EUR million								
Assets of the reporting institution	3,106.6	597.5			4,983.2	1,018.7		
Equity instruments					9.6	0.0		
Debt securities	691.4	591.3	695.3	594.9	918.0	812.1	910.8	815.8
of which covered bonds	501.7	501.6	505.0	505.0	263.0	263.2	260.1	260.1
of which issued by general governments	3.2	3.2	3.2	3.2	410.5	410.5	417.0	417.0
of which issued by financial corporations	688.2	588.1	692.1	591.6	410.9	378.9	407.2	376.0
of which issued by non-financial corporations					73.8		63.8	
Other assets	2,364.5	7.3			4,053.4	206.6		
Collateral received*		Fair value of encumbered collateral received or own debt securities issued		of which notionally eligible EHQLA and HQLA	Fair value of collateral received or own debt securities issued available for encumbrance			of which EHQLA and HQLA
EUR million								
Collateral received by the reporting institution						62,6		62,6
Other collateral received						62,6		62,6
Total assets, collateral received and own debt securities issued		3 106,6		597,5				
Sources of encumbrance*					Matching liabilities, contingent liabilities or securities lent		Assets, collateral received and own debt securities issued other than covered bonds and ABSs encumbered	
EUR million								
Carrying amount of selected financial liabilities						2,228.7		3,106.6

Information on importance of encumbrance*

The main source of encumbrance for Aktia is covered bond issuance programs where the required overcollateralization levels are defined according to the relevant statutory regimes. Other contributors to encumbrance are derivatives, repos and the intraday facility at the central bank. The main source of the unencumbered assets are loans and debt securities. The rest are equity instruments and other assets.

*Template A, B, C, D of EBA/GL/2014/03

8. Risk and capital in the life insurance business

The capital ratio shows steady growth in accordance with the planned development. The unit-linked business continues to grow.

8.1 Risk management system and governance

The board of Aktia Life Insurance is the body with ultimate responsibility for the governance and operation of the company. However, Aktia as a financial Group is governed as an entity, and much of the decision-making takes place in the Group's Board of Directors and its relevant committees.

In particular, concerning matters that typically have an impact on other subsidiaries as well – such as strategy, risk appetite, and ALM – decisions are made at Group level. Also, many of the written policies are common to all subsidiaries within the Group. Matters concerning daily operations of the insurance company – such as insurance production and development, insurance techniques (actuarial matters), sales, etc. – are decided within the insurance company.

The Risk Control unit of Aktia is common to the whole Group, and in practice, the life insurance company's risk control is outsourced to the parent company. The Group has a written policy in which the responsibilities of the Risk Control function are defined. Risk tolerance limits for the life insurance company are set up within the Group's limit policy. The life insurance company also has a risk management plan of its own, which is mainly concerned with identifying and defining the measurement methods for the risks specifically connected to the life insurance company. This document also sets out how risks are measured in the company's Own Risk and Solvency Assessment (ORSA).

The Risk Control unit is led by the Head of Risk Control, who reports to the Group's Board of Directors. The unit must be organised in such a way that it is independent of the business and the support functions that it monitors and controls. It cannot perform the duties it monitors. The Risk Control unit must have adequate and competent resources to perform the control function reliably.

The primary duty of the Risk Control unit is to report on the Group's risk exposure in relation to the risk appetite established under the strategy, independently from the business channels. On a quarterly basis, the unit presents an overview of the

significant risk positions to the Group's Board of Directors and the Risk Committee and provides an assessment of the risk profile. It also reports quarterly to the board of the Life Insurance Company. A report of all activities during the year is presented annually for the Risk Committee of the Group's Board of Directors, which then presents an assessment of the adequacy of the risk management and whether its activities are appropriate.

8.2 Key risks in the life insurance company

In the ORSA of Aktia Life Insurance, the main risk categories are defined to be business risk, insurance (underwriting) risk, operational risk and market risk. In the ORSA of 2018, market risk and insurance risk were the dominant risks, with 65.6 % (66.5 %) and 32.0 % (31.1 %), respectively, of the total correlated risk sum. The correlated risk sum is referred to as the ORSA capital requirement and is calculated alongside the official Solvency II capital requirements. The available capital calculated for the Solvency II framework is compared with these requirements.

The sub-risks for the ORSA capital requirement are calculated using internal methods. For underwriting risk, the method coincides with the Solvency II framework regarding the life and health risk modules, but the correlation differs. The calculation of market risk, which is the largest risk, coincides with the method used for the daily internal market risk limit and is the method used in the sensitivity analysis in section 6.5.1. The macroeconomic stress parameters used, which are the same for Aktia Bank and the life insurance company, are described in section 8.2.1.

8.2.1 Market risk

The market risks considered for the life insurance company are interest rate risk, spread risk, currency (FX) risk, equity risk, real estate risk and concentration risk. For Solvency II purposes, the risks are calculated using the standard Solvency II formula, and for internal purposes using the aforementioned market risk limit stresses as well. This text mainly describes the internal method.

From a risk sensitivity perspective, the largest risks (in this order) are interest rate risk, real estate risk and equity risk. For the interest-linked technical provisions, all other risks except interest rate risk are of negligible size, and interest rate risk remains large after the netting effect of the covering portfolio is added. For the unit-linked policies, the netting effect is much bigger in general, as the customer bears the largest part of the risk. The largest risk after netting for the unit linked side is equity risk.

Interest rate risk here refers to the risk of change in the risk-free rate. It is the main risk for the technical provisions. It affects profitability through the spread between rate of return and guaranteed customer rate, but it also affects capital adequacy through the fair value valuation of assets and liabilities imposed by the Solvency II framework. From this point of view, the interest rate risk is the most important ALM risk, and it arises from the difference between incoming and outgoing future cash flows.

In the sensitivity analysis, interest rate risk is stressed through percentage change factors calculated from the Euribor–euro swaps curve for each rate maturity. The factors are determined from historical data and recalibrated annually. The downward stress represents the 0.5th percentile of all observed absolute rate changes, and the upward stress the 99.5th percentile. Minimum stresses of at least 100 basis points upwards and 50 basis points downwards are applied for each maturity with no flooring and allowing stressing of already negative rates.

Credit spread risk, or simply “spread risk”, is the risk connected to a change (increase) in default risk for a specific counterparty. The spread risks of the life insurance company are mostly implicitly priced by the market by observation of such factors as the seniority, collateralization and credit rating of the security. Spread risk has continued to shrink; however, it remains the third-largest market risk, totalling EUR 15.4 (19.4) million at year-end. On the asset side, roughly the same instruments (fixed-income securities) are subject to both spread and interest rate risk, but as the interest-linked technical provisions are not subject to spread risk, this risk is one-sided, unlike the interest rate risk. The only practical way to hedge against spread risk is therefore through credit derivatives. These, however, are currently not used by the company. As there are no equities in the interest-linked portfolio, a higher spread risk is indeed the natural consequence of a portfolio yielding a higher return. Fixed-income still dominates the interest-linked portfolio, with a total of EUR 428.8 (467.1) million, or 78 % (81 %), at year-end.

In the sensitivity analysis, spread risk is stressed through absolute change factors calculated from a set of collective yield curves from the market. Each security is mapped to the most appropriate curve in the set using factors such as type of investment and rating. The factors are determined from historical data and recalibrated annually. The (upward) stress represents the 99.5th percentile of the absolute changes of the yield curve level, from which the risk-free component has been subtracted.

FX risk arises from changes in the exchange rate against the base currency (the euro). The FX risk on the interest-linked side arises from positions in mutual fixed-income funds investing in emerging markets and high-yield bonds issued in USD and local currencies. Also, some positions in private equity funds are in foreign currencies. On the unit-linked side, exposures come from mutual funds (interest and equity) investing in foreign-currency instruments. Mutual funds investing in a non-euro geographic area but officially denoted in euros typically include currency

risk as well, which is considered in the risk calculation. FX risk is noteworthy on both the interest-linked and the unit-linked sides.

In the sensitivity analysis, each currency is shocked both downwards and upwards, and the worst case for each currency is chosen, after which the effect is summed over all currencies (without correlation). The stress factors are determined from historical data and recalibrated annually, representing the 0.5th percentile and the 99.5th percentile, respectively, of the percentage changes in exchange rate. The total FX risk at year-end was EUR 13.8 (6.7) million, of which EUR 10.3 (4.0) million arose in the interest-linked portfolio.

Equity risk reflects possible decreases in the value of equities. In the portfolio covering interest-linked policies, the equity risk has arisen only from private equity funds and similar assets that cannot be sold immediately. The company has discontinued its long-held policy of disposing of these investments, and private equity and private credit are on the rise again. The total position at year-end is now EUR 4.5 (1.7) million. On the unit-linked side, equity risk is the most substantial risk. This is mostly due to volume: as the majorities of unit-linked securities are equity or mixed mutual funds, the company’s share of risk remains substantial even after netting assets and technical provisions. The market value for the unit-linked portfolio was EUR 756.8 (802.3) million at year-end, and the size of equity risk was EUR 16.9 (17.3) million, of which EUR 14.0 (16.2) million was due to the unit-linked portfolio.

Real estate risk reflects possible decreases in the value of owned real estate. The real estate risk of the company arises from positions in real estate funds and physical real estate. At year-end, the total real estate position was EUR 67.2 (77.9) million. Real estate risk is the second largest of the market risks, and though the real-estate position at year end is lower than it has typically been during the year (due to some recent sales), it should be noted that leveraging is used in several of the cases, which increases the risk involved. Therefore, the actual real-estate risk at year-end measured EUR 25.2 (24.3) million, although the multiplicative risk factor used is only 25%. On the unit-linked side, it is of negligible importance.

In the sensitivity analysis, equity risk is calculated simply as a percentage decrease in market value. The factor is chosen by expert judgement but based on historical data. For equities, the factor is -50 % (listed equity) or -60 % (private equity), and -25 % for real estate.

Table 8.1 Allocation of holdings in the interest linked portfolio

EUR million	31 Dec 2018		31 Dec 2017	
Equities	0.0	0.0 %	0.0	0.0 %
Fixed-income	428.8	77.7 %	467.1	81.3 %
Government bonds	84.3	15.3 %	104.9	18.3 %
Financial sector bonds in total	188.6	34.2 %	198.2	34.5 %
Covered bonds	165.8	30.1 %	174.1	30.3 %
Senior bonds	14.7	2.7 %	19.2	3.3 %
Subsenior bonds	8.1	1.5 %	4.8	0.8 %
Other corporate in total	61.3	11.1 %	76.0	13.2 %
Senior bonds	60.8	11.0 %	75.5	13.1 %
Subsenior bonds	0.5	0.1 %	0.6	0.1 %
Emerging markets bonds	46.9	8.5 %	44.5	7.7 %
High yield bonds	19.5	3.5 %	20.3	3.5 %
Trade Finance	28.2	5.1 %	23.3	4.1 %
Alternative investments	4.5	0.8 %	1.7	0.3 %
Private Equity & Venture capital	4.5	0.8 %	1.7	0.3 %
Hedge funds	0.0	0.0 %	0.0	0.0 %
Real estate	67.2	12.2 %	77.9	13.6 %
Directly owned	38.6	7.0 %	54.9	9.6 %
Real estate funds	28.5	5.2 %	23.0	4.0 %
Money market	0.0	0.0 %	0.0	0.0 %
Cash at bank	51.1	9.3 %	27.9	4.9 %
Total	551.5	100.0 %	574.5	100.0 %

Table 8.2 Sensitivity analysis for market risk

	Portfolio		Technical provisions*		Total			
	31 Dec 2018	31 Dec 2017	31 Dec 2018	31 Dec 2017	31 Dec 2018		31 Dec 2017	
	EUR million	EUR million	EUR million	EUR million	EUR million	%**	EUR million	%
Life insurance company								
Interest linked								
Market value 31 Dec	500.4	546.6	-425.9	-452.2	74.5	61.9 %	94.4	66.2 %
IR risk up	-16.0	-19.2	39.1	42.0	23.1	19.2 %	22.8	16.0 %
IR risk down	17.7	22.3	-69.6	-75.0	-51.9	-43.1 %	-52.7	-37.0 %
Spread risk	-14.2	-18.0	0.1	0.0	-14.1	-11.7 %	-17.9	-12.6 %
Currency risk	-10.0	-4.0	0.1	0.1	-9.9	-8.2 %	-3.9	-2.7 %
Equity risk	-2.9	-1.1	0.0	0.0	-2.9	-2.4 %	-1.1	-0.8 %
Real estate risk	-25.2	-24.3	0.2	0.3	-25.0	-20.8 %	-24.1	-16.9 %
Unit- and index linked								
Market value 31 Dec	756.8	802.3	-711.0	-754.1	45.8	38.1 %	48.2	33.8 %
IR risk up	-14.4	-13.3	14.8	13.8	0.4	0.3 %	0.6	0.4 %
IR risk down	16.9	15.9	-10.5	-13.2	6.4	5.3 %	2.7	1.9 %
Spread risk	-17.8	-19.6	16.5	18.2	-1.3	-1.1 %	-1.5	-1.0 %
Currency risk	-56.0	-37.4	52.1	34.6	-3.9	-3.2 %	-2.8	-2.0 %
Equity risk	-200.8	-216.6	186.8	200.3	-14.0	-11.6 %	-16.2	-11.4 %
Real estate risk	0.0	0.0	0.0	0.0	0.0	0.0 %	0.0	0.0 %
Total								
Market value 31 Dec	1,257.2	1,348.9	-1,136.9	-1,206.3	120.3	100.0 %	142.6	100.0 %
IR risk up	-30.4	-32.4	53.9	55.8	23.5	19.5 %	23.4	16.4 %
IR risk down	34.6	38.2	-80.1	-88.2	-45.5	-37.8 %	-50.0	-35.0 %
Spread risk	-32.0	-37.6	16.6	18.2	-15.4	-12.8 %	-19.4	-13.6 %
Currency risk	-66.0	-41.4	52.2	34.7	-13.8	-11.5 %	-6.7	-4.7 %
Equity risk	-203.7	-217.7	186.8	200.3	-16.9	-14.0 %	-17.3	-12.1 %
Real estate risk	-25.2	-24.3	0.2	0.3	-25.0	-20.8 %	-24.1	-16.9 %

* The market value of the technical provisions is a risk-neutral value which is obtained by discounting simulated cashflows. Therefore it differs from the book value of the technical provisions.

** The percentage is the portion of the total market value (120,3 for 2018)

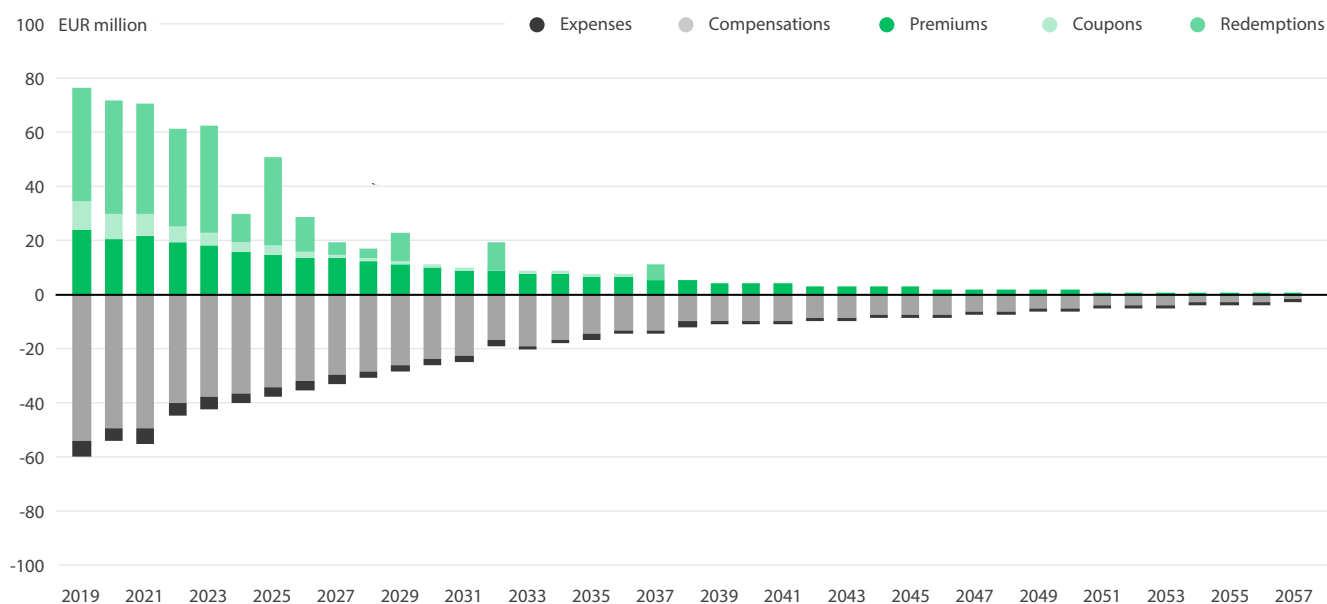
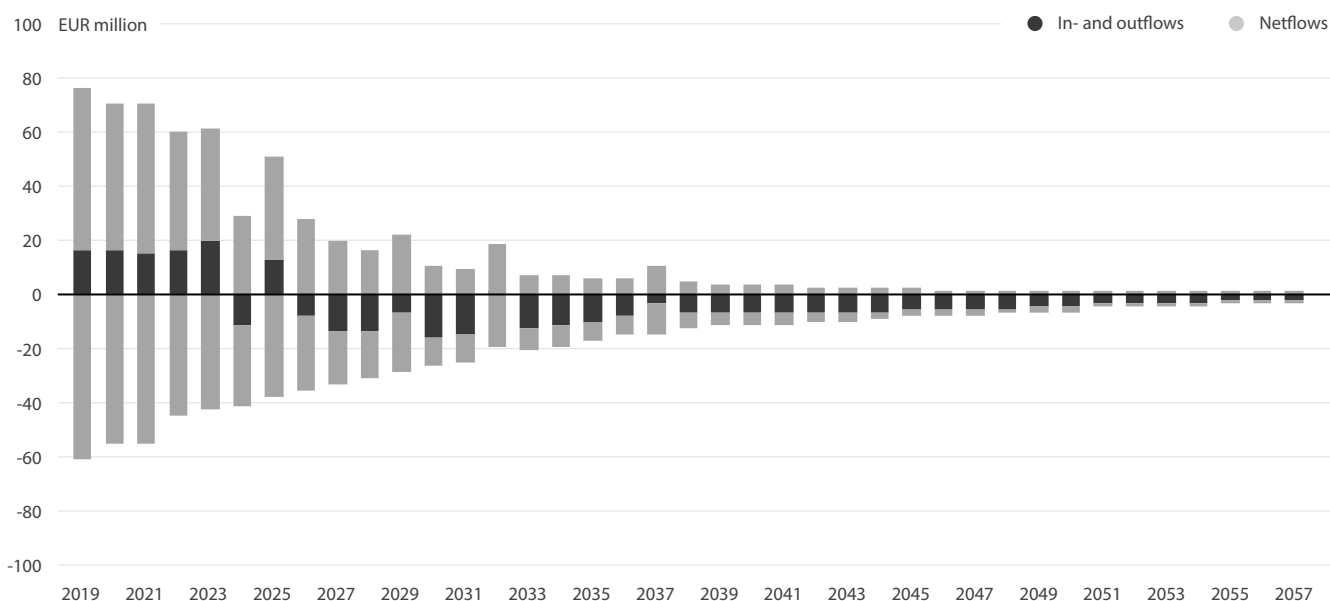
Table 8.3 Technical provisions by policy type and guaranteed rate

EUR million	TP 31 Dec 2018	%	Premiums	Claims paid	Expense charges	Guar- anteed interest	Bonuses	TP 31 Dec 2017
Group pension	55.4	4.8 %	2.1	3.7	0.2	2.0	0.0	54.6
3,5 %	53.8	4.7 %	2.1	3.5	0.2	2.0	-	53.6
2,5 %	0.1	0.0 %	-	0.0	0.0	0.0	-	0.1
1,0 %	1.5	0.1 %	-	0.2	0.0	0.0	0.0	0.9
Individual pension insurance	247.3	21.4 %	3.1	25.6	0.5	10.2	-	258.3
4,5 %	160.5	13.9 %	0.3	17.8	0.3	7.5	-	171.4
3,5 %	57.4	5.0 %	-	5.4	0.1	2.0	-	59.7
2,5 %	23.6	2.0 %	-	2.3	0.0	0.6	-	23.9
1,0 %	5.8	0.5 %	2.8	0.0	0.1	0.1	-	3.4
Savings insurance	52.6	4.5 %	0.8	7.6	0.2	1.5	-	56.2
4,5 %	3.3	0.3 %	0.1	3.4	0.0	0.2	-	6.4
3,5 %	19.4	1.7 %	0.5	1.4	0.1	0.7	-	19.8
2,5 %	29.8	2.6 %	0.2	2.8	0.1	0.6	-	29.9
Risk insurance	24.7	2.1 %	20.2	11.4	6.7	0.8	0.1	26.7
Unit linked insurance	756.8	65.5 %	78.7	62.1	8.7	-	-	802.3
Savings insurance	622.5	53.9 %	71.7	59.0	7.1	-	-	655.3
Individual pension insurance	121.1	10.5 %	5.3	3.1	1.5	-	-	133.2
Group pension	13.2	1.1 %	1.7	0.0	0.2	-	-	13.9
Reservation for increased life expectancy	3.0	0.3 %	-	-	-	-	-	3.2
Reservation for lowered discount rate	16.0	1.4 %	-	-	-	-	-	16.0
	1,155.7	100.0 %	104.9	110.4	16.4	14.5	0.1	1,217.3

Table 8.4 Estimated Technical Provisions cash flow distribution (outflows) over time for interest linked policies

31 Dec 2018

EUR million	Duration	2019-2020	2021-2022	2023-2027	2028-2032	2033-2037	2038-2047	2048-2057	2058-
Savings insurance	10.0	14.1	8.8	13.2	8.9	6.5	7.4	4.4	3.9
4,5%	5.9	1.3	0.7	1.5	0.7	0.2	0.2	0.1	0.0
3,5%	8.9	8.2	3.9	4.0	3.1	2.2	3.0	1.6	1.7
2,5%	11.4	4.6	4.3	7.6	5.2	4.0	4.2	2.7	2.2
Pensions	10.7	55.1	50.6	112.2	81.1	52.7	65.2	31.7	13.8
4,5%	6.8	41.7	36.1	71.8	40.4	15.7	7.9	1.8	0.5
3,5%	11.4	16.6	16.7	36.1	31.7	24.3	32.6	15.7	8.9
2,5%	11.5	2.5	2.4	6.7	6.2	5.6	8.2	3.8	0.8
1,0%	14.7	-5.8	-4.7	-2.4	2.9	7.1	16.4	10.4	3.7
Other insurance	9.2	4.7	-3.3	-10.6	-9.6	-7.1	-9.0	-3.7	-1.0
Total	10.1	73.8	56.1	114.8	80.5	52.0	63.6	32.4	16.8

Figure 8.5. Cash flow distribution and mismatch of interest linked policies - Technical Provisions vs. portfolio (EUR million)**Mismatch of in- and outflows****8.2.2 Underwriting risk**

Aktia Life Insurance provides voluntary pension insurance, life insurance and savings insurance. Due to laws regarding insurance contracts, the company has quite limited scope to influence premium levels or to change the terms of existing contracts. The sufficiency of premiums is monitored on a yearly basis. For new policies, the company is free to set the premium levels, which are decided by the Board after a proposal from the

chief actuary. Reinsurance is used to limit the liability, ensure that the solvency capital is adequate, and prevent the profit from fluctuating too much.

In this context, underwriting risk is the risk that the future cash flows from existing insurance policies will not be consistent with the ones estimated in the valuation of the technical provisions. Therefore, it is a model risk and represents the risk connecting the actual outcome to the model used for technical provisions.

In the company's ORSA, the primary underwriting risks are estimated with the same method as in the standard Solvency II formula; only the final correlation differs in order of application. The same methods and parameters are used for the risk analysis within this text. The risks considered are mortality risk and longevity risk, disability risk, lapse risk, expense risk and catastrophe risk, and all of the aforementioned are considered separately for policies classified as mainly life policies or mainly health policies.

At year-end, the total life risk was EUR 53.4 (56.1) million correlated, and EUR 72.2 (75.5) million uncorrelated. Health risk was EUR 15.3 (16.4) million correlated and EUR 15.6 (16.6) million uncorrelated.

Mortality risk is stressed through a 15 % increase in mortality, and mostly arises from life insurance policies. At year-end, the risk for life insurance was EUR 6.3 (6.4) million, and for health insurance it was below EUR 0.1 (below 0.1) million.

Longevity risk is stressed through a 20 % decrease in mortality, and mostly arises from pensions and savings policies. At year-end, the risk for life insurance was 6.2 (6.5) million, and for health insurance it was below EUR 0.1 (below 0.1) million.

Disability risk is stressed as a combination of an increase of 35 % in the assumed disability rates during the next year and 25 % during the following years, as well as a decrease of 20 % in the recovery rates. For health insurance policies, a 5 % increase in healthcare expenses is used, combined with a one-percentage-point increase in the assumed inflation rate. The risk mainly arises from policies covering disability and health expenses. At year-end, the risk for life insurance was EUR 0.5 (0.5) million, and it was EUR 12.8 (13.7) million for health insurance.

Lapse risk is calculated as the worst of three stress scenarios: an increase in lapse frequency, a decrease in lapse frequency, and a mass lapse event. This is estimated to be the largest underwriting risk, and at year-end, the risk for life insurance was EUR 40.0 (42.0) million, and it was EUR 3.8 (3.6) million for health insurance.

Expense risk is stressed through a 10% increase in the assumed future expense, combined with a one-percentage-point increase in the assumed inflation rate. Expense risk is the second largest of the underwriting risks. At year-end, the risk for life insurance was EUR 14.7 (15.9) million, and it was EUR 2.7 (3.1) million for health insurance.

Catastrophe risk is stressed through estimated effects on different catastrophic events. For life insurance policies, this consists of an increase of 0.15 percentage points in mortality rates during the following year. For health insurance policies, a combination of a large-scale accident, an accident in a location with a large concentration of policyholders, and a pandemic is considered. At year-end, the risks were EUR 4.5 (4.1) million and EUR 0.4 (0.4) million for life and health, respectively.

8.3 Capital management and solvency position

The capital planning process of Aktia Life Insurance is, to a large extent, subordinated to the Group's process, which is carried out in parallel with the ICAAP planning of Aktia Group. Temporally, the ICAAP planning process coincides with the ORSA planning, which enables parallel work to the extent it is possible.

The Group's goal is to allocate the capital within the parent company and the subsidiaries, so that an efficient and, at the same time, reassuring capitalisation rate can be achieved for all companies. The Group's policy has, in recent years, been that the life insurance company maintains sufficient capital to cover the necessary regulatory requirements, but that any surplus capital is transferred to the parent company.

Aktia Life Insurance has been granted permission to use the transition rule for technical provisions in its calculation of the Solvency II available capital, with the limitations in accordance with Article 308d (4) that the Finnish FSA has set out for all companies that have applied for this rule to be used. The capital structure of the company is fairly straightforward, and at year-end, all available capital was Tier 1 capital eligible for covering both the SCR and MCR. At the end of Q4 2018, the eligible solvency capital was EUR 175.5 (169.5) million, and the SCR was EUR 76.3 (85.1) million, resulting in a solvency ratio of 229.8 % (199.2 %). The ratio for the MCR of EUR 22.7 (23.9) million was 772.9 % (708.0 %). Without transition rules, the eligible capital was EUR 125.8 (116.3) million, the SCR was EUR 88.9 (98.6) million, and the solvency ratio was 141.5 % (117.9 %). The ratio for the MCR of EUR 24.7 (26.1) million was 509.6 % (446.0 %).

The interest-linked technical provisions include a reserve of EUR 16.0 million, in order that the investment yield requirement in future years might be decreased. According to the calculations, this reserve is due to be dissolved during the years 2020–2033, at a pace such as to guarantee that the investment income will cover the expected interest payments from the insurance obligations. After 2020, the yield requirement is expected to be below 3.1%, taking this dissolution into account.

9. Operational risk

9.1 The management of operational risks

Operational risks are the risk of losses arising from unclear or incomplete internal processes or instructions, deficient or unreliable systems, and inadequate or unreliable information, as well as those caused by staff – including human error – or by external events. Operational risks include legal risks but not strategic risks.

The realisation of an operational risk could result in direct or indirect economic losses for Aktia, but it could also constitute a threat to the reputation of the Group.

The framework for the management of operational risks in the Group is adopted by the Board of Directors on a yearly basis. According to the framework, critical functions of the Group, including outsourced functions, are to be risk assessed on a yearly basis. Operational risks are present in all of Aktia's operations. The risk management policy requires that the level of operational risk should be normal in comparison to the activities of Aktia and its competitors. This is achieved through a thorough insight into business activities, good and well-functioning internal control mechanisms, risk-aware leadership and competent staff.

The Board of Directors approves key risk indicators (KRIs) for operational risks annually. They are reported to management and the Board of Directors on a quarterly basis.

The responsibility for managing operational risks lies with the risk owner, i.e. the management of the different business areas and their respective organisation. Risk management requires continuous development of the quality of the different internal processes and the internal controls embedded in them within the whole Group. It also requires the ability to identify emerging areas of risk.

Risk assessments are to be performed by the risk owners and their organization with the help of standard assessment models. The risk assessments can also be supported by the Operational Risk Management team within the Risk Control function of the Group in the second line of defence. According to the framework, the risk assessments are performed as traditional risk and control assessment, and they are complemented with risk self-assessments. Risk assessments result in identified risks or risk areas, which are then evaluated for their probability and their potential impact. The risk owner or the appropriate decision-

making bodies in the organisation should then determine how these risks or risk areas are to be managed and what mitigating actions should be taken. Certain operational risks can also be accepted. The identified risk areas are followed up by the risk owner on a regular basis, and the effects of the risk-mitigating actions are also evaluated.

In 2018, the focus areas in assessing and managing operational risks were: new processes introduced and operational efficiency.

Adequate internal instructions for the functions, processes and staff are in place as a preventive measure in order to reduce operational risks in central and high-risk areas. The instructions cover, among other things, internal controls, legal risks, staff risks, principles for continuity and contingency planning, measures to prevent money laundering and financing of terrorism, as well as the implementation of financial sanctions.

In 2018, emphasis was still placed on the overall management of operational risks. The same applied to work in the line of preventing moneylaundering and financing of terrorism (AML/CTF), including enhanced know-your-customer process. Special focus was also placed to improve IT risk management after extensive insourcing of core banking systems.

Despite well-functioning internal controls, risk events (incidents) do occur. All functions and branches are required to report not only incidents with financial implications, but also "close calls". The Operational Risk Management team within Risk Control at Group level analyses incident information and escalates important issues to the risk owner for action, including for risk mitigation measures at the process or Group level. The root causes of the risk event – i.e. failures in processes, systems, know-how or internal controls – are analysed. Rapid and proactive management of any customer impact is also sought.

Risk Control is responsible for reporting its assessment of the management of operational risk within the first line of defence to the Board of Directors every quarter.

Before launching new products, services or processes, or introducing material changes in previously existing products, services or processes, a new product approval process is applied to identify the risks associated with the new product, service or changed process. The purpose is to ensure that the introduction of products, services or processes has been carefully thought through.

The management of each business area is responsible for ensuring that the processes and procedures are adapted to Aktia's strategy and the goals established by the Group's executive management, and that the internal instructions are sufficient. As part of an efficient internal control system, process documents are created for critical processes. Each manager is responsible for full compliance with the instructions within the area managed.

In addition to the preventive work aimed at avoiding or mitigating operational risks, efforts are also made within the Group to maintain adequate insurance cover for damage that can occur as a result of the realisation of such risks.

9.2 Information security management system and data protection

The Board of Directors approves annual KRIs for information security, and the CEO annually approves a revised version of the information security policy, which is based on ISO 27001, as well as all relevant regulatory requirements. To further maintain the high level of awareness of information security within the organisation, there are a training programme for information security awareness and a process for information security incident management, and information security assessments are conducted regularly.

The IT function assesses its operational risk level quarterly, and the key risks are reported to the Board of Directors. Furthermore, a new information security manager (CISO) role was established in Q3 2018 in the first line of defence. The CISO has responsibility for implementing the IT security framework within Aktia Group. The CISO is also responsible for reporting frequently to the management on operational IT security. The assessment of the risk level is based on a set of objectives especially for IT governance and IT processes, as well as for continuity and disaster recovery plans.

Aktia has appointed a data protection officer (DPO) in the second line of defence. The DPO is in charge of monitoring compliance with the GDPR and other applicable data protection legislation and provides information and advice on data protection related matters. The DPO reports regularly to the management and to the Board of Directors.

10. Regulatory development

New regulations for financial institutions continuing

On 23 November 2016, the European Commission made a proposal to amend Regulation (EU) No 575/2013 and Directive 2013/36/EU. This proposal includes e.g. a binding leverage ratio, a binding NSFR, amendments to the large exposures framework and other relevant amendments. There is a political compromise on this issue, and new legislation will be discussed in the EU's legislative forums during 2019.

According to the proposal, the level of leverage ratio will be set to 3 %. Aktia reported a leverage ratio of 4.7 % at year-end 2018. According to the proposal, the NSFR will be set to minimum level of 100 %. Aktia reported an NSFR level of 119 % at year-end 2018.

The local supervisor, the Financial Supervisory Authority (FIN-FSA), decided in 2016 after a supervisory review the level of required capital buffers for each regulated institution. This requirement was set for Aktia at a level of 1.75 %, and became applicable from 30 June 2017.

FIN-FSA has set a minimum risk weight level of 15% for residential mortgage loans applicable to credit institutions that have adopted the internal ratings-based approach for the calculation of capital requirements. The decision on the 15% minimum risk weight entered into force from 1 January 2018 and will be valid for two years. This requirement increased Aktia's risk-weighted assets by EUR 225.9 million on 31 December 2018.

Macroprudential decisions: FIN-FSA decides every three months on the level of the countercyclical buffer. The most recent decision was made on 20 December 2018, and it was 0%. The systemic risk buffer requirement was introduced as part of FIN-FSA's macroprudential toolkit as of 1 January 2018. The board of the Financial Supervisory Authority has decided to put into place systemic risk buffer requirements for Finnish credit institutions. According to the Financial Supervisory Authority, the buffer requirement aims to strengthen the credit institutions' structural systemic risk tolerance. The requirement varies between the credit institutions, and a 1% systemic risk buffer has been set for Aktia Bank.

The Basel Committee's oversight body, the Group of Central Bank Governors and Heads of Supervision (GHOS), endorsed in December 2017 the outstanding Basel III post-crisis regulatory reforms. The reforms include, among other things, the following elements:

1. A revised standardised approach for credit risk, which will improve the robustness and risk sensitivity of the existing approach
2. Revisions to the internal ratings-based approach for credit risk, where the use of the most advanced internally modelled approaches for low-default portfolios will be limited
3. Revisions to the credit valuation adjustment (CVA) framework, including the removal of the internally modelled approach and the introduction of a revised standardised approach
4. A revised standardised approach for operational risk, which will replace the existing standardised approaches and the advanced measurement approaches
5. Revisions to the measurement of the leverage ratio and a leverage ratio buffer for global systemically important banks (G-SIBs), which will take the form of a Tier 1 capital buffer set at 50% of a G-SIB's risk-weighted capital buffer
6. An aggregate output floor, which will ensure that banks' risk-weighted assets (RWAs) generated by internal models are no lower than 72.5% of RWAs as calculated by the Basel III framework's standardised approaches; banks will also be required to disclose their RWAs based on these standardised approaches.

This revised standard will take effect according to the proposal from 1 January 2022 and will be phased in over five years. The legislative process to implement this Basel reform in EU legislation has started.

European banking crisis management rules were established from the beginning of 2015. In Finland, local legislation was implemented and a new authority was established, called the Financial Stability Authority. The Financial Stability Authority has drawn up a resolution plan for Aktia. On 23 October 2016, the European Commission published a proposal amending the BRRD. This proposal also includes a review of the MREL requirement.

List of abbreviations

ALCO	Asset and Liability Committee	ISO	International Organisation for Standardisation
ALM	Asset and Liability Management	KYC	Know your customer
AT1	Additional Tier 1	LCR	Liquidity coverage ratio
BRRD	Banking Recovery and Resolution Directive	LGD	Loss given default
CCF	Credit conversion factor	LTV	Loan-to-value
CCP	Central counterparty	MCR	Minimum capital requirement
CET1	Common equity tier 1	MDB	Multilateral development bank
CEO	Chief Executive Officer	MREL	Minimum requirement for own funds and eligible liabilities
CFO	Chief Financial Officer	NII	Net interest income
CRD	The EU's Capital Requirements Directive	NSFR	Net stable funding ratio
CRM	Credit risk mitigation	ORSA	Own Risk and Solvency Assessment
CRR	The EU's Capital Requirements Regulation	O-SII	Other systemically important institutions
CVA	Credit valuation adjustment	OTC	Over-the-counter
DPD	Days past due	PD	Probability of default
DR	Default rate	PFE	Potential future exposure
EAD	Exposure at default	P&L	Profit and loss
EBA	European Banking Authority	PIT	Point-in-time
ECL	Expected credit losses	PSE	Public sector entity
EL	Expected loss	REA	Risk exposure amount
EU	European Union	ROE	Return on equity
EV	Economic value	RW	Risk weight
FIN-FSA	Finnish supervisory authority	RWA	Risk-weighted assets
FX	Foreign exchange	SA	Standardised approach
FVOCI	Fair value through other comprehensive income	SCR	Solvency capital requirement
FVTPL	Fair value through profit or loss	S&P	Standard & Poor's
GDPR	General data protection regulation	SME	Small and medium-sized enterprise
HQLA	High-quality liquid assets	SREP	Supervisory review and evaluation process
ICAAP	Internal Capital Adequacy Assessment Process	STFs	Securities financing transactions
IFRS	International Financial Reporting Standard	T2	Tier 2
ILAAP	Internal liquidity adequacy assessment process	TTC	Through-the-cycle
IRB	Internal ratings-based approach	TP	Technical provisions
IRRBB	Interest rate risk in the banking book	VaR	Value at risk
ISDA/CSA	International Swaps and Derivatives Association/ Credit Support Annex		

Appendix

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Appendix 1.

Appendix 1 a. Differences between accounting and regulatory scopes of consolidation and mapping of financial statement categories with regulatory risk categories*

31 Dec 2018

EUR million	Carrying values as reported in published financial statements	Carrying values under scope of regulatory consolidation	Carrying values of items:		
			Subject to credit risk framework	Subject to counterparty credit risk framework	Not subject to capital requirements or subject to deduction from capital
Assets					
Cash and balances with central banks	289.2	289.2	289.2	0.0	0.0
Financial assets available for sale	1,340.9	1,117.2	1,117.2	0.0	0.0
Financial assets held until maturity	308.0	239.0	239.0	0.0	0.0
Derivative instruments	70.0	70.0	0.0	70.0	0.0
Loans and other receivables	6,129.1	6,126.4	6,126.4	0.0	0.0
Investments for unit-linked insurances	902.7	3.6	3.6	0.0	0.0
Investments in associated companies	0.1	0.1	0.1	0.0	0.0
Investments in group companies	0.0	46.2	39.1	0.0	7.1
Intangible assets	66.7	66.3	0.0	0.0	66.3
Investment properties	39.1	0.0	0.0	0.0	0.0
Other tangible assets	3.2	3.2	3.2	0.0	0.0
Total other assets	114.9	105.8	105.8	0.0	0.0
Tax receivables	2.4	2.4	2.4	0.0	0.0
Total assets	9,266.1	8,069.2	7,925.8	70.0	73.4
Liabilities					
Deposits	4,565.1	4,613.6	0.0	0.0	0.0
Derivative instruments	17.1	17.1	0.0	0.0	0.0
Other financial liabilities	2,813.7	2,813.7	0.0	99.0	0.0
Technical provisions	1,155.7	0.0	0.0	0.0	0.0
Total other liabilities	70.8	66.8	0.0	0.0	0.0
Provisions	0.0	0.0	0.0	0.0	0.0
Tax liabilities	53.6	47.3	0.0	0.0	0.0
Total liabilities	8,676.1	7,558.5	0.0	99.0	0.0

*Template LI1

Appendix 1b. Template LI2: Main sources of differences between regulatory exposure amounts and carrying values in financial statements

31 Dec 2018

EUR million	Total	Items subject to:	
		Credit risk framework	Counterparty credit risk framework
Asset carrying value amount under scope of regulatory consolidation (as per template LI1)	7,995.8	7,925.8	70.0
Liabilities carrying value amount under regulatory scope of consolidation (as per template LI1)	99.0	0.0	99.0
Total net amount under regulatory scope of consolidation	8,094.8	7,925.8	169.0
Off-balance sheet amounts	491.6	238.2	0.0
Differences in derivative exposure amounts	0.0	0.0	11.3
Differences due to consideration of provisions	0.0	14.0	0.0
Credit value adjustment (CVA)	0.0	0.0	21.6
Credit risk mitigation techniques affecting the exposure amount: financial collateral, comprehensive method	0.0	-46.4	-158.7
Other adjustments	0.0	1.2	0.0
Exposure amounts considered for regulatory purposes	0.0	8,132.8	43.2

* Template LI2

Appendix 2. Own funds disclosure template

EUR million, 31 Dec 2018

Transitional own funds disclosure template

		(A) Amount at disclosure date	(B) Regulation (EU) No 575/2013 article reference	(C) Amounts subject to pre- regulation (EU) No 575/2013 treatment or prescribed residual amount of regulation (EU) No 575/2013
Common Equity Tier 1 (CET1) capital: instruments and reserves				
1	Capital instruments and the related share premium accounts	163.0	26 (1), 27, 28, 29, EBA list 26 (3)	
	of which: Share capital	163.0	EBA list 26 (3)	
2	Retained earnings	185.5	26 (1) (c)	
3	Accumulated other comprehensive income (and other reserves, to include unrealised gains and losses under the applicable accounting standards)	114.4	26 (1)	
3a	Funds for general banking risk	0.0	26 (1) (f)	
4	Amount of qualifying items referred to in Article 484 (3) and the related share premium accounts subject to phase out from CET 1	0.0	486 (2)	
	Public sector capital injection grandfathered until 1 January 2018	0.0	483 (2)	
5	Minority interests (amount allowed in consolidated CET1)	0.0	84, 479, 480	
5a	Independently reviewed interim profits net of any foreseeable charge or dividend	6.8	26 (2)	
6	Common Equity Tier 1 (CET1) capital before regulatory adjustments	469.7		
Common Equity Tier 1 (CET1) capital: regulatory adjustments				
7	Additional value adjustments (negative amount)	-1.1	34, 105	
8	Intangible assets (net of related tax liability) (negative amount)	-64.4	36 (1) (b), 37, 472 (4)	
9	Empty Set in the EU	0.0		
10	Deferred tax assets that rely on future profitability excluding those arising from temporary differences (net of related tax liability where conditions in Article 38 (3) are met) (negative amount)	0.0	36 (1) (c), 38, 472 (5)	
11	Fair value reserves related to gains or losses on cash flow hedges	0.0	33 (a)	
12	Negative amounts resulting from the calculation of expected loss amounts	-11.9	36 (1) (d), 40, 159, 472 (6)	
13	Any increase in equity that result from securitised assets (negative amount)	0.0	32 (1)	
14	Gains or losses on liabilities valued at fair value resulting from changes in own credit standing	0.0	33 (b)	
15	Defined-benefit pension fund assets (negative amount)	0.0	36 (1) (e), 41, 472 (7)	
16	Direct and indirect holdings by an institution of own CET1 instruments (negative amount)	-1.0	36 (1) (f), 42, 472 (8)	
17	Holdings of the CET1 instruments of financial sector entities where those entities have reciprocal cross holdings with the institution designed to artificially inflate the own funds of the institution (negative amount)	0.0	36 (1) (g), 44, 472 (9)	
18	Direct and indirect holdings by the institution of the CET1 instruments of financial sector entities where the institution does not have a significant investment in those entities (amount above the 10% threshold and net of eligible short positions) (negative amount)	0.0	36 (1) (h), 43, 45, 46, 49 (2) (3), 79, 472 (10)	
19	Direct, indirect and synthetic holdings of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities (amount above 10% threshold and net of eligible short positions) (negative amount)	-7.1	36 (1) (i), 43, 45, 47, 48 (1) (b), 49 (1) to (3), 79, 470, 472 (11)	
20	Empty Set in the EU	0.0		
20a	Exposure amount of the following items which qualify for a RW of 1250%, where the institution opts for the deduction alternative	0.0	36 (1) (k)	
20b	of which: qualifying holdings outside the financial sector (negative amount)	0.0	36 (1) (k) (i), 89 to 91	
20c	of which: securitisation positions (negative amounts)	0.0	36 (1) (k) (ii) 243 (1) (b) 244 (1) (b) 258	

20d	of which: free deliveries (negative amount)	0.0	36 (1) (k) (iii), 379 (3)
21	Deferred tax assets arising from temporary differences (amount above 10% threshold, net of related tax liability where the conditions in 38 (3) are met) (negative amount)	0.0	36 (1) (c), 38, 48 (1) (a), 470, 472 (5)
22	Amount exceeding the 15% threshold (negative amount)	0.0	48 (1)
23	of which: direct and indirect holdings by the institution of the CET1 instruments of financial sector entities where the institution has a significant investment in those entities	0.0	36 (1) (i), 48 (1) (b), 470, 472 (11)
24	Empty Set in the EU	0.0	
25	of which: deferred tax assets arising from temporary differences	0.0	36 (1) (c), 38, 48 (1) (a), 470, 472 (5)
25a	Losses for the current financial year (negative amount)	0.0	36 (1) (a), 472 (3)
25b	Foreseeable tax charges relating to CET1 items (negative amount)	0.0	36 (1) (l)
26	Regulatory adjustments applied to Common Equity Tier 1 in respect of amounts subject to pre-CRR treatment	0.0	
26a	Regulatory adjustments relating to unrealised gains and losses pursuant to Articles 467 and 468	0.0	
	Of which: ... filter for unrealised loss 1	0.0	467
	Of which: ... filter for unrealised loss 2	0.0	467
	Of which: ... filter for unrealised gain 1	0.0	468
	Of which: ... filter for unrealised gain 2	0.0	468
26b	Amount to be deducted from or added to Common Equity Tier 1 capital with regard to additional filters and deductions required pre-CRR	0.0	481
	Of which: ...	0.0	481
27	Qualifying AT1 deductions that exceed the AT1 capital of the institution (negative amount)	0.0	36 (1) (j)
28	Total regulatory adjustments to Common equity Tier 1 (CET1)	-85.5	
29	Common Equity Tier 1 (CET1) capital	384.2	

Additional Tier 1 (AT1) capital: instruments

30	Capital instruments and the related share premium accounts	0.0	51, 52
31	of which: classifies as equity under applicable accounting standards	0.0	
32	of which: classified as liabilities under applicable accounting standards	0.0	
33	Amount of qualifying items referred to in Article 484 (4) and the related share premium accounts subject to phase out from AT1	0.0	486 (3)
	Public sector capital injections grandfathered until 1 January 2018	0.0	486 (3)
34	Qualifying Tier 1 capital included in consolidated AT1 capital (including minority interests not included in row 5) issued by subsidiaries and held by third parties	0.0	85, 86, 480
35	of which: instruments issued by subsidiaries subject to phase out	0.0	486 (3)
36	Additional Tier 1 (AT1) capital before regulatory adjustments	0.0	

Additional Tier 1 (AT1) capital: regulatory adjustments

37	Direct and indirect holdings by an institution of own AT1 Instruments (negative amount)	0.0	52 (1) (b), 56 (a), 57, 475 (2)
38	Direct, indirect and synthetic holdings of the AT1 instruments of financial sector entities where those entities have reciprocal cross holdings with the institution designed to inflate artificially the own funds of the institution (negative amount)	0.0	56 (b), 58, 475 (3)
39	Direct, indirect and synthetic holdings of the AT1 instruments of financial sector entities where the institution does not have a significant investment in those entities (amount above the 10% threshold and net of eligible short positions) (negative amount)	0.0	56 (c), 59, 60, 79, 475 (4)
40	Direct, indirect and synthetic holdings by the institution of the AT1 instruments of financial sector entities where the institution has a significant investment in those entities (net of eligible short positions) (negative amount)	0.0	56 (d), 59, 79, 475 (4)
41	Regulatory adjustments applied to additional tier 1 in respect of amounts subject to pre-CRR treatment and transitional treatments subject to phase out as prescribed in Regulation (EU) No 575/2013 (ie. CRR residual amounts)	0.0	
41a	Residual amounts deducted from Additional Tier 1 capital with regard to deduction from Common Equity Tier 1 capital during the transitional period pursuant to article 472 of Regulation (EU) No 575/2013	0.0	472, 472(3)(a), 472 (4), 472 (6), 472 (8), 472 (9), 472 (10) (a), 472 (11) (a)

	Of which items to be detailed line by line, e.g. Material net interim losses, intangibles, shortfall of provisions to expected losses etc	0.0	
41b	Residual amounts deducted from Additional Tier 1 capital with regard to deduction from Tier 2 capital during the transitional period pursuant to article 475 of Regulation (EU) No 575/2013	0.0	477,477 (3), 477 (4) (a)
	Of which items to be detailed line by line, e.g. Reciprocal cross holdings in Tier 2 instruments, direct holdings of non-significant investments in the capital of other financial sector entities, etc	0.0	
41c	Amount to be deducted from or added to Additional Tier 1 capital with regard to additional filters and deductions required pre- CRR	0.0	467, 468, 481
	Of which: ...possible filter for unrealised losses	0.0	467
	Of which: ...possible filter for unrealised gains	0.0	468
	Of which: ...	0.0	481
42	Qualifying T2 deductions that exceed the T2 capital of the institution (negative amount)	0.0	56 (e)
43	Total regulatory adjustments to Additional Tier 1 (AT1) capital	0.0	
44	Additional Tier 1 (AT1) capital	0.0	
45	Tier 1 capital (T1 = CET1 + AT1)	384.2	

Tier 2 (T2) capital: instruments and provisions

46	Capital instruments and the related share premium accounts	67.5	
47	Amount of qualifying items referred to in Article 484 (5) and the related share premium accounts subject to phase out from T2	0.0	486 (4)
	Public sector capital injections grandfathered until 1 January 2018	0.0	483 (4)
48	Qualifying own funds instruments included in consolidated T2 capital (including minority interests and AT1 instruments not included in rows 5 or 34) issued by subsidiaries and held by third parties	0.0	87, 88, 480
49	of which: instruments issued by subsidiaries subject to phase out	0.0	486 (4)
50	Credit risk adjustments	0.0	62 (c) & (d)
51	Tier 2 (T2) capital before regulatory adjustments	67.5	

Tier 2 (T2) capital: regulatory adjustments

52	Direct and indirect holdings by an institution of own T2 instruments and subordinated loans (negative amount)	0.0	63 (b) (i), 66 (a), 67, 477 (2)
53	Holdings of the T2 instruments and subordinated loans of financial sector entities where those entities have reciprocal cross holdings with the institution designed to inflate artificially the own funds of the institution (negative amount)	0.0	66 (b), 68, 477 (3)
54	Direct and indirect holdings of the T2 instruments and subordinated loans of financial sector entities where the institution does not have a significant investment in those entities (amount above 10% threshold and net of eligible short positions) (negative amount)	0.0	66 (c), 69, 70, 79, 477 (4)
54a	Of which new holdings not subject to transitional arrangements	0.0	
54b	Of which holdings existing before 1 January 2013 and subject to transitional arrangements	0.0	
55	Direct and indirect holdings by the institution of the T2 instruments and subordinated loans of financial sector entities where the institution has a significant investment in those entities (net of eligible short positions) (negative amount)	0.0	66 (d), 69, 79, 477 (4)
56	Regulatory adjustments applied to tier 2 in respect of amounts subject to pre-CRR treatment and transitional treatments subject to phase out as prescribed in Regulation (EU) No 575/2013 (i.e. CRR residual amounts)	0.0	
56a	Residual amounts deducted from Tier 2 capital with regard to deduction from Common Equity Tier 1 capital during the transitional period pursuant to article 472 of Regulation (EU) No 575/2013	0.0	472, 472(3)(a), 472 (4), 472 (6), 472 (8), 472 (9), 472 (10) (a), 472 (11) (a)
	Of which items to be detailed line by line, e.g. Material net interim losses, intangibles, shortfall of provisions to expected losses etc	0.0	
56b	Residual amounts deducted from Tier 2 capital with regard to deduction from Additional Tier 1 capital during the transitional period pursuant to article 475 of Regulation (EU) No 575/2013	0.0	475, 475 (2) (a), 475 (3), 475 (4) (a)

	Of which items to be detailed line by line, e.g. reciprocal cross holdings in at1 instruments, direct holdings of non significant investments in the capital of other financial sector entities, etc	0.0	
56c	Amount to be deducted from or added to Tier 2 capital with regard to additional filters and deductions required pre CRR	0.0	467, 468, 481
	Of which: ...possible filter for unrealised losses	0.0	467
	Of which: ...possible filter for unrealised gains	0.0	468
	Of which: ...	0.0	481
57	Total regulatory adjustments to Tier 2 (T2) capital	0.0	
58	Tier 2 (T2) capital	67.5	
59	Total capital (TC = T1 + T2)	451.7	
59a	Risk weighted assets in respect of amounts subject to pre-CRR treatment and transitional treatments subject to phase out as prescribed in Regulation (EU) No 575/2013 (i.e. CRR residual amounts)	97.8	
	Of which: Residual amounts relating to holdings in significant financial entities not deducted from CET1 capital	97.8	472, 472 (5), 472 (8) (b), 472 (10) (b), 472 (11) (b)
	Of which: ...items not deducted from AT1 items (Regulation (EU) No 575/2013 residual amounts) (items to be detailed line by line, e.g. Reciprocal cross holdings in T2 instruments, direct holdings of non-significant investments in the capital of other financial sector entities, etc)	0.0	475, 475 (2) (b), 475 (2) (c), 275 (4) (b)
	Items not deducted from T2 items (Regulation (EU) No 575/2013 residual amounts) (items to be detailed line by line, e.g. Indirect holdings of own t2 instruments, indirect holdings of non significant investments in the capital of other financial sector entities, indirect holdings of significant investments in the capital of other financial sector entities etc)	0.0	477, 477 (2) (b), 477 (2) (c), 477 (4) (b)
60	Total risk weighted assets	2,199.2	

Capital ratios and buffers

61	Common Equity Tier 1 (as a percentage of risk exposure amount)	17.47 %	92 (2) (a), 465
62	Tier 1 (as a percentage of risk exposure amount)	17.47 %	92 (2) (b), 465
63	Total capital (as a percentage of risk exposure amount)	20.54 %	92 (2) (c)
64	Institution specific buffer requirement (CET1 requirement in accordance with article 92 (1) (a) plus capital conservation and countercyclical buffer requirements, plus systemic risk buffer, plus the systemically important institution buffer (G-SII or O-SII buffer), expressed as a percentage of risk exposure amount)	8.551 %	CRD 128, 129, 130
65	of which: capital conservation buffer requirement	2.50 %	
66	of which: countercyclical buffer requirement	0.051 %	
67	of which: systemic risk buffer requirement	0.00 %	
67a	of which: Global Systemically Important Institution (G-SII) or Other Systemically Important Institution (O-SII) buffer	0.00 %	CRD 131
68	Common Equity Tier 1 available to meet buffers (as a percentage of risk exposure amount)	12.97 %	CRD 128
69	[non relevant in EU regulation]		
70	[non relevant in EU regulation]		
71	[non relevant in EU regulation]		

Amounts below the thresholds for deduction (before risk weighting)

72	Direct and indirect holdings of the capital of financial sector entities where the institution does not have a significant investment in those entities (amount below 10% threshold and net of eligible short positions)	0.0	36 (1) (h), 45, 46, 472 (10) 56 (c), 59, 60, 475 (4) 66 (c), 69, 70, 477 (4)
73	Direct and indirect holdings by the institution of the CET 1 instruments of financial sector entities where the institution has a significant investment in those entities (amount below 10% threshold and net of eligible short positions)	39.1	36 (1) (i), 45, 48, 470, 472 (11)
74	Empty Set in the EU	0.0	
75	Deferred tax assets arising from temporary differences (amount below 10% threshold, net of related tax liability where the conditions in Article 38 (3) are met)	0.0	36 (1) ©, 38, 48, 470, 472 (5)

Applicable caps to the inclusion of provisions in Tier 2

76	Credit risk adjustments included in T2 in respect of exposures subject to standardized approach (prior to the application of the cap)	0.0	62
77	Cap on inclusion of credit risk adjustments in T2 under standardised approach	0.0	62
78	Credit risk adjustments included in T2 in respect of exposures subject to internal ratings-based approach (prior to the application of the cap)	0.0	62
79	Cap for inclusion of credit risk adjustments in T2 under internal ratings-based approach	0.0	62

Capital instruments subject to phase-out arrangements (only applicable between 1 Jan 2013 and 1 Jan 2022)

80	Current cap on CET1 instruments subject to phase out arrangements	0.0	484 (3), 486 (2) & (5)
81	Amount excluded from CET1 due to cap (excess over cap after redemptions and maturities)	0.0	484 (3), 486 (2) & (5)
82	Current cap on AT1 instruments subject to phase out arrangements	0.0	484 (4), 486 (3) & (5)
83	Amount excluded from AT1 due to cap (excess over cap after redemptions and maturities)	0.0	484 (4), 486 (3) & (5)
84	Current cap on T2 instruments subject to phase out arrangements	0.0	484 (5), 486 (4) & (5)
85	Amount excluded from T2 due to cap (excess over cap after redemptions and maturities)	0.0	484 (5), 486 (4) & (5)

Appendix 3. Main features of the CET1 capital instruments

		Shares
1	Issuer	Aktia Bank Plc
2	Unique identifier	FI4000058870
3	Governing law(s) of the instrument	Finland
Regulatory treatment		
4	Transitional CRR rules	CET1
5	Post-transitional CRR rules	CET1
6	Eligible at solo/ (sub-)consolidated/ solo &(sub-)consolidated	Solo&consolidated
7	Instrument type (types to be specified by each jurisdiction)	Share capital
8	Amount recognised in regulatory capital (EUR million)	163.0
9	Nominal amount of instrument (EUR million)	N/A
9a	Issue price	N/A
9b	Redemption price	N/A
10	Accounting classification	Shareholders' equity
11	Original date of issuance	N/A
12	Perpetual or dated	Perpetual
13	Original maturity date	No maturity
14	Issuer call subject to prior supervisory approval	No
15	Optional call date, contingent call dates and redemption amount	N/A
16	Subsequent call dates, if applicable	N/A
Coupons/dividends		
17	Fixed or floating dividend/coupon	N/A
18	Coupon rate and any related index	N/A
19	Existence of a dividend stopper	N/A
20a	Fully discretionary, partially discretionary or mandatory (in terms of timing)	Fully discretionary
20b	Fully discretionary, partially discretionary or mandatory (in terms of amount)	Fully discretionary
21	Existence of step up or other incentive to redeem	N/A
22	Noncumulative or cumulative	N/A
23	Convertible or Non-convertible	N/A
24	If convertible, conversion trigger(s)	N/A
25	If convertible, fully or partially	N/A
26	If convertible, conversion rate	N/A
27	If convertible, mandatory or optional conversion	N/A
28	If convertible, specify instrument type convertible into	N/A
29	If convertible, specify issuer of instrument it converts into	N/A
30	Write-down features	N/A
31	If write-down, write-down trigger(s)	N/A
32	If write-down, full or partial	N/A
33	If write-down, permanent or temporary	N/A
34	If temporary write-down, description of write-up mechanism	N/A
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Tier 2
36	Non-compliant transitioned features	No
37	If Yes, specify non-compliant features	N/A

Appendix 4. Main features of T2 capital instruments

		Tier 2 - Issue 1	Tier 2 - Issue 2	Tier 2 - Issue 3	Tier 2 - Issue 4	Tier 2 - Issue 5
1	Issuer	Aktia Bank Plc	Aktia Bank Plc	Aktia Bank Plc	Aktia Bank Plc	Aktia Bank Plc
2	Unique identifier	FI4000071550	FI4000076740	FI4000085519	FI4000092614	FI4000104898
3	Governing law(s) of the instrument	Finland	Finland	Finland	Finland	Finland
Regulatory treatment						
4	Transitional CRR rules	Tier 2	Tier 2	Tier 2	Tier 2	Tier 2
5	Post-transitional CRR rules	Tier 2	Tier 2	Tier 2	Tier 2	Tier 2
6	Eligible at solo/ (sub-)consolidated/ solo &(sub-) consolidated	Solo& consolidated	Solo& consolidated	Solo& consolidated	Solo& consolidated	Solo&c onsolidated
7	Instrument type (types to be specified by each jurisdiction)	Subordinated debt	Subordinated debt	Subordinated debt	Subordinated debt	Subordinated debt
8	Amount recognised in regulatory capital (EUR million)	0.0	0.4	0.6	2.0	2.1
9	Nominal amount of instrument (EUR million)	10.8	12.5	9.5	16.1	12.9
9a	Issue price	100%	100%	100%	100%	100%
9b	Redemption price	100%	100%	100%	100%	100%
10	Accounting classification	Liability-amortised cost	Liability-amortised cost	Liability-amortised cost	Liability-amortised cost	Liability-amortised cost
11	Original date of issuance	21 Oct 2013	2 Jan 2014	3 Mar 2014	28 Apr 2014	18 Aug 2014
12	Perpetual or dated	Dated	Dated	Dated	Dated	Dated
13	Original maturity date	2 Jan 2019	1 Mar 2019	26 Apr 2019	16 Aug 2019	18 Oct 2019
14	Issuer call subject to prior supervisory approval	No	No	No	No	No
15	Optional call date, contingent call dates and redemption amount	N/A	N/A	N/A	N/A	N/A
16	Subsequent call dates, if applicable	N/A	N/A	N/A	N/A	N/A
Coupons/dividends						
17	Fixed or floating dividend/coupon	Fixed coupon	Fixed coupon	Fixed coupon	Fixed coupon	Fixed coupon
18	Coupon rate and any related index	3.00	3.00	3.00	3.00	3.00
19	Existence of a dividend stopper	No	No	No	No	No
20a	Fully discretionary, partially discretionary or mandatory (in terms of timing)	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
20b	Fully discretionary, partially discretionary or mandatory (in terms of amount)	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
21	Existence of step up or other incentive to redeem	No	No	No	No	No
22	Noncumulative or cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative
23	Convertible or non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible
24	If convertible, conversion trigger(s)	N/A	N/A	N/A	N/A	N/A
25	If convertible, fully or partially	N/A	N/A	N/A	N/A	N/A
26	If convertible, conversion rate	N/A	N/A	N/A	N/A	N/A
27	If convertible, mandatory or optional conversion	N/A	N/A	N/A	N/A	N/A
28	If convertible, specify instrument type convertible into	N/A	N/A	N/A	N/A	N/A
29	If convertible, specify issuer of instrument it converts into	N/A	N/A	N/A	N/A	N/A
30	Write-down features	No	No	No	No	No
31	If write-down, write-down trigger(s)	N/A	N/A	N/A	N/A	N/A
32	If write-down, full or partial	N/A	N/A	N/A	N/A	N/A
33	If write-down, permanent or temporary	N/A	N/A	N/A	N/A	N/A
34	If temporary write-down, description of write-up mechanism	N/A	N/A	N/A	N/A	N/A
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Senior unsecured	Senior unsecured	Senior unsecured	Senior unsecured	Senior unsecured
36	Non-compliant transitioned features	No	No	No	No	No
37	If Yes, specify non-compliant features	N/A	N/A	N/A	N/A	N/A

Appendix 4, cont.

		Tier 2 - Issue 6	Tier 2 - Issue 7	Tier 2 - Issue 8	Tier 2 - Issue 9	Tier 2 - Issue 10
1	Issuer	Aktia Bank Plc	Aktia Bank Plc	Aktia Bank Plc	Aktia Bank Plc	Aktia Bank Plc
2	Unique identifier	FI4000113204	FI4000125315	FI4000148333	FI4000153499	FI4000167176
3	Governing law(s) of the instrument	Finland	Finland	Finland	Finland	Finland
Regulatory treatment						
4	Transitional CRR rules	Tier 2	Tier 2	Tier 2	Tier 2	Tier 2
5	Post-transitional CRR rules	Tier 2	Tier 2	Tier 2	Tier 2	Tier 2
6	Eligible at solo/ (sub-)consolidated/ solo &(sub-) consolidated	Solo& consolidated	Solo& consolidated	Solo& consolidated	Solo& consolidated	Solo& consolidated
7	Instrument type (types to be specified by each jurisdiction)	Subordinated debt	Subordinated debt	Subordinated debt	Subordinated debt	Subordinated debt
8	Amount recognised in regulatory capital (EUR million)	2.6	1.4	2.3	5.9	4.1
9	Nominal amount of instrument (EUR million)	13.2	6.0	8.6	18.2	11.3
9a	Issue price	100%	100%	100%	100%	100%
9b	Redemption price	100%	100%	100%	100%	100%
10	Accounting classification	Liability-amortised cost	Liability-amortised cost	Liability-amortised cost	Liability-amortised cost	Liability-amortised cost
11	Original date of issuance	20 Oct 2014	2 Jan 2015	2 Mar 2015	27 Apr 2015	17 Aug 2015
12	Perpetual or dated	Dated	Dated	Dated	Dated	Dated
13	Original maturity date	2 Jan 2020	28 Feb 2020	24 Apr 2020	15 Aug 2020	17 Oct 2020
14	Issuer call subject to prior supervisory approval	No	No	No	No	No
15	Optional call date, contingent call dates and redemption amount	N/A	N/A	N/A	N/A	N/A
16	Subsequent call dates, if applicable	N/A	N/A	N/A	N/A	N/A
Coupons/dividends						
17	Fixed or floating dividend/coupon	Fixed coupon	Fixed coupon	Fixed coupon	Fixed coupon	Fixed coupon
18	Coupon rate and any related index	3.00	2.75	2.75	2.50	2.50
19	Existence of a dividend stopper	No	No	No	No	No
20a	Fully discretionary, partially discretionary or mandatory (in terms of timing)	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
20b	Fully discretionary, partially discretionary or mandatory (in terms of amount)	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
21	Existence of step up or other incentive to redeem	No	No	No	No	No
22	Noncumulative or cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative
23	Convertible or non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible
24	If convertible, conversion trigger(s)	N/A	N/A	N/A	N/A	N/A
25	If convertible, fully or partially	N/A	N/A	N/A	N/A	N/A
26	If convertible, conversion rate	N/A	N/A	N/A	N/A	N/A
27	If convertible, mandatory or optional conversion	N/A	N/A	N/A	N/A	N/A
28	If convertible, specify instrument type convertible into	N/A	N/A	N/A	N/A	N/A
29	If convertible, specify issuer of instrument it converts into	N/A	N/A	N/A	N/A	N/A
30	Write-down features	No	No	No	No	No
31	If write-down, write-down trigger(s)	N/A	N/A	N/A	N/A	N/A
32	If write-down, full or partial	N/A	N/A	N/A	N/A	N/A
33	If write-down, permanent or temporary	N/A	N/A	N/A	N/A	N/A
34	If temporary write-down, description of write-up mechanism	N/A	N/A	N/A	N/A	N/A
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Senior unsecured	Senior unsecured	Senior unsecured	Senior unsecured	Senior unsecured
36	Non-compliant transitioned features	No	No	No	No	No
37	If Yes, specify non-compliant features	N/A	N/A	N/A	N/A	N/A

Appendix 4, cont.

		Tier 2 - Issue 11	Tier 2 - Issue 12	Tier 2 - Issue 13	Tier 2 - Issue 14	Tier 2 - Issue 15
1	Issuer	Aktia Bank Plc	Aktia Bank Plc	Aktia Bank Plc	Aktia Bank Plc	Aktia Bank Plc
2	Unique identifier	FI4000176433	FI4000188859	FI4000197892	FI4000201702	FI4000219316
3	Governing law(s) of the instrument	Finland	Finland	Finland	Finland	Finland
Regulatory treatment						
4	Transitional CRR rules	Tier 2	Tier 2	Tier 2	Tier 2	Tier 2
5	Post-transitional CRR rules	Tier 2	Tier 2	Tier 2	Tier 2	Tier 2
6	Eligible at solo/ (sub-)consolidated/ solo &(sub-) consolidated	Solo& consolidated	Solo& consolidated	Solo& consolidated	Solo& consolidated	Solo& consolidated
7	Instrument type (types to be specified by each jurisdiction)	Subordinated debt	Subordinated debt	Subordinated debt	Subordinated debt	Subordinated debt
8	Amount recognised in regulatory capital (EUR million)	8.7	4.0	3.7	7.2	6.5
9	Nominal amount of instrument (EUR million)	21.6	9.3	7.9	13.6	11.4
9a	Issue price	100%	100%	100%	100%	100%
9b	Redemption price	100%	100%	100%	100%	100%
10	Accounting classification	Liability-amortised cost	Liability-amortised cost	Liability-amortised cost	Liability-amortised cost	Liability-amortised cost
11	Original date of issuance	19 Oct 2015	4 Jan 2016	29 Feb 2016	25 Apr 2016	22 Aug 2016
12	Perpetual or dated	Dated	Dated	Dated	Dated	Dated
13	Original maturity date	2 Jan 2021	27 Feb 2021	23 Apr 2021	20 Aug 2021	11 Nov 2021
14	Issuer call subject to prior supervisory approval	No	No	No	No	No
15	Optional call date, contingent call dates and redemption amount	N/A	N/A	N/A	N/A	N/A
16	Subsequent call dates, if applicable	N/A	N/A	N/A	N/A	N/A
Coupons/dividends						
17	Fixed or floating dividend/coupon	Fixed coupon	Fixed coupon	Fixed coupon	Fixed coupon	Fixed coupon
18	Coupon rate and any related index	2.50	2.25	2.00	2.00	2.00
19	Existence of a dividend stopper	No	No	No	No	No
20a	Fully discretionary, partially discretionary or mandatory (in terms of timing)	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
20b	Fully discretionary, partially discretionary or mandatory (in terms of amount)	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
21	Existence of step up or other incentive to redeem	No	No	No	No	No
22	Noncumulative or cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative	Non-cumulative
23	Convertible or non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible	Non-convertible
24	If convertible, conversion trigger(s)	N/A	N/A	N/A	N/A	N/A
25	If convertible, fully or partially	N/A	N/A	N/A	N/A	N/A
26	If convertible, conversion rate	N/A	N/A	N/A	N/A	N/A
27	If convertible, mandatory or optional conversion	N/A	N/A	N/A	N/A	N/A
28	If convertible, specify instrument type convertible into	N/A	N/A	N/A	N/A	N/A
29	If convertible, specify issuer of instrument it converts into	N/A	N/A	N/A	N/A	N/A
30	Write-down features	No	No	No	No	No
31	If write-down, write-down trigger(s)	N/A	N/A	N/A	N/A	N/A
32	If write-down, full or partial	N/A	N/A	N/A	N/A	N/A
33	If write-down, permanent or temporary	N/A	N/A	N/A	N/A	N/A
34	If temporary write-down, description of write-up mechanism	N/A	N/A	N/A	N/A	N/A
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Senior unsecured	Senior unsecured	Senior unsecured	Senior unsecured	Senior unsecured
36	Non-compliant transitioned features	No	No	No	No	No
37	If Yes, specify non-compliant features	N/A	N/A	N/A	N/A	N/A

Appendix 4, cont.

		Tier 2 - Issue 16	Tier 2 - Issue 17
1	Issuer	Aktia Bank Plc	Aktia Bank Plc
2	Unique identifier	FI4000224183	FI4000243142
3	Governing law(s) of the instrument	Finland	Finland
Regulatory treatment			
4	Transitional CRR rules	Tier 2	Tier 2
5	Post-transitional CRR rules	Tier 2	Tier 2
6	Eligible at solo/ (sub-)consolidated/ solo &(sub-) consolidated	Solo& consolidated	Solo& consolidated
7	Instrument type (types to be specified by each jurisdiction)	Subordinated debt	Subordinated debt
8	Amount recognised in regulatory capital (EUR million)	8.4	7.8
9	Nominal amount of instrument (EUR million)	13.3	11.7
9a	Issue price	100%	100%
9b	Redemption price	100%	100%
10	Accounting classification	Liability-amortised cost	Liability-amortised cost
11	Original date of issuance	11 Nov 2016	25 Feb 2017
12	Perpetual or dated	Dated	Dated
13	Original maturity date	25 Feb 2022	26 Apr 2022
14	Issuer call subject to prior supervisory approval	No	No
15	Optional call date, contingent call dates and redemption amount	N/A	N/A
16	Subsequent call dates, if applicable	N/A	N/A
Coupons/dividends			
17	Fixed or floating dividend/coupon	Fixed coupon	Fixed coupon
18	Coupon rate and any related index	2.00	2.00
19	Existence of a dividend stopper	No	No
20a	Fully discretionary, partially discretionary or mandatory (in terms of timing)	Mandatory	Mandatory
20b	Fully discretionary, partially discretionary or mandatory (in terms of amount)	Mandatory	Mandatory
21	Existence of step up or other incentive to redeem	No	No
22	Noncumulative or cumulative	Non-cumulative	Non-cumulative
23	Convertible or non-convertible	Non-convertible	Non-convertible
24	If convertible, conversion trigger(s)	N/A	N/A
25	If convertible, fully or partially	N/A	N/A
26	If convertible, conversion rate	N/A	N/A
27	If convertible, mandatory or optional conversion	N/A	N/A
28	If convertible, specify instrument type convertible into	N/A	N/A
29	If convertible, specify issuer of instrument it converts into	N/A	N/A
30	Write-down features	No	No
31	If write-down, write-down trigger(s)	N/A	N/A
32	If write-down, full or partial	N/A	N/A
33	If write-down, permanent or temporary	N/A	N/A
34	If temporary write-down, description of write-up mechanism	N/A	N/A
35	Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Senior unsecured	Senior unsecured
36	Non-compliant transitioned features	No	No
37	If Yes, specify non-compliant features	N/A	N/A

Appendix 5. Leverage Ratio – Disclosure Template

Aktia Bank Plc, consolidated, 31 December 2018

Summary reconciliation of accounting assets and leverage ratio exposures*

EUR million		Applicable Amount
1	Total assets as per published financial statements	9,266.1
2	Adjustment for entities which are consolidated for accounting purposes but are outside the scope of regulatory consolidation	-1,196.8
3	(Adjustment for fiduciary assets recognised on the balance sheet pursuant to the applicable accounting framework but excluded from the leverage ratio total exposure measure in accordance with Article 429(13) of Regulation (EU) No 575/2013)	0.0
4	Adjustments for derivative financial instruments	-55.5
5	Adjustment for securities financing transactions (SFTs)	0.2
6	Adjustment for off-balance sheet items (ie conversion to credit equivalent amounts of off-balance sheet exposures)	183.5
EU-6a	(Adjustment for intragroup exposures excluded from the leverage ratio total exposure measure in accordance with Article 429(7) of Regulation (EU) No 575/2013)	0.0
EU-6b	(Adjustment for exposures excluded from the leverage ratio total exposure measure in accordance with Article 429(14) of Regulation (EU) No 575/2013)	0.0
7	Other adjustments	-86.3
8	Leverage ratio total exposure measure	8,111.1

* Table LRSum

Leverage ratio common disclosure*

EUR million		CRR leverage ratio exposures
On-balance sheet exposures (excluding derivatives and SFTs)		
1	On-balance sheet items (excluding derivatives SFTs and fiduciary assets but including collateral)	7,998.5
2	(Asset amounts deducted in determining Tier 1 capital)	-85.5
3	Total on-balance sheet exposures (excluding derivatives, SFTs and fiduciary assets) (sum of lines 1 and 2)	7,913.0
Derivative exposures		
4	Replacement cost associated with all derivatives transactions (ie net of eligible cash variation margin)	8.5
5	Add-on amounts for PFE associated with all derivatives transactions (mark- to-market method)	11.4
EU-5a	Exposure determined under Original Exposure Method	0.0
6	Gross-up for derivatives collateral provided where deducted from the balance sheet assets pursuant to the applicable accounting framework	0.0
7	(Deductions of receivables assets for cash variation margin provided in derivatives transactions)	-5.4
8	(Exempted CCP leg of client-cleared trade exposures)	0.0
9	Adjusted effective notional amount of written credit derivatives	0.0
10	(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	0.0
11	Total derivatives exposures (sum of lines 4 to 10)	14.5
SFT exposures		
12	Gross SFT assets (with no recognition of netting), after adjusting for sales accounting transactions	0.0
13	(Netted amounts of cash payables and cash receivables of gross SFT assets)	0.0
14	Counterparty credit risk exposure for SFT assets	0.2
EU-14a	Derogation for SFTs: Counterparty credit risk exposure in accordance with Articles 429b(4) and 222 of Regulation (EU) No 575/2013	0.0
15	Agent transaction exposures	0.0
EU-15a	(Exempted CCP leg of client-cleared SFT exposure)	0.0
16	Total securities financing transaction exposures (sum of lines 12 to 15a)	0.2
Other off-balance sheet exposures		
17	Off-balance sheet exposures at gross notional amount	490.8
18	(Adjustments for conversion to credit equivalent amounts)	-307.4
19	Other off-balance sheet exposures (sum of lines 17 and 18)	183.5
Exempted exposures in accordance with Article 429(7) and (14) of Regulation (EU) No 575/2013 (on and off balance sheet)		
EU-19a	(Intragroup exposures (solo basis) exempted in accordance with Article 429(7) of Regulation (EU) No 575/2013 (on and off balance sheet))	
EU-19b	(Exposures exempted in accordance with Article 429 (14) of Regulation (EU) No 575/2013 (on and off balance sheet))	
Capital and total exposure measure		
20	Tier 1 capital	384.2
21	Leverage ratio total exposure measure (sum of lines 3, 11, 16, 19, EU-19a and EU-19b)	8,111.1
Leverage ratio		
22	Leverage ratio	4.74 %
Choice on transitional arrangements and amount of derecognised fiduciary items		
EU-23	Choice on transitional arrangements for the definition of the capital measure	Fully phased in
EU-24	Amount of derecognised fiduciary items in accordance with Article 429(11) of Regulation (EU) No 575/2013	0.0

* Table LRCom

Split-up of on balance sheet exposures (excluding derivatives, SFTs and exempted exposures)*

EUR million		CRR leverage ratio exposures
EU-1	Total on-balance sheet exposures (excluding derivatives, SFTs, and exempted exposures), of which:	7,998.5
EU-2	Trading book exposures	0.0
EU-3	Banking book exposures, of which:	7,998.5
EU-4	Covered bonds	714.9
EU-5	Exposures treated as sovereigns	749.7
EU-6	Exposures to regional governments, MDB, international organisations and PSE not treated as sovereigns	0.0
EU-7	Institutions	246.9
EU-8	Secured by mortgages of immovable properties	5,462.6
EU-9	Retail exposures	274.7
EU-10	Corporate	331.0
EU-11	Exposures in default	41.0
EU-12	Other exposures (eg equity, securitisations, and other non-credit obligation assets)	177.7

* Table LRSpl

Free format text boxes for disclosure on qualitative items*

Description of the processes used to manage the risk of excessive leverage	<p>The risk of excessive leverage is managed as part of the capital management process. The development of leverage ratio is estimated based on the strategic business plan. The plan incorporates the growth targets in exposure amount as well as the anticipated developments in capital measure. As part of the process, the targets for the leverage ratio and the liability structure are also defined. The asset encumbrance ratio is key metric and limits the amount of covered bond funding. The level of leverage is monitored quarterly and reported to the Board of Directors. Leverage ratio is also an indicator in the Group's recovery plan and alarm zones have been set for the ratio. The recovery plan describes actions which the management can take in order to increase capital or reduce the exposures</p> <p>The Bank Group's target for the leverage ratio is 3.5 % at a minimum.</p>
Description of the factors that had an impact on the leverage Ratio during the period to which the disclosed leverage Ratio refers	<p>Leverage ratio was 4.7 % at the year-end which is somewhat more than the year before. Both the numerator and the denominator changed during the period. The amount of Tier 1 capital increased as a result of growth in retained earnings. The exposure amount decreased due to reduction in size of Aktia Bank's liquidity portfolio.</p>

* Table LRQua

Appendix 6. Navigation

Appendix 6 a. Capital and risk information guide

Capital and Risk information guide

Reference	Capital and Risk management report	Annual Report	www.aktia.com
Quantification	Chapter number	Pages	
End of Year results		41, 53-56, 65-66	
Minimum capital requirements	4	43, G2/83-95	
Development of RWA	4	93-94, G2/83-95	
Development of Own funds	4	G2/83-95	
Capital Ratios	4	43, G2/83-95	
Leverage ratio	4	44, G2/83-95	
Capital requirements parameters	4	44, G2/83-95	
Credit Risk	5	47, G2/83-95	
Counterparty Credit risk	5	47, G2/83-95	
Market Risk	6	47, G2/83-95	
Operational Risk	9	48, G2/83-95	
Liquidity Risk	7	42, 47, G2/83-95	
Frameworks	Chapter number	Pages	
Credit Risk	5	84-86	
Counterparty Credit risk	5	86-87	
Market Risk	6	86-87	
Operational Risk	9	91	
Liquidity Risk	7	86	
Life and Pensions operation	8	91	
Capital	4	83-84	
Capital instruments	App 3, 4		
New regulations	10		
Remuneration	-	G44-G46, 127-134	Governance-related information

Appendix 6 b. Navigation for disclosures

Navigation for disclosures

Articles of CRR (EU 575/2013)

Article	Section	Reference/section in CAR 2018/ Annual Report/aktia.com
Article 431		
	1.	This report and disclosures at aktia.com address the requirement
	2.	This report and disclosures at aktia.com address the requirement
	3.	Aktia Bank Plc has adopted a formal policy to assure compliance with the disclosure requirements.
	4.	Can be provided upon request.
Article 432		
Non-material, proprietary or confidential information		
	1.	List can be found in Appendix 6c
	2.	List can be found in Appendix 6c
	3.	List can be found in Appendix 6c
	4.	--
Article 433		
Frequency of disclosure		
		The disclosures are made annually in conjunction with the publication of Aktia's Annual Report
		The disclosures for items where more frequent disclosures are assessed as needed, are published in interim financial reports or on aktia.com.
Article 434		
Means of disclosures		
	1.	This table provides the required information.
	2.	This table provides the required information.
Article 435		
Risk management objectives and policies		
	1.	
	(a)	3, 4, 5, 6, 7, 8, 9
	(b)	3
	(c)	3,4,5,6,7,8,9
	(d)	3,4,5,6,7,8,9
	(e)	2
	(f)	3
	2.	
	(a)	aktia.com
	(b)	aktia.com
	(c)	aktia.com
	(d)	3
	(e)	3

Article	Section	Reference/section in CAR 2018/ Annual Report/aktia.com
Article 436		
Scope of application		
	(a)	2
	(b)	2
	(i)	2
	(ii)	2
	(iii)	2
	(iv)	2
	(c)	4
	(d)	N/A
	(e)	N/A
Article 437		
Own funds		
	1.	
	(a)	App 2,3 and 4
	(b)	App 3 and 4
	(c)	App 3 and 4
	(d)	
	(i)	App 4
	(ii)	App 4
	(iii)	App 4
	(e)	N/A
	(f)	4
Article 438		
Capital requirements		
	(a)	4
	(b)	N/A
	(c)	4
	(d)	4
	(i)	N/A
	(ii)	N/A
	(iii)	N/A
	(iv)	4
	(d)	4
	(i)	N/A
	(ii)	N/A
	(iii)	N/A
	(iv)	4
	(e)	4
	(f)	4

Appendix 6 b, cont.

Article	Section	Reference/section in CAR 2018/ Annual Report/aktia.com
Article 439		
Exposure to counterparty credit risk		
(a)	5	
(b)	5	
(c)	N/A	
(d)	N/A	
(e)	5	
(f)	5	
(g)	5	
(h)	N/A	
(i)	N/A	
Article 440		
Capital buffers		
1.		
(a)	4	
(b)	4	
Article 441		
Indicators of global systemic importance		
1.	N/A	
2.	--	
Article 442		
Credit risk adjustments		
(a)	5	
(b)	5	
(c)	5	
(d)	5	
(e)	5	
(f)	5	
(g)		
	(i)	5
	(ii)	5
	(iii)	5
(h)	5	
(i)	5	
	(i)	5
	(ii)	5
	(iii)	5
	(iv)	5
	(v)	5
Article 443		
Unencumbered assets		
	7	

Article	Section	Reference/section in CAR 2018/ Annual Report/aktia.com
Article 444		
Use of ECAIs		
(a)	5	
(b)	5	
(c)	5	
(d)	5	
(e)	5	
Article 445		
Exposure to market risk		
	N/A	
Article 446		
Operational risk		
	N/A	
Article 447		
Exposures in equities not included in the trading book		
(a)	Annual Report	
(b)	Annual Report	
(c)	N/A	
(d)	N/A	
(e)	Annual Report	
Article 448		
Exposure to interest rate risk on positions not included in the trading book		
(a)	6	
(b)	6	
Article 449		
Exposure to securitisation positions		
(a)	4	
(b)	N/A	
(c)	N/A	
(d)	N/A	
(e)	N/A	
(f)	N/A	
(g)	N/A	
(h)	N/A	
(i)	N/A	
(j)	N/A	
	(i)	N/A
	(ii)	N/A
	(iii)	N/A
	(iv)	N/A
	(v)	N/A
	(vi)	N/A

Appendix 6 b, cont.

Article	Section	Reference/section in CAR 2018/ Annual Report/aktia.com
(k)		N/A
(l)		N/A
(m)		N/A
(n)		N/A
	(i)	N/A
	(ii)	N/A
	(iii)	N/A
	(iv)	N/A
	(v)	N/A
	(vi)	N/A
(o)		N/A
	(i)	N/A
	(ii)	N/A
(p)		N/A
(q)		N/A
(r)		N/A
Article 450		
Remuneration policy		
(a)		aktia.com
(b)		aktia.com
(c)		aktia.com
(d)		aktia.com
(e)		aktia.com
(f)		aktia.com
(g)		aktia.com
(h)		aktia.com
	(i)	aktia.com
	(ii)	aktia.com
	(iii)	aktia.com
	(iv)	aktia.com
	(v)	aktia.com
	(vi)	aktia.com
(i)		aktia.com
(j)		N/A
2.		N/A
		Aktia has applied this in reporting these issues.
Article 451		
Leverage		
1.		
(a)		4
(b)		4
(c)		N/A
(d)		4
(e)		4

Article	Section	Reference/section in CAR 2018/ Annual Report/aktia.com
Article 452		
Use of the IRB approach to credit risk		
(a)		5
(b)		
	(i)	5
	(ii)	5
	(iii)	5
	(iv)	5
(c)		5
	(i)	N/A
	(ii)	N/A
	(iii)	N/A
	(iv)	5
	(v)	5
(d)		N/A
(e)		
	(i)	5
	(ii)	5
	(iii)	N/A
(f)		5
(g)		5
(h)		5
(i)		5
(j)		
	(i)	N/A
	(ii)	N/A
		5
Article 453		
Use of credit risk mitigation techniques		
(a)		5
(b)		5
(c)		5
(d)		N/A
(e)		5,6
(f)		5
(g)		5
Article 454		
Use of the advanced measurement approaches to operational risk		

Appendix 6 b, cont.

Article	Section	Reference/section in CAR 2018/ Annual Report/aktia.com
Article 455		
Use of internal market risk models		
(a)		N/A
	(i)	N/A
	(ii)	N/A
	(iii)	N/A
	(iv)	N/A
(b)		N/A
(c)		N/A
(d)		N/A
	(i)	N/A
	(ii)	N/A
	(iii)	N/A
(e)		N/A
(f)		N/A
(g)		N/A

Appendix 6 c. Information not disclosed due to non-material-, proprietary- or confidential nature**Information not disclosed due to non-material-, proprietary- or confidential nature**

Article reference	Reason for not including	Reference to information provided as complement to the information not included
EU CRB-C Geographical breakdown of exposures, Article 442(d)	Breakdown to geographical areas within Finland is confidential information.	Exposures are provided with other breakdowns in section 5.

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