

Pillar III Disclosure Report 2019

Published 27 October 2020

MuniFin

Table of contents

3	Section 1	Introduction and basis for preparation
5	Section 2	Risk management objectives and policies
20	Section 3	Information on the scope of application of the regulatory framework
25	Section 4	Own funds
30	Section 5	Capital requirements
34	Section 6	Capital buffers
37	Section 7	Credit risk and general information on credit risk mitigation
49	Section 8	Credit risk and credit risk mitigation in the standardised approach
52	Section 9	Non-performing exposures
55	Section 10	Counterparty credit risk
59	Section 11	Unencumbered assets
62	Section 12	Market risk
62	Section 13	Remuneration
63	Section 14	Leverage ratio
65	Section 15	Liquidity Coverage Ratio
68	Section 16	CRR reference table
74	Section 17	Information not disclosed due to non-materiality, proprietary or confidential nature

MuniFin has updated Section 11 Unencumbered assets Template A and B.
Updated Pillar III Disclosure Report 2019 has been republished on 27 October 2020.

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 capital requirement directive (“CRD IV”) (2013/36/EU) and the capital requirements regulation (“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 assessment of overall risks and capital adequacy based on those risks: Internal Capital Adequacy Assessment Process (ICAAP) and Supervisory Review and Evaluation Process (SREP) and
- Pillar 3: Disclosure 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 MuniFin Group

Measured by the balance sheet, MuniFin (parent company) is Finland’s third largest credit institution; the company’s balance sheet totals nearly EUR 39 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 entities nominated by the Housing Finance and Development Centre of Finland (ARA). MuniFin is the only credit institution 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 investments 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 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. The Municipal Guarantee Board is established by a special law and all Finnish mainland municipalities (local governments) are permanent members of the Municipal Guarantee Board.

MuniFin 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 supplementing the information disclosed in this Pillar 3 Report.

MuniFin's Business Control and Reporting department is responsible for the process of publishing financial information. Risk management function and Legal and Governance function 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 for approval.

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 concerning 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 the 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 16 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 to publish Pillar III disclosures semiannually at the same time as publication of the Financial Statements and the Half Year Report. The semiannual publication of the comprehensive Pillar III disclosures is deemed to be sufficient despite MuniFin being one of the three largest institutions in 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 is not prone to any sudden changes. There has been no essential changes in MuniFin's risk appetite. 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 /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 is information considered to be proprietary or confidential the information is not published, but disclosed in more general manner.

All figures presented in this report are those of the MuniFin Group.

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 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:

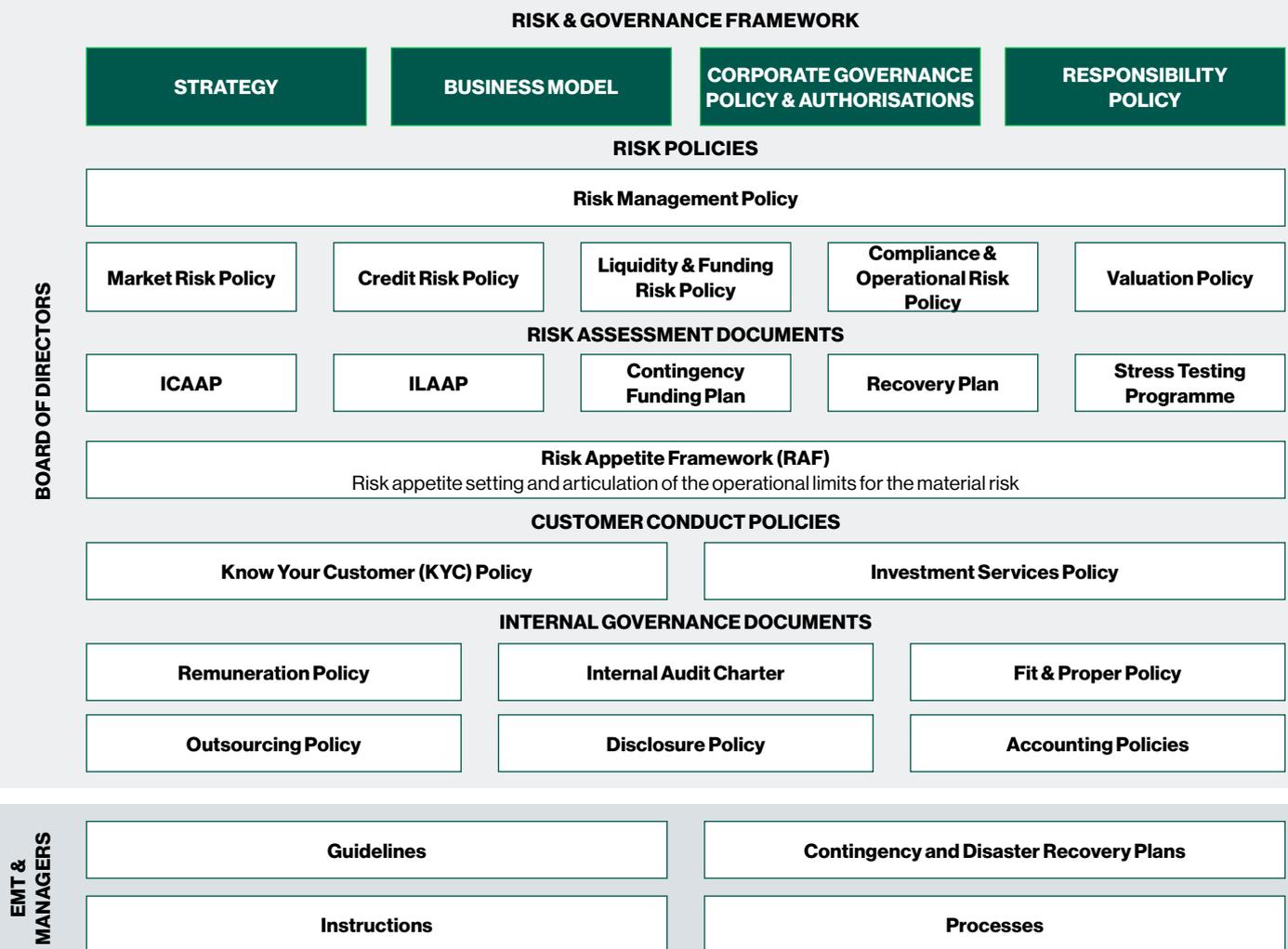


Figure 1. Risk and Governance Framework of MuniFin

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 responsibilities are allocated to all the relevant parties, and risks are reported and escalated.

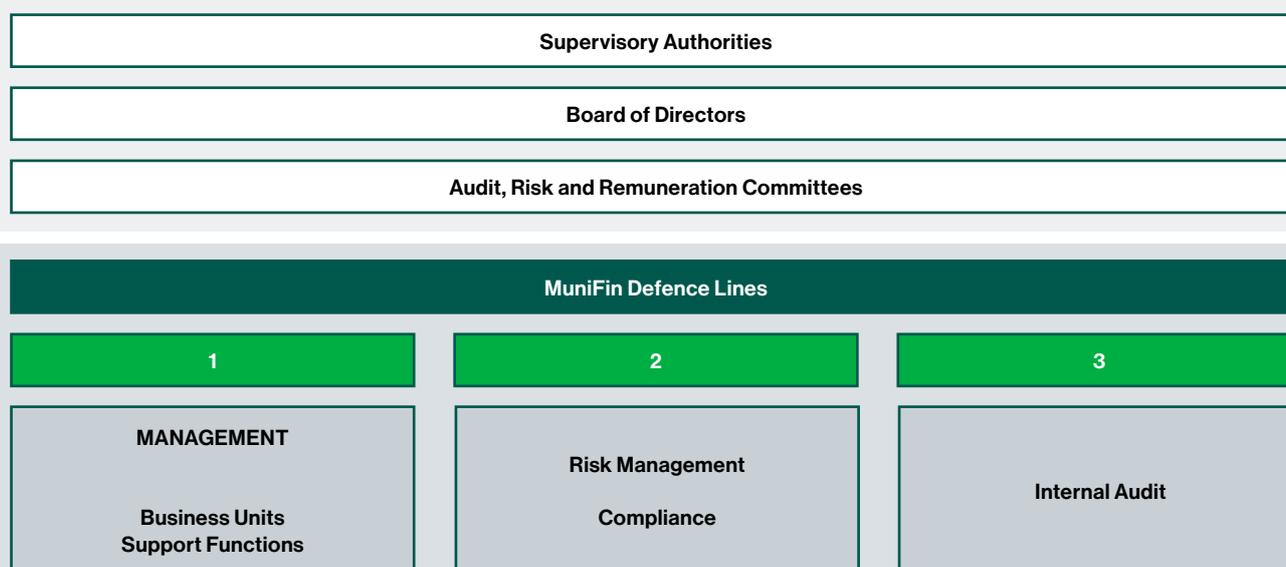


Figure 2. Three lines of defence risk governance model

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. The risk positions and limit usage are reported to the Executive Management Team and its subgroups and Board of Directors on a regular basis. Customer Finance maintains customer relationships and is in charge of credit decisions within the set limits and managing the granted credit limits. The Finance division, 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 and Operational Risk function monitors the company's compliance with regulation as well as operational risks.

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. Internal Audit's task is to review and audit independently the first and second line of defence and to carry out its functions independently of any other line of defence.

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).

As required by regulation and 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 conservative 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.

The purpose of the Audit Committee, as a preparatory body, is to assist the Board of Directors in duties related to financial reporting and internal control. The Audit Committee supervises work of the external and internal audit. 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. The Executive Management Team 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 Executive Management Team 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 Executive Management Team also delegates duties to the necessary divisions, departments and responsible individuals.

Concerning risk management, the Executive Management Team 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 Executive Management Team is supported by six executive-level decision-making bodies: the Risk Group, the ALM Group, the Credit Group, the Security Management Group, the Valuation Control Group and the Data Governance Group. All Groups support the Executive Management Team 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.

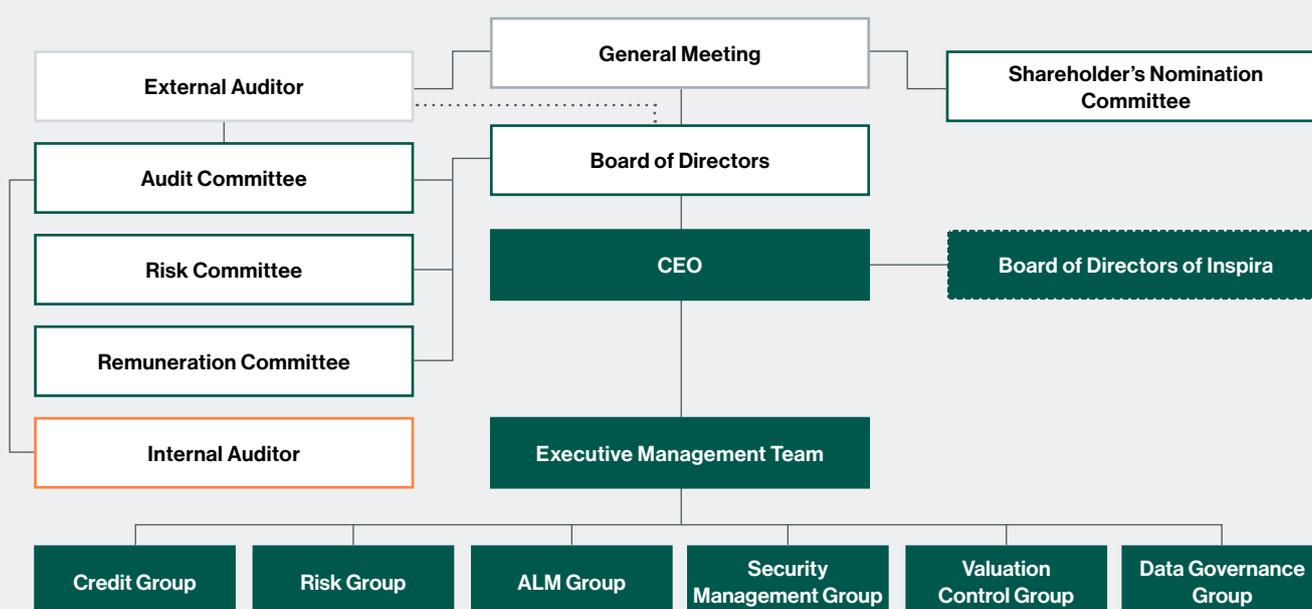


Figure 3. Risk related governance structure of MuniFin

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. Risk Appetite Framework 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). Business model and strategy are the key drivers that determine MuniFin's risk appetite along with the areas of profitability and capital, liquidity and funding, credit risk, 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 Risk Appetite Framework are:

- Overall risk appetite statement of MuniFin
- Risk appetite pillars: profitability and capital, liquidity and funding risks, credit risk, market risk 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 Risk Appetite Framework 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 enables MuniFin to maintain its credit ratings equal to those of the Republic of Finland and that customer financing will be secured in all market conditions".

There were no material changes in MuniFin's risk appetite in 2019. 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 recognised risks associated with its business operations in the above mentioned five areas. Risk Appetite Framework 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 Risk Appetite Framework 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 publically 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 2019.

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 Risk Appetite Framework and capital planning framework.

Risk profile described in Risk Appetite Framework 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	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	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 risk	Non-performing exposures and impairments	Maintain a sound credit risk profile appropriate for MuniFin's business model.
	Average credit rating in liquidity portfolio	
	Geographic concentration in liquidity portfolio	
Market risk	EVE	Maintain a sound market risk profile appropriate for MuniFin's business model.
	NII risk	
	Basis risk	
	FX risk	
	Spread risk	
	Fair valuation risk	
Operational risks	Reputation	Maintain an effective operational control and compliance to support functional and responsible operations.
	Indicators related to HR	
	IT and business continuity risks	
	Cybercrime and data protection risks	
	Internal fraud and financial crime	
	Process and conduct risk	
	Regulatory breaches	
Operational losses		

Key figures of profitability and capital in Risk Appetite Dashboard

	31 Dec 2019	31 Dec 2018	31 Dec 2017
Change in the CET1 ratio, percentage point	17,7	13,9	7,3
Leverage ratio, %	4,0	4,1	3,8
Cost-to-income ratio	0,3	0,2	0,2

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 Risk Appetite Framework 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.

MuniFin's risk profile compared to the RAF is reported to the Board through the Risk Appetite Dashboard on a monthly basis.

Stress testing

MuniFin pursues stress testing activities in a manner that is suitable to the specifications of its operations, business model and risk profile according to the Stress Test Programme, which has been approved by the Board of Directors. The stress testing programme focuses on principles of governance (including stress testing governance structures and their use), data infrastructure, stress testing scope and coverage, scenario development, stress testing programme model, methodologies and the application of stress testing programmes. MuniFin's stress testing programme is a pivotal part of risk management. Stress test outputs are used to assess the viability of MuniFin's Capital plan as well as the Liquidity and funding plan in adverse circumstances in the context of internal capital adequacy assessment process (ICAAP), the internal liquidity adequacy assessment process (ILAAP) and recovery planning.

MuniFin's Risk Management division is heavily involved in the design, update and application of the Stress testing Programme. Other divisions involved in operating the programme are Capital Markets, Customer Finance, and Finance.

During 2019, MuniFin conducted a stress test as part of its ICAAP and ILAAP. The main objective was to analyze the development of capital adequacy and profitability in years 2019–2023. The subject of stress testing was to test business, market and credit risks and their impact on financial figures in different scenarios. In addition, sufficiency of liquidity was tested with several stress scenarios. The results from the stress test showed that with the current capital requirements the level of own funds is sufficient even in very adverse scenarios in the period under review. Also, the leverage ratio was above the anticipated leverage ratio requirement of 3% even in adverse scenarios. The stress test also showed that the amount of liquidity is sufficient even in very unfavourable circumstances.

MuniFin performed during the second half of the year so called reverse stress testing as part of its recovery planning. The purpose of this stress test was to find extremely negative scenarios that threaten the business continuity and measures that will enable MuniFin to cope with the situation and continue its operations.

MuniFin also participated in Sensitivity Analysis of Liquidity Risk Stress Test (LIST 2019) conducted by ECB Banking Supervision in 2019. The purpose of this exercise was to assess the ability to withstand hypothetical idiosyncratic liquidity shocks. The sensitivity analysis was successful and showed that MuniFin's liquidity is sufficient.

Capital adequacy management principles

MuniFin's objectives regarding equity 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 capital adequacy plan and monitors it. The company updates its capital adequacy plan at least 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 the 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 as part of monthly business analyses.

Information on risk management, objectives and policies by category of risks

EU CRA, EUCRA

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 lease assets 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 entities 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 Risk Appetite Framework, internal policies and guidelines.

Capital Markets division includes MuniFin's Treasury operations, Funding operations and ALM 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 of 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 function, 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 Risk Appetite Framework, 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 Executive Management Team to develop company's credit risk management principles and policies. It monitors credit risk limits and indicators defined in Risk Appetite Framework 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 Executive Management Team, which decides on credit granting for customers with certain risk level. In addition, MuniFin has an ALM Group set up by the Executive Management Team, 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 lease financing 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 leasing 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.

However, starting from the beginning of 2020 MuniFin has assigned limits to its customer finance. The company 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. Customer's credit scoring impacts on the credit approval process as well as granting the loans and authorisations needed for granting the loans. The level of credit risk has an impact on loan pricing.

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 for hedging purposes in its own operations, for example 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. Under the requirements set by "EMIR", the European Markets Infrastructure Regulation, standard plain-vanilla OTC interest rate swaps are cleared using Central Counterparties (CCPs). In this model, at the end of the 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, with some exceptions, 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 total of 57 Credit Support Annexes in force of which 49 require daily margining. 37 of these agreements are in active use and of this, 36 require daily margining. New CSA agreements have been made during 2019 in preparing for Brexit. 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 PD due to the nature of the transactions with the counterparty.

Expected credit losses

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, financial 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. More information regarding expected credit losses can be found in MuniFin's Financial Statements 2019, which are available on the company's website.

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

MuniFin is the only credit institution in Finland, which specialises in the provision of financing for the local government sector and central government-subsidised housing production, and is by far the largest financier for its customer base. MuniFin's customers consist of municipalities, joint municipal authorities, 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). All loans granted by MuniFin have the risk level associated with Finnish public sector entities.

Taking into account the nature of MuniFin's business, the company has some recognised and accepted concentration risk in its customer financing, i.e. geographically (locally), by customer type (municipality sector, central government-subsidised housing production) and by collateral type (mortgages). Company's largest subportfolio in the customer financing is for municipality sector. This risk concentration on the municipality sector is unavoidable and inherent to MuniFin's business model.

Considerable portion of the exposure to customers is indirectly related to Finnish sovereign risk 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, the concentration risk cannot be significantly modified. On the other hand, all receivables from MuniFin's customers have 0% risk-weights in capital adequacy calculations and taking into account MuniFin's business model the concentration risk is acceptable and in line with the company's strategy. In addition, in the calculation of large exposures, all receivables from customers are zero after mitigation techniques. Due to these factors, MuniFin accepts the concentration risk in its customer financing as inherent to its business model.

The main responsible for recognising the risk concentrations as well as managing them is Customer Finance division. The independent Risk Management monitors and analyses the portfolio and reports its risk concentrations to the Risk Group, the Executive Management Team, the Risk Committee and the Board of Directors. During 2019 MuniFin has developed a limit and monitoring framework for the management of concentration risk and starting from the beginning of 2020 the framework is in production.

The company could be exposed to concentration risk in its liquidity portfolio. However, limits related to investments in liquidity portfolio guide to diversify investments between issuers, geographical areas and instrument types, for example. 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 Executive Management Team ensures with set 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, the Executive Management Team, the Risk Committee and the 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 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 (part of MuniFin's Capital Markets division), which is responsible for managing the day-to-day market risk positions of MuniFin. In addition, the Funding department, as another first line risk owner, is responsible for executing funding transactions so that suitability and hedging possibilities of new funding is always assessed according to the set principles before entering into a transaction.

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. The Risk Management function identifies, measures and monitors market risk independently of the business functions. The function ensures that risks remain within limits and that MuniFin's Risk Appetite Framework is in line with the risk strategy and the risk appetite. The independent Compliance function's task is to ensure that MuniFin complies with internal and external regulations.

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.

The Executive Management Team is responsible for ensuring that limits set by the Board of Directors and other principles related to market risk management are taken into account in the operations by arranging the necessary control points and regular reporting.

MuniFin has three sub-groups that operate under the Executive Management Team in market risk management related matters. The ALM Group's key duties are management of market risk position of the balance sheet, steering the IRRBB strategy, monitoring the balance sheet profitability as well as monitoring key Risk Appetite Framework indicators and financial markets. The Risk Group's task is to ensure that MuniFin's risks remain within risk appetite and at a level sufficient to maintain MuniFin's business continuity, strong credit rating and compliance with relevant regulatory requirements. The Valuation Control Group monitors MuniFin's fair values and is responsible for the final decision of MuniFin's fair values for financial reporting.

The main Board's Committee responsible for market risk management is the Risk Committee. The Risk Committee reviews and challenges the updates proposed to the Market Risk Policy. The Committee is responsible for reviewing the market risk related reporting.

The Board of Directors approves the Market Risk Policy as well as the risk appetite set in Risk Appetite Framework, including the market risk related risk appetite, risk indicators, limits and

thresholds. The Board of Directors is responsible for setting the scope and general requirements for the risk measurement and assessment, defining the principles for organising market risk management and related quality assurance and confirming the risk level and risk appetite based on the MuniFin's strategy and business plan.

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, spread risk, fair valuation risk and prudent valuation risk. Interest rate risk in banking book has been divided into the following sub-risk types: Economic Value of Equity, NII (net interest income) 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. However, MuniFin is exposed to these types of market risks through its funding operations. These risks are always fully hedged using derivatives.

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. However, a small temporary exchange rate risk may arise due to collateral management in the clearing of derivatives by Central Counterparties. This exchange risk is actively monitored and hedged.

At the end of December 2019 and 2018 the FX position was less than 2% of own funds and therefore, based on the Article 351 of CRR, the own funds requirement for market risk has not been calculated.

Management of market risk

General principles

The objective is to maintain a sound market risk profile appropriate for MuniFin's business model. 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 Risk Appetite Framework. The aim is to keep the overall risk profile at such a low level that MuniFin's credit rating remains equal to that of the Republic of Finland and MuniFin is able to secure customer financing in all market conditions.

IRRBB

MuniFin's strategy for interest rate risk in the banking book (IRRBB) is to ensure sustainable profitability regardless of the level of interest rates. The focus is to stabilise earnings by minimising Earnings at Risk (NII risk) measure. Economic Value of Equity (EVE) of interest rate sensitivity is a secondary measure but also kept within risk appetite. Interest rate risk arises from the operations in funding, customer financing and investment activities (liquidity portfolio). MuniFin does not have a trading book.

The main principle for managing MuniFin's interest rate risk hedging is to utilise interest rate swaps to hedge fixed-rate exposures back-to-back to floating-rate. The back-to-back interest rate swaps (IRS) replicate all the details of underlying liability, asset or portfolio of assets to offset the risk of the underlying transaction.

As a norm, interest rate hedges are executed on all fixed-rate assets and liabilities with maturities longer than one year. All shorter maturities and floating-rate items are subject to tenor basis risk and fixing risk (seasonal mismatch) management on a balance sheet level and hedged as balance sheet overlay hedge.

The ALM Group decides on a strategic mismatch position, i.e. leave fixed-rate exposures unhedged in order to steer the company's net interest income towards the objective of earnings stabilisation. The strategic mismatch position is created using assets only, and include both fixed and revisable rate loans as well as fixed-rate investments in the liquidity portfolio. Derivatives are not used in the creation of the strategic mismatch.

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 leasing 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.

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 (steepener and flattener scenarios). Furthermore, parallel down -200 basis point parallel shift is used with rates floored to zero.

MuniFin does not take deposits and such, do not model the behavior of non-maturity deposits.

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 2019	-14,288	6.5%
31 Dec 2018	-7,600	3.6%

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. All interest rate-sensitive cash flows are taken into account when calculating the interest rate sensitivity of the current value of the balance sheet. Prepayments of loans are at very low level and do not have any material impact on interest rate sensitivity. 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 2019	-114,219	7.6%
31 Dec 2018	-37,100	2.6%

Basis risk

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.

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. Furthermore, basis risk is controlled by the Risk Management function.

Basis risk (EUR 1,000)	Impact	In relation to NII
31 Dec 2019	-19,348	8.8%
31 Dec 2018	-6,231	2.9%

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 in euros. All foreign currency denominated funding and liquidity investments denominated in foreign currency are translated into euros using derivatives at the time of underlying transaction. 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.

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 liquidity portfolio. It is measured by calculating the change in the market value when the portfolio's yield requirement (discount curve) is stressed by a certain number of basis points. The change in the yield requirement corresponds to the estimated monthly spread risk of the liquidity portfolio.

The liquidity portfolio spread risk is managed in Treasury within the portfolio management framework. Main principle in portfolio management is to guarantee a sufficient amount of earnings within the liquidity requirements. The spread risk, which affects the market value of liquidity investments, is managed on an aggregate level by controlling the average maturity of liquidity portfolio. Targets for average maturity and portfolio composition are decided for each year as part of Liquidity & Funding plan, in association with business planning.

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 2019	0.22 p.p.	-22,200	1.5%
31 Dec 2018	0.32 p.p.	-33,900	2.4%

Fair valuation risk

MuniFin has applied IFRS 9 from the beginning of the financial year 2018 onwards. As part of the implementation of IFRS 9, MuniFin reclassified its financial assets and liabilities. The reclassification significantly increased instruments measured at fair value, and increased the volatility affecting both profit and loss and MuniFin's own funds through OCI (Other Comprehensive Income). The volatility of the fair values of financial instruments arises from tenor basis spreads, cross-currency basis spreads and credit spreads.

The fair value volatility is regularly monitored and reported to capture any changes in the financial position or in sensitivities to market movements. MuniFin has set up daily and monthly controls to validate the valuations and monitor PnL, Cost-of-Hedging and own credit risk volatility. Fair value risk is reported to the Executive Management Team, Risk Committee and to the Board of Directors.

MuniFin has also established in 2019 the Valuation Control Group, steered by the CFO. The Valuation Control Group monitors MuniFin's fair values and is responsible for the final decision of MuniFin's fair values for financial reporting. In addition to ensuring that prices and other model input parameters in the fair valuation correctly reflect financial instruments characteristics and are aligned with the market expectations, MuniFin has implemented an Independent Price Verification (IPV) process. The IPV is performed by a third-party service provider in regular intervals to revalue a selection of MuniFin's financial instruments using a set of independently verifiable external market data. Results are reported to the Valuation Control Group on a monthly basis. Based on the results, the Valuation Control Group may require making fair value adjustments. During 2019 there has been no fair value adjustments.

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 predefined time 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

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 assesses 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 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 Executive Management Team 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 Executive Management Team, 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 Executive Management Team, 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 Executive Management Team 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.

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.

The purpose of operational risk management is to identify operational risks related to MuniFin's operations and define methods and principles according to the company's risk appetite. MuniFin applies very conservative risk management for all its risks. However, operational risks are inherent in all MuniFin's businesses and operations. Therefore, MuniFin aims to minimize operational risks related to its business and operations by carefully identifying and analyzing the impact and probability of the risks.

Governance of operational risk

MuniFin's functions and departments are accountable for the operational and compliance risks related to their area of responsibility. They are also responsible for managing the operational risks within the limits set and by risk appetite framework. Furthermore, managing compliance risks related their areas of responsibilities are the responsibility of respective functions and departments.

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

The same function 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.

Compliance and Operational Risk reports to the Risk Group 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. Given the scale of the matter, the issue may be referred by the Risk Group to the Executive Management Team or, where appropriate, to the Board of Directors. In addition, to ensure the independence of the Compliance function, the Head of Compliance may report regularly to the Board's Audit Committee and may also report directly to the CEO.

Internal Audit (the third line of defence) performs regularly risk-based audits in accordance with the annual plan approved by the Board of Directors.

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 Compliance and Operational Risk. The assessment of risks is conducted by assigning the probability of the occurrence and the impact on the materialisation of the event. In addition, mitigation actions are recognized and agreed. 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.

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 to minimise their impact on MuniFin's operations and customers. The business continuity and crisis management also includes disaster recovery plan for technical infrastructure and IT systems. Ensuring the business continuity is the responsibility of the Executive Management Team. 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 regulation 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. During the financial year 2019, MuniFin has entered into outsourcing agreements regarding IT end-user and infrastructure services as well as operations of the business IT system to ensure operational reliability and improve the availability of services over time. The project for the implementation of these outsourcing agreements is on-going and is expected to be completed during year 2020.

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.

MuniFin has a whistleblowing process in place for reporting potential internal or external misconducts or breaches of ethical standards or internal or external rules. The whistleblower channel for employees and other stakeholders is a safe way to report any misconduct. Concerns can be raised anonymously and confidentially through MuniFin's website.

Operational risk assessment is also part of the MuniFin's internal capital adequacy assessment process (ICAAP). The ICAAP process takes into account the company's most significant operational risks and estimates the amount of capital needed to be allocated to them. The company's internal liquidity adequacy assessment process (ILAAP) also takes into account operational risks. Responsibilities related to liquidity management are clearly defined and include necessary controls as well as limit structures and restrictions on access rights and authorisations.

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 2019, which is available on the company's website at www.munifin.fi.

Section 3

Information on the scope of application of the regulatory framework

EULI1

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	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 2019 (EUR 1,000)					
Assets					
Cash and balance with central banks	4,909,338	4,909,338	-	-	-
Loans and advances to credit institution	818,323	132,194	686,129	77,659	-
Loans and advances to the public and public sector entities	24,798,432	24,798,432	-	-	-
Debt securities	5,716,318	5,716,318	-	163,498	-
Shares and participations	9,797	9,797	-	-	-
Derivative contracts	2,244,997	-	2,244,997	824,687	-
Intangible assets	14,704	-	-	-	14,704
Tangible assets	9,041	9,041	-	-	-
Other assets	170,359	170,571	-	-	-213
Accrued income and prepayments	242,450	72,605	169,845	-	-
Total assets	38,933,758	35,818,296	3,100,970	1,065,843	14,491
Liabilities					
Liabilities to credit institutions	1,178,256	-	1,094,885	-	-
Liabilities to the public and public sector entities	3,862,053	-	-	173,885	-
Debt securities issued	29,983,585	-	-	22,083,677	-
Derivative contracts	1,762,010	-	1,762,010	1,040,009	3,356
Other liabilities	116,374	-	96,342	75,676	-
Accrued expenses and deferred income	180,917	-	1,406	-	-
Deferred tax liabilities	256,241	-	-	-	-
Total liabilities	37,339,436	-	2,954,643	23,373,246	3,356

	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 2018 (EUR 1,000)					
Assets					
Cash and balance 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

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

31 Dec 2019 (EUR 1,000)	a	b	c	e
	Total	Items subject to		
		Credit risk framework	CCR framework	Market risk framework
1 Assets carrying value amount under the scope of regulatory consolidation (as per template EU LI1)	38,933,758	35,818,296	3,100,970	1,065,843
2 Liabilities carrying value amount under the regulatory scope of consolidation (as per template EU LI1)	-26,327,889	-	-2,954,643	-23,373,246
3 Total net amount under the regulatory scope of consolidation	12,605,868	35,818,296	146,327	-22,307,403
4 Off-balance sheet amounts	2,361,319	2,361,319	-	-
5 Differences due to Article 274 mark-to-market method and carrying amounts	651,112	-	651,112	-
6 Differences due to Article 352 foreign exchange risk treatment and carrying amounts	-	-	-	22,307,403
7 Exposure amounts considered for regulatory purposes	38,977,054	38,179,615	797,439	-

31 Dec 2018 (EUR 1,000)	a	b	c	e
	Total	Items subject to		
		Credit risk framework	CCR framework	Market risk framework
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	2,270,346	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	-

EU LI3

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

31 Dec 2019 Name of the entity	a	b	f
	Method of accounting consolidation	Method of regulatory consolidation	
		Full consolidation	Description 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 2018.

EU LIA

Explanation of differences between accounting and regulatory exposure amounts

The differences between the financial statement 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 statement carrying amounts of 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 own funds at the end of 2019 (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 and market data input 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.

MuniFin applies a market-based approach when the instrument has a functioning market and public price quotations are available. The market approach is used mainly for the valuation of investment bonds. All instruments for which quoted market prices are available, MuniFin uses quoted unadjusted market price for identical instruments in active markets that the MuniFin can access at the measurement date. The market is considered to be active if trading is frequent and price data is regularly available. The mid price quotes are considered to represent the price for an orderly transaction between parties in the market on the valuation date.

Income approach is applied when valuation is based, for example, on determining the present value of future cash flows (discounting). The Group uses the income approach for many of its financial instruments, for example derivatives, lending and funding. 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.

All valuation models, both complex and simple models, use market prices and other inputs. These market prices and inputs comprise interest rates, FX rates, volatilities, correlations etc. MuniFin applies different types of valuation inputs depending on the type and complexity of the instruments and the related risk factors and payoff structures. 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.

MuniFin uses widely recognised valuation models to determine the fair value of common and simple financial instruments, such as interest rate and currency swaps, that use only observable market data and require little judgement and estimation. Observable prices or model inputs are usually available in the market for listed debt and equity securities and simple OTC derivatives such as interest rate swaps. The availability of observable market prices and model inputs reduces the need for management judgement and estimation and reduces the uncertainty associated with determining fair values. The availability of observable market prices and inputs varies depending on the products and markets and is prone to changes based on specific events and general conditions in the financial markets.

The Group applies different models in order to derive the fair value of a certain type of instruments. The choice of base models and its calibration depends on the complexity of the financial instrument and the observability of the relevant inputs. In line with market practice, the primary choice of base model is contingent on the underlying instrument classes. Additionally instruments are broken down into different categories granular enough to capture the most important risk drivers and different kind of calibration techniques. The specific combination of base models and the different assumptions and calibrations techniques are documented. The Group's fair value instruments that are subject to mark-to-model valuation techniques consists out of four asset classes: interest rate instruments, foreign exchange instruments, equity-linked instruments and hybrid instruments.

MuniFin has implemented a framework for the arrangements, activities and procedures with regards to its model risk management. The purpose of the model risk management framework is to ensure the effective management of model risk and mitigation of fair value uncertainty, as well as to ensure compliance with external and internal requirements. The Group ensures that all aspects of the lifecycle of valuation models (i.e. approval, design and development, testing and maintenance, monitoring and execution) are subject to effective governance, clear roles and responsibilities and effective internal control.

The Group manages and maintains a model inventory which provides a holistic view of all valuation models, their business purpose and characteristics as well as their applications and conditions for use. The Executive Management Team is responsible of the approval of new valuation models (including limitations and conditions of use), and material changes to existing models. All approved valuation models within the model inventory are subject to annual review and re-approval by the Executive Management Team.

The Group has implemented an efficient control and performance monitoring framework with regards to its valuation models, which aims to ensure the accuracy and appropriateness of model output. The model performance monitoring consists of four main controls:

- Fair value control and reconciliation to counterparty valuations;
- Fair value differences report;
- Independent Price Verification (IPV) by a third-party service provider and
- Independent model validation by a third-party service provider

The first line of defence does not perform valuations as the independent Risk Management function, representing the second line of defence, produces MuniFin's valuation and fair values.

MuniFin does not have a trading book.

At year end 2019 MuniFin deducted a prudent valuation adjustment totalling EUR 38.4 million from Common Equity Tier 1. 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 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 2019	31 Dec 2018
Share capital	42,583	42,583
Reserve for invested non-restricted equity	40,366	40,366
Retained earnings	1,121,774	1,035,692
Fair value reserve	28,882	14,961
Other reserves	277	277
Foreseeable dividend	-6,250	-6,250
Accrued interest net of deferred taxes of AT1 capital loan treated as equity	-9,433	-9,459
Common Equity Tier 1 (CET1) capital before regulatory adjustments	1,218,199	1,118,171
Intangible assets	-14,704	-14,850
Deductions due to prudential filters on Common Equity Tier 1	-41,043	-37,865
Common Equity Tier 1 (CET1) capital	1,162,452	1,065,455
Instruments included in Additional Tier 1 capital	347,454	347,454
Additional Tier 1 (AT1) capital	347,454	347,454
Tier 1 (T1) capital	1,509,906	1,412,909
Total own funds	1,509,906	1,412,909

Common Equity Tier 1 capital includes the net profit, which has been subject to a review by the external auditor, 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 CET1 capital are made up of MuniFin's debt value adjustment (DVA) and prudent valuation adjustment (PVA). In addition, the amount of foreseeable dividend has been deducted from CET1 capital.

Additional Tier 1 capital contains MuniFin's AT1 capital loan EUR 350 million which was issued on October 1st 2015. A detailed description of the instruments included in the Additional Tier 1 capital is included in the Financial Statements 2019 and in this Pillar III report that is available in English 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 EUR million, as of most recent reporting date)	42.583	347.454
9. Nominal amount of instrument	N/A	EUR 350 million
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.

	Common Equity Tier 1 capital	Additional Tier 1 instrument
	Shares A and B of share capital	EUR 350,000,000 Perpetual Fixed Rate Resettable Additional Tier 1 Securities
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
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

The prospectus of MuniFin's Additional Tier 1 instrument is available on company's website at https://www.kuntarahoitus.fi/app/uploads/sites/2/2019/09/muni-fin_at1_-_offering_circular.pdf.

Transitional own funds

31 Dec 2019 (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	1,016,842	26 (1) c	
3. Accumulated other comprehensive income (and other reserves, to include unrealised gains and losses under the applicable accounting standards)	69,525	26 (1)	
5a. Independently reviewed interim profits net of any foreseeable charge or dividends	89,249	26 (2)	
6. Common Equity Tier 1 (CET1) capital before regulatory adjustments	1,218,199		
Common Equity Tier 1 (CET1) capital: regulatory adjustments			
7. Additional value adjustments (negative amount)	-38,358	34, 105	
8. Intangible assets (net of related tax liability) (negative amount)	-14,704	36 (1) (b), 37, 472 (4)	
14. Gains or losses on liabilities valued at fair value resulting from changes in own credit standing	-2,685	33 (b)	
28. Total regulatory adjustments to Common Equity Tier 1 (CET1)	-55,747		
29. Common Equity Tier 1 (CET1) capital	1,162,452		
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	-		
44. Additional Tier 1 (AT1) capital	347,454		
45. Tier 1 capital (T1 = CET1 + AT1)	1,509,906		
59. Total capital (TC = T1 + T2)	1,509,906		
60. Total risk weighted assets	1,399,553		
Capital ratios and buffers			
61. Common Equity Tier 1 (as percentage of risk exposure amount)	83.06%	92 (2) (a), 465	
62. Tier 1 (as percentage of risk exposure amount)	107.88%	92 (2) (b), 465	
63. Total capital (as percentage of risk exposure amount)	107.88%	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)	9.72%	CRD 128, 129, 130, 131, 133	
65. of which: capital conservation buffer requirement	2.50%	CRD 129	
66. of which: countercyclical buffer requirement	0.72%	CRD 130	
67. of which: systemic risk buffer requirement	1.50%	CRD 133	
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)	78.56%	CRD 128	

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		
43. Total regulatory adjustments to Additional Tier 1 (AT1) capital	-		
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, 131, 133	
65. of which: capital conservation buffer requirement	2.50%	CRD 129	
66. of which: countercyclical buffer requirement	0.45%	CRD 130	
67. of which: systemic risk buffer requirement	0.00%	CRD 133	
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	

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 equity 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 capital adequacy plan and monitors it. The company updates its capital adequacy plan at least 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 the 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 as part of monthly business analyses.

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 business risk, credit risk and market 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 2.25% (Pillar 2 Requirement) on MuniFin, effective from 1 March 2019 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 2019 and 2018 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

	31 Dec 2019	31 Dec 2018
CET1 capital ratio, %	83.06	66.34
Tier 1 capital ratio, %	107.88	87.97
Total capital ratio, %	107.88	87.97

Consolidated minimum requirement for own funds

(EUR 1,000)	31 Dec 2019		31 Dec 2018	
	Capital requirement	Risk exposure amount	Capital requirement	Risk exposure amount
Credit and counterparty risk, standardised approach	61,038	762,976	78,128	976,596
Exposures to central governments or central banks	-	-	-	-
Exposures to regional governments or local authorities	289	3,613	353	4,413
Exposures to public sector entities	-	-	4,807	60,086
Exposures to multilateral development banks	323	4,043	951	11,884
Exposures to institutions*	37,847	473,090	52,470	655,875
Exposures in the form of covered bonds	20,676	258,456	18,986	237,323
Items representing securitisation positions	-	-	13	165
Exposures in the form of shares in CIUs	84	1,049	88	1,103
Other items	1,818	22,724	460	5,746
Market risk	-	-	-	-
Credit valuation adjustment risk (CVA VaR), standard method	17,085	213,561	19,722	246,528
Operational risk, basic indicator approach	33,841	423,016	30,644	383,048
Total	111,964	1,399,553	128,494	1,606,172

* Exposures to institutions includes capital requirement for counterparty credit risk by EUR 2 896 thousand (2018: EUR 3 617 thousand).

Consolidated exposure by class

31 Dec 2019 (EUR 1,000)					Average exposure amount over the period	Risk exposure amount
Exposure classes	On-balance sheet exposure	Off-balance sheet exposure	Derivatives exposure	Total exposure		
Exposures to central governments or central banks	5,170,467	-	-	5,170,467	4,794,138	-
Exposures to regional governments or local authorities	11,316,007	724,183	290,560	12,330,750	12,420,665	3,613
Exposures to public sector entities	342,131	-	-	342,131	283,806	-
Exposures to multilateral development banks	182,632	-	-	182,632	196,299	4,043
Exposures to international organisations	111,246	-	-	111,246	93,708	-
Exposures to institutions	1,907,819	-	506,879	2,414,698	2,574,145	473,090
Exposures to corporates	6,031,136	1,629,526	-	7,660,662	7,146,923	-
Exposures secured by mortgages on immovable property	8,515,464	7,609	-	8,523,074	8,683,596	-
Exposures in default	61,757	-	-	61,757	39,091	-
Exposures in the form of covered bonds	2,137,947	-	-	2,137,947	2,005,152	258,456
Items representing securitisation positions	-	-	-	-	574	-
Exposures in the form of shares in CIUs	9,769	-	-	9,769	9,806	1,049
Other items	31,920	-	-	31,920	27,942	22,724
Total	35,818,296	2,361,319	797,439	38,977,054	38,275,845	762,976

31 Dec 2018 (EUR 1,000)					Average exposure amount over the period	Risk exposure amount
Exposure classes	On-balance sheet exposure	Off-balance sheet exposure	Derivatives exposure	Total exposure		
Exposures to central governments or central banks	3,920,338	-	-	3,920,338	4,144,181	-
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

EU OV1

Overview of RWAs

The overall RWA has moderately decreased over the reporting period 2019. The credit risk (excluding CCR) has mainly decreased due to the changes in the liquidity portfolio. The CVA RWA and capital charge reduced moderately. The remaining securitisation exposures from a legacy portfolio have been sold during 2019. There are no RWAs 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 2019	30 Sep 2019	31 Dec 2019	30 Sep 2019
1 Credit risk (excluding CCR)	726,775	777,594	58,142	62,207
2 Of which the standardised approach	726,775	777,594	58,142	62,207
6 CCR	249,762	323,459	19,981	25,877
7 Of which mark to market	36,201	42,383	2,896	3,391
12 Of which CVA	213,561	281,076	17,085	22,486
14 Securitisation exposures in the banking book (after the cap)	-	9,228	-	738
18 Of which standardised approach	-	9,228	-	738
19 Market risk	-	-	-	-
20 Of which the standardised approach	-	-	-	-
23 Operational risk	423,016	423,016	33,841	33,841
24 Of which basic indicator approach	423,016	423,016	33,841	33,841
29 Total	1,399,553	1,533,297	111,964	122,664

Section 6 Capital buffers

Minimum capital requirements and capital buffers

Minimum capital requirements and capital buffers, % 31 Dec 2019	Capital requirement	Capital conservation buffer ¹⁾	Counter-cyclical buffer ²⁾	O-SII ³⁾	Systemic risk buffer ⁴⁾	Total capital buffers	Total
Common Equity Tier 1 (CET1)	4.50%	2.50%	0.72%	0.50%	1.50%	4.72%	9.22%
Tier 1 Capital (T1)	6.00%	2.50%	0.72%	0.50%	1.50%	4.72%	10.72%
Total own funds	8.00%	2.50%	0.72%	0.50%	1.50%	4.72%	12.72%

Minimum capital requirements and capital buffers 31 Dec 2019 (EUR 1,000)	Capital requirement	Capital conservation buffer ¹⁾	Counter-cyclical buffer ²⁾	O-SII ³⁾	Systemic risk buffer ⁴⁾	Total capital buffers	Total
Common Equity Tier 1 (CET1)	62,980	34,989	10,082	6,998	20,993	66,064	129,044
Tier 1 Capital (T1)	83,973	34,989	10,082	6,998	20,993	66,064	150,037
Total own funds	111,964	34,989	10,082	6,998	20,993	66,064	178,028

Minimum capital requirements and capital buffers, % 31 Dec 2018	Capital requirement	Capital conservation buffer ¹⁾	Counter-cyclical buffer ²⁾	O-SII ³⁾	Systemic risk buffer ⁴⁾	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 31 Dec 2018 (EUR 1,000)	Capital requirement	Capital conservation buffer ¹⁾	Counter-cyclical buffer ²⁾	O-SII ³⁾	Systemic risk buffer ⁴⁾	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

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 the EU capital requirements Regulation (575/2013; CRR) and Directive (2013/36/EU; CRD IV). On 13 December 2019, 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 0.72% (31 Dec 2018: 0.45%)

³⁾ Other Systemically Important Institutions additional capital requirements: Act on Credit Institutions (610/2014) Sect 10:8 § and the EU capital requirements Regulation (575/2013; CRR) and Directive (2013/36/EU; CRD IV). Additional capital requirement (O-SII) for MuniFin is 0.5%. The decision of the Board of FIN-FSA on 29 June 2018, effective from 1 January 2019 (31 Dec 2018: 1%).

⁴⁾ On 29 June 2018 the Financial Supervisory Authority 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 is effective from 1 July 2019.

As part of the yearly Supervisory Review and Evaluation Process, ECB updated the additional capital requirement (P2R) for MuniFin to 2.25%, effective on 1 March 2019. Considering the additional capital requirement the new minimum level for CET1 capital ratio is 11.47% and total capital ratio 14.97%.

Future changes in capital buffers

ECB has updated the capital buffer requirement (P2R) imposed on MuniFin as part of the yearly Supervisory Review and Evaluation Process (SREP). The requirement was kept unchanged at 2.25%. The updated capital buffer requirement is effective on 1 January 2020.

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

31 Dec 2019 (EUR 1,000)		General credit exposures		Own funds requirements		Total	Own funds requirement weights	Countercyclical capital buffer rate
		Exposure value for SA	Of which: General credit exposures					
Breakdown by country		010	070	100	110	120		
010	AU	113,453	1,815	1,815	8.0%	0.00%		
010	BE	54,642	437	437	1.9%	0.00%		
010	CA	237,653	3,802	3,802	16.8%	0.00%		
010	DK	74,671	597	597	2.6%	1.00%		
010	FI	484,823	5,441	5,441	24.1%	0.00%		
010	FR	198,676	1,589	1,589	7.0%	0.25%		
010	GB	184,353	1,811	1,811	8.0%	1.00%		
010	LU	9,769	84	84	0.4%	0.25%		
010	NL	96,244	770	770	3.4%	0.00%		
010	NO	357,283	2,858	2,858	12.7%	2.50%		
010	NZ	53,478	856	856	3.8%	0.00%		
010	SE	314,592	2,517	2,517	11.1%	2.50%		
020	Total	2,179,636	22,578	22,578	100%			

Amount of institution-specific countercyclical capital buffer

31 Dec 2019 (EUR 1,000)		Column
Row		010
010	Total risk exposure amount	1,399,553
020	Institution-specific countercyclical buffer rate	0.72%
030	Institution-specific countercyclical buffer requirement	10,082

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

31 Dec 2018 (EUR 1,000)		General credit exposures	Securitisation exposure	Own funds requirements	Of which: Securitisation exposure	Total	Own funds requirement weights	Counter-cyclical capital buffer rate
		Exposure value for SA	Exposure value for SA	Of which: General credit exposures				
Breakdown by country		010	050	070	090	100	110	120
010	AU	142,804	-	2,285	-	2,285	11.7%	0.00%
010	BE	74,848	-	599	-	599	3.1%	0.00%
010	CA	243,373	-	3,894	-	3,894	19.9%	0.00%
010	CH	23,978	-	384	-	384	2.0%	0.00%
010	DK	79,647	-	638	-	638	3.3%	0.00%
010	ES	-	825	-	13	13	0.1%	0.00%
010	FI	370,073	-	3,207	-	3,207	16.4%	0.00%
010	FR	168,271	-	1,352	-	1,352	6.9%	0.00%
010	GB	175,188	-	1,459	-	1,459	7.5%	1.00%
010	LU	9,494	-	88	-	88	0.5%	0.00%
010	NL	98,090	-	785	-	785	4.0%	0.00%
010	NO	233,916	-	1,872	-	1,872	9.6%	2.00%
010	NZ	75,302	-	1,205	-	1,205	6.2%	0.00%
010	SE	219,586	-	1,760	-	1,760	9.0%	2.00%
010	US	79	-	6	-	6	0.0%	0.00%
020	Total	1,914,650	825	19,534	13	19,547	100.0%	

Amount of institution-specific countercyclical capital buffer

31 Dec 2018 (EUR 1,000)		Column
Row		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

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, 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

MuniFin has invested in an automated digital solution for regulatory reporting. As a result, the identification of covered and uncovered part of loans collateralised by real estate collateral has improved. The effect is seen within exposure classes "secured by mortgages on immovable property", "corporates" and "regional governments or local authorities" for both on-balance and off-balance sheet items. Only the covered part is included in exposure class "secured by mortgages on immovable property". This change had no impact on the risk exposure amount.

Changes in exposures to institutions between reporting periods are mainly driven by changes in the liquidity portfolio.

	a	b
31 Dec 2019 (EUR 1,000)	Net value of exposures at the end of the period	Average net exposures over the period
16 Central governments or central banks	5,170,467	4,794,138
17 Regional governments or local authorities	12,330,750	12,420,665
18 Public sector entities	342,131	283,806
19 Multilateral development banks	182,632	196,299
20 International organisations	111,246	93,708
21 Institutions	2,414,698	2,574,145
22 Corporates	7,660,662	7,146,923
26 Secured by mortgages on immovable property	8,523,074	8,683,596
28 Exposures in default	61,757	39,091
30 Covered bonds	2,137,947	2,005,152
32 Collective investments undertakings	9,769	9,806
34 Other exposures	31,920	27,942
35 Total standardised approach	38,977,054	38,275,272
36 Total	38,977,054	38,275,272

	a	b
31 Dec 2018 (EUR 1,000)	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

EU CRB-C

Geographical breakdown of exposures

		a	b	c	d	e
		Net value				
31 Dec 2019 (EUR 1,000)		Finland	Other Nordic countries	Other EU countries	Other countries	Total
7	Central governments or central banks	5,043,035	-	127,432	-	5,170,467
8	Regional governments or local authorities	12,002,303	17,359	114,749	196,340	12,330,750
9	Public sector entities	48,174	154,921	139,037	-	342,131
10	Multilateral development banks	-	-	-	182,632	182,632
11	International organisations	-	-	38,561	72,685	111,246
12	Institutions	393,406	363,693	1,394,575	263,024	2,414,698
13	Corporates	7,660,662	-	-	-	7,660,662
15	Secured by mortgages on immovable property	8,523,074	-	-	-	8,523,074
16	Exposures in default	61,757	-	-	-	61,757
18	Covered bonds	452,903	746,546	533,915	404,583	2,137,947
20	Collective investments undertakings	-	-	9,769	-	9,769
22	Other exposures	31,920	-	-	-	31,920
23	Total standardised approach	34,217,235	1,282,519	2,358,037	1,119,264	38,977,054
24	Total	34,217,235	1,282,519	2,358,037	1,119,264	38,977,054

		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
16	Exposures in default	-	-	-	-	-
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

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 Statistics Finland.

	d	e	f	h		l	o	q	s	u
31 Dec 2019 (EUR 1,000)	Electricity, gas, steam and air condition- ing supply	Water supply	Construc- tion	Transport and storage	Financial and insurance activities	Real estate activities	Public adminis- tration and defence, compulso- ry social security	Human health services and social work activities	Other services	Total
7 Central governments or central banks	-	-	-	-	4,935,926	-	234,541	-	-	5,170,467
8 Regional governments or local authorities	874	9,441	-	-	-	2,183	10,820,149	1,377,152	120,951	12,330,750
9 Public sector entities	-	47,723	-	-	154,921	-	139,037	-	450	342,131
10 Multilateral development banks	-	-	-	-	182,632	-	-	-	-	182,632
11 International organisations	-	-	-	-	38,561	-	72,685	-	-	111,246
12 Institutions	-	-	-	-	2,281,145	-	133,553	-	-	2,414,698
13 Corporates	376,653	346,536	262,527	304,006	14,321	5,668,967	80,073	168,753	438,827	7,660,662
15 Secured by mortgages on immovable property	-	-	97,437	1,903	-	8,246,043	-	160,401	17,289	8,523,074
16 Exposures in default	-	-	-	-	-	33,479	-	-	28,278	61,757
18 Covered bonds	-	-	-	-	2,137,947	-	-	-	-	2,137,947
20 Collective investments undertakings	-	-	-	-	9,769	-	-	-	-	9,769
22 Other exposures	-	-	-	-	31,920	-	-	-	-	31,920
23 Total standardised approach	377,527	403,700	359,965	305,910	9,787,141	13,950,673	11,480,038	1,706,306	605,795	38,977,054
23 Total	377,527	403,700	359,965	305,910	9,787,141	13,950,673	11,480,038	1,706,306	605,795	38,977,054

	d	e	f	h		l	o	q	s	u
	Electricity, gas, steam and air condition- ing supply	Water supply	Construc- tion	Transport and storage	Financial and insurance activities	Real estate activities	Public adminis- tration and defence, compulso- ry social security	Human health services 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
16 Exposures in default	-	-	-	-	-	-	-	-	-	-
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

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 2019 (EUR 1,000)	On demand	<= 1 year	> 1 year <= 5 years	> 5 years	No stated maturity	Total
7 Central governments or central banks	4,935,926	-	234,541	-	-	5,170,467
8 Regional governments or local authorities	3	1,074,155	2,381,977	8,150,432	-	11,606,567
9 Public sector entities	-	125,445	195,940	20,746	-	342,131
10 Multilateral development banks	-	89,499	82,796	10,337	-	182,632
11 International organisations	-	-	65,418	45,828	-	111,246
12 Institutions	80,450	1,023,392	701,103	584,599	25,154	2,414,698
13 Corporates	-	112,816	337,576	5,580,743	-	6,031,136
15 Secured by mortgages on immovable property	-	91,208	81,867	8,342,389	-	8,515,464
16 Exposures in default	-	-	-	61,757	-	61,757
18 Covered bonds	-	445,984	1,430,859	261,103	-	2,137,947
20 Collective investments undertakings	-	-	-	9,769	-	9,769
22 Other exposures	-	-	-	-	31,920	31,920
23 Total standardised approach	5,016,379	2,962,500	5,512,078	23,067,703	57,075	36,615,735
24 Total	5,016,379	2,962,500	5,512,078	23,067,703	57,075	36,615,735

	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
16 Exposures in default	-	-	-	-	-	-
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

EU CR1-A

Credit quality of exposures by exposure class and instrument

Defaulted exposures in column "a" include breakdown by the exposure class that corresponds to the exposure before default. In order to avoid double counting of exposures, the "Total standardised approach" in row 35 does not take into account figures disclosed under row 28.

The row 37 "Of which: Loans" includes the gross carrying value of Loans and advances to the public and public sector entities, Cash and balances with central banks and Loans and advances to credit institutions, other than posted cash collateral as variation margin.

		a	b	c	f	g
		Gross carrying values of		Specific credit risk adjustment	Credit risk adjustment charges of the period	Net values
		Defaulted exposures	Non-defaulted exposures			
31 Dec 2019	(EUR 1,000)					
16	Central governments or central banks	-	5,170,467	-	0	5,170,467
17	Regional governments or local authorities	-	12,330,769	19	8	12,330,750
18	Public sector entities	-	342,131	-	0	342,131
19	Multilateral development banks	-	182,632	-	-	182,632
20	International organisations	-	111,246	-	-	111,246
21	Institutions	-	2,414,709	11	-44	2,414,698
22	Corporates	63,440	7,660,753	91	31	7,660,662
26	Secured by mortgages on immovable property	-	8,523,074	1	-4	8,523,074
28	Exposures in default	63,440	-	1,683	-117	61,757
30	Covered bonds	-	2,137,947	-	-	2,137,947
32	Collective investments undertakings	-	9,769	-	-	9,769
34	Other exposures	-	31,920	-	-	31,920
35	Total standardised approach	63,440	38,915,418	1,804	-126	38,977,054
36	Total	63,440	38,915,418	1,804	-126	38,977,054
37	Of which: Loans	61,837	29,978,230	201	126	29,978,028
38	Of which: Debt securities	-	5,736,848	0	0	5,736,848
39	Of which: Off-balance sheet exposures	-	2,361,323	4	4	2,361,319

		a	b	c	f	g
		Gross carrying values of		Specific credit risk adjustment	Credit risk adjustment charges of the period	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	-23	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	-4	3,061,369
22	Corporates	1,800	5,422,331	59	-51	5,422,271
26	Secured by mortgages on immovable property	-	9,869,709	5	-5	9,869,704
28	Exposures in default	1,800	-	1,800	-2	0
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	-85	36,156,570
36	Total	1,800	36,156,700	1,930	-85	36,156,570
37	Of which: Loans	-	26,583,319	75	-78	23,008,809
38	Of which: Debt securities	-	5,885,988	-	-2	5,885,988
39	Of which: Off-balance sheet exposures	-	2,796,753	-	-5	2,796,753

EU CR1-B

Credit quality of exposures by industry or counterparty types

	a	b	c	f	g
	Gross carrying values of		Specific credit risk adjustment	Credit risk adjustment charges of the period	Net values
	Defaulted exposures	Non-defaulted exposures			
31 Dec 2019 (EUR 1,000)					
4 Electricity, gas, steam and air conditioning supply	-	377,528	1	0	377,527
5 Water supply	-	403,700	1	0	403,700
6 Construction	-	359,965	0	0	359,965
8 Transport and storage	-	305,910	1	0	305,910
XX Financial and insurance activities	-	9,787,152	11	-44	9,787,141
11 Real estate activities	33,517	13,917,270	115	74	13,950,673
14 Public administration and defence, compulsory social security	-	11,480,054	16	7	11,480,038
16 Human health services and social work activities	1,603	1,706,319	1,616	-185	1,706,306
18 Other services	28,320	577,519	44	21	605,795
19 Total	63,440	38,915,418	1,804	-126	38,977,054

	a	b	c	f	g
	Gross carrying values of		Specific credit risk adjustment	Credit risk adjustment charges of the period	Net values
	Defaulted exposures	Non-defaulted exposures			
31 Dec 2018 (EUR 1,000)					
4 Electricity, gas, steam and air conditioning supply	-	450,310	0	-1	450,310
5 Water supply	-	428,652	0	-1	428,651
6 Construction	-	241,099	0	0	241,099
8 Transport and storage	-	301,557	0	0	301,557
XX Financial and insurance activities	-	8,687,160	55	-4	8,687,105
11 Real estate activities	-	13,134,032	41	-37	13,133,991
14 Public administration and defence, compulsory social security	-	10,968,811	10	-23	10,968,801
16 Human health services and social work activities	1,800	1,292,131	1,801	-3	1,292,129
18 Other services	-	652,949	22	-15	652,927
19 Total	1,800	36,156,700	1,930	-85	36,156,570

EU CR1-C

Credit quality of exposures by geography

	a	b	c	f	g
	Gross carrying values of				
	Defaulted exposures	Non-defaulted exposures	Specific credit risk adjustment	Credit risk adjustment charges of the period	Net values
31 Dec 2019 (EUR 1,000)					
1 Finland	63,440	34,155,595	1,800	-131	34,217,235
2 Other Nordic countries	-	1,282,519	-	-	1,282,519
3 Other EU countries	-	2,358,041	4	4	2,358,036
4 Other countries	-	1,119,264	-	-	1,119,264
5 Total	63,440	38,915,418	1,804	-126	38,977,054
	a	b	c	f	g
	Gross carrying values of				
	Defaulted exposures	Non-defaulted exposures	Specific credit risk adjustment	Credit risk adjustment charges of the period	Net values
31 Dec 2018 (EUR 1,000)					
1 Finland	1,800	31,199,312	1,930	-85	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	-85	36,156,570

EU CR1-D

Ageing of past-due exposures

Templates EU CR1-D and EU CR1-E are replaced by new templates in EBA/GL/2018/10 Guideline on disclosure of non-performing and forborne exposures from 31 Dec 2019. MuniFin has reported new templates according to EBA/GL/2018/10 in Section 9.

	a
	Gross carrying values
	<= 30 days
31 Dec 2018 (EUR 1,000)	
1 Loans	296
2 Debt securities	-
3 Total exposures	296

EU CR1-E

Non-performing and forborne exposures

Templates EU CR1-D and EU CR1-E are replaced by new templates in EBA/GL/2018/10 Guideline on disclosure of non-performing and forborne exposures from 31 Dec 2019. MuniFin has reported new templates according to EBA/GL/2018/10 in Section 9.

	a	c	d	e	f	h	i	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		Of which performing exposures		Of which forborne exposures			
	Of which performing forborne	Of which defaulted	Of which impaired					
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	-	-	-	-	-	-	-

EU CR2-A

Changes in the stock of general and specific credit risk adjustments

Changes in the stock of specific credit risk adjustments for impaired and defaulted loans and debt securities are presented in the following table. MuniFin did not make any general credit risk adjustments during 2019 or 2018.

	a	b
31 Dec 2019 (EUR 1,000)	Accumulated specific credit risk adjustment	Accumulated general credit risk adjustment
1 Opening balance	-	-
2 Increases due to amounts set aside for estimated loan losses during the period	80	-
3 Decreases due to amounts reversed for estimated loan losses during the period	-	-
4 Decreases due to amounts taken against accumulated credit risk adjustments	-	-
5 Transfers between credit risk adjustments	-	-
6 Impact of exchange rate differences	-	-
7 Business combinations, including acquisitions and disposals of subsidiaries	-	-
8 Other adjustments	-	-
9 Closing balance	80	-
10 Recoveries on credit risk adjustments recorded directly to the statement of profit or loss	-	-
11 Specific credit risk adjustments directly recorded to the statement of profit or loss	-	-

	a	b
31 Dec 2018 (EUR 1,000)	Accumulated specific credit risk adjustment	Accumulated general credit risk adjustment
1 Opening balance	1,366	-
2 Increases due to amounts set aside for estimated loan losses during the period	-	-
3 Decreases due to amounts reversed for estimated loan losses during the period	-	-
4 Decreases due to amounts taken against accumulated credit risk adjustments	-	-
5 Transfers between credit risk adjustments	-	-
6 Impact of exchange rate differences	-	-
7 Business combinations, including acquisitions and disposals of subsidiaries	-	-
8 Other adjustments	-1,366	-
9 Closing balance	-	-
10 Recoveries on credit risk adjustments recorded directly to the statement of profit or loss	-	-
11 Specific credit risk adjustments directly recorded to the statement of profit or loss	-	-

EU CR2-B

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

Changes in the stock of defaulted loans and debt securities are presented in the following table. The stock classified as defaulted is also treated as impaired.

During the reporting period, eight counterparties have been reclassified as impaired and defaulted. During the 2018 reporting period one defaulted loan was transferred from loans to guarantee receivables.

		a
31 Dec 2019 (EUR 1,000)		Gross carrying value of defaulted exposures
1	Opening balance	-
2	Loans and debt securities that have defaulted or impaired since the last reporting period	61,837
3	Returned to non-defaulted status	-
4	Amounts written off	-
5	Other changes	
6	Closing balance	61,837

		a
31 Dec 2018 (EUR 1,000)		Gross carrying value of defaulted exposures
1	Opening balance	1,816
2	Loans and debt securities that have defaulted or impaired since the last reporting period	
3	Returned to non-defaulted status	-
4	Amounts written off	-
5	Other changes	-1,816
6	Closing balance	-

EU CR3

CRM techniques - Overview

The unsecured loans include loans granted to MuniFin's customers, cash held at the central bank and loans and advances in credit institutions other than posted cash collateral as variation margin. Collaterals reported in this table consist exclusively of immovable property. For further credit risk mitigation, all loans secured by immovable property have guarantees from the State of Finland or municipalities.

Unsecured debt securities include covered bonds at year-end 2019 EUR 2,138 million (2018: EUR 1,888 million).

	a	b	c	d
31 Dec 2019 (EUR 1,000)	Exposures unsecured - Carrying amount	Exposures secured - Carrying amount	Exposures secured by collateral	Exposures secured by financial guarantees
1 Total loans	15,246,370	14,731,859	8,515,464	6,216,395
2 Total debt securities	5,520,523	216,325	-	216,325
3 Total exposures	20,766,894	14,948,185	8,515,464	6,432,720

	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	12,804,601	13,778,718	8,527,155	5,251,563
2 Total debt securities	5,071,707	814,281	-	814,281
3 Total exposures	17,876,308	14,592,999	8,527,155	6,065,844

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) recognized by EBA to determine the risk-weight for liquidity portfolio issuers and issues. 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 2018.

Asset class (debt securities)	31 Dec 2019 and 31 Dec 2018		
	External rating equivalent		
	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

In 2019 MuniFin has implemented an automated digital solution for regulatory reporting. As a result, the identification of covered and uncovered part of loans collateralised by real estate collateral has improved. The effect is seen within exposure classes "secured by mortgages on immovable property", "corporates" and "regional governments or local authorities" for both on-balance and off-balance sheet items. Only the covered part is included in exposure class "secured by mortgages on immovable property". This change had no impact on the risk exposure amount. Changes in exposures to institutions between reporting periods are mainly driven by changes in the liquidity portfolio.

		a	b	c	d	e	f
		Exposures before CCF and CRM		Exposures post CCF and CRM		RWAs and RWA density	
31 Dec 2019 (EUR 1,000)		On-balance sheet amount	Off-balance sheet amount	On-balance sheet amount	Off-balance sheet amount	RWAs	RWA density
Exposure classes							
1	Central governments or central banks	5,170,467	-	15,084,145	763,561	-	0%
2	Regional governments or local authorities	11,316,007	724,183	16,144,691	358,480	3,613	0%
3	Public sector entities	342,131	-	341,681	-	-	0%
4	Multilateral development banks	182,632	-	182,632	-	4,043	2%
5	International organisations	111,246	-	111,246	-	-	0%
6	Institutions	1,907,819	-	1,774,266	-	473,090	27%
7	Corporates	6,031,136	1,629,526	-	-	-	-
9	Secured by mortgages on immovable property	8,515,464	7,609	-	-	-	-
10	Exposures in default	61,757	-	-	-	-	-
12	Covered bonds	2,137,947	-	2,137,947	-	258,456	12%
14	Collective investments undertakings	9,769	-	9,769	-	1,049	11%
16	Other exposures	31,920	-	31,920	-	22,724	71%
17	Total	35,818,296	2,361,319	35,818,296	1,122,041	762,976	2%

		a	b	c	d	e	f
		Exposures before CCF and CRM		Exposures post CCF and CRM		RWAs and RWA density	
31 Dec 2018 (EUR 1,000)		On-balance sheet amount	Off-balance sheet amount	On-balance sheet amount	Off-balance sheet amount	RWAs	RWA density
Exposure classes							
1	Central governments or central banks	3,920,338	-	13,024,826	314,011	-	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	-	610,669	34%
7	Corporates	5,129,701	292,570	-	-	-	-
9	Secured by mortgages on immovable property	8,527,156	1,342,548	-	-	-	-
10	Exposures in default	-	-	-	-	-	-
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	931,224	3%

EU CR5

Standardised approach

Automation of the regulatory reporting process has resulted in more precise recognition of counterparties and lead to some changes in exposure class allocation. Financial entities identified as PSEs within Article 116 (4) of the CRR have been classified directly with 0% risk-weight (increase of EUR 342 million in 0% risk-weighted public sector entities from institutions). Other changes in risk-weight allocation between reporting periods is mainly driven by changes in the liquidity portfolio.

31 Dec 2019

(EUR 1,000)

Exposure classes	Risk weight							Total	Of which unrated
	0 %	2 %	10 %	20 %	50 %	100 %	Others		
1 Central governments or central banks	15,847,706	-	-	-	-	-	-	15,847,706	-
2 Regional governments or local authorities	16,485,103	-	-	18,067	-	-	-	16,503,171	16,482,073
3 Public sector entities	341,681	-	-	-	-	-	-	341,681	-
4 Multilateral development banks	162,417	-	-	20,215	-	-	-	182,632	-
5 International organisations	111,246	-	-	-	-	-	-	111,246	-
6 Institutions	-	158,494	-	1,247,224	368,548	-	-	1,774,266	24,300
12 Covered bonds	-	-	1,691,331	446,616	-	-	-	2,137,947	-
14 Collective investments undertakings	-	-	-	-	-	-	9,769	9,769	-
16 Other exposures	9,191	6	-	-	-	22,723	-	31,920	22,723
17 Total	32,957,344	158,500	1,691,331	1,732,122	368,548	22,723	9,769	36,940,337	16,529,096

31 Dec 2018

(EUR 1,000)

Exposure classes	Risk weight							Total	Of which unrated
	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
10 Exposures in default	-	-	-	-	-	-	-	-	-
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

Section 9

Non-performing exposures

Template 1

Credit quality of forborne exposures

		a	b	c	d	e	f	g	h
		Gross carrying amount/nominal amount of exposures with forbearance measures				Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions		Collateral received and financial guarantees received on forborne exposures	
		Non-performing forborne				On performing forborne exposures	On non-performing forborne exposures	Of which collateral and financial guarantees received on non-performing exposures with forbearance measures	
31 Dec 2019 (EUR 1,000)		Performing forborne	Of which defaulted	Of which impaired					
1	Loans and advances	27,834	4,954	4,954	4,954	-26	-1	32,761	4,953
6	Non-financial corporations	27,193	4,954	4,954	4,954	-26	-1	32,120	4,953
7	Households	641	-	-	-	-	-	641	-
10	Total	27,834	4,954	4,954	4,954	-26	-1	32,761	4,953

Template 3

Credit quality of performing and non-performing exposures by past due days

The following table shows the counterparty breakdown for the gross carrying amount of performing and non-performing exposures. The gross NPL ratio is 0,20%.

	a	b	c	d	e	f	g	h	i	j	k	l
	Gross carrying amount/nominal amount											
	Performing exposures						Non-performing exposures					
			Past due		Unlikely	Past due	Past due	Past due	Past due	Past due	Past due	Of which
		Not past	> 30	are past	> 90	> 180	> 1 year	> 2 years	> 5 years	> 7 years	> 7 years	defaulted
		due or	days	due or	days	days	≤ 1 year	≤ 2 years	≤ 5 years	≤ 7 years	> 7 years	
		past due	≤ 90	not past	≤ 90	≤ 180						
		≤ 30 days	days	due or	days	days						
31 Dec 2019 (EUR 1,000)												
1 Loans and advances	30,360,978	30,360,978	-	61,726	61,726	-	-	-	-	-	-	61,726
2 Central banks	4,935,926	4,935,926	-	-	-	-	-	-	-	-	-	-
3 General governments	11,568,637	11,568,637	-	-	-	-	-	-	-	-	-	-
4 Credit institutions	791,496	791,496	-	-	-	-	-	-	-	-	-	-
5 Other financial corporations	158,501	158,501	-	-	-	-	-	-	-	-	-	-
6 Non-financial corporations	12,533,555	12,533,555	-	61,726	61,726	-	-	-	-	-	-	61,726
8 Households	372,863	372,863	-	-	-	-	-	-	-	-	-	-
9 Debt securities	5,736,848	5,736,848	-	-	-	-	-	-	-	-	-	-
11 General governments	1,548,556	1,548,556	-	-	-	-	-	-	-	-	-	-
12 Credit institutions	3,770,182	3,770,182	-	-	-	-	-	-	-	-	-	-
13 Other financial corporations	349,038	349,038	-	-	-	-	-	-	-	-	-	-
14 Non-financial corporations	69,072	69,072	-	-	-	-	-	-	-	-	-	-
15 Off-balance-sheet exposures	2,361,323	-	-	-	-	-	-	-	-	-	-	-
17 General governments	805,771	-	-	-	-	-	-	-	-	-	-	-
20 Non-financial corporations	1,546,747	-	-	-	-	-	-	-	-	-	-	-
21 Households	8,805	-	-	-	-	-	-	-	-	-	-	-
22 Total	38,459,149	36,097,826	-	61,726	61,726	-	-	-	-	-	-	61,726

Template 4

Performing and non-performing exposures and related provisions

	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
	Gross carrying amount/nominal amount						Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions						Collateral and financial guarantees received		
	Performing exposures		Non-performing exposures		Performing exposures – accumulated impairment and provisions		Non-performing exposures – accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions		Accumulated partial write-off		On performing exposures	On non-performing exposures			
31 Dec 2019 (EUR 1,000)	Of which stage 1	Of which stage 2	Of which stage 2	Of which stage 3	Of which stage 1	Of which stage 2	Of which stage 2	Of which stage 3	Of which stage 2	Of which stage 3	Accumulated partial write-off	On performing exposures	On non-performing exposures		
1 Loans and advances	30,360,978	30,124,811	184,887	61,726	-	61,726	-139	-59	-80	-80	-	-80	-	14,537,548	61,646
2 Central banks	4,935,926	4,935,926	-	-	-	-	-0	-0	-	-	-	-	-	-	-
3 General governments	11,568,637	11,556,476	3,157	-	-	-	-20	-19	-1	-	-	-	-	1,680,090	-
4 Credit institutions	791,496	791,496	-	-	-	-	-28	-28	-	-	-	-	-	-	-
5 Other financial corporations	158,501	158,501	-	-	-	-	-4	-4	-	-	-	-	-	-	-
6 Non-financial corporations	12,533,555	12,328,250	171,592	61,726	-	61,726	-75	-7	-68	-80	-	-80	-	12,484,607	61,646
8 Households	372,863	354,161	10,138	-	-	-	-11	-0	-11	-	-	-	-	372,852	-
9 Debt securities	5,736,848	1,752,499	23,690	-	-	-	-0	-0	-0	-	-	-	-	216,325	-
11 General governments	1,548,556	721,489	13,796	-	-	-	-0	-0	-0	-	-	-	-	13,700	-
12 Credit institutions	3,770,182	971,832	-	-	-	-	-	-	-	-	-	-	-	133,553	-
13 Other financial corporations	349,038	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14 Non-financial corporations	69,072	59,178	9,894	-	-	-	-0	-0	-0	-	-	-	-	69,072	-
15 Off-balance-sheet exposures	2,361,323	2,359,038	2,285	-	-	-	4	4	0	-	-	-	-	1,719,559	-
17 General governments	805,771	805,771	-	-	-	-	1	1	-	-	-	-	-	164,007	-
20 Non-financial corporations	1,546,747	1,544,462	2,285	-	-	-	3	3	0	-	-	-	-	1,546,747	-
21 Households	8,805	8,805	-	-	-	-	0	0	-	-	-	-	-	8,805	-
22 Total	38,459,149	34,236,348	210,863	61,726	-	61,726	-135	-55	-80	-80	-	-80	-	16,473,432	61,646

Template 9

Collateral obtained by taking possession and execution processes

MuniFin has not obtained collateral by taking possession and execution processes.

Section 10

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 total of 57 Credit Support Annexes in force of which 49 require daily margining. 37 of these agreements are in active use and of this, 36 require daily margining. New CSA agreements have been made during 2019 in preparing for Brexit. Additionally, the Municipal Guarantee Board's guarantees are used for reducing the derivative counterparty risk of certain counterparties. The counterparty credit risk RWA has moderately decreased between 2019 and 2018.

		b	c	f	g
		Replacement cost / current market value	Potential future credit exposure	EAD post CRM	RWAs
31 Dec 2019 (EUR 1,000)					
1	Mark to market	272,628	524,811	453,585	36,201
11	Total				36,201

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

EU CCR2

CVA capital charge

The CVA capital charge has been reduced moderately between 2019 and 2018. MuniFin manages the CVA capital charge with comprehensive use of CSAs and CCP clearing. The number and value of derivatives cleared through the Central Counterparty has increased during the year 2019.

		a	b
		Exposure value	RWAs
31 Dec 2019 (EUR 1,000)			
4	All portfolios subject to the standardised method	414,433	213,561
5	Total subject to the CVA capital charge	414,433	213,561

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

EU CCR8

Exposures to CCPs

	a	b
	EAD post CRM	RWAs
31 Dec 2019 (EUR 1,000)		
1 Exposures to QCCPs (total)		1,849
2 Exposures for trades at QCCPs (excluding initial margin and default fund contributions); of which	92,446	1,849
3 (i) OTC derivatives	92,446	1,849
7 Segregated initial margin	158,494	
10 Alternative calculation of own funds requirements for exposures		-
11 Exposures to non-QCCPs (total)		-
17 Segregated initial margin	-	

	a	b
	EAD post CRM	RWAs
31 Dec 2018 (EUR 1,000)		
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	-	

EU CCR3

Standardised approach – CCR exposures by regulatory portfolio and risk

31 Dec 2019 (EUR 1,000)		Risk-weight				Total	Of which unrated
		0%	2%	20%	50%		
Exposure classes		0%	2%	20%	50%	Total	Of which unrated
2	Regional governments or local authorities	290,560	-	-	-	290,560	290,560
6	Institutions	-	92,446	227,849	186,583	506,879	-
11	Total	290,560	92,446	227,849	186,583	797,439	290,560

31 Dec 2018 (EUR 1,000)		Risk-weight				Total	Of which unrated
		0%	2%	20%	50%		
Exposure classes		0%	2%	20%	50%	Total	Of which unrated
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

EU CCR5-A

Impact of netting and collateral held on exposure values

31 Dec 2019 (EUR 1,000)		a	b	c	d	e
		Gross positive fair value or net carrying amount	Netting benefits	Netted current credit exposure	Collateral held	Net credit exposure
1	Derivatives	2,422,935	1,054,011	1,368,924	1,191,579	177,345
4	Total	2,422,935	1,054,011	1,368,924	1,191,579	177,345

31 Dec 2018 (EUR 1,000)		a	b	c	d	e
		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

EU CCR5-B

Composition of collateral for exposures to CCR

	a	b	c	d
	Collateral used in derivative transactions			
	Fair value of collateral received		Fair value of posted collateral	
	Segregated	Unsegregated	Segregated	Unsegregated
31 Dec 2019 (EUR 1,000)				
Cash	-	1,191,579	158,494	686,150
Total	-	1,191,579	158,494	686,150

The amount of collaterals posted for derivative transactions at year end 2019 was EUR 844 million (2018: EUR 1,440 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			
	Fair value of collateral received		Fair value of posted collateral	
	Segregated	Unsegregated	Segregated	Unsegregated
31 Dec 2018 (EUR 1,000)				
Cash	-	739,260	112,999	1,327,197
Total	-	739,260	112,999	1,327,197

EU CCR6

Credit derivatives exposures

MuniFin did not hold any credit derivatives during 2019 or 2018.

Section 11 Unencumbered assets

MuniFin has updated Section 11 Unencumbered assets Template A and B.
Updated Pillar III Disclosure Report 2019 has been republished on 27 October 2020.

Template A

Encumbered and unencumbered assets

	Carrying amount of encumbered assets		Fair value of encumbered assets		Carrying amount of unencumbered assets		Fair value of unencumbered assets	
	of which notionally eligible EHQLA and HQLA		of which notionally eligible EHQLA and HQLA		of which EHQLA and HQLA		of which EHQLA and HQLA	
	010	030	040	050	060	080	090	100
31 Dec 2019 (EUR 1,000)								
010 Assets of the reporting institution	14,811,537	26,484		-	23,753,338	8,185,536		8,185,536
030 Equity instruments	-	-		-	9,799	9,799		9,799
040 Debt securities	-	-	-	-	5,918,893	3,475,806	5,919,419	3,475,806
050 of which: covered bonds	-	-	-	-	2,045,182	2,009,084	2,045,182	2,009,084
060 of which: asset-backed securities	-	-	-	-	763	763	763	763
070 of which: issued by general governments	-	-	-	-	1,691,676	822,604	1,692,136	822,604
080 of which: issued by financial corporations	-	-	-	-	4,148,475	2,675,110	4,148,475	2,675,110
090 of which: issued by non-financial corporations	-	-	-	-	79,626	-	79,693	-
120 Other assets	14,811,537	26,484		-	17,939,501	4,711,099		4,711,099
121 of which: loans and advances other than loans on demand	14,785,285	0		-	10,095,279	-		-

	Carrying amount of encumbered assets	Fair value of encumbered assets	Carrying amount of unencumbered assets	Fair value of unencumbered assets
	010	040	060	090
31 Dec 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	

Template B

Collateral received

Collateral received is cash collateral related to CSA agreements on derivatives. Cash collateral have been classified as "Loans and advances other than loans on demand" during 2019. Presented figures for years 2019 and 2018 are based on median values of quarterly data on a rolling basis over the previous twelve months.

	Fair value of encumbered collateral received or own debt securities issued		Unencumbered Fair value of collateral received or own debt securities issued available for encumbrance	
	of which notionally eligible EHQLA and HQLA		of which EHQLA and HQLA	
	010	030	040	060
31 Dec 2019 (EUR 1,000)				
130 Collateral received by the reporting institution	-	-	1,156,189	0
220 Loans and advances other than loans on demand	-	-	1,156,189	0
TOTAL ASSETS, COLLATERAL RECEIVED AND OWN DEBT SECURITIES ISSUED	14,811,537	26,484		

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

Template C

Sources of encumbrance

	31 Dec 2019		31 Dec 2018	
	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	32,962,643	14,773,135	29,114,192	14,865,322

Template D

Accompanying narrative information

The above disclosures represents the median values of quarterly data, on a rolling basis over the previous twelve months. The same scope of regulatory consolidation is used for the disclosures on asset encumbrance as for the liquidity requirements used to define HQLA eligibility. Only the assets of the parent company entail asset encumbrance. There classification is consistent between pledged assets within the accounting framework and encumbered asset.

Financial assets classified as encumbered assets relate to loans that have been pledged to the Municipal Guarantee Board as counter collateral for guarantees it has given to MuniFin's funding, loans that are pledged to the Central Bank for possible monetary policy operations and cash collateral pertaining to derivatives. MuniFin does not have any covered bond or asset-backed security issuances.

During the reporting period, the median values of encumbered assets related to loans pledged to Municipal Guarantee Board (EUR 10,949 million), loans pledged to Central Bank for possible monetary policy operations (EUR 2,706 million), cash collateral related to derivatives (EUR 1,141 million) and minimum reserves held at the central bank (EUR 26 million). During the reporting period, all encumbered assets have been EUR nominated.

MuniFin maintains a sufficient liquidity portfolio of unencumbered, highly liquid assets at all times. MuniFin constantly monitors the amount of encumbered assets within the liquidity portfolio. MuniFin uses cash for derivatives collateral management and hence the only source of asset encumbrance in the liquidity portfolio is repo related collateral management. During the reporting period, all assets within liquidity portfolio were unencumbered, of which EUR 8,185 million were HQLA eligible.

Other assets within template A, that have been classified as unencumbered, include cash with central banks, loans and advances, derivative contracts, intangible assets, tangible assets and other fixed assets.

The additional columns for asset quality indicators have been disclosed according to Article 2 (1) of the EBA/RTS/2017/03 to the templates A and B as of 31 December 2019.

Section 12 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 2019 (EUR 2.0 million at the end of 2018). 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 13 Remuneration

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

Section 14

Leverage ratio

LRSum

Summary reconciliation of accounting assets and leverage ratio exposures

(EUR 1,000)	31 Dec 2019	31 Dec 2018
	Applicable amount	Applicable amount
1 Total assets as per published financial statements	38,933,758	35,676,739
4 Adjustments for derivative financial instruments	-2,059,346	-2,169,194
6 Adjustment for off-balance sheet items (i.e. conversion to credit equivalent amounts of off-balance sheet exposures)	1,122,041	1,339,665
7 Other adjustments	-14,207	-14,850
8 Leverage ratio total exposure measure	37,982,245	34,832,360

LRCom

Leverage ratio common disclosure

(EUR 1,000)	31 Dec 2019	31 Dec 2018
	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)	36,519,150	34,003,222
2 (Asset amounts deducted in determining Tier 1 capital)	-14,704	-14,850
3 Total on-balance sheet exposures (excluding derivatives, SFTs and fiduciary assets) (sum of lines 1 and 2)	36,504,446	33,988,372
Derivative exposures		
4 Replacement cost associated with all derivatives transactions (i.e. net of eligible cash variation margin)	280,699	169,721
5 Add-on amounts for PFE associated with all derivatives transactions (mark-to-market method)	761,208	661,799
7 (Deductions of receivables assets for cash variation margin provided in derivatives transactions)	-686,150	-1,327,197
11 Total derivatives exposures (sum of lines 4 to 10)	355,758	-495,677
Other off-balance sheet exposures		
17 Off-balance sheet exposures at gross notional amount	2,361,319	2,796,753
18 (Adjustments for conversion to credit equivalent amounts)	-1,239,278	-1,457,088
19 Other off-balance sheet exposures (sum of lines 17 and 18)	1,122,041	1,339,665
Capital and total exposure measure		
20 Tier 1 capital	1,509,906	1,412,909
21 Leverage ratio total exposure measure (sum of lines 3, 11, 16, 19, EU-19a and EU-19b)	37,982,245	34,832,360
Leverage ratio		
22 Leverage ratio	3.98%	4.06%

LRSpl

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

(EUR 1,000)	31 Dec 2019	31 Dec 2018
	CRR leverage ratio exposures	CRR leverage ratio exposures
Total on-balance sheet exposures (excluding derivatives, SFTs, and exempted exposures), of which:		
EU-1	35,833,000	32,676,025
EU-3 Banking book exposures, of which:	35,833,000	32,676,025
EU-4 Covered bonds	2,137,947	1,887,770
EU-5 Exposures treated as sovereigns	17,083,751	14,234,064
EU-6 Exposures to regional governments, MDB, international organisations and PSE not treated as sovereigns	38,732	329,683
EU-7 Institutions	1,907,819	2,525,096
EU-8 Secured by mortgages of immovable properties	8,515,464	8,527,156
EU-10 Corporate	6,031,136	5,129,701
EU-11 Exposures in default	61,757	-
EU-12 Other exposures (eg equity, securitisations, and other non-credit obligation assets)	56,393	42,555

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 principles 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 3.98% at the end of 2019 compared to 4.06% at the end of previous year. The balance sheet exposures grew by net EUR 3,257 million during the year. The change was mainly driven by increased lending to the public and public sector entities and increased amount of liquid assets. Off-balance sheet exposures, loan promises to public and public sector entities, decreased by EUR 218 million during the year. Own funds grew in the period by EUR 97 million, mainly driven by increase in CET1 capital, namely from the continued profit generation.

Section 15

Liquidity Coverage Ratio

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 2019. The buffer for HQLA assets remained on a high level throughout the year. The additional requirement for outflows related to derivative exposures and other collateral requirements is calculated using the historical look-back approach (HLBA). During 2019 the HLBA outflow amount reduced significantly.

Scope of consolidation: Consolidated (EUR 1,000)	Total unweighted value (average)				Total weighted value (average)			
	31 Mar 2019	30 Jun 2019	30 Sep 2019	31 Dec 2019	31 Mar 2019	30 Jun 2019	30 Sep 2019	31 Dec 2019
Number of data points used in the calculation of averages	12	12	12	12	12	12	12	12
HIGH-QUALITY LIQUID ASSETS								
1 Total high-quality liquid assets (HQLA)					7,161,136	7,274,569	7,425,775	7,792,524
CASH - OUTFLOWS								
2 Retail deposits and deposits from small business customers, of which:	-	-	-	-	-	-	-	-
3 <i>Stable deposits</i>	-	-	-	-	-	-	-	-
4 <i>Less stable deposits</i>	-	-	-	-	-	-	-	-
5 Unsecured wholesale funding	1,927,414	1,909,610	1,920,411	1,958,721	1,927,414	1,909,610	1,920,411	1,958,721
6 <i>Operational deposits (all counterparties) and deposits in networks of cooperative banks</i>	-	-	-	-	-	-	-	-
7 <i>Non-operational deposits (all counterparties)</i>	8,702	18,563	22,353	26,314	8,702	18,563	22,353	26,314
8 <i>Unsecured debt</i>	1,918,712	1,891,047	1,898,059	1,932,407	1,918,712	1,891,047	1,898,059	1,932,407
9 Secured wholesale funding					-	-	-	-
10 Additional requirements	3,863,930	3,826,717	3,665,043	3,413,592	1,497,480	1,404,554	1,252,986	1,082,049
11 <i>Outflows related to derivative exposures and other collateral requirements</i>	1,234,542	1,135,449	985,071	823,163	1,234,542	1,135,428	984,989	823,006
12 <i>Outflows related to loss of funding on debt products</i>	-	-	-	-	-	-	-	-
13 <i>Credit and liquidity facilities</i>	2,629,388	2,691,268	2,679,971	2,590,429	262,939	269,127	267,997	259,043
14 Other contractual funding obligations	1,860	1,860	1,860	1,860	-	-	-	-
15 Other contingent funding obligations	3,669,732	3,731,613	3,688,011	3,714,362	369,912	374,609	375,994	374,084
16 TOTAL CASH OUTFLOWS					3,794,806	3,688,773	3,549,391	3,414,853
CASH - INFLOWS								
17 Secured lending (e.g. reverse repos)	-	-	-	-	-	-	-	-
18 Inflows from fully performing exposures	629,088	678,987	761,297	786,336	325,853	358,170	412,462	435,721
19 Other cash inflows	174,176	170,066	191,471	210,471	162,984	161,781	184,985	210,471
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	803,264	849,052	952,767	996,806	488,838	519,951	597,447	646,192
EU-20a Fully exempt inflows	-	-	-	-	-	-	-	-
EU-20b Inflows subject to 90% cap	-	-	-	-	-	-	-	-
EU-20c Inflows subject to 75% cap	803,264	849,052	952,767	996,806	488,838	519,951	597,447	646,192
21 LIQUIDITY BUFFER					7,161,136	7,274,569	7,425,775	7,792,524
22 TOTAL NET CASH OUTFLOWS					3,305,928	3,168,782	2,951,904	2,771,122
23 LIQUIDITY COVERAGE RATIO (%)					220.30%	236.97%	273.10%	304.98%

Scope of consolidation: Consolidated (EUR 1,000)	Total unweighted value (average)				Total weighted value (average)			
	31 Mar 2018	30 Jun 2018	30 Sep 2018	31 Dec 2018	31 Mar 2018	30 Jun 2018	30 Sep 2018	31 Dec 2018
Number of data points used in the calculation of averages	12	12	12	12	12	12	12	12
HIGH-QUALITY LIQUID ASSETS								
1 Total high-quality liquid assets (HQLA)					6,232,540	6,513,169	6,814,129	6,944,723
CASH - OUTFLOWS								
2 Retail deposits and deposits from small business customers, of which:	-	-	-	-	-	-	-	-
3 <i>Stable deposits</i>	-	-	-	-	-	-	-	-
4 <i>Less stable deposits</i>	-	-	-	-	-	-	-	-
5 Unsecured wholesale funding	1,914,107	2,073,557	2,092,568	2,097,909	1,914,107	2,073,557	2,092,568	2,097,909
6 <i>Operational deposits (all counterparties) and deposits in networks of cooperative banks</i>	-	-	-	-	-	-	-	-
7 <i>Non-operational deposits (all counterparties)</i>	4,539	4,044	4,507	5,225	4,539	4,044	4,507	5,225
8 <i>Unsecured debt</i>	1,909,567	2,069,512	2,088,061	2,092,684	1,909,567	2,069,512	2,088,061	2,092,684
9 Secured wholesale funding					-	-	-	-
10 Additional requirements	3,499,081	3,518,396	3,618,334	3,773,569	1,477,818	1,469,953	1,470,476	1,489,541
11 <i>Outflows related to derivative exposures and other collateral requirements</i>	1,253,233	1,242,348	1,231,825	1,235,760	1,253,233	1,242,348	1,231,825	1,235,760
12 <i>Outflows related to loss of funding on debt products</i>	-	-	-	-	-	-	-	-
13 <i>Credit and liquidity facilities</i>	2,245,848	2,276,047	2,386,509	2,537,809	224,585	227,605	238,651	253,781
14 Other contractual funding obligations	2,239	2,113	1,986	1,860	-	-	-	-
15 Other contingent funding obligations	3,474,973	3,529,213	3,575,507	3,607,775	366,229	366,955	360,223	365,962
16 TOTAL CASH OUTFLOWS					3,758,154	3,910,465	3,923,267	3,953,411
CASH - INFLOWS								
17 Secured lending (e.g. reverse repos)	-	-	-	-	-	-	-	-
18 Inflows from fully performing exposures	698,357	676,532	655,059	637,262	357,199	346,530	335,719	326,640
19 Other cash inflows	196,741	207,336	186,267	177,515	181,656	193,618	176,255	162,625
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	895,098	883,868	841,326	814,777	538,855	540,148	511,974	489,265
EU-20a Fully exempt inflows	-	-	-	-	-	-	-	-
EU-20b Inflows subject to 90% cap	-	-	-	-	-	-	-	-
EU-20c Inflows subject to 75% cap	895,098	883,868	841,326	814,777	538,855	540,148	511,974	489,265
21 LIQUIDITY BUFFER					6,232,540	6,513,169	6,814,129	6,944,723
22 TOTAL NET CASH OUTFLOWS					3,219,299	3,370,317	3,411,293	3,464,146
23 LIQUIDITY COVERAGE RATIO (%)					207.31%	202.57%	206.77%	205.27%

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 enough high quality liquid assets 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 a 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 a 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 16

CRR reference table

Pillar 3 disclosures in accordance with the Articles 435–455 of CRR

CRR ref.	High level summary	Reference
Article 435	Risk management objectives and policies	
1 (a)	Strategies and processes to manage risks	Pillar III Disclosure Report 2019 Section 2
1 (b)	Governance structure and organisation	Pillar III Disclosure Report 2019 Section 2, Corporate Governance Statement 2019 pages 3–18
1 (c)	Scope and nature of risk reporting and measurement systems	Pillar III Disclosure Report 2019 Section 2, Annual Report 2019 pages 133–155
1 (d)	Policies for hedging and mitigating risk	Pillar III Disclosure Report 2019 Section 2, Annual Report 2019 pages 133–155
1 (e)	Declaration approved by the management body on the adequacy of risk management arrangements	Pillar III Disclosure Report 2019 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 2019 Section 2 page 8
2 (a)	Number of directorships held by members of the Board of Directors	Corporate Governance Statement 2019 pages 7–11 and page 13
2 (b)	Recruitment policy for the selection of members of the Board of Directors and their actual knowledge, skills and expertise	Corporate Governance Statement 2019 pages 4–13
2 (c)	Policy on diversity with regard to selection of members of the Board of Directors	Corporate Governance Statement 2019 pages 5–6
2 (d)	Set up a separate risk committee and the number of times the risk committee has met.	Corporate Governance Statement 2019 page 14
2 (e)	Description of the information flow on risk to the management body.	Pillar III Disclosure Report 2019 Section 2, Corporate Governance Statement 2019 pages 19–25
Article 436	Scope of application	
(a)	The name of the institution to which the CRR requirements apply	Pillar III Disclosure Report 2019 Section 1, Annual Report 2019 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 2019 Section 3 pages 20–24, 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

CRR ref.	High level summary	Reference
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 2019 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 2019 Section 4 pages 26–27
1 (c)	Full terms and conditions of all Common Equity Tier 1, Additional Tier 1 and Tier 2 instruments	Pillar III Disclosure Report 2019 Section 4 pages 26–27, Articles of Association (www.munifin.fi) and AT1 instrument prospectus at https://www.kuntarahoitus.fi/app/uploads/sites/2/2019/09/munifin_at1_-_offering_circular.pdf
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 2019 Section 4 pages 28–29
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 2019 Section 2 page 10 and Section 5, Corporate Governance Statement 2019 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 2019 Section 5 and Section 6
(c)	Risk-weighted exposure amounts in accordance with the standardized approach	Pillar III Disclosure Report 2019 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 2019 Section 5 page 31 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 2019 Section 5 page 31 and template EU OV

CRR ref.	High level summary	Reference
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 2019 Section 2 pages 12–13
(b)	A discussion of policies for securing collateral and establishing credit reserves	Pillar III Disclosure Report 2019 Section 2 pages 12–13
(c)	A discussion of policies for wrongway risk exposures	Pillar III Disclosure Report 2019 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 2019 Section 10 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 2019 Section 10 pages 55–58, templates EU CCR1, EU CCR2, EU CCR8, EU CCR3, EU CCR5-A, EU CCR5-B and EU CCR6
(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 2019 Section 10 pages 55–58, templates EU CCR1, EU CCR2, EU CCR8, EU CCR3, EU CCR5-A, EU CCR5-B and EU CCR6
(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 if the institution has received the permission of the competent authorities to estimate	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 2019 Section 6 pages 35–36
(b)	The amount of institution specific countercyclical capital buffer	Pillar III Disclosure Report 2019 Section 6 pages 35–36
Article 441	Indicators of global systemic importance	
1-2	Indicator values used for determining the score of the institution.	Not applicable

CRR ref.	High level summary	Reference
Article 442	Credit risk adjustments	
(a)	The definitions for accounting purposes of past due and impaired	Pillar III Disclosure Report 2019 Section 7 page 37 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 2019 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 2019 Section 7 page 38 template 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 2019 Section 7 page 39 template 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 2019 Section 7 pages 40–41 template 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 2019 Section 7 page 42 template 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 2019 Section 7 pages 43–45 templates EU CR1-A, EU CR1-B, EU CR1-C and Section 9 pages 52–54
(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 2019 Section 7 pages 43–45 templates EU CR1-A, EU CR1-B, EU CR1-C and Section 9 pages 52–54
(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 2019 Section 7 pages 46–47 templates EU CR2-A and EU CR2-B
(XXX)	Specific credit risk adjustments and recoveries recorded directly to the income statement shall be disclosed separately	Annual Report 2019 Consolidated Financial Statements Notes 14 and 27
Article 443	Unencumbered assets	
	Disclosure on unencumbered assets according to EBA Guidelines	Pillar III Disclosure Report 2019 Section 11
Article 444	Use of ECAls	
(a)	Names of the nominated ECAls and ECAs and the reasons for any changes	Pillar III Disclosure Report 2019 Section 8 page 49
(b)	The exposure classes for which each ECAI or ECA is used	Pillar III Disclosure Report 2019 Section 8 page 49
(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 2019 Section 8 page 49
(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 2019 Section 8 page 49
(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 2019 Section 8 page 50–51 template EU CR4 and EU CR5

CRR ref.	High level summary	Reference
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 2019 Section 12 page 62
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 2019 Section 2 pages 18–19
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 2019 Section 2 pages 13–16 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 2019 Section 2 pages 13–16 table EU MRA
Article 449	Exposure to securitization positions	
	Exposure to securitization positions	Pillar III Disclosure Report 2019 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 2019 pages 14–15, Remuneration Report 2019
(b)	Information on link between pay and performance	Remuneration Report 2019
(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 2019 pages 3–7
(d)	Ratios between fixed and variable remuneration set in accordance with Article 94(1)(g) of the CRDIV	Remuneration Report 2019 pages 5–7
(e)	Information on the performance criteria on which the entitlement to shares, options or variable components of remuneration is based	Remuneration Report 2019. 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 2019
(g)	Aggregate quantitative information on remuneration, broken down by business area	Remuneration Report 2019 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 2019 page 7
(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 2019 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.

CRR ref.	High level summary	Reference
Article 451	Leverage	
(a)	The leverage ratio and how the institution applies Article 499(2) and (3) of the CRR	Pillar III Disclosure 2019 Section 14 pages 63–64
(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 2019 Section 14 pages 63–64
(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 2019 Section 14 page 64
(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 2019 Section 14 page 64
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 2019 Section 2 pages 11–13
(b)	The policies and processes for collateral valuation and management	Pillar III Disclosure 2019 Section 2 pages 11–13
(c)	A description of the main types of collateral taken by the institution	Pillar III Disclosure 2019 Section 2 pages 11–13
(d)	The main types of guarantor and credit derivative counterparty and their creditworthiness	Pillar III Disclosure 2019 Section 2 pages 11–13
(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 2019 Section 7 page 48 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 2019 Section 7 page 48 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 17

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

Reference	Reason for not disclosing	Information provided in Pillar III Disclosure
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.
EBA/GL/2018/10 Template 2 – Quality of forbearance, Template 5 – Quality of non-performing exposures by geography, Template 6 – Credit quality of loans and advances by industry, Template 7 – Collateral valuation – loans and advances, Template 8 – Changes in the stock of non-performing loans and advances and Template 10 – Collateral obtained by taking possession and execution processes – vintage breakdown.	EBA/GL/2018/10 Templates 2, 5, 6, 7, 8 and 10 are applicable only to significant credit institutions with a gross NPL ratio of 5% or above. As the NPL ratio does not exceed 5%, MuniFin has not disclosed these templates.	MuniFin complies the EBA/GL/2018/10 disclosure requirements by disclosing the templates applicable to all credit institutions within Section 9 Non-performing exposures. Additionally, according to Section 3 Implementation (19) of EBA/GL/2018/10, MuniFin has disclosed 'Template 12 – EU CR1-B – Credit quality of exposures by industry or counterparty types' and 'Template 13 – EU CR1-C – Credit quality of exposures by geography' in full within Section 7 Credit risk and general information on credit risk mitigation.

MuniFin (Municipality Finance Plc) is one of Finland's largest credit institutions: the company's balance sheet totals nearly EUR 39 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 entities 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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