

Pillar III Disclosure Report 2018

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Section 1

Introduction and basis for preparation

Introduction

Municipality Finance Plc ("MuniFin") is a Finnish credit institution supervised by the European Central Bank and the Finnish Financial Supervisory Authority. As a credit institution MuniFin has to comply with EU capital requirements for credit institution consisting of the CRD IV Directive (2013/36/EU) and the CRR (EU 575/2013) which are based on the revised capital adequacy framework of the Basel Committee on Banking Supervision, known as Basel III.

The capital requirements for banks consist of three pillars:

- Pillar 1: The minimum capital requirements for each category of risk: credit and counterparty risk, market risk, credit valuation adjustment risk and operational risk
- Pillar 2: Internal processes for risk management and setting internal capital requirements: Internal Capital Adequacy Assessment Plan (ICAAP) and Supervisory Review and Evaluation Process (SREP) and
- Pillar 3: Publication requirements concerning capital adequacy and risks.

This document fulfils MuniFin's Pillar 3 disclosure requirements of the current regulation and provides a comprehensive overview of the risk profile of MuniFin. In case required information has been published as part of some other document published by MuniFin, this information has been incorporated to this document by a reference.

Description of Municipality Finance Group

Measured by the balance sheet, MuniFin (parent company) is Finland's third largest credit institution; the company's balance sheet totals over EUR 35 billion. The company is owned by Finnish municipalities, the public sector pension fund Keva and the Republic of Finland. MuniFin is an integral part of the Finnish public economy.

MuniFin's mission is to build a better future in line with the principles of responsibility and in cooperation with its customers. MuniFin's customers consist of municipalities, municipal federations and municipality-controlled entities, as well as non-profit corporations and other non-profit organisations nominated by the Housing Finance and Development Centre of Finland (ARA). MuniFin is the only financier in Finland specialising in the provision of financing for the local government sector and central government-subsidised housing production. Lending is used for environmentally and socially responsible investment targets such as public transportation, sustainable buildings, hospitals and healthcare centers, schools and day care centers, and homes for the elderly.

MuniFin's customers are domestic but the company operates in a completely global business environment. It is the most active Finnish bond issuer in international capital markets. The funding is exclusively guaranteed by the Municipal Guarantee Board.

Municipality Finance Group also includes the subsidiary company, Financial Advisory Services Inspira Ltd.

Disclosure principles

Majority of information required to be published by MuniFin based on Pillar 3 will be disclosed in this Pillar III Report, which is separate from the annually published Report of the Board of Directors and the Financial Statements. In addition, there are documents (e.g. Corporate Governance Statement and Remuneration Report) available on MuniFin's webpage which supplement together with this Pillar 3 Report information disclosed.

MuniFin's Business Control and Reporting department is responsible for the process of publishing financial information. Risk management department and Legal and Governance function of the company take also part into the disclosure process. The Executive Management Team examine risk and solvency information prior delivering the information for the Audit Committee's review. After Audit Committee the report is delivered to the Board of Directors to approve.

In order to support its work, the Board of Directors has established an Audit Committee and a Risk Committee. The purpose of the Audit Committee is to assist the Board of Directors in duties related to financial reporting and internal control arrangement. The Risk Committee assists the Board in the matters with regard to the institution's overall risk appetite and risk strategy, and in overseeing that the management complies with the risk strategy decided by the Board.

The company's financial statements are annually audited by the External Auditor and the interim report is subject to review by the External Auditor.

This disclosure report comprises a comprehensive disclosure on capital adequacy, capital management and risk management. This Pillar III Report includes disclosures required according to the Part Eight of CRR and also tables and templates required according to EBA guidelines on disclosure requirements under Part Eight of Regulation (EU) No 575/2013 valid from 31 December 2017. The Pillar III disclosures of MuniFin are published semiannually. The annual disclosures are published in conjunction with the date of publication of MuniFin's Annual Report (including the Report of the Board of Directors and Financial Statements). Half Year Pillar III disclosures are published in conjunction with the date of publication of MuniFin's Half Year Report (interim report).

This report is divided into sections mainly based on the breakdown described in the EBA guidelines on disclosure requirements under Part Eight of Regulation (EU) No 575/2013. The Section 15 includes table of reference to Part Eight Regulation (EU) No 575/2013 and the location where the information can be found.

Following EBA guidelines on disclosure requirements on the frequency of the disclosures MuniFin has assessed the need to publish Pillar III disclosures more frequently than annually. MuniFin has considered the matter thoroughly and decided the publication of Pillar III disclosures semiannually at the same time as publication of the Report of the Board of Directors and Financial Statements and Half Year Report. The semiannual publication of the comprehensive Pillar III disclosures is deemed to be sufficient despite MuniFin is one of the three largest institutions its home Member State and has been identified by competent authorities as an other systemically important institution (O-SII). MuniFin's business model is stable with a limited range of activities and exposures. MuniFin applies very conservative principles to its risk management and the resulting risk profile of MuniFin's is not prone to any sudden changes. There has been no essential changes in MuniFin's risk appetite. The introduction of IFRS 9 in the beginning of 2018 has increased volatility through the unrealised gains and losses of financial instruments. MuniFin analyses and follows closely the volatility and prepares for its possible impacts on profitability and solvency. On the basis of these considerations MuniFin has deemed it is sufficient to publish Pillar III information semiannually.

Following EBA guidelines (EBA/GL/2016/11) MuniFin has not disclosed empty tables or specific rows or columns that are not considered to be relevant for MuniFin's activities.

Information of this Pillar III report has not been audited. The appropriateness of the Pillar III disclosed information is approved by MuniFin's Board of Directors. If there's information considered to be proprietary or confidential the information is not published, but disclosed in more general manner (see also Section 16).

MuniFin republished on 29 November 2018 Pillar III Disclosure Report 2017 and Pillar III Disclosure Report Half Year 2018 originally made public on 7 March 2018 and 14 August 2018, respectively. The republished and corrected figures had no effect on MuniFin's ability to meet all its obligations. MuniFin exceeds by far all capital requirements MuniFin is subject to. Republished Pillar III Disclosure Report 2017 and Pillar III Disclosure Report Half Year Report 2018 are available on MuniFin's website at www.munifin.fi. A revision of comparison year 2017 has been taken into account in this Pillar III Disclosure Report 2018 when applicable.

All figures presented in this report are Municipality Finance Group's.

Section 2 Risk management objectives and policies

EU OVA

GENERAL INFORMATION ON RISK MANAGEMENT, OBJECTIVES AND POLICIES

Risk management principles

MuniFin has a Risk and Governance Framework in place. The Framework is created to ensure that risk culture, business and strategy risk, risk appetite, risk governance, people and processes are aligned and effectively working. The following principles are followed across MuniFin:

- The Risk and Governance Framework is supported by comprehensive set of risk policies and underlying guidelines and instructions.
- MuniFin has a clearly defined Risk Appetite Framework (RAF), which sets out the level of risk MuniFin is willing to take and able to assume in pursuit of its strategic objectives.
- Limits and targets are defined and embedded throughout MuniFin to ensure the company remains at any given time within the set risk appetite.

- Risk management activities are included in all parts of the organisation to ensure that limits are adhered.
- A three line of defence governance model is in place, which ensures that an independent control, review and challenge of all operations is provided by an independent Risk Management function.
- Material risk types are actively managed in line with MuniFin’s approach of identifying, measuring, managing, monitoring and reporting risks. Identification of risks is forward looking to allow management to take a proactive approach to risk management.
- MuniFin is managed in such a way that it is confident of weathering extreme but plausible stress scenarios. Stress testing is used to demonstrate that MuniFin is able to withstand these shocks.

The components of MuniFin’s Risk and Governance Framework are presented in the figure below:

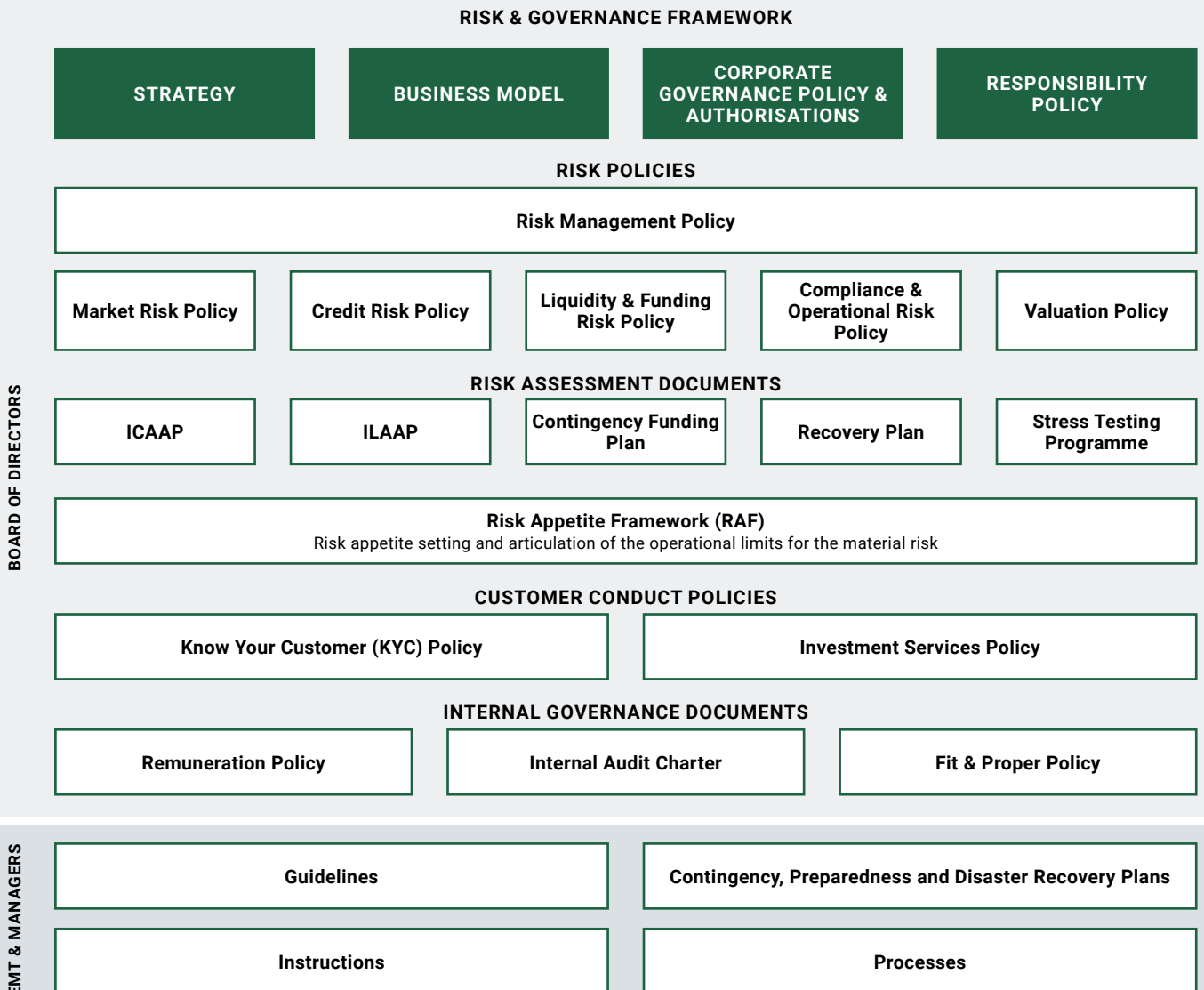


Figure 1. Risk and Governance Framework of MuniFin

Governance of risk management

The key principle for the risk management in MuniFin is the three lines of defence governance model. The three lines of defence model has been adopted to ensure that responsibility is allocated to all the relevant parties, and risks are reported and escalated.

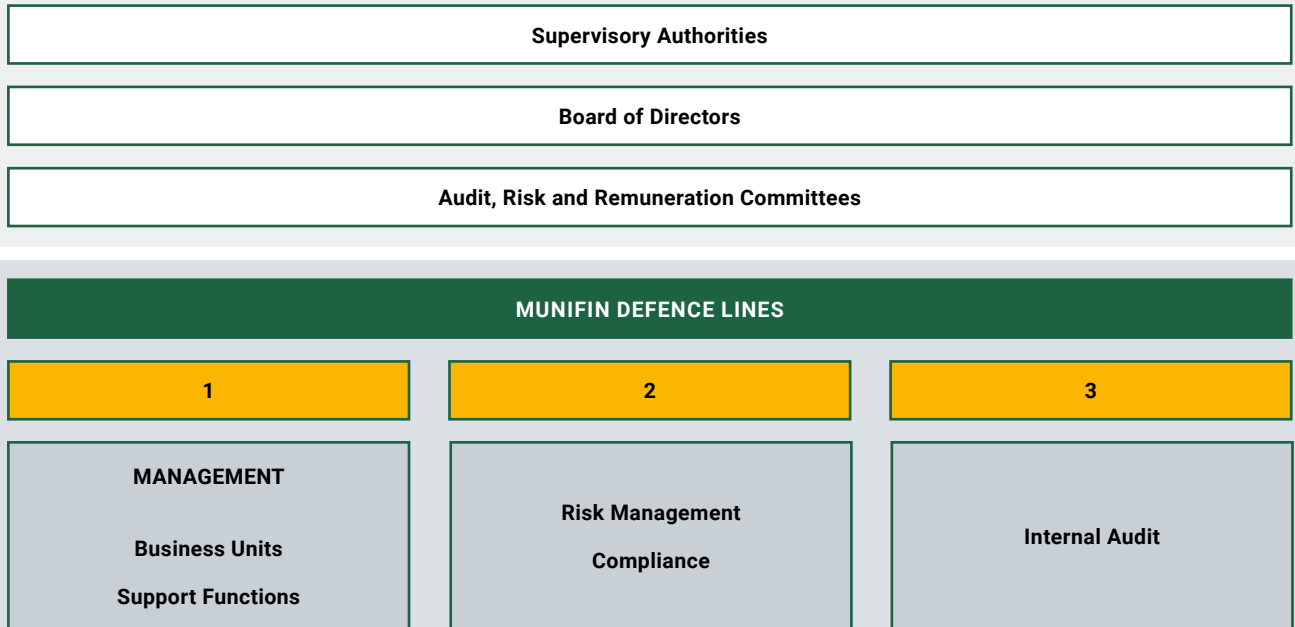


Figure 2. Three lines of defence risk governance model

The first line of defence is represented by the management, business units and support functions that are responsible and accountable for the on-going identification, assessment and management of risks. The first line of defence operates business activities within the set limits and in accordance with the internal control framework.

The first line of defence has the following main responsibilities:

- Measuring risk exposures and ensuring that they are managed in line with the risk appetite.
- Putting in place processes to ensure that the business is operating within risk appetite and policy objectives through implementing guidelines and instructions.
- Having processes in place for monitoring risk exposure against limits and targets, and for the timely escalation processes in a case of any breaches of limits and targets.

The Capital Markets function is responsible for managing the interest rate risk profile of the consolidated balance sheet by entering into market transactions within the limits set by the Board of Directors (Board). The risk positions and limit usage are reported to the Executive Management Team (EMT) and its subgroups and the Board of Directors on a regular basis. Customer financing maintains customer relationships and is in charge of credit decisions within the set limits and managing the granted credit limits. The Business Control and Reporting department, led by the Chief Financial Officer, is responsible for the principles related to capital adequacy and the structure of own funds.

The second line of defence includes independent risk management and compliance functions. MuniFin's risk management complements the risk activities of the business units through its risk control and reporting responsibilities. Risk management is responsible for overseeing MuniFin's risk-taking activities, assessing risks independently from the business units, establishing actions for the management of risks and developing policies, methodologies and systems for the management of risks. Finally, risk management's task is to ensure that the Risk and Governance Framework is in line with the risk strategy, risk appetite and risk limits. The Compliance function monitors the company's compliance with regulation.

The third line of defence is the internal audit function which is in charge of conducting risk-based and general audits, providing an independent review and objective assurance to the Board of Directors on the quality and effectiveness of the internal control framework, the first and second line of defence and the Risk and Governance Framework including links to organisational culture, as well as strategic and business planning, remuneration and decision-making processes.

The risk management and the capital management are governed by procedures set in policies, charters, risk assessment and planning documents, guidelines and instructions and other descriptions under the Risk and Governance Framework. All entities in the MuniFin Group (parent company MuniFin and subsidiary Inspira) are subject to the same Risk and Governance Framework.

Board of Directors and Committees

The Board of Directors is the highest decision-making body, both in strategic and risk related matters. Regarding risk management, the Board of Directors approves the risk strategy, general principles, risk policies, limits and processes. The Board of Directors is responsible for deciding on MuniFin's risk appetite and defining target capital ratios. The Board of Directors also approves MuniFin's risk management policy, risk appetite framework, risk policies including stress-testing programme and remuneration policy, and risk assessment and planning documents (ICAAP, ILAAP, contingency funding plan and recovery plan).

In order to organise its work as efficiently as possible, the Board of Directors has established three committees: Audit Committee, Risk Committee and Remuneration Committee. These committees are responsible for assisting and preparing matters for the Board of Directors.

The Risk Committee of the Board assists the Board of Directors in matters regarding the risk strategy and risk taking and in supervising that the company follows the risk strategy set by the Board. The purpose of risk management is to ensure that risks associated with lending, funding, liquidity management and other business operations are in line with MuniFin's low risk profile defined in the Risk Appetite Framework and related risk policies. In addition, the Risk Committee monitors the compliance of the business operations in relation to the risk strategy set by the Board of Directors.

Board's Audit Committee is responsible for directing Internal Audit to undertake independent audits on MuniFin's risk and control framework. In collaboration with the Risk Committee, the Audit Committee evaluates the assessments and audit findings concerning the Risk Appetite Framework on at least an annual basis. Based on these audit findings, the Audit Committee opines on the adequacy and effectiveness of the framework, including the MuniFin's level of compliance with regulatory standards.

The Remuneration Committee is responsible for including the risk appetite as a key component in the performance objectives, remuneration and incentive structures of the staff. The Remuneration Committee ensures that the remuneration systems do not lead to undesired operating processes or uncontrolled risk-taking. In addition, the remuneration policies shall be such that a significant breach of the set risk appetite limits may have consequences for the involved individuals' appraisal and remuneration.

CEO and Executive Management Team

The policies, business plans and strategies are approved by the Board and cascaded top-down through the Executive Management Team (EMT). The EMT is chaired by the CEO and membered by the Heads of most of MuniFin's divisions. The CEO is responsible for organising MuniFin's operational activities, and is ultimately responsible to the Board for ensuring that the activities meet the set requirements. The EMT handles the organisation of operational activities by approving the set of operational guidelines supplementing the Risk Management Policy, Risk Appetite Framework, Risk Policies and other policies of the Board of Directors. The EMT also delegates duties to the necessary divisions, departments and responsible individuals.

Concerning risk management, the EMT is also responsible for ensuring that the limits set by the Board and other principles related to risk management are taken into account in MuniFin's operations by arranging the necessary control points and regular reporting.

The EMT is supported by three executive level decision-making bodies, the Risk Group, the ALM Group and the Credit Group. All Groups support the EMT with matters concerning the MuniFin's risk position and risk profile approved by the Board.

The Chief Risk Officer (CRO) reports directly to the Board's Risk Committee on MuniFin's overall risk position at each meeting and presents a more thorough risk review at least twice a year.

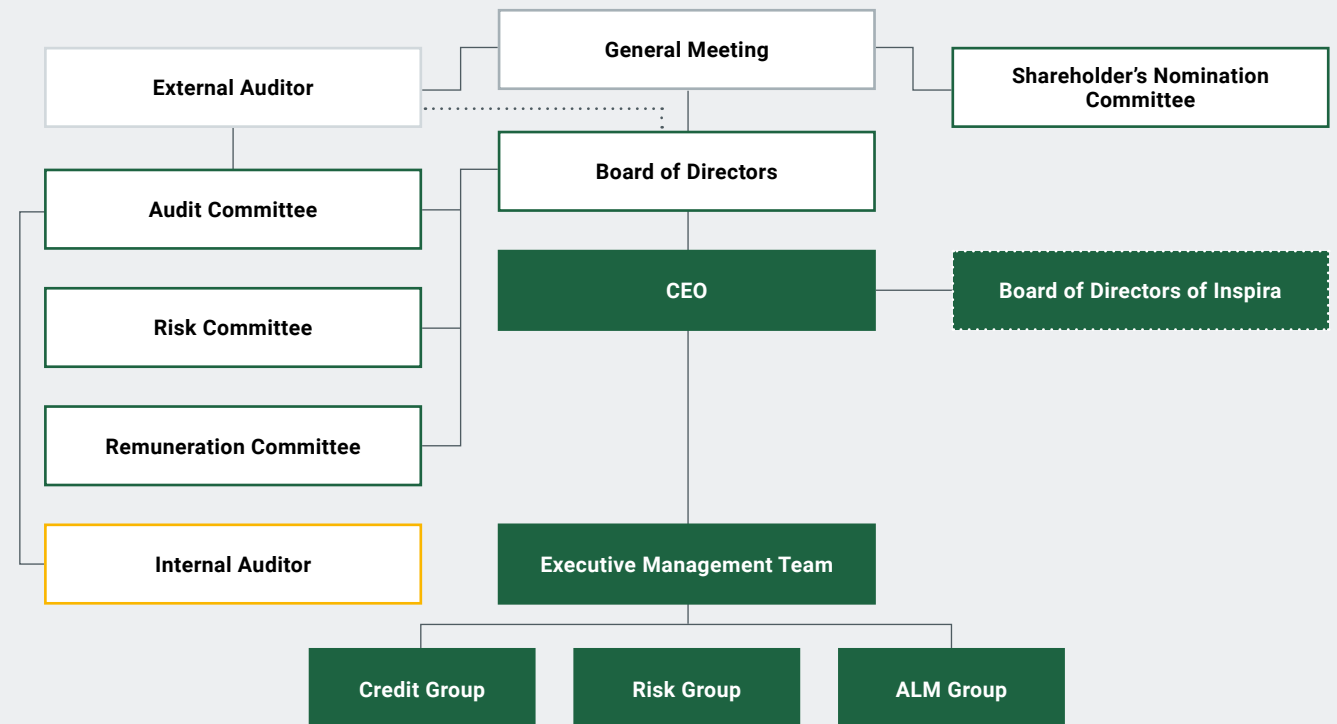


Figure 3. Risk related governance structure of MuniFin

MuniFin's overall risk profile associated with the business strategy and business model

In the Finnish economy and financial system, MuniFin's dedicated role is to ensure the availability of market based funding to the municipality sector and central government-subsidised housing production. Market based funding is acquired from capital markets at the most competitive rates available to MuniFin under all market conditions. MuniFin operates a low-risk business model with a limited scope of services offered for a restricted customer base. Furthermore, MuniFin has conservative risk management policies. MuniFin's business activity is strictly limited to the financing of Finnish municipalities, municipal federations, central government-subsidised housing production and companies controlled by municipalities in case the operations of the company are needed to ensure the availability of services essential to Finnish citizens due to local or regional circumstances. The services provided by MuniFin do not include services typically provided by traditional commercial banks, such as deposit-taking, payments and custody services or asset management related services. Due to the limited business activities focusing on offering financing services only to municipal and local government sectors, MuniFin has no material financial fee income, with net interest income being the only material source of earnings. All MuniFin's customer financing is direct municipal risk or has a guarantee by a municipality or central government (deficiency guarantee). Hence, all MuniFin's exposures to its customers are treated with zero risk-weight in the calculation of capital adequacy.

MuniFin's overall risk profile is described in the Risk Appetite Framework approved by the Board of Directors and updated at least annually. RAF is linked to both short-term and long-term strategic plans, capital and financial plans, Recovery Plan and the Remuneration Policy. It is fully aligned with ICAAP (Internal Capital Adequacy Assessment Process) and ILAAP (Internal Liquidity Adequacy Assessment Process). The risk appetite process is a key process that is closely related to MuniFin's business model and strategy. Business model and strategy are the key drivers that determine MuniFin's risk appetite along the areas of profitability and capital, liquidity and funding, credit and market risk and operational risks.

In the Risk Appetite Framework MuniFin has defined the types and amounts of risk that MuniFin is willing and able to take in pursuing its strategic objectives. The key dimensions of RAF are:

- Overall risk appetite statement of MuniFin
- Risk appetite pillars: profitability and capital, liquidity and funding risks, credit and market risks and operational risks
- For each pillar its strategic objective or risk appetite statement and material risks
- Risk indicators for each material risk
- Risk limits and thresholds for each risk indicator

MuniFin's RAF starts with the overall Risk Appetite Statement, which expresses the level of risk that MuniFin is willing to accept in order to achieve its strategy. MuniFin's overall Risk Appetite Statement is as follows: "Maintain the overall risk profile at such a low level that MuniFin's credit rating remains equal to that of the Republic of Finland and to secure customer financing in all market conditions."

There were no material changes in MuniFin's risk appetite in 2018. The company's Board of Directors assures that the risk management arrangements in place are adequate with respect to the Group's risk profile and strategy. Risks remained within the set limits during the financial year and, according to company's assessment, risk management met the requirements set for it. The IFRS 9 standard, adopted at the beginning of 2018, has increased the volatility of financial results through the unrealised valuation of financial instruments. MuniFin monitors and analyses continuously volatility of fair value changes and prepares for possible impacts on financial results and capital adequacy.

In the Risk Appetite Framework MuniFin has recognized risks associated with its business operations in the above mentioned four areas. RAF defines risk indicators for each material risk. Risk limits and threshold values are then set for each risk indicator. Altogether, these form the company's risk profile and define the amount of risk that MuniFin is able and willing to take. At least annually, the risk limits and thresholds are reviewed and recalibrated in order to align RAF with MuniFin's strategy and external and macro-economic developments. MuniFin has established a set of thresholds that are used to monitor and review the amount of risk taken compared to its risk appetite. The available historical data, regulatory requirements and external benchmarks as well as other publicly available information are used to establish, evaluate and calibrate the thresholds.

A "traffic light approach" is used to set the thresholds and to report the risk levels for each of the risk indicators. Target zone (green) is defined as the desired risk appetite level set by the Board. Early warning zone (yellow) refers to a risk level, which exceeds the desired risk appetite and triggers active monitoring and decision-making. MuniFin may decide to stay temporarily on the yellow zone, but additional risk-taking should be avoided. In addition, a plan will be made to steer the risk level back to green zone. Limit breach zone (red) refers to a risk level, which breaches the risk appetite and leads to immediate actions to steer the level of risk back to the risk appetite level. Board's Risk Committee and the Board are immediately informed and involved in the decision-making.

All financial risk indicators were clearly within the risk tolerance levels set by the Board of Directors at the end of 2018.

Stress testing forms an integral part of MuniFin's overall Risk and Governance Framework. Stress-testing programme ensures that stress-test scenarios are aligned within RAF and capital planning framework.

Risk profile described in RAF is always an essential part of the strategic business planning process. In the process, identified risk factors are considered and included in the base and stress scenarios of the business plan.

Summary of Risk Appetite Framework indicators

Risk pillars		Objectives
Profitability and capital	Credit rating	To maintain a sufficient level of earnings, profitability and capital, even in stress periods.
	Leverage ratio	
	Net interest income ratio	
	Cost-to-income ratio	
	Change in the CET1 ratio	
Liquidity and funding	Liquidity Coverage Ratio	To maintain an adequate liquidity buffer and a sustainable funding position and profile, even in stress periods.
	Net Stable Funding Ratio	
	Financing Gap	
	Indicators related to funding	
	Survival horizon	
Credit and market risks	Non-performing exposures and impairments	To maintain a sound credit and market risk profile appropriate for MuniFin's business model.
	Average credit rating in liquidity portfolio	
	Geographic concentration in liquidity portfolio	
	Indicators related to market risk	
Operational risks	Reputation	To maintain an effective operational control and compliance to support functional and responsible operations.
	Environmental, Social and Governance score	
	Indicators related to HR	
	Indicators related to operational risks	
	Regulatory breaches	

Key figures of profitability and capital

	31 Dec 2018	31 Dec 2017	31 Dec 2016
Change in the CET1 ratio, percentage point	13.92	7.25	4.72
Leverage ratio, %	4.06	3.84	3.54
Cost-to-income ratio	0.21	0.18	0.17

Risk management process

In MuniFin, risks are identified through continuous monitoring and analyses of the operating environment and, especially, during the annual strategy update and business planning process. Risks are also identified as part of the RAF development and annual update and in an annual operational risk self-assessment process. Complementary to this, ICAAP and ILAAP look at these risk types to assess capital and liquidity requirements that should be allocated to material risk types.

Risk measurement quantifies risks and it is used to assess and select the appropriate means of managing relevant risks and to enable appropriate resources to be dedicated to the management of that risk. The first line of defence risk owners are responsible for measuring risk exposures and ensuring that risks are managed in line with company's risk appetite. In risk measurement,

considerations are given to both normal and stressed conditions and processes put in place to ensure that changes in risk trends are identified and factored into the risk measurement. This includes the identification of appropriate stress testing methodologies to test MuniFin's resilience under a range of stress scenarios.

Risk management identifies the appropriate strategy to address material risks. The second line of defence is responsible for developing the Risk Policies for each risk type as well as the overall Risk Appetite Framework. The first line of defence risk owners are responsible for putting in place processes to ensure that the business is operating within risk appetite and policy objectives through implementing operational level guidelines and instructions. Stress testing is also used as a risk management tool to assess the company's potential risk exposure under stress and to put in place processes and procedures to limit risk exposure.

Risk monitoring is used to track identified risks and identify new or emerging risks. It allows MuniFin to put in place risk management processes and evaluate their effectiveness. The first line of defence risk owners have processes in place for monitoring risk exposure against limits and targets and second line of defence is responsible for monitoring exposures of material risk types against RAF and other risk limits.

Escalation processes are in place within the first and the second line to escalate any breaches of limits and targets in a timely manner. In the case of a breach being identified within the first line of defence, the breach is reported to the Risk Management and then escalated according to relevant governance processes, e.g. a breach of risk appetite limits must follow RAF escalation processes. Conversely, in the case of a breach being identified by the second line of defence the case must be first discussed with the first line of defence function, before being escalated through relevant governance processes. The frequency of monitoring processes varies according to individual risk types.

Risk reporting provides the Board of Directors and its Risk Committee, the Executive Management Team and other management with an accurate, timely and clear oversight of the current risk exposure and highlights any risks that might impede the achievement of business objectives. Reporting tools and methodologies are in place to ensure timely and accurate risk reporting. Frequency of risk reporting varies according to the materiality of risk types.

The Risk Appetite Dashboard is reported on a monthly basis to the Board.

INFORMATION ON RISK MANAGEMENT, OBJECTIVES AND POLICIES BY CATEGORY OF RISKS

EU CRA
EU CCRA
EU CRC

QUALITATIVE DISCLOSURE REQUIREMENTS RELATED TO CREDIT RISK AND CREDIT COUNTERPARTY RISK

Credit risk refers to the possibility that MuniFin's counterparty fails to meet its obligations in accordance with the agreed terms and conditions. Credit risk originates from lending operations, but also from other receivables, like debt securities, derivatives and off-balance sheet commitments. Credit risk also includes country risk, settlement risk and counterparty credit risk.

Concentration risk refers to the risk related to the overall spread of a company's exposures over the variety of debtors.

Governance of credit risk

The management of credit risk in MuniFin is based on the risk framework approved by the Board of Directors and it aligns the risk appetite with the company's strategy and business model.

Credit risk management is based on the three lines of defence model used at MuniFin.

The first line of defence is represented by the company's business operations. Customer Finance division offers to MuniFin's limited clientele loans, short-term lending, financial leases and derivatives for hedging purposes. MuniFin's customers consist of municipalities, municipal federations and municipality-controlled entities, as well as non-profit corporations and other non-profit organisations nominated by the Housing Finance and Development Centre of Finland (ARA). Customer Financing maintains customer relationships and is in charge of credit decisions within the set limits and managing the granted credit limits. The division also develops and maintains effective internal controls to ensure credit risks are treated prudently within the company's RAF, internal policies and guidelines.

Capital Markets division includes MuniFin's Treasury operations and Funding operations. Treasury department is responsible for managing MuniFin's liquidity portfolio. The guiding principle is to invest in cash and liquid and highly rated financial instruments to ensure business continuity under all market conditions. The Capital Markets division is also responsible for MuniFin's hedging operations using derivatives. MuniFin only uses derivatives for hedging purposes and it does not have a trading book.

In the second line of defence, the Risk Management function, headed by the CRO, is independent from the company's business operations. Risk Management has a responsibility for developing and maintaining the company's credit risk management framework and credit risk policies in accordance with the relevant regulation. The Risk Management function monitors and analyses MuniFin's credit risks and assures that credit granting process including the credit approval is conducted in accordance with MuniFin's credit risk policies. Risk Management also reports on a regular basis to Risk Group, Executive Management Team and to the Board of Directors of company's overall credit risk position.

The second line of defence also includes the Compliance department headed by the CRO, which monitors that MuniFin is compliant with applicable credit risk regulation.

The third line of defence, internal audit, regularly performs risk-based audits in accordance with the annual plan approved by the Board and its Audit Committee.

Board of Directors and Risk Committee

The Board of Directors has the overall responsibility for MuniFin's risk management and approves the main principles of credit risk management in the company. MuniFin's risk appetite is defined in RAF, which also includes the indicators for monitoring the company's risk appetite on credit risk.

The Board of Directors steers the credit risk management through the credit risk appetite and other relevant policies, collateral management and credit-granting principles that aim to ensure that the level of credit risk remains at a moderate level and at the same time, the solvency and profitability targets are taken into consideration.

The Risk Committee of the Board supports the Board in the tasks related to credit risk management, i.e. evaluates the changes in the credit risk framework and policies before the Board approval and follows regularly credit risk reporting and the risk indicators in the Risk Appetite Framework.

Executive Management Team, Risk Group, Credit Group and ALM Group

MuniFin has a Risk Group set up by the EMT to develop company's credit risk management principles and policies. It monitors credit risk limits and indicators defined in RAF and analyses the status of credit risk, credit counterparty risk and concentration risk. The CEO appoints Risk Group members, noting that the Risk Group cannot have business representatives as decision-makers. Risk Group does not participate in business decision-making and business representatives do not participate in Risk Group's decision-making.

MuniFin has a Credit Group set up by the EMT, which decides on credit granting for customers with certain risk level. In addition, MuniFin has an ALM Group set up by the EMT, which decides on new counterparties and issuers in investment and derivatives operations and their limits in the context of credit risk policies and guidelines.

Management of credit and counterparty credit risk

Credit risk management in customer financing

MuniFin may only grant loans and financial leases without a separate security directly to a municipality or municipal federation. For others, loans must be secured with an absolute guarantee issued by a municipality or municipal federation, or mortgage collateral and state deficiency guarantee. When a loan has a deficiency guarantee by the state of Finland, primary pledge of mortgage collateral is required unless the loan is a central-government subsidised housing loan granted for municipality or municipal federation in which case there is no collateral required by law. Under deficiency guarantee, the state of Finland is responsible for the primary debt in respect of the part that is not recovered from liquidation of the mortgage collateral. The guarantee and collateral arrangement must cover the full amount of the granted loan including the principal, interest and fees. A primary pledge (mortgage collateral) is required when the loan is given a deficiency guarantee by the state and the amount of the primary pledge must equal 1.2 times the amount of the loan. All granted interest subsidy loans must be accepted by ARA (The Housing Finance and Development Centre of Finland). The loan itself is granted by a financial institution. Because such a guarantee is required to reduce the credit risk, all loans granted are classified as zero-risk when calculating capital adequacy.

The company does not bear the residual value risk related to its financial lease services. MuniFin has not had credit losses in the financing of its customers after possible realisation of mortgage collaterals and guarantees. The company does not have customer limits for lending as all lending is to counterparties, which are allocated the risk weight of zero percent in the capital adequacy calculations. The company, however, analyses the credit risk and payment behaviour of its customers regularly.

MuniFin monitors the development of the value of real estate collateral during the loan period and calculates Loan-to-Value ratio. When making credit decisions, the value of collateral is calculated both with and without guarantees. Both values are documented in the credit decision process.

MuniFin's business model for customer financing is based on the zero risk-weights in capital adequacy calculations due to the municipal customers and the credit mitigation techniques in use (mortgage collaterals and guarantees by municipalities or the state of Finland). Despite that, MuniFin has in use a credit rating system, in which each customer is assigned an internal credit rating as part of the credit decision-making process. In addition to that, Risk Management evaluates at least annually all customers and updates credit rating if needed.

Credit risk management in liquidity portfolio and credit counterparty risk

MuniFin is also exposed to credit risk from its liquidity portfolio investments and derivative instruments. In selecting counterparties, MuniFin evaluates credit risk using the principles and limits, approved by the Board of Directors, based on external credit ratings. Nominal values of debt securities and equivalent market values of derivatives are used in monitoring credit risk.

Investments in liquidity portfolio must have at least one credit rating from an approved rating agency; Standard & Poor's, Moody's or Fitch. MuniFin follows a principle that credit rating in liquidity portfolio must be at least A-. If credit rating is downgraded below A-, MuniFin's Risk Group decides what measures should be taken. MuniFin may invest in domestic financial counterparties or domestic public sector entities, which are not rated but investments in these counterparties are restricted by separate limits. MuniFin also limits foreign country risk exposure by setting separate limit to this risk.

Counterparty credit risk is the risk that the MuniFin's counterparty in derivative contracts or repo agreements is not able to meet its obligations. MuniFin uses derivatives only in hedging purposes in its own operations, like hedging all non-euro funding and investment transactions to euros and fixed and long-term interest rate transactions to short-term interest rate risk (Euribor). MuniFin also uses derivatives for hedging balance sheet fixing risk. Furthermore, derivatives transacted with customers are hedged in the markets.

Derivatives are traded over-the-counter (OTC), which means that the terms of contract are individually defined and agreed with the derivative counterparty. In May 2016, MuniFin switched to using central counterparties (CCPs) in the clearing of standard OTC derivative contracts, as required by "EMIR", the European Markets Infrastructure Regulation. In this model, at the end of a daily clearing process, a CCP becomes the counterparty to each cleared trade. The purpose of CCP clearing is to reduce counterparty risk. Currently, MuniFin has two global banks providing clearing broker services.

The counterparty credit risk is also subject to strict limits. When approving the financial counterparty for derivatives, a counterparty must have at least one credit rating from either Standard & Poor's, Moody's or Fitch and it must be at least A- or equivalent. All contracts are valued daily using market information and advanced valuation models and reconciled with counterparty valuations. Derivatives with financial counterparties are executed only under ISDA Master Agreements. MuniFin limits credit risk arising from its derivative counterparties with ISDA Credit Support Annexes (CSA). The company has 49 CSA agreements in place of which 39 require daily margining. MuniFin only enters into the trade with counterparties which have a variation margin CSA with daily margining. MuniFin only accepts cash as a collateral in derivatives agreements. Additionally, the Municipal Guarantee Board's guarantees are used for reducing the derivative counterparty risk of certain financial counterparties.

The Credit Valuation Adjustment (CVA) that measures counterparty credit risk and MuniFin's own Debt Valuation Adjustment (DVA) are both taken into account when calculating credit risk exposures arising from derivative counterparties. The CVA is estimated for each derivative counterparty by calculating MuniFin's expected positive exposure throughout the maturity of the derivative portfolio, taking into account the probability of default and the estimated amount of loss in the possible event of default. Input data for the calculation is based on the terms of CSA agreements, generally accepted assumptions in the markets on the loss given default and expected probabilities of default based on historical credit rating matrices. Similarly, the DVA is determined on the basis of MuniFin's expected negative exposures, taking into account the probability of company's own default and the loss given default.

According to its own analysis, MuniFin does not have any exposures containing general or specific wrong way risk. The general wrong way risk is the risk that the credit quality of the counterparty might positively correlate with macro-economic factors, which also effects on the value of derivatives transactions. Specific wrong way risk is the risk when future exposure to a specific counterparty is positively correlated with the counterparty's probability of default (PD) due to the nature of the transactions with the counterparty.

Developments in credit risk

As part of the implementation of IFRS 9, MuniFin has developed an impairment model in order to recognise expected credit losses before the actual impairment event. The IFRS 9 requirements for impairment are based on a three-stage approach to measure expected credit losses (ECLs). Financial assets measured at amortised cost or fair value through other comprehensive income are in scope for recognising impairment under the IFRS 9 standard. In addition, finance lease receivables and off-balance sheet binding loan commitments are in scope for recognising impairment due to their credit risk. Impairment of financial assets is calculated based on the credit loss expected to arise over a 12-month period, unless there has been a significant increase in credit risk since origination, in which case, the allowance is calculated based on the expected credit losses over the life of the asset. Both lifetime and 12-month expected credit losses (ECLs) are calculated on an individual basis. The definition of default used in ECL is in line with the MuniFin's capital adequacy calculations and risk management. When estimating the ECLs, MuniFin considers different scenarios. Each scenario is associated with different PDs, EADs and LGDs. When relevant, the assessment of multiple scenarios also incorporates how defaulted loans are expected to be recovered. The maximum period for which the credit losses are determined is the contractual life of a financial instrument unless the company has the legal right to call it earlier.

In the measurement of expected credit losses, past events and forward looking information is used. Utilising forward-looking information in the expected credit loss model requires judgement. In addition to the aforementioned factors, also meaningful macroeconomic variables are included in the model. Their forecasts are included in the macroeconomic scenarios. MuniFin has been compliant with the IFRS 9 ECL framework since the adoption of IFRS 9 from 1 January 2018.

Credit risk and counterparty credit risk reporting

MuniFin's credit risks are reported to the Board of Directors, Risk Committee, Executive Management Team and to the Risk Group. The Risk Management department is responsible for producing regular risk reporting on the company's risk positions including indicators set in the Risk Appetite Framework.

The Risk Management department monitors the counterparty credit ratings on a daily basis and reports immediately to the Executive Management Team of any significant changes.

Capital requirements for credit risk and counterparty credit risk

MuniFin calculates capital requirements for credit risk using the standardised approach. For counterparty credit risk MuniFin is applying the mark-to-market method.

Concentration risk

Taking into account the nature of MuniFin's business, the company has some concentration risk in its customer financing. Although the exposure to MuniFin's customers (municipality sector and central government-subsidised housing production) are seen as a concentration, this is inherent in MuniFin's business model and forms the basis for the company's strategy. Considerable portion of the exposure to customers is indirectly related to the state of Finland due to the deficiency guarantee in loan arrangements for the government-subsidised housing production. This is inextricably linked to MuniFin's business model and to its place in the Finnish social system. Furthermore, the ultimate purpose of MuniFin is to be a financier for municipality sector and central government-subsidised housing production and limitations on MuniFin's customer base and operations are set in the Act on Municipality Guarantee Board. Therefore, this risk is accepted by the company.

The company could be exposed to concentration risk in its liquidity portfolio. However, limits related to investments in liquidity portfolio guide to diversify invests in geographically amongst others. The Board approves an annual liquidity and funding plan, in which the investment goals are aligned with principles and limits set in risk policies. In addition to this, the EMT ensures with guidelines that concentration risk is manageable and within set limits. Concentration risk related to the liquidity portfolio is monitored by the first line of defence, the Treasury department, as well as independently by the second line of defence, the Risk Management department. Reports are submitted to the Risk Group, Risk Committee and Board of Directors.

EU MRA

QUALITATIVE DISCLOSURE REQUIREMENTS RELATED TO MARKET RISK

Market risk means the risk of the company incurring a loss as a result of an unfavourable change in market price or its volatility. Market risks include interest rate, foreign exchange, share price and other price risks. MuniFin manages the interest rate risk arising from its business operations by means of using derivative contracts. Interest rate risk arises mainly from the difference in Euribor rate terms between assets and liabilities. The AT1 capital loan transaction and the company's equity also causes interest rate risk. The company hedges against exchange rate risks by using derivative contracts to translate all foreign currency denominated funding and investments into euros. The company does not bear any material foreign exchange risk. Derivative contracts are also used to hedge against other market risks. Derivative contracts may only be used for hedging purposes. MuniFin does not have a trading portfolio.

Governance of market risk

The market risk management operates under the three lines of defence framework as described in Governance of risk management in Section 2. Market risk management utilises the existing governance structure and processes involving all organisational levels of the company.

Concerning market risk, the primary first line risk owner is the Treasury department and the second line tasks are conducted by the Risk Management and Compliance functions.

Risk Management is responsible for the development market risk policies, while Treasury as the first line risk owner is responsible for making sure that guidelines, instructions and processes are in place to ensure that the relevant policies are being complied with and MuniFin is operating in line with the defined risk appetite at any given time. Overall, the Treasury department is responsible for managing day-to-day market risk positions of MuniFin.

The third line of defence, the Internal Audit function, conducts risk-based and general audits, independently reviews and provides objective assurance to the Board of Directors on the quality and effectiveness of the internal control systems.

The independent risk management function is responsible for the development and maintenance of MuniFin's market risk management framework. The framework is described in the Market risk policy, which is owned by MuniFin's CRO. The policy is updated at least annually and changes reflect any material changes to the organisational design, best practices, and external environment. The Risk Group is responsible for reviewing any changes proposed by the risk management function prior to the policy being subject to a review by the Executive Management Team and the Risk Committee and finally approved by the Board.

Market risk appetite

MuniFin's overall risk appetite is described in the Risk Appetite Framework. MuniFin has identified the following material market-risk areas: interest rate risk in banking book, FX risk and spread risk. Interest rate risk in banking book has been divided into following sub-risk types: economic value of equity, earnings at risk and basis risk.

Under the RAF, MuniFin has further defined material risks and for each material risk MuniFin has set risk indicators defining the tolerance for market risks. At least on an annual basis, the risk limits and thresholds are reviewed and recalibrated in order to align the Risk Appetite Framework with the Company's strategy and external and macro-economic developments.

Due to MuniFin's business model MuniFin does not have risk appetite for equity, equity index, commodity or any other similar market risk types.

Capital requirements for market risk

MuniFin calculates capital requirements for the overall net foreign exchange position. The company hedges against exchange rate risks by using derivative contracts to translate all foreign currency denominated funding and investments into euros. The company does not bear any material foreign exchange risk.

Management of market risk

General principles

The purpose of market risk management is to ensure that the market risk arising from MuniFin's banking book operations correspond to the accepted risk profile as defined in the RAF. The aim is to keep the overall risk profile at such a low level that the company's strong credit rating (Aa1 /AA+) is not compromised.

MuniFin maintains its exposure to banking book interest rate risk at a low level, which is in line with the company's low-risk business model. Interest rate risk arises from the operations in funding, customer financing and investment activities (liquidity portfolio).

The main principle is to hedge all fixed-rate assets and liabilities with a maturity of one year or greater to floating rate. The hedge is mainly executed simultaneously with the closing of the funding transaction in order to avoid any market risks arising from the timing differences. Furthermore, all fixed-rate assets including the loans to the customers are hedged to floating rate. Due to nature of lending business, small exposures with minor notional amounts may be left unhedged. Any remaining interest rate positions in the banking book are under ongoing monitoring by Treasury and Risk Management. These residual risks are hedged at a portfolio level if deemed necessary.

Under current risk management practices, where all interest rate risk exposures above one year are hedged to floating rate, the main impact from interest rates to the MuniFin's earnings arises from short-term interest rate fixings (Euribor rates). This risk is actively managed by Treasury both by using Euribor basis swaps to mitigate the risk and by matching lending interest rate fixing dates with funding related fixing dates.

Fair value hedge accounting is applied to certain financial assets and liabilities, where the plain-vanilla interest rate of the hedged item has been swapped to a floating rate using derivatives. In addition, fair value hedge accounting is applied to foreign currency denominated financial liabilities with fixed interest rates, which have been hedged by exchanging the principal into euros and the interest rate into a floating rate. The hedging relationships within hedge accounting are documented and they comply with the company's risk management objectives and strategy. MuniFin does not apply cash flow hedge accounting.

For financial assets, the company applies fair value hedge accounting in accordance with IAS 39 portfolio hedge accounting to lending at fixed rates and long-term reference rates. For the aforementioned financial assets, the hedged risk is interest rate risk. In addition fair value hedge accounting according to IFRS 9 is applied to lease agreements at fixed rates and structured lending transactions which pass the SPPI test and which have been hedged 1:1 with an interest rate swap.

IRRBB

The ALM Group is responsible for monitoring MuniFin's interest rate risk and for the principles of IRRBB risk management. Treasury supports the ALM Group in relation to IRRBB risk management activities and is responsible for managing interest rate risk at an operational level in accordance with the decisions made by the ALM Group. Interest rate risk management is regularly controlled and reported by the Risk Management function.

MuniFin performs IRRBB calculations based on a number of different interest rate shock scenarios, including non-parallel shifts in the interest-rate curve (steeper and flatter scenarios). Furthermore, parallel down – 200 basis point parallel shift is used with rates floored to zero.

Interest rate sensitivity

Interest rate sensitivity or economic value of equity (EVE) measures how much the present value of assets and liabilities will fluctuate due to changes in the interest rate environment. The impact is assessed in proportion to MuniFin's own funds. MuniFin applies number of interest rate scenarios to measure interest rate sensitivity of the balance sheet. In addition, MuniFin applies the standard regulatory approach by measuring the total negative impact of a +/- 200 basis point parallel shift of the yield curve applying a zero floor.

Economic Value of Equity

(EUR 1,000)	Impact	In relation to own funds
31 Dec 2018	-37,100	2.6%
31 Dec 2017	-5,600	0.44%

Earnings risk

Earnings risk is measured through a financial forecast model for the company's projected financial income by measuring how adverse changes in interest rates may affect the net interest income. The impact is assessed in proportion to MuniFin's profitability. The model includes the entire balance sheet of the company and takes into account any optionality in the balance sheet.

Earnings risk is measured monthly for the following 12-month period. The measurement compares the projected financial income of the base scenario of the forecast model to a set of selected interest rate scenarios. The most negative scenario is used as a measure for earnings risk.

Earnings at Risk

(EUR 1,000)	Impact	In relation to net interest income
31 Dec 2018	-7,600	3.6%
31 Dec 2017	-20,207	10.7%

Basis risk

Basis risk is actively monitored and managed by Treasury both using Euribor basis swaps to mitigate the risk and by matching lending and funding fixing dates. Basis risk is followed by the Risk Management function.

Basis risk refers to the impact of the relative changes in interest rates for financial instruments that have similar tenors but are priced using different interest rate indices. Unfavourable changes in basis swap spreads may have a negative effect on MuniFin's net interest income. Maintaining a stable earnings profile, even under stressed interest rate conditions, is an important part of ensuring MuniFin is able to operate according to its business model.

Basis risk at MuniFin refers to the single-currency basis risk arising from assets and liabilities, which are linked to different Euribor reference indices. The basis risk indicator is defined as a negative effect of an unfavourable change in basis swap spread on NII, and calculated as a proportion of the preceding year's total net interest income. When measuring basis risk MuniFin applies two different scenarios.

in euros. All foreign currency denominated funding and liquidity investments denominated in foreign currency are translated into euros using derivatives. The functionality of the cross-currency derivative markets are always assessed before entering into new funding or investments in order to ensure that currency hedges can be put in place according to hedging strategy in order to hedge all transactions back to euros. Furthermore, all currency nominated funding transactions with early call options are hedged fully for potential call situations.

Despite this, MuniFin is not able to completely hedge out all FX risk, due to the need for conducting daily collateral management in foreign currency when non-euro interest rate derivatives are cleared with Central Counterparties.

MuniFin will avoid cross-currency basis risk on its foreign-currency funding and investments by executing hedges to the maturity date of underlying hedged item. Thus, future changes in the cross-currency bases will not affect MuniFin's cash-flow-based risk profile. Any potential impact from cross-currency basis risk associated with existing hedges and having an effect on profitability would be evaluated as part of annual ICAAP process.

FX risk

The ALM Group is responsible for monitoring MuniFin's FX risk and for the principles of FX risk management. Treasury supports ALM Group in relation to FX risk management activities and is responsible for managing the FX risk at an operational level in accordance with the decisions made by the ALM Group. Risk Management monitors and reports on FX risk related risk limits.

Based on the guidance from the Board of Directors, MuniFin's lending and other customer finance products are all denominated

Spread risk management

Spread risk refers to the risk premium component of an investment, indicating the additional return demanded by investors for an instrument with a specific credit rating instead of investing in the risk-free yield. Spread risk is defined as a probability of change in the market value of an instrument, if the market required return changes. The change may be caused by a change in the instrument's level of risk or a change in the 'risk sensitivity' of the market.

For MuniFin, spread risk refers to the risk of loss due to a negative change in the market value of the investment portfolio. It is measured through calculating the change in the market value when the portfolio's yield requirement (discount curve) is stressed by a certain number of basis points.

In MuniFin's investment policy, all investments are classified and limited according to their liquidity, credit rating and geographic concentration. Risk Management performs back-testing for its monthly spread risk calculations by comparing the realised fair value reserve change and the estimated spread risk from previous month.

Spread risk

(EUR 1,000)	Change in required return	Impact	In relation to own funds
31 Dec 2018	0.32 p.p.	-33,900	2.4%
31 Dec 2017	0.20 p.p.	-26,800	2.1%

Stress testing

MuniFin's stress-testing framework documented in Stress testing programme has been developed to be in line with EBA Guidelines on stress testing, taking into consideration the principle of proportionality in both the quantitative and the qualitative aspects of stress testing within MuniFin.

Stress testing enables MuniFin to gain a more in depth understanding of its individual risk profile (e.g related to interest rate risk) and thus enhance its risk management activities. Stress testing allows MuniFin to gain insights into how key measures predicted as part of the planning process could change under different stress situations.

Stress tests performed for market risk cover spread risk and IRRBB related stress test for earnings and economic value. Market risk is also part of the comprehensive company-wide ICAAP stress test, which measures risk over a five-year horizon.

Market risk reporting

Monthly reports of market risk development are delivered to the Board of Directors and Executive Management Team as part of regular risk reporting. All changes in MuniFin's market risk profile or position and necessary actions, which are taken in order for the company to remain within set risk appetite are reported to the Board of Directors. In addition to regular reporting, ad-hoc reporting is prepared to the Board as needed.

EU LIQA

LIQUIDITY RISK MANAGEMENT

See section 14 for liquidity risk management principles.

OPERATIONAL RISK

Operational risk means the risk of loss due to insufficient or failed internal processes, insufficient or failed policies, systems or external factors. Operational risks also include risks arising from a failure to comply with internal and external regulation (compliance risk), legal risks and reputational risk. Operational risks may result in expenses, payable compensation, loss of reputation, false information on position, risk and results or an interruption of operations.

Governance of operational risk

MuniFin's independent Risk Management, Operational Risk function (the second line of defence) is responsible for developing and maintaining the framework for managing operational risk and also supports and controls the first line of defence in their implementation of the operational risk framework. Risk Management maintains adequate operational risk policies and procedures. In addition, the risk management monitors and reports the adequacy and effectiveness of operational risk framework on a regular basis

MuniFin's Compliance function (the second line of defence) is responsible for developing and maintaining the framework for managing compliance risk. It also supports the first line of defence in their implementation of the compliance risk framework.

Risk Management reports to the Risk Group, Executive Management Team's subgroup, on a regular basis about all operational risk incidents and controls needed. The Risk Group decides if any operational actions are needed. It also reviews and approves the findings of an annual operational risk self-assessment process.

The Board of Directors approves the principles of operational risk management. The Risk Committee of the Board of Directors assists the Board on matters concerning the company's risk strategy and risk appetite level, for example by evaluating changes in the operational risk management policy. The Risk Committee supports the Board in the supervision that the company adheres to the risk strategy approved by the Board.

Management and measurement of operational risk

Operational risks are recognised as part of the company's daily operations and processes. This has been implemented with an annual operational risk survey, which is carried out by departments through a self-assessment led by Risk Management. Each function's and department's responsibilities include the management of operational risks on a daily basis. In addition, the company's Risk Management and Compliance functions support the other functions and departments and have the responsibility at the company level for coordinating the management of operational risks. The Compliance function reports to the Audit Committee.

MuniFin uses various methods for managing operational risks. The company has internal policies approved by the Board and supplementing internal guidelines approved by the management in

order to guide operations. Operational risks are also covered by the Risk Appetite Framework approved by the Board of Directors. Key duties and processes have been charted and described. Internal instructions and processes are updated on a regular basis, and the compliance with them is supervised. The tasks related to business activities, risk control, back-office functions, documentation and accounting are separated. The company has adequate backup systems to ensure the continuity of key functions. The expertise of the personnel is maintained and developed through regular development discussions and training plans. MuniFin has insurance policies related to its operations and assesses the level of insurance cover on regular basis.

MuniFin has a contingency plan for situations in which business operations are interrupted. The plan is designed to ensure that the company is able to continue functioning and to limit its losses in different disruptive scenarios. The annual operational risk survey and the operational risk-event report process support the company's continuity planning.

MuniFin's compliance function continuously monitors the development of legislation and regulations issued by authorities relevant to the company's operations and ensures that any regulatory changes are appropriately responded. The legislation and regulations concerning the operations of credit institutions have faced significant changes during the past few years and will continue to change in the future, which creates challenges for MuniFin's Compliance function. The company has tried to minimise the risks related to this by maintaining active contacts with the authorities and interest groups as well as through the organisation of the company's internal compliance function (incl. reporting, evaluation of effects).

MuniFin has significant information system and business process related projects aimed at improving the quality, efficiency and regulatory compliance of current operations. The extent of these projects creates operational risks that the company strives to minimise by developing and implementing models related to project management and monitoring (incl. regular reporting) and ensuring sufficient resources. The risks related to development projects are surveyed and monitored regularly. In addition, project audits are in scope of the internal audit when included on the annual audit plan.

The company has an approval process for new products and services. The process aims to ensure that all material risks and operational requirements are taken into account when developing new products and services. The company does not have material outsourced functions in its operations. The main outsourced items are related to IT support and back-up facilities of IT servers.

The realisation of operational risks is monitored with systematic operational risk event reporting, which is used to change operating principles or implement other measures to reduce operational risks where necessary. The aggregated incident information is included in the regular risk reporting to the Board. MuniFin's operational risk position is monitored and reported on a monthly basis following the risk indicators defined in the Risk Appetite Framework.

Minimum own funds requirement for operational risk

MuniFin calculates the minimum own funds requirement for operational risk using the basic indicator approach. Under the basic indicator approach, the own funds requirement for operational risk equals to 15% of the average over three years of the relevant indicator as set out in the Capital Requirements Regulation in Article 316.

INFORMATION ON GOVERNANCE ARRANGEMENTS

Information on governance arrangements are described in a separate document, Corporate Governance Statement 2018, which is available on the company's website at www.munifin.fi.

Section 3

Information on the scope of application of the regulatory framework

EU LI1

Differences between accounting and regulatory scopes of consolidation and the mapping of financial statement categories with regulatory risk categories

	a & b	c	d	f	g
	Carrying values as reported in published Financial Statements & carrying values under scope of regulatory consolidation	Subject to credit risk framework	Subject to CCR framework	Subject to market risk framework	Not subject to capital requirements or subject to deduction from capital
31 Dec 2018 (EUR 1,000)					
ASSETS					
Cash and balances with central banks	3,522,200	3,522,200	-	-	-
Loans and advances to credit institution	1,380,544	104,694	1,275,850	44,113	-
Loans and advances to the public and public sector entities	22,968,118	22,968,118	-	-	-
Debt securities	5,862,591	5,862,591	-	189,812	-
Shares and participations	9,521	9,521	-	-	-
Derivative contracts	1,538,610	-	1,538,610	763,508	-
Intangible assets	14,850	-	-	-	14,850
Tangible assets	2,427	2,427	-	-	-
Other assets	174,818	123,471	51,347	16,449	-
Accrued income and prepayments	203,061	68,153	134,908	-	-
Total assets	35,676,739	32,661,175	3,000,714	1,013,883	14,850
LIABILITIES					
Liabilities to credit institutions	822,504	-	739,260	31,799	-
Liabilities to the public and public sector entities	3,870,918	-	-	1,556,846	-
Debt securities issued	26,901,998	-	-	21,871,044	-
Derivative contracts	2,205,427	-	2,205,427	1,478,966	4,995
Other liabilities	6,149	-	-	-	-
Accrued expenses and deferred income	148,377	-	38,191	-	-
Deferred tax liabilities	235,307	-	-	-	-
Total liabilities	34,190,680	-	2,982,878	24,938,654	4,995

	a & b	c	d	f	g
	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 CCR framework	Subject to market risk framework	Not subject to capital requirements or subject to deduction from capital
31 Dec 2017 (EUR 1,000)					
ASSETS					
Cash and balances with central banks	3,554,182	3,554,182	-	-	-
Loans and advances to credit institution	1,251,391	24,221	1,227,170	5,742	-
Loans and advances to the public and public sector entities	21,650,847	21,650,847	-	-	-
Debt securities	6,494,234	6,494,234	-	206,869	-
Shares and participations	9,662	9,662	-	-	-
Derivative contracts	1,433,318	-	1,433,318	756,503	-
Intangible assets	10,196	-	-	-	10,196
Tangible assets	2,594	2,594	-	-	-
Other assets	157,862	114,657	43,205	12,697	-
Accrued income and prepayments	173,853	67,497	106,356	-	-
Total assets	34,738,139	31,917,893	2,810,049	981,811	10,196
LIABILITIES					
Liabilities to credit institutions	3,902,480	-	699,780	42,190	-
Liabilities to the public and public sector entities	646,558	-	-	253,398	-
Debt securities issued	26,303,961	-	-	22,732,764	-
Derivative contracts	2,216,034	-	2,216,034	1,707,173	5,134
Other liabilities	2,587	-	-	-	-
Accrued expenses and deferred income	124,574	-	54,398	-	-
Deferred tax liabilities	202,522	-	-	-	-
Total liabilities	33,398,716	-	2,970,212	24,735,525	5,134

The table above provides a breakdown of the published financial statements into the various risk frameworks. Certain items such as foreign currency assets and liabilities are subject to both the credit risk framework and the market risk framework. Cross currency

derivatives hedging these foreign currency assets and liabilities are taken into account in the market risk and counterparty credit risk frameworks.

EU LI2

Main sources of differences between regulatory exposure amounts and carrying values in Financial Statements

	a	b	c	e
	Total	Items subject to		
		Credit risk framework	CCR framework	Market risk framework
31 Dec 2018 (EUR 1,000)				
1 Assets carrying value amount under the scope of regulatory consolidation (as per template EU LI1)	35,676,739	32,661,175	3,000,714	1,013,883
2 Liabilities carrying value amount under the regulatory scope of consolidation (as per template EU LI1)	-27,921,533	-	-2,982,878	-24,938,654
3 Total net amount under the regulatory scope of consolidation	7,755,207	32,661,175	17,836	-23,924,772
4 Off-balance sheet amounts	2,796,753	2,796,753	-	-
5 Differences due to Article 274 mark-to-market method and carrying amounts	681,630	-	681,630	-
6 Differences due to Article 352 foreign exchange risk treatment and carrying amounts	-	-	-	23,924,772
7 Exposure amounts considered for regulatory purposes	36,157,395	35,457,928	699,466	0

	a	b	c	e
	Total	Items subject to		
		Credit risk framework	CCR framework	Market risk framework
31 Dec 2017 (EUR 1,000)				
1 Assets carrying value amount under the scope of regulatory consolidation (as per template EU LI1)	34,738,139	31,917,893	2,810,049	981,811
2 Liabilities carrying value amount under the regulatory scope of consolidation (as per template EU LI1)	-27,705,737	-	-2,970,212	-24,735,525
3 Total net amount under the regulatory scope of consolidation	7,032,402	31,917,893	-160,163	-23,753,714
4 Off-balance sheet amounts	2,270,346	2,270,346	-	-
5 Differences due to Article 274 mark-to-market method and carrying amounts	842,058	-	842,058	-
6 Differences due to Article 352 foreign exchange risk treatment and carrying amounts	-	-	-	23,753,714
7 Exposure amounts considered for regulatory purposes	34,870,134	34,188,240	681,895	0

EU LI3

Outline of the differences in the scopes of consolidation (entity by entity)

	a	b	f
31 Dec 2018	Method of accounting consolidation	Method of regulatory consolidation	Description of the entity
Name of the entity			
Municipality Finance Plc	Full consolidation	x	Credit institution
Financial Advisory Services Inspira Ltd	Full consolidation	x	Financial advisory services

There has been no changes in the scope of the consolidation compared to year-end 2017.

EU LIA

Explanation of differences between accounting and regulatory exposure amounts

The differences between the Financial Statement's carrying values and regulatory exposure amounts arise mainly from off-balance sheet items, the difference in the treatment of derivatives between the IFRS framework and regulatory framework and treatment of market risk. Off-balance sheet items include credit commitments, which are included in the regulatory exposure on row 4, but not included in the accounting carrying amounts. The difference in the treatment of derivatives between the IFRS and regulatory frameworks is shown on row 5 and arises from the counterparty credit risk framework and applying CRR Article 274 mark-to-market method to derivatives. In the Financial Statements carrying amounts derivative assets and liabilities are fair valued on instrument level, with no netting applied on counterparty level and without considering the impact of any collateral. As shown on row 6 a difference also arises from the market risk framework in comparison to the accounting framework.

In calculating the capital requirements for market risk, only foreign exchange risk is taken into account as the group does not have a trading book nor share or commodity positions. With regard to foreign exchange risk, the accounting carrying amounts of cross currency derivatives do not represent the actual long or short positions in only foreign currency, therefore a difference exists in comparison to the treatment of foreign currency positions in CRR Article 352. As foreign exchange risk is hedged by swapping all currency denominated assets and liabilities into euros, the company's net foreign exchange position is small. There is no capital requirement for foreign exchange risk, as the group's net position does not exceed 2 percent of the own funds at the end of 2018 (CRR Article 351).

The scope of consolidation for Financial Statements and regulatory consolidation does not differ.

Financial instruments are valued in accordance with MuniFin's internal valuation policy defined by the company. MuniFin assigns fair value to its financial instruments based on quotes from Bloomberg, Reuters and other external sources. Instruments are valued by using the quotes either directly or indirectly, i.e. using them as inputs of the valuation techniques used to assign fair value. MuniFin applies both market approach and income approach in its valuation of financial instruments. If the market has a well-established valuation approach for a financial instrument that is not quoted, the fair value is based on an established, appropriate underlying valuation method provided that sufficient information is available to determine fair value for that purpose. If a valuation practice is not established on the market, the valuation model for the product concerned is based on commonly used calculation methods covering all the elements that would be taken into account by market participants when setting the price. In addition the selected method is required to be consistent with the accepted financial methods used in pricing financial instruments.

MuniFin applies a market-based approach when the instrument has a functioning market and public price quotations are available. MuniFin applies income approach when valuation is based, for example, on determining the present value of future cash flows (discounting). Valuation methods take into account an assessment of the credit risk, discount rates used, the possibility of early repayment and other factors that influence the fair value of a financial instrument reliably. Stochastic models are used to generate a distribution of future rates, FX, equity or inflation values. These values are used in the payoff of each instrument to generate a distribution of possible instrument values in the future. The future values are then discounted in order to produce valuations for the instruments. Overall, mark-to-market valuation is applied to investment bonds as for these market prices are available, whereas issued debt and lending measured at fair value and OTC-derivatives are valued using mark-to-model methodologies.

MuniFin has systems and controls in place for its valuation process to ensure that valuations are prudent and reliable. Market data used in valuations is back-tested and validated. Derivatives are reconciled with derivative counterparties daily and tolerance levels are defined to monitor absolute and relative valuation differences. MuniFin has separated its valuation process from the first line of defence departments. The Independent Risk Management performs all valuations.

MuniFin does not have a trading book.

At year end 2018 MuniFin deducted a prudent valuation adjustment totalling EUR 33.9 million from Common Equity Tier 1. During 2018 MuniFin's fair valued assets and liabilities exceeded the threshold of EUR 15 billion set for applying the simplified approach. MuniFin transitioned to the core approach at the end of 2018. In 2017 MuniFin deducted a prudent valuation adjustment totalling EUR 9.5 million from Common Equity Tier 1. The 2017 prudent valuation adjustment was calculated utilising the simplified approach.

At year end 2017 in accordance with CRR Article 34 MuniFin deducted an additional valuation adjustment related to derivative valuation from CET1. The additional valuation had an impact of EUR -7 million on Common Equity Tier 1.

In addition to the prudent valuation adjustment, MuniFin has calculated Credit Valuation and Debit Valuation adjustments in accordance with IFRS 13 to account for the non-performance risk in its fair values of derivatives.

Section 4

Own funds

Consolidated own funds

(EUR 1,000)	31 Dec 2018	31 Dec 2017
Share capital	42,583	42,583
Reserve for invested non-restricted equity	40,366	40,366
Retained earnings	1,035,692	879,799
Fair value reserve	14,961	28,944
Other reserves	277	277
Foreseeable dividend	-6,250	-6,250
Accrued interest net of deferred taxes of AT1 capital loan treated as equity	-9,459	-9,459
Common Equity Tier 1 (CET1) capital before regulatory adjustments	1,118,171	976,260
Intangible assets	-14,850	-10,196
Deductions due to prudential filters on Common Equity Tier 1	-37,865	-20,544
Common Equity Tier 1 (CET1) capital	1,065,455	945,519
Instruments included in Additional Tier 1 capital	347,454	347,454
Additional Tier 1 (AT1) capital	347,454	347,454
Tier 1 (T1) capital	1,412,909	1,292,973
Total own funds	1,412,909	1,292,973

Based on EU Capital requirements regulation and FIN-FSA regulations and guidelines 25/2013 unrealised gains on assets measured at fair value (fair value reserve) are included in Common Equity Tier 1 (transitional period during 1 January 2015–31 December 2017). Common Equity Tier 1 capital includes the profit for the financial year, which has been subject to a review by the auditors, and therefore can be included in CET1 capital on the basis of permission granted by the ECB in accordance with the Capital Requirements Regulation. Deductions due to prudential filters on Common Equity Tier 1 are made up of MuniFin's debt value adjustment (DVA) and other value adjustments and the anticipated distribution of earnings.

Additional Tier 1 capital contains MuniFin's AT1 capital loan EUR 350 million which was issued on October 1 2015. A detailed description of the instruments included in the Additional Tier 1 capital is included in the Report of the Board of Directors and in this Pillar III report. Both reports are available on the company's website.

Main features of capital instruments

	Common Equity Tier 1 capital	Additional Tier 1 instrument
	Shares A and B of share capital	EUR 350,000,000 Perpetual Fixed Rate Resetable Additional Tier 1 Securities
1. Issuer	Municipality Finance Plc	Municipality Finance Plc
2. Unique identifier	N/A	ISIN: XS1299724911
3. Governing law(s) of the instrument	Finnish Law	English law, except for the provisions of Status and Subordination (section 3) and Enforcement Events (section 10) which are governed by Finnish law.
Regulatory treatment		
4. Transitional CRR rules	CET1	AT1
5. Post-transitional CRR rules	CET1	AT1
6. Eligible at solo/consolidated / solo & consolidated	Solo and consolidated	Solo and consolidated
7. Instrument type (types to be specified by each jurisdiction)	Share capital as defined in Regulation No (EU) 575/2013 Article 28, Finnish Limited Liability Companies Act	Additional Tier 1 as defined in Regulation No (EU) 575/2013 Article 52, Finnish Limited Liability Companies Act
8. Amount recognised in regulatory capital (currency in million, as of most recent reporting date)	42.583	347.454
9. Nominal amount of instrument	N/A	350,000
9a. Issue price	N/A	100%
9b. Redemption price	Redemption price according to the Articles of Association depending of the redemption situation	100%
10. Accounting classification	Shareholders' equity	Other equity instrument issued
11. Original date of issuance	N/A	Oct 1, 2015
12. Perpetual or dated	Perpetual	Perpetual
13. Original maturity date	No maturity	No maturity
14. Issuer call subject to prior supervisory approval	Yes	Yes
15. Optional call date, contingent call dates and redemption amount	N/A	1) Right to redeem on April 1, 2022 and subsequently on each annual coupon payment date; 2) Right to redeem subsequent to a Capital or Tax Event as defined in the terms. Redemption price is 100%.
16. Subsequent call dates, if applicable	N/A	Annually April 1 after the first call date.
Coupons/Dividends		
17. Fixed or floating dividend/coupon	Fixed	Fixed coupon until April 1 2022, thereafter floating.
18. Coupon rate and any related index	N/A	4.5% to but excluding the first call date 1.4.2022. After 1.4.2022 the rate is the 5 year swap rate plus a margin of 3.960% and reset each fifth anniversary.
19. Existence of a dividend stopper	No	No

	Common Equity Tier 1 capital	Additional Tier 1 instrument
	Shares A and B of share capital	EUR 350,000,000 Perpetual Fixed Rate Resetable Additional Tier 1 Securities
20a. Fully discretionary, partially discretionary or mandatory (in terms of timing)	Fully discretionary	Fully discretionary
20b. Fully discretionary, partially discretionary or mandatory (in terms of amount)	Fully discretionary	Fully discretionary
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 to	N/A	N/A
30. Write-down features	No	Yes
31. If write-down, write-down trigger(s)	N/A	CET1 of the Issuer and/or the Group less than 5.125%
32. If write-down, full or partial	N/A	Full or partially
33. If write-down, permanent or temporary	N/A	Temporary
34. If temporary write-down, description of write-up mechanism	N/A	Fully discretionary
35. Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument)	Additional Tier 1	Tier 2
36. Non-compliant transitioned features	No	No
37. If yes, specify non-compliant features	N/A	N/A

Transitional own funds

31 Dec 2018 (EUR 1,000)	Amount at disclosure date	Regulation (EU) No 575/2013 article reference	Amounts subject to pre-regulation (EU) No 575/2013 treatment or prescribed residual amount of regulation (EU) No 575/2013
Common Equity Tier 1 capital: instruments and reserves			
1. Capital instruments and the related share premium accounts	42,583	26 (1), 27, 28, 29, EBA list 26 (3)	
2. Retained earnings	883,734	26 (1) c	
3. Accumulated other comprehensive income (and other reserves, to include unrealised gains and losses under the applicable accounting standards)	55,604	26 (1)	
5a. Independently reviewed interim profits net of any foreseeable charge or dividends	136,249	26 (2)	
6. Common Equity Tier 1 (CET1) capital before regulatory adjustments	1,118,171		
Common Equity Tier 1 (CET1) capital: regulatory adjustments			
7. Additional value adjustments (negative amount)	-33,870	34, 105	
8. Intangible assets (net of related tax liability) (negative amount)	-14,850	36 (1) (b), 37, 472 (4)	
14. Gains or losses on liabilities valued at fair value resulting from changes in own credit standing	-3,996	33 (b)	
28. Total regulatory adjustments to Common Equity Tier 1 (CET1)	-52,715		
29. Common Equity Tier 1 (CET1) capital	1,065,455		
Additional Tier 1 (AT1) capital: instruments			
30. Capital instruments and the related share premium	347,454	51, 52	
31. of which: classified as equity under applicable accounting standards	347,454		
36. Additional Tier 1 (AT1) capital before regulatory adjustments	347,454		
Additional Tier 1 (AT1): regulatory adjustments			
	0		
44. Additional Tier 1 (AT1) capital	347,454		
45. Tier 1 capital (T1 = CET1 + AT1)	1,412,909		
59. Total capital (TC = T1 + T2)	1,412,909		
60. Total risk weighted assets	1,606,172		
Capital ratios and buffers			
61. Common Equity Tier 1 (as percentage of risk exposure amount)	66.34%	92 (2) (a), 465	
62. Tier 1 (as percentage of risk exposure amount)	87.97%	92 (2) (b), 465	
63. Total capital (as percentage of risk exposure amount)	87.97%	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), expressed as a percentage of risk exposure amount)	8.45%	CRD 128, 129, 130	
65. of which: capital conservation buffer requirement	2.50%		
66. of which: countercyclical buffer requirement	0.45%	CRD 130	
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	1.00%	CRD 131	
68. Common Equity Tier 1 available to meet buffers (as a percentage of risk exposure amount)	61.84%	CRD 128	

Transitional own funds

31 Dec 2017 (EUR 1,000)	Amount at disclosure date	Regulation (EU) No 575/2013 article reference	Amounts subject to pre-regulation (EU) No 575/2013 treatment or prescribed residual amount of regulation (EU) No 575/2013
Common Equity Tier 1 capital: instruments and reserves			
1. Capital instruments and the related share premium accounts	42,583	26 (1), 27, 28, 29, EBA list 26 (3)	
2. Retained earnings	721,134	26 (1) c	
3. Accumulated other comprehensive income (and other reserves, to include unrealised gains and losses under the applicable accounting standards)	69,587	26 (1)	
5a. Independently reviewed interim profits net of any foreseeable charge or dividends	142,956	26 (2)	
6. Common Equity Tier 1 (CET1) capital before regulatory adjustments	976,260		
Common Equity Tier 1 (CET1) capital: regulatory adjustments			
7. Additional value adjustments (negative amount)	-16,437	34, 105	
8. Intangible assets (net of related tax liability) (negative amount)	-10,196	36 (1) (b), 37, 472 (4)	
14. Gains or losses on liabilities valued at fair value resulting from changes in own credit standing	-4,107	33 (b)	
28. Total regulatory adjustments to Common Equity Tier 1 (CET1)	-30,741		
29. Common Equity Tier 1 (CET1) capital	945,519		
Additional Tier 1 (AT1) capital: instruments			
30. Capital instruments and the related share premium	347,454	51, 52	
31. of which: classified as equity under applicable accounting standards	347,454		
36. Additional Tier 1 (AT1) capital before regulatory adjustments	347,454		
43. Total regulatory adjustments to Additional Tier 1 (AT1) capital	0		
44. Additional Tier 1 (AT1) capital	347,454		
45. Tier 1 capital (T1 = CET1 + AT1)	1,292,973		
Tier 2 (T2) capital: instruments and provisions			
51. Tier 2 (T2) capital before regulatory adjustments	0		
58. Tier 2 (T2) capital	0		
59. Total capital (TC = T1 + T2)	1,292,973		
60. Total risk weighted assets	1,783,501		
Capital ratios and buffers			
61. Common Equity Tier 1 (as percentage of risk exposure amount)	53.01%	92 (2) (a), 465	
62. Tier 1 (as percentage of risk exposure amount)	72.50%	92 (2) (b), 465	
63. Total capital (as percentage of risk exposure amount)	72.50%	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), expressed as a percentage of risk exposure amount)	7.84%	CRD 128, 129, 130	
65. of which: capital conservation buffer requirement	2.50%		
66. of which: countercyclical buffer requirement	0.34%	CRD 130	
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	0.50%	CRD 131	
68. Common Equity Tier 1 available to meet buffers (as a percentage of risk exposure amount)	48.51%	CRD 128	

IFRS 9-FL

Comparison of institutions' own funds and capital and leverage ratios with and without the application of transitional arrangements for IFRS 9 or analogous ECLs

MuniFin is not applying the transitional arrangements specified in Capital Requirements Regulation's Article 473a for IFRS 9 or analogous ECLs. MuniFin's own funds, capital and leverage ratios already reflect the full impact of IFRS 9 or analogous ECLs.

Section 5

Capital requirements

MuniFin's objectives regarding own funds in relation to risk taking and the operating environment are defined as part of the annual planning. The planning horizon extends to the following five years, in order to be able to predict the business performance trend and the sufficiency of own funds with respect to the increasing capital requirements arising from changing regulation and to be able to react to potential needs for additional capitalisation in sufficient time. The Board of Directors approves the internal capital adequacy plan and monitors it. The company updates its capital adequacy plan annually and follows implementation of the plan quarterly.

The aim for the capital adequacy management is to monitor the capital adequacy and to confirm that MuniFin's capital adequacy fulfills its targets and requirements set by financial authorities to ensure continuity of the operations. Controlling capital adequacy is continuous and an essential part of the company's strategic planning process, which covers setting strategic goals, specifying development projects and making financial forecasts for the following years. This is done in cooperation with management and the Board. The Board of the company approves the final strategy. Management ensures that the operative measures of the company correspond with the principles determined in the strategy approved by the Board. As part of the annual planning, the management prepares a business plan for the coming year and business forecasts for the years that follow. The company's risk position and its effect on the company's financial status are also evaluated. Regular risk analyses as well as various stress test scenarios are used for evaluating and measuring risks. Based on these, the capital adequacy plan is updated annually and actions needed to strengthen own funds are determined. The adequacy of own funds is also monitored through monthly business analyses and in quarterly compiled capital plan review. Capital adequacy and minimum capital requirements are evaluated during the planning horizon through different scenario calculations in the capital plan review. Capital plan review includes also i.e. anticipated changes in the own funds, capital requirements and a contingency plan.

In the internal capital adequacy plan MuniFin calculates capital requirements on Pillar I risk and for Pillar II risks. Pillar I capital requirements are calculated for credit risk, counterparty credit risk, market risk, credit valuation adjustment risk and operational risk as outlined in the Capital Requirements Regulation. For Pillar II risks MuniFin considers additional capital requirements for strategic risk, default risk, spread risk, interest rate risk in banking book and operational risk.

Furthermore to the regulatory minimum capital requirements, as part of the annual supervisor's review (SREP), the European Central Bank (ECB) has imposed an additional capital requirement of 1.5% (Pillar 2 Requirement) on MuniFin, effective from 1 January 2017 to cover additional risks not covered in Pillar I. The amount of the additional capital requirement is evaluated by the ECB at least annually.

The regulatory capital requirement for credit risk is calculated using the standardised approach and for counterparty credit risk MuniFin uses mark-to-market method. In calculating the regulatory capital requirements for market risk, only foreign exchange risk is taken into account as the group does not have a trading book nor share or commodity positions. As foreign exchange risk is hedged by swapping all currency denominated funding and investments into euros, the company's foreign exchange position is small and consists of FX trades made for daily collateral management purposes in other currencies than euros. At the end of 2018 and 2017 there was no capital requirement for foreign exchange risk since the net position did not exceed 2 percent of the own fund (CRR 575/2013 Art. 351). The capital requirement for operational risks is calculated using the basic indicator approach.

Consolidated key figures for capital adequacy

Consolidated key figures for capital adequacy	31 Dec 2018	31 Dec 2017
Common Equity Tier 1 (CET1) capital ratio, %	66.34	53.01
Tier 1 (T1) capital ratio, %	87.97	72.50
Total capital ratio, %	87.97	72.50

Consolidated minimum requirement for own funds

The capital requirement for credit risk is calculated using the standardised approach.

In calculating the capital requirements for market risk, only foreign exchange risk is taken into account as the group does not have a trading book nor share or commodity positions. As foreign exchange risk is hedged by swapping all currency denominated funding and investments into euros, the company's foreign exchange position is very small. On 31 December 2018 there was no capital requirement for foreign exchange risk since the net position did not exceed 2 percent of the own funds (CRR 575/2013 Art. 351).

MuniFin has updated the capital ratios for the comparison year 2017, which take into account the technical correction in the calculation of the credit valuation adjustment risk and also guarantees by the Municipal Guarantee Board are not taken into consideration as a risk mitigation tool for calculating the credit valuation adjustment risk. These changes increased the credit valuation adjustment risk. At the same time, the handling of cash collateral under derivative netting agreements has also been refined, which has had a negative effect on the amount of credit and counterparty risk. For the comparison year, the currency risk has also been less than 2% of own funds.

The capital requirement for operational risk is calculated using the basic indicator approach.

(EUR 1,000)	31 Dec 2018		31 Dec 2017	
	Capital requirement	Risk exposure amount	Capital requirement	Risk exposure amount
Credit and counterparty risk, standardised approach	78,128	976,596	88,603	1,107,536
Exposures to central governments or central banks	0	0	302	3,780
Exposures to regional governments or local authorities	353	4,413	332	4,153
Exposures to public sector entities	4,807	60,086	4,742	59,271
Exposures to multilateral development banks	951	11,884	953	11,914
Exposures to institutions	52,470	655,875	62,294	778,671
Exposures in the form of covered bonds	18,986	237,323	19,063	238,284
Items representing securitisation positions	13	165	104	1,296
Exposures in the form of shares in CIUs	88	1,103	103	1,286
Other items	460	5,746	710	8,881
Market risk	0	0	0	0
Credit valuation adjustment risk (CVA VaR), standard method	19,722	246,528	27,294	341,179
Operational risk, basic indicator approach	30,644	383,048	26,783	334,786
Total	128,494	1,606,172	142,680	1,783,501

Exposures to institutions includes capital requirement for counterparty risk by EUR 3,617 thousand (2017: EUR 3,158 thousand).

Consolidated exposure by class**31 Dec 2018 (EUR 1,000)**

Exposure classes	On-balance sheet exposure	Off-balance sheet exposure	Derivatives exposure	Total exposure	Average exposure amount over the period	Risk exposure amount
Exposures to central governments or central banks	3,920,338	-	-	3,920,338	4,144,181	0
Exposures to regional governments or local authorities	10,077,540	1,161,635	163,192	11,402,368	11,159,722	4,413
Exposures to public sector entities	270,265	-	-	270,265	286,313	60,086
Exposures to multilateral development banks	222,280	-	-	222,280	222,498	11,884
Exposures to international organisations	73,324	-	-	73,324	73,660	-
Exposures to institutions	2,525,096	-	536,274	3,061,369	3,626,873	655,875
Exposures to corporates	5,129,701	292,570	-	5,422,271	5,380,951	-
Exposures secured by mortgages on immovable property	8,527,156	1,342,548	-	9,869,704	9,532,723	-
Exposures in default	-	-	-	-	113	-
Exposures in the form of covered bonds	1,887,770	-	-	1,887,770	1,898,486	237,323
Items representing securitisation positions	825	-	-	825	1,282	165
Exposures in the form of shares in CIUs	9,494	-	-	9,494	9,554	1,103
Other items	17,386	-	-	17,386	14,135	5,746
Total	32,661,175	2,796,753	699,466	36,157,395	36,350,490	976,596

31 Dec 2017 (EUR 1,000)

Exposure classes	On-balance sheet exposure	Off-balance sheet exposure	Derivatives exposure	Total exposure	Average exposure amount over the period	Risk exposure amount
Exposures to central governments or central banks	4,004,347	-	-	4,004,347	3,307,052	3,780
Exposures to regional governments or local authorities	9,578,898	873,521	160,014	10,612,433	10,890,553	4,153
Exposures to public sector entities	281,233	-	-	281,233	278,233	59,271
Exposures to multilateral development banks	232,631	-	-	232,631	238,805	11,914
Exposures to international organisations	73,917	-	-	73,917	95,083	-
Exposures to institutions	2,891,157	-	521,880	3,413,037	4,283,925	778,671
Exposures to corporates	5,086,565	274,461	-	5,361,025	5,459,483	-
Exposures secured by mortgages on immovable property	7,733,922	1,122,364	-	8,856,287	8,564,424	-
Exposures in default	450	-	-	450	113	-
Exposures in the form of covered bonds	1,938,881	-	-	1,938,881	1,961,964	238,284
Items representing securitisation positions	6,478	-	-	6,478	18,128	1,296
Exposures in the form of shares in CIUs	9,635	-	-	9,635	9,663	1,286
Other items	79,780	-	-	79,780	88,119	8,881
Total	31,917,893	2,270,346	681,895	34,870,134	35,195,544	1,107,536

EU OV1

Overview of RWAs

The overall RWA has moderately decreased over the reporting period 2018. The credit risk (excluding CCR) has mainly decreased due to the changes in the liquidity portfolio. The CVA RWA and capital charge reduced due to lower exposure values and slightly shorter average maturity for the derivatives. The securitisation

exposures have decreased due to repayments on a small legacy portfolio. There are no risk-weighted assets for market risk, as the foreign exchange net position did not exceed two percent of the own funds.

(EUR 1,000)	RWAs		Minimum capital requirements	
	31 Dec 2018	31 Dec 2017	31 Dec 2018	31 Dec 2017
1 Credit risk (excluding CCR)	931,224	1,066,762	74,498	85,341
2 Of which the standardised approach	931,224	1,066,762	74,498	85,341
6 CCR	291,735	380,657	23,339	30,453
7 Of which mark to market	45,207	39,478	3,617	3,158
12 Of which CVA	246,528	341,179	19,722	27,294
14 Securitisation exposures in the banking book (after the cap)	165	1,296	13	104
18 Of which standardised approach	165	1,296	13	104
19 Market risk	0	0	0	0
20 Of which the standardised approach	0	0	0	0
23 Operational risk	383,048	334,786	30,644	26,783
24 Of which basic indicator approach	383,048	334,786	30,644	26,783
29 Total	1,606,172	1,783,501	128,494	142,680

Section 6

Capital buffers

Minimum capital requirements and capital buffers

Minimum capital requirements and capital buffers, % 31 Dec 2018	Capital requirement	Capital conservation buffer ¹⁾	Countercyclical buffer ²⁾	O-SII ³⁾	Total capital buffers	Total
Common Equity Tier 1 (CET1)	4.50%	2.50%	0.45%	1.00%	3.95%	8.45%
Tier 1 Capital (T1)	6.00%	2.50%	0.45%	1.00%	3.95%	9.95%
Total own funds	8.00%	2.50%	0.45%	1.00%	3.95%	11.95%

Minimum capital requirements and capital buffers (EUR 1,000) 31 Dec 2018	Capital requirement	Capital conservation buffer ¹⁾	Countercyclical buffer ²⁾	O-SII ³⁾	Total capital buffers	Total
Common Equity Tier 1 (CET1)	72,278	40,154	7,168	16,062	63,384	135,662
Tier 1 Capital (T1)	96,370	40,154	7,168	16,062	63,384	159,754
Total own funds	128,494	40,154	7,168	16,062	63,384	191,878

Minimum capital requirements and capital buffers, % 31 Dec 2017	Capital requirement	Capital conservation buffer ¹⁾	Countercyclical buffer ²⁾	O-SII ³⁾	Total capital buffers	Total
Common Equity Tier 1 (CET1)	4.50%	2.50%	0.34%	0.50%	3.34%	7.84%
Tier 1 Capital (T1)	6.00%	2.50%	0.34%	0.50%	3.34%	9.34%
Total own funds	8.00%	2.50%	0.34%	0.50%	3.34%	11.34%

Minimum capital requirements and capital buffers (EUR 1,000) 31 Dec 2017	Capital requirement	Capital conservation buffer ¹⁾	Countercyclical buffer ²⁾	O-SII ³⁾	Total capital buffers	Total
Common Equity Tier 1 (CET1)	80,258	44,588	6,017	8,918	59,522	139,780
Tier 1 Capital (T1)	107,010	44,588	6,017	8,918	59,522	166,532
Total own funds	142,680	44,588	6,017	8,918	59,522	202,202

1) Act on Credit Institutions (610/2014), Chapter 10, Section 3, and the EU capital requirements Regulation (575/2013; CRR) and Directive (2013/36/EU; CRD IV). Valid from 1 January 2015.

2) Act on Credit Institutions (610/2014) Sect 10:4-5 § and Capital Requirements Regulation and Directive (CRR/CRD4). On 20 December 2018 (2017: 21 December 2017), the Board of Financial Supervisory Authority (FIN-FSA) decided not to set countercyclical capital buffer requirement for credit exposures allocated to Finland. The institution-specific countercyclical capital buffer requirement is determined on the basis of the geographical distribution of the exposures. For MuniFin it is 0.45% on 31 December 2018 (31 Dec 2017: 0.34%).

3) Other Systemically Important Institutions additional capital requirements: Act on Credit Institutions (610/2014) Sect 10:8 § and Capital Requirements Regulation and Directive (CRR/CRD4). Additional capital requirement (O-SII) for MuniFin is 1%. The decision of the Board of FIN-FSA on 21 December 2017, effective on 1 July 2018 (31 Dec 2017: 0.5%).

ECB updated the additional capital requirement (P2R) for MuniFin to 1.75%, effective on 1 January 2018. Considering the additional capital requirement, the new minimum level for CET1 capital is 10,20% on 31 December 2018.

Future changes in capital buffers

ECB updated in February 2019 as part of SREP decision MuniFin's additional capital requirement (P2R), which will be 2.25% from 1 March 2019 onwards. On 29 June 2018 the Financial Supervisory Authority decided to lower MuniFin's O-SII buffer from 1% to 0.5%. The change is effective on 1 Jan 2019. At the same time the FIN-FSA also made a macroprudential decision to impose a systemic

risk buffer requirement on credit institutions. The buffer set for MuniFin is 1.5% and it will be covered by CET1. The systemic risk buffer and the O-SII additional capital requirement are parallel buffers, of which the greater is applied. The new requirement will be effective on 1 July 2019.

Geographical distribution of credit exposures relevant for the calculation of the countercyclical capital buffer

31 Dec 2018 (EUR 1,000) Breakdown by country		General credit exposures	Securitisation exposure	Own funds requirements		Own funds requirement weights	Countercyclical capital buffer rate		
		Exposure value for SA	Exposure value for SA	Of which: General credit exposures	Of which: Securitisation exposure	Total			
Row		010	050	070	090	100	110	120	
010	Other Countries	-	-	-	-	-	-	0.0%	0.0%
010	AE	-	-	-	-	-	-	0.0%	0.0%
010	AT	-	-	-	-	-	-	0.0%	0.0%
010	AU	142,804	-	2,285	-	2,285	11.7%	0.0%	
010	BE	74,848	-	599	-	599	3.1%	0.0%	
010	CA	243,373	-	3,894	-	3,894	19.9%	0.0%	
010	CH	23,978	-	384	-	384	2.0%	0.0%	
010	DE	-	-	-	-	-	-	0.0%	0.0%
010	DK	79,647	-	638	-	638	3.3%	0.0%	
010	ES	-	825	-	13	13	0.1%	0.0%	
010	FI	370,073	-	3,207	-	3,207	16.4%	0.0%	
010	FR	168,271	-	1,352	-	1,352	6.9%	0.0%	
010	GB	175,188	-	1,459	-	1,459	7.5%	1.0%	
010	IT	-	-	-	-	-	-	0.0%	0.0%
010	JP	-	-	-	-	-	-	0.0%	0.0%
010	KR	-	-	-	-	-	-	0.0%	0.0%
010	LU	9,494	-	88	-	88	0.5%	0.0%	
010	NL	98,090	-	785	-	785	4.0%	0.0%	
010	NO	233,916	-	1,872	-	1,872	9.6%	2.0%	
010	NZ	75,302	-	1,205	-	1,205	6.2%	0.0%	
010	SE	219,586	-	1,760	-	1,760	9.0%	2.0%	
010	SG	-	-	-	-	-	-	0.0%	0.0%
010	US	79	-	6	-	6	0.0%	0.0%	
020	Total	1,914,650	825	19,534	13	19,547	100%		

Amount of institution-specific countercyclical capital buffer

Row	Column 010
010 Total risk exposure amount	1,606,172
020 Institution-specific countercyclical buffer rate	0.45%
030 Institution-specific countercyclical buffer requirement	7,168

Geographical distribution of credit exposures relevant for the calculation of the countercyclical capital buffer

31 Dec 2017 (EUR 1,000) Breakdown by country		General credit exposures	Securitisation exposure	Own funds requirements		Own funds requirement weights	Countercyclical capital buffer rate		
		Exposure value for SA	Exposure value for SA	Of which: General credit exposures	Of which: Securitisation exposure	Total			
Row		010	050	070	090	100	110	120	
010	Other Countries	1,630	-	-	7	-	7	0.0%	0.0%
010	AE	-	-	-	-	-	-	0.0%	0.0%
010	AT	627	-	-	-	-	-	0.0%	0.0%
010	AU	116,950	-	-	1,871	-	1,871	9.4%	0.0%
010	BE	76,101	-	-	602	-	602	3.0%	0.0%
010	CA	248,067	-	-	3,935	-	3,935	19.7%	0.0%
010	CH	24,626	-	-	395	-	395	2.0%	0.0%
010	DE	7,932	-	-	58	-	58	0.3%	0.0%
010	DK	94,748	-	-	759	-	759	3.8%	0.0%
010	ES	-	1,607	-	-	26	26	0.1%	0.0%
010	FI	434,393	-	-	3,395	-	3,395	17.0%	0.0%
010	FR	198,964	-	-	1,614	-	1,614	8.1%	0.0%
010	GB	219,524	-	-	1,852	-	1,852	9.3%	0.0%
010	IT	-	-	-	-	-	-	0.0%	0.0%
010	JP	372	-	-	8	-	8	0.0%	0.0%
010	KR	709	-	-	6	-	6	0.0%	0.0%
010	LU	9,635	-	-	103	-	103	0.5%	0.0%
010	NL	117,315	4,871	-	942	78	1,020	5.1%	0.0%
010	NO	215,256	-	-	1,722	-	1,722	8.6%	2.0%
010	NZ	58,486	-	-	937	-	937	4.7%	0.0%
010	SE	203,121	-	-	1,648	-	1,648	8.2%	2.0%
010	SG	-	-	-	-	-	-	0.0%	0.0%
010	US	289	-	-	23	-	23	0.1%	0.0%
020	Total	2,028,746	6,478	-	19,876	104	19,980	100.0%	

Amount of institution-specific countercyclical capital buffer

Row	Column	
010	Total risk exposure amount	1,783,501
020	Institution-specific countercyclical buffer rate	0.34%
030	Institution-specific countercyclical buffer requirement	6,017

Section 7

Credit risk and general information on credit risk mitigation

EU CRB-A

Additional disclosure related to the credit quality of assets

Past due: Past due is defined as a loan payment that has not been made as of its due date.

Non-performing: A past due claim is considered non-performing when its payments of interest or principal is over 90 days due, an impairment on the asset has been recognised or in the occurrence of other such events, where the solvency of the client can be assumed to be permanently compromised. In other cases, when payments are received in time or the receivable is less than 90 days due, the financial asset is classified as performing.

Impaired: At the end of each reporting period the company assesses whether there is objective evidence that a financial asset is impaired. A financial asset is impaired and impairment losses are incurred if there is objective evidence of impairment as a result of one or more events that occurred after the initial recognition of the asset, and this loss event has an impact on the estimated future cash flows that can be reliably estimated. Objective evidence of impairment of an item or group recognised under financial assets can include information on the following loss events: the issuer or debtor is experiencing significant financial difficulty, or breach of contract terms, such as default or delinquency in interest or principal payments.

Definition of default: A default is considered to have occurred with regard to a particular obligor when either or both of the following have taken place: (i) the obligor is unlikely to pay its credit obligations to MuniFin, without recourse by the MuniFin to actions such as realising the security; (ii) the obligor is past due more than 90 days (i.e. at least 91 days) on any material credit obligation to MuniFin.

The definition of default in accounting purposes is aligned with the definition of default used for internal credit risk management purposes.

Forborne: If the payment plan is modified or some other change in terms is made on a loan that a client cannot fulfill due to financial difficulties, the loan is always categorised as a forborne loan. Forborne loans are alleviations to the original payment plan agreed on the client's initiative and their purpose is to aid the client to manage temporary payment difficulties. The loan is no longer classified as a forborne loan after two years, if the client has been able to fulfill the new payment plan and no impairment on liabilities has been recognised.

EU CRB-B

Total and average net amount of exposures

During the reporting period, most significant changes occurred in Exposures to institutions and Other items. Exposures to institutions were affected by changes in MuniFin's liquidity portfolio. Other exposures have changed after more accurate allocation of accrued

interests. At the end of 2017 the accrued interests were included in Other items. In 2018 calculations, they have been included in the carrying amount and allocated in relevant exposure groups.

31 Dec 2018 (EUR 1,000)		a	b
		Net value of exposures at the end of the period	Average net exposures over the period
16	Central governments or central banks	3,920,338	4,144,181
17	Regional governments or local authorities	11,402,367	11,159,722
18	Public sector entities	270,265	286,313
19	Multilateral development banks	222,280	222,498
20	International organisations	73,324	73,660
21	Institutions	3,061,369	3,626,873
22	Corporates	5,422,271	5,380,951
26	Secured by mortgages on immovable property	9,869,704	9,532,723
28	Exposures in default	-	113
30	Covered bonds	1,887,770	1,898,486
32	Collective investments undertakings	9,494	9,554
34	Other exposures	17,386	14,135
35	Total standardised approach	36,156,570	36,349,209
36	Total	36,156,570	36,349,209

31 Dec 2017 (EUR 1,000)		a	b
		Net value of exposures at the end of the period	Average net exposures over the period
16	Central governments or central banks	4,004,347	3,307,052
17	Regional governments or local authorities	10,612,433	10,890,553
18	Public sector entities	281,233	278,233
19	Multilateral development banks	232,631	238,805
20	International organisations	73,917	95,083
21	Institutions	3,413,037	4,283,925
22	Corporates	5,361,025	5,459,483
26	Secured by mortgages on immovable property	8,856,287	8,564,424
28	Exposures in default	450	113
30	Covered bonds	1,938,881	1,961,964
32	Collective investments undertakings	9,635	9,663
34	Other exposures	79,780	88,119
35	Total standardised approach	34,863,657	35,177,415
36	Total	34,863,657	35,177,415

EU CRB-C

Geographical breakdown of exposures

		a	b	c	d	e
		Net value				
31 Dec 2018 (EUR 1,000)		Finland	Other Nordic countries	Other EU countries	Other countries	Total
7	Central governments or central banks	3,663,778	-	217,176	39,384	3,920,338
8	Regional governments or local authorities	11,402,367	-	-	-	11,402,367
9	Public sector entities	37,233	-	155,037	77,994	270,265
10	Multilateral development banks	-	-	-	222,280	222,280
11	International organisations	-	-	-	73,324	73,324
12	Institutions	433,754	390,817	1,557,887	678,912	3,061,369
13	Corporates	5,422,271	-	-	-	5,422,271
15	Secured by mortgages on immovable property	9,869,704	-	-	-	9,869,704
18	Covered bonds	353,725	533,083	515,505	485,457	1,887,770
20	Collective investments undertakings	-	-	9,494	-	9,494
22	Other exposures	16,348	66	892	79	17,386
23	Total standardised approach	31,199,181	923,966	2,455,991	1,577,431	36,156,570
24	Total	31,199,181	923,966	2,455,991	1,577,431	36,156,570

		a	b	c	d	e
		Net value				
31 Dec 2017 (EUR 1,000)		Finland	Other Nordic countries	Other EU countries	Other countries	Total
7	Central governments or central banks	3,664,694	-	299,539	40,114	4,004,347
8	Regional governments or local authorities	10,612,433	-	-	-	10,612,433
9	Public sector entities	49,514	-	165,086	66,633	281,233
10	Multilateral development banks	-	-	-	232,631	232,631
11	International organisations	-	-	-	73,917	73,917
12	Institutions	242,285	532,448	1,774,189	864,115	3,413,037
13	Corporates	5,361,025	-	-	-	5,361,025
15	Secured by mortgages on immovable property	8,856,287	-	-	-	8,856,287
16	Exposures in default	450	-	-	-	450
18	Covered bonds	378,034	508,192	608,695	443,959	1,938,881
20	Collective investments undertakings	-	-	9,635	-	9,635
22	Other exposures	55,908	4,933	11,768	7,170	79,780
23	Total standardised approach	29,220,631	1,045,574	2,868,912	1,728,539	34,863,657
24	Total	29,220,631	1,045,574	2,868,912	1,728,539	34,863,657

EU CRB-D

Concentration of exposures by industry or counterparty types and exposure classes

The breakdown for the exposures by industry are shown in the following tables. Industry breakdown for domestic exposures is based on the information from the Finnish Patent and Registration Office.

	d	e	f	h		l	o	q	s	u	
	Electricity, gas, steam and air condition- ing supply	Water sup- ply	Construc- tion	Transport and storage	Financial and insurance activities	Real estate activities	Public adminis- tration and defence, compulsory social security	Human health ser- vices and social work activities	Other services	Total	
31 Dec 2018 (EUR 1,000)											
7	Central governments or central banks	-	-	-	-	3,554,035	-	366,303	-	-	3,920,338
8	Regional governments or local authorities	1,069	64,355	-	-	-	53,414	10,146,830	993,211	143,489	11,402,367
9	Public sector entities	-	-	-	-	223,909	-	46,356	-	-	270,265
10	Multilateral development banks	-	-	-	-	222,280	-	-	-	-	222,280
11	International organisations	-	-	-	-	30,582	-	42,742	-	-	73,324
12	Institutions	-	-	-	-	2,698,105	-	363,264	-	-	3,061,369
13	Corporates	449,241	364,296	165,012	299,137	60,929	3,493,020	-	124,423	466,213	5,422,271
15	Secured by mortgages on immovable property	-	-	76,086	2,420	-	9,587,556	3,306	174,496	25,840	9,869,704
18	Covered bonds	-	-	-	-	1,887,770	-	-	-	-	1,887,770
20	Collective investments undertakings	-	-	-	-	9,494	-	-	-	-	9,494
22	Other exposures	-	-	-	-	-	-	-	-	17,386	17,386
23	Total standardised approach	450,310	428,651	241,099	301,557	8,687,105	13,133,991	10,968,801	1,292,129	652,927	36,156,570
23	Total	450,310	428,651	241,099	301,557	8,687,105	13,133,991	10,968,801	1,292,129	652,927	36,156,570

	d	e	f	h		l	o	q	s	u	
	Electricity, gas, steam and air condition- ing supply	Water sup- ply	Construc- tion	Transport and storage	Financial and insurance activities	Real estate activities	Public adminis- tration and defence, compulsory social security	Human health ser- vices and social work activities	Other services	Total	
31 Dec 2017 (EUR 1,000)											
7	Central governments or central banks	-	-	-	-	3,554,177	-	450,170	-	-	4,004,347
8	Regional governments or local authorities	5,727	65,588	5,872	5,147	-	2,767	9,413,830	939,388	174,115	10,612,433
9	Public sector entities	-	-	-	-	231,719	-	49,514	-	-	281,233
10	Multilateral development banks	-	-	-	-	232,631	-	-	-	-	232,631
11	International organisations	-	-	-	-	-	-	73,917	-	-	73,917
12	Institutions	-	-	-	-	3,084,496	-	328,541	-	-	3,413,037
13	Corporates	480,147	343,296	171,445	298,482	26,669	3,565,262	5,056	138,667	332,001	5,361,025
15	Secured by mortgages on immovable property	-	-	39,743	2,935	-	8,638,871	17,679	143,965	13,093	8,856,287
16	Exposures in default	-	-	-	-	-	-	-	450	-	450
18	Covered bonds	-	-	-	-	1,938,881	-	-	-	-	1,938,881
20	Collective investments undertakings	-	-	-	-	9,635	-	-	-	-	9,635
22	Other exposures	849	723	294	413	17,685	20,648	22,147	1,619	15,402	79,780
23	Total standardised approach	486,722	409,607	217,354	306,978	9,095,894	12,227,547	10,360,855	1,224,089	534,611	34,863,657
23	Total	486,722	409,607	217,354	306,978	9,095,894	12,227,547	10,360,855	1,224,089	534,611	34,863,657

EU CRB-E

Maturity of exposures

The following tables show breakdown by residual maturity for on-balance-sheet exposures. Off-balance sheet exposures are not included.

		a	b	c	d	e	f
		Net exposure value					
31 Dec 2018 (EUR 1,000)		On demand	<= 1 year	> 1 year <= 5 years	> 5 years	No stated maturity	Total
7	Central governments or central banks	3,554,035	79,386	220,285	66,632	-	3,920,338
8	Regional governments or local authorities	-	981,151	2,448,894	6,810,688	-	10,240,733
9	Public sector entities	-	58,074	177,902	34,288	-	270,265
10	Multilateral development banks	-	967	211,211	10,103	-	222,280
11	International organisations	-	18,378	26,234	28,713	-	73,324
12	Institutions	185,457	796,126	1,689,258	390,528	-	3,061,369
13	Corporates	-	152,192	296,258	4,681,251	-	5,129,701
15	Secured by mortgages on immovable property	-	79,076	189,873	8,258,207	-	8,527,156
18	Covered bonds	-	228,096	1,431,293	228,382	-	1,887,770
20	Collective investments undertakings	-	-	-	9,494	-	9,494
22	Other exposures	4	-	2,074	353	14,954	17,386
23	Total standardised approach	3,739,496	2,393,446	6,693,281	20,518,638	14,954	33,359,817
24	Total	3,739,496	2,393,446	6,693,281	20,518,638	14,954	33,359,817

		a	b	c	d	e	f
		Net exposure value					
31 Dec 2017 (EUR 1,000)		On demand	<= 1 year	> 1 year <= 5 years	> 5 years	No stated maturity	Total
7	Central governments or central banks	3,554,177	80,086	274,605	95,479	-	4,004,347
8	Regional governments or local authorities	-	884,209	2,491,740	6,362,962	-	9,738,912
9	Public sector entities	-	22,095	209,991	49,147	-	281,233
10	Multilateral development banks	-	20,005	190,388	22,239	-	232,631
11	International organisations	-	-	44,989	28,928	-	73,917
12	Institutions	113,551	1,033,553	1,788,500	477,434	-	3,413,037
13	Corporates	-	150,171	288,435	4,647,959	-	5,086,565
15	Secured by mortgages on immovable property	-	65,958	295,170	7,372,794	-	7,733,922
16	Exposures in default	-	-	-	450	-	450
18	Covered bonds	-	267,071	1,465,884	205,926	-	1,938,881
20	Collective investments undertakings	-	-	-	9,635	-	9,635
22	Other exposures	5	64,568	715	-	14,492	79,780
23	Total standardised approach	3,667,733	2,587,716	7,050,417	19,272,952	14,492	32,593,310
24	Total	3,667,733	2,587,716	7,050,417	19,272,952	14,492	32,593,310

EU CR1-A

Credit quality of exposures by exposure class and instrument

	a	b	c	g
	Gross carrying values of		Specific credit risk adjustment	Net values
	Defaulted exposures	Non-defaulted exposures		
31 Dec 2018 (EUR 1,000)				
16 Central governments or central banks	-	3,920,338	-	3,920,338
17 Regional governments or local authorities	-	11,402,378	11	11,402,367
18 Public sector entities	-	270,265	-	270,265
19 Multilateral development banks	-	222,280	-	222,280
20 International organisations	-	73,324	-	73,324
21 Institutions	-	3,061,425	55	3,061,369
22 Corporates	-	5,422,331	59	5,422,271
26 Secured by mortgages on immovable property	-	9,869,709	5	9,869,704
28 Exposures in default	1,800	-	1,800	-
30 Covered bonds	-	1,887,770	-	1,887,770
32 Collective investments undertakings	-	9,494	-	9,494
34 Other exposures	-	17,386	-	17,386
35 Total standardised approach	1,800	36,156,700	1,930	36,156,570
36 Total	1,800	36,156,700	1,930	36,156,570
37 Of which: Loans	1,800	23,008,885	1,875	23,008,809
38 Of which: Debt securities	-	5,885,988	-	5,885,988
39 Of which: Off-balance sheet exposures	-	2,796,753	-	2,796,753

	a	b	c	g
	Gross carrying values of		Specific credit risk adjustment	Net values
	Defaulted exposures	Non-defaulted exposures		
31 Dec 2017 (EUR 1,000)				
16 Central governments or central banks	-	4,004,347	-	4,004,347
17 Regional governments or local authorities	-	10,612,433	-	10,612,433
18 Public sector entities	-	281,233	-	281,233
19 Multilateral development banks	-	232,631	-	232,631
20 International organisations	-	73,917	-	73,917
21 Institutions	-	3,413,037	-	3,413,037
22 Corporates	-	5,361,025	-	5,361,025
26 Secured by mortgages on immovable property	-	8,856,287	-	8,856,287
28 Exposures in default	1,816	-	1,366	450
30 Covered bonds	-	1,938,881	-	1,938,881
32 Collective investments undertakings	-	9,635	-	9,635
34 Other exposures	-	79,780	-	79,780
35 Total standardised approach	1,816	34,863,207	1,366	34,863,657
36 Total	1,816	34,863,207	1,366	34,863,657
37 Of which: Loans	1,816	21,690,548	1,366	21,690,998
38 Of which: Debt securities	-	6,513,062	-	6,513,062
39 Of which: Off-balance sheet exposures	-	2,270,346	-	2,270,346

EU CR1-B

Credit quality of exposures by industry or counterparty types

		a	b	c	g
		Gross carrying values of		Specific credit risk adjustment	Net values
		Defaulted exposures	Non-defaulted exposures		
31 Dec 2018	(EUR 1,000)				
4	Electricity, gas, steam and air conditioning supply	-	450,310	0	450,310
5	Water supply	-	428,652	0	428,652
6	Construction	-	241,099	0	241,099
8	Transport and storage	-	301,557	0	301,557
XX	Financial and insurance activities	-	8,687,160	55	8,687,105
11	Real estate activities	-	13,134,032	41	13,133,991
14	Public administration and defence, compulsory social security	-	10,968,811	10	10,968,801
16	Human health services and social work activities		1,292,131	1	1,292,129
18	Other services	-	652,949	22	652,927
19	Total	-	36,156,700	130	36,156,570

		a	b	c	g
		Gross carrying values of		Specific credit risk adjustment	Net values
		Defaulted exposures	Non-defaulted exposures		
31 Dec 2017	(EUR 1,000)				
4	Electricity, gas, steam and air conditioning supply	-	486,722	-	486,722
5	Water supply	-	409,607	-	409,607
6	Construction	-	217,354	-	217,354
8	Transport and storage	-	306,978	-	306,978
10	Information and communication	-	106,938	-	106,938
XX	Financial and insurance activities	-	9,095,894	-	9,095,894
11	Real estate activities	-	12,227,547	-	12,227,547
14	Public administration and defence, compulsory social security	-	10,360,855	-	10,360,855
15	Education	-	157,768	-	157,768
16	Human health services and social work activities	1,816	1,223,639	1,366	1,224,089
17	Arts, entertainment and recreation	-	135,615	-	135,615
18	Other services	-	119,794	-	119,794
XX	Not defined	-	14,497	-	14,497
19	Total	1,816	34,863,207	1,366	34,863,657

EU CR1-C

Credit quality of exposures by geography

		a	b	c	g
		Gross carrying values of		Specific credit risk adjustment	Net values
		Defaulted exposures	Non-defaulted exposures		
31 Dec 2018	(EUR 1,000)				
1	Finland	1,800	31,199,312	1,930	31,199,181
2	Other Nordic countries	-	923,966	-	923,966
3	Other EU countries	-	2,455,991	-	2,455,991
4	Other countries	-	1,577,431	-	1,577,431
5	Total	1,800	36,156,700	1,930	36,156,570

		a	b	c	g
		Gross carrying values of		Specific credit risk adjustment	Net values
		Defaulted exposures	Non-defaulted exposures		
31 Dec 2017	(EUR 1,000)				
1	Finland	1,816	29,220,181	1,366	29,220,631
2	Other Nordic countries	-	1,045,574	-	1,045,574
3	Other EU countries	-	2,868,912	-	2,868,912
4	Other countries	-	1,728,539	-	1,728,539
5	Total	1,816	34,863,207	1,366	34,863,657

EU CR1-D

Ageing of past-due exposures

The number of past-due loans is very small and large carrying amounts of individual loans explain the change between the periods.

		a		a	
		Gross carrying values		Gross carrying values	
		<= 30 days		<= 30 days	
31 Dec 2018	(EUR 1,000)		31 Dec 2017	(EUR 1,000)	
1	Loans	296	1	Loans	12,457
3	Total exposures	296	3	Total exposures	12,457

EU CR1-E

Non-performing and forborne exposures

	a	b	c	d	e	f	g	h	i	l	m
	Gross carrying values 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	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		
31 Dec 2018 (EUR 1,000)											
010 Debt securities	5,885,988	-	-	-	-	-	-	-	-	-	-
020 Loans and advances	27,731,767	-	61,676	-	-	-	-	21	21	-	61,656
030 Off-balance sheet exposures	2,796,753	-	-	-	-	-	-	-	-	-	-

	a	b	c	d	e	f	g	h	i	l	m
	Gross carrying values 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	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		
31 Dec 2017 (EUR 1,000)											
010 Debt securities	6,519,543	-	-	-	-	-	-	-	-	-	-
020 Loans and advances	26,338,111	-	48,548	1,816	1,816	1,366	-	-	-	-	691
030 Off-balance sheet exposures	2,270,346	-	-	-	-	-	-	-	-	-	-

EU CR2-A

Changes in the stock of general and specific credit risk adjustments

31 Dec 2018 (EUR 1,000)	a	b
	Accumulated specific credit risk adjustment	Accumulated general credit risk adjustment
1 Opening balance	1,366	-
Increases due to amounts set aside for estimated loan losses during the period	564	-
9 Closing balance	1,930	-

31 Dec 2017 (EUR 1,000)	a	b
	Accumulated specific credit risk adjustment	Accumulated general credit risk adjustment
1 Opening balance	-	-
Increases due to amounts set aside for estimated loan losses during the period	1,366	-
9 Closing balance	1,366	-

EU CR2-B

Changes in the stock of defaulted and impaired loans and debt securities

31 Dec 2018 (EUR 1,000)	a
	Gross carrying value of defaulted exposures
1 Opening balance	1,816
5 Other changes	-1,816
6 Closing balance	0

31 Dec 2017 (EUR 1,000)	a
	Gross carrying value of defaulted exposures
1 Opening balance	-
Loans and debt securities that have defaulted or impaired since the last reporting period	1,816
6 Closing balance	1,816

EU CR3

CRM techniques - Overview

The unsecured loans are loans granted to municipalities or municipal federations. Collaterals reported in this table consist exclusively of real estate. For further credit risk mitigation, all loans secured by real estate collateral have guarantees from the Finnish government or municipalities.

Unsecured debt securities include covered bonds by EUR 1 888 million.

	a	b	c	d
31 Dec 2018 (EUR 1,000)	Exposures unsecured - Carrying amount	Exposures secured - Carrying amount	Exposures secured by collateral	Exposures secured by financial guarantees
1 Total loans	9,230,092	13,778,718	8,527,155	5,251,563
2 Total debt securities	5,070,882	814,281	-	814,281
3 Total exposures	14,300,974	14,592,999	8,527,155	6,065,844

	a	b	c	d
31 Dec 2017 (EUR 1,000)	Exposures unsecured - Carrying amount	Exposures secured - Carrying amount	Exposures secured by collateral	Exposures secured by financial guarantees
1 Total loans	8,747,710	12,942,838	7,754,880	5,187,958
2 Total debt securities	5,613,661	899,401	-	899,401
3 Total exposures	14,361,370	13,842,239	7,754,880	6,087,360
4 Of which defaulted		450	450	

Section 8

Credit risk and credit risk mitigation in the standardised approach

EU CRD

Qualitative disclosure requirements on institutions' use of external credit ratings under the standardised approach for credit risk

The capital requirement for credit risk is calculated using the standardised approach. In the standardised approach external credit assessment may be used according the Capital Requirements Regulation. MuniFin uses external credit assessment institutions (ECAI) recognised by EBA to determine the risk weight for liquidity portfolio counterparties and or issuers. MuniFin uses three EBA-recognised ECAI for this purpose: Standard & Poor's, Moody's Investor Services and Fitch Ratings. The mapping of

the alphanumeric scale of each ECAI used with the credit quality steps are aligned with the standard association published by the EBA. There were no changes in the ECAI used compared with end of 2017.

The specific issue ratings by the ECAI is used when risk-weighting the covered bonds and for items representing securitisation positions. Issuer ratings are applied for other debt securities.

31 Dec 2018 and 31 Dec 2017 External rating equivalent

Asset class (debt securities)	Standard & Poor's	Moody's	Fitch
Exposures to central governments or central banks	x	x	x
Exposures to regional governments or local authorities	x	x	x
Exposures to multilateral development banks	x	x	x
Exposures to institutions	x	x	x
Exposures to public sector entities	x	x	x
Exposures in the form of covered bonds	x	x	x
Items representing securitisation positions	x	x	x
Exposures in the form of shares in CIUs	x	x	x
Other items	x	x	x

EU CR4

Standardised approach – Credit risk exposure and CRM effects

The post CCF off-balance sheet amount has increased within the reporting period due to higher credit conversion factor applied.

31 Dec 2018 (EUR 1,000)	a	b	c	d	e	f
	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
1 Central governments or central banks	3,920,338	-	13,024,826	314,011	0	0%
2 Regional governments or local authorities	10,077,540	1,161,635	15,360,121	1,010,975	4,413	0%
3 Public sector entities	270,265	-	270,265	-	60,086	22%
4 Multilateral development banks	222,280	-	222,280	-	11,884	5%
5 International organisations	73,324	-	73,324	-	-	0%
6 Institutions	2,525,096	-	1,794,885	-	655,875	37%
7 Corporates	5,129,701	292,570	-	-	-	-
9 Secured by mortgages on immovable property	8,527,156	1,342,548	-	-	-	-
12 Covered bonds	1,887,770	-	1,887,770	-	237,323	13%
14 Collective investments undertakings	9,494	-	9,494	-	1,103	12%
16 Other exposures	17,386	-	17,386	-	5,746	33%
17 Total	32,660,350	2,796,753	32,660,350	1,324,987	976,431	3%

31 Dec 2017 (EUR 1,000)	a	b	c	d	e	f
	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
1 Central governments or central banks	4,004,347	-	12,336,314	112,522	3,780	0%
2 Regional governments or local authorities	9,578,898	873,521	14,875,074	311,519	4,153	0%
3 Public sector entities	281,233	-	281,233	-	59,271	21%
4 Multilateral development banks	232,631	-	232,631	-	11,914	5%
5 International organisations	73,917	-	73,917	-	-	0%
6 Institutions	2,891,157	-	2,083,500	-	778,671	37%
7 Corporates	5,086,565	274,461	-	-	-	-
9 Secured by mortgages on immovable property	7,733,922	1,122,364	-	-	-	-
10 Exposures in default	1,816	-	450	-	-	0%
12 Covered bonds	1,938,881	-	1,938,881	-	238,284	12%
14 Collective investments undertakings	9,635	-	9,635	-	1,286	13%
16 Other exposures	79,780	-	79,780	-	8,881	11%
17 Total	31,912,782	2,270,346	31,911,416	424,041	1,106,240	3%

EU CR5

Standardised approach

31 Dec 2018 (EUR 1,000)	Risk weight							Total	Of which unrated	
	Exposure classes	0%	2%	10%	20%	50%	100%			Others
1	Central governments or central banks	13,338,837	-	-	-	-	-	-	13,338,837	-
2	Regional governments or local authorities	16,349,029	-	-	22,067	-	-	-	16,371,096	15,734,408
3	Public sector entities	-	-	-	250,155	20,109	-	-	270,265	-
4	Multilateral development banks	162,861	-	-	59,419	-	-	-	222,280	-
5	International organisations	73,324	-	-	-	-	-	-	73,324	-
6	Institutions	-	112,994	-	775,122	906,769	-	-	1,794,885	22,932
12	Covered bonds	-	-	1,402,313	485,457	-	-	-	1,887,770	-
14	Collective investments undertakings	-	-	-	-	-	-	9,494	9,494	-
16	Other exposures	11,635	-	-	6	-	5,745	-	17,386	5,745
17	Total	29,935,687	112,994	1,402,313	1,592,226	926,878	5,745	9,494	33,985,337	15,763,085

31 Dec 2017 (EUR 1,000)	Risk weight							Total	Of which unrated	
	Exposure classes	0%	2%	10%	20%	50%	100%			Others
1	Central governments or central banks	12,429,937	-	-	18,899	-	-	-	12,448,836	-
2	Regional governments or local authorities	15,165,829	-	-	20,765	-	-	-	15,186,594	14,531,570
3	Public sector entities	-	-	-	271,152	10,082	-	-	281,233	-
4	Multilateral development banks	173,061	-	-	59,571	-	-	-	232,631	-
5	International organisations	73,917	-	-	-	-	-	-	73,917	-
6	Institutions	0	105,000	-	840,522	1,137,977	-	-	2,083,500	15,670
10	Exposures in default	450	-	-	-	-	-	-	450	-
12	Covered bonds	-	-	1,494,922	443,959	-	-	-	1,938,881	-
14	Collective investments undertakings	-	-	-	-	-	-	9,635	9,635	-
16	Other exposures	57,285	1	9,612	5,417	1,257	6,208	-	79,780	6,208
17	Total	27,900,479	105,001	1,504,534	1,660,285	1,149,316	6,208	9,635	32,335,457	14,553,447

Section 9

Counterparty credit risk

EU CCR1

Analysis of CCR exposure by approach

MuniFin limits credit risk arising from its derivative counterparties with ISDA Credit Support Annexes. The company has 49 Credit Support Annexes in force of which 39 require daily margining. Additionally, the Municipal Guarantee Board's guarantees are used for reducing the derivative counterparty risk of certain counterparties. The change for counterparty credit risk RWA have been very moderate between 2018 and 2017.

MuniFin updated the counterparty credit risk calculation during 2018 and included the effect of posted collateral. The revised counterparty credit risk for the end of 2017 was republished in the Pillar III Disclosure Report on November 29 2018.

	a	b	c	d	e	f	g
31 Dec 2018		Replacement cost / current market value	Potential future credit exposure	EEPE	Multiplier	EAD post CRM	RWAs
(EUR 1,000)	Notional						
1 Mark to market		162,744	536,722			312,814	45,207
11 Total							45,207

	a	b	c	d	e	f	g
31 Dec 2017		Replacement cost / current market value	Potential future credit exposure	EEPE	Multiplier	EAD post CRM	RWAs
(EUR 1,000)	Notional						
1 Mark to market		148,584	533,311			278,855	39,478
11 Total							39,478

EU CCR2

CVA capital charge

The reduced CVA capital charge from end of year 2017 to the end of year 2018 was due to lower exposure value and slightly shorter average maturity for the derivatives.

From the end of 2017 onwards the guarantees granted by the Municipal Guarantee Board for certain derivative counterparties

were not taken into account in credit valuation adjustment risk. MuniFin amended the formula for calculating credit valuation adjustment risk. The revised CVA capital charge for the end of 2017 was republished in the Pillar III Disclosure Report on November 29 2018.

31 Dec 2018 (EUR 1,000)		a	b
		Exposure value	RWAs
4	All portfolios subject to the standardised method	474,599	246,528
5	Total subject to the CVA capital charge	474,599	246,528

31 Dec 2017 (EUR 1,000)		a	b
		Exposure value	RWAs
4	All portfolios subject to the standardised method	572,353	341,179
5	Total subject to the CVA capital charge	572,353	341,179

EU CCR8

Exposures to CCPs

31 Dec 2018 (EUR 1,000)	a	b
	EAD post CRM	RWAs
1 Exposures to QCCPs (total)		1,233
2 Exposures for trades at QCCPs (excluding initial margin and default fund contributions); of which	61,675	1,233
3 (i) OTC derivatives	61,675	1,233
7 Segregated initial margin	112,999	
10 Alternative calculation of own funds requirements for exposures		-
11 Exposures to non-QCCPs (total)		-
17 Segregated initial margin	-	

31 Dec 2017 (EUR 1,000)	a	b
	EAD post CRM	RWAs
1 Exposures to QCCPs (total)		831
2 Exposures for trades at QCCPs (excluding initial margin and default fund contributions); of which	41,546	831
3 (i) OTC derivatives	41,546	831
7 Segregated initial margin	105,000	
10 Alternative calculation of own funds requirements for exposures		-
11 Exposures to non-QCCPs (total)		-
17 Segregated initial margin	-	

EU CCR3

Standardised approach – CCR exposures by regulatory portfolio and risk

31 Dec 2018 (EUR 1,000)	Risk weight				Total	Of which unrated
	0%	2%	20%	50%		
Exposure classes						
2 Regional governments or local authorities	163,192	-	-	-	163,192	163,192
6 Institutions	-	61,675	252,410	222,189	536,274	-
11 Total	163,192	61,675	252,410	222,189	699,466	163,192

31 Dec 2017 (EUR 1,000)	Risk weight				Total	Of which unrated
	0%	2%	20%	50%		
Exposure classes						
2 Regional governments or local authorities	160,014	-	-	-	160,014	160,014
6 Institutions	-	41,546	149,246	331,089	521,880	-
11 Total	160,014	41,546	149,246	331,089	681,895	160,014

EU CCR5-A

Impact of netting and collateral held on exposure values

	a	b	c	d	e
31 Dec 2018 (EUR 1,000)	Gross positive fair value or net carrying amount	Netting benefits	Netted current credit exposure	Collateral held	Net credit exposure
1 Derivatives	1,665,936	791,781	874,155	739,260	134,895
4 Total	1,665,936	791,781	874,155	739,260	134,895

	a	b	c	d	e
31 Dec 2017 (EUR 1,000)	Gross positive fair value or net carrying amount	Netting benefits	Netted current credit exposure	Collateral held	Net credit exposure
1 Derivatives	1,583,475	665,648	917,827	699,780	135,718
4 Total	1,583,475	665,648	917,827	699,780	135,718

EU CCR5-B

Composition of collateral for exposures to CCR

	a	b	c	d
	Collateral used in derivative transactions			
31 Dec 2018	Fair value of collateral received		Fair value of posted collateral	
(EUR 1,000)	Segregated	Unsegregated	Segregated	Unsegregated
Cash	-	739,260	112,999	1,327,197
Total	-	739,260	112,999	1,327,197

The amount of collaterals posted for derivative transactions at year-end 2018 was EUR 1,440 million (2017: EUR 1,375 million). MuniFin holds a strong credit rating (Aa1/AA+). The impact of a possible credit downgrade lower than four notches of MuniFin would not have any impact on the collateral posted.

	a	b	c	d
	Collateral used in derivative transactions			
31 Dec 2017	Fair value of collateral received		Fair value of posted collateral	
(EUR 1,000)	Segregated	Unsegregated	Segregated	Unsegregated
Cash	-	699,780	105,000	1,270,375
Total	-	699,780	105,000	1,270,375

EU CCR6

Credit derivatives exposures

MuniFin did not hold any credit derivatives during 2018 or 2017.

Section 10

Unencumbered assets

Information on importance of encumbrance

The tables below provide information on asset encumbrance and liabilities related to encumbered assets. Encumbered assets mainly relate to lending receivables that have been pledged to the Municipal Guarantee Board as counter collateral for guarantees it has given to MuniFin's funding, lending receivables that are pledged to the central bank for possible operations related to monetary policy counterparty position and collateral pertaining to derivatives. Presented figures for years 2018 and 2017 are based on median values of quarterly data on a rolling basis over the previous twelve months.

The change in the encumbered assets between 2018 and 2017 is related to the amount of loans pledged to the Municipal Guarantee Board. In February 2018 MuniFin and the Municipal Guarantee Board updated the Framework Agreement for NSFR purposes and agreed to release part of the lending receivables from pledges. The updated Framework Agreement also clarified the terms between MuniFin and the Municipal Guarantee Board.

Encumbered and unencumbered assets

	010 Carrying amount of encumbered assets	040 Fair value of encumbered assets	060 Carrying amount of unencumbered assets	090 Fair value of unencumbered assets
2018 (EUR 1,000)				
010 Assets of the reporting institution	14,925,390		20,714,703	
030 Equity instruments	-		9,582	
040 Debt securities	-	-	6,130,291	6,130,690
050 of which: covered bonds	-	-	1,894,750	1,894,750
060 of which: asset-backed securities	-	-	1,391	1,391
070 of which: issued by general governments	-	-	1,601,650	1,601,990
080 of which: issued by financial corporations	-	-	4,452,253	4,452,253
090 of which: issued by non-financial corporations	-	-	80,758	80,811
120 Other assets	14,925,390		14,574,830	
121 of which: loans and advances other than loans on demand	14,692,045		9,064,063	
2017 (EUR 1,000)				
010 Assets of the reporting institution	21,820,696		12,437,215	
030 Equity instruments	-		9,695	
040 Debt securities	135,776	135,776	7,006,524	7,007,098
050 of which: covered bonds	-	-	1,975,878	1,975,878
060 of which: asset-backed securities	-	-	20,139	20,134
070 of which: issued by general governments	135,776	135,776	1,705,865	1,706,201
080 of which: issued by financial corporations	-	-	5,198,822	5,198,818
090 of which: issued by non-financial corporations	-	-	93,717	93,799
120 Other assets	21,820,696		5,420,996	
121 of which: loans and advances other than loans on demand	21,666,905		417,801	

Collateral received

Collateral received is cash collateral related to CSA agreements on derivatives. Presented figures for years 2018 and 2017 are based on median values of quarterly data on a rolling basis over the previous twelve months.

	31 Dec 2018		31 Dec 2017	
	010 Fair value of encumbered collateral received or own debt securities issued	040 Unencumbered Fair value of collateral received or own debt securities issued available for encumbrance	010 Fair value of encumbered collateral received or own debt securities issued	040 Unencumbered Fair value of collateral received or own debt securities issued available for encumbrance
(EUR 1,000)				
130 Collateral received by the reporting institution	-	684,535	-	921,660
140 Loans on demand	-	684,535	-	921,660
250 TOTAL ASSETS, COLLATERAL RECEIVED AND OWN DEBT SECURITIES ISSUED	14,925,390	684,535	21,820,696	921,660

Sources of encumbrance

	31 Dec 2018		31 Dec 2017	
	010 Matching liabilities, contingent liabilities or securities lent	030 Assets, collateral received and own debt securities issued other than covered bonds and ABSs encumbered	010 Matching liabilities, contingent liabilities or securities lent	030 Assets, collateral received and own debt securities issued other than covered bonds and ABSs encumbered
(EUR 1,000)				
010 Carrying amount of selected financial liabilities	29,114,192	14,865,322	28,060,687	21,817,450

Section 11 Market risk

EU MR1

Market risk under the standardised approach

MuniFin calculates capital requirements for overall net foreign exchange position. The company hedges against exchange rate risks by using derivative contracts to translate all foreign currency denominated funding and investments into euros. The company does not bear any material foreign exchange risk.

The foreign exchange risk position was EUR 2.0 million at the end of 2018 (EUR 13,4 million at the end of 2017). Since the foreign exchange risk position was less than two percent of the own funds, there was no capital requirement for it (CRR 575/2013 Art. 351).

MuniFin does not hold trading book exposures.

Section 12 Remuneration

MuniFin publishes separate Remuneration report which is available on the Company's website www.munifin.fi.

Section 13

Leverage ratio

LRSum

Summary reconciliation of accounting assets and leverage ratio exposures

(EUR 1,000)	31 Dec 2018	31 Dec 2017
	Applicable Amount	Applicable Amount
1 Total assets as per published financial statements	35,676,739	34,738,139
4 Adjustments for derivative financial instruments	-2,169,194	-2,133,649
6 Adjustment for off-balance sheet items (ie conversion to credit equivalent amounts of off-balance sheet exposures)	1,339,665	1,075,117
7 Other adjustments	-14,850	-10,196
8 Leverage ratio total exposure measure	34,832,360	33,669,410

LRCom

Leverage ratio common disclosure

(EUR 1,000)	31 Dec 2018	31 Dec 2017
	CRR leverage ratio exposures	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)	34,003,222	33,198,465
2 (Asset amounts deducted in determining Tier 1 capital)	-14,850	-10,196
3 Total on-balance sheet exposures (excluding derivatives, SFTs and fiduciary assets) (sum of lines 1 and 2)	33,988,372	33,188,269
Derivative exposures		
4 Replacement cost associated with all derivatives transactions (i.e. net of eligible cash variation margin)	169,721	147,268
5 Add-on amounts for PFE associated with all derivatives transactions (mark-to-market method)	661,799	634,131
7 (Deductions of receivables assets for cash variation margin provided in derivatives transactions)	-1,327,197	-1,375,375
11 Total derivatives exposures (sum of lines 4 to 10)	-495,677	-593,976
Other off-balance sheet exposures		
17 Off-balance sheet exposures at gross notional amount	2,796,753	2,270,346
18 (Adjustments for conversion to credit equivalent amounts)	-1,457,088	-1,195,229
19 Other off-balance sheet exposures (sum of lines 17 and 18)	1,339,665	1,075,117
Capital and total exposure measure		
20 Tier 1 capital	1,412,909	1,292,973
21 Leverage ratio total exposure measure (sum of lines 3, 11, 16, 19, EU-19a and EU-19b)	34,832,360	33,669,410
Leverage ratio		
22 Leverage ratio	4.06%	3.84%

LRSpl

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

(EUR 1,000)		31 Dec 2018	31 Dec 2018
		CRR leverage ratio exposures before CRM	CRR leverage ratio exposures post CRM
EU-1	Total on-balance sheet exposures (excluding derivatives, SFTs, and exempted exposures), of which:	32,676,025	32,676,025
EU-3	Banking book exposures, of which:	32,676,025	32,676,025
EU-4	Covered bonds	1,887,770	1,887,770
EU-5	Exposures treated as sovereigns	14,234,064	13,024,826
EU-6	Exposures to regional governments, MDB, international organisations and PSE not treated as sovereigns	329,683	15,925,990
EU-7	Institutions	2,525,096	1,794,885
EU-8	Secured by mortgages of immovable properties	8,527,156	-
EU-10	Corporate	5,129,701	-
EU-11	Exposures in default	-	-
EU-12	Other exposures (e.g. equity, securitisations, and other non-credit obligation assets)	42,555	42,555

(EUR 1,000)		31 Dec 2017	31 Dec 2017
		CRR leverage ratio exposures before CRM	CRR leverage ratio exposures post CRM
EU-1	Total on-balance sheet exposures (excluding derivatives, SFTs, and exempted exposures), of which:	31,812,893	31,812,893
EU-3	Banking book exposures, of which:	31,812,893	31,812,893
EU-4	Covered bonds	1,938,881	1,938,881
EU-5	Exposures treated as sovereigns	13,830,222	12,336,314
EU-6	Exposures to regional governments, MDB, international organisations and PSE not treated as sovereigns	340,804	15,462,856
EU-7	Institutions	2,795,792	1,988,135
EU-8	Secured by mortgages of immovable properties	7,733,922	-
EU-10	Corporate	5,086,565	-
EU-11	Exposures in default	450	450
EU-12	Other exposures (e.g. equity, securitisations, and other non-credit obligation assets)	86,257	86,257

LRQua

Disclosure on qualitative items

The risk of excessive leverage is managed as part of the internal capital management process. Within this process, the target level for leverage ratio is defined. The leverage ratio is part of MuniFin's risk appetite framework and is regularly monitored in Risk Appetite Dashboard and in internal monthly reporting. Leverage Ratio is also one of the Recovery Plan indicators. The principals for managing maturity mismatch and asset encumbrance are defined in the Liquidity and Funding Risk policy. The maturity mismatch is followed and managed through the Financing gap indicator within the risk appetite framework. MuniFin maintains a sufficient liquidity portfolio of unencumbered, highly liquid assets at all times.

The consolidated leverage ratio was 4.06% at the end of 2018 compared to 3.84% at end of previous year. The balance sheet exposures grew by net EUR 800 million during the year. The change was mainly driven by increased lending to the public and public sector entities. Off-balance sheet exposures, credit commitments to public and public sector entities, grew by EUR 265 million during the year. Own funds grew in the period by EUR 120 million, mainly driven by increase in CET1 capital, namely from the continued profit generation.

Section 14

Liquidity risk management and liquidity coverage ratio

EU LIQA

Liquidity risk management

Liquidity and funding risk is the risk that MuniFin is unable to meet its financial obligations as they become due, resulting in an inability to support normal business activities or a failure to meet regulatory liquidity requirements or rating agency expectations. MuniFin is exposed to liquidity risk in its customer financing, funding, investment activities and other operations.

MuniFin has identified a sub-set of liquidity and funding risks as material risks in the Risk Appetite Framework. When identifying liquidity and funding risks, MuniFin considers the connection between liquidity and funding risk and other risks, such as interest rate risk, credit risk, operational and reputational risk as these risks may have an effect on MuniFin's liquidity position.

Management of liquidity risk

MuniFin's liquidity risk management is based on the Liquidity and funding risk policy, which describes e.g. roles and responsibilities, sources of liquidity and funding risk, management and monitoring of liquidity risk. Liquidity and funding risk policy is in line with the business model document and overall risk management principles. The policy is an integral part of the MuniFin's risk management framework.

MuniFin's liquidity risk management is conservative. The company strives to ensure liquidity adequacy under all market conditions by maintaining sufficient number of liquidity sources. The primary sources of liquidity are short-term and long-term funding, liquidity portfolio, repo markets and cash. Funding programmes are both short-term (Euro Commercial Paper) and long-term (Medium Term Note and AUD debt programmes) and cover several currencies. MuniFin has various diversification strategies: by market, geographically, by issuing bonds targeted at different investor types, and by varying maturities and currencies. MuniFin is also a monetary policy counterparty of the Bank of Finland. The company has pledged loans to the Bank of Finland and can obtain credit from the central bank against these collaterals.

MuniFin conducts systematic liquidity and funding planning. The liquidity and funding plan is prepared annually and the development of the liquidity and funding plan is reviewed quarterly. In addition, the plan is complemented by a rolling short-term 3 months operational plan for liquidity management. MuniFin also has a process in place to respond liquidity stress test situations and MuniFin maintains a contingency funding plan, which will be activated in the event of a liquidity crisis. MuniFin also maintains a sufficient liquidity portfolio of unencumbered, highly liquid assets to be able to continue normal operations even under severe market distress for at least a period of time defined in Risk Appetite Framework without any new long-term funding.

MuniFin has set risk indicators defining the tolerance for liquidity and funding risk in its Risk Appetite Framework. At least on a yearly basis, the risk limits and thresholds are reviewed and calibrated in order to align the Risk Appetite Framework with the company's strategy and external and macro-economic developments. The company has set targets and early warning threshold levels which, when breached, will trigger corrective actions in order to ensure that the company remains within its risk appetite.

MuniFin supports its assessment of liquidity requirements with regular stress testing applying severe but plausible stress scenarios to its liquidity and funding risk profile. MuniFin's liquidity stress test framework assess the company's liquidity adequacy and the main objective is to determine the company's survival horizon under stress in order to determine whether it has sufficient liquid assets to ensure it is operating within the liquidity and funding risk appetite set by the Board of Directors. The limits for the survival horizon have been set to weather severe stress scenario assumptions.

Structure and organisation of the liquidity risk

MuniFin's Treasury and Funding departments are responsible for managing liquidity and funding risk within limits set by the Board of Directors. Treasury and Funding as first line risk owners are also responsible for ensuring that liquidity guidelines, instructions and processes are in place and the company is operating in line with the defined risk appetite at any given time. Risk management department as an independent control function, is responsible for risk management policies and frameworks and monitors liquidity management.

The Board of Directors is responsible for setting the scope and general requirements for the liquidity risk measurement and assessment, defining the principles for organising liquidity and funding risk management, confirming the risk level and risk appetite based on MuniFin's strategy and business plan and approving the plan for maintaining liquidity adequacy proportionate to the risk appetite. The Executive Management Team's (EMT) responsibility is to ensure that all liquidity and funding risk related processes are clearly defined and documented, up to date and contain the duties and responsibilities for each of MuniFin's divisions, departments or responsible persons. In addition, the EMT is responsible for organising the work in order to enable an efficient liquidity and funding risk identification, measuring, managing, monitoring and reporting. The ALM Group, which operates under the EMT, is responsible for liquidity and funding risk operational management related to monitoring and decisions of quality and quantity of liquidity and funding. The Risk Group, which operates also under the EMT, ensures that risks of MuniFin remain within risk appetite and at a level sufficient to maintain MuniFin's business continuity, strong credit rating and compliance with relevant regulatory requirements.

Measurement and reporting of liquidity risk

MuniFin measures both short-term and long-term liquidity. For short-term liquidity, MuniFin calculates e.g. refinancing risk in short-term funding which expresses maximum amount of maturing issued debt instrument under the ECP programme during a specified time period. MuniFin also measures short-term callable funding (call date within the next 12-month period) and limits the amount of callable funding as a proportion of the total funding portfolio. For long-term liquidity, MuniFin measures e.g. financing gap which measures the difference between the average maturity of financial assets and the average maturity of financial liabilities. The company also limits and measures the length of the survival horizon, which is defined as the amount of time that the company could survive given the size of its liquidity buffer.

MuniFin has measured liquidity coverage ratio (LCR) since 2014 using EU regulation as a calculation basis. The Board of Directors has set limits for LCR in Risk Appetite Framework. MuniFin is compliant with LCR according to EU regulation.

MuniFin has set up a liquidity buffer for situations where the company is in an urgent need of cash and normal funding sources are not in use. Liquidity buffer consists of high-quality liquid assets, which could be converted into cash within a short time frame, either through sale of the assets on the market or through the repurchase agreement in the repo market. This subset of the total liquidity portfolio contains liquid assets from both short-term and long-term liquidity portfolios.

Liquidity and funding risk indicators are reported to the Board of Directors and EMT regularly. Both bodies are informed of any material changes in MuniFin's liquidity risk profile or position and of any necessary actions, which should be taken in order for the company to remain within the set risk appetite.

The adequacy of liquidity risk management

In the Internal Liquidity Adequacy Assessment Process (ILAAP) performed annually, MuniFin assesses the adequacy of its liquidity resources to cover forecasted liquidity needs under the business-as-usual and stress scenarios. ILAAP is integral part of MuniFin's risk management framework in addition to other strategic processes such as Risk Appetite Framework, ICAAP, Recovery Plan and remuneration framework. The ILAAP document is approved by the Board of Directors.

Stress testing is required to assess MuniFin's liquidity adequacy in a comprehensive, integrated and forward-looking manner. All liquidity risk indicators from the Risk Appetite Framework and other liquidity indicators used by MuniFin are included in ILAAP.

EU LIQ1

LCR disclosure and qualitative information on the LCR

The liquidity coverage ratio was over the target level set in the Risk Appetite Framework at all times during 2018. The buffer for HQLA assets have remained on high level during the year. As off balance sheet loan commitments have increased within 2018, the additional outflow amount has also increased. The inflows relate mainly to the loan payments from the public and public sector entities and maturing non-HQLA securities.

Based on the EBA Guideline 2017/01 credit institutions under the scope of application of these guidelines do not need to publish the disclosures where some of the observations for the calculation of their averages are prior to the first LCR reporting reference date (31 Dec 2017). The disclosed figures for LCR for the end of 2017 represent the situation at 31 Dec 2017, not the yearly average, as disclosed for the year 2018.

Scope of consolidation: Consolidated (EUR 1,000)		Total unweighted value	Total weighted value	Total unweighted value	Total weighted value
		31 Dec 2018	31 Dec 2018	31 Dec 2017	31 Dec 2017
Number of data points used		12	12	1	1
HIGH-QUALITY LIQUID ASSETS					
1	Total high-quality liquid assets (HQLA)		6,944,723		7,026,837
CASH - OUTFLOWS					
5	Unsecured wholesale funding	2,097,909	2,097,909	2,582,699	2,582,699
7	Non-operational deposits (all counterparties)	5,225	5,225	7,470	7,470
8	Unsecured debt	2,092,684	2,092,684	2,575,229	2,575,229
9	Secured wholesale funding		-		-
10	Additional requirements	3,773,569	1,489,541	3,361,295	1,473,249
11	Outflows related to derivative exposures and other collateral requirements	1,235,760	1,235,760	1,263,466	1,263,466
13	Credit and liquidity facilities	2,537,809	253,781	2,097,829	209,783
14	Other contractual funding obligations	1,860	-	1,653	-
15	Other contingent funding obligations	3,607,775	365,962	3,859,550	404,495
16	TOTAL CASH OUTFLOWS		3,953,411		4,460,444
CASH - INFLOWS					
18	Inflows from fully performing exposures	637,262	326,640	369,240	192,959
19	Other cash inflows	177,515	162,625	216,058	207,629
EU-19a	(Difference between total weighted inflows and total weighted outflows arising from transactions in third countries where there are transfer restrictions or which are denominated in non-convertible currencies)		-		-
EU-19b	(Excess inflows from a related specialised credit institution)		-		-
20	TOTAL CASH INFLOWS	814,777	489,265	585,298	400,588
EU-20a	Fully exempt inflows	-	-	-	-
EU-20b	Inflows subject to 90% cap	-	-	-	-
EU-20c	Inflows subject to 75% cap	814,777	489,265	585,298	400,588
21	LIQUIDITY BUFFER		6,944,723		7,026,837
22	TOTAL NET CASH OUTFLOWS		3,464,146		4,059,856
23	LIQUIDITY COVERAGE RATIO, %		205.27%		173.08%

Concentration of funding and liquidity sources

MuniFin acquires funding from international capital markets, mainly with unsecured public bond issues. While there is a high concentration on the unsecured wholesale funding, MuniFin has diversified its funding extensively across markets, currencies, durations and maturities.

MuniFin holds high quality liquid assets enough to meet the statutory LCR requirement on a daily basis. Furthermore, in line with MuniFin's risk appetite framework, the total liquidity amount must be enough to cover uninterrupted business for at least six months.

Derivative exposures and potential collateral calls

MuniFin has made CSA agreements including daily margin calls with most of its derivative counterparties. MuniFin calculates the largest cash collateral movement with the historical look back approach and considers this as an outflow for the potential collateral calls.

Currency mismatch in the LCR

MuniFin monitors and calculates LCR in all significant currencies on regular basis. The company hedges against exchange rate risks by using derivative contracts to translate all foreign currency denominated funding into euros. The company does not bear any material foreign exchange risk. MuniFin does not hold liquidity buffer in other currencies than euro for LCR purposes.

A description of the degree of centralisation of liquidity management and interaction between the group's units

MuniFin's liquidity management is based on the Liquidity and funding risk policy which describes e.g. roles and responsibilities, sources of liquidity and funding risk, management and monitoring of liquidity risk. Liquidity and funding risk policy is in line with the business model document and overall risk management principles. The policy is an integral part of the MuniFin's risk management framework.

Other items in the LCR calculation that are not captured in the LCR disclosure template but that the institution considers relevant for its liquidity profile

Outflows from unsecured wholesale funding with call maturity options are treated in the LCR calculation according to the next possible call date. The estimate for the realised calls for the next 12 months is 20-40%.

Section 15

CRR reference table

CRR REF.	HIGH LEVEL SUMMARY	REFERENCE
Pillar 3 disclosures in accordance with the Articles 435–455 of CRR		
Article 435	Risk management objectives and policies	
1 (a)	Strategies and processes to manage risks	Pillar III Disclosure Report 2018 Section 2
1 (b)	Governance structure and organisation	Pillar III Disclosure Report 2018 Section 2, Corporate Governance Statement 2018 pages 2–18
1 (c)	Scope and nature of risk reporting and measurement systems	Pillar III Disclosure Report 2018 Section 2, Annual Report 2018 pages 104–116
1 (d)	Policies for hedging and mitigating risk	Pillar III Disclosure Report 2018 Section 2, Annual Report 2018 pages 104–116
1 (e)	Declaration approved by the management body on the adequacy of risk management arrangements	Pillar III Disclosure Report 2018 Section 2 page 8
1 (f)	Concise risk statement approved by the management body succinctly describing the institution's overall risk profile associated with the business strategy.	Pillar III Disclosure Report 2018 Section 2 page 8
2 (a)	Number of directorships held by members of the Board of Directors	Corporate Governance Statement 2018 pages 8–11
2 (b)	Recruitment policy for the selection of members of the Board of Directors and their actual knowledge, skills and expertise	Corporate Governance Statement 2018 pages 3–13
2 (c)	Policy on diversity with regard to selection of members of the Board of Directors	Corporate Governance Statement 2018 pages 6–7
2 (d)	Set up a separate risk committee and the number of times the risk committee has met.	Corporate Governance Statement 2018 page 14
2 (e)	Description of the information flow on risk to the management body.	Pillar III Disclosure Report 2018 Section 2, Annual Report 2018 pages 104–105, Corporate Governance Statement 2018 pages 18–21

Article 436 Scope of application		
(a)	The name of the institution to which the CRR requirements apply	Annual Report 2018 and website www.munifin.fi
(b) (i)-(iv)	Outline of the differences in the basis of consolidation for accounting and prudential purposes, with a brief description of the entities therein, explaining whether they are: (i) fully consolidated; (ii) proportionally consolidated; (iii) deducted from own funds; (iv) neither consolidated nor deducted	Pillar III Disclosure Report 2018 Section 3 pages 17–19, templates EU LI1, EU LI2 and EU LI3
(c)	Any current or foreseen material practical or legal impediment to the prompt transfer of own funds or repayment of liabilities among the parent undertaking and its subsidiaries	Not applicable
(d)	The aggregate amount by which the actual own funds are less than required in all subsidiaries not included in the consolidation, and the name or names of such subsidiaries	Not applicable
(e)	If applicable, the circumstance of making use of the provisions laid down in Articles 7 and 9	Not applicable
Article 437 Own funds		
1 (a)	A full reconciliation of Common Equity Tier 1 items, Additional Tier 1 items, Tier 2 items and filters and deductions applied pursuant to Articles 32 to 35, 36, 56, 66 and 79 to own funds of the institution and the balance sheet in the audited financial statements of the institution	Pillar III Disclosure Report 2018 Section 4
1 (b)	A description of the main features of the Common Equity Tier 1 and Additional Tier 1 instruments and Tier 2 instruments issued by the institution	Pillar III Disclosure Report 2018 Section 4 pages 22–23
1 (c)	Full terms and conditions of all Common Equity Tier 1, Additional Tier 1 and Tier 2 instruments	Pillar III Disclosure Report 2018 Section 4 pages 22–23, Articles of Association (www.munifin.fi)
1 (d) (i)-(iii)	Separate disclosure of the nature and amounts of the following: (i) each prudential filter applied pursuant to Articles 32 to 35; (ii) each deduction made pursuant to Articles 36, 56 and 66; (iii) items not deducted in accordance with Articles 47, 48, 56, 66 and 79	Pillar III Disclosure Report 2018 Section 4 pages 24–25
1 (e)	A description of all restrictions applied to the calculation of own funds in accordance with the CRR and the instruments, prudential filters and deductions to which those restrictions apply;	Not applicable
1 (f)	Where institutions disclose capital ratios calculated using elements of own funds determined on a basis other than that laid down in this Regulation, a comprehensive explanation of the basis on which those capital ratios are calculated.	Not applicable
Article 438 Capital requirements		
(a)	A summary of the approach to assessing the adequacy of its internal capital to support current and future activities	Pillar III Disclosure Report 2018 Section 5, Corporate Governance Statement pages 21–22
(b)	Upon demand from the supervisory authority, the result of the institution's internal capital adequacy assessment process including the composition of the additional own funds requirements based on the supervisory review process as referred to in point (a) of Article 104(1) of CRDIV	Pillar III Disclosure Report 2018 Section 5
(c)	Risk-weighted exposure amounts in accordance with the standardised approach	Pillar III Disclosure Report 2018 Section 5 template EU OV1
(d)	Risk-weighted exposure amounts in accordance with internal ratings based (IRB) approach	Not applicable
(e)	Own funds requirements	Pillar III Disclosure Report 2018 Section 5 pages 27–28 and template EU OV1
(f)	Own funds requirements calculated in accordance with CRR, Part Three, Title III, Chapters 2, 3 and 4 and disclosed separately.	Pillar III Disclosure Report 2018 Section 5 pages 27–28 and template EU OV1

Article 439 Exposure to counterparty credit risk		
(a)	A discussion of the methodology used to assign internal capital and credit limits for counterparty credit exposures	Pillar III Disclosure Report 2018 Section 2 pages 11–12
(b)	A discussion of policies for securing collateral and establishing credit reserves	Pillar III Disclosure Report 2018 Section 2 pages 11–12
(c)	A discussion of policies for wrongway risk exposures	Pillar III Disclosure Report 2018 Section 2 page 12
(d)	A discussion of the impact of the amount of collateral the institution would have to provide given a downgrade in its credit rating	Pillar III Disclosure Report 2018 Section 9 template EU CCR5-B
(e)	Gross positive fair value of contracts, netting benefits, netted current credit exposure, collateral held and net derivatives credit exposure. Net derivatives credit exposure is the credit exposure on derivatives transactions after considering both the benefits from legally enforceable netting agreements and collateral arrangements	Pillar III Disclosure Report 2018 Section 9 pages 48–50 templates EU CCR1, EU CCR2 and EU CCR8
(f)	Measures for exposure value under the methods set out in the CRR in Part Three, Title II, Chapter 6, Sections 3 to 6 whichever method is applicable	Pillar III Disclosure Report 2018 Section 9 pages 48–50 templates EU CCR1, EU CCR2 and EU CCR8
(g)	The notional value of credit derivative hedges, and the distribution of current credit exposure by types of credit exposure	Not applicable
(h)	Notional amounts of credit derivative transactions, segregated between use for the institution's own credit portfolio, as well as in its intermediation activities, including the distribution of the credit derivatives products used, broken down further by protection bought and sold within each product group	Not applicable
(i)	The estimate of α if the institution has received the permission of the competent authorities to estimate α	Not applicable
Article 440 Capital buffers		
(a)	The geographical distribution of credit exposures relevant for the calculation of countercyclical capital buffer	Pillar III Disclosure Report 2018 Section 6 pages 31–32
(b)	The amount of institution specific countercyclical capital buffer	Pillar III Disclosure Report 2018 Section 6 pages 31–32
Article 441 Indicators of global systemic importance		
1-2	Indicator values used for determining the score of the institution.	Not applicable.
Article 442 Credit risk adjustments		
(a)	The definitions for accounting purposes of past due and impaired	Pillar III Disclosure Report 2018 Section 7 page 33 table EU CRB-A
(b)	A description of the approaches and methods adopted for determining specific and general credit risk adjustments	Pillar III Disclosure Report 2018 Section 7
(c)	The total amount of exposures after accounting offsets and without taking into account the effects of credit risk mitigation, and the average amount of the exposures over the period broken down by different types of exposure classes	Pillar III Disclosure Report 2018 Section 7 page 34 template EU CRB-B
(d)	The geographic distribution of the exposures, broken down in significant areas by material exposure classes, and further detailed if appropriate	Pillar III Disclosure Report 2018 Section 7 page 34 template EU CRB-C
(e)	The distribution of the exposures by industry or counterparty type, broken down by exposure classes, including specifying exposure to SMEs, and further detailed if appropriate	Pillar III Disclosure Report 2018 Section 7 pages 36–37 template EU CRB-D
(f)	The residual maturity breakdown of all the exposures, broken down by exposure classes, and further detailed if appropriate	Pillar III Disclosure Report 2018 Section 7 page 38 template EU CRB-E

(g) (i)-(iii)	By significant industry or counterparty type, the amount of: (i) impaired exposures and past due exposures, provided separately; (ii) specific and general credit risk adjustments; (iii) charges for specific and general credit risk adjustments during the reporting period	Pillar III Disclosure Report 2018 Section 7 pages 39–42 templates EU CR1-A, EU CR1-B, EU CR1-C EU CR1-D and EU CR1-E
(h)	The amount of the impaired exposures and past due exposures, provided separately, broken down by significant geographical areas including, if practical, the amounts of specific and general credit risk adjustments related to each geographical area	Pillar III Disclosure Report 2018 Section 7 pages 39–42 templates EU CR1-A, EU CR1-B, EU CR1-C EU CR1-D and EU CR1-E
(i) (i)-(v)	Reconciliation of changes in the specific and general credit risk adjustments for impaired exposures, shown separately. The information shall comprise: (i) a description of the type of specific and general credit risk adjustments; (ii) the opening balances; (iii) the amounts taken against the credit risk adjustments during the reporting period; (iv) the amounts set aside or reversed for estimated probable losses on exposures during the reporting period, any other adjustments including those determined by exchange rate differences, business combinations, acquisitions and disposals of subsidiaries, and transfers between credit risk adjustments; (v) the closing balances	Pillar III Disclosure Report 2018 Section 7 page 43 templates EU CR2-A and EU CR2-B
	Specific credit risk adjustments and recoveries recorded directly to the income statement shall be disclosed separately	Annual Report 2018 Consolidated Financial Statements Notes 14 and 43
Article 443	Unencumbered assets	
	Disclosure on unencumbered assets according to EBA Guidelines	Pillar III Disclosure Report 2018 Section 10
Article 444	Use of ECAIs	
(a)	Names of the nominated ECAIs and ECAs and the reasons for any changes	Pillar III Disclosure Report 2018 Section 8 page 45
(b)	The exposure classes for which each ECAI or ECA is used	Pillar III Disclosure Report 2018 Section 8 page 45
(c)	A description of the process used to transfer the issuer and issue credit assessments onto items not included in the trading book	Pillar III Disclosure Report 2018 Section 8 page 45
(d)	The association of the external rating of each nominated ECAI or ECA with the credit quality steps prescribed in the CRR in Part Three, Title II, Chapter 2, taking into account that this information needs not be disclosed if the institution complies with the standard association published by the European Banking Authority	Pillar III Disclosure Report 2018 Section 8 page 45
(e)	The exposure values before and the exposure values after credit risk mitigation associated with each credit quality step prescribed in the CRR in Part Three, Title II, Chapter 2 as well as those deducted from own funds	Pillar III Disclosure Report 2018 Section 8 page 46–47 template EU CR4 and EU CR5
Article 445	Exposure to market risk	
	The institutions calculating their own funds requirements in accordance with points (b) and (c) of Article 92(3) of the CRR shall disclose those requirements separately for each risk referred to in those provisions. In addition, the own funds requirement for specific interest rate risk of securitisation positions shall be disclosed separately.	Pillar III Disclosure Report 2018 Section 11 page 53
Article 446	Operational risk	
	Institutions shall disclose the approaches for the assessment of own funds requirements for operational risk that the institution qualifies for; a description of the methodology set out in Article 312(2) of the CRR, if used by the institution, including a discussion of relevant internal and external factors considered in the institution's measurement approach, and in the case of partial use, the scope and coverage of the different methodologies used.	Pillar III Disclosure Report 2018 Section 2 page 16

Article 447	Exposures in equities not included in the trading book	
	Exposures in equities not included in the trading book	Not applicable
Article 448	Exposure to interest rate risk on positions not included in the trading book	
(a)	The nature of the interest rate risk and the key assumptions (including assumptions regarding loan prepayments and behaviour of non-maturity deposits), and frequency of measurement of the interest rate risk	Pillar III Disclosure Report 2018 Section 2 pages 12–15 table EU MRA
(b)	The variation in earnings, economic value or other relevant measure used by the management for upward and downward rate shocks according to management's method for measuring the interest rate risk, broken 'down by currency.	Pillar III Disclosure Report 2018 Section 2 pages 12–15 table EU MRA
Article 449	Exposure to securitisation positions	
	Exposure to securitisation positions	Pillar III Disclosure Report 2018 Section 5
Article 450	Remuneration policy	
(a)	Information concerning the decision-making process used for determining the remuneration policy, as well as the number of meetings held by the main body overseeing remuneration during the financial year, including, if applicable, information about the composition and the mandate of a remuneration committee, the external consultant whose services have been used for the determination of the remuneration policy and the role of the relevant stakeholders	Corporate Governance Statement 2018 pages 15–16, Remuneration Report 2018
(b)	Information on link between pay and performance	Remuneration Report 2018
(c)	The most important design characteristics of the remuneration system, including information on the criteria used for performance measurement and risk adjustment, deferral policy and vesting criteria	Remuneration Report 2018 pages 5–6
(d)	Ratios between fixed and variable remuneration set in accordance with Article 94(1)(g) of the CRDIV	Remuneration Report 2018 pages 5–8
(e)	Information on the performance criteria on which the entitlement to shares, options or variable components of remuneration is based	Remuneration Report 2018. MuniFin does not grant variable remuneration in the form of shares or options.
(f)	The main parameters and rationale for any variable component scheme and any other non-cash benefits	Remuneration Report 2018
(g)	Aggregate quantitative information on remuneration, broken down by business area	Remuneration Report 2018 page 6
(h)	Aggregate quantitative information on remuneration, broken down by senior management and members of staff whose actions have a material impact on the risk profile of the institution	Remuneration Report 2018 pages 7–8
(i)	The number of individuals being remunerated EUR 1 million or more per financial year, for remuneration between EUR 1 million and EUR 5 million broken down into pay bands of EUR 500 000 and for remuneration of EUR 5 million and above broken down into pay bands of EUR 1 million	Not applicable, there were no individuals employed by MuniFin in 2018 being remunerated EUR 1 million or more.
(j)	Upon demand from the Member State or competent authority, the total remuneration for each member of the management body or senior management.	Not applicable, no such demand has been made by the supervisory authority.

Article 451	Leverage	
(a)	The leverage ratio and how the institution applies Article 499(2) and (3) of the CRR	Pillar III Disclosure Section 13 pages 54–55
(b)	A breakdown of the total exposure measure as well as a reconciliation of the total exposure measure with the relevant information disclosed in published financial statements	Pillar III Disclosure Section 13 pages 54–55
(c)	Where applicable, the amount of derecognised fiduciary items in accordance with Article 429(11) of the CRR	Not applicable
(d)	A description of the processes used to manage the risk of excessive leverage	Pillar III Disclosure 2018 Section 13 page 55
(e)	A description of the factors that had an impact on the leverage ratio during the period to which the disclosed leverage ratio refers	Pillar III Disclosure 2018 Section 13 page 55
Article 452	Use of the IRB Approach to credit risk	
	IRB Approach to credit risk	Not applicable
Article 453	Use of credit risk mitigation techniques	
(a)	The policies and processes for, and an indication of the extent to which the entity makes use of, on- and offbalance sheet netting	Pillar III Disclosure 2018 Section 2 pages 11–12
(b)	The policies and processes for collateral valuation and management	Pillar III Disclosure 2018 Section 2 pages 11–12
(c)	A description of the main types of collateral taken by the institution	Pillar III Disclosure 2018 Section 2 pages 11–12
(d)	The main types of guarantor and credit derivative counterparty and their creditworthiness	Pillar III Disclosure 2018 Section 2 pages 11–12
(e)	Information about market or credit risk concentrations within the credit mitigation taken	Not applicable
(f)	For institutions calculating risk-weighted exposure amounts under the Standardised Approach or the IRB Approach, but not providing own estimates of LGDs or conversion factors in respect of the exposure class, separately for each exposure class, the total exposure value (after, where applicable, on- or off-balance sheet netting) that is covered – after the application of volatility adjustments – by eligible financial collateral, and other eligible collateral	Pillar III Disclosure 2018 Section 7 page 44 template EU CR3
(g)	For institutions calculating risk-weighted exposure amounts under the Standardised Approach or the IRB Approach, separately for each exposure class, the total exposure (after, where applicable, on- or offbalance sheet netting) that is covered by guarantees or credit derivatives. For the equity exposure class, this requirement applies to each of the approaches provided in Article 155	Pillar III Disclosure 2018 Section 7 page 44 template EU CR3
Article 454	Use of the Advanced Measurement Approaches to operational risk	
	Advanced Measurement Approaches to operational risk	Not applicable
Article 455	Use of Internal Market Risk Models	
	Internal Market Risk Models	Not applicable

Section 16

Information not disclosed due to non-materiality, proprietary or confidential nature

REFERENCE	REASON FOR NOT DISCLOSING	INFORMATION PROVIDED IN PILLAR III DISLOSURES
EBA/GL/2016/11 table EU OVA (b), CRR Article 435(1)(b): The approved limits of risks to which the institution is exposed.	Risk Appetite Framework (RAF) limits and thresholds are defined strictly confidential. Limits and thresholds are of strategic nature and as such defined confidential. The Financial Supervisory Authorities have full access to MuniFin's RAF limits and thresholds.	RAF is described in detail in Section 2 Risk management objectives and policies, subsection MuniFin's overall risk profile associated with the business strategy and business model.

Municipality Finance Plc is one of the largest credit institutions in Finland: the company's balance sheet exceeds EUR 35 billion. The company is owned by Finnish municipalities, the public sector pension fund Keva and the Republic of Finland.

MuniFin's mission is to build a better future in line with the principles of responsibility and in cooperation with its customers. MuniFin's customers are Finnish municipalities, municipal federations, municipally controlled companies and non-profit housing organisations. Lending is used for environmentally and socially responsible investment targets such as public transportation, sustainable buildings, hospitals and healthcare centres, schools and day care centres, and homes for people with special needs.

MuniFin's customers are domestic but the company operates in a completely global business environment. It is the most active Finnish bond issuer in international capital markets and the first Finnish green bond issuer. The funding is exclusively guaranteed by the Municipal Guarantee Board.

The Municipality Finance Group also includes the subsidiary company, Financial Advisory Services Inspira Ltd.

Read more: www.munifin.fi

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