Annual Report
2021

MuniFin

Contents

MuniFin

More customer benefits and support amidst change

In 2021, MuniFin's key themes were renewal and sustainability. We allowed customers to benefit from negative interest rates more than before, thus making customer financing even more affordable.

Finland's economic and employment situation exceeded expectations in 2021 and reached a surprisingly good level. The central government's COVID-19 support package ensured that municipalities have not had to shoulder the negative economic effects of the pandemic. As a result, the municipal sector's demand for financing was lower than expected in 2021. The demand for state-subsidised housing finance grew moderately, as expected. MuniFin's market position is strong, and we continue to be by far the largest single credit institution offering long-term loans for our customer base.

Despite the temporarily improved financial situation, the sustainability gap and structural problems in public economy continue to exist. In 2022, we therefore expect the demand for financing in the municipal sector to return to the pre-pandemic level.

The European Union's changes to capital requirements regulation came into force at the end of June. Under the new regulation, MuniFin gained the status of a public development credit institution, which significantly eases our ability to comply with the leverage ratio capital requirement. This has allowed us to increasingly transfer the benefit from negative interest rates to our customers, making our loan financing even more affordable than before. This change in our credit terms took force in October, and its benefits will begin to have a wider impact in the interest costs of our loan customers in 2022.

Once again, our funding succeeded excellently, and the availability of funding in the international capital market remained good. Thanks to our effective funding, we were again able to ensure affordable financing for our customers.

Support amidst social change
Before municipal elections, we launched discussion about global phenomena and social changes that are transforming the operations and finances of our customers, especially municipalities. The discussion paper we published in May offered municipal decision-makers different viewpoints and alternatives for adapting to these changes.

The legislative package for Finland's long-prepared health and social services reform was largely completed in June, allowing municipalities to launch practical preparations. Our subsidiary company Inspira has helped municipalities to prepare for the reform and assess its impact. In the future, MuniFin's customers will include the new wellbeing services counties.

The EU taxonomy for sustainable activities made the headlines from time to time in the past year, giving rise to questions among our customers, who play a key role in mitigating climate change and promoting the green transition. We support our customers in this transition by offering them green finance and sharing our expertise. In 2021, the demand for our green finance continued to grow, and the social finance that we launched in 2020 established its position among our customers.

Our online events and digital training sessions on economic themes, launched in 2020, gained a firm foothold, attracting thousands of our customers and other stakeholders during the year.

Integrating sustainability and new operating models
Sustainability is integrated even more closely into all our operations and the work of all our employees. In 2021, we started to work on calculations to make the environmental load of our own operations more visible. Our entire staff also participated in dedicated sustainability training. Because sustainability is such an integral part of all our work, we have now incorporated it directly into our operational reporting instead of publishing a separate report.

The year started with a renewed organisation and was characterised by renewal and the rooting of new operating models. The process is a long one, but the reorganisation seeks to achieve even better benefits for our customers. The work has progressed according to plan. In 2022, we will continue to drive this process and invest in integrating sustainability into all our operations, improving leadership, increasing personnel satisfaction and renewing our systems.

I wish to thank our customers for their close collaboration and our staff for their excellent work during this year of external and internal upheaval.

Esa Kallio
President and CEO
Municipality Finance Plc

Sustainability is the core of all our operations

We are committed to building a better and more sustainable future with our customers. Our customers include municipalities, joint municipal authorities, municipality-controlled entities and non-profit organisations nominated by the Housing Finance and Development Centre of Finland (ARA). In the future, the new wellbeing services counties will also be our customers.

Our core mandate is to ensure that our customers stay viable and can acquire affordable funding regardless of the market situation. We offer our customers diverse financial services and are by far the largest single provider of financing for our customer segments. Our experts help our customers make investment decisions that are sustainable for the economy, environment and society.

The effects of our work can be seen in the everyday lives of Finns, obliging us to take sustainability into account in all our operations. The financed projects include schools, hospitals, libraries, roads, bridges, sewerage, rental apartments and housing for people with special needs.

To meet the needs of our customers, we acquire financing from the international capital markets, where we are known as a reliable and highly responsive market participant. Our funding is guaranteed by the Municipal Guarantee Board, whose members are all the Finnish mainland municipalities.

The shareholders of MuniFin are Finnish municipalities, public sector pension provider Keva and the State of Finland. Due to the shareholder base, we do not seek to maximise profit, but to serve efficiently and profitably as the best financing expert in the field, providing our customers with solutions that are the best fit for their needs.

We constantly develop our services to meet the needs of our customers and help with the management of all their investment and financial needs, including investment planning and the identification of investment opportunities, all the way to the end of the investment lifecycle. MuniFin employs approximately 160 financial and economic experts. We aim to provide an attractive and adaptable working environment with values-based management.

In addition to the parent company Municipality Finance Plc, Municipality Finance Group includes Financial Advisory Services Inspira Ltd, which specialises in financial advisory services for the municipal sector.

Shareholders %

53/31/16

Municipalities Keva State of Finland

Long-term customer financing, EUR billion

29.2

New long-term funding, EUR billion

9.4

Social finance, EUR billion

1.2

Green finance, EUR billion

2.3

AA+ **Aa1**

Credit rating

Standard & Poor's: AA+, Moody's: Aa1

ESG ratings

11.8 Sustainalytics ESG risk rating

AA MSCI

C + Prime ISS ESG

Key Figures (Group)	2021	2020	Change, %
Net interest income (EUR million)	280	254	10%
Net operating profit excluding unrealised fair value changes (EUR million)	213	197	8%
Long-term customer financing (EUR million)	29,214	28,022	4%
Total funding (EUR million)	40,712	38,139	7%
Balance sheet total (EUR million)	46,360	44,042	5%
Total own funds (EUR million)	1,756	1,624	8%
CET1 capital ratio (%)	95.0	104.3	-9%
Leverage ratio (%)	12.8	3.9	232%

Customer satisfaction (scale 1–7)

6.24

01

1 January: We started the year in a renewed organisation. The reorganisation allows us to create even better preconditions for improving our customer and employee experience. It also strengthens and optimises our core business processes.

03

31 March: Environmental Finance awarded us with the 2021 Green Bond of the Year in the local authority or municipality category as a testimony to our long-term commitment in the field of sustainability. More on this on page 20.

05

10 May: We formulated a climate risk road map that includes our action plan for preparing for environmental and climate risks in the near future.

11 May: We published a discussion paper on how to achieve a sustainable municipality. In this publication, experts envision the municipalities of the future and seek solutions to pain points in municipal management, sustainable development and municipal finances.

06

23 June: The Finnish Parliament adopted the legislation on establishing wellbeing services counties and reforming the organisation of healthcare, social welfare and rescue services. The legislation allows MuniFin to continue as a lender to the loans and other liabilities that will be transferred to the wellbeing services counties.

28 June: Changes to the banks' capital requirements regulation (CRR II and CRD V) were applied. MuniFin fulfils the CRR II definition of a public development credit institution, which significantly eases compliance with MuniFin's capital requirements.

08

19 August: We reached record-breaking results in our customer satisfaction survey. Compared to other companies in the financial sector, we scored exceptionally high on the Net Promoter Score (NPS), which measures how likely customers are to recommend the company.

09

15 September: We published our Sustainable Investment Framework, which summarises the sustainability principles, processes and responsibilities in our investment activities.

10

1 October: We changed the conditions for interest rates in our long-term customer loans. The new model will offer a significant benefit to our loan customers, as it will allow them to benefit from negative reference rates more than before.

5 October: We issued a new tap of EUR 500 million to the social bond issued in 2020. The transaction was a tremendous success: dedicated ESG investors bought more than 75% of the benchmark.

11

2 November: We broadened our investor base for green bonds into the Sterling market by issuing an inaugural GBP 250 million green bond. The successful transaction attracted 40% participation from dedicated ESG investors.

12

10 December: For our personnel, we published our first culture book describing how the MuniFin culture is reflected in our working life, what kind of a culture we are pursuing and what makes working at MuniFin unique.

17 December: We completed the IT services outsourcing project, significantly improving our operational reliability and information security.

Customers and sustainability at the heart of our strategy

MuniFin is the only credit institution in Finland that specialises solely in financing the municipal sector and non-profit housing production. Our customers are at the heart of our strategy, and our core mandate is to offer them affordable financing under all market conditions, including exceptional situations. We are committed to building a better and more sustainable future with our customers, and our work is guided by our values of customer centricity, responsibility and transparency.

In line with our current strategy reaching to 2024, our vision is to be the best financing partner for our customers. Our operating environment is changing constantly, requiring us to anticipate, identify and adapt to these changes and the opportunities and risks that they pose. Much like the year before, 2021 was also marked by the global COVID-19 pandemic, which increased economic uncertainty and highlighted the importance of our core mandate.

The implementation of our strategy proceeded as planned in 2021. We focused on further strengthening our core mandate, preserving the availability of reasonably priced financing for our customers, integrating our new operating models and increasing sustainability in all our operations.

Agility and efficiency through the new organisational structure

We continued to renew and restructure our organisation in 2021, starting the year off with a new organisational structure, which will better serve expert work and increase efficiency at the company level. Lower hierarchy will also speed up our decision-making processes and yield more executive power to individual divisions and experts.

In 2021, we also combined some of our business functions to increase our understanding of our customers' financing processes and make them even more streamlined. We merged information management, business architecture management and a significant share of our reporting into our financial administration.

In our new organisation, business lines are responsible for their own development. We built our operating model for agile development, describing our roles and practices and renewing our administrative structure. Our experts were trained in agile development methods, which we put to use in piloting new business practices.

We aim to be an attractive and adaptable workplace with values-based leadership. In 2021, we focused especially on developing a stronger organisational culture and on continuing to integrate coaching leadership into our everyday work.

Even more affordable customer loans

We create customer benefits with competitive long-term financing. In 2021, we decided to take negative reference rates into account in the interest rate calculation of long-term customer loans. This change increasingly transfers the benefits of the negative interest rate environment to our customers and further lowers their loan expenses. It was made possible by a change to banks' capital requirements regulation that took effect in June 2021; MuniFin is now categorised as a public development credit institution, which substantially eases compliance with leverage ratio requirement. Transferring this benefit to our customers was a gesture that got a very positive reception.

New services to navigate through the health and social services reform
In June 2021, the Finnish Parliament approved new legislation on establishing wellbeing services counties and reforming the health, social and rescue services. The new legislation enables MuniFin to continue to act as the financier of loans transferred from the joint municipal authorities to the new wellbeing services counties. Moreover, the Parliament is currently working on amending the Act on the Municipal Guarantee Board. If implemented, this amendment would also allow MuniFin to finance new investments by the wellbeing services counties.

The health and social services reform is the largest change in our customers' operating environment in decades, and its effects on the incomes, expenses and financial positions of municipalities continued to remain uncertain in 2021. During the year, we developed new services to help our customers navigate and analyse these changes.

Sustainability is an integral part of our work
There are growing requirements on sustainability – not only in terms of the climate, but also in terms of social responsibility – and policymakers are increasingly driving agendas that promote sustainable development. Regulation and expectations of sustainable business activities are increasing also in the financial sector. Especially the European Central Bank and regulatory authorities are placing more emphasis on environmental, social and corporate governance (ESG) risks.

These developments also reflect on us and require us to take action. In line with our strategy, we react to changes in markets and regulation and aim to be a forerunner in sustainability also in the future.

Sustainability is the cornerstone of all our work. We continually improve the sustainability of our operations and offer our customers financing solutions that support and promote sustainable development. Our services create long-term positive benefits to our customers and the Finnish society: they help maintain the welfare society, all the way from housing solutions and public infrastructure to curbing climate change.

Case

Calculating MuniFin's own emissions is another step towards carbon neutrality

We have been supporting our customers in their climate efforts for years. Our green finance enables projects that reduce or avoid greenhouse gas emissions, thereby also contributing to the Finnish Government's strategic themes of sustainable development. One of these themes is carbon neutral Finland that protects biodiversity, which includes the goal of achieving carbon neutrality by 2035. Our customers play a key role in making this happen.

In 2021, we continued to work on reducing our own climate impact. We launched a project that aims to calculate emissions of both our own operations and the projects we finance for the first time. Understanding the current situation will help us plan actions to further reduce our carbon footprint and to support and encourage our customers to reduce their emissions. This work will also increase our understanding of the business risks associated with emissions.

Investments made with our green and social finance place particular emphasis on sustainability. We have granted green financing to projects that produce clear and measurable environmental benefits since 2016. The year 2021 marked the first full year of our social finance, which we launched in 2020. The impact of our green and social finance is described in more detail in our Green and Social Impact Reports.

Our goal for 2024 is to increase the proportion of green and social finance to 20% of all our long-term customer finance. In 2021, green and social finance kept gaining ground, accounting for 12.0% of all long-term customer finance. Our goal is ambitious, and achieving it will require active efforts, but our customers are likely to continue to make sustainable investments. Finland's goal of being a carbon neutral country by 2035 will affect our customers' operations through amendments to construction and land use laws that will introduce new requirements of low-carbon construction, for example. We can therefore tentatively expect sustainable investment choices to become more frequent, which in turn could make more customer projects eligible for our green financing.

We also continued to invest in sustainability at the company level and sought to accommodate stakeholder expectations in our work. In 2021, we created our climate risk roadmap, which contains our action plan for the preparation of environmental and climate risks over the next few years. Environmental and climate risks continuously affect our operating environment, but they are taken into account in our business operations, therefore leaving our core mandate and strategy unchanged.

Following the roadmap, in the autumn we identified and assessed ESG risks that are most relevant to us, creating a foundation for future development. We also started calculating the emissions and carbon footprint of our own operations, long-term customer finance portfolio as well as our liquidity investments. Understanding where are at now is the first step in finding out how we could achieve carbon neutrality in our own work and how we can also encourage our customers and other key stakeholders on this path.

Case

Widespread cooperation to improve financial literacy and knowledge about society

The effects of our work can be seen in the everyday lives of Finns through the projects that we finance. But we want to help promote social welfare in other ways, too. An important part of our corporate social responsibility is increasing knowledge of public economy and finance. We regularly bring these topics up in public discussion and work with universities and organisations to improve the financial skills of pupils and students and to increase their knowledge about society.

We are a long-term partner of Junior Achievement Finland, a leading organisation in Finnish entrepreneurship education, and we support the work of the Yrityskylä learning environment of Economy and Youth TAT. The Yrityskylä concept reaches more than 60,000 pupils in grades six and nine every year and has been awarded as the world's best educational innovation by the World Innovation Summit for Education. We are also one of the donors to Aalto University's professorship of urban economics and have worked with Finnish universities on courses related to sustainability and other topics.

Responsibly towards a better future

Our core mission and values

MISSION

Building a better and more sustainable future with our customers

VISION

Main financing partner for our customers

VALUES

Customer centricity
Responsibility
Transparency

Our strategy

Our work is always responsible, and we offer financing solutions that support and promote sustainable development.

1. We ensure the availability of financing for our customers in all market conditions.
2. We create customer benefits through competitively priced long-term financing, a smooth service model and customer-centric services that bring additional value to our customers' financing and financial management.
3. We secure our strong position in the capital markets with good risk management, a low risk profile and a joint municipal funding system.
4. We constantly improve our operations through further development and digitalisation.
5. We are an attractive and adaptable working community with values-based leadership.
6. We aim to secure our profitability and operations in the long term, but do not aim to maximise our profit.

Key principles for responsibility and the UN Sustainable Development Goals

1 Responsible products and services

Goal 2024:
Customer satisfaction is at a very good level

2 Forerunner in sustainability

Goal 2024:
Green and social finance accounts for 20% of the long-term customer finance portfolio

3 Developing wellbeing at work

Goal 2024:
Personnel satisfaction is at a good level

4 Strong corporate governance

Goal 2024:
All ESG risks associated with customers are assessed with a uniform methodology

Key principles for responsibility and the UN Sustainable Development Goals
We assess the focus areas and goals of responsibility in line with the framework of the United Nations Sustainable Development Goals (SDGs). Through our work, we strive to promote the achievement of as many of the SDGs as possible.

We have linked each key principle with the relevant UN Sustainable Development Goals that we can substantially influence. In addition, we have set one long-term company-level goal for each key principle.

How we create value

MuniFin's operations create value for our customers, our employees, and the society at large. Our value creation model illustrates the resources we use in this mission, the underlying choices that support our value creation, and the impacts of our operations.

Resources

Skilled and motivated employees

Strong financial status

Committed customers and stakeholders

Global investor base

Common funding system

Strong credit rating

Partnerships

MuniFin

Responsibility

Transparency

Customer centricity

Efficiency

High-quality risk management

Specialisation in own customer segment

Investing in employee know-how and wellbeing

We aim to secure an adequate level of profitability to secure our operations in the long term, but do not aim to maximise our profit

Impacts

Happy customers

We ensure the availability of financing for our customers and create customer benefits through competitively priced long-term financing

Solvency

Growth of wellbeing in the society

Equal opportunities for good life

Supporting the sustainability of municipalities' investments

Healthy, motivated and skilled personnel

The central government's COVID-19 support and unexpectedly good economic development improved the economic outlook of the municipal sector, reducing their financing requirements

The economic outlook of the municipal sector temporarily improved as the central government compensated for the effects of the COVID-19 pandemic. As a result, municipalities' demand for financing was moderate. In contrast, the demand for non-profit housing project financing grew. MuniFin Group retained its strong position as a financier for the municipal and non-profit housing sectors in 2021. Customers benefited from the negative interest rate environment as MuniFin decided to take negative reference rates into account in calculating the interest rates of long-term customer loans.

Our customers include municipalities, joint municipal authorities and municipality-controlled entities, as well as non-profit housing organisations and non-profit housing projects nominated by the Housing Finance and Development Centre of Finland (ARA). We offer our customers diverse financing services and extensive support in investment planning and financial management.

We are committed to a customer-centric operating model. We do not seek to increase the financing needs of our customers to maximise the profit of our own operations. Instead, we strive to create positive long-term effects in Finnish society by actively collaborating with our customers to find financing solutions and investment methods that best suit their needs.

Lending portfolio 2017–2021 (MEUR)

2017	2018	2019	2020	2021
21.2	22.4	24.0	26.9	27.9

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Key sustainability indicators in customer services

1 Sustainable products and services

GOAL 2024:
Customer satisfaction is at a very good level

- Training sessions, seminars and events for customers
- Number of users of digital MuniFin services
- Proportion of state-subsidised housing finance for special groups in new lending

2 Forerunner in sustainability

GOAL 2024:
Green and social finance accounts for 20% of the long-term customer finance portfolio

- Amount of green and social finance (EUR)
- Number of green and social finance projects

The central government's COVID-19 support gave a temporary boost to the municipal sector

In 2021, the demand for financing in municipalities was moderate and lower than expected, as the record-breaking demand spurred by the coronavirus pandemic returned to a more normal level. Thanks to the central government's COVID-19 support measures, municipal finances improved temporarily, reducing financing requirements in municipalities. In contrast, the demand for non-profit housing finance grew moderately in 2021 and has remained largely unaffected throughout the pandemic.

MuniFin is by far the largest single provider of financing for its customer segment. The demand for our financing nevertheless decreased by 28.8% compared to 2020. New long-term financing totalled EUR 3.7 billion (EUR 5.2 billion), of which EUR 3.3 billion consisted of loans and EUR 0.4 billion of lease financing. Long-term customer financing at year-end amounted to EUR 29.2 billion, of which loans totalled EUR 27.9 billion and leasing EUR 13.3 billion. The amount of new lending fell by 31.3% from the previous year's figure, and the amount of lease financing increased by 0.7%.

Inspira, MuniFin's subsidiary company that specialises in financial advisory services, had a turnover of EUR 1.7 million in 2021, while it was EUR 2.8 million in 2020. This difference is mainly due to lower pass-through expenses.

As expected, municipal finances are returning to normal and non-profit housing projects continue to have a steady need for financing. We therefore expect the demand for our services to grow in 2022.

Case

Independent living in Aurinkolinna

Finns with disabilities or special needs may still struggle to find a home because suitable apartments are in short supply. Approximately one third of Finland's 31,000 adults with disabilities still live in their childhood home.

Aurinkolinna in Espoo offers modern and accessible homes and shared facilities for twenty young people who require round-the-clock support due to disabilities or autism. The building was funded by MuniFin and designed in close collaboration with the residents to best serve their special needs. The aim is to offer all residents individual solutions for independent living.

Aurinkolinna complements the housing options for people with disabilities provided by the City of Espoo. It employs 14 social and health care professionals on a permanent basis.

Case

Inspira helped Kemi analyse the financial effects of the health and social services reform

Finland's health and social services reform and its potential long-term effects have caused uncertainty in municipal financial planning. The City of Kemi took advantage of Inspira's services in analysing the reform's financial impact.

Kemi's economy has been in deficit for many years. Inspira analysed reform's effect on the city's economic capacity and the level of sustainable investment until 2030. This analysis included two alternative scenarios for the future, including an assessment of the effects of the transfer of support services from the city to the wellbeing services county and the ownership of health and social services facilities, which have not been taken into account in the calculations by the Ministry of Finance.

Inspira's analysis confirmed the city's own assessment: the minor positive financial impact of the reform will not be enough to balance Kemi's economy. Concrete measures to remedy the situation are therefore now being planned, with the goal of stabilising the city's economy during the current planning period, which ends in 2025.

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New services for analysing the effects of the health and social services reform
Finland's health and social services reform will change municipal service responsibilities in a substantial way, creating uncertainty to municipal income, expenses and financing. In 2021, we developed our service offering to match the changing customer needs and continued to work on helping balance the finances of municipalities and hospital districts. Inspira's new offerings for municipalities garnered interest; these include services that help analyse the financial effects of the health and social services reform as well as tools for planning the finances and investments of the new wellbeing services counties.

Support for sustainable financing
We aim to be the main financing partner for our customers. We support and encourage our customers to manage their finances in a sustainable way and to make sustainable investment decisions. Our financing includes a thorough assessment of the profitability of investments as well as comprehensive insight into the customer's financial situation. We also monitor the ESG risks of our customers.

In addition to providing financing, we support our customers by further bolstering their expertise in overall financial management. We offer customers a comprehensive range of financial modelling, reporting and forecasting tools, the use of which continued to increase in 2021. We continued to develop our digital services and further increase the digitalisation of our financing process to make it even more efficient and user-friendly. Our online events, digital training sessions and economic reports have gained a firm foothold and keep attracting larger audiences.

Financing for impactful investments

We offer our customers two sustainable finance products – green and social finance – to finance their sustainable investments.

Our green finance is aimed at environmentally friendly investments that produce clear and measurable environmental benefits. Our Green Bonds Framework includes seven project categories that are eligible for green financing: sustainable buildings, sustainable public transportation, water and wastewater management, renewable energy, energy efficiency, waste management, and environmental management.

Our social finance is aimed at investments that produce widespread social benefits. They contribute to equality, communality, welfare or regional vitality. Our Social Bonds Framework includes three project categories: welfare, social housing and education.

Through our green and social finance, we want to encourage our customers to make environmentally and socially sustainable investments. To do so, we grant a margin discount for eligible projects, making green and social finance a more affordable way to finance an investment than a regular loan. So not only do our customers get to enjoy the positive impacts of their investments, they also benefit financially. Sustainable finance projects demonstrate how committed our customers are to the wellbeing of the environment and society.

Our customers make many impactful investments that are eligible for our green or social finance, and our green and social portfolios have kept growing year by year. At the end of 2021, we financed a total of 195 green and 59 social projects. The impacts of our sustainable finance are discussed in more detail in our Green and Social Impact Reports.

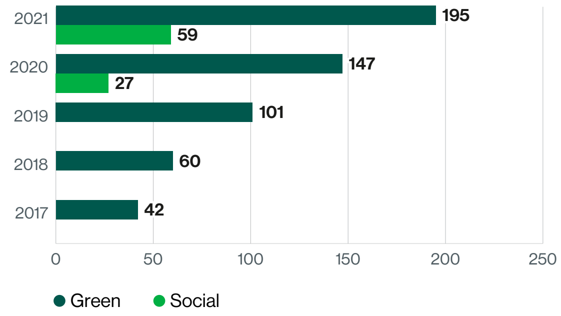
Annual CO_2 emissions avoided/reduced in green finance projects

tCO_2 **85,557**

Annual energy savings in green finance projects (avoided/reduced)

MWh **31,351**

Number of green and social finance projects in 2017–2021



Stimulating monetary policy ensured favourable market conditions – MuniFin's funding activities were highly successful

The year 2021 was characterised by stable capital markets. We were able to successfully carry out our funding operations as planned.

We acquire all of our funding from the international capital markets as standardised issuances under debt programmes. Our long-standing funding strategy has focused on diversification into several markets, currencies, maturities and investor types to secure access to funding in all market conditions.

Despite the COVID-19 pandemic, capital markets remained stable and favourable in 2021. Central banks' financing operations and securities purchase programmes helped maintain strong market liquidity, low interest rates and low credit risk premiums. The global economy recovered from the pandemic at a rapid rate, which was also seen in the rising values of stocks and other assets, but uncertainty began to increase towards the end of the year as inflation started to make the headlines both in Europe and the US. Market expectations on central banks changing their monetary policies and reducing their stimulus measures also increased.

Total number of funding transactions 2017–2021

2017	2018	2019	2020	2021
318	260	198	218	208

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Key sustainability indicators in funding

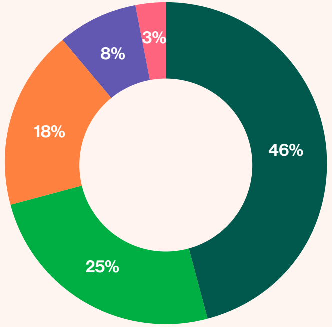
1 **Sustainable products and services**

- Survey of North European issuers

2 **Forerunner in sustainability**

- Green bond issued
- Social bond issued

Geographical distribution of funding



- Europe
- Asia Pacific
- Nordics
- Americas
- Africa and The Middle East

Successful year with no surprises in funding

Our funding activities were successful and carried out as planned. Strong market liquidity ensured strong demand for our funding transactions throughout the year. This demand also showed in the average cost of our funding, which ended up being less than estimated. Our new long-term funding in 2021 totalled EUR 9.4 billion (EUR 11.0 billion). Short-term debt instruments under the Euro Commercial Paper (ECP) programme amounted to EUR 3.8 billion at the end of the year (EUR 3.9 billion). We continued issuing green and social bonds in line with our strategy. We also won Environmental Finance's 2021 Green Bond of the Year award as recognition of our long-term commitment to sustainability.

Strategic benchmark bonds well received

Our funding mainly focused on public markets and benchmark transactions, which all had excellent timing and very strong investor demand. In 2021, we issued five strategic benchmark bonds: three denominated in euros and two in US dollars. Additionally, we increased our social bond issued in 2020 by EUR 500 million and issued a green bond denominated in pounds sterling. These highly successful issuances show that there is a growing demand for sustainable and safe investments around the world, but they are also a testament to our good reputation in the international capital markets.

Successful tactical funding ensured competitive financing

We improved our ability to use new, alternative reference rates in our funding as a response to changes in market reference rates. In 2021, we issued our first SOFR-linked note as a private placement. This transaction was later increased with two additional transactions. In addition, we were active in the GBP market by issuing approximately GBP 1.1 billion, as well as in the NOK market, where we issued NOK 5.2 billion in 2021.

We also participated for the second time in the European Central Bank's third series of targeted longer-term refinancing operations (TLTRO III) with EUR 750 million, which helps us ensure our customers' financing on competitive terms. Our TLTRO III financing now totals EUR 2 billion. We also continued our operations in the Japanese Uridashi market.

We aim to continuously develop and improve our funding processes. To this end, we piloted a digital platform together with Citibank and implemented a digital bond issuance and its documentation, gathering information and experience on the opportunities of digital platforms.

Main funding operations in 2021

January: 5-year benchmark bond, USD 1.5 billion

February: 10-year benchmark bond, EUR 1.0 billion

April: 7-year benchmark bond, EUR 500 million

June: TLTRO III operation, EUR 750 million

July: Inaugural SOFR-linked note, USD 200 million

August: 5-year benchmark bond, USD 1.0 million

October: Increase to social bond maturing in 2035, EUR 500 million

November: Green bond, GBP 300 million

November: Digital issuance in private placement

Regulation will change the markets of green finance and green bonds
The EU Green Deal, and especially the actions on sustainable finance, will affect the financial markets in many ways. We have followed the development of the EU Taxonomy and estimated its effects on our operations. In the next few years, the most significant effect of the Taxonomy will be the reporting obligations it will introduce.

We also expect the EU Taxonomy to affect the markets of green finance and green bonds. We have analysed the European Commission's proposal on the EU Green Bond Standard, which uses the same screening criteria for green investments as the Taxonomy.

Sustainable finance regulation is a broad and complex package that will require clarification in terms of both market practices and the regulation itself. At project level, operating practices and information availability will have to be improved so that our customers can carry out investment projects that adhere to the EU Taxonomy.

Case

MuniFin wins 2021 Green Bond of the Year

The online news and analysis service Environmental Finance chose MuniFin as the winner of the 2021 Green Bond of the Year award in the local authority or municipality category. The successful EUR 500 million, 10-year green bond was our fourth bond of this type. It was issued in October 2020 and it was nearly seven times oversubscribed.

The prestigious award is highly valued in the global capital market. It is a testimony to our long-term commitment to sustainability.

By the end of 2021, we had issued green bonds worth approximately EUR 2 billion in total. Our goal for 2024 is to increase the proportion of green and social finance to 20% of all our long-term customer finance. Our Green Bonds Framework was created according to the International Capital Markets Association's Green Bond Principles and reviewed by Cicero and the Stockholm Environment Institute (SEI). Cicero awarded our framework with the second-best rating of "Medium Green".

Liquidity increased in 2021

In 2021, low yields continued to present challenges for our liquidity management. For this reason, we made fewer long-term liquidity investments and increased our central bank deposits. We also kept improving the sustainability of our investment operations and published our Sustainable Investment Framework.

The credit and market risks as well as the expected yield of our long-term liquidity investments are diversified geographically and by asset class. The year 2021 was characterised by central banks' stimulus measures. Low interest rates and credit risk premiums were challenging in terms of yields. The European Central Bank's targeted longer-term refinancing operations (TLTRO III) reduced the demand for financing for certain asset classes and especially for banks. As a result, fewer covered bonds were issued than before. We decreased the share of long-term liquidity investments out of our total liquidity due to lower expected yields, and increased the share of central bank deposits.

We hedge against the interest rate risk of liquidity investments with interest rate swaps. Changes in interest rates therefore do not have a direct impact on changes in the value of our liquidity investments.

Total liquidity 2017–2021, EUR billion

2017	2018	2019	2020	2021
9.3	8.7	9.9	10.1	12.2

MuniFin

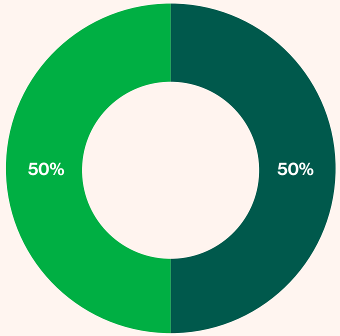
Key sustainability indicators in liquidity management

2

Forerunner in sustainability

- Total amount of socially responsible investments
- ESG score of the investment portfolio compared to the benchmark

MuniFin's socially responsible investments (SRIs)



- Green bonds
- Social bonds

Total amount of MuniFin's SRIs: EUR 456 million.

Case

Sustainable Investment Framework summarises our liquidity investment principles

One of our main principles is the continuous improvement of sustainability, and it is therefore closely integrated into our investment process. In 2021, we published our Sustainable Investment Framework, which summarises the sustainability principles, processes and responsibilities of our investment operations. The purpose of the framework is to increase transparency and promote sustainable investment throughout the industry.

The framework is based on our sustainability policy and defines three main principles for sustainable liquidity management. Firstly, we select investments and issuers so that their ESG rating at the portfolio level exceeds the benchmark index. Secondly, we exclude investments that do not align with our sustainability principles. Thirdly, we allocate part of our investment portfolio to bonds that further the goals of sustainable development and are classified as sustainable. We make all our liquidity investments by following our ethical criteria.

We monitor the average ESG rating of our liquidity portfolio and manage it so that it remains above the benchmark. At the end of 2021, the ESG rating of our long-term liquidity portfolio was 59.3 (55.7), exceeding the benchmark index by 3.4 points (2.4). Our direct sustainable investments totalled EUR 456 million (EUR 355 million).

We steer our liquidity according to our risk appetite framework. The minimum amount of short-term liquidity, measured by the liquidity coverage ratio (LCR), must meet the statutory requirement of 100% on a daily basis. As a long-term requirement, total liquidity must be enough to cover uninterrupted business for a survival horizon of at least 12 months. A new Net Stable Funding Ratio (NSFR) requirement of 100% took effect in June 2021.

At the end of the year, MuniFin's LCR stood at 334.9% (264.4%) and NSFR at 123.6% (116.4%). Our total liquidity could have covered uninterrupted business for 14.2 months (12.3).

At the end of 2021, MuniFin's total liquidity was EUR 12.2 billion (EUR 10.1 billion).

Towards a more agile organisation

MuniFin provides a physically and mentally safe working environment that promotes the general wellbeing of employees and offers equal opportunities.

At the end of 2021, MuniFin had 164 employees working in various specialist positions. We started the year in a renewed organisational model, which defines our internal organisation but also our ways of working and our development in a broader context. The constantly changing operating environment and our versatile work tasks require continuous professional development from our employees. We therefore offer our employees plenty of opportunities to participate in training, support their ability to cope with their tasks and help them find a good work-life balance.

An essential goal for us is to improve occupational wellbeing and job satisfaction to ensure that our skilled employees feel that their work is meaningful. Our objective is to achieve a good level of personnel satisfaction. This is measured through an anonymous survey conducted by an independent research company, and each year, we make a development plan based on the results. In 2021, we focused especially on the improvement of leadership and organisational culture.

In autumn 2021, we also established a culture working group made up of MuniFin employees, tasked with helping develop a stronger organisational culture. The group's work resulted in a culture book, which was published internally in December.

Key sustainability indicators in the organisation

3 Developing wellbeing at work

GOAL 2024:
Personnel satisfaction is at a good level

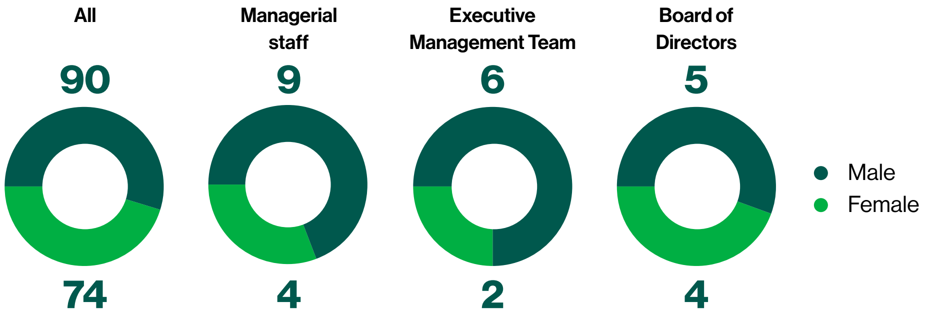
- Gender distribution of employees
- Gender distribution of managerial staff
- Gender distribution of the Executive Management Team
- Gender distribution of the Board of Directors
- Age distribution of employees
- Employer's pension insurance (TyEL) category
- Training days per employee
- Gender pay gap
- Employee turnover

Diversity and equal opportunities

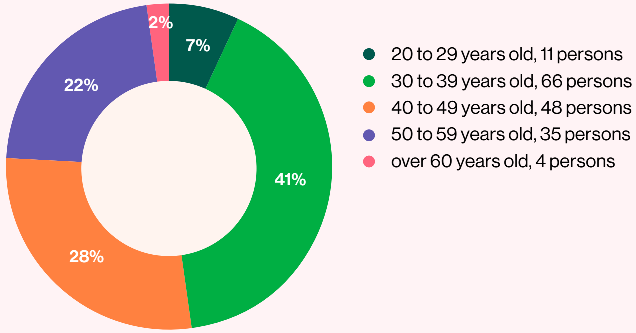
Diversity and offering equal opportunities to everyone at the workplace are important elements of our corporate culture. Diversity refers to unique, individual characteristics such as work experience, competence, gender or national origin.

We strive to be an appealing, values-led organisation that is capable of change. We want to attract, foster and retain diverse employees in our company, and we want to promote an inclusive working environment that appreciates the positive value of individual differences. MuniFin had a very even gender and age distribution in 2021. The gender distribution in the Board of Directors was balanced, but executive and managerial positions had a male majority.

Gender distribution of employees



Employees by age



Gender pay gap in similar positions

2%

Men have higher pay than women.

Employee wellbeing is a priority

We invest in employee wellbeing in many ways. We strive to support the wellbeing of our employees and to prevent work-related stress and excessive workloads. We provide extensive healthcare services, good training opportunities, commuting and recreational benefits. We also organise joint leisure-time activities. In 2021, we began offering access to an external mental wellbeing service for our employees to support their work capacity. Our employees have had very few absences due to sickness, and none have claimed disability pension due to reduced working ability. MuniFin therefore ranks in the best employer's pension (TyEL) category (1). These categories do not apply to MuniFin's subsidiary Inspira due to its smaller payroll.

In autumn 2021, we established new remote working principles that support employee wellbeing. Our experts now have the flexibility to mostly choose where in Finland they want to work: at home, at the office or at their holiday house, for example.

We provided our employees with financial support for purchases required by remote working. We also offered every employee mobile broadband access. In addition, we improved the conditions for hybrid work by upgrading the videoconference technology in our meeting rooms.

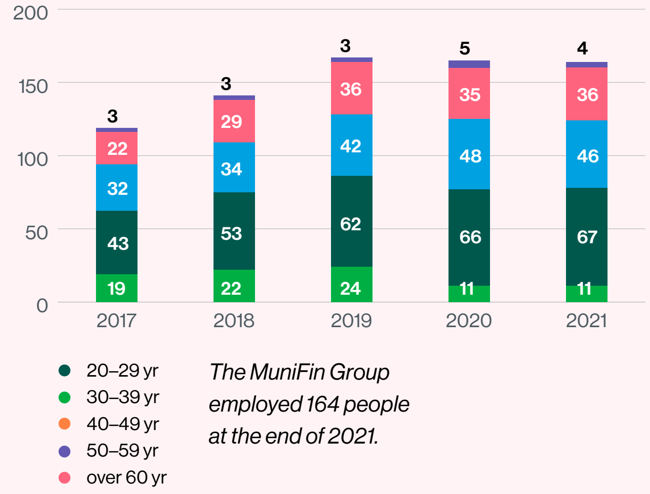
Training and tools to accomplish change

The changes in the operating environment and the development of our operations give rise to new competence requirements. In 2021, we mapped out the requirements for each unit, evaluating what skills would become more relevant and what less so in the future.

We offered all employees the opportunity to take part in finance training tailored for MuniFin and organised in collaboration with Aalto University Executive Education. This training proved popular and will be continued in 2022.

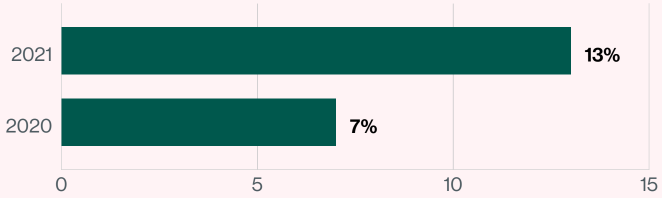
Managerial training in 2021 focused especially on the implementation of coaching leadership on an everyday level, and this work will continue in 2022. Managers, executives and key persons in change processes were each given tailored training and tools to bring the planned changes at MuniFin to a successful conclusion.

Age distribution and number of employees



The MuniFin Group employed 164 people at the end of 2021.

Employee turnover



Employer's pension insurance (TyEL) category

1

The TyEL contribution category indicates the rate of disability pensions due to reduced working ability. The fewer people are granted disability pension, the better the employer's category (with 1 being the best on a scale of 1–11). Due to its smaller payroll, the TyEL categories do not apply to Inspira, which pays the average TyEL contribution instead of a category-based contribution.

Corporate governance

MuniFin promotes a level of responsibility that goes over and above minimum legal requirements in all its decisions and structures. This means, for example, adhering to various non-binding recommendations. Our commitment to strong corporate governance is emphasised in our key values and strategy and implemented in all our operations.

As a credit institution, our operations are governed by credit institution regulations and related supervisory guidelines, which contain a considerable amount of requirements on governance. In addition to these minimum legal requirements, we deem it important that our corporate governance is professional and efficient and creates a solid basis for healthy business principles. Our decision-making and responsibilities are described in the Corporate Governance Policy approved by the Board and in MuniFin's annual Corporate Governance Statement. Our operations are also guided by the Sustainability Policy, which is approved by our Board of Directors.

Strong corporate governance also includes our HR policy. In the terms and conditions of employment, we comply with Finnish legislation and the collective agreement for the financial sector. The MuniFin website has a whistleblowing channel that can be used to report any suspected misconduct, also anonymously.

MuniFin is a signatory to the United Nations Global Compact. This membership demonstrates we are committed to operating in ways that meet and promote fundamental responsibilities in the areas of human rights, labour, environment and anti-corruption wherever they have a presence.

No violations of regulations

During all our years of operation, there have been no material regulatory violations that would have led to official sanctions. In addition to internal control mechanisms, our compliance function oversees MuniFin's compliance with regulation based on an annual monitoring plan and provides internal guidance and support in compliance-related matters. Any significant contraventions of regulations are reported on a monthly basis to the management and Board of Directors as part of our risk position reporting. This reporting practice is part of our risk appetite framework.

Key sustainability indicators in governance

4 Strong corporate governance

GOAL 2024: All ESG risks associated with customers are assessed with a uniform methodology

- 100% of employees have completed Sustainability Policy training
- Violations of regulations
- Memberships of associations and national interest organisations
- International and Finnish commitments
- Sustainalytics ESG risk rating

Monitoring the sustainability of our operations

We take environmental responsibility into consideration in our work by committing to continuously reducing the negative environmental impacts of our operations. However, the majority of our positive environmental impact is indirect, created in our customers' own activities.

MuniFin Group has received the WWF Green Office certification. Green Offices are required to take environmental issues into broad consideration in their business premises, decision-making and operations. Green Offices also commit to continuously improving the environmental impact of their operations. The most recent Green Office assessment was performed in autumn 2021. According to the assessment, MuniFin fulfils the Green Office criteria.

We report on the environmental impact of our operations on an annual basis. In 2021, we began calculating the emissions of both our own operations and the projects we have financed, in order to better understand our carbon footprint and our further emission reduction options. The first calculations were performed for the year 2020 because of the timing of the calculations and the availability of data. We will continue to monitor our emissions in the future and work to assess the best ways to reduce them.

We compensate for the emissions generated by our employees' air travel and for the CO_2 emissions caused by large customer events that we organise. In 2021, we compensated for a total of 5 CO_2 tonnes of our emissions.

The COVID-19 pandemic influenced the environmental impact of our operations in 2021. Remote working continued on a large scale, significantly reducing MuniFin employees' travel to the office and for other work-related reasons compared to pre-pandemic times.

Memberships of associations, networks and national interest organisations:

- Climate Bonds Initiative
- European Association of Public Banks
- FIBS Pro – sustainable business network
- Finsif – Finland's Sustainable Investment Forum
- Hinku network – Towards Carbon Neutral Municipalities and Regions
- International Swaps and Derivatives Association ISDA
- International Capital Markets Association ICMA
- Nordic Capital Markets Forum
- REETTA – economic and climate management project for municipalities
- Ilmava – climate work coaching for municipal leaders
- Green Building Council Finland FIGBC (joined in 2021)

Commitments

- UN Global Compact initiative
- Commitment 2050 initiative of the Finnish Prime Minister's Office

Sustainability scorecard

We report the indicators for our key principles of sustainability and our performance in a sustainability scorecard. Our 2021 report is the first in which we publish specific performance figures and the limit values used in the assessment.

KEY PRINCIPLE	Performance and trends	2021	Limit values
Sustainable products and services	**GOAL 2024:** Customer satisfaction is at a very good level	6.24	Green: ≥ 5.5 Orange: 4–5.4 Red: < 4
	Training sessions, seminars and events for customers	24	Green: ≥ 16 per year Orange: 11–15 per year Red: ≤ 11 per year
	Cooperation and partnerships with educational institutions	3	Green: ≥ 4 cooperation agreements Orange: 1–3 cooperation agreements Red: No cooperation agreements
	Number of users of digital MuniFin services	+233	Green: Number of users has increased Red: Number of users has decreased
	Survey of North European issuers	1	Green: First or second place in our category Orange: Third or fourth place in our category Red: Fifth or lower place in our category
	Proportion of state-subsidised housing finance for special groups in new lending	9.2%	Green: More than 15% Orange: 10–15% Red: Less than 10%
Forerunner in sustainability	**GOAL 2024:** Green and social finance account for 20% of the long-term customer finance portfolio	12%	Green: The proportion is growing in line with the growth path Orange: The proportion is growing, but at a rate 1–2 percentage points below the growth path Red: The proportion is growing, but at a rate more than 2 percentage points below the growth path
	Amount of green and social finance (EUR)	+ EUR 1.1 bln	Green: Amount on balance sheet has grown > EUR 1 billion Orange: Amount on balance sheet has grown EUR 500 million – 1 billion Red: Amount on balance sheet has grown < EUR 500 million
	Number of green and social finance projects	+81	Green: More than 60 new projects approved in the past year Orange: 30–60 projects approved in the past year Red: Fewer than 30 new projects approved in the past year
	Green bond issued	Yes	Green: Yes Red: No
	Social bond issued	Yes	Green: Yes Red: No
	Total amount of socially responsible investments	15.6%	Green: ≥ 10% of issued responsible funding Orange: 8–10% of issued responsible funding Red: ≤ 8% of issued responsible funding
	ESG score of the investment portfolio compared to the benchmark	Above	Green: Above the benchmark index Red: Below the benchmark index

KEY PRINCIPLE	Performance and trends	2021	Limit values
Developing wellbeing at work	**GOAL 2024:** Personnel satisfaction is at a good level	A	**Green:** AA Good, AA+ Good+, AAA Excellent **Orange:** A Satisfactory, A+ Satisfactory + **Red:** C Poor, B Passable
	Gender distribution of employees	55/45	**Green:** 40–60% (of either gender) **Orange:** 61–79% or 21–39% (of either gender) **Red:** 80% or higher / 20% or lower (of either gender)
	Gender distribution of managerial staff	71/29	**Green:** 40–60% (of either gender) **Orange:** 61–79% or 21–39% (of either gender) **Red:** 80% or higher / 20% or lower (of either gender)
	Gender distribution of the Board of Directors	75/25	**Green:** 40–60% (of either gender) **Orange:** 61–79% or 21%–39% (of either gender) **Red:** 80% or higher / 20% or lower (of either gender)
	Gender distribution of the Executive Management Team	56/44	**Green:** 40–60% (of either gender) **Orange:** 61–79% or 21–39% (of either gender) **Red:** 80% or higher / 20% or lower (of either gender)
	Age distribution of employees	All represented	**Green:** All age groups are represented **Orange:** One age group is not represented **Red:** Two age groups are not represented
	Employer's pension insurance (TyEL) category	1	**Green:** 1–3 **Orange:** 4–6 **Red:** 7 or higher
	Training days per employee	2.5	**Green:** ≥ 4 **Orange:** 2–3.9 **Red:** < 2
	Gender pay gap	2%	**Green:** By pay grade, average difference max 3% **Orange:** By pay grade, average difference 3.1–5% **Red:** By pay grade, average difference more than 5%
	Employee turnover	13%	**Green:** ≤ 10% **Orange:** 10.1–13% **Red:** > 13%
Strong corporate governance	**GOAL 2024:** All ESG risks associated with customers are assessed with a comparable methodology		**Green:** ESG risks associated with all customers have been assessed using comparable methods **Orange:** ESG risks associated with the most significant (top 20) customers have been assessed using comparable methods **Red:** ESG risks have not been assessed
	100% of employees have completed Sustainability Policy training	100%	**Green:** 95% **Orange:** 90–95% **Red:** < 90%
	Violations of regulations	No violations	**Green:** No violations **Orange:** Formal public statement by a supervisor requiring actions due to regulatory violation but no sanction measures are posed **Red:** Material sanction from supervisors or regulators (administrative fine, public warning or penalty payment)
	Memberships of associations and national interest organisations	12	**Green :** ≥ 4 **Orange:** 1–3 **Red:** 0
	National and international commitments	2	**Green:** Number of commitments has remained the same or increased **Orange:** Number of commitments has decreased **Red:** No commitments
	ESG rating	11.8	**Green:** Improvement in line with the target path **Orange:** Improvement from the previous year, but falling behind the target path **Red:** Decrease from the previous year

Principles of sustainability reporting

Although neither the EU Non-financial Reporting Directive nor the Finnish Accounting Act obliges MuniFin to disclose non-financial information, sustainability is a matter of such great importance to us that we have decided to include sustainability reporting as part of our Annual Report. We have applied the GRI Standards where applicable, but our reporting does not meet all the GRI requirements.

In our work, sustainability is realised particularly through our business operations, organisation and governance. Our reporting indicators are based on the key principles of sustainability approved by the MuniFin Board of Directors. We reserve the right to add, remove or change the existing indicators and goals, but any changes must be in line with the key principles specified in our sustainability strategy.

In 2021, we made some changes to our reporting indicators. We removed the indicators Breakdown of state-subsidised housing finance and Breakdown of state-subsidised housing finance for special groups and replaced these with Proportion of state-subsidised housing finance for special groups in new lending because we do not seek to achieve a certain breakdown. We also removed the indicator Geographical distribution of funding. In addition, we left out the green finance indicators Reduction of CO_2 emissions in green projects, Energy savings in green projects and Distribution of projects by category, but we continue to report this information in our Green Impact Report. We also made some small changes to the names of the indicators. The most significant amendment concerned the indicator related to the assessment of ESG risks associated with our customer financing: instead of using uniform assessment methods, we will now use comparable assessment methods to better acknowledge the different risks related to customer groups and financed projects. As a new indicator, we introduced an external ESG rating (Sustainalytics ESG risk rating), which offers a broad overview of MuniFin's sustainability.

MuniFin's sustainability reporting has not been verified by an external party.

Board of Directors

Under the Articles of Association, the Board of Directors has a minimum of five and a maximum of nine members. The Annual General Meeting elects the members of the Board, and each member's term of office will terminate when the Annual General Meeting following their election concludes.

In accordance with the proposal of the Shareholders' Nomination Committee, the 2021 Annual General Meeting elected nine members to the Board of Directors for the 2021–2022 term (from the end of the AGM to the end of the next AGM).

Kari Laukkanen, b. 1964
Chair
Board member since 2018
Education: M.Sc. (Econ.)
Primary occupation: Board professional and financial consultant (Lauvest Oy)
Other material positions of trust: Chair of the Board of Directors at Emittor Oy
Independence: Independent of the company and its shareholders
Previous key work history and positions of trust: Long and diverse international banking experience in various positions at a global banking group (Citigroup, 1990–2016, last 13 years Managing Director, Citi Country Officer of the Finnish branch).

Maaria Eriksson, b. 1967
Vice chair
Board member since 2019
Education: M.Sc. (Econ.), CEFA
Primary occupation: Deputy CIO, COO, Investments, Keva
Other material positions of trust: Member of the Advisory Committee for Investments at the University of Oulu
Independence: Independent of the company, not independent of its significant shareholders (employed by a significant shareholder)
Previous key work history and positions of trust: Long and diverse experience in capital market tasks at Keva, Finland's largest occupational pension insurance company (since 1998), and before that as portfolio manager and economist in the banking sector (Merita 1996–1998) and as an economist at the Bank of Finland (1994–1996).

Markku Koponen, b. 1957
Board member since 2018
Education: Master of Laws (LL.M.), trained on the bench, EMBA
Primary occupation: Board professional
Other material positions of trust: -
Independence: Independent of the company and its significant shareholders
Previous key work history and positions of trust: Long and diverse experience in communications, legal affairs and banking regulation at OP Financial Group, one of the largest banking groups in Finland (1985–2017). More than 20 years of experience in executive positions.

Vivi Marttila, b. 1966
Board member since 2016
Education: M.Sc. (Econ.)
Primary occupation: Mayor of the municipality of Simo
Other material positions of trust: Member of the Board of Directors at LocalTapiola Lappi
Independence: Independent of the company and its significant shareholders
Previous key work history and positions of trust: Long and diverse experience of auditing in the public sector and at listed companies (1990–2001 and 2011–2015) as well as a city finance director (2001–2011).

Tuomo Mäkinen, b. 1972
Board member since 2021
Education: M.Sc. (Econ.)
Primary occupation:
Finance Manager, City of Helsinki
Other material positions of trust:
Chair of the Board of Directors at Helsinki Stadion Oy (Helsinki City Group, non-commercial entity)
Independence: Not independent of the company and its significant shareholders (employed by a significant shareholder and customer)
Previous key work history and positions of trust: Long experience of executive-level financial responsibilities at the City of Helsinki since 2000. Finance Manager since 2014.

Minna Smedsten, b. 1976
Board Member since 2021
Education: M.Sc. (Econ.)
Primary occupation: CFO at Taaleri Group
Other material positions of trust:
Board member and chair of the audit committee at Basware Oyj; board member at the following companies in the Taaleri Group: Taaleri Energia, Taaleri Real Estate, Taaleri Private Equity Funds, Taaleri Energia Operations, Taaleri Energia Funds Management Oy
Independence: Independent of the company and its significant shareholders
Previous key work history and positions of trust: Long experience in executive-level financial management positions at the financial sector since 2000 (Taaleri, GreenStream, Kaupthing Bank, Norvestia).

Denis Strandell, b. 1958
Board member since 2020
Education: M.Sc. (Econ.)
Primary occupation:
Mayor of the City of Hanko
Other material positions of trust:
Member of the Board of Directors at C-Fiber Hanko Oy; deputy member of the Board of Directors at Novago Business Development Ltd
Independence: Independent of the company and its significant shareholders
Previous key work history and positions of trust: Long and diverse experience in capital market tasks and investment services at Finnish and Nordic banking and investment services groups (1986–2011: Protos, Aktia, Unibank, Danske Bank, FIM). Long experience (since 2000) of Finnish municipal sector administration in the Kirkkonummi municipal council and municipal government prior to becoming the Mayor of the City of Hanko (since 2015).

Leena Vainiomäki, b. 1961
Board member since 2021
Education: M.Soc.Sc (Political sciences)
Primary occupation: Board professional
Other material positions of trust:
Member of the Board of Directors at LRV Corp Oy and Veikkaus Oy; member of the Board of Directors and Audit Committee at Suomirata Oy (non-commercial entity)
Independence: Independent of the company and its significant shareholders
Previous key work history and positions of trust: Long and diverse experience in executive-level positions at the financial sector. Country Manager at Danske Bank (2018–2020), other executive-level positions at Danske Bank since 2011 and at Nordea and its predecessors since 1988.

Kimmo Viertola, b. 1961
Board member since 2020
Education: M.Sc. (Econ.)
Primary occupation: Director General of the Ownership Steering Department at the Prime Minister's Office
Other material positions of trust:
Chair of the Shareholders' Nomination Board at Fortum (until January 2021); chair of Neste Shareholders' Nomination Board; member of the Nomination Committee at SSAB
Independence: Independent of the company, not independent of its significant shareholders (employed by a significant shareholder)
Previous key work history and positions of trust: Long experience in management and finance in various tasks at Finnish Industry Investment Ltd (1998–2017), banking experience in Skopbank (1993–1994) and FennoScandia Bank in London (1989–1992) as well as from board work in several companies.

Executive Management Team

Under the Articles of Association, the company has a CEO and a Deputy to the CEO appointed by the Board of Directors. The CEO's duty is to manage the company's operations in order to implement the resolutions made by the Board of Directors and maintain the company's operations in line with the strategy, risk management principles and limits set by the Board of Directors. Supported by the Executive Management Team, the CEO is responsible for ensuring the company's effective day-to-day operations and organisational structure and reporting to the Board of Directors.

Esa Kallio, b. 1963
President and CEO
Employed by MuniFin since 2005
Education: M.Sc. (Econ)

Mari Tyster, b. 1975
Executive Vice President, Legal and Communications, Deputy to the CEO
Employed by MuniFin since 2009
Education: Master of Laws

Aku Dunderfelt, b. 1975
Executive Vice President, Customer Solutions
Employed by MuniFin since 2019
Education: BBA

Toni Heikkilä, b. 1965
Executive Vice President, CRO, Risk Management and Compliance
Employed by MuniFin since 1997
Education: Lic.Sc. (Econ.), M.Sc. (Finance)

Joakim Holmström, b. 1977
Executive Vice President, Capital Markets and Sustainability
Employed by MuniFin since 2008
Education: M.Sc. (Econ.)

Harri Luhtala, b. 1965
Executive Vice President, CFO, Finance
Employed by MuniFin since 2019
Education: M.Sc. (Econ.)

Minna Piitulainen, b. 1973
Executive Vice President, Development and HR Services
Employed by MuniFin since 2018
Education: M.Sc. (Psychology)

Juha Volotinen, b. 1975
CIO, Technology Services
Employed by MuniFin since 2021
Education: M.Sc. (Econ.)

Tax footprint

MuniFin Group's strategy and operating principles
The management of tax affairs is organised as part of the Group's financial management. The main observations and measures related to tax issues and tax risks are reported to the Board of Directors.

The Municipality Finance Group complies with the tax legislation in the payment, remittance and notification of taxes and charges. MuniFin's strategy in taxation is to support the business solutions and take taxation into account as one of the factors influencing the planning and decision-making related to the business solutions. Tax planning aims at controlling the uncertainties related to taxation and avoiding risks in interpretation. Therefore, MuniFin requests the tax authorities to provide preliminary rulings whenever necessary.

Taxes and tax-like payments paid and remitted
MuniFin acquires financing from the international capital markets but conducts business only in Finland. MuniFin therefore pays income taxes in full to Finland. MuniFin does not receive any income from abroad for which relevant withholding tax at the source is paid. MuniFin has no investments or operations in countries defined by the OECD as tax havens.

In 2021, the MuniFin Group employed 164 people, of whom 153 worked for the parent company. The Group's turnover was EUR 535 million and the profit before tax EUR 240 million. As a credit institution, MuniFin had the possibility to assign a credit loss provision in its accounting and taxation, in accordance with the Business Tax Act. The credit loss provision involves a deferred tax liability.

MuniFin's operations are mainly exempt from value-added tax. As MuniFin is unable to deduct the VAT related to purchases in its operations exempt from VAT, the VAT remains as final costs for MuniFin. MuniFin also runs leasing operations subject to VAT, for which VAT is paid and the VAT included in the purchases is deducted. The operations of MuniFin's subsidiary Inspira are subject to VAT. Inspira deducts VAT from its purchases and pays VAT for its sales. The amounts of VAT paid and remitted vary according to business volumes, and value-added taxes are not taken into account in the taxes paid and remitted.

TAXES AND TAX-LIKE PAYMENTS PAID (EUR 1,000)	2021	2020
Income tax	34,386	5,604
Employer's social security contributions	2,976	2,707
Stability fee to the EU crisis resolution fund	6,737	5,163
Total	**44,099**	**13,473**

TAXES TO BE REMITTED (EUR 1,000)	2021	2020
Withholding taxes	5,276	4,727
Employee's social security contributions	1,348	1,326
Total	**6,624**	**6,053**

Report of the Board of Directors and Financial Statements 2021

This is a voluntarily published pdf report, so it does not fulfill the disclosure obligation pursuant to Section 7:5§ of the Securities Markets Act.

MuniFin

In brief: MuniFin Group in 2021

- The Group's net operating profit excluding unrealised fair value changes amounted EUR 213 million (EUR 197 million) and it increased by 8.0% (6.2%). The Group's net interest income totalled EUR 280 million (EUR 254 million) and grew by 10.3% (5.8%). Costs in the financial year amounted to EUR 72 million (EUR 58 million). Costs excluding non-recurring item grew as expected and were EUR 2.6 million higher, making the figure 4.4% greater than in the previous year.

- The net operating profit amounted to EUR 240 million (EUR 194 million). Unrealised fair value changes amounted to EUR 27 million (EUR -3 million) in the financial year.

- Changes to the regulation of banks' capital adequacy (*CRR II* and *CRD V*) were applied at the end of June 2021. The Group's leverage ratio was 12.8% (3.9%) at the end of December. MuniFin fulfils the CRR II definition of a public development credit institution and may therefore deduct all credit receivables from the central government and municipalities in the calculation of its leverage ratio. This change explains the growth of leverage ratio.

- At the end of December 2021, the Group's CET1 capital ratio remained very strong, 95.0% (104.3%). Tier 1 and total capital ratio were 118.4% (132.7%). The new CRR II regulation lowered the capital ratio mainly due to the changes in the calculation of the counterparty credit risk and CVA VaR. CET1 capital ratio nevertheless exceeded the total requirement of 13.4% by over seven times, with capital buffers accounted for.

- The COVID-19 pandemic that broke out in March 2020 has now lasted almost two years, although its intensity has varied. As a whole, the pandemic has only had a minor effect on the Group's financial standing. In this financial year, the demand for financing in the municipal sector remained lower than expected due to surprisingly good economic development and the Government's temporary COVID-19 recovery measures in 2020.

- Long-term customer financing, including both long-term loans and leased assets totalled EUR 29,214 million (EUR 28,022 million) and grew by 4.3% (13.0%) at the end of December. The total of new lending in January–December amounted to EUR 3,275 million (EUR 4,764 million). Short-term customer financing decreased by 16.9% (previous year's growth was 62.9%) and reached EUR 1,089 million (EUR 1,310 million).

- Of all long-term customer financing, the amount of green finance aimed at environmentally sustainable investments totalled EUR 2,328 million (EUR 1,786 million) and the amount of social finance aimed at investments promoting equality and communality totalled EUR 1,161 million (EUR 589 million) at the end of December. Green and social finance have been well received by customers, and the amount of this finance increased by 46.9% (88.0%) from the previous year.

- In 2021, new long-term funding reached EUR 9,395 million (EUR 10,966 million). At the end of December, the total amount of acquired funding was EUR 40,712 million (EUR 38,139 million), of which long-term funding made up for EUR 36,893 million (EUR 34,243 million).

- The Group's liquidity has remained at a very good level. At the end of December, total liquidity amounted to EUR 12,222 million (EUR 10,089 million). The Liquidity Coverage Ratio (*LCR*) stood at 334.9% (264.4%) at the end of the year and the Net Stable Funding Ratio (*NSFR*) at 123.6% (116.4%).

- The Board of Directors proposes to the Annual General Meeting to be held in spring 2022 a dividend of EUR 1.03 per share for 2021, totalling EUR 40,235,711.94. The total dividend payment for 2020 was EUR 20,313,174.96.

- Outlook for 2022: The Group expects its net operating profit excluding unrealised fair value changes to be significantly lower than in the previous year, as per the Group's long-term profitability targets and more beneficial customer pricing enabled by these targets. The Group expects its capital adequacy ratio and leverage ratio to remain very strong. The valuation principles set in IFRS 9 may cause significant but temporary unrealised fair value changes, some of which increase the volatility of net operating profit and make it more difficult to estimate in the short term. A more detailed outlook is presented in the section *Outlook for 2022*.

Comparison figures deriving from the income statement and figures describing the change during the financial year are based on figures reported for the corresponding period in 2020. Comparison figures deriving from the balance sheet and other cross-sectional items are based on the figures of 31 December 2020 unless otherwise stated.

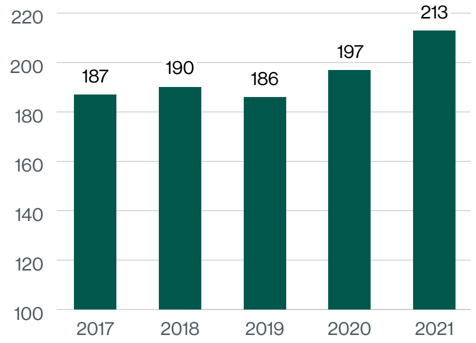
Key figures (Group)

	31 Dec 2021	31 Dec 2020
Net operating profit excluding unrealised fair value changes (EUR million)*	213	197
Net operating profit (EUR million)*	240	194
Net interest income (EUR million)*	280	254
New lending (EUR million)*	3,275	4,764
Long-term customer financing (EUR million)*	29,214	28,022
New long-term funding (EUR million)*	9,395	10,966
Balance sheet total (EUR million)	46,360	44,042
CET1 capital (EUR million)	1,408	1,277
Tier 1 capital (EUR million)	1,756	1,624
Total own funds (EUR million)	1,756	1,624
CET1 capital ratio, %**	95.0	104.3
Tier 1 capital ratio, %**	118.4	132.7
Total capital ratio, %**	118.4	132.7
Leverage ratio, %**	12.8	3.9
Return on equity (*ROE*), %*	10.7	9.4
Cost-to-income ratio*	0.2	0.2
Personnel	164	165

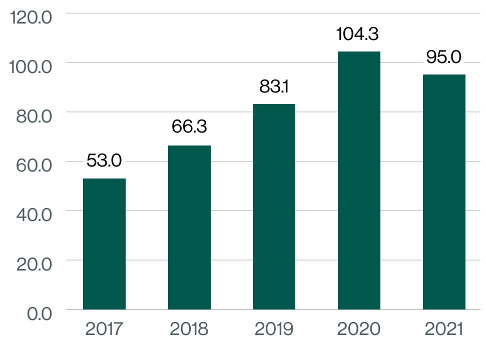
** Alternative performance measure.*
*** Figures for the financial year 2021 are calculated in accordance with CRR II. Comparison periods have not been restated to reflect the updated capital requirements regulation.*

The calculation formulas for all key figures can be found on pages 72–79. All figures presented in the Report of the Board of Directors are those of MuniFin Group, unless otherwise stated.

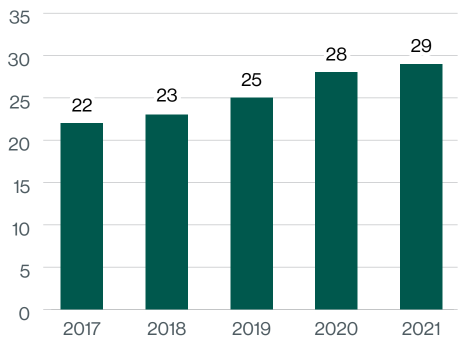
Net operating profit excluding unrealised fair value changes, EUR million*



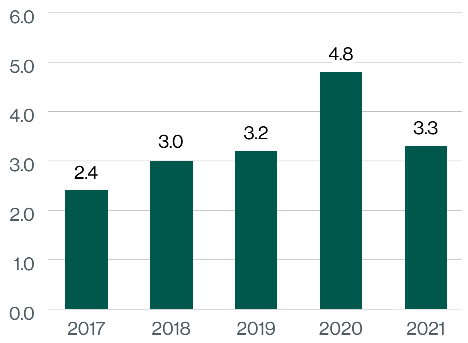
CET1 capital ratio, %**



Long-term customer financing, EUR billion*



New lending, EUR billion*



** Alternative performance measure.*
*** Figures for the financial year 2021 are calculated in accordance with CRR II. Comparison periods have not been restated to reflect the updated capital requirements regulation.*

The calculation formulas for all key figures can be found on pages 72–79. All figures presented in the Report of the Board of Directors are those of MuniFin Group, unless otherwise stated.

Report of the Board of Directors
1 January–31 December 2021

MuniFin

Operating environment in 2021

The global economy continued to recover rapidly from the COVID-19 recession in the first half of 2021. In Western countries, vaccination programmes proceeded relatively quickly and allowed restrictions to be gradually eased, which strengthened economic confidence and hastened the recovery of demand drivers. Further in the year, the release of pent-up demand put global supply chains to a test, causing a shortage of components and transport services. Disrupted supply chains and the steep increase in energy prices accelerated inflation and weakened consumer buying power. Towards the end of the year, bottlenecks in production and the outbreak of new, quickly spreading coronavirus variants slowed down global growth. The slowdown of growth was particularly substantial in China, where the cooling down of the overheated property sector weakened the development of construction investments and ran large construction companies into difficulties. The global economy is nevertheless expected to have achieved a growth of almost 6% in 2021.

The Finnish economy recovered better than expected. Finland's GDP exceeded the pre-pandemic level already in the second quarter of 2021. Employment also recovered briskly, with the total number of people in employment reaching an all-time high late in the year. The global component shortage also affected Finland's industrial production, but less than in many comparison countries. Finland also saw a smaller increase in inflation than the euro area on average. Labour shortage, the cost increase and the aggravation of the pandemic situation all slowed down Finland's economic growth in the second half of the year. As a whole, residential construction picked up in 2021. The volume of social housing production levelled off slightly after the strong growth of the previous year. The number of housing sales clearly grew in 2021 and the prices of dwellings rose by 3.5–4.0% in Finland. Municipal economy continued to strengthen in 2021 thanks to the central government's COVID-19 support package and surprisingly positive tax income development. The Finnish economy is expected to have grown by approximately 3.5% in 2021.

Monetary policy continued to focus heavily on recovery also in 2021. In the United States, financial policy supported especially private consumption, but late in the year, the Congress passed President Biden's Build Back Better Act introducing massive public investments. In Europe, national measures were complemented by investment programmes funded through NextGenerationEU, the EU's temporary recovery instrument. Monetary policy remained very light, although in the United States, the central bank Fed began to reduce its securities purchases in November and signalled that further tightening measures will be introduced in 2022.

In the first half of 2021, equity markets increased steeply and corporate loan risk premiums shrank in the wake of strong economic recovery. Long-term interest rates also increased, thus setting the price for the gradual normalisation of the monetary policy over the next few years. In the second half of the year, the spread of the Delta and Omicron coronavirus variants and the acceleration of cost-push inflation increased cyclical uncertainty. Share yields and long-term interest rate increases evened out towards the end of the year.

The yield on 10-year Finnish government bonds came to 0.07%, when it stood at -0.40% at the start of the year. Euribor rates remained relatively stable. At the end of 2021, 3-month Euribor was -0.57%. The value of the euro decreased in relation to the US dollar by over 7% in 2021. The drop was particularly influenced by the prospect of the Fed tightening its monetary policy at a considerably brisker pace than the European Central Bank (*ECB*).

Effects of the COVID-19 pandemic on MuniFin Group

The COVID-19 pandemic broke out in March 2020, and although its intensity has fluctuated, the pandemic has now plagued the world for almost two years. As a whole, the pandemic has only had a minor effect on MuniFin Group's financial standing. The pandemic has transformed working methods in the Group: the staff has mostly worked remotely almost throughout the pandemic.

In the 2021 financial year, the Finnish municipal sector's demand for financing was moderate in comparison, falling back from the spike in demand seen a year ago. The central government's COVID-19 support package in 2020 temporarily improved the financial position of municipalities, which reduced the demand for financing. The pandemic's effects on the demand for state-subsidised housing finance have remained minor throughout the crisis. Overall, the demand for financing in 2021 was slightly smaller than normal.

In 2021, the situation in the funding market stabilised after the previous year's disruptions caused by the COVID-19 pandemic. The Group had good access to funding.

The Group has protected the health and safety of its staff and the continuity of its operations by adhering to the national recommendation to work remotely. This has in part ensured the continuity of MuniFin Group's socially essential services and business processes also during the crisis. In October, the Group introduced a new hybrid work model and began to gradually return to the office, but returned to remote work in late November following the new national recommendation.

To facilitate customers' access to services while the restriction measures are in force, the Group has further developed its digital services and their support. MuniFin Group has also held several online events for customers and other stakeholder groups on themes related to the economic outlook and its effects on municipal finances.

Individual MuniFin Group customers have run into financial difficulties due to the COVID-19 pandemic. If the pandemic has temporarily impacted customers' repayment ability, the Group has offered them repayment holidays and made concessions to the payment terms of their loans. The demand for such arrangements has been modest: the Group granted only a few concessions in 2021. MuniFin Group's total credit risk has remained low, and the amount of expected credit losses (*ECL*) calculated according to the IFRS 9 standard also remains low. The Group's customer exposures have zero risk weight in the Group's capital adequacy calculation because they are from Finnish municipalities or involve a municipal guarantee or a state deficiency guarantee supplementing the real estate collateral. Based on the management's assessment, all receivables from customers will be fully recovered and no final credit losses are therefore expected. More information on forbearance measures and expected credit losses is available in Note *27* of the Consolidated Financial Statements.

In order to secure the banking sector's ability to continue financing its customers in exceptional circumstances, the banking authorities have eased some requirements for supervised banks. Most of these concessions were no longer applicable in 2021. Regardless of the underlying conditions, MuniFin Group's capital adequacy ratios remain strong. More information on the applied concessions and their effects are provided in the section *Capital adequacy*.

New variants of the coronavirus continue to cause uncertainty about the course of the pandemic and its effects on MuniFin Group and the economy in general. In any case, growing vaccination coverage significantly helps control this increasing uncertainty.

Effects of the health and social services reform on MuniFin Group

After a lengthy preparation process, the Finnish Parliament passed the legislative package concerning the reform of health and social services in the summer 2021, with the new wellbeing services counties to begin operations on 1 January 2023. At this stage, the wellbeing services counties will be largely funded by the central government, but the counties will nevertheless have government authorisation and guarantees for borrowing.

In terms of financing, the new legislation allows MuniFin to continue to act as a lender/counterparty to the loans and other liabilities that will be transferred to the counties. The Parliament is discussing a proposal that would also allow MuniFin to grant new loans. The purpose is to pass this bill by the time the wellbeing services counties begin their work. The entire health and social services reform and all its parties will benefit if the existing loans and future financing options will not undergo significant changes and the continuity of financing can be secured.

The FIN-FSA decided in January 2022, based on the consultation round held in late 2021, that wellbeing services counties, similar to the central and local government, will also fall in the zero-risk category in the capital adequacy regulation of banks. This decision simplifies the financing arrangements because it means that separate government guarantees are not required and that MuniFin can finance wellbeing services counties in the same way it does municipalities.

In 2022, the health and social services reform will be reflected in the Group's operations as practical preparation to act as a financing counterparty to the new wellbeing services counties. It is difficult to estimate the wider economic impact of the reform at this stage, when there is no practical information available on how wellbeing services counties will function. Wellbeing services counties' future level of investments will effect on MuniFin's financing volumes, but on the other hand the operating expenditures of the counties will be covered from the government's budget. In MuniFin's financing operations, health and social services lending plays such a role that changes in it will not have a material impact on MuniFin Group's financial development in the near future.

Information on the Group results

CONSOLIDATED INCOME STATEMENT (EUR million)	1–12/2021	1–12/2020	Change, %
Net interest income	280	254	10.3
Other income	4	2	85.4
Income excluding unrealised fair value changes	**285**	**257**	**11.0**
Commission expenses	-5	-5	-0.2
Personnel expenses	-18	-18	-0.3
Other items in administrative expenses	-17	-15	11.6
Depreciation and impairment on tangible and intangible assets	-16	-6	>100
Other operating expenses	-16	-15	6.6
Costs	**-72**	**-58**	**22.4**
Credit losses and impairments on financial assets	0	-1	-87.8
Net operating profit excluding unrealised fair value changes	**213**	**197**	**8.0**
Unrealised fair value changes	27	-3	<-100
Net operating profit	**240**	**194**	**23.5**
Profit for the financial year	**192**	**155**	**23.4**

The sum of individual results may differ from the displayed total due rounding. Changes of more than 100% are shown as >100% or <-100%.

Group's net operating profit excluding unrealised fair value changes

MuniFin Group's core business operations remained strong during 2021. The Group's net operating profit excluding unrealised fair value changes grew by 8.0% (6.2%) and totalled EUR 213 million (EUR 197 million). Income excluding unrealised fair value changes was EUR 285 million (EUR 257 million) and grew by 11.0% (4.3%). The Group's costs were EUR 72 million (EUR 58 million) rising by 22.4% from the previous year. The non-recurring item related to impairment on on-going IT system implementation, EUR 10.5 million, increased costs. Costs excluding the non-recurring item grew as predicted and were 4.4% higher than in previous year (-3.0%). The COVID-19 pandemic did not have a significant negative impact on the Group's core business and profitability in 2021 or in comparison year.

Net interest income totalled EUR 280 million (EUR 254 million), and increased by 10.3% (5.8%) on the previous year. Net interest income was positively affected by growing volumes and low market interest rates. In October 2021, the Group changed the conditions of its long-term customer loans with variable interest rates so that its customers will benefit from negative reference rates better than before. This change only had a minor effect on the Group's profits. The Group's net interest income does not recognise the interest expenses of EUR 16 million of the AT1 capital instrument, as the capital loan is treated as an equity instrument in the consolidated accounts. The interest expenses of the capital loan are treated similarly to dividend distribution; that is, as a decrease in retained earnings under equity upon realisation of interest payment on an annual basis.

Other income grew from the previous year to EUR 4 million (EUR 2 million). Other income includes commission income, realised net income from securities and foreign exchange transactions, net income on financial assets at fair value through other comprehensive income, and other operating income. In addition, the turnover of MuniFin's subsidiary company Financial Advisory Services Inspira is included in the other income.

During 2020, the COVID-19 pandemic slowed cost growth, making the year's costs unusually low. Costs started rising again in 2021, although the growth was slower than before the pandemic.

Commission expenses totalled EUR 5 million (EUR 5 million) and consisted primarily of paid guarantee fees, custody fees and funding programme update fees.

Administrative expenses reached EUR 35 million (EUR 33 million) and grew by 5.2% (2.3%). Of this, personnel expenses comprised EUR 18 million (EUR 18 million) and other administrative expenses EUR 17 million (EUR 15 million). Personnel expenses were almost at the same level as in previous year and were 0.3% (0.8%) less than in 2020. There were no significant changes in employee numbers and the average number of employees in the Group was 162 (167). Salary and pension costs decreased slightly during the financial year.

Other items in administrative expenses grew by 11.6% (4.0%) during the financial year. The cost of maintaining and developing information systems has increased IT expenses, but on the other hand, the COVID-19 pandemic has reduced certain types of expenditure, such as travelling expenses both in 2021 and 2020. In 2019, MuniFin Group signed outsourcing agreements for IT end-user and infrastructure services as well as the operation of the business IT systems to improve operational reliability and the availability of services. This implementation project was completed in late 2021.

During the financial year, depreciation and impairment of tangible and intangible assets reached EUR 16 million (EUR 6 million). The item includes impairment of EUR 10.5 million on the Group's significant on-going IT system implementation.

Other operating expenses increased by 6.6% (-17.1%) to EUR 16 million (EUR 15 million). Fees collected by authorities increased by 23.0% (13.6%) to EUR 9 million (EUR 7 million), mainly due to an increase in the contribution to the Single Resolution Fund, which grew by 30.5% to EUR 6.7 million (EUR 5.2 million). These fees excluded, other expenses were EUR 6 million (EUR 7 million), decreasing by 10.3% (-35.1%), mostly due to smaller purchases of external services compared to 2020. Other expenses include a provision of EUR 0.4 million related to a possible tax increase following a tax interpretation issue from previous years.

The amount of expected credit losses (*ECL*), calculated according to IFRS 9, decreased during the financial year and was EUR -0.1 million (EUR -0.9 million). MuniFin Group has updated the scenarios and weights used to calculate ECL. These are reported in more detail in Note *27* in the Consolidated Financial Statements.

In 2020, MuniFin Group recorded an additional discretionary provision (*management overlay*) of EUR 0.3 million to take into account the financial effects of the COVID-19 pandemic. This was due to the fact that the deteriorating financial situation of certain customer segments had not yet reflected in MuniFin Group's internal risk ratings for these segments, and therefore the Group's management decided to record an additional discretionary provision based on a group-specific assessment. The financial situation of these customer segments later improved, and the management decided to remove the additional discretionary provision in late 2021. At the end of 2021, the Group's management decided to record an additional discretionary provision of EUR 0.4 million to take into account ECL model changes that will take place in 2022. During 2022, the Group will further develop loss given default (*LGD*) calculation of mortgage loans as well as lifetime ECL calculations.

The Group's overall credit risk position has remained low. According to the management's assessment, all receivables will be recovered in full and no final credit loss will therefore arise, because the receivables are from Finnish municipalities, or they are accompanied by a securing municipal guarantee or a state deficiency guarantee supplementing mortgage collateral. During the Group's history of more than 30 years, it has never recognised any final credit losses in its customer financing.

At the end 2021, the Group had a total of EUR 19 million (EUR 24 million) of guarantee receivables from public sector entities due to customer insolvency, which are still under 0.1% of total customer exposure. The credit risk of the liquidity portfolio has remained at a good level, its average credit rating being AA+ (AA+). More information on the credit risks of financial assets and other commitments are available in Note *27* in the Consolidated Financial Statements.

Group's profit and unrealised fair value changes

The Group's net operating profit was EUR 240 million (EUR 194 million). Unrealised fair value changes improved the Group's net operating profit by EUR 27 million, while in the previous year they had a negative impact of EUR 3 million. In 2021, net income from hedge accounting amounted to EUR 5 million (EUR 4 million) and unrealised net income from securities transactions to EUR 22 million (EUR -7 million).

The Group's effective tax rate during the financial year was 20.1% (20.0%). Taxes in the consolidated income statement amounted to EUR 48 million (EUR 39 million). After taxes, the Group's profit for the financial year was EUR 192 million (EUR 155 million). The Group's full-year return on equity (*ROE*) was 10.7% (9.4%). Excluding unrealised fair value changes, the ROE was 9.6% (9.6%).

The Group's other comprehensive income includes unrealised fair value changes of EUR -3 million (EUR -32 million). During the financial year, the most significant item affecting the other comprehensive income was cost-of-hedging, EUR -3 million (EUR -16 million). The fair value change due to changes in own credit risk of financial liabilities designated at fair value through profit or loss totalled EUR 0.4 million (EUR -17 million).

On the whole, unrealised fair value changes net of deferred tax affected the Group's equity by EUR 19 million (EUR -28 million) and CET1 capital net of deferred tax in capital adequacy by EUR 19 million (EUR -15 million). The cumulative effect of unrealised fair value changes on the Group's own funds in capital adequacy calculations was EUR 31 million (EUR 12 million).

Unrealised fair value changes reflect the temporary impact of market conditions on the valuation levels of financial instruments at the reporting time. The value changes may vary significantly from one reporting period to another, causing volatility in profit, equity and own funds in capital adequacy calculations. The effect on individual contracts will be removed by the end of the contract period.

In accordance with its risk management principles, MuniFin Group uses derivatives to financially hedge against interest rate, exchange rate and other market and price risks. Cash flows under agreements are hedged, but due to the generally used valuation methods, changes in fair value differ between the financial instrument and the respective hedging derivative. Changes in the shape of the interest rate curve and credit risk spreads in different currencies affect the valuations, which cause the fair values of hedged assets and liabilities and hedging instruments to behave in different ways. In practice, the changes in valuations are not realised on a cash basis because the Group primarily holds financial instruments and their hedging derivatives almost always until the maturity date. Changes in credit risk spreads are not expected to be materialised as credit losses for the Group, because the Group's liquidity reserve has been invested in instruments with low credit risk. In the financial year, unrealised fair value changes were influenced in particular by changes in interest rate expectations and credit risk spreads in the Group's main funding markets.

Parent Company's result

MuniFin's net interest income at year-end was EUR 264 million (EUR 238 million), and its net operating profit stood at EUR 223 million (EUR 178 million). The profit after appropriations and taxes was EUR 137 million (EUR 22 million). The interest expenses of EUR 16 million for 2021 on the AT1 capital loan, which forms part of Additional Tier 1 capital in capital adequacy calculation, have been deducted in full from the Parent Company's net interest income (EUR 16 million). In the Parent Company, the AT1 capital loan has been recorded under the balance sheet item *Subordinated liabilities*.

Subsidiary Inspira

The turnover of MuniFin's subsidiary company, Financial Advisory Services Inspira Ltd, was EUR 1.7 million for 2021 (EUR 2.8 million), and its net operating profit amounted to EUR 0.1 million (EUR 0.1 million).

Information on the consolidated statement of financial position

CONSOLIDATED STATEMENT OF FINANCIAL POSITION (EUR million)	31 Dec 2021	31 Dec 2020	Change, %
Cash and balances with central banks	8,399	5,566	50.9
Loans and advances to credit institutions	1,417	1,842	-23.0
Loans and advances to the public and public sector entities	29,214	28,022	4.3
Debt securities	4,841	5,763	-16.0
Derivative contracts	2,000	2,358	-15.2
Other items included in the assets	489	491	-0.5
Total assets	**46,360**	**44,042**	**5.3**
Liabilities to credit institutions	2,801	2,001	39.9
Liabilities to the public and public sector entities	3,325	3,884	-14.4
Debt securities issued	35,328	32,912	7.3
Derivative contracts	2,224	2,861	-22.2
Other items included in the liabilities	821	679	20.8
Total equity	1,862	1,705	9.2
Total liabilities and equity	**46,360**	**44,042**	**5.3**

MuniFin Group's consolidated statement of financial position totalled EUR 46,360 million (EUR 44,042 million) and grew by 5.3% (13.1%). The increase in assets was mainly due to growth in total liquidity under central bank deposits (cash and balances with central banks) and in long-term customer financing (loans and advances to the public and public sector entities).The increase in liabilities is due to liabilities to credit institutions and in debt securities issued.

At the end of 2021, the Group's equity stood at EUR 1,862 million (EUR 1,705 million), including the AT1 capital loan of EUR 347 million (EUR 347 million). The profit of the financial year increased the equity. In addition, in the consolidated accounts, interest expenses amounting to EUR 12.6 million (EUR 12.6 million) net of deferred tax on the AT1 capital instrument were deducted from the equity upon the realisation of the interest payment in April, as were the dividends of EUR 20.3 million (EUR 6.3 million) for the 2020 financial year, paid to MuniFin's shareholders in October 2021.

The Parent Company's balance sheet at the end of the year was EUR 46,359 million (EUR 44,042 million).

Financing and other services for customers

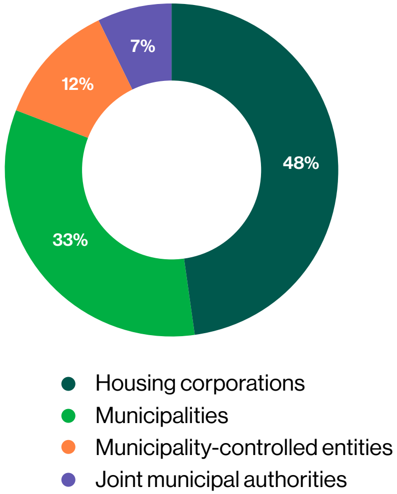
MuniFin is a public development credit institution under CRD/CRR and is the only credit institution in Finland that specialises in financing for the local government sector and state-subsidised housing production. It is by far the largest financier for its customer base. MuniFin Group's customers consist of municipalities, joint municipal authorities, and municipality-controlled entities, as well as non-profit organisations and projects 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 and a risk weight of 0% in capital adequacy calculations. The Group offers its customers diverse financing services and extensive support in investment planning and financial management.

In 2021, the demand for financing in the municipal sector was moderate, returning to normal levels from the spike created by the COVID-19 pandemic a year earlier. The central government's COVID-19 support package in 2020 temporarily improved the financial position of municipalities, and because the economic situation of municipalities has been better than expected, the demand for financing has been lower. The pandemic has only had a minor effect on the demand for state-subsidised housing finance throughout the duration of the pandemic, and as a whole, the demand for this type of financing increased moderately in 2021.

MuniFin Group's position as a provider of financing for its customer segment remained strong also in 2021. Demand for MuniFin's financing decreased during the year: new lending was EUR 3,275 million (EUR 4,764 million). The decrease in new lending was mainly due to the demand of financing returning back to its normal level after the unusually high demand of 2020 caused by the COVID-19 pandemic.

The Group's long-term customer financing amounted to EUR 29,214 million (EUR 28,022 million) at the end of 2021 and grew by 4.3% (13.0%). This figure includes long-term loans and leased assets. Long-term customer financing excluding unrealised fair value changes amounted to EUR 29,064 million (EUR 27,511 million) at the end of the year. The growth was 5.6% (12.5%). Short-term customer financing (commercial papers to municipalities and municipal companies) decreased during the financial year and was EUR 1,089 million (EUR 1,310 million) at the end of the year.

Lending portfolio by customer type at 31 Dec 2021, %



Customer interest in sustainable finance products continued to increase. MuniFin grants green finance to investments that produce clear and measurable environmental benefits. Of long-term customer financing, green finance accounted for EUR 2,328 million (EUR 1,786 million) at the end of the year. Projects funded with MuniFin's social finance produce widespread social benefits and promote equality, communality, welfare or regional vitality. Social finance accounted for EUR 1,161 million (EUR 589 million) of long-term customer financing. MuniFin puts forward suitable projects to evaluation teams mostly comprised of independent experts outside the Group, which then decide which projects are granted green and social finance.

The turnover of MuniFin's subsidiary company Inspira, specialising in financial advisory services, decreased during the financial year. In 2021, Inspira focused on improving its service offering, introducing development projects that offer tools for more comprehensive financial planning and launching new services that help municipalities analyse the financial effects of Finland's health and social services reform.

MuniFin Group offers its customers a wide range of tools for financial management, forecasting, modelling and reporting, and their user base has been growing steadily also in 2021. The COVID-19 pandemic has increased the need to use the Group's digital services in remote working contexts. The Group has continued to develop its digital services and the digitalisation of its financing process in order to make the customer experience even more user-friendly and efficient; for example, customers now have the option to apply for financing online. MuniFin Group's online events, digital training sessions and economic reports have gained a firm foothold and keep attracting larger audiences.

In 2021, the Group decided to change the conditions of its long-term customer loans with variable interest rates so that its customers will benefit from negative reference rates better than before. The change took effect in October and was received very positively among the Group's customers. It did not significantly affect the Group's results for 2021 or benefits received by the customers. The impact of the decision on customer benefits is estimated to be significantly larger in 2022. This change was enabled by the CRR II regulation that entered into force at the end of June and recognised MuniFin's role as a public development credit institution, substantially decreasing the Group's total exposure of leverage ratio, which in turn decreases the Group's long-term profitability target and enabled previously described changes in lending terms.

Funding and liquidity management

MuniFin Group's funding strategy is to diversify its funding sources to ensure access to funding under all market conditions. The Group actively diversifies its funding across multiple currencies, maturities, geographical areas and investor groups. Proactive long-term cooperation with investors has increased MuniFin Group's name recognition in various markets.

Capital markets remained stable in 2021 despite the prolonged COVID-19 pandemic. Central banks' financing operations and securities purchase programmes helped maintain strong market liquidity, low interest rates and low credit risk premiums. The global economy recovered from the pandemic at a rapid rate, but uncertainty began to increase towards the end of the year as inflation started to make the headlines both in Europe and the US.

MuniFin Group's funding operations were successful and carried out as planned in 2021. The stable market situation upheld high investor demand, which kept the Group's funding costs lower than expected. Many of MuniFin Group's customers performed well financially and therefore required less financing, which in turn made the Group's own need for funding slightly lower than anticipated.

The main focus in MuniFin Group's funding continued to be on public arrangements, which attracted very strong investor demand. During 2021, MuniFin issued dollar-denominated benchmark bonds of USD 1.5 billion and USD 1 billion, and euro-denominated benchmark bonds of EUR 1 billion and EUR 500 million. In addition to these benchmark bonds, MuniFin continued to issue sustainable bonds, increasing its social bond, launched in 2020, by EUR 500 million, and issuing a green bond of GBP 300 million in November. Moreover, MuniFin participated for the second time in the ECB's third series of targeted longer-term refinancing operations (*TLTRO III*) with EUR 750 million, which partly enabled to ensure customer financing on competitive terms.

In 2021, the Group also continued its strong operations in the Japanese Uridashi market, releasing bonds totalling EUR 1,369 million (EUR 1,221 million) and thus being one the most active issuers in this market.

MuniFin Group acquires all of its funding from the international capital market. In 2021, MuniFin Group's new long-term funding totalled EUR 9,395 million (EUR 10,966 million). A total of 208 (218) long-term funding arrangements were made in 13 (11) different currencies. The Group uses derivatives to hedge against market risks.

At the end of 2021, MuniFin Group's total funding amounted to EUR 40,712 million (EUR 38,139 million) of which MuniFin's short-term debt instruments under the Euro Commercial Paper (*ECP*) programme amounted to EUR 3,819 million (EUR 3,896 million). Of total funding, 49% (50%) was denominated in euros and 51% (50%) in foreign currencies.

The majority of MuniFin Group's funding transactions are arranged as standardised issues under debt programmes, of which MuniFin uses the following:

Medium Term Note *(MTN)* programme	EUR 40,000 million
Euro Commercial Paper (*ECP*) programme	EUR 10,000 million
AUD debt programme (*Kangaroo*)	AUD 2,000 million

MuniFin's funding is guaranteed by the Municipal Guarantee Board (*MGB*), a public law institution whose members consists of all municipalities in mainland Finland. The members are responsible for the liabilities of the MGB in proportion to their population. The MGB has granted guarantees for the debt programmes as well as for funding arrangements outside the programmes. Based on this, debt instruments issued by MuniFin are classified as zero-risk when calculating the capital adequacy of credit institutions and solvency of insurance companies, and as Level 1 liquid assets in liquidity calculation in the EU.

MuniFin Group's liquidity has remained excellent. The Group's investment operations mostly comprise the management of prefunding, and the funds are invested in liquid and highly rated financial instruments to ensure business continuity under all market conditions. According to the Group's liquidity policy, its total liquidity amount must be enough to cover uninterrupted business (including new net customer financing) for at least 12 months.

At the end of 2021, MuniFin Group's total liquidity was EUR 12,222 million (EUR 10,089 million). Of this, central bank deposits totalled EUR 8,435 million (EUR 5,601 million) and investments in liquid, low-risk securities EUR 3,753 million (EUR 4,453 million), with the average credit rating of AA+ (AA+) and average maturity of 2.6 years (2.8). In addition to this, money market deposits in credit institutions totalled EUR 34 million (EUR 35 million).

The Group actively monitors and improves the sustainability of its funding and investments. In addition to low credit risk and high liquidity, MuniFin Group monitors the sustainability of its liquidity investments through ESG *(Environmental, Social and Governance)* scores [1]. At the end of 2021, MuniFin Group's liquidity investments had an average ESG score of 59.3 (55.7) on a scale of 1–100, well above the benchmark index of 55.9 (53.3). In addition to monitoring the ESG scoring of its investments, the Group also has direct sustainable investments. At the end of the year, these amounted to EUR 456 million (EUR 355 million), which is 12.1% (8.0%) of all investments in securities. The Group's ratio of sustainable investments is higher than the market benchmark of 5.0% (2.1%). The ratio of socially responsible investments to MuniFin Group's own green and social funding was 15.6% (13.8%). In September 2021, MuniFin Group published its Sustainable Investment Framework, which describes the principles, processes and responsibilities of the Group's investment operations. The Framework is available in English on MuniFin's website.

[1] ESG score is calculated quarterly by external service provider. ESG score takes into account inter alia the quality of ESG governance, business model and possible controversies in ESG matters.

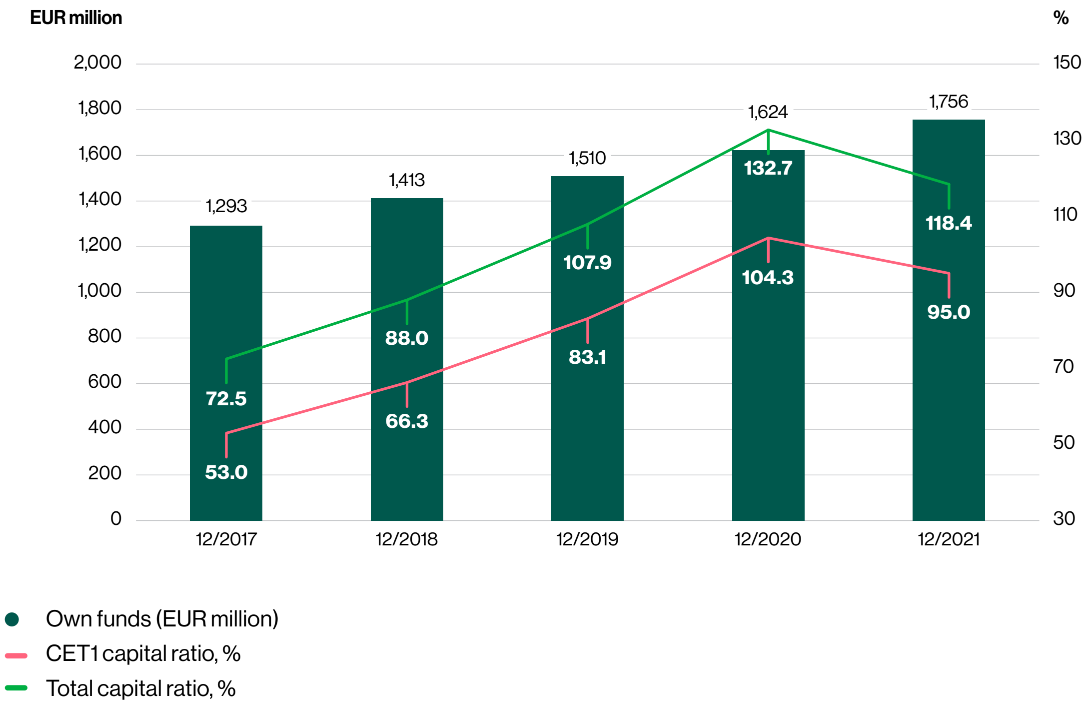
MuniFin's credit ratings

RATING AGENCY	Long-term funding	Outlook	Short-term funding
Moody's Investors Service	Aa1	Stable	P-1
Standard & Poor's	AA+	Stable	A-1+

MuniFin's credit ratings correspond to those of the Government of Finland. The credit ratings did not change during the financial year. The MGB, which guarantees MuniFin Group's funding, also has the corresponding ratings.

Capital adequacy

Group's own funds and capital adequacy



Group's own funds and capital adequacy

At the end of 2021, the Group's total capital ratio was 118.4% (132.7%) and its CET1 capital ratio was 95.0% (104.3%). The CRR II regulation applied at the end of June 2021 had a depressing effect on capital adequacy, especially due to the changes in the standardised method for measuring counterparty credit risk *(SA-CCR)* and the credit valuation adjustment risk *(CVA VaR)*. This impact was considerably greater than estimated. Figures for the comparison period have not been adjusted to reflect the updated regulation.

At 95.0%, MuniFin Group's CET1 capital ratio surpasses the total minimum requirement set in legislation, taking into account also valid capital buffers, over sevenfold.

CONSOLIDATED OWN FUNDS (EUR 1,000)	**31 Dec 2021**	**31 Dec 2020**
Common Equity Tier 1 before regulatory adjustments	1,464,442	1,328,150
Regulatory adjustments to Common Equity Tier 1	-56,172	-51,338
Common Equity Tier 1 (*CET1*)	**1,408,270**	**1,276,812**
Additional Tier 1 capital before regulatory adjustments	347,454	347,454
Regulatory adjustments to Additional Tier 1 capital	-	-
Additional Tier 1 capital (*AT1*)	**347,454**	**347,454**
Tier 1 capital(*T1*)	**1,755,723**	**1,624,265**
Tier 2 capital before regulatory adjustments	-	-
Regulatory adjustments to Tier 2 capital	-	-
Tier 2 capital (*T2*)	**-**	**-**
Total own funds	**1,755,723**	**1,624,265**

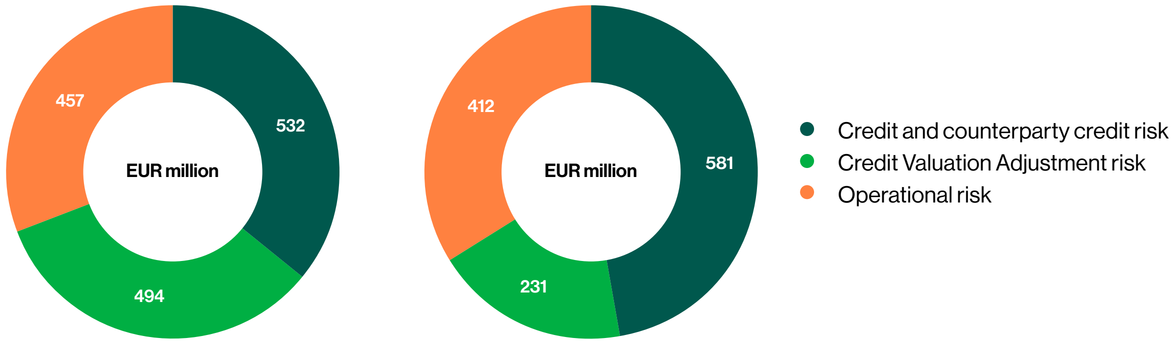
At the end of 2021, MuniFin Group's CET1 capital totalled EUR 1,408 million (EUR 1,277 million) and Tier 1 capital EUR 1,756 million (EUR 1,624 million). The Group had no Tier 2 capital. The Group's own funds totalled EUR 1,756 million (EUR 1,624 million).

The CET1 capital includes the profit for the financial year. The profit has been subject to a financial review by auditors and can therefore be included in CET1 capital based on the permission granted by the ECB in accordance with the Capital Requirements Regulation (*CRR*).

MuniFin Group applies the core approach for additional valuation adjustment (*AVA*) in prudent valuation. At the end of 2020, the Group applied the Commission's Delegated Regulation that relaxed the aggregation factor that is applied in certain valuations in the AVA calculation. The aggregation factor was returned to its previous level at the start of 2021, and at the end of the reporting period, the Group deducted the prudent valuation adjustment from its CET1 capital in full. At the end of December 2020, this temporary relief had a EUR 8 million effect on the Group's own funds.

Total risk exposure amount 12/2021
EUR 1,482 million

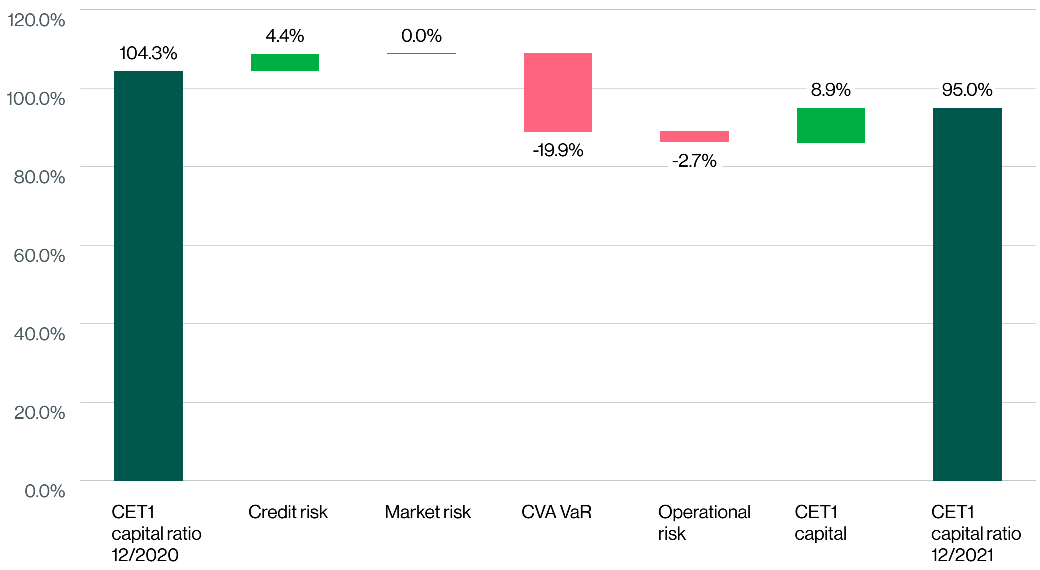
Total risk exposure amount 12/2020
EUR 1,224 million



There was no capital requirement for market risk at the end of 2021 and 2020.

The Group's total risk exposure amount increased by 21.2% from the end of 2020, totalling EUR 1,482 million (EUR 1,224 million) at the end of the 2021. In total, the risk exposure amount for credit and counterparty credit risk decreased by EUR 49 million. However, for counterparty credit risk, the risk exposure amount under CRR II, calculated using the standardised method, increased to EUR 59 million from EUR 41 million at the end of 2020. In addition, a reclassification was made in the credit risk calculation in the category *Exposures to corporates*, which includes receivables from credit institutions and clearing houses located in the United Kingdom. Following Brexit, these counterparties will no longer be reported as receivables from institutions under Article 107 (3) of CRR.

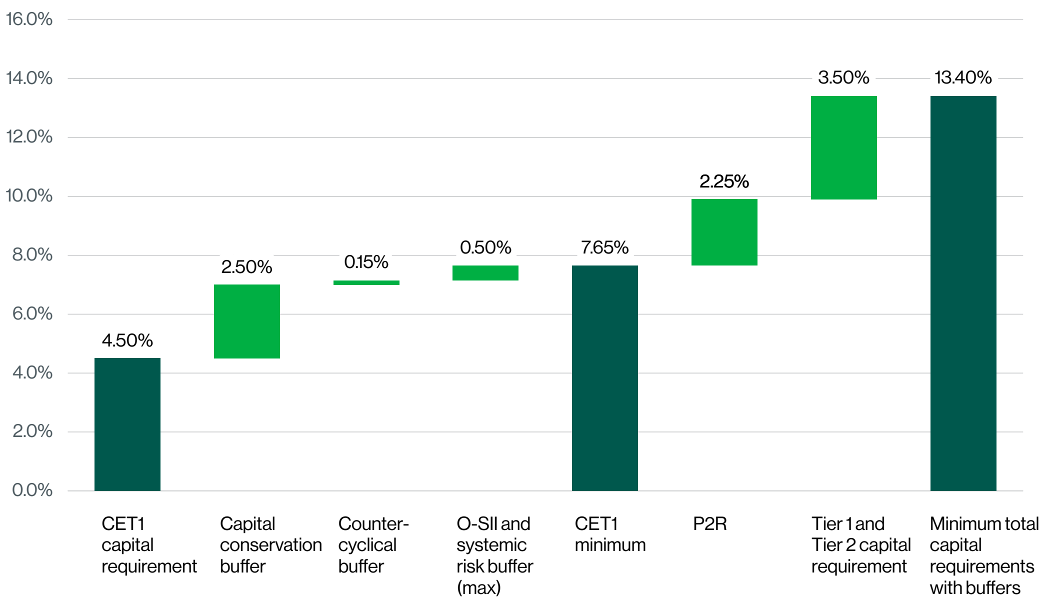
Group's CET1 capital ratio changes, %



There was no capital requirement for market risk at the end of 2021 or in the comparison year, because the currency position was less than 2% of own funds, and, based on Article 351 of the CRR, the own funds requirement for market risk has therefore not been reported. The credit valuation adjustment risk increased to EUR 494 million (EUR 231 million). The increase was especially related to the exposure-at-default (*EAD*) value of derivatives used in the calculation, as the calculation changed with CRR II regulation. The risk exposure amount of operational risk was EUR 457 million (EUR 412 million) and the growth was due to the increase in profit indicators. As of the end of 2020, the Group has applied the European Banking Authority EBA's recommendation regarding the calculation of the profit indicator for operational risk. According to this recommendation, the profit indicator is to be calculated using the last three year-end observations, including the current reporting period's year-end observation. The indicator is then applied for the next twelve months from the time of calculation.

Detailed key figures on the capital adequacy of both MuniFin Group and the Parent Company are provided in the Notes to this Report. The principles of capital adequacy management are described in Note 2 to the Consolidated Financial Statements, *Risk management principles and the Group's risk position*. Concurrently with this Report of the Board of Directors and the Financial Statements, MuniFin Group is publishing a separate Pillar III Disclosure Report on capital adequacy and risk management, which is available in English on MuniFin's website.

Group's minimum capital requirements and capital buffers, %



Group's minimum capital requirements and capital buffers

The minimum capital requirement is 8% for total capital adequacy and 4.5% for CET1 capital adequacy. Under the Act on Credit Institutions, the capital conservation buffer is 2.5% and, for MuniFin Group, the additional capital requirement for other systemically important credit institutions (*O-SII*) is 0.5%. At the end of June 2021, the FIN-FSA gave its annual decision and MuniFin Group's O-SII buffer was kept unchanged at 0.5%.

The FIN-FSA decides on an additional capital requirement for the MuniFin Group based on the systemic risk buffer and adjusts it annually. This requirement has been 1.5% since July 2019. In April 2020, the FIN-FSA adjusted the capital requirements for the largest credit institutions in Finland, aiming to mitigate the negative effect the COVID-19 pandemic could have on the stability of financial markets and on the capacity of credit institutions to finance the economy. The FIN-FSA removed MuniFin Group's abovementioned systemic risk buffer of 1.5%, effective immediately, which reduced the Group's overall capital requirements by 1.0 percentage points. By the end of the financial year, the FIN-FSA had not imposed a new systemic risk buffer for the MuniFin Group. The systemic risk buffer and the O-SII buffer are parallel buffers, of which only the greater is applied.

The FIN-FSA also decides on a countercyclical capital buffer requirement on a quarterly basis, and it decided not to impose such a buffer in December 2021. For MuniFin Group, the credit institution-specific countercyclical capital buffer requirement that is imposed based on the geographical distribution of exposures is 0.15% (0.21%). The Group therefore has a minimum requirement of 7.65% (7.71%) for CET1 capital ratio and 11.15% (11.21%) for total capital ratio.

In addition to the above-mentioned requirements, the ECB has imposed a bank-specific Pillar 2 Requirement (*P2R*) of 2.25% on MuniFin Group as part of the annual Supervisory Review and Evaluation Process (*SREP*). Including this P2R requirement, the total SREP capital requirement ratio (*TSCR*) was 10.25% (10.25%) at the end of December 2021. The minimum level of total capital ratio was 13.40% (13.46%) including P2R and other additional capital buffers. For 2021 SREP, MuniFin Group received the decision early February 2022. The P2R is 2.00% from 1 March 2022 onwards, and the minimum level of total capital ratio is 13.15% and TSCR is 10.00%.

Leverage ratio, Liquidity Coverage Ratio and Net Stable Funding Ratio

At the end of December, MuniFin Group's leverage ratio was 12.8% (3.9%). MuniFin fulfils the CRR II definition of a public development credit institution and may therefore deduct all credit receivables from municipalities and the central government in the calculation of its leverage ratio. The amount of credit receivables from municipalities and the central government was EUR 31,568 million at the end of December. This change explains the growth of leverage ratio. The effect of the CRR II regulation coming into force at the end of June 2021, was 8.8 percentage points to the leverage ratio. The minimum requirement for leverage ratio has stood at 3%. Figures for the comparison period have not been adjusted to reflect the updated regulation.

At the end of 2021, MuniFin Group's Liquidity Coverage Ratio (*LCR*) was 334.9% (264.4%). The minimum requirement is 100%.

As part of the changes to the regulation of banks' capital adequacy, a new Net Stable Funding Ratio (*NSFR*) requirement took effect in June 2021. At the end of December, the Group's NSFR was 123.6% (116.4%). The minimum requirement is 100%.

Future changes in banking regulation

At the end of October, the European Commission published its proposal for the implementation of the final Basel III banking regulatory standards in the EU (so called *CRR III package*). The reform will affect the bank's solvency calculation, especially in credit, market and operational risk calculations, in CVA VaR, in leverage ratio calculation and introduces a new output floor. MuniFin Group's business model is based on zero risk-weighted customer financing and there will not be any changes on this when implementing Basel III package. However, the reform will affect on the Group's calculation methods and reporting in capital adequacy calculations. Impact assessment of the changes will become more precise in the coming years as the Group prepares for the entry into force of the CRR III regulations.

MuniFin Group also prepares for the implementation of the European Commission's delegated regulation (2016/2251) on the replacement of the initial margin of bilateral derivative transactions with securities collateral. The Group will enter this in phase 6, which comes into force in September 2022.

Liabilities under the Act on the Resolution of Credit Institutions and Investment Firms

MuniFin's crisis resolution authority is the EU's Single Resolution Board (*SRB*). The SRB has imposed on MuniFin a binding minimum requirement for own funds and eligible liabilities (*MREL*). The size of the MREL requirement is 10.25% of the total risk exposure amount and 3.00% of the leverage ratio exposure. The MREL requirement takes into account SRB's decision on that the simplified resolution strategy is applied to MuniFin.

The MREL requirement will take effect on 1 January 2024, but MuniFin must fully comply with the final MREL target levels from 1 January 2022 onwards. MuniFin's own funds and eligible liabilities exceed the minimum requirements by a wide margin. Because the Group's own funds and eligible liabilities currently fulfil the MREL requirements, there is no present need for MuniFin to issue Tier 3 instruments.

Risk management

MuniFin Group's operations require adequate risk management mechanisms to ensure that its risk position remains within the limits set by the Parent Company's Board of Directors. To preserve its strong credit rating, the Group applies conservative risk management principles and aims to keep its overall risk status low.

The relevant risk types associated with MuniFin Group's operations include credit and counterparty risk, market risk and liquidity risk. All business operations also involve strategic risks, ESG risks and operational risks, including compliance risk.

The Group's risks are described in greater detail in Note *2* to the Consolidated Financial Statements, entitled *Risk management principles and the Group's risk position.* Concurrently with this Report of the Board of Directors and the Financial Statements, MuniFin Group is publishing a separate Pillar III Disclosure Report on capital adequacy and risk management, which is available in English on MuniFin's website.

The Group's risk position

There were no material changes in MuniFin Group's risk appetite during 2021, and risks remained within the limits set by the Board of Directors during the year. The COVID-19 pandemic may affect the Group's counterparty risk, liquidity portfolio credit risk and risks related to liquidity, lending and business processes. So far, however, the Group's risk position has remained stable and at a moderate level throughout the financial year. Unrealised fair value changes of financial instruments caused volatility of profits during the financial year. The Group continuously monitors and analyses the volatility arising from valuations and prepares for any impacts this may have on its profit and capital adequacy.

The direct impact of the withdrawal of the United Kingdom from the European Union (*Brexit*) has been limited to MuniFin Group. The Group has reshaped its business relationships to ensure its funding and liquidity after Brexit.

Also underway during the financial year, was the process of replacing IBOR reference rates with alternative, nearly risk-free reference rates. So far, the IBOR reform has not had a significant impact on the Group's risk management principles. The IBOR process is described in greater detail in the section *23. IBOR reform* of Note *1* to the Consolidated Financial Statements, entitled *Summary of significant accounting policies.*

In early 2021, MuniFin Group participated in the SSM Stress Test led by the ECB. The stress test covered the years 2021–2023. MuniFin Group's capital adequacy and leverage ratio remained extremely strong even under the adverse scenario. In this adverse scenario, the Group's CET1 capital ratio stood at 67% and its leverage ratio at 3.6% (*CRR*) at the end of 2023. Both figures clearly exceed regulatory requirements.

The Group is exposed to credit risks as part of its business. Due to the nature of its customer base, credit risks are low. The credit risks emerge almost exclusively from customer financing, the liquidity portfolio investments and the derivatives portfolio. MuniFin also offers derivative products for its customers for hedging their interest rate positions. These products are covered with offsetting contracts from the market. The Group only uses derivatives for hedging against market risks.

In view of its credit risk mitigation techniques (mortgage collateral and guarantees received) and exemptions set out in CRR Article 400 related to the calculation of large exposures, the Group is not exposed to customer risk meant by large exposure regulation in its customer financing, and thus the customer risk of any individual customer does not exceed 10% of own funds. The amount of expected credit losses slightly decreased during the financial year and was EUR -0.1 million (EUR -0.9 million) recognised in the income statement. The amount of forborne loans at the end of 2021 was EUR 88 million (EUR 88 million), while non-performing exposures amounted to EUR 128 million at the end of 2021 (EUR 136 million). For these non-performing exposures, MuniFin has absolute guarantees by municipalities or real estate collateral and state deficiency guarantee, and these exposures are therefore not expected to carry the risk of a final credit loss. Non-performing exposures represented 0.4% of total customer exposure (0.5%).

MuniFin's credit risk position remained stable and at a low level during the reporting period. The COVID-19 pandemic has not weakened the Group's credit risk position, and it is expected to remain stable and in line with the Group's credit risk strategy also in the future.

Market risks include interest rate risk, exchange rate risk and other market and price risks. The Group uses derivatives to hedge against market risks. Derivatives can only be used for hedging purposes as the Group does not engage in trading activities. Interest rate risk mainly arises from the differences in Euribor rates applicable to the assets and liabilities in the balance sheet. MuniFin Group actively monitors and hedges its interest rate risk. Eight scenarios are used in the calculation of the NII risk, of which the least favourable outcome is considered. The least favourable scenario was based on an assumption of a rise of 50 basis points in the whole interest rate curve. One-year NII risk at the end of the year was EUR 0 million (EUR -32 million). Several scenarios are also used in the calculation of the Economic Value of Equity, of which the least favourable outcome is considered. The least favourable scenario was based on an assumption of a rise of 50 basis points in the whole interest rate curve. The Economic Value of Equity at the end of the year was EUR -13 million (EUR -345 million).

MuniFin Group's FX risk is hedged by using derivative contracts to swap all funding and investments denominated in foreign currency into euros. The Group's customer financing is denominated in euros. The Group has no significant open FX positions. In practice, a small temporary exchange rate risk may arise due to collateral management in the clearing of derivatives by central counterparties. This exchange rate risk is actively monitored and hedged. Derivatives are also used to hedge against other market and price risks. The Group has also determined valuation risk as a significant risk for its business. Unrealised fair value changes of financial instruments increase the Group's earnings volatility. The Group continuously monitors and analyses the volatility arising from valuations and prepares for any impacts this may have on its profit and capital adequacy.

The Group's market risk has remained stable. The market was relatively stable during the reporting period, which has manifested in less valuation volatility in the Group's profits than in the comparison period.

The Group manages its refinancing risk by limiting the average maturity between financial assets and liabilities. In addition, the Group manages its liquidity risk by setting a limit for the minimum adequacy of the available short-term and long-term liquidity. At the end of 2021, the Group's survival horizon was 14.2 months (12.3 months). The Group's liquidity remained good, with the LCR being 334.9% (264.4%) at the end of the year. The availability of long-term funding is monitored via the Net Stable Funding Ratio (*NSFR*). The NSFR requirement entered into force in June 2021 and the ratio was 123.6% (116.4%) at the end of the year. The availability of funding remained good throughout the year. In January–December 2021, MuniFin Group issued EUR 9,395 million (EUR 10,966 million) in long-term funding.

MuniFin Group's operational risks are estimated to be at a moderate level, and there were no material losses from operational risks in 2021. According to MuniFin's estimate, the COVID-19 pandemic has not increased significantly the Group's operational risks. The extensive remote work arrangements have had some effect on the Group's operating practices, but its business operations have continued normally. Control points related to processes and information security, for example, have remained in place and continued to function in the usual way.

ESG risks include environmental, social and governance risks. There have been no material changes in ESG risks during the year. According to the Group's estimate, it is currently not exposed to any substantial social or governance risks. Also, the Group's current estimate is that environmental and climate risks are unlikely to manifest substantially in the short-term. In the medium and long-term, climate risks may nevertheless have an adverse economic effect on the Group's customers. However, any changes in the customers' financial situation are not expected to affect the Group's credit risk position.

Governance

In addition to corporate legislation, MuniFin complies with the governance requirements of the Finnish Act on Credit Institutions. The governance policy is described in more detail on MuniFin's website.

Upon the publication of the Annual Report, MuniFin Group also publishes a Corporate Governance Statement on its website, pursuant to chapter 7, section 7 of the Finnish Securities Market Act. The statement is separate from the Annual Report and includes a description of the main features of the internal audit and risk management systems pertaining to the financial reporting process. The statement also includes the governance descriptions required by the Act on Credit Institutions as well as information on how MuniFin complies with the Finnish Corporate Governance Code for listed companies published by the Finnish Securities Market Association. This code applies to Finnish listed companies, i.e. companies whose shares are listed on Nasdaq Helsinki Ltd (Helsinki Stock Exchange). Since MuniFin is exclusively an issuer of listed bonds and its shares are not subject to public trading, this code does not apply directly to MuniFin.

Group structure
Municipality Finance Group (MuniFin Group or the Group) consists of Municipality Finance Plc (MuniFin or the Parent Company) and Financial Advisory Services Inspira Ltd (Inspira). Inspira is fully owned by MuniFin. No changes to the group structure took place during the reporting period.

General meeting
The Annual General Meeting (*AGM*) of MuniFin was held on 25 March 2021. The AGM confirmed the Financial Statements for 2020 and discharged the members of the Board of Directors, the CEO and the Deputy CEO from liability for the financial year 2020. In addition, in accordance with the proposal of the Board of Directors, the AGM authorised MuniFin's Board of Directors to decide on the dividend and its payment at a time it deems best, taking into account the current supervisory recommendations. The AGM authorised the Board of Directors to decide on a dividend payment of a maximum of EUR 0.52 per share, totalling EUR 20,313,174.96. The amount of distributable funds on the Group's balance sheet on 31 December 2021 was EUR 151,454,113.07.

On 15 December 2020, the ECB recommended that, due to the COVID-19 pandemic, until September 2021 significant credit institutions exercise extreme prudence when deciding on dividends. In October 2021, based on the AGM's authorisation, the MuniFin Board of Directors decided on a dividend payment of EUR 0.52 per share, totalling EUR 20,313,174.96. The dividend was paid to the shareholders on 25 October 2021.

Based on the proposal of the Shareholders' Nomination Committee, the AGM decided to appoint nine Board members for the 2021–2022 term, lasting from the 2021 AGM to the end of the subsequent AGM. The AGM also confirmed the Shareholders' Nomination Committee's proposal on the remuneration of Board members.

In addition, the meeting re-elected KPMG Oy Ab as MuniFin's auditor, with APA Tiia Kataja as the principal auditor. Kataja acted as the principal auditor during the previous term as well.

The AGM also decided on amendments to the Articles of Association. The Line of Business in the Articles of Association was complemented by adding MuniFin's status as a public development credit institution as per the prudential regulation of credit institutions and with other, more technical amendments. All amendments are listed in the AGM's resolutions, available on MuniFin's website.

Board of Directors

The Shareholder's Nomination Committee made a proposal to the AGM held on 25 March 2021 regarding the members to be elected for the term that began at the end of the 2021 AGM and will conclude at the end of the subsequent AGM.

The AGM elected the following members to the Board of Directors: Maaria Eriksson, Markku Koponen, Kari Laukkanen, Vivi Marttila, Tuomo Mäkinen, Minna Smedsten, Denis Strandell, Leena Vainiomäki and Kimmo Viertola. The MuniFin Board nominated Kari Laukkanen as the Chair of the Board and Maaria Eriksson as the Vice Chair.

MuniFin has statutory audit, risk and remuneration committees established by the Board of Directors. The committees act as assisting and preparatory bodies to the Board of Directors. The MuniFin Board selected Markku Koponen (Chair), Vivi Marttila, Minna Smedsten and Denis Strandell as the members of the Audit Committee. In the Risk Committee, the Board selected Leena Vainiomäki (Chair), Maaria Eriksson, Kari Laukkanen and Tuomo Mäkinen. In the Remuneration Committee, the Board selected Kari Laukkanen (Chair), Leena Vainiomäki and Kimmo Viertola.

From the 2020 AGM to the 2021 AGM, the members of the Board of Directors were Helena Walldén (Chair), Tuula Saxholm (Vice Chair), Maaria Eriksson, Markku Koponen, Kari Laukkanen, Vivi Marttila, Denis Strandell and Kimmo Viertola. Helena Walldén and Tuula Saxholm were not available for the Board's 2021–2022 term.

The operations of the MuniFin Board of Directors and its committees are described in more detail on MuniFin's website.

Personnel

At the end of December 2021, MuniFin Group had 164 (165) employees, of which 153 (154) worked for the Parent Company. Salaries and remuneration paid across the Group amounted to EUR 14.6 million (EUR 14.9 million).

The President and CEO of MuniFin is Esa Kallio, with Mari Tyster, Executive Vice President, acting as deputy to the CEO. In addition, the MuniFin Executive Management Team includes Executive Vice Presidents Aku Dunderfelt, Toni Heikkilä, Joakim Holmström, Harri Luhtala, Minna Piitulainen and Juha Volotinen.

MuniFin Group has restructured its organisation and operating practices to streamline its operations and to further improve its products, services and customer experience. The renewed organisation is more strongly based on MuniFin's core operations, i.e. customer financing solutions and capital markets processes. The changes took effect on 1 January 2021. MuniFin established a new Development and HR Services division to manage the development portfolio and support change management. The new division is headed by Minna Piitulainen, who is also a member of the MuniFin Executive Management Team as from 1 January 2021.

During the reporting period, Rainer Holm, MuniFin's Executive Vice President of Technology Services and member of the Executive Management Team, left the service of MuniFin. Holm was succeeded by Juha Volotinen as from 1 April 2021. Volotinen also acts as a member of the MuniFin Executive Management Team.

Salaries and remuneration

The remuneration paid to MuniFin Group's management and employees consists of fixed remuneration (base salary and fringe benefits) and a variable element based on the conditions of the remuneration scheme. The principles of the remuneration scheme are confirmed by the Parent Company's Board of Directors, and they are reviewed on an annual basis. The Remuneration Committee advises the Board of Directors on remuneration-related matters. For more information on salaries and remuneration, refer to Note *45 Salaries and remuneration* in the Consolidated Financial Statements. Concurrently with this Report of the Board of Directors and the Financial Statements, MuniFin Group is publishing a separate Pillar III Disclosure Report on capital adequacy, risk management and remuneration, which is available in English on MuniFin's website.

Internal audit

The purpose of MuniFin Group's internal audit is to monitor the reliability and accuracy of the Group's information on finances and other management. It also ensures that MuniFin Group has sufficient and appropriately organised manual operations and IT systems and that the risks associated with the operations are adequately managed.

Share capital and shareholders

At the end of the 2021 financial year, MuniFin had paid share capital registered in the Trade Register to the amount of EUR 43,008,044.20, and the number of shares was 39,063,798. The company has two series of shares (A and B), with equal voting and dividend rights. Each share confers one vote at the Annual General Meeting.

At the end of 2021, MuniFin had 276 (277) shareholders.

10 LARGEST SHAREHOLDERS 31 Dec 2021		No. of shares	Per cent
1.	Keva	11,975,550	30.7%
2.	Republic of Finland	6,250,000	16.0%
3.	City of Helsinki	4,066,525	10.4%
4.	City of Espoo	1,547,884	4.0%
5.	VAV Asunnot Oy (City of Vantaa)	963,048	2.5%
6.	City of Tampere	919,027	2.4%
7.	City of Oulu	903,125	2.3%
8.	City of Turku	763,829	2.0%
9.	City of Kuopio	592,303	1.5%
10.	City of Lahti	537,926	1.4%

The number of shares presented in the above table do not include any shares owned by the Group companies of the listed shareholders.

MuniFin is not aware of any material changes in the holdings of major shareholders during the year.

Events after the reporting period

The FIN-FSA decided in January 2022, based on the consultation round held in late 2021, that wellbeing services counties, similar to the central and local government, will also fall in the zero-risk category in the capital adequacy regulation of banks. This decision simplifies the financing arrangements because it means that separate government guarantees are not required and that MuniFin can finance wellbeing services counties in the same way it does municipalities.

For 2021 SREP, MuniFin Group received the decision early February 2022. The P2R is 2.00% from 1 March 2022 onwards, and the minimum level of total capital ratio is 13.15% and TSCR is 10.00%. At the end of December 2021, the minimum requirement of total capital ratio was 13.40% and TSCR was 10.25%.

Outlook for 2022

According to the MuniFin Group's current view, global economic growth is slowing down, but the main trend in the economic outlook remains still relatively positive. Employment continues to have room for growth, household savings lend support to consumption potential and private investments are expected to remain at a good level. The first half of the year will suffer from the uncertainty caused by the coronavirus Omicron variant. The high price of energy and the ongoing component shortage will continue to cause cost pressures and take their toll on economic activity. Economic forecasts continue to be highly uncertain.

The main trends in monetary policy are the same in the United States and Europe, but their central banks will move at a considerably different pace. The risk of the economy overheating in the United States is real, and the central bank Fed is likely to have to raise its key interest rates several times, already in 2022. In the euro area, the increased inflation is still mainly explained by reasons that are expected to be temporary. The ECB's new symmetrical inflation target of 2% leaves the central bank more leeway to ignore temporary cost-push inflation. The ECB is likely to scale down its non-standard measures in 2022, but presumably very gradually. It now seems that a prudent normalisation of the interest rate policy could begin in late 2023, when the euro area should reach its pre-pandemic growth path. The outlook in monetary policy continues to be highly prone to changes in the pandemic situation.

In Finland, labour shortage and the increasing price of necessities will slow down economic growth in 2022. GDP growth will nevertheless remain somewhat stronger than Finland's long-term growth potential. Unemployment is expected to fall below 7%.

The central government's COVID-19 support package will no longer boost municipal finances in 2022, returning the focus on structural imbalances. More specific assessments of how the health and social services reform will impact individual municipalities will not be available until spring 2022. The reform's practical challenges and the uncertainty of its financial impact make it difficult to predict municipal finances over the next few years.

In 2022, the health and social services reform will be reflected in the Group's operations as practical preparation to act as a financing counterparty to the new wellbeing services counties. It is difficult to estimate the wider economic impact of the reform at this stage, when there is no practical information available on how wellbeing services counties will function. Wellbeing services counties' future level of investments will effect on MuniFin's financing volumes, but on the other hand the operating expenditures of the counties will be covered from the government's budget. In MuniFin's financing operations, health and social services lending plays such a role that changes in it will not have a material impact on MuniFin's financial development in the near future.

After confirmation of its status as a public development credit institution, MuniFin decided in June 2021 to change the conditions of its long-term customer loans with variable interest rates in a way that will allow customers to benefit from negative reference rates better than before, which will clearly make the Group's 2022 net interest income lower than in the previous year. The Group's customer operations and funding are expected to continue to run and develop steadily. Operating expenses are expected to grow from 2021, as investments in IT systems and operational reliability as well as the marked rise in supervisory fees all increase expenses.

Considering the above-mentioned circumstances, the Group expects its net operating profit excluding unrealised fair value changes to be significantly lower than in the previous year, as per the Group's long-term profitability targets and more beneficial customer pricing enabled by these targets. The Group expects its capital adequacy ratio and leverage ratio to remain very strong. The valuation principles set in the IFRS regulatory framework may cause significant but temporary unrealised fair value changes, some of which increase the volatility of net operating profit and make it more difficult to estimate in the short term.

These estimates are based on a current assessment of the development of MuniFin Group's operations and the operating environment.

The Board's proposal concerning the profit for the financial year 2021

Municipality Finance Plc has distributable funds of EUR 267,949,619.07, of which the profit for the financial year totalled EUR 136,808,680.96.

The Board of Directors proposes to the Annual General Meeting that EUR 1.03 per share be paid in dividend, totalling EUR 40,235,711.94.

MuniFin's profit for the financial year was very good. The Board of Directors considers the payment of this dividend to be well justified.

MuniFin clearly fulfils all the prudential requirements set for it. No events have taken place since the end of the financial year that would have a material effect on the Company's financial position. In the Board's opinion, the proposed distribution of profits does not place the fulfilment of the capital requirements or the Company's liquidity in jeopardy.

Dividends will be paid to shareholders who are recorded in the Company's list of shareholders on 31 March 2022. The Board of Directors proposes that the dividends be paid on 5 April 2022.

The Group’s development

	31 Dec 2021	31 Dec 2020	31 Dec 2019	31 Dec 2018	31 Dec 2017
Turnover (EUR million)	535	532	718	714	204
Net interest income (EUR million)*	280	254	240	236	229
% of turnover	52.4	47.7	33.5	33.1	112.0
Net operating profit (EUR million)*	240	194	131	190	198
% of turnover	44.8	36.5	18.3	26.6	97.2
Unrealised fair value changes (EUR million)*	27	-3	-54	0	11
Net operating profit excluding unrealised fair value changes (EUR million)*	213	197	186	190	187
Cost-to-income ratio*	0.2	0.2	0.3	0.2	0.2
Cost-to-income ratio excluding unrealised fair value changes*	0.2	0.2	0.2	0.2	0.2
Return on equity (*ROE*), %*	10.7	9.4	6.8	10.8	12.6
Return on equity (*ROE*) excluding unrealised fair value changes, %*	9.6	9.6	9.6	10.7	11.9
Return on assets (*ROA*), %*	0.4	0.4	0.3	0.4	0.5
Return on assets (*ROA*) excluding unrealised fair value changes, %*	0.4	0.4	0.4	0.4	0.4

	31 Dec 2021	31 Dec 2020	31 Dec 2019	31 Dec 2018	31 Dec 2017
Long-term customer financing (EUR million)*	29,214	28,022	24,798	22,968	21,651
New lending (EUR million)*	3,275	4,764	3,175	2,953	2,439
Total funding (EUR million)*	40,712	38,139	33,929	30,856	30,153
New long-term funding (EUR million)*	9,395	10,966	7,385	7,436	9,510
Equity (EUR million)	1,862	1,705	1,594	1,486	1,339
Total balance sheet (EUR million)	46,360	44,042	38,934	35,677	34,738
Total liquidity (EUR million)*	12,222	10,089	9,882	8,722	9,325
Liquidity Coverage Ratio (*LCR*), %	334.9	264.4	430.2	176.7	173.0
Net Stable Funding Ratio (*NSFR*), %**	123.6	116.4	116.3	-	-
Equity ratio, %*	4.0	3.9	4.1	4.2	3.9
CET1 capital (EUR million)	1,408	1,277	1,162	1,065	946
Tier 1 capital (EUR million)	1,756	1,624	1,510	1,413	1,293
Total own funds (EUR million)	1,756	1,624	1,510	1,413	1,293
CET1 capital ratio, %**	95.0	104.3	83.1	66.3	53.0
Tier 1 capital ratio, %**	118.4	132.7	107.9	88.0	72.5
Total capital ratio, %**	118.4	132.7	107.9	88.0	72.5
Leverage ratio, %**	12.8	3.9	4.0	4.1	3.8
Personnel	164	165	167	151	134

** Alternative Performance Measure.*
*** Figures for the financial year 2021 are calculated in accordance with CRR II. Comparison periods have not been restated to reflect the updated capital requirements regulation.*

The calculation formulas for all key figures can be found on pages 72–79. All figures presented in this Report of the Board of Directors are those of MuniFin Group, unless otherwise stated.

Note 1. Key figures

MuniFin Group defines the Alternative Performance Measures (*APMs*) to be financial measures that have not been defined in the IFRS standards or the capital requirements regulation (*CRD/CRR*). The APMs improve comparability between companies in the same sector and between reporting periods and provide valuable information to the readers of the financial reports. The APMs provide a more consistent basis for comparing the results of financial periods and for assessing MuniFin Group's performance. They are also an important aspect of the way in which the Group's management defines operating targets and monitors performance.

The APMs are presented in MuniFin Group's financial reports in accordance with the guidelines for Alternative Performance Measures issued by the European Securities and Markets Authority (*ESMA*).

MuniFin Group has not made any adjustments to APMs nor included any new APMs due to the impacts of the COVID-19 pandemic.

ALTERNATIVE PERFORMANCE MEASURE EUR million	DEFINITION / EXPLANATION	RECONCILIATION	1 Jan–31 Dec 2021	1 Jan–31 Dec 2020
Net interest income	Interest income and expense from financial assets and liabilities are recognised in net interest income. A significant part of the Group's revenues consists of net interest income.	Interest and similar income (incl. Leasing)	504	533
		interest and similar expense	-223	-279
		Net interest income	**280**	**254**
Unrealised fair value changes	Due to IFRS 9 implementation, more financial instruments are measured at fair value through profit and loss which increases PnL volatility. To enhance comparability of business performance between periods and companies, it is often necessary to exclude the PnL effect of the unrealised fair value changes.	Net income from securities transactions, unrealised fair value changes	22	-7
		Net income from hedge accounting	5	4
		Unrealised fair value changes	**27**	**-3**
Net operating profit	Net operating profit describes the Group's operating profit before taxes.	**Net operating profit**	**240**	**194**
Net operating profit excluding unrealised fair value changes	Net operating profit excluding unrealised fair value changes as an APM is of interest for showing MuniFin Group's underlying earnings capacity.	Net operating profit	240	194
		- Unrealised fair value changes	27	-3
		Net operating profit excluding unrealised fair value changes	**213**	**197**
Income	Income, which describes the Group's total income including net interest income, is used e.g. as a denominator (excl. Commission expenses) in Cost-to-income ratio.	Net interest income	280	254
		Commission income	2	3
		Net income from securities and foreign exchange transactions	24	-8
		Net income on financial assets at fair value through other comprehensive income	-	0
		Net income from hedge accounting	5	4
		Other operating income	0	0
		Income	**311**	**253**

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ALTERNATIVE PERFORMANCE MEASURE EUR million	DEFINITION / EXPLANATION	RECONCILIATION	1 Jan–31 Dec 2021	1 Jan–31 Dec 2020
Income excluding unrealised fair value changes	Income excluding unrealised fair value changes reflects the Group's operating income, of which the most significant is net interest income.	Income	311	253
		- Unrealised fair value changes	27	-3
		Income excluding unrealised fair value changes	**285**	**257**
Other income	Other income includes all other income of the Group except net interest income and unrealised fair value changes.	Commission income	2	3
		Net income from securities and foreign exchange transactions, realised	2	-1
		Net income on financial assets at fair value through other comprehensive income	-	0
		Other operating income	0	0
		Other income	**4**	**2**
Costs	Costs, which describe the Group's total costs, is used e.g. as a numerator (excl. Commission expenses) in Cost-to-income ratio.	Commission expenses	5	5
		Administrative expenses	35	33
		Depreciation and impairment on tangible and intangible assets	16	6
		Other operating expenses	16	15
		Costs	**72**	**58**
Costs excluding the non-recurring item	Costs excluding the non-recurring item reflects the amount of costs comparable between financial periods.	Costs	72	-
		Non-recurring item (impairment on on-going IT system implementation)	-10	-
		Costs excluding the non-recurring item	**61**	**-**
Cost-to-income ratio	Cost-to-income ratio is an established key ratio in the banking sector for assessing the relationship between expenses and income. The ratio gives investors a comparative view of MuniFin Group's cost-effectiveness.	Costs (excl. Commission expenses)	66	53
		÷ Income (incl. Net commission income)	306	248
		Cost-to-income ratio	**0.2**	**0.2**

ALTERNATIVE PERFORMANCE MEASURE EUR million	DEFINITION / EXPLANATION	RECONCILIATION	1 Jan–31 Dec 2021	1 Jan–31 Dec 2020
Cost-to-income ratio excluding unrealised fair value changes	Cost-to income ratio excluding unrealised fair value changes gives a more precise picture of MuniFin Group's operative effectiveness as it excludes the income volatility of unrealised fair value changes. Cost-to income ratio excluding unrealised fair value changes as a performance measure has become more widely used after the implementation of IFRS 9 as PnL volatility of income has grown due to unrealised fair value changes of financial instruments. It improves comparability of operative effectiveness between companies and reporting periods.	Costs (excl. Commission expenses)	66	53
		÷ (Income (incl. Net commission income)	306	248
		- Unrealised fair value changes)	27	-3
		Cost-to-income ratio excluding unrealised fair value changes	**0.2**	**0.2**
The effect of unrealised fair value changes on other comprehensive income and equity net of tax	Key indicator used in management reporting to describe the effect of unrealised fair value changes during the reporting period on the Group's comprehensive income and equity net of tax.	Unrealised fair value changes through PnL	27	-3
		Taxes related to the unrealised fair value changes through PnL	-5	1
		Net change in fair value due to changes in own credit risk on financial liabilities designated at fair value through profit or loss, net of tax	0	-13
		Net change in Cost-of-Hedging, net of tax	-2	-12
		Net change in fair value of financial assets at fair value through other comprehensive income, net of tax	-1	0
		The effect of unrealised fair value changes on other comprehensive income and equity net of tax	**19**	**-28**
New lending	Key indicator used in management reporting to describe MuniFin Group's business volume during the reporting period. The indicator includes the amount of new loans excluding unrealised fair value changes.	**New lending**	**3,275**	**4,764**
New long-term funding	Key indicator used in management reporting to describe MuniFin Group's funding activity during the reporting period. The indicator includes the amount of new funding (over 1 year) issued excluding unrealised fair values changes.	**New long-term funding**	**9,395**	**10,966**

ALTERNATIVE PERFORMANCE MEASURE EUR million	DEFINITION / EXPLANATION	RECONCILIATION	31 Dec 2021	31 Dec 2020
Return on Equity *(ROE)*, %	ROE measures the efficiency of MuniFin Group's capital usage. It is a commonly used performance measure and as an APM improves comparability between companies.	((Net operating profit	240	194
		- Taxes)	-48	-39
		÷ Equity and non-controlling interest (average of values at the beginning and end of the period)) x100	1,783	1,650
		Return on Equity *(ROE)*, %	**10.7%**	**9.4%**
Return on Equity *(ROE)* excluding unrealised fair value changes, %	MuniFin Group's strategy indicator. Excluding the unrealised changes in fair values increases comparability between reporting periods.	((Net operating profit excluding unrealised fair value changes	213	197
		- Taxes)	-43	-39
		÷ Equity and non-controlling interest (average of values at the beginning and end of the period)) x100	1,783	1,650
		Return on Equity *(ROE)* excluding unrealised fair value changes, %	**9.6%**	**9.6%**
Return on Assets *(ROA)*, %	ROA measures the efficiency of MuniFin Group's investments. It is a commonly used performance measure and as an APM improves comparability between companies.	((Net operating profit	240	194
		- Taxes)	-48	-39
		÷ Average balance sheet total (average of values at the beginning and end of the period)) x100	45,201	41,488
		Return on Assets *(ROA)*, %	**0.4%**	**0.4%**
Return on Assets *(ROA)* excluding unrealised fair value changes, %	Excluding the unrealised changes in fair values increases comparability of ROA between reporting periods.	((Net operating profit excluding unrealised fair value changes	213	197
		- Taxes)	-43	-39
		÷ Average balance sheet total (average of values at the beginning and end of the period)) x100	45,201	41,488
		Return on Assets *(ROA)* excluding unrealised fair value changes, %	**0.4%**	**0.4%**
Equity ratio, %	Equity ratio is an investment leverage and solvency ratio that measures the amount of assets that are financed by equity. It is a commonly used performance measure and as an APM improves comparability between companies.	(Equity and non-controlling interest	1,862	1,705
		÷ Balance sheet total) x100	46,360	44,042
		Equity ratio, %	**4.0%**	**3.9%**
Long-term loan portfolio	Key indicator used in management reporting to describe MuniFin Group's business volume.	Loans and advances to the public and public sector entities	29,214	28,022
		- Leasing	1,334	1,091
		Long-term loan portfolio	**27,880**	**26,931**
Long-term customer financing	Key indicator used in management reporting to describe MuniFin Group's business volume.	Loans and advances to the public and public sector entities	29,214	28,022
		Long-term customer financing	**29,214**	**28,022**

ALTERNATIVE PERFORMANCE MEASURE EUR million	DEFINITION / EXPLANATION	RECONCILIATION	31 Dec 2021	31 Dec 2020
Long-term customer financing excluding unrealised fair value changes	Key indicator used in management reporting to describe MuniFin Group's business volume. In this indicator the unrealised fair value changes have been excluded to enhance comparability of business performance between periods.	Loans and advances to the public and public sector entities	29,214	28,022
		- Unrealised fair value changes	-150	-511
		Long-term customer financing excluding unrealised fair value changes	**29,064**	**27,511**
Short-term customer financing	Key indicator used in management reporting to describe MuniFin Group's business volume.	Debt securities, commercial papers (municipalities and municipal companies)	1,089	1,310
		Short-term customer financing	**1,089**	**1,310**
Total funding	Key indicator used in management reporting to describe MuniFin Group's funding volume.	Liabilities to credit institutions	2,801	2,001
		Liabilities to the public and public sector entities	3,325	3,884
		Debt securities issued	35,328	32,912
		Total	**41,453**	**38,797**
		- CSA collateral (received)	-741	-658
		Total funding	**40,712**	**38,139**
Long-term funding	Key indicator used in management reporting to describe MuniFin Group's funding volume.	Total funding	40,712	38,139
		- Short-term issued funding (*ECP*)	-3,819	-3,896
		Long-term funding	**36,893**	**34,243**
Total liquidity	Key indicator used in management reporting to describe MuniFin Group's liquidity position.	Debt securities	4,841	5,763
		- Short-term customer financing	-1,089	-1,310
		Shares and participations	-	0
		Investments in securities total	**3,753**	**4,453**
		Cash and balances with central banks	8,399	5,566
		Other deposits	70	70
		Other investments total	**8,469**	**5,636**
		Total liquidity	**12,222**	**10,089**
Ratio of socially responsible investments to MuniFin Group's own green and social funding	Key indicator used in management reporting for social responsibility area.	(Socially responsible investments	456	355
		÷Green and social funding) x100	2,930	2,578
		Ratio of socially responsible investments to MuniFin Group's own green and social funding	**15.6%**	**13.8%**

OTHER MEASURES EUR million	DEFINITION	RECONCILIATION	1 Jan-31 Dec 2021	1 Jan-31 Dec 2020
Turnover	Defined in IFRS (IAS 1). Turnover is not disclosed in MuniFin Group's income statement so the formula for turnover should be given even though it is not considered to be an APM.	Interest and similar income (incl. Leasing)	504	533
		Commission income	2	3
		Net income from securities and foreign exchange transactions	24	-8
		Net income on financial assets at fair value through other comprehensive income	-	0
		Net income from hedge accounting	5	4
		Other operating income	0	0
		Turnover	**535**	**532**
			31 Dec 2021	**31 Dec 2020**
Liquidity Coverage Ratio *(LCR)*, %	Defined in CRR.	(Liquid assets	11,564	9,229
		÷ (Liquidity outflows - liquidity inflows in a stress situation)) x100	3,453	3,490
		Liquidity Coverage Ratio *(LCR)*, %	**334.9%**	**264.4%**
Net Stable Funding Ratio *(NSFR)*, %	Defined in CRR. The 31 Dec 2021 ratio has been calculated in accordance with CRR II. The comparative ratio has not been restated. The comparative ratio has been calculted based on Basel III NSFR guidelines.	(Available Stable Funding (*ASF*)	33,638	30,883
		÷ Required Stable Funding (*RSF*)) x100	27,221	26,539
		Net Stable Funding Ratio *(NSFR)*, %	**123.6%**	**116.4%**
CET1 capital ratio, %	Defined in CRR. The 31 Dec 2021 ratio has been calculated in accordance with CRR II. The comparative ratio has not been restated.	(Common Equity Tier 1 (*CET1*) capital	1,408	1,277
		÷ Risk exposure amount) x100	1,482	1,224
		CET1 capital ratio, %	**95.0%**	**104.3%**

OTHER MEASURES EUR million	DEFINITION	RECONCILIATION	31 Dec 2021	31 Dec 2020
Tier 1 capital ratio, %	Defined in CRR. The 31 Dec 2021 ratio has been calculated in accordance with CRR II. The comparative ratio has not been restated.	(Tier 1 capital	1,756	1,624
		÷ Risk exposure amount) x100	1,482	1,224
		Tier 1 capital ratio, %	**118.4%**	**132.7%**
Total capital ratio, %	Defined in CRR. The 31 Dec 2021 ratio has been calculated in accordance with CRR II. The comparative ratio has not been restated.	(Total own funds	1,756	1,624
		÷ Risk exposure amount) x100	1,482	1,224
		Total capital ratio, %	**118.4%**	**132.7%**
Leverage ratio, %	Defined in CRR. The 31 Dec 2021 ratio has been calculated in accordance with CRR II. The comparative ratio has not been restated.	(Tier 1 capital	1,756	1,624
		÷ Total exposure) x100	13,714	42,100
		Leverage ratio, %	**12.8%**	**3.9%**

Note 2. Group's capital adequacy position

Table 1. Minimum capital requirements and capital buffers

MINIMUM CAPITAL REQUIREMENTS AND CAPITAL BUFFERS, % 31 Dec 2021	Capital requirement	Capital conservation buffer [1]	Countercyclical buffer [2]	O-SII [3]	Systemic risk buffer [4]	Total capital buffers	Total
Common Equity Tier 1 (*CET1*) capital	4.50%	2.50%	0.15%	0.50%	0.00%	3.15%	7.65%
Tier 1 (*T1*) Capital	6.00%	2.50%	0.15%	0.50%	0.00%	3.15%	9.15%
Total own funds	8.00%	2.50%	0.15%	0.50%	0.00%	3.15%	11.15%

MINIMUM CAPITAL REQUIREMENTS AND CAPITAL BUFFERS (EUR 1,000) 31 Dec 2021	Capital requirement	Capital conservation buffer [1]	Countercyclical buffer [2]	O-SII [3]	Systemic risk buffer [4]	Total capital buffers	Total
Common Equity Tier 1 (*CET1*) capital	66,712	37,062	2,217	7,412	0	46,692	113,404
Tier 1 (*T1*) Capital	88,950	37,062	2,217	7,412	0	46,692	135,642
Total own funds	118,600	37,062	2,217	7,412	0	46,692	165,292

MINIMUM CAPITAL REQUIREMENTS AND CAPITAL BUFFERS, % 31 Dec 2020	Capital requirement	Capital conservation buffer [1]	Countercyclical buffer [2]	O-SII [3]	Systemic risk buffer [4]	Total capital buffers	Total
Common Equity Tier 1 (*CET1*) capital	4.50%	2.50%	0.21%	0.50%	0.00%	3.21%	7.71%
Tier 1 (*T1*) Capital	6.00%	2.50%	0.21%	0.50%	0.00%	3.21%	9.21%
Total own funds	8.00%	2.50%	0.21%	0.50%	0.00%	3.21%	11.21%

MINIMUM CAPITAL REQUIREMENTS AND CAPITAL BUFFERS (EUR 1,000) 31 Dec 2020	Capital requirement	Capital conservation buffer [1]	Countercyclical buffer [2]	O-SII [3]	Systemic risk buffer [4]	Total capital buffers	Total
Common Equity Tier 1 (*CET1*) capital	55,065	30,592	2,630	6,118	0	39,340	94,405
Tier 1 (*T1*) Capital	73,420	30,592	2,630	6,118	0	39,340	112,760
Total own funds	97,893	30,592	2,630	6,118	0	39,340	137,234

[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 10:4-6 § and Capital Requirements Regulation and the EU capital requirements Regulation (575/2013; CRR) and Directive (2013/36/EU; CRD IV). On 16 December 2021 (18 December 2020), 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 Group it is 0.15% (0.21%).

[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 Group is 0.5% (0.5%). The decision of the Board of FIN-FSA on 29 June 2021, effective immediately.

[4] Act on Credit Institutions (610/2014) Sect 10:6a § and the EU Capital Requirements Regulation (575/2013; CRR) and Directive (2013/36/EU; CRD IV). On 6 April 2020, the FIN-FSA made a decision to remove the additional capital requirement determined on the basis of the structural characteristics of the financial system (systemic risk buffer) from Finnish credit institutions. The aim of the decision is to mitigate the negative effects of the COVID-19 pandemic on the stability of the financial markets. The decision entered into force immediately. By the end of the financial year, the FIN-FSA had not imposed a new systemic risk buffer for the MuniFin Group. The systemic risk buffer and the O-SII additional capital requirement are parallel buffers, of which the greater is applied.

ECB has imposed a bank-specific Pillar 2 Requirement (*P2R*) of 2.25% on MuniFin Group as part of the annual Supervisory Review and Evaluation Process (*SREP*). Including this P2R requirement, the total SREP capital requirement ratio (*TSCR*) was 10.25% (10.25%) at the end of December 2021. The minimum level of total capital ratio was 13.40% (13.46%) including P2R and other additional capital buffers. For 2021 SREP, MuniFin Group received the decision early February 2022. The P2R is 2.00% from 1 March 2022 onwards, and the minimum level of total capital ratio is 13.15% and TSCR is 10.00%.

Table 2. Own Funds

(EUR 1,000)	31 Dec 2021	31 Dec 2020
Share capital	42,583	42,583
Reserve for invested non-restricted equity	40,366	40,366
Retained earnings	1,416,916	1,258,224
Fair value reserve	13,994	16,471
Other reserves	277	277
Foreseeable dividend	-40,236	-20,313
Accrued interest net of deferred taxes of AT1 capital loan treated as equity	-9,459	-9,459
Common Equity Tier 1 (*CET1*) capital before regulatory adjustments	**1,464,442**	**1,328,150**
Intangible assets	-12,296	-17,346
Deductions due to prudential filters on Common Equity Tier 1 capital	-43,876	-33,992
Common Equity Tier 1 (*CET1*) capital	**1,408,270**	**1,276,812**
Instruments included in Additional Tier 1 capital	347,454	347,454
Additional Tier 1 (*AT1*) capital	**347,454**	**347,454**
Tier 1 (*T1*) capital	**1,755,723**	**1,624,265**
Tier 2 (*T2*) capital	**-**	**-**
Total own funds	**1,755,723**	**1,624,265**

Table 3. Consolidated key figures for capital adequacy

	31 Dec 2021	31 Dec 2020
CET1 capital ratio, %	94.99	104.34
Tier 1 capital ratio, %	118.43	132.74
Total capital ratio, %	118.43	132.74

Figures for the reporting period are calculated in accordance with CRR II. Comparison period has not been restated to reflect the updated capital requirements regulation.

Common Equity Tier 1 capital includes the profit for the financial year, which has been subject to a financial 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 additional valuation adjustment (*AVA*). In addition, the amount of foreseeable dividend has been deducted from CET1 capital.

Change in own credit risk is not included in the own funds (CRR Art. 33).

Additional Tier 1 capital contains MuniFin's AT1 capital loan EUR 350 million at face value, from which EUR 347.5 million can be included in the own funds. The AT1 loan was issued on October 1st 2015. A more detailed description of AT1 capital loan is included in the Parent Company Note *35 Subordinated liabilities*. In addition, main features of capital instruments are included in a separate Pillar III Disclosure Report from this Report of Board of Directors and Financial Statements. Pillar III Disclosure Report is available in English on MuniFin's website.

Table 4. Consolidated minimum requirement for own funds

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

When calculating the capital requirements for market risk, only foreign exchange risk is taken into account as the Group does not have a trading book nor share or commodity positions. As foreign exchange risk is hedged by swapping all currency denominated funding and investments into euros, the Group's foreign exchange position is very small. On 31 December 2021, the FX net position was EUR 1.4 million (EUR 2.1 million), which is less than 2% of total own funds. There was no capital requirement for market risk since the FX net position did not exceed 2% of the total own funds (CRR 575/2013 Art. 351). Also in the comparison period, the FX net position was less than 2% of total own funds.

Guarantees granted by the Municipal Guarantee Board for certain derivative counterparties are not taken into account in credit valuation adjustment risk.

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

	31 Dec 2021		31 Dec 2020	
(EUR 1,000)	Capital requirement	Risk exposure amount	Capital requirement	Risk exposure amount
Credit and counterparty risk, standardised approach	**42,524**	**531,547**	**46,448**	**580,596**
Exposures to central governments or central banks	-	0	-	0
Exposures to regional governments or local authorities	451	5,634	458	5,721
Exposures to public sector entities	705	8,807	718	8,975
Exposures to multilateral development banks	-	0	-	0
Exposures to institutions	23,422	292,771	30,970	387,121
Exposures to corporates	6,038	75,471	-	-
Exposures in the form of covered bonds	9,734	121,670	12,243	153,037
Other items	2,176	27,194	2,059	25,742
Market risk	**-**	**-**	**-**	**-**
Credit valuation adjustment risk (CVA VaR), standard method	**39,549**	**494,362**	**18,470**	**230,876**
Operational risk, basic indicator approach	**36,527**	**456,587**	**32,976**	**412,196**
Total	**118,600**	**1,482,496**	**97,893**	**1,223,668**

The capital requirement for counterparty risk is EUR 4,727 thousand (EUR 3,275 thousand).
Figures for the reporting period are calculated in accordance with CRR II. Comparison period has not been restated to reflect the updated capital requirements regulation.

Table 5. Consolidated exposure by class

31 Dec 2021 (EUR 1,000) EXPOSURE CLASSES	On-balance sheet exposure	Off-balance sheet exposure	Derivatives exposure	Total exposure	Average exposure amount over the period	Risk exposure amount
Exposures to central governments or central banks	8,636,433	-	-	8,636,433	8,503,878	0
Exposures to regional governments or local authorities	14,297,717	906,117	323,486	15,527,320	15,431,645	5,634
Exposures to public sector entities	342,672	-	-	342,672	390,671	8,807
Exposures to multilateral development banks	152,387	-	-	152,387	153,403	0
Exposures to international organisations	143,579	-	-	143,579	147,620	0
Exposures to institutions	1,285,401	-	547,272	1,832,673	1,821,127	292,771
Exposures to corporates	6,457,680	1,682,251	279,398	8,419,329	8,544,959	75,471
Exposures secured by mortgages on immovable property	10,208,300	-	-	10,208,300	9,837,166	0
Exposures in default	130,053	4,506	-	134,559	142,628	0
Exposures in the form of covered bonds	1,216,705	-	-	1,216,705	1,305,877	121,670
Other items	27,232	-	-	27,232	26,675	27,194
Total	**42,898,158**	**2,592,873**	**1,150,157**	**46,641,188**	**46,305,650**	**531,547**

31 Dec 2020 (EUR 1,000) EXPOSURE CLASSES	On-balance sheet exposure	Off-balance sheet exposure	Derivatives exposure	Total exposure	Average exposure amount over the period	Risk exposure amount
Exposures to central governments or central banks	5,873,259	-	-	5,873,259	4,907,696	0
Exposures to regional governments or local authorities	13,893,677	753,517	397,641	15,044,834	14,778,461	5,721
Exposures to public sector entities	495,823	-	-	495,823	432,695	8,975
Exposures to multilateral development banks	185,612	-	-	185,612	208,265	0
Exposures to international organisations	158,697	-	-	158,697	146,967	0
Exposures to institutions	1,970,555	-	559,905	2,530,460	2,384,224	387,121
Exposures to corporates	6,360,654	1,594,447	-	7,955,101	7,975,930	0
Exposures secured by mortgages on immovable property	9,275,460	4,809	-	9,280,269	8,943,126	0
Exposures in default	136,700	1,201	-	137,901	76,111	0
Exposures in the form of covered bonds	1,530,373	-	-	1,530,373	1,956,922	153,037
Other items	33,791	-	-	33,791	27,576	25,742
Total	**39,914,602**	**2,353,973**	**957,545**	**43,226,121**	**41,837,973**	**580,596**

Figures for the reporting period are calculated in accordance with CRR II. Comparison period has not been restated to reflect the updated capital requirements regulation.

Table 6. Leverage ratio

CONSOLIDATED LEVERAGE RATIO (EUR 1,000)	31 Dec 2021	31 Dec 2020
Tier 1 (*T1*) capital	1,755,723	1,624,265
Total exposure	13,715,604	42,102,840
Leverage ratio, %	12.80	3.86

EXPOSURES (EUR 1,000)	31 Dec 2021	31 Dec 2020
On-balance sheet exposures (excl. derivatives and intangible assets)	42,875,215	41,533,974
Derivatives exposure	1,181,445	-512,445
Off-balance sheet exposure	1,227,349	1,081,310
Excluded exposures of public development credit institutions (promotional loans)	-31,568,405	-
Total	**13,715,604**	**42,102,840**

BREAKDOWN OF ON-BALANCE SHEET EXPOSURE (EXCLUDING DERIVATIVES AND EXEMPTED EXPOSURES) (EUR 1,000)	31 Dec 2021 Leverage ratio exposure value	31 Dec 2020 Leverage ratio exposure value
Covered bonds	1,216,705	1,530,373
Exposures treated as sovereigns	9,618,861	20,533,442
Exposures to regional governments, multilateral development banks, international organisations and public sector entities not treated as sovereigns	72,202	73,627
Institutions	1,285,401	1,970,555
Secured by mortgages of immovable properties	-	9,275,460
Corporate	336,701	6,360,654
Exposures in default	-	136,700
Other exposures	16,585	51,137
Total	**12,546,455**	**39,931,948**

Figures for the reporting period are calculated in accordance with CRR II. Comparison period has not been restated to reflect the updated capital requirements regulation.

Note 3. Parent Company's capital adequacy position

Table 1. Own funds

(EUR 1,000)	31 Dec 2021	31 Dec 2020
Share capital	43,008	43,008
Reserve for invested non-restricted equity	40,743	40,743
Retained earnings	1,404,148	1,245,898
Fair value reserve	13,994	16,471
Other reserves	277	277
Foreseeable dividend	-40,236	-20,313
Common Equity Tier 1 (*CET1*) capital before regulatory adjustments	**1,461,934**	**1,326,084**
Intangible assets	-12,305	-17,358
Deductions due to prudential filters on Common Equity Tier 1 capital	-43,876	-33,992
Common Equity Tier 1 (*CET1*) capital	**1,405,753**	**1,274,733**
Instruments included in Additional Tier 1 capital	349,878	349,388
Additional Tier 1 (*AT1*) capital	**349,878**	**349,388**
Tier 1 (*T1*) capital	**1,755,631**	**1,624,121**
Tier 2 (*T2*) capital	**-**	**-**
Total own funds	**1,755,631**	**1,624,121**

Common Equity Tier 1 capital includes the profit for the financial year, which has been subject to a financial 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 additional valuation adjustment (*AVA*). In addition, the amount of foreseeable dividend has been deducted from CET1 capital.

Own credit risk changes are not included in the own funds (CRR Art. 33).

Additional Tier 1 capital contains MuniFin's AT1 capital loan EUR 350 million at face value, from which EUR 349.9 million can be included in the own funds. The AT1 loan was issued on October 1st 2015. A more detailed description of AT1 capital loan is included in the Parent Company Note *35 Subordinated liabilities*. In addition, main features of capital instruments are included in a separate Pillar III Disclosure Report from this Report of Board of Directors and Financial Statements. Pillar III Disclosure Report is available in English on MuniFin's website.

Table 2. Key figures for capital adequacy

	31 Dec 2021	31 Dec 2020
CET1 capital ratio, %	97.00	107.14
Tier 1 capital ratio, %	121.14	136.51
Total capital ratio, %	121.14	136.51

Figures for the reporting period are calculated in accordance with CRR II. Comparison period has not been restated to reflect the updated capital requirements regulation.

Table 3. Minimum requirement for own funds

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

When calculating the capital requirements for market risk, only foreign exchange risk is taken into account as MuniFin does not have a trading book nor share or commodity positions. As foreign exchange risk is hedged by swapping all currency denominated funding and investments into euros, the Company's foreign exchange position is very small. On 31 December 2021, the FX net position was EUR 1.4 million (EUR 2.1 million), which is less than 2% of total own funds. There was no capital requirement for market risk since the FX net position did not exceed 2% of the total own funds (CRR 575/2013 Art. 351). Also in the comparison period, the FX net position was less than 2% of total own funds.

Guarantees granted by the Municipal Guarantee Board for certain derivative counterparties are not taken into account in credit valuation adjustment risk.

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

	31 Dec 2021		31 Dec 2020	
(EUR 1,000)	Capital requirement	Risk exposure amount	Capital requirement	Risk exposure amount
Credit and counterparty risk, standardised approach	**42,604**	**532,547**	**46,522**	**581,522**
Exposures to central governments or central banks	-	0	-	0
Exposures to regional governments or local authorities	451	5,634	458	5,721
Exposures to public sector entities	705	8,807	718	8,975
Exposures to multilateral development banks	-	0	-	0
Exposures to institutions	23,410	292,622	30,956	386,946
Exposures to corporates	6,038	75,471	-	-
Exposures in the form of covered bonds	9,734	121,670	12,243	153,037
Equity exposure	131	1,639	131	1,639
Other items	2,136	26,704	2,016	25,203
Market risk	**-**	**-**	**-**	**-**
Credit valuation adjustment risk (CVA VaR), standardised method	**39,549**	**494,362**	**18,470**	**230,876**
Operational risk, basic indicator approach	**33,788**	**422,344**	**30,190**	**377,380**
Total	**115,940**	**1,449,252**	**95,182**	**1,189,778**

The capital requirement for counterparty risk is EUR 4,727 thousand (EUR 3,275 thousand).
Figures for the reporting period are calculated in accordance with CRR II. Comparison period has not been restated to reflect the updated capital requirements regulation.

Table 4. Exposure by class

31 Dec 2021 (EUR 1,000) EXPOSURE CLASSES	On-balance sheet exposure	Off-balance sheet exposure	Derivatives exposure	Total exposure	Risk exposure amount
Exposures to central governments or central banks	8,636,433	-	-	8,636,433	0
Exposures to regional governments or local authorities	14,297,717	906,117	323,486	15,527,320	5,634
Exposures to public sector entities	342,672	-	-	342,672	8,807
Exposures to multilateral development banks	152,387	-	-	152,387	0
Exposures to international organisations	143,579	-	-	143,579	0
Exposures to institutions	1,284,655	-	547,272	1,831,927	292,622
Exposures to corporates	6,457,680	1,682,251	279,398	8,419,329	75,471
Exposures secured by mortgages on immovable property	10,208,300	-	-	10,208,300	0
Exposures in default	130,053	4,506	-	134,559	0
Exposures in the form of covered bonds	1,216,705	-	-	1,216,705	121,670
Equity exposures	656	-	-	656	1,639
Other items	26,706	-	-	26,706	26,704
Total	**42,897,542**	**2,592,873**	**1,150,157**	**46,640,572**	**532,547**

31 Dec 2020 (EUR 1,000) EXPOSURE CLASSES	On-balance sheet exposure	Off-balance sheet exposure	Derivatives exposure	Total exposure	Risk exposure amount
Exposures to central governments or central banks	5,873,259	-	-	5,873,259	0
Exposures to regional governments or local authorities	13,893,677	753,517	397,641	15,044,834	5,721
Exposures to public sector entities	495,823	-	-	495,823	8,975
Exposures to multilateral development banks	185,612	-	-	185,612	0
Exposures to international organisations	158,697	-	-	158,697	0
Exposures to institutions	1,969,682	-	559,905	2,529,586	386,946
Exposures to corporates	6,360,654	1,594,447	-	7,955,101	0
Exposures secured by mortgages on immovable property	9,275,460	4,809	-	9,280,269	0
Exposures in default	136,700	1,201	-	137,901	0
Exposures in the form of covered bonds	1,530,373	-	-	1,530,373	153,037
Equity exposures	656	-	-	656	1,639
Other items	33,252	-	-	33,252	25,203
Total	**39,913,845**	**2,353,973**	**957,545**	**43,225,364**	**581,522**

Figures for the reporting period are calculated in accordance with CRR II. Comparison period has not been restated to reflect the updated capital requirements regulation.

Consolidated Financial Statements

MuniFin

Municipality Finance Group Consolidated Financial Statements
1 January–31 December 2021

MuniFin

Consolidated income statement

(EUR 1,000)	Note	1 Jan–31 Dec 2021	1 Jan–31 Dec 2020
Interest and similar income	(3)	503,536	532,935
Interest and similar expense	(3)	-223,339	-278,814
Net interest income		**280,197**	**254,121**
Commission income	(4)	2,126	2,834
Commission expense	(4)	-5,056	-5,066
Net income from securities and foreign exchange transactions	(5, 6)	24,095	-7,790
Net income on financial assets at fair value through other comprehensive income	(7)	-	-3
Net income from hedge accounting	(8, 26)	4,823	4,183
Other operating income	(10)	95	127
Administrative expenses	(11)	-34,722	-33,004
Depreciation and impairment on tangible and intangible assets	(12)	-16,208	-5,794
Other operating expenses	(13)	-15,568	-14,610
Credit loss and impairments on financial assets	(14)	-104	-857
Net operating profit		**239,678**	**194,141**
Income tax expense	(15)	-48,073	-38,840
Profit for the financial year		**191,605**	**155,301**

The accompanying notes are an integral part of the Financial Statements.

Consolidated statement of comprehensive income

(EUR 1,000)	Note	1 Jan–31 Dec 2021	1 Jan–31 Dec 2020
Profit for the financial year		191,605	155,301
Components of other comprehensive income			
Items not to be reclassified to income statement in subsequent periods			
Net change in fair value due to changes in own credit risk on financial liabilities designated at fair value through profit or loss	(6)	400	-16,551
Net change in Cost-of-Hedging	(26)	-2,504	-15,564
Items to be reclassified to income statement in subsequent periods			
Net change in fair value of financial assets at fair value through other comprehensive income	(7)	-672	112
Net change in expected credit loss of financial assets at fair value through other comprehensive income	(27)	0	-62
Taxes related to components of other comprehensive income		555	6,413
Total components of other comprehensive income		-2,222	-25,652
Total comprehensive income for the financial year		**189,383**	**129,649**

The accompanying notes are an integral part of the Financial Statements.

Consolidated statement of financial position

(EUR 1,000)	Note	31 Dec 2021	31 Dec 2020
Assets			
Cash and balances with central banks	(20)	8,399,045	5,565,801
Loans and advances to credit institutions	(21)	1,417,310	1,841,853
Loans and advances to the public and public sector entities	(22)	29,214,043	28,022,325
Debt securities	(23)	4,841,428	5,763,214
Shares and participations	(24)	-	27
Derivative contracts	(19, 25)	1,999,676	2,358,163
Intangible assets	(28, 30)	12,296	17,346
Tangible assets	(29, 30)	7,491	10,364
Other assets	(31)	256,117	259,785
Accrued income and prepayments	(32)	212,655	203,547
Total assets	**(16, 17, 18)**	**46,360,060**	**44,042,426**

(EUR 1,000)	Note	31 Dec 2021	31 Dec 2020
Liabilities and equity			
Liabilities			
Liabilities to credit institutions	(34, 37)	2,801,016	2,001,478
Liabilities to the public and public sector entities	(35, 37)	3,324,685	3,884,026
Debt securities issued	(36, 37)	35,327,525	32,911,906
Derivative contracts	(19, 25)	2,224,294	2,860,570
Provisions and other liabilities	(38)	349,331	247,021
Accrued expenses and deferred income	(39)	181,732	152,398
Deferred tax liabilities	(33)	289,887	279,906
Total liabilities	**(16, 17, 18)**	**44,498,470**	**42,337,306**
Equity			
Share capital	(40)	42,583	42,583
Reserve fund	(40)	277	277
Fair value reserve of investments	(40)	309	847
Own credit revaluation reserve	(40)	64	-255
Cost-of-Hedging reserve	(40)	13,621	15,624
Reserve for invested non-restricted equity	(40)	40,366	40,366
Retained earnings	(40)	1,416,916	1,258,224
Total equity attributable to parent company equity holders		**1,514,136**	**1,357,666**
Other equity instruments issued	**(40)**	**347,454**	**347,454**
Total equity		**1,861,590**	**1,705,120**
Total liabilities and equity		**46,360,060**	**44,042,426**

The accompanying notes are an integral part of the Financial Statements.

Consolidated statement of changes in equity

(EUR 1,000)	Total equity attributable to parent company equity holders								Other equity instruments issued	Total equity
	Share capital	Reserve fund	Fair value reserve of investments	Own credit revaluation reserve	Cost-of-Hedging reserve	Reserve for invested non-restricted equity	Retained earnings	Total		
Equity at 31 December 2019	**42,583**	**277**	**807**	**12,985**	**28,075**	**40,366**	**1,121,774**	**1,246,868**	**347,454**	**1,594,321**
Interest paid on Additional Tier 1 capital instrument	-	-	-	-	-	-	-12,600	-12,600	-	-12,600
Dividends paid for 2019	-	-	-	-	-	-	-6,250	-6,250	-	-6,250
Profit for the financial year	-	-	-	-	-	-	155,301	155,301	-	155,301
Components of other comprehensive income net of tax										
Items not to be reclassified to income statement in subsequent periods										
Net change in fair value due to changes in own credit risk on financial liabilities designated at fair value through profit or loss	-	-	-	-13,241	-	-	-	-13,241	-	-13,241
Net change in Cost-of-Hedging	-	-	-	-	-12,451	-	-	-12,451	-	-12,451
Items to be reclassified to income statement in subsequent periods										
Net change in fair value of financial assets at fair value through other comprehensive income	-	-	90	-	-	-	-	90	-	90
Net change in expected credit loss of financial assets at fair value through other comprehensive income	-	-	-50	-	-	-	-	-50	-	-50
Equity at 31 December 2020	**42,583**	**277**	**847**	**-255**	**15,624**	**40,366**	**1,258,224**	**1,357,666**	**347,454**	**1,705,120**

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(EUR 1,000)	Share capital	Reserve fund	Fair value reserve of investments	Own credit revaluation reserve	Cost-of-Hedging reserve	Reserve for invested non-restricted equity	Retained earnings	Total	Other equity instruments issued	Total equity
	Total equity attributable to parent company equity holders									
Interest paid on Additional Tier 1 capital instrument	-	-	-	-	-	-	-12,600	-12,600	-	-12,600
Dividends paid for 2020	-	-	-	-	-	-	-20,313	-20,313	-	-20,313
Profit for the financial year	-	-	-	-	-	-	191,605	191,605	-	191,605
Components of other comprehensive income net of tax										
Items not to be reclassified to income statement in subsequent periods										
Net change in fair value due to changes in own credit risk on financial liabilities designated at fair value through profit or loss	-	-	-	320	-	-	-	320	-	320
Net change in Cost-of-Hedging	-	-	-	-	-2,004	-	-	-2,004	-	-2,004
Items to be reclassified to income statement in subsequent periods										
Net change in fair value of financial assets at fair value through other comprehensive income	-	-	-538	-	-	-	-	-538	-	-538
Net change in expected credit loss of financial assets at fair value through other comprehensive income	-	-	0	-	-	-	-	0	-	0
Equity at 31 December 2021	**42,583**	**277**	**309**	**64**	**13,621**	**40,366**	**1,416,916**	**1,514,136**	**347,454**	**1,861,590**

The accompanying notes are an integral part of the Financial Statements.

Consolidated statement of cash flows

(EUR 1,000)	1 Jan–31 Dec 2021	1 Jan–31 Dec 2020
Cash flow from operating activities	**2,750,437**	**772,020**
Net change in long-term funding	3,085,073	3,702,396
Net change in short-term funding	-354,008	1,257,523
Net change in long-term loans	-1,580,112	-3,074,492
Net change in short-term loans	224,130	-506,296
Net change in investments	667,724	462,373
Net change in collaterals	480,083	-1,287,941
Interest on assets	16,875	83,389
Interest on liabilities	221,595	161,397
Other income	74,355	62,547
Payments of operating expenses	-88,798	-86,847
Taxes paid	3,518	-2,028
Cash flow from investing activities	**-7,747**	**-8,236**
Acquisition of tangible assets	-3	-3,644
Proceeds from sale of tangible assets	226	165
Acquisition of intangible assets	-7,970	-4,758
Cash flow from financing activities	**-37,866**	**-23,753**
Paid interest on AT1 capital instrument	-15,750	-15,750
Dividend paid	-20,313	-6,250
Total cash flow from leases	-1,803	-1,753
Change in cash and cash equivalents	**2,704,824**	**740,031**
Cash and cash equivalents at 1 Jan	**5,730,680**	**4,990,649**
Cash and cash equivalents at 31 Dec	**8,435,504**	**5,730,680**

The accompanying notes are an integral part of the Financial Statements.

Notes to the Consolidated Financial Statements

Notes to the income statement

Notes to the statement of financial position

Notes to the Consolidated Financial Statements

Note 1. Summary of significant accounting policies

1. General information on the Group and the basis of preparation

Municipality Finance Group (referred to as MuniFin Group or the Group) consists of Municipality Finance Plc (referred to as MuniFin or the Parent Company) and Financial Advisory Services Inspira Ltd (referred to as Inspira or the Subsidiary). The Group's Parent Company is a Finnish public limited liability company established under Finnish legislation and domiciled in Helsinki. Its registered address is Jaakonkatu 3 A, 00100 Helsinki. The Subsidiary's domicile is Helsinki and registered address Jaakonkatu 3 A, 00100 Helsinki. A copy of the Consolidated Financial Statements is available online at www.munifin.fi or from the Group's Parent Company at Jaakonkatu 3 A, 00100 Helsinki.

The Board of Directors of MuniFin has approved these Financial Statements for disclosure at its meeting on 4 February 2022. According to the Finnish Limited Liability Companies Act, shareholders may accept or reject the Financial Statements at the Annual General Meeting held after the publication. The Annual General Meeting may also decide to alter the Financial Statements.

These Consolidated Financial Statements have been prepared in accordance with International Financial Reporting Standards (*IFRS*) and in compliance with IAS and IFRS and the SIC and IFRIC interpretations in force on 31 December 2021. International Financial Reporting Standards refer to the standards and their interpretations approved for application in the EU in accordance with the procedure stipulated in EU Regulation (EC) No. 1606/2002 and embodied in the Finnish Accounting Act and the decrees enacted under it. In addition, the notes to the Consolidated Financial Statements comply with the requirements of the Finnish accounting and corporate legislation complementing the IFRS requirements.

Capital adequacy information in compliance with Part Eight of the EU Capital Requirements Regulation ((EU) No 575/2013) and its amending regulation ((EU) No 876/2019) is presented in a Pillar III Disclosure Report which is a separate report from the Report of the Board of Directors and the Financial Statements.

The Consolidated Financial Statements have been prepared under historical cost convention, except for financial assets and liabilities measured at fair value and hedged items in fair value hedge accounting for the risk hedged.

The functional currency of the Parent Company is euro. The notes of the Financial Statements are presented in thousands of euros. All figures in the notes have been rounded, so the total of individual figures may differ from the total figure presented.

2. Changes in accounting policies and application of new standards

The Consolidated Financial Statements have been prepared in accordance with the same accounting policies as in 2020, with the exception of the following new standards, interpretations and amendments to existing standards that the Group has applied starting from 1 January 2021.

COVID-19-Related Rent Concessions beyond 30 June 2021 – Amendment to IFRS 16 Leases (effective from 1 April 2021 for financial years starting, at the latest, on or after 1 January 2021). The amendments allow the lessees not to account for rent concessions as lease modifications if the concessions are a direct consequence of the COVID-19 pandemic and only if certain conditions are met. This change did not have an effect on the Consolidated Financial Statements, as the Group has not had any rent concessions due to the COVID-19 pandemic.

Interest Rate Benchmark Reform – Phase 2 – Amendments to IFRS 9 Financial Instruments, IAS 39 Financial Instruments: Recognition and Measurement, IFRS 7 Financial Instruments: Disclosures, IFRS 4 Insurance Contracts and IFRS 16 Leases (effective for financial years beginning on or after 1 January 2021). Amendments address issues affecting financial statements when changes are made to contractual cash flows and hedging relationships as a result of interest rate benchmark reform. Amendments assist companies in providing useful information about the effects of interest rate benchmark reform on financial statements. The effects of the interest rate benchmark reform are discussed in this Note in Section *23. IBOR reform.*

As of 1 January 2021, MuniFin Group adopted the **European Banking Authority's (EBA) guidelines on the application of the definition of default** (Guidelines on the application of the definition of default under Article 178 of Regulation (EU) No 575/2013: EBA/GL/2016/07 and EBA/RTS/2016/06). The guidelines harmonise the definition of default applied by European banks on their customers. The process in accordance with the Guidelines recognises defaults earlier, based on the unlikeliness to pay criteria that include, for example, payment defaults registered in external credit registers or granted forbearance where the present value of the loan decreases by more than 1 per cent. The implementation of the new definition of default did not have a significant impact on MuniFin Group's expected credit losses (*ECL*).

Other new or amended standards and interpretations that entered into effect in 2021 did not have a material impact on the Consolidated Financial Statements.

3. Accounting policies requiring management judgement and key uncertainty factors related to estimates

In preparing the Financial Statements under IFRS, the Group management is required to make certain estimates and use judgement in the application of the accounting policies that affect the revenue, expenses, assets and liabilities presented in the Financial Statements.

The key assumptions made by the Group concern key uncertainty factors pertaining to the future and the estimates at the financial statement date including the uncertainties related to the potential short- and long-term impact of the COVID-19 pandemic. These relate to, among other things, the determination of fair value and the expected credit losses and impairment of financial assets.

3.1 Management judgement related to the determination of fair value

The level of management judgement required in establishing fair value of financial instruments for which there is a quoted price in an active market is usually minimal. For the valuation of financial instruments where prices quoted in active markets are not available, the Group uses valuation techniques to establish fair value. These valuation techniques involve some level of management estimation and judgement, the degree of which will depend on observability of the input parameters and the instrument's complexity. For instruments, valued using valuation models which are standard across the industry and where all inputs are quoted in active markets, the level of subjectivity or judgement required is low. The level of subjectivity and degree of management judgement required is more significant for those instruments valued using sophisticated models and where some or all of the inputs are less liquid or unobservable. Management judgement is required in the selection and application of appropriate parameters, assumptions and modelling techniques in particular, where data is obtained from infrequent market transactions or extrapolation techniques are applied.

MuniFin Group discloses financial assets and liabilities according to their fair value hierarchy levels in the notes to the Financial Statements. Management judgement is required in determining the hierarchy level to which a financial instrument should be classified specifically when the valuation is determined by a number of inputs, of which some are observable and others not. Furthermore, the classification of an instrument can change over time to reflect changes in input liquidity. The Group also discloses a sensitivity analysis of the impact on the level 3 financial instruments by using reasonably possible alternatives for the unobservable input. The determination of reasonably possible alternatives requires management judgement.

The valuation methods and controls and quantitative disclosures with respect to the determination of fair value as well as the fair value hierarchy levels and sensitivity analysis are disclosed in Note *17 Fair values of financial assets and liabilities*. The changes in the fair values of financial instruments impact the income statement line items *Net income from securities and foreign exchange transactions* and *Net income from hedge accounting* as well as the other comprehensive income line items *Net change in fair value of financial assets at fair value through other comprehensive income, Net change in fair value due to changes in own credit risk on financial liabilities designated at fair value through profit or loss* and *Net change in Cost-of-Hedging.*

3.2 Management judgement related to the expected credit losses

The measurement of impairment losses under IFRS 9 across all categories of financial assets requires judgement, in particular, the estimation of amount and timing of future cash flows and collateral values when determining impairment losses and the assessment of a significant increase in credit risk. These estimates are driven by a number of factors, changes in which can result in different levels of allowances. Expected credit losses are disclosed in Note *27*. The changes of the expected credit losses are recognised under the income statement line *Credit loss and impairments of financial assets*.

The Group's ECL calculations are an output of complex models with a number of underlying assumptions regarding the choice of variable inputs and their interdependencies. Elements of ECL models that are considered accounting judgements and estimates include:

- The Group's internal credit grading model, which assigns probabilities of default (*PD*) to the individual grades.
- The Group's criteria for assessing if there has been a significant increase in credit risk and qualitative assessment.
- Development of ECL models, including the various formulas and the choice of inputs.
- Determination of relationships between macroeconomic scenarios and economic inputs, such as unemployment levels and collateral values and their effect on PDs, EADs (*exposures at default*) and LGDs (*loss given default*).
- Selection of forward-looking macroeconomic scenarios and their probability weightings, to derive the economic inputs into the ECL models.

The Group regularly reviews its models in the context of actual loss experience and adjusts them when necessary.

In addition to the model-based expected credit losses, the Group has recorded an additional discretionary provision (*management overlay*) of EUR 430 thousand to take into account model changes that will take place in 2022. During 2022, the Group will further develop loss given default (*LGD*) calculation of mortgage loans as well as lifetime ECL calculations.

4. Basis of consolidation

The Consolidated Financial Statements encompasses the Financial Statements of MuniFin, the Parent Company, and the Subsidiary Financial Advisory Services Inspira Ltd, in which the Parent Company has control. MuniFin has control over an investee if it is exposed or has rights to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. Inspira is fully owned by MuniFin and thus the control is based on votes. Intra-group holdings have been eliminated by using the acquisition method. Intra-group transactions, receivables and liabilities as well as distribution of profit have been eliminated in the Consolidated Financial Statements.

5. Segment reporting

The Group's line of business is credit institution operations and providing financial services. The Group operates in a single segment, which also forms the basis of reporting to the Group's chief operating decision maker. Group-level information on products and services are presented in Note *3 Interest income and expense* and *4 Commission income and expense*. The Group has not broken down income or assets based on geographical areas due to operating in Finland only. The Group regularly monitors the development of the lending portfolio by customer and the proportion of interest paid by each customer of the total interest income. The largest cities measured by population and non-profit companies focused on rental housing development are the largest borrowers. There is no customer group, that accumulates over 10% of Group's total interest income. The chief operating decision maker of the Group is the Chief Executive Officer of the Parent Company as he is responsible for allocating resources to and assess the performance of the Group.

6. Translation of foreign currency denominated items

Transactions denominated in a foreign currency have been recorded in euro, the Group's Parent Company's functional currency, using the exchange rates of the transaction dates. On the reporting date, monetary receivables and liabilities denominated in a foreign currency have been translated into euros using the European Central Bank's average exchange rate of that date. The resulting translation differences are recorded in the income statement under *Net income from securities and foreign exchange transactions*. The fair value changes of financial assets denominated in a foreign currency and classified as fair value through other comprehensive income are divided into translation differences arising from changes to the amortised cost of the asset and other changes in carrying amount. Translation differences related to changes in amortised cost are recognised in the income statement, while other changes in carrying amount are recognised in other comprehensive income.

7. Classification, recognition and measurement of financial instruments

The classification of financial instruments at initial recognition depends on their contractual terms and for financial assets on the business model for managing the instruments. Financial instruments are initially measured at fair value taking into account transaction costs that are incremental and directly attributable to the acquisition cost or issue of the financial asset or liability, unless the financial asset or liability is measured at fair value through profit or loss. Trade receivables are measured at the transaction price.

7.1 Classification and measurement of financial assets

The classification of financial assets is dependent on:

- the business model applied to managing the financial assets and
- the characteristics of their contractual cash flows.

Financial assets are reclassified only when the business model for managing financial assets is changed. On initial recognition, a financial asset is classified as amortised cost (*AC*), fair value through other comprehensive income (*FVOCI*) or fair value through profit or loss (*FVTPL*). Certain financial assets, that otherwise meet the requirements to be classified as amortised cost or fair value through other comprehensive income, can be irrevocably designated to be measured at fair value through profit or loss by applying fair value option (*FVO*).

7.1.1 Business model assessment

The Group has determined its business models at the level that best reflects how it manages groups of financial assets to achieve its business objective. Business model is not assessed on an instrument-by-instrument basis, but at a higher level of aggregation and is based on observable factors such as:

- How the performance of the business model and the financial assets held within that business model are evaluated and reported to the Group's key management personnel.
- The risks that affect the performance of the business model and the financial assets held within that business model and, in particular, the way those risks are managed.
- How managers of the business are compensated, for example, whether the compensation is based on the fair value of the assets managed or on the contractual cash flows collected.
- The expected frequency, value and timing of sales.

The business model assessment is based on reasonably expected scenarios without taking "worst case" or "stress case" scenarios into account. If cash flows after initial recognition are realised in a way that is different from original expectations, the Group does not change the classification of the remaining financial assets held in that business model but incorporates such information when assessing newly originated or newly purchased financial assets going forward.

MuniFin Group has identified two different business models for managing financial assets: the first business model is based on holding financial assets and collecting contractual cash flows. The other business model is based on collecting contractual cash flows and selling financial assets.

The Group's lending is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows. In addition, financial assets such as bank account balances, bank deposits, CSA collateral receivables and reverse repurchase agreements are held within a business model whose objective is to hold financial assets in order to collect contractual cash flows.

Liquidity investments are held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets. Thus, based on the business model the financial assets are classified as fair value through other comprehensive income (*FVOCI*).

7.1.2 The solely payment of principal and interest (SPPI) test

As a second step of its classification process, the Group assesses the contractual terms of financial assets to identify whether they meet the SPPI test. In the SPPI test, the contractual cash flows of the financial asset are assessed. In order to pass the SPPI test, the cash flows need to consist solely of payments of principal and interest.

"Principal" for the purpose of this test is defined as the fair value of the financial asset at initial recognition and it may change over the life of the financial asset for example, if there are repayments of principal or amortisation of the premium or discount.

The most significant elements of interest within a lending arrangement are typically the consideration for the time value of money and credit risk. To make the SPPI assessment, the Group applies judgement and considers relevant factors such as the currency in which the financial asset is denominated, and the period for which the interest rate is set.

Financial assets are required to be classified at fair value through profit or loss, if:

- they contain contractual terms that are unrelated to a basic lending agreement and
- give rise to cash flows that are not solely payments of principal and interest on the amount outstanding.

These contractual terms are required to introduce a more than de minimis exposure to risks or volatility in the contractual cash flows, in order for the financial asset to fail the SPPI test. Some of the Group's structured lending agreements do not fulfil the SPPI criteria and are thus classified mandatorily at fair value through profit or loss. As a result of the requirements in the SPPI test, embedded derivatives in financial assets would be classified at fair value through profit or loss. IFRS 9 does not allow for the separation of embedded derivatives from financial asset host contracts.

7.1.3 Amortised cost

A financial asset is classified at amortised cost if it meets both of the following conditions and is not designated at fair value through profit or loss:

- The item is held within a business model whose objective is to hold assets to collect contractual cash flows; and
- The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Financial assets in this category are initially recognised at fair value adjusted by directly attributable transaction costs. Subsequently, these assets are measured at amortised cost using the effective interest method. The measurement of impairment is based on the expected credit loss model described in Section *9. Impairment of financial assets*. Interest received on financial assets at amortised cost is recognised in the income statement under *Interest and similar income*. The expected credit losses are recognised in the income statement under *Credit loss and impairments on financial assets*.

Based on the business model assessment, financial assets that are classified at amortised cost include the Group's lending portfolio consisting of short-term and long-term lending, money market deposits, reverse repurchase agreements, bank account balances and CSA collateral receivables. Not all aforementioned assets can be classified at amortised cost as required by the business model as certain lending agreements fail the test of solely payments of principal and interest. These structured lending agreements are classified mandatorily at fair value through profit or loss.

As a rule, the Group hedges fixed rate lending and lending at long-term reference rates and applies fair value hedge accounting to these. Lending that is designated as hedged item in a hedge relationship, is measured at fair value for the risk hedged. Hedge accounting principles are described in Section *10. Hedge accounting* of this note. Note *26 Hedge accounting* describes how hedge accounting has been implemented in the Group.

7.1.4 Fair value through other comprehensive income
A financial asset, that is a debt instrument, is classified at fair value through other comprehensive income if it meets both of the following conditions and is not designated at fair value through profit or loss:

- The asset is held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets; and
- The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Financial assets in this category are initially recognised at fair value adjusted by directly attributable transaction costs. Subsequent changes in fair value are recognised through the other comprehensive income and are presented in the *Fair value reserve* adjusted by deferred tax. The measurement of impairment is based on the expected credit loss model described in Section *9. Impairment of financial assets*. Foreign exchange gains and losses on debt securities denominated in foreign currencies are recognised in the income statement under *Net income from securities and foreign exchange transactions*. Interest received on debt securities is recognised in the income statement under *Interest and similar income*. The expected credit losses are recognised in the income statement under *Credit loss and impairments on financial assets*. Upon disposal, the cumulative gain or loss previously recognised in the other comprehensive income is reclassified from the fair value reserve in equity to the income statement and presented under *Net income on financial assets at fair value through other comprehensive income*.

On initial recognition of an equity investment that is not held for trading, the Group may irrevocably elect to present subsequent changes in fair value in the other comprehensive income. When this election is made, amounts presented in the other comprehensive income are not subsequently transferred to the income statement. Dividends on such investments are recognised in the income statement unless the dividend clearly represents a partial recovery of the initial investment. This election is made on an investment-by-investment basis. The Group classifies all of its investments in equity instruments at fair value through profit or loss.

Based on the business model assessment, investments of the Group's liquidity portfolio are classified at fair value through other comprehensive income. The majority of the liquidity portfolio consists of fixed and floating rate debt securities and investments in commercial papers. These investments pass the SPPI test.

7.1.5 Fair value through profit or loss

A financial asset is classified at fair value through profit or loss unless it is classified at amortised cost or fair value through other comprehensive income. In MuniFin Group, this category comprises of the following assets:

- derivative assets,
- debt instruments with contractual terms that do not represent solely payments of principal and interest on the principal amount outstanding,
- investments in equity instruments and
- financial assets designated at fair value through profit or loss on initial recognition.

Financial assets in this category are initially recognised at fair value, with transaction costs recognised in the income statement as incurred. Subsequently, these assets are measured at fair value through profit or loss. Fair value changes are recorded in the income statement under *Net income from securities and foreign exchange transactions*. Interest received on financial assets at fair value through profit or loss is recognised in the income statement under *Interest and similar income*.

7.1.6 Designated at fair value through profit or loss

On initial recognition, the Group can designate certain financial assets at fair value through profit or loss (*fair value option, FVO*). This irrevocable designation is made if doing so eliminates or significantly reduces measurement or recognition inconsistencies (i.e., eliminates an accounting mismatch) which would otherwise arise from measuring financial assets on different bases. Financial assets that the Group has designated at fair value through profit or loss include debt securities of the liquidity portfolio and individual lending agreements of which the interest rate risk and/or foreign exchange risk is hedged with interest rate and cross currency interest rate swaps.

7.2 Classification and measurement of financial liabilities

On initial recognition, a financial liability is classified at amortised cost (*AC*) or fair value through profit or loss (*FVTPL*). Certain financial liabilities, that otherwise meet the requirements to be classified at amortised cost, can be irrevocably designated at fair value through profit or loss by applying the fair value option (*FVO*). Financial liabilities are not reclassified after initial recognition.

7.2.1 Amortised cost

Financial liabilities are classified at amortised cost, except for:

- derivative liabilities and
- liabilities that are designated at fair value through profit or loss.

Financial liabilities in this category are initially recognised at fair value adjusted by directly attributable transaction costs. Subsequently, these financial liabilities are measured at amortised cost using the effective interest rate method. Interest paid on liabilities is recognised in the income statement under *Interest and similar expense*.

Financial liabilities that are classified at amortised cost include liabilities to credit institutions, liabilities to the public and public sector entities and debt securities issued. MuniFin Group applies fair value hedge accounting according to IFRS 9 to financial liabilities at amortised cost which have been hedged. Hedge accounting principles are described in Section *10. Hedge accounting* of this note. Note *26 Hedge accounting* describes how hedge accounting has been implemented in the Group.

7.2.2 Fair value through profit or loss

A financial liability is classified at fair value through profit or loss unless it is classified at amortised cost. This category includes derivative contracts and financial liabilities that are designated at fair value through profit or loss upon initial recognition.

Financial liabilities in this category are initially recognised at fair value. Subsequent changes in fair value are recorded in the income statement under *Net income from securities and foreign exchange transactions.* Interest paid on liabilities is recognised in the income statement under *Interest and similar expense*.

7.2.3 Designated at fair value through profit or loss

On initial recognition, the Group can designate certain financial liabilities at fair value through profit or loss. This designation is made:

- if it eliminates or significantly reduces an accounting mismatch or
- if financial liabilities are both managed, and their performance evaluated on a fair value basis in accordance with a documented risk management or investment strategy.

The Group has designated short-term debt instruments denominated in foreign currencies, which have been hedged with FX swaps at fair value through profit or loss. The designation reduces accounting mismatch which would otherwise arise between the measurement of the derivative and financial liability. In addition, the Group has also designated certain financial liabilities at fair value through profit or loss. These consist of financial liabilities, which have been hedged according to the Group's risk management policy, but to which fair value hedge accounting in accordance with IFRS 9 is not applied. To eliminate the accounting mismatch resulting from the economic hedge, these debt instruments have been designated at fair value through profit or loss. As a result of the designation all financial liabilities containing embedded derivatives requiring separation are classified at fair value through profit or loss.

An embedded derivative is part of a hybrid financial instrument, which contains a non-derivative host and an embedded derivative which causes the contractual cash flows to be modified in similar way to that of stand-alone derivative cash flows. If the economic characteristics and risks of an embedded derivative are not closely related to the characteristics and risks of the host contract, the embedded derivative of a debt instrument is required to be separated. The separated embedded derivative is measured at fair value through profit or loss. If the fair value of the embedded derivative cannot be separately measured, the entire hybrid instrument is designated at fair value through profit or loss. Debt securities issued by MuniFin can contain interest or redemption terms with the economic characteristics and risks that are not closely related to the host contract. The Group hedges all structured interest and redemption terms in its issued debt securities with offsetting derivatives and designates them at fair value through profit and loss and thus the above-mentioned components are not separated from the host contract.

The fair value changes of financial liabilities designated at fair value through profit or loss are recorded in the income statement under *Net income from securities and foreign exchange transactions*, except for fair value changes attributable to changes in the Group's own credit risk. The fair value changes of the derivative hedging the financial liability are recorded in the same income statement line item. When a financial liability is designated at fair value through profit or loss, the fair value changes due to changes of the Group's credit risk are presented separately in the other comprehensive income under *Net change in fair value due to changes in own credit risk on financial liabilities designated at fair value through profit or loss*.

The Group applies the income approach to the separation of fair value changes related to changes in own credit risk from the fair value changes of the financial liability. For the majority of financial liabilities designated at fair value through profit or loss, no market price is available as there is no active secondary market. The methodology for separation of own credit risk, utilises as input:

- MuniFin's benchmark curves,
- cross currency basis spreads and
- credit spreads of MuniFin's issued debt securities.

Based on the aforementioned inputs, valuation curves can be constructed for various reporting periods for valuing financial liabilities designated at fair value through profit or loss. By comparing fair values calculated using the trade date and reporting date curves, the impact of the change in own credit risk on the fair value of the financial liability can be determined.

8. Recognition and derecognition of financial assets and liabilities

Financial assets are recognised on the statement of financial position on the settlement day. Financial liabilities are recognised when the consideration is received. Derivatives are recognised on the trade date.

Financial assets are derecognised when the contractual right to the assets expires or when the rights have been transferred to another party. Financial liabilities are derecognised when the obligations have been fulfilled.

8.1 Derecognition due to substantial modification of terms and conditions

The Group derecognises a financial asset, such as a loan to a customer, when the terms and conditions have been renegotiated to the extent that, substantially, it becomes a new loan. The newly recognised loans are classified at stage 1 for the purposes of measurement of expected credit loss, unless the Group determines that the modified loan is deemed to be a credit-impaired financial asset (*purchased or originated credit impaired, POCI*). If the modification does not result in cash flows that are substantially different, the modification does not result in derecognition.

If an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of the existing liability are substantially modified, such an exchange or modification is treated as a derecognition of the original liability and the recognition of a new liability.

9. Impairment of financial assets

The impairment requirements are based on a three-stage approach to measure expected credit losses (ECL). Financial assets classified as amortised cost or fair value through other comprehensive income are in scope for recognising impairment under the IFRS 9 standard. Also finance lease receivables and off-balance sheet binding loan commitments are in scope for recognising impairment due to their credit risk. For further information on the classification of financial assets, see Section *7. Classification, recognition and measurement of financial instruments* in this Note.

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 (*ECL*) are calculated on an individual basis. Collective assessment may be used to determine a possible management overlay provision.

9.1 Measurement of ECL

The assets in the scope of the expected credit loss impairment model are classified into three stages.

- Stage 1 includes assets with no significant increase in credit risk,
- Stage 2 includes assets with significantly increased credit risk since origination, and
- Stage 3 includes assets that are credit impaired and thus fulfil the definition of default.

Default is defined as a situation where the obligor is more than 90 days-past-due or the obligor is considered unlikely to pay its credit obligations for example due to the obligor's bankruptcy or distressed restructuring. The definition of default is in line with the Group's capital adequacy calculations and risk management as well as with that required by international regulators (European Banking Authority's (*EBA*) guidelines on the application of the definition of default under Article 178 of Regulation (EU) No 575/2013: EBA/GL/2016/07 and EBA/RTS/2016/06).

The provision for stage 1 is equivalent to the credit loss expected for 12 months. For stages 2 and 3, the provision is equivalent to the expected credit losses for the entire lifetime. The Group calculates ECL based on three probability-weighted scenarios to measure the expected cash shortfalls. The net present value of the contractual cash flows of the exposure are compared to the sum of the net present value of expected future cash flows. If the contractual cash flows are higher than the expected future cash flows, the difference is recognised as an expected credit loss. The expected future cash flows are discounted with the effective interest rate (*EIR*). The fair value of collateral and received guarantees are taken into account when calculating expected future cash flows.

The key elements of the ECL calculations are, as follows:

PD *The probability of default* is an estimate of the likelihood of default over a given time horizon. A default may only happen at a certain time over the assessed period, if the exposure has not been previously derecognised and is still in the portfolio. The PD used in stage transition is defined on a client level. The PD used to calculate the exposures expected credit loss takes also into account the guarantees received, so that the Finnish government PD is applied in the ECL calculation instead.

EAD *The exposure at default* is an estimate of the exposure at a future default date, taking into account expected changes in the exposure after the reporting date, including prepayments of principal and interest, whether scheduled by contract or otherwise, expected drawdowns on committed facilities, and accrued interest from missed payments.

LGD *The loss given default* is an estimate of the loss arising in the case where a default occurs at a given time. It is based on the difference between the contractual cash flows due and those that the lender would expect to receive, including cash flows from the realisation of any collateral.

When estimating the ECL, the Group considers three scenarios. Each of these are associated with different PDs, EADs and LGDs. When relevant, the Group's assessment of multiple scenarios also incorporates how defaulted loans are expected to be recovered, including the probability that the loans will cure and the value of collateral or the amount that might be received for selling the asset. The maximum period for which the credit losses are determined is the contractual life of a financial instrument unless the Group has the legal right to call it earlier.

Impairment losses and their reversals are accounted for and disclosed separately from modification losses or gains that are accounted for as an adjustment of the financial asset's gross carrying amount.

The accounting principles of ECL are summarised below:

- Stage 1: If there has been no significant increase in credit risk since initial recognition, the provision for exposures is based on the 12-month expected loss. The 12-month ECL is calculated as the portion of the lifetime ECL that represent the ECL that result from default events on a financial instrument that are possible within the 12 months after the reporting date. The Group calculates the 12-month ECL allowance based on the expectation of a default occurring in the 12 months following the reporting date. These expected 12-month default probabilities are applied to a forecast EAD and multiplied by the expected LGD and discounted by an EIR.
- Stage 2: When the exposure has shown a significant increase in credit risk since origination but is not credit-impaired, the Group records a provision for the lifetime expected credit losses. The mechanics are similar to those explained above, including the use of multiple scenarios, but PDs and LGDs are estimated over the lifetime of the instrument. The expected cash shortfalls are discounted by their EIR.
- Stage 3: For assets considered credit-impaired, the Group recognises the lifetime expected credit losses. For these exposures interest revenue is calculated by applying the EIR to the amortised cost (*net of provision*).
- Purchased or originated credit impaired assets (*POCI*) are financial assets that are credit-impaired on initial recognition.
- Loan commitments: When estimating ECL for undrawn loan commitments, the Group estimates the expected portion of the loan commitment that will be drawn down over its expected life. The ECL is then calculated based on the present value of the expected shortfalls in cash flows if the loan is drawn down, based on probability-weighting of the three scenarios. The expected cash shortfalls are discounted at an approximation to the expected EIR of the loan.

9.2 Significant increase in credit risk

At each reporting date, the Group assesses whether there has been a significant increase in credit risk for exposures since initial recognition on an individual basis by comparing the risk of default occurring over the expected life between the reporting date and the date of initial recognition. If one of the following factors indicate that credit risk has increased significantly, the instrument is transferred from stage 1 to stage 2:

- Thresholds for significant increases in credit risk based on both the percentage and absolute change in probability of default relative to initial recognition (12MPD ≤ 1%: 12MPD doubled and increased by 0.5 basis points/ 12MPD > 1%: 12MPD doubled or increased by 2.0 basis points)
- Additional qualitative factors, such as forbearance on a financial asset or watch list of counterparties
- Financial assets which repayments are more than 30 days past due.

Movements between stage 2 and stage 3 are based on whether a financial asset is credit-impaired due to the change in credit risk. A financial asset is impaired if there is objective evidence of the impairment. An exposure will migrate through the ECL stages as asset quality deteriorates. If, in a subsequent period, asset quality improves and also reverses any previously assessed significant increase in credit risk since origination after a probation period and after fulfilment of certain criteria, then the calculation basis for ECL reverts from lifetime ECL to 12-month ECL.

Transition from stage 1 to stages 2 and 3, and from stage 2 to stage 3 are immediate. Transition from stage 2 to stage 1 and from stage 3 to stage 2 requires that the criteria for transition must be met for six months before transition (*probation period*).

In the measurement of expected credit losses, the Group includes forward-looking information and macroeconomic scenarios in the model. The scenarios are the same as used in the Group's financial annual planning and stress testing. The macroeconomic projections cover a three-year period and as no reliable macroeconomic projections exceeding a three-year time horizon are available, forward-looking adjustment will be limited to a three-year period. Mainly three scenarios are used: base, optimistic and adverse. Scenarios also include probability weights. The ECL model consists of the following macroeconomic variables for Finnish counterparties of financial assets; Finnish government long-term EUR-rates, the development of residential housing prices and unemployment rate. The projections are included in the macroeconomic scenarios. For non-Finnish financial assets, stress test scenarios published by the European Central Bank are used.

9.3 Forborne and modified loans

The Group sometimes makes concessions or modifications to the original terms of loans or other receivables as a response to the borrower's financial difficulties, rather than enforcing the collection of collateral. Forbearance measures are concessions to original contractual payment terms agreed at the customers' initiative to help the customer through temporary payment difficulties. Performing forborne exposures include forborne exposures reclassified as performing during their probation period or forbearance measures made into a performing loan. Loan modifications due to reasons other than the customer's financial difficulties are not classified as forborne exposures. The Group considers a loan forborne when such concessions or modifications are provided as a result of the borrower's present or expected financial difficulties and the Group would not have agreed to them if the borrower had been financially healthy.

Once a loan or other receivable has been classified as forborne, it will remain forborne for a minimum 24-month probation period. In order for the loan or other receivable to be reclassified out of the forborne category, the customer has to meet all of the following criteria:

- All of its loan facilities and other receivables have to be considered performing.
- The probation period of two years has passed from the date the forborne contract was considered performing.
- The Group has received regular payments of more than an insignificant amount of principal or interest during at least half of the probation period.
- The customer does not have any contract that is more than 30 days past due.

Forborne loans and payment delays are regularly reported to the Group's management as an indicator of anticipated client payment ability/solvency.

9.4 Presentation of allowance for ECL in the statement of financial position

Loss allowances for ECL are recognised in the income statement with a corresponding charge to the statement of financial position as follows:

- Financial assets classified at amortised cost: as a deduction from the gross carrying amount of the assets.
- Debt instruments classified at FVOCI: no loss allowance is recognised as a deduction from the gross carrying amount of the assets in the statement of financial position because the carrying amount of these assets is at fair value. However, the loss allowance is recognised through the other comprehensive income in the fair value reserve. The accumulated loss recognised in the fair value reserve is recycled through OCI to the income statement upon derecognition of the financial assets.
- Finance lease receivables: as a deduction from the gross carrying amount of the assets.
- Binding loan commitments: recognised in *Provisions and other liabilities*.

9.5 Write-off

Financial assets are written off, either partially or in full, when the Group has no reasonable expectations of recovering the financial asset. This is generally the case when the Group determines that the borrower or guarantor does not have assets or sources of income that could generate sufficient cash flows to repay the amounts subject to impairment. The Group's credit risks, and credit risk management are further discussed in Note *2*. If the amount to be written off is greater than the accumulated loss allowance of the expected credit losses, the difference is first treated as an addition to the allowance that is then applied against the gross carrying amount.

Financial assets that are written off, partially or fully, could still be subject to enforcement activities in order to comply with the Group's procedures for recovery of the amounts due. Subsequent recoveries of amounts previously written off reduce the amount of the expense in the income statement.

10. Hedge accounting

The interest rate and foreign exchange rate risk of the Group are managed by entering into derivative transactions. According to the Market Risk Policy the Group's hedging strategy is to mainly hedge all material foreign exchange and interest risks of financial assets and liabilities with maturities exceeding one year. As a result, foreign currency denominated items are translated into euros and fixed rate and long-term reference rates are swapped to floating interest rates with shorter terms.

MuniFin Group applies fair value hedge accounting to:

- Financial assets and liabilities and lease agreements denominated in euros, where the plain-vanilla interest rate of the hedged item has been swapped to a floating rate using derivatives.
- 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 Group has documented the hedge relationships within hedge accounting and they comply with the Group's risk management objectives and strategy. The Group does not apply cash flow hedge accounting.

The carrying amounts of assets and liabilities in hedge accounting are presented in Note *16 Financial assets and liabilities*. The fair values of derivatives included in hedge accounting are presented in Note *25 Derivative contracts*. The notionals of hedged items, the fair value of the hedged items, the impact of hedge accounting on profit or loss and on equity is shown in Note *26 Hedge accounting*. The impact of hedge accounting on profit or loss is also shown in Note *8 Net income from hedge accounting*.

The change in fair value due to foreign exchange differences of derivatives in hedge accounting and the hedged items are recognised in the income statement under *Net income from securities and foreign exchange transactions*. Other changes in fair value of the hedged items and derivatives hedging them are recognised in the income statement under *Net income from hedge accounting*. The ineffective portion of the hedging relationship is also shown on this line in the income statement. The interest received and paid on derivative contracts is recognised as an adjustment to *Interest and similar expenses* of hedged liabilities or as an adjustment to *Interest and similar income* of hedged assets.

The Group applies both hedge accounting according to IFRS 9 and portfolio hedge accounting according to IAS 39.

10.1 IFRS 9 hedge accounting

Fair value hedge accounting according to IFRS 9 is applied to:

- Fixed rate funding and zero-coupon funding denominated in euros. The hedged item for euro denominated funding is interest rate risk.
- Fixed rate funding and zero-coupon funding denominated in foreign currencies; and
- Structured lending and finance lease agreements at fixed and long-term reference rates.

For all foreign currency hedge relationships, the Group has elected to utilise Cost-of-Hedging. For each hedge relationship, when the cross-currency swap is designated as a hedging instrument, the cross-currency basis spread is separated and excluded from the designation and accounted for as Cost-of-Hedging. The difference between the changes in fair value of the actual derivative and the designated portion of the derivative are recorded through the other comprehensive income under *Net change in Cost-of-Hedging* to the *Cost-of-Hedging reserve*. Thus, changes in cross currency basis spreads will impact other comprehensive income and not create ineffectiveness in the hedge relationship.

For financial liabilities, the hedged item is at amortised cost, excluding the portion of hedged interest risk, which is subject to fair value hedge accounting. The credit risk of the Group is not included in the hedging relationship. For each financial liability in fair value hedge accounting, the Group determines the credit spread of each trade at inception. The credit spread corresponds to the margin, which needs to be added to the discount curve in order for the fair value at inception to match the issue price. The credit spread is held constant throughout the hedge relationship and based on its present value, the fair value of the financial liability with respect to the hedged risk can be calculated. The change in the value of the hedged risk is recognised as an adjustment to the carrying amount of the hedged item in the income statement under item *Net income from hedge accounting.* Ineffectiveness between the hedged item and the designated portion of the hedge are recorded in the income statement. Separating the credit risk from the fair value is a requirement for applying hedge accounting only on interest rate and foreign exchange risks. The Group uses interest rate swaps and cross currency interest rate swaps as hedging instruments.

In addition, fair value hedge accounting according to IFRS 9 is applied to structured lending, which passes the SPPI test and is thus at amortised cost and which has been hedged 1:1 with interest rate swaps. The customer marginal of the lending agreement is not part of the hedge relationship.

Both funding and structured lending are hedged with hedging instruments with terms that match the hedged item. The hedge ratio between the hedged item and hedging instrument is 1:1. As a result, it is expected that the fair value changes of the derivative offset the fair value changes of the hedged item related to the hedged risk. Prospective effectiveness testing has been performed by verifying that the critical terms match. Ineffectiveness is introduced into the hedge relationship due to the differences in the interest rate curves used in valuing the hedged item and hedging instrument. In addition, ineffectiveness could be created if the critical terms would differ or if the credit risk of the derivative would increase. MuniFin has CSA collateral agreements with its derivative counterparties to mitigate the counterparty credit risk related to derivatives. The effectiveness of all hedge relationships is verified at inception of the hedge relationship and regularly after that on a quarterly basis.

Fair value hedge accounting according to IFRS 9 is also applied to finance lease agreements at fixed and long-term reference rates. The interest risk of these lease agreements is hedged with interest rate derivatives. Due to the size of the agreements, several lease agreements are hedged with one interest rate derivative. The terms of the derivative match the combined terms of the hedged agreements. The customer marginal of the finance lease agreement is not part of the hedge relationship. The principles of fair value hedge accounting applied to lease agreements resemble those presented above to a large extent. Due to the way the agreements are hedged, the prospective effectiveness testing is performed using sensitivity analysis. In the analysis the fair value change of the hedged item and hedging instrument is simulated by shifting the interest rate curves.

The hedged items, finance lease agreements and structured lending, are measured at amortised cost excluding the portion of hedged interest risk, which is subject to fair value hedge accounting. The change in the value of the hedged risk is recognised as an adjustment to the carrying amount of the hedged item and in the income statement under item *Net income from hedge accounting*.

10.2 IAS 39 portfolio hedge accounting

For financial assets, the Group applies fair value hedge accounting in accordance with IAS 39 portfolio hedge accounting to lending at fixed rates and long-term reference rates. The hedged risk is interest rate risk. The customer marginal of the lending agreement is not part of the hedge relationship. The negative reference rates in the current interest rate environment are taken into account as part of the eliminated margin. Lending is hedged as a portfolio, as such the hedged item consists of several lending agreements. The lending agreements are grouped and hedged by pricing and re-fixing dates. The interest rates and payment dates of the interest rate derivatives hedging the lending agreements contained in the portfolio are defined so that the notionals and cash flows match the terms of the lending agreements of the hedged item. Therefore, the fair value changes of the hedging instrument are assumed to offset those of the lending agreements. The effectiveness of the hedge relationship is expected to be effective throughout the hedged period, until maturity. As the portfolio consists of several hedges and lending agreements, prospective effectiveness testing is performed for each new group of hedged items and for the entire portfolio at the inception of each new hedge. Prospective effectiveness testing is performed as a sensitivity analysis and by reviewing the notionals of the hedges and hedged items by maturity bucket. The Group performs retrospective effectiveness testing using regression analysis on fair value changes.

The hedged items of the portfolio are measured at amortised cost excluding the portion of hedged interest risk, which is subject to fair value hedge accounting. The change in the value of the hedged risk is recognised as an adjustment to the carrying amount of the hedged item and in the income statement under item *Net income from hedge accounting*.

11. Offsetting financial instruments

Financial assets and liabilities are offset, and the net amount is reported on the statement of financial position, when there is a legally enforceable right to offset the recognised amounts and there is an intention to settle on a net basis or realise the asset and settle the liability simultaneously. Offsetting financial instruments are presented in Note *19*.

12. Cash and cash equivalents

MuniFin Group's cash and cash equivalents contain cash and loans and advances to credit institutions payable on demand. Deposits and investments with maturities less than three months on the date of the acquisition can also be included in cash and cash equivalents.

13. Determination of fair value

Fair value is the price that would be received to sell the asset or paid to transfer the liability in an orderly transaction between market participants at the measurement date. The fair values of financial instruments are determined on the basis of either price quotations obtained from functioning markets or, if such markets do not exist, by applying valuation methods. A market is deemed to be functioning if price quotations are readily and consistently available, and they reflect real market transactions executed in a consistent manner between independent parties.

If a quoted price in an active market is not available for a financial instrument, the Group uses valuation techniques standard across the industry and for which sufficient information is available to determine the fair value. The chosen valuation technique should include all factors that market participants would consider in pricing the financial instrument. The valuation technique maximises the use of observable inputs and as few as possible unobservable inputs are used.

The Group measures fair values using the following fair value hierarchy, which reflects the significance of the inputs used in making the measurements:

- Level 1: Inputs that are quoted market prices (unadjusted) for identical instruments in active markets that the Group can access at the measurement date. The market is considered to be active if trading is frequent and price data is regularly available. These quotes (mid) represent the price for an orderly transaction between parties in the market on the valuation date.
- Level 2: Inputs other than quoted prices included within level 1 that are observable either directly (i.e. as prices) or indirectly (i.e. derived from prices). This level includes instruments valued using quoted prices for identical instruments in markets that are considered less than active or other valuation techniques in which all significant inputs are directly or indirectly observable from market data.
- Level 3: This level includes all instruments for which the valuation technique includes inputs that are unobservable, and the unobservable inputs have a significant impact on the instrument's valuation. If the valuation input is illiquid, extrapolated or based on historical prices, the valuation input will be defined as a level 3 valuation input as these types of inputs are per definition unobservable. Unobservable inputs are used only to the extent that no relevant observable inputs are available.

If the inputs used to measure fair value are categorised into different levels of the fair value hierarchy, the fair value measurement is categorised in its entirety in the level of the lowest level input that is significant to the entire measurement.

The best evidence of the fair value of a financial instrument on initial recognition is normally the transaction price. If the fair value on initial recognition differs from the transaction price and the fair value is evidenced, neither by a quoted price in an active market for an identical asset or liability, nor based on a valuation technique for which any unobservable inputs are judged to be insignificant in relation to the measurement, then the financial instrument is initially measured at fair value and adjusted to defer the difference between the fair value on initial recognition and the transaction price (*Day 1 gain or loss*). The difference is amortised on a straight-line basis throughout the lifetime of the contract. For callable instruments, the amortisation period is considered to be until the first call date.

The fair value hierarchy levels, the Group's valuation methods and the valuation framework is described in more detail in Note *17*.

14. Leases

A lease is defined as a contract, or part of a contract, that conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

14.1 MuniFin Group as a lessee

Lease liabilities are initially measured at the present value of the remaining lease payments, discounted using the incremental borrowing rate. The lease liability is subsequently measured at amortised cost using the effective interest method. Right-of-use assets are initially measured at cost which is the amount equal to lease liability. Lease liabilities are presented in the statement of financial position under *Provisions and other liabilities* and the interest expense under *Interest and similar expense*. Lease payments are allocated between interest expense and the deduction of the lease liability. Right-of-use assets are presented under *Tangible assets*. The right-of-use assets are depreciated over the shorter of the asset's useful life and the lease term on a straight-line basis.

The right-of-use assets the Group has leased consists of various items such as office space, cars, storage units and parking facilities. The lease terms are negotiated on an individual basis and they can contain extension options. The use of extension options is considered on a contractual basis. When the Group is reasonably certain to exercise extension and termination options, they are included in the determination of the lease term.

The Group has elected to use the practical expedient as allowed by IFRS 16.C10(a) by applying a single discount rate to all lease liabilities. The majority of the Group's lease liability relates to office premises for which the interest rate implicit in the lease is not readily determined. Consequently, an incremental borrowing rate (*IBR*) is used. Maturity has been defined based on the lease term of office premises and parking space. The same maturity for the discount rate is used for all leases since the impact of other leases than office premises are considered not material.

At each reporting date, MuniFin Group assess whether there is any indication that right-of-use assets may be impaired based on either internal or external sources of information. Typically, a company's decision to sub-let or vacate leased property indicates that the right-of-use asset may be impaired. If impairment indicators exist, then MuniFin Group performs impairment test and determines the level at which it carries out impairment testing – i.e., at the asset or cash-generating unit level.

14.2 MuniFin Group as a lessor

Lease agreements, where the Group is the lessor, have been classified as finance leases. A lease is a finance lease if the financial benefits and risks of the asset are substantially transferred to the lessee. The finance lease agreements are recognised on the statement of financial position as a finance lease receivable at an amount corresponding to the Group's net investment in the lease. The proceeds from the leases are divided into repayments and interest income. Interest income is recognised over the term of the lease in a way that the remaining net investment yields the same rate of return over the period of the lease. Finance leases are presented in the statement of financial position under *Loans and advances to the public and public sector entities*. Interest received is presented in the income statement under *Interest income and similar income*.

The Group's finance leases are long-term leases of movable fixed assets such as machines, medical equipment, furniture, vehicles, IT and office equipment. In addition, the Group offers property leasing. Leasing customers are the same as in lending, i.e., municipalities, cities, joint municipal authorities, and companies owned and controlled by municipalities. The Group does not bear the residual value risk of the lease agreements.

15. Intangible assets

An intangible asset is recognised in the statement of financial position only if it fulfils the criteria for intangible assets that is for example that the Group has the control over the asset, and it is probable that the expected future economic benefits that are attributable to the asset will flow to the Group and the acquisition cost can be measured reliably. The initial measurement is at cost. The acquisition cost includes all costs that are directly attributable to preparing the asset for its intended use, including internal personnel costs. The recognised intangible asset does not include costs of using the asset, staff training expenses or administration and other overhead costs.

After initial recognition, an intangible asset is recognised at its cost less accumulated depreciation and impairment. Intangible assets are depreciated at straight-line basis over 3–8 years depending on the useful life of the asset. Depreciation begins when the asset is available for use. At each reporting date, all intangible assets are reviewed for indications of impairment and change in their useful lives. An intangible asset that is not yet available for use is tested for impairment at least annually. Impairment testing is performed more frequently if required due to any indication of impairment. The impairment charge is the difference between the carrying amount and the recoverable amount of the intangible asset. The recoverable amount is determined for the cash generating unit to which the asset belongs to. A cash-generating unit is the smallest identifiable group of assets whose cash flows are largely independent of the cash inflows from other asset groups. As MuniFin's operations are treated as a single segment and the operations cannot be divided into smaller, fully independent cash-generating units, the impairment is determined by considering MuniFin as a single cash-generating unit.

16. Cloud computing arrangements

In cloud computing arrangements, such as software as a service (*SaaS*) arrangement, the cloud vendor has the control over the asset and thus cloud computing arrangements cannot be recognised as an intangible asset in the Group's statement of financial position. However, the implementation costs of the cloud computing arrangement may be recorded in the statement of financial position as a prepaid asset under *Accrued income and prepayments* and amortised as an expense over the period of the access to the software, but only if the implementation costs consist of costs paid to the cloud vendor which are not distinct from the access to the software. The implementation costs are not distinct when the implementation service could only be performed by the cloud vendor, for example when the cloud vendor agrees to customise the software by modifying the existing software code or writing new code. All other expenses such as internal personnel costs, external project management costs etc. are to be recognised as expenses when incurred.

17. Tangible assets

Tangible assets are recognised in the statement of financial position at historical cost, net of accumulated depreciation and impairment. Assets are depreciated on a straight-line basis over their estimated useful lives. The estimated useful lives are:

Office renovation costs	the lease term
Buildings	25 years
Machinery and equipment	5 years
IT equipment	4 years

The assets' residual values and useful lives are reviewed at each financial statement date and, if necessary, adjusted to reflect the changes in the expected economic benefit.

The Group assesses at each reporting date whether there is any evidence of the tangible assets being impaired. If evidence of impairment is identified, the recoverable amount is assessed for the given assets. If the carrying amount of an asset item is greater than the recoverable amount, an impairment loss is recognised in the income statement.

18. Provisions and contingent liabilities

A provision is recognised for an obligation resulting from a past event and it is probable that the obligation will be realised, yet the timing and the exact amount are uncertain. The obligation needs to be based on either an actual or legal obligation towards a third party. Provisions may arise, for example, from onerous contracts or as a result of reorganisations that have a material effect on the nature and focus of the Group's operations. Restructuring provision is recognised when the Group has prepared a detailed restructuring plan and has begun to implement the plan or communicated the matter. Provisions are disclosed in Note *38 Provisions and other liabilities.*

A contingent liability is a potential obligation based on past events. The existence of the obligation will not be confirmed until the uncertain future event outside the control of the Group occurs. Contingent liabilities can also be such obligations, that do not require an outflow to settle or of which the amount cannot be reliably estimated. Contingent liabilities are disclosed in Note *41 Contingent assets and liabilities*.

19. Equity

Equity consists of share capital, retained earnings and reserves of equity (reserve fund, fair value reserve, own credit revaluation reserve, Cost-of-Hedging reserve and reserve for invested non-restricted equity). Other instruments issued by the Group can be classified into equity based on their nature. Perpetual instruments with interest payments which are at the discretion of the issuer are classified as equity in the Consolidated Financial Statements.

The EUR 350 million AT1 capital loan issued by MuniFin is an equity instrument and included in the consolidated equity. The capital loan is perpetual, and the interest payments and redemption are at the discretion of the Group. The AT1 capital loan is subordinated to other liabilities. It is senior to other items contained in equity. The instrument holders do not bear rights of shareholders, control or voting rights at the annual general meeting. Interest payments are treated as a deduction of equity based on the decisions of the issuer. These are presented in equity net of deferred taxes as a deduction of the capital loan. The deferred tax assets are recognised in the income statement through the tax deduction of the transaction expense amortisation. The equity is disclosed in Note *40*.

20. Recognition of income and expenses

20.1 Net interest income

Interest income and expense from financial assets and liabilities are recognised in net interest income. Transaction expenses and premium or discount as well as commissions and fees received and paid which are considered as a compensation for the risk incurred by the Group in relation to the financial instrument and are considered as an integral part of the effective interest rate, are taken into account when the effective interest rate is calculated. For floating rate financial liabilities premium or discount is amortised from the date of issuance to the next interest payment date. For fixed rate financial liabilities, the premium or discount is amortised until maturity. The Group amortises the premium or discount of floating rate debt security investments until maturity. In the current market conditions, the premium or discount on a financial asset is not based on changes in market rates, but credit risk. The market value of a floating rate investment does not reset to the nominal when its interest rate is re-fixed to market interest rates, therefore the amortisation to the next interest date is not justifiable. The Group evaluates the impact of changes in market conditions on the amortisation principle and its application regularly.

The negative interest income from assets is presented as interest expense and the negative interest expense from liabilities is presented as interest income. The Group recognises interest income and expenses on derivatives hedging liabilities in hedge accounting in interest expense and the interest income and expenses on derivatives hedging assets in hedge accounting in interest income.

20.2 Commission income and expenses

Fees that are not an integral part of the effective interest rate of a financial instrument are accounted for in accordance with IFRS 15 standard. Commission income is recognised when the Group transfers control of services' performance obligations to a customer. The key criterion is the transfer of control. Commission income is recognised to the extent that the Group is expected to be entitled of the services rendered to the customer.

The Group's commission income consists of fees for financial advisory services and fees for digital services. The performance obligations of the services are met either over time or at a point in time, depending on the nature of the service. The commissions for advisory services are mainly charged from the customer after the service has been performed in accordance with the terms of the agreement and commission for digital services are charged once a year and recognised over time. Other commissions are charged and recognised at the time of the service is provided.

Commission expenses include paid guarantee fees, custody fees as well as funding programme update fees. Commission expenses are recognised on accrual basis.

20.3 Net income from securities and foreign exchange transactions

Item *Net income from securities* includes fair value changes of financial assets and liabilities measured at fair value through profit or loss, fair value changes of derivative contracts at fair value through profit or loss (not included in hedge accounting) as well as capital gains and losses related to these items. Item *Net income from foreign exchange transactions* includes unrealised and realised translation differences for all items denominated in foreign currencies. Translation differences related to the hedged items and hedging instruments in hedge accounting are also included in this item.

20.4 Net income on financial assets at fair value through other comprehensive income

Item *Net income on financial assets at fair value through other comprehensive income* includes realised gains and losses of the financial assets at fair value through other comprehensive income.

20.5 Net income from hedge accounting

Item *Net income from hedge accounting* includes the net result from recognising financial assets and liabilities and derivative contracts hedging them at fair value for the hedged risk. Foreign exchange gains and losses on hedged items and hedging instruments are recognised in *Net income from securities and foreign exchange transactions*.

20.6 Other operating income

Item *Other operating income* includes gains from the disposal of tangible and intangible assets and other operating income.

20.7 Administrative expenses

Item *Administrative expenses* includes salaries and fees, pension costs as well as other social security costs. In addition, costs related to IT, marketing and other administrative costs are presented as administrative expenses.

20.8 Depreciation and impairment on tangible and intangible assets

Item *Depreciation and impairment on tangible and intangible assets* include depreciation and possible impairment of tangible and intangible assets as well as right-of-use assets. The depreciation principles are discussed in Sections *15. Intangible assets, 17. Tangible assets* and *14. Leases* of this Note.

20.9 Other operating expenses

Item *Other operating expenses* includes expenses to authorities, rental expenses and other expenses from credit institution operations paid by the Group.

Expenses to authorities include stability fees as well as other administrative and supervisory fees to Finnish Financial Supervisory Authority (*FIN-FSA*) and European Central Bank (*ECB*). Stability fees are contributions paid to EU crisis resolution fund. The Resolution Fund is managed by EU Single Resolution Board (*SRB*), which decides on the amount of the stability fees. The stability fee is determined by the size of the entity and the risks involved in its business. The fee is fully expensed at the beginning of the financial year using the estimate of the amount of the payment and adjusted after the payment has been made. In addition to the stability fee, the Group pays to the SRB an annual administrative fee. Also, the Group pays the Financial Stability Agency (*FSA*) an administrative fee that is determined on the same basis as the FIN-FSA's supervisory fee. The administrative fees are recognised on an accrual basis as *Other operating expenses*.

The FIN-FSA's supervisory fee is based on the fixed basic fee and the total assets. The supervisory fee payable to the ECB is determined on the basis of the significance and the risk profile to be monitored. Supervisory fees are recognised on an accrual basis as *Other operating expenses*.

20.10 Credit loss and impairments on financial assets

Item *Credit loss and impairments on financial assets* includes the expected credit losses recognised for the financial assets classified as amortised cost and fair value through other comprehensive income as well as write-offs and subsequent recoveries recognised for all financial assets.

The accounting principles of the impairments are discussed in Section *9. Impairment of financial assets* of this Note.

21. Remuneration

21.1 Short-term employee benefits

Short-term employee benefits consist of salaries, fringe benefits, annual leave and performance bonuses. The Group recognises the cost of these benefits for the period in which the employees render the related service.

Short-term employee benefits are employee benefits (other than termination benefits) that are expected to be settled in their entirety within twelve months of the financial reporting period in which the employees render the related service. The income statement line-item *Salaries and remuneration* consist of short-term employee benefits and termination benefits

21.2 Termination benefits

Termination benefits are employee benefits provided in exchange for the termination of an employee's employment as a result of the Group's decision to terminate an employee's employment before the normal retirement date or an employee's decision to accept an offer of benefits in exchange for the termination of employment. Termination benefits are based on termination of employment, not on work performance.

21.3 Post-employment benefits

Post-employment benefits are paid to recipients after termination of employment. In MuniFin Group, these benefits consist of pensions. The Group's pension plans are defined contribution plans. Pension coverage has been arranged via an external pension insurance Group. For defined contribution plans, the Group makes fixed payments to external pension insurance companies. After this, the Group has no legal or actual obligation to make further payments if the pension insurance company does not have sufficient assets to pay the employees' pensions for current or preceding periods. The contributions payable are recognised as expenses in the income statement for the period to which the payments relate.

The Group's remuneration system is in its entirety contribution based. The description of the remuneration system is available at MuniFin's website www.munifin.fi.

22. Income taxes

Item *Income taxes* in the consolidated income statement comprises taxes that are determined based on the taxable income for the period generated by the Group companies, and changes in deferred taxes. Taxes are recognised in the income statement, with the exception of taxes related to items recognised in other comprehensive income or in equity. In this case, the tax is also recognised correspondingly in other comprehensive income or directly in equity. Taxes based on the taxable income for the period are calculated based on tax rate and legislation enacted or approved in practice by the financial statement date. This tax is adjusted for any taxes related to previous financial years.

Deferred taxes are recognised for temporary differences between the assets and liabilities carrying amounts and taxable value as well as for unused tax losses and unused tax credits. Deferred taxes in the Consolidated Financial Statements consist of the release and transfer to equity of the voluntary credit loss provision and depreciation difference recorded by the Parent Company. In addition, deferred taxes arise from financial assets measured at fair value through other comprehensive income, changes in own credit risk on financial liabilities designated at fair value through profit or loss and Cost-of-Hedging recorded through other comprehensive income. In addition, deferred taxes arise from differences in the treatment of the AT1 capital loan and issuance expenses and interest expenses related to the AT1 capital loan in the Parent Company's statutory Financial Statements and the Consolidated Financial Statements. Deferred taxes are presented in Note *33*. Deferred tax liabilities and receivables are calculated based on the tax rate that is anticipated to be in force at the time of the temporary difference is being released.

23. IBOR reform

IBOR reform is a global change aimed at replacing Interbank Offered Rates (*IBORs*) with alternative nearly risk-free rates (*RFR*). The reason for the reform is, among other things, the revealed manipulation cases of the IBOR reference rates. In European Union the reform is regulated by the EU Benchmark Regulation (*EU BMR*). Most prominently, IBOR reform affects the London Interbank Offered Rate (*LIBOR*), a panel-based benchmark that is available in five currencies (*USD, GBP, EUR, CHF, JPY*). GBP, EUR, CHF, JPY and USD (*1-week and 2-month*) LIBOR quotation will expire after 2021, therefore the financial instruments tied to those reference rates must have been changed or replaced during 2021. For longer maturities (*1-, 3-, 6- and 12-month*) of the USD LIBOR reference rate, the quotation expiring date has been postponed to June 2023.

Euribor is the most important IBOR used by MuniFin Group. The calculation methodology of Euribor changed during 2019. In July 2019, the Belgian Financial Services and Markets Authority (*FSMA*) granted authorisation with respect to Euribor under the EU BMR. This allows market participants to continue to use Euribor for both existing and new contracts. The Group's current view is that Euribor will continue to exist as a benchmark rate for the foreseeable future.

MuniFin Group has exposures to IBORs on its financial instruments that have been replaced or reformed or that will be replaced or reformed as part of these market-wide initiatives. The IBOR reform especially affects MuniFin Group's funding products and derivatives, risk management, IT systems, valuations, collateral management and hedge accounting. For now, the IBOR reform has not had significant impacts on the Group's risk management principles, which are discussed in more detail in Note *2 Risk management principles and the Group's risk position*.

23.1 Reliefs given by the IASB

The IASB (*International Accounting Standards Board*) is addressing the IBOR reform and its effects on financial reporting in two phases. The aim of the reliefs is to facilitate the transition of companies from IBOR reference rates to alternative risk-free rates and to temporarily ease the requirements of those IFRS standards that could form an obstacle to the implementation of the IBOR reform. The reliefs apply only to changes, which are a direct consequence of the IBOR reform. Any other changes will be subject to the normal requirements of IFRS standards also during the IBOR reform. The amendments are relevant to MuniFin Group given that the Group applies hedge accounting to hedge relationships with IBOR terms.

In September 2019, the IASB issued the Interest Rate Benchmark Reform– Amendments to IFRS 9, IAS 39 and IFRS 7. The EU endorsed the amendments on 15 January 2020. These phase 1 amendments modify specific hedge accounting requirements related to the uncertainty arising from the IBOR reform to the timing and amount of cash flows of a hedged item or hedging instrument during the period of uncertainty to allow hedge accounting to continue for affected hedge relationships. The Group has initially adopted IBOR reform related phase 1 amendments to IFRS 9, IAS 39 and IFRS 7 from 1 January 2020. The Group applies amendments retrospectively to hedging relationships that existed on 1 January 2020 or have been designated thereafter and that are directly affected by the IBOR reform. The Group will cease to apply the phase 1 amendments when the uncertainty arising from the IBOR reform is no longer present with respect to the timing and the amount of the interest rate benchmark-based cash flows of the hedged item or hedging instrument, or when the hedge accounting is discontinued.

In August 2020, the IASB issued the phase 2 amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16 standards. EU endorsed the amendments on 14 January 2021. The phase 2 amendments address issues that might affect financial reporting when an existing interest rate benchmark is actually replaced. The phase 2 amendments allow hedge accounting not to be discontinued simply because the hedged item, hedging instrument or hedged risk is changed as a direct consequence of the IBOR reform. The phase 2 amendments introduce a practical expedient for modifications required as a direct consequence of the IBOR reform and made on an economically equivalent basis. These modifications are accounted for by updating the effective interest rate so that it corresponds to the change in the market interest rate. The amendments are effective for annual periods beginning on or after 1 January 2021, with earlier application permitted. MuniFin Group has applied the phase 2 amendments as of 31 December 2020. The phase 2 amendments will cease to apply once the changes required by IBOR reform have been implemented.

23.2 IBOR reform and hedge accounting

The Group's accounting policies related to hedge accounting are discussed in more detail in the Section *10. Hedge accounting* of this Note.

The Group has issued fixed rate debt instruments in various foreign currencies to which the Group applies IFRS 9 fair value hedge accounting using cross currency interest rate swaps or a combination of fixed-to-floating interest rate swap (pay leg USD LIBOR) and floating-to-floating cross currency swap (receive leg USD LIBOR) as the hedging instruments. The phase 1 amendments permit continuation of hedge accounting even if in the future the hedged risk, GBP LIBOR, USD LIBOR or other benchmark rates (IBORs), may no longer be separately identifiable. However, this relief does not extend to the requirement that the designated interest rate risk component must continue to be reliably measurable. If the risk component is no longer reliably measurable, the hedging relationship is discontinued. The phase 2 amendments on the other hand, allow the hedge accounting of existing IBOR hedge relationships to be continued in situations where, as a consequence of the IBOR reform, changes are made to the hedging relationship that would normally lead to the discontinuation of hedge accounting. Such changes include e.g., changing the hedged risk from IBOR reference rate to an alternative risk-free rate or changes to the hedging instrument if the hedging instrument refers to IBOR and is changed to an alternative risk-free rate as a direct consequence of the IBOR reform.

During the financial year 2021, the Group has made changes in accordance with the phase 2 reliefs to the hedge accounting relationships for which the hedged risk (CHF, GBP, JPY and USD LIBOR) has been changed from LIBOR reference rate to the alternative risk-free rate. At the same time, the necessary updates were made to the Group's hedge accounting documentation.

MuniFin Group also applies IFRS 9 fair value hedge accounting to issued euro-denominated fixed rate debt, which are hedged to floating rate Euribor. In addition, the Group has fixed and revisable rate lending and leasing financing in euros. The interest rate risk of the loans and leased assets are hedged using Euribor interest rate swaps. MuniFin Group applies fair value portfolio hedge accounting in accordance with IAS 39 to its fixed and revisable rate loans and IFRS 9 fair value hedge accounting to its fixed and revisable rate leased assets and structured lending. As Euribor is expected to continue, MuniFin Group does not currently anticipate changes to these hedge relationships due to the IBOR reform.

To the extent that the changes required by the IBOR reform have not yet been made, the prospective effectiveness testing is in accordance with the phase 1 amendments based on existing critical terms, hedged cash flows or hedged risks. Any ineffectiveness arising from hedge relationships is recognised under *Net income from hedge accounting*. In addition to potential sources of ineffectiveness outlined in Note *26 Hedge accounting*, the IBOR reform may result in ineffectiveness as the transition of hedged items and related hedging instruments from IBORs to alternative risk-free rates may occur at different times. This may result in different impacts on the valuation of hedged items and related hedging instruments.

23.3 Modifications of financial instruments as a consequence of the IBOR reform

MuniFin Group had some issued foreign currency floating rate debt exposure referencing to ceasing IBORs for which the maturities were beyond 2021. MuniFin Group did not apply hedge accounting to these financial liabilities as they had initially been classified as designated at fair value through profit or loss. During 2021, the Group has restructured or repurchased these instruments, and rest of the instruments will be restructured in early 2022. Compared to the Group's total funding exposure, the share of IBOR-linked funding was minor. The restructurings did not result in derecognition. MuniFin Group still has some floating rate liabilities tied to the USD LIBOR reference rate on December 31, 2021, which are intended to be restructured or repurchased during 2022.

In addition, the Group has derivative contracts referencing to ceasing USD LIBOR reference rates and with maturity beyond June 2023. These derivative contracts include both derivative contracts in hedge accounting (described above in Section *23.2 IBOR reform and hedge accounting*) and other hedging derivative contracts. The changes required by the IBOR reform may be conducted, inter alia, through restructuring, activation of fallback conditions or termination of the contract, depending on the manner in which the changes required by the IBOR reform are implemented in the financial instrument hedged by that derivative in question.

The Group's bilateral derivative instruments are governed by the International Swaps and Derivatives Association's (*ISDA*) Master Agreement. ISDA has amended the standardised contract terms for situations where quotations for a reference rate are not available (*fallback clauses*). The Group has agreed with its derivative counterparties to include these new terms in the agreements. The changes to the agreements took effect in January 2021.

23.4 MuniFin Group's IBOR exposure

The following table presents a summary of the Group's financial instruments (excluding derivative contracts) which refer to an IBOR reference rate and have maturity beyond 2021 and June 2023 (USD LIBOR).

31 Dec 2021 (EUR 1,000)	The carrying amount of financial instruments referring to IBOR and with maturity beyond 2021	The carrying amount of financial instruments referring to IBOR and with maturity beyond June 2023
Financial assets		
Euribor *	11,677,981	11,281,970
Financial assets in total	**11,677,981**	**11,281,970**
Financial liabilities		
Euribor *	-	-
USD Libor	54,469	54,469
JPY Libor	10,842	7,723
Financial liabilities in total	**65,311**	**62,193**

* The Group's current view is that Euribor will continue to exist as a benchmark rate for the foreseeable future.

The following table presents a summary of the notionals of the Group's derivative contracts under hedge accounting, which refer to an IBOR reference rate and have maturity beyond 2021 and June 2023 (USD LIBOR).

31 Dec 2021 (EUR 1,000) Floating rate interest	Notional of derivative contracts referring to IBOR and with maturity beyond 2021	Notional of derivative contracts referring to IBOR and with maturity beyond June 2023
SEK Stibor	97,558	97,558
USD Libor	11,919,477	6,180,470
Euribor*	38,558,309	33,417,813
Total	**54,575,345**	**39,695,841**

* The Group's current view is that Euribor will continue to exist as a benchmark rate for the foreseeable future.

Hedges with two floating legs (receive/pay leg) are presented in the table under each applicable reference rate.

23.5 IBOR transition project

The Group had an IBOR transition project, owned by the Head of Capital Markets and Sustainability, in which, but not limited to, risk management, funding, treasury, legal, finance and IT were represented. The aim of the project was to prepare the Group for a smooth transition to alternative risk-free rates.

In 2019, the Group conducted an impact assessment and prepared for the IBOR transition project.

In July 2020 the discounting methodology of Euro denominated interest rate derivatives centrally cleared through LCH (*London Clearing House*) changed from EONIA (*Euro Overnight Index Average*) to €STR (*Euro Short-term Rate*). A similar change was conducted in October for USD centrally cleared interest rate derivatives to change discounting from Federal Funds rate to SOFR (*Secured Overnight Financing Rate*). During the last quarter of 2020, the Group also renegotiated the interest rate term of the collaterals for the majority of its CSA agreements with its bilateral derivative counterparties. The CSA agreements transitioned from EONIA to €STR rate and the discounting methodology for those derivative agreements was changed accordingly. Part of the CSA negotiations were postponed to 2021 and for the derivatives with these counterparties the discounting methodology was changed in 2021 accordingly.

The changes in discounting methodologies did not have a material impact on the Group's consolidated income statement as the valuation impact was in principle offset by equivalent cash compensations.

During 2021, the Group's IBOR transition project focused on changing or replacing the ceasing IBOR -linked instruments with alternative risk-free rates or on otherwise economically equivalent terms. In addition, the Group negotiated the rest of the CSA agreements of the derivative counterparties to €STR and changed the ceasing LIBOR curves used in the valuation to alternative risk-free rates. At the same time, the hedged risk in hedge accounting was changed from LIBOR reference rate to the alternative risk-free rates and the needed changes to the Group's hedge accounting documentation were updated.

For longer maturities (1-, 3-, 6- and 12-month) of the USD LIBOR reference rate, the quotation expiring date has been postponed to June 2023. MuniFin Group has financial instruments linked to USD LIBOR which will be modified or replaced before the end of the quotation.

MuniFin Group's floating rate customer loans and leasing agreements all reference to Euribor. As Euribor is expected to continue, the Group currently expects only limited impacts on its client-facing activities due to the IBOR reform. The Group is committed to treating its customers fairly and is closely monitoring the evolving market practices. The Group has prepared a communication and training plan to ensure that client-facing staff will have sufficient knowledge and competence to respond to customer needs appropriately.

24. New and amended standards and interpretations not yet adopted

* = Not yet endorsed for use by the European Union as of 31 December 2021.

The Group has not yet adopted the following new and amended standards and interpretations already issued by the IASB. The Group will adopt them on their effective date or, if the date is other than the first day of the financial year, from the beginning of the subsequent financial year. Standards published by IASB that enter into effect after 1 January 2021:

Property, Plant and Equipment — Proceeds before Intended Use – Amendments to IAS 16 Property, Plant and Equipment* (to be applied from 1 January 2022). Under the amendments, proceeds from selling items before the related item of PPE is available for use should be recognised in profit or loss, together with the costs of producing those items. Management estimates that the change will not have an impact on the Consolidated Financial Statements of MuniFin Group.

Onerous Contracts – Costs of Fulfilling a Contract – Amendments to IAS 37 Provisions, Contingent Liabilities and Contingent Assets* (to be applied from 1 January 2022). When an onerous contract is accounted for based on the costs of fulfilling the contract, the amendments clarify that these costs comprise both the incremental costs and an allocation of other direct costs. Management estimates that the change will not have a material impact on the Consolidated Financial Statements of MuniFin Group.

Annual Improvements to IFRS Standards 2018–2020 (effective for financial years beginning on or after 1 January 2022). The annual improvements process provides a mechanism for minor and non-urgent amendments to IFRSs to be grouped together and issued in one package annually. The amendments clarify amongst other the following standards:

- IFRS 9 Financial Instruments – Fees in the '10 per cent' test for derecognition of financial liabilities: This amendment clarifies that – for the purpose of performing the ''10 per cent test' for derecognition of financial liabilities – in determining those fees paid net of fees received, a borrower includes only fees paid or received between the borrower and the lender, including fees paid or received by either the borrower or lender on the other's behalf.
- IFRS 16 Leases – Lease incentives – Example 13. The amendment removes the illustration of payments from the lessor relating to leasehold improvements. The example was not clear as to why such payments are not a lease incentive.

Management estimates that these changes will not have a material impact on the Consolidated Financial Statements of MuniFin Group.

Disclosure of Accounting Policies – Amendments to IAS 1 Presentation of Financial Statements and IFRS Practice Statement 2 Making Materiality Judgements* (effective for financial years beginning on or after 1 January 2023, early application is permitted). The amendments clarify the application of materiality to disclosure of accounting policies. Management estimates that the change will not have a material impact on the Consolidated Financial Statements of MuniFin Group.

Definition of Accounting Estimates – Amendments to IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors* (effective for financial years beginning on or after 1 January 2023, early application is permitted). The amendments clarify how companies should distinguish changes in accounting policies from changes in accounting estimates, with a primary focus on the definition of and clarifications on accounting estimates. Management estimates that the change will not have a material impact on the Consolidated Financial Statements of MuniFin Group.

Deferred Tax related to Assets and Liabilities arising from a Single Transaction – Amendments to IAS 12 Income Taxes* (effective for financial years beginning on or after 1 January 2023, early application is permitted). The amendments narrow the initial recognition exemption (*IRE*) and clarify that the exemption does not apply to transactions such as leases and decommissioning obligations which give rise to equal and offsetting temporary differences. Management estimates that the change will not have a material impact on the Consolidated Financial Statements of MuniFin Group.

Other standards and interpretations to be applied in future financial periods are assessed not to have a material impact on the Consolidated Financial Statements.

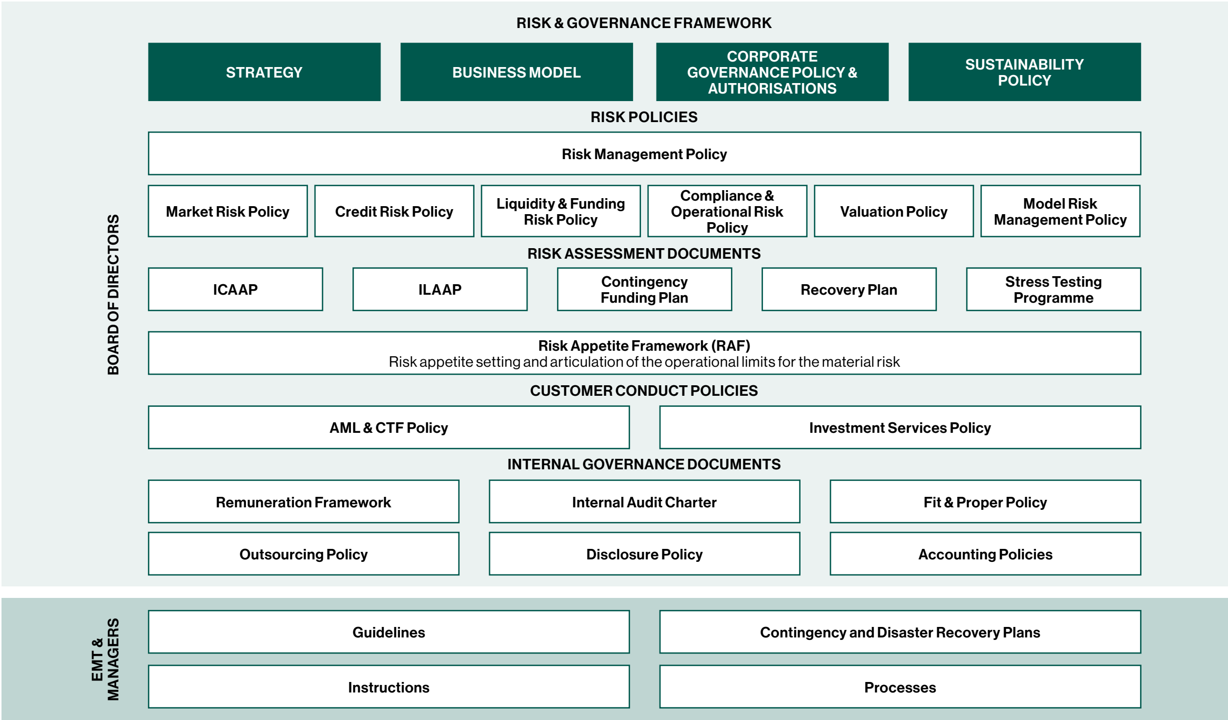
Note 2. Risk management principles and the Group's risk position

1. General risk management principles

MuniFin Group's operations require sufficient risk management mechanisms to ensure that the Group's risk positions remain within the limits set by the Parent Company's Board of Directors. MuniFin Group applies very conservative principles to its risk management. The aim is to keep the overall risk profile at such a low level that the Parent Company's strong credit rating (Aa1 /AA+) is not compromised.

The Group regularly surveys risks related to its operations and continuously develops methods for recognising and managing risks. Risks are assessed with regular risk analyses. The aim of the analyses is to recognise new challenges and risks created by changes in the operating environment and prioritise the risks and their management on the basis of the results. The Group mitigates risks it has identified with collateral, guarantees, derivative contracts, insurance and active risk management. According to its own analysis, the Group does not have any liabilities containing wrong-way risk (the likelihood of a default by counterparty is positively correlated with general market risk factors).

The Board of Directors has ratified the Group's Risk and Governance Framework and, as part of it, key policies and processes for the effective implementation of internal control and risk management, as shown in the following table.



MuniFin Group's Risk Appetite Framework (*RAF*) defines target and maximum levels for risk indicators. The framework is updated regularly, at least annually, and the Board of Directors of the Parent Company approves the document. RAF enables the Group to:

- Effectively identify, assess and manage the risks inherent in its strategy as well as other internal and external business risks,
- Understand and decide on the amount of risk it is willing to take in executing its business strategy, and to actively communicate it,
- Promote sound discussions of MuniFin Group's risk appetite and enable challenging of business and risk-taking decisions.

RAF is linked to both short-term and long-term strategic plans, capital and financial plans, the recovery plan and the remuneration policy. It is fully aligned with the ICAAP (*Internal Capital Adequacy Assessment Process*) and the ILAAP (*Internal Liquidity Adequacy Assessment Process*).

RAF is described in the adjacent table. The Group has remained within the risk appetite set by the Board of Directors during the financial year.

There were no material changes in the Group's risk position in 2021. The Group's risk position has remained stable and at a moderate level. Based on the Group's assessment, risk management met the requirements set for it. MuniFin Group's risk management and internal control practices and

Summary of Risk Appetite Framework indicators

Risk pillars	Risk indicators	Objectives
Profitability & Capital	Credit rating Leverage ratio Net interest income ratio Change in CET1 ratio	Maintain a sufficient level of earnings, profitability and capital, even in stress periods.
Liquidity & Funding	Liquidity coverage ratio Net stable funding ratio Financing gap Indicators related to funding Survival horizon	Maintain an adequate liquidity buffer and a sustainable funding position and profile, even in stress periods.
Credit risk	Non-performing exposures Expected credit losses Average credit rating (customer financing) Single-name concentration (customer financing and derivative portfolio) Energy efficiency of real estate new-production ESG score Average credit rating (liquidity portfolio) Geographic concentration (liquidity portfolio)	Maintain a sound credit risk profile appropriate for MuniFin's business model.
Market risk	Economic value of equity NII risk Basis risk FX risk Spread risk Fair value volatility Prudent valuation	Maintain a sound market risk profile appropriate for MuniFin's business model.
Operational risk	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	Maintain an effective operational control and compliance to support functional and responsible operations.

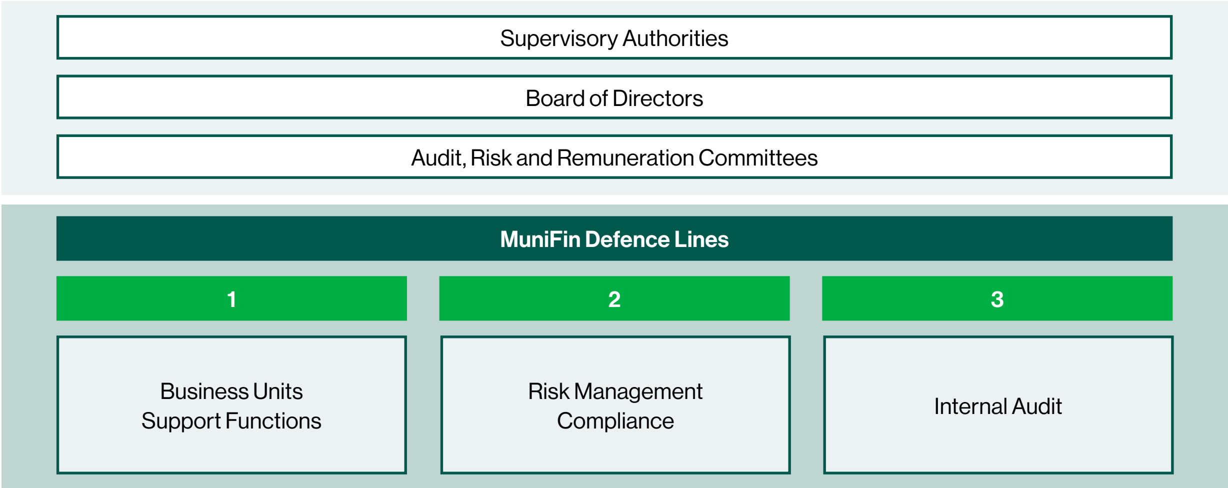
processes are developed continuously. During 2021 the ESG (*Environmental, Social, Governance*) risk capabilities have been developed in particular. The Group's risk position is regularly reported to the Board of Directors, and, in addition, the Chief Risk Officer provides the Risk Committee of the Board a semi-annual extended risk review of the Group's risk positions.

A number of the Group's counterparties in capital markets transactions are based in the United Kingdom (*UK*). Following the UK's withdrawal from the European Union (*EU*), some of the Group's UK-based counterparties have become restricted in their ability to provide financial services to counterparties located in EU from their UK entities. Consequently, such counterparties have decided to transition their operations from the UK to member states of the EU. In order to ensure continuity of its funding and liquidity management activities, the Group has restructured its business relationships accordingly. Such restructuring has involved negotiating and entering into new legal documentation and transitioning business activities to new entities. The immediate effects to the Group of UK's withdrawal from the EU have been very limited.

IBOR reform is a global change aimed at replacing Interbank Offered Rates (*IBORs*) with alternative nearly risk-free rates (*RFR*). The reason for the reform is, among other things, the revealed manipulation cases of the IBOR reference rates. In European Union the reform is regulated by the EU Benchmark Regulation (*EU BMR*). Most prominently, IBOR reform affects the London Interbank Offered Rate (*LIBOR*), a panel-based benchmark that is available in five currencies (*USD, GBP, EUR, CHF, JPY*). GBP, EUR, CHF, JPY and USD (1-week and 2-month) LIBOR quotation will expire after 2021, therefore the financial instruments tied to those reference rates must have been changed or replaced during 2021. For longer maturities (1-, 3-, 6- and 12-month) of the USD LIBOR reference rate, the quotation expiring date has been postponed to June 2023. For now, the IBOR reform has not have significant impacts on the Group's risk management principles. The status of the Group's IBOR transition project is discussed more broadly in the accounting policies (Note *1*) in Section *23. IBOR reform*.

2. Organisation of risk management and capital adequacy management

For the implementation of internal control framework, the Group applies the three lines of defence model. MuniFin Group has an extensive risk management organisation, which covers all operations including the tasks and responsibilities of different departments and decision-making bodies. Internal control framework is supported by controls of different processes. Internal control is performed at all levels of the organisation and the nature and scope of operations are taken into account in defining the operating methods used in internal control. Internal control is primarily carried out in line operations, where internal control is continuous and part of day-to-day operations.



The Board of Directors of the Parent Company is responsible for the Group's management and the proper arrangement of its operations. The Board of Directors is responsible for the duties specified for it in the Limited Liability Companies Act, the Articles of Association and other legislative provisions and regulations issued by the authorities. Duties and principles of the Board of Directors are confirmed as part of MuniFin's Corporate Governance Policy and the appended Board's Rules of Procedure. The Corporate Governance Statement is available on MuniFin's website. The main duties of the Board include confirming the Group's strategy, annual operating plan and budget, monitoring the Group's financial situation and ensuring through supervision that the management, and risk management in particular, are properly arranged by management. The Board of Directors also makes all the far-reaching decisions related to the nature and scope of the activities.

As requested by the regulation and in order to organise its work as efficiently as possible, the Board has established an Audit Committee, a Risk Committee, and a Remuneration Committee for assistance and for the preparation of matters. The Board may also establish other committees as necessary.

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.

The Risk Committee assists the Board in the matters in regard to the Group's overall risk appetite and strategy, and in overseeing that the management complies with the risk strategy decided by the Board. The Risk Committee is to estimate whether the prices for the services that tie up capital correspond with the Group's business model and risk strategy and, in the event this is not the case, to present a remedy plan to the Board. Furthermore, the Risk Committee shall assist the Remuneration Committee in the establishment of sound remuneration policies, and to assess whether the incentives provided by the remuneration system take into consideration the Group's risks, capital and liquidity requirements, and the likelihood and timing of the earnings.

The Remuneration Committee of the Board of Directors is responsible for preparatory work to assist in the Board's decision-making concerning the setting of objectives related to the Group's remuneration system, assessment of whether the objectives are attained, development of the remuneration system and the remuneration and other benefits for the CEO and persons reporting to the CEO.

In the first line of defence, business units and support functions have the ownership of material risk types and are responsible for identifying, evaluating and managing risks. The Group's risk appetite, guidelines, processes, controls and limits guide this work. All employees who work in the first line of defence are responsible for the risk management of their own work.

The second line of defence includes Risk Management and Compliance functions. The Risk Management function supplements the business units' work with their independent supervisory and reporting responsibilities. They are also responsible for risk-related guidelines and processes, advice and information, risk strategy, limits and risk appetite alignment as part of RAF. The second line of defence informs the Board and the Executive Management Team (*EMT*) on issues that may have or have had an impact on MuniFin Group's risk profile or strategy. The main responsibilities of the Compliance function include reporting to the management of the changes in the regulations affecting the operations of MuniFin Group including their potential impact on operational activities. In addition, the tasks include internal communication, training and advice for the staff to ensure compliance with the regulations, assess internal processes for ensuring compliance with the regulations as well as communication with the supervising authorities and monitoring the related actions within the Group.

In the third line of defence, an independent internal audit regularly conducts risk-based audits in accordance with the annual plan approved by the Board. The task of internal audit is to conduct an independent review of the first two lines of defence.

3. Stress testing

MuniFin Group constantly conducts stress testing related to its business in accordance with the stress testing program approved by the Board of Directors. The annual ICAAP and ILAAP processes include stress testing on group-level solvency and liquidity adequacy. Risk management, independent of the Group's business, is responsible for designing stress scenarios in cooperation with business units. The main objective of the stress testing conducted in 2021 was to analyse the development of MuniFin Group's solvency and profitability in 2021–2024. Business, market and credit risks and their estimated economic impact under different circumstances were tested. In addition, the liquidity adequacy of the Group was tested with several different stress scenarios. As in previous years, the results of the stress tests showed that with the current capital requirements, the level of equity in the Group during the period under review is sufficient even under very unfavourable conditions. In addition, the Group's total own funds also fulfilled the 3% minimum leverage ratio CRR II requirement, which entered into force in June 2021. In terms of liquidity, stress tests showed that the liquidity of the Group is sufficient even under very unfavourable conditions.

In late 2021, the Group also carried out a so-called reverse stress testing as part of its recovery plan. This stress test aims to find extremely negative scenarios that threaten the Group's business continuity, as well as the steps that the Group can take to cope with the situation and continue its business.

MuniFin Group participated in the SSM Stress Test led by ECB in the first half year of 2021. The stress test covered years 2021–2023. MuniFin Group's capital adequacy and leverage ratio remained extremely strong under even adverse scenario. According to this adverse scenario, the Group's CET1 capital ratio would be 67% at the end of 2023 and the leverage ratio 3.6% (*CRR*). Both figures exceed clearly regulatory requirements.

4. Capital adequacy management principles

MuniFin Group'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 at least the following three 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 Group 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 the Group'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 Group's strategic planning process, which covers setting strategic goals, specifying development projects and making financial forecasts for the following years. This is done in cooperation with management and the Board. The Board of the Parent Company approves the final strategy. Management ensures that the operative measures of the Group 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 Group's risk position and its effect on the Group's financial status are also evaluated. Regular risk analyses as well as various stress test scenarios are used for evaluating and measuring risks. Based on these, the capital adequacy plan is updated annually, and actions needed to strengthen own funds are determined. The adequacy of own funds is also monitored through monthly business analyses.

The Group calculates its capital adequacy based on the EU Capital Requirements Regulation ((EU) No 575/2013) and its amending regulation ((EU) No 876/2019) as well as Directive (2013/36/EU). The capital adequacy requirement for credit risk is calculated using the standardised approach, and the capital adequacy requirement for operational risks using the basic indicator approach. As the Group has neither a trading book nor share and commodity positions, only currency risks are taken into account in the capital adequacy calculations for market risk. MuniFin Group's FX risk is hedged by using derivative contracts to swap all funding and investments denominated in foreign currency into euros. The Group's lending and other customer finance items are denominated in euros. The Group has no significant open FX positions.

In practice, a small temporary exchange rate risk may arise due to collateral management in the clearing of derivatives by central counterparties. This exchange rate risk is actively monitored and hedged. The credit ratings given by Standard & Poor's, Moody's Investor Service and Fitch Ratings are used for determining the risk weights used in the capital adequacy calculations. The aforementioned companies are credit rating institutions approved by the Finnish Financial Supervisory Authority for capital adequacy calculations. In capital adequacy calculations for the credit risk, the Group uses methods for reducing the credit risk such as guarantees provided by municipalities as well as deficiency guarantees given by the State of Finland. For derivatives, netting agreements, collateral agreements (*ISDA/Credit Support Annex*) and guarantees granted by the Municipal Guarantee Board (*MGB*) are used for reducing the capital adequacy requirement related to the counterparty risk of derivative counterparties.

Concurrently with this Report of the Board of Directors and the Consolidated Financial Statements, the Group publishes a separate Pillar III Disclosure Report on capital adequacy and risk management, which is available in English on MuniFin's website.

5. Strategic risks

Strategic risk means that MuniFin Group would choose a wrong strategy for pursuing financially profitable operations or that the Group would fail to adapt its strategy to changes in the operating environment.

The management of strategic risks is based on continuous monitoring and analyses of customers' needs, forecasts of market trends, and analyses of changes in the competition and the operating environment. Risks and their significance are assessed annually as a part of the strategy process and in connection with annual assessment of the Board of Directors. The existing strategy extends to 2024, and its need for updating is evaluated at least annually.

According to an assessment by the Group's management, the COVID-19 pandemic has not significantly affected the strategic risks of the Group.

6. Liquidity risks

6.1 Refinancing and liquidity risk

Refinancing risk means the risk related to refinancing of the loans. The Group manages refinancing risk by limiting the average maturity of the financial assets and liabilities. The financing gap is calculated as the difference between average maturity of assets (*customer financing and liquidity portfolio*) and the average maturity of liabilities (*funding portfolio*).

Liquidity risk means the risk of the Group not being able to perform its payment obligations arising from settling financial agreements or other financing activities on their due date. The Group manages the liquidity risk by limiting the short-term liquidity coverage ratio (*LCR*) and net stable funding ratio (*NSFR*) and the survival horizon for the long-term liquidity.

In order to maintain its conservative liquidity and funding risk profile as defined in RAF, MuniFin Group has identified several sources of liquidity. Primary sources of liquidity are short-term and long-term funding, liquidity portfolio, repo markets and cash. Central Bank liquidity facility is a secondary source of liquidity.

MuniFin Group follows the principle of prefunding and acquires its funding in the form of short- and long-term funding. This is to ensure that adequate liquidity is available at any given time and in all market conditions. For this purpose, the required minimum amount for the liquidity portfolio is determined through scenario analyses to meet internal and regulatory liquidity requirements. In the case that the Group needed to acquire additional liquidity, it would first assess the availability of funding from the capital markets in the form of short-term or long-term funding. If this is not available, the Group could utilise the liquidity portfolio as a source of liquidity by selling assets or using them as collateral in the repo markets. MuniFin Group has existing agreements in place with counterparties to enter into bilateral repurchase agreements (*repo agreements*). These repo agreements could be used to cover funding redemptions in the short term and to cover any unexpected changes in the liquidity position.

A key aspect of the Group's liquidity and funding risk management is the maintenance of a well-balanced, low risk liquidity portfolio in the form of highly liquid assets, which could be liquidised or used as collateral in the repo markets in the event that the Group experiences an unexpected and sudden liquidity shortage. The overall liquidity portfolio mainly consists of prefunding that is raised from the markets, but not yet utilised for customer financing. In case of a sudden outflow of funds, the Group holds a liquidity portfolio at such a level that its LCR and Survival Horizon have a sufficient buffer to continue normal operations even under such conditions. The high-quality liquid assets (*HQLA*) defined in LCR regulations[1] used to manage the Group's liquidity are presented in the table below:

LIQUID ASSETS, HQLA (EUR 1,000)	31 Dec 2021	%	31 Dec 2020	%
Level 1	10,899,629	82%	8,560,796	85%
Level 2a	910,009	7%	896,100	9%
Level N	1,479,616	11%	580,086	6%
Total	**13,289,256**	**100%**	**10,036,984**	**100%**

The liquidity portfolio is divided into liquidity quality levels so that level 1 and 2a are considered high-quality liquid assets. Assets on the liquidity level N are liquid in normal market conditions (*other liquid assets*).

The secondary source of liquidity is a public funding source in the form of the existing Central Bank liquidity facility, which is considered as an alternative, if primary sources were either not sufficient, available in a timely manner or the cost of using primary sources of liquidity were considered too high. Loans granted by MuniFin Group to the municipal sector are accepted as collateral for this facility and the Group has pre-pledged part of the loan portfolio in order to ensure access to this liquidity source at any time, if required (Note *42 Collateral given*). In addition, the Group is able to increase the facility through pledging additional municipal loans to the collateral pool. The facility is tested regularly to ensure that the liquidity is available intraday, if needed.

Liquidity stress testing is a key tool used by MuniFin Group to assess liquidity adequacy. The main objective is to determine whether the Group has sufficient liquidity to continue its normal business operations under both business-as-usual or baseline scenario and stress scenarios.

[1] *Commission Delegated Regulation (EU) 2015/61 and Commission Delegated Regulation (EU) 2018/1620.*

The Group prepares, in connection with the business planning process, a Liquidity and Funding Plan (*L&F plan*). The Plan is approved by the Board of the Parent Company and reviewed on a quarterly basis by the Risk Committee, which reports its observations to the Board. The L&F Plan and the quarterly review of the plan include regular back testing. The L&F Plan is part of the Group's ongoing Internal Liquidity Adequacy Assessment Process (*ILAAP*) and it includes forecasting and planning of funding and liquidity position. The L&F Plan is aligned with the ICAAP baseline scenario during the annual business planning process. The Plan aims at keeping the level of the Group's liquidity and funding within its risk appetite defined by the Board. It also takes into account economic perspective to ensure a sufficient long-term profitability for the Group.

Within the ILAAP performed annually, the Group assesses the adequacy of its liquidity resources to cover the forecast liquidity needs under the business-as-usual and stress scenarios. ILAAP is an integral part of the Group's risk management framework that includes other strategic processes such as RAF, ICAAP, Recovery Plan and remuneration framework. RAF formalises the interplay between these processes. Stress tests are required to assess the Group's liquidity adequacy in a comprehensive, integrated and forward-looking manner. ILAAP consists of a baseline scenario and adverse scenarios and is fully aligned with the ICAAP baseline scenario, the only exception being the assumed restricted access to funding markets.

The Group aims to maintain strong credit ratings in all market conditions to be able to execute its funding plan in an efficient and cost-efficient manner. To support the cost efficiency and quick execution, the Group has in place debt issuance programmes of standardised templates. Standardised programmes provide the Group flexibility and ease of execution. Furthermore, MuniFin Group uses bilateral loan documentation with some funding counterparties. All funding issued by MuniFin is explicitly guaranteed by the Municipal Guarantee Board (*MGB*).

Funding concentration risk refers to the risk that the Group is overly dependent on funding from a limited number of products, markets, geographical area, investors or maturities. To mitigate the risk, MuniFin Group ensures the funding diversification across various products, markets, maturities and investor type and by not placing too much reliance on any single funding source. MuniFin Group aims to keep this mix relatively stable, with the goal being to ensure continuity of funding while simultaneously avoiding overreliance on any specific market. To maintain access to diversified funding sources, the Group aims to maintain its good relationship with investors and arranging banks and to actively seek new potential markets and investors. The diversification of the Group's funding requirements is set out and planned for in detail through the annual L&F Plan.

The following tables present the maturity breakdown of MuniFin Group's financial liabilities.

BREAKDOWN OF FINANCIAL LIABILITIES BY MATURITY 31 Dec 2021 (EUR 1,000)	0–3 months	3–12 months	1–5 years	5–10 years	over 10 years	Total
Liabilities to credit institutions	741,520	583	14,530	22,256	32,368	811,257
Liabilities to the public and public sector entities	97,142	146,115	1,235,342	1,014,067	1,370,356	3,863,022
Debt securities issued	5,104,498	5,407,504	18,745,582	4,318,196	2,802,048	36,377,828
Provisions and other liabilities	337,823	-	-	-	-	337,823
Total	**6,280,983**	**5,554,202**	**19,995,454**	**5,354,519**	**4,204,772**	**41,389,929**

BREAKDOWN OF FINANCIAL LIABILITIES BY MATURITY 31 Dec 2020 (EUR 1,000)	0–3 months	3–12 months	1–5 years	5–10 years	over 10 years	Total
Liabilities to credit institutions	658,737	759	29,601	38,614	37,488	765,199
Liabilities to the public and public sector entities	137,168	388,332	979,706	1,427,094	1,505,614	4,437,915
Debt securities issued	8,673,256	4,505,609	13,857,502	3,185,728	3,754,717	33,976,813
Provisions and other liabilities	237,212	-	-	-	-	237,212
Total	**9,706,373**	**4,894,700**	**14,866,809**	**4,651,436**	**5,297,819**	**39,417,138**

Breakdown of financial liabilities by maturity is presented using carrying amounts and future interest payments translated into euros using year-end foreign exchange rates. Financial liabilities containing a call option are shown in the maturity bucket of the next call date. Based on the current call forecast, about 25–50% of callable liabilities are expected to be called during 2022. In 2021, 47% of callable liabilities were called at the next call date. Line item *Liabilities to credit institutions* contains CSA collateral totalling EUR 741,110 thousand (EUR 658,120 thousand). These are presented in the maturity bucket 0–3 months although their outflow date is not known and is dependent on the development of derivative fair values.

The following tables present the maturity breakdown of MuniFin Group's derivatives at fair value.

BREAKDOWN OF FUNDING DERIVATIVES BY MATURITY 31 Dec 2021 (EUR 1,000)	0–3 months	3–12 months	1–5 years	5–10 years	over 10 years	Total
Derivative assets	89,668	158,549	567,851	368,541	815,067	1,999,676
Derivative liabilities	-169,425	-1,032,622	-405,040	-110,008	-507,199	-2,224,294
Interest flows related to derivative assets and liabilities	155,169	236,860	617,799	155,307	56,189	1,221,324

BREAKDOWN OF FUNDING DERIVATIVES BY MATURITY 31 Dec 2020 (EUR 1,000)	0–3 months	3–12 months	1–5 years	5–10 years	over 10 years	Total
Derivative assets	13,995	81,899	454,061	583,520	1,224,688	2,358,163
Derivative liabilities	-184,922	-124,631	-1,728,905	-185,014	-637,098	-2,860,570
Interest flows related to derivative assets and liabilities	133,434	239,860	698,692	268,969	128,374	1,469,329

The Group hedges all of its funding to floating rate euros. In addition, all lending is hedged to floating rates. Due to the strategy of earnings stabilisation, part of the fixed-rate loan exposure might be left unhedged. For evaluating the impact of derivatives, the interest flows of derivative assets and liabilities are shown as net amount on one line. Derivatives containing call option are shown in the table in the maturity bucket during which the derivative can be called on the next call date.

The Group has presented the maturities of financial assets based on their maturity dates in Note *18*.

6.2 Market liquidity risk

Market liquidity risk means that the Group would fail to realise or cover its position at the market price, because the market lacks depth or is not functioning due to a disruption.

The Group monitors the liquidity of markets and products on a continuous basis. In addition, established market standards are observed when derivative contracts are transacted. Almost all market values of debt securities valued at fair value are calculated based on quotations received from the market. For the remaining debt securities, the market value is calculated using other market information. The valuation techniques and valuation inputs are described in more detail in Note *17 Fair values of financial assets and liabilities*.

The Group's funding has been highly successful even in the exceptional circumstances caused by the pandemic. The Group's long-standing funding strategy has relied on diversification into multiple currencies, markets, maturities and investor types. This strategy, combined with MuniFin's good reputation among investors as well as the safety of investments in the Finnish municipal sector, secured MuniFin's access to markets during the COVID-19 pandemic and especially during spring 2020 at times when it was difficult or even impossible to many other issuers. The situation in the funding market has stabilised from that experienced in the beginning of the pandemic.

7. Credit risk

Credit risk means the risk of a counterparty defaulting on its commitments to the Group. Credit risk has been identified as a material risk in RAF, but is mitigated by the loan guarantees and/or collaterals as well as the fact that MuniFin only finances public-sector entities with a zero-percent risk weighting. Customer financing is one source of credit risk, but credit risk can also arise from other types of receivables, such as bonds, short-term debt instruments and derivative contracts as well as off-balance sheet items such as unused credit facilities, limits and guarantees. In addition, geographical concentration and settlement risks are considered as credit risks.

The following table presents the Group's maximum exposure to credit risk grouped by the items on the statement of financial position.

MAXIMUM EXPOSURE TO CREDIT RISK (EUR 1,000)	31 Dec 2021			31 Dec 2020		
	Amortised cost and Fair value through other comprehensive income	, of which expected credit loss	Fair value through profit or loss *	Amortised cost and Fair value through other comprehensive income	, of which expected credit loss	Fair value through profit or loss *
Cash and balances with central banks	8,399,045	0	-	5,565,801	0	-
Loans and advances to credit institutions	1,417,310	-82	-	1,841,853	-43	-
Loans and advances to the public and public sector entities	29,139,898	-1,148	74,145	27,977,887	-1,091	44,438
Debt securities	1,302,354	-41	3,539,074	1,733,355	-42	4,029,859
Derivative contracts	-	-	1,999,676	-	-	2,358,163
Other assets	240,682	-13	-	244,875	-4	-
Credit commitments (off-balance sheet item)	2,592,873	-4	-	2,353,978	-4	-
Total	**43,092,161**	**-1,289**	**5,612,895**	**39,717,750**	**-1,184**	**6,432,459**

* Includes all financial assets measured at fair value through profit or loss (IFRS 9 classifications; designated at fair value through profit or loss, mandatorily at fair value through profit or loss and fair value through profit or loss).

The Act on the Municipal Guarantee Board (*MGB Act*) sets limits on the operations of MuniFin Group, which can also be considered as an important credit risk management tool. The Municipal Guarantee Board (*MGB*) is an institution governed by the public law, whose purpose under the MGB Act is to secure and develop the joint municipal funding. To accomplish this purpose MGB can grant guarantees to the funding of credit institutions controlled or owned directly or indirectly by municipalities if the funding is used for financing of municipalities, joint municipal authorities 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*). Financing, derivatives and other services can be offered only to customers and objects in accordance with the MGB Act. All funding issued by MuniFin has a MGB guarantee. In addition, MuniFin has guarantees granted by MGB to mitigate the counterparty credit risk of some derivative counterparties.

In addition to the MGB Act, a material credit risk management principle is that all customer financing and the derivatives offered to customers have to obtain the so-called zero risk-weight in MuniFin Group's capital adequacy calculation. As a business model, this zero risk requirement for all customer financing, is different from other credit institutions' and the credit risk principles inherent and required in their credit risk policies. MuniFin Group's Credit risk policy and credit risk management practices rely significantly on this principle.

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*). MuniFin Group may only grant loans and leasing financing without a separate security directly to a municipality or joint municipal authority. For others, loans must be secured with an absolute guarantee issued by a municipality or joint municipal authority or a real estate collateral and a state deficiency guarantee. The guarantee or guarantee together with a real estate collateral has to fully cover the financing provided. Guarantees and the fair value of collateral received are also taken into account in the calculation of expected credit losses. The Group does not bear the residual value risk for the objects of its leasing services. MuniFin Group has not had credit losses from the financing of its customers after the realisation of any real estate collateral and guarantees have taken place.

Municipal customers are divided into three sectors: municipalities, joint municipal authorities and municipal companies. By law, a Finnish municipality cannot default (*Bankruptcy Act 120/2004*). The municipalities have an unlimited right to increase local income tax rates and due to this, together with other elements of autonomy, the Finnish municipal sector has, similar to sovereigns, a zero credit risk weighting in capital adequacy calculation of credit institutions. Finnish municipalities and cities can also establish joint municipal authorities to provide services that they are legally required to provide for their citizens or undertake regional development activities. Municipalities are jointly members of these joint municipal authorities and are commonly responsible for their funding and other liabilities. All loans to municipal companies are guaranteed by municipalities (or joint municipal authorities). Thus, there is always a municipality, that cannot default by law, to carry the risk of default. When a loan has a 100% absolute guarantee from a municipality or a joint municipal authority, MuniFin Group can apply for payment directly from the guarantor in accordance with the terms of the loan. The guarantor is committed based on the guarantee commitment to pay the interest and other ancillary costs in addition to the principal.

The housing customer group consists of two types of housing institutions: institutions owned or controlled by municipalities (or joint municipal authorities) and state-subsidised housing institutions. Loans for housing companies owned by municipalities or joint municipal authorities are guaranteed by municipalities, or these loans can also be categorised as state-subsidised housing loans. In such cases there is real estate collateral and a deficiency guarantee from the State of Finland. State-subsidised housing institutions are defined as corporations designated by state authority and engaged in the renting or production and maintenance of housing, or corporations controlled by them. The housing companies are nominated by the Housing Finance and

Development Centre of Finland (*ARA*), a governmental agency operating under the supervision of the Ministry of the Environment. Loans for housing companies have a deficiency guarantee from the State of Finland that covers the residual risk over the collateral value of the respective property. When a loan has a deficiency guarantee by the State of Finland, primary pledge of mortgage collateral is mainly required unless the loan is a state-subsidised housing loan granted for municipality or joint municipal authority in which case there is no collateral required by law. The amount of the primary pledge must be at least 1.3 times the amount of the loan. Under deficiency guarantee, the State of Finland is responsible for the primary debt in respect of the part that is not covered from the liquidation of the mortgage collateral.

Despite MuniFin Group's business model, which is based on the zero risk-weighting customers, the Group has a risk rating system for all customers, which assigns a risk score to the customer as part of the credit granting process. In addition, independent Risk Management prepares an annual analysis of all customers, which identifies their respective risk rating. The annual analysis and update of the risk rating is based on the financial statements, the report of the board of directors and other available information. The analysis takes into account the environmental, social and governance risks (*ESG*) insofar as information about the customer is available for assessment. The assessment highlights the potential impacts of climate and environmental risks, which may materialise to customers either directly as physical risks or as transition risks related to preparing for climate change. The customer's risk rating will affect the need for further analysis of the customer in the process of granting financing, the financing decisions, decision-making power inside the Group and possibly also the pricing. The Group has customer-specific credit limits in use. In addition, MuniFin Group calculates the loan-to-value (*LTV*) ratio for its loans with real estate collateral and regularly monitors the development of LTV values.

The following table shows the risk rating (of which risk rating 5 represents the best credit worthiness) distribution of the Group's customer financing in relation to total capital, which includes lending, leased assets, municipal commercial papers and off-balance sheet credit commitments.

RISK RATING	31 Dec 2021	31 Dec 2020
5	22.9%	24.7%
4	28.7%	28.0%
3	38.6%	37.9%
2	8.4%	7.7%
1	1.4%	1.8%
Total	**100.0%**	**100.0%**

In addition to the above mentioned, the Group's credit risk management is based on proactive customer relationship management, customer knowledge (*KYC*), careful selection of counterparties, credit rating and volume limits for counterparties, trustworthy and professional staff, decision-making powers, comprehensive documentation and an on-going internal monitoring and reporting.

The Group defines the non-performing exposures (*NPE*) as receivables that fulfil at least one of the criteria's below.

- Significant receivables past due more than 90 days;
- MuniFin Group's Credit Group's (*customer financing*) or Capital Markets and Sustainability Management Team's (*liquidity portfolio*) assessment that it is probable that the debtor is not likely to pay its obligation in full without realisation of the collateral, regardless of whether there have been any delays in payments or how many days the payments have been past due.

Non-performing exposures are treated as stage 3 receivables in the calculation of expected credit losses.

Forborne exposures include exposures that have been renegotiated due to the customer's financial difficulties. Details about the principles applied to forborne and modified exposures are described in the accounting policies (Note *1*) in Section *9.3 Forborne and modified loans*. The non-performing and forborne exposures are disclosed in Note *27* in table *Non-performing and forborne exposures*.

Impairments for loans and other financial assets, which are classified according to IFRS 9 as amortised cost (*AC*) or fair value through other comprehensive income (*FVOCI*), are measured using the expected credit loss model under IFRS 9 standard. In addition, lease agreements and off-balance sheet credit commitments are subject to expected credit loss calculation due to the credit risk involved in the contracts. The methods used for calculating expected credit losses are described in the accounting policies (Note *1*) in Section *9. Impairment of financial assets*. Quantitative information on the Group's expected credit losses and their development during the financial year is presented in the Notes *14* and *27*.

The amount of the Group's expected credit losses in relation to the Group's statement of financial position is very low, 0.003% (0.003%). Expected credit losses in relation to the total assets and commitments included in the calculations are 0.003% (0.003%). The amount of expected credit losses is materially influenced by the Group's conservative risk management principles, in particular the guarantees and collaterals received by the Group, as well as the customer base and the high credit ratings of counterparties.

At the end of 2021, the Group's management decided to record an additional discretionary provision of EUR 0.4 million to take into account ECL model changes that will take place in 2022. During 2022, the Group will further develop loss given default (*LGD*) calculation of mortgage loans as well as lifetime ECL calculations.

MuniFin Group is also exposed to credit risk from its liquidity portfolio investments and derivative instruments. In selecting counterparties, MuniFin evaluates credit risk with principles and limits, approved by the Parent Company's Board of Directors, based on external credit ratings. The credit rating of investments is one of the key indicators used by the Group to make investment decisions concerning its liquidity portfolio. Nominal values of debt securities and equivalent credit values of derivatives (*fair value method*) are used in monitoring credit risk. Counterparties are also regularly subject to an internal risk assessment, which assesses economic and qualitative factors as well as ESG risks by comparing the individual issuer's ESG score with the reference value of the general market index for the asset class.

The following table presents the credit rating breakdown of the liquidity portfolio investments.

CREDIT RATING	31 Dec 2021	31 Dec 2020
AAA	59.2%	57.1%
AA+	8.8%	9.5%
AA	11.5%	12.5%
AA-	15.7%	15.5%
A+	1.4%	3.4%
A	3.3%	1.4%
A-	0.0%	0.6%
Total	**100.0%**	**100.0%**

In addition, MuniFin Group has central bank deposit in total EUR 8,435 million (EUR 5,601 million).

The Group limits the credit risk arising from its derivative contracts with ISDA Credit Support Annexes. MuniFin Group has 36 derivative counterparties with which it has valid derivative contracts. The Group has the above-mentioned collateral agreement with all of these counterparties.

BREAKDOWN OF NOMINAL VALUE OF DERIVATIVE CONTRACTS BY COUNTERPARTY CREDIT RATING (EUR 1,000)

	31 Dec 2021	31 Dec 2020
Finnish municipalities	1,743,647	1,930,687
Central counterparty	40,828,879	36,721,506
AA	15,426,607	14,520,186
A	12,357,720	12,406,794
BBB	70,699	2,045,830
Total	**70,427,552**	**67,625,003**

GIVEN AND RECEIVED CASH COLLATERAL BASED ON CSA AGREEMENTS (EUR 1,000)

	31 Dec 2021	31 Dec 2020
Given collateral	-1,310,650	-1,607,100
Given collateral to central counterparty	-238,943	-243,272
Received collateral	741,110	658,120
Received collateral from central counterparty	333,295	231,180
Net collateral	**-475,188**	**-961,072**

The Credit Valuation Adjustment (*CVA*) that measures counterparty credit risk and MuniFin Group'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 the Group'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 calculated based on credit default swaps (*CDS*). Similarly, the DVA is determined on the basis of MuniFin Group's expected negative exposures, taking into account the probability of MuniFin's own default and the loss given default.

MuniFin Group uses central counterparties (*CCPs*) in the clearing of standard over-the-counter (*OTC*) derivative contracts, as required by the European Markets Infrastructure Regulation (*EMIR*). In this model, at the end of a clearing process, a CCP becomes the counterparty to each cleared trade. The purpose of CCP clearing is to reduce counterparty risk. Two global banks provide clearing broker services to the Group. The variation margin of the derivatives with the CCPs is based on the daily margining of the cash collateral (*Collateralised-to-Market, CTM*).

MuniFin Group may also be exposed to settlement risks in the course of its operations in respect to issued bonds, customer financing, liquidity portfolio investments or derivative transactions. Group's customer financing transactions are dependent on the operations of domestic payment banks and similarly the capital market transactions are dependent on the operations of the Group's international payment banks and clearing parties. In order to minimise the credit risk associated with clearing and settlement, transactions are in principle carried out through delivery against payment.

Taking into account the nature of MuniFin Group's business model, the Group has acknowledged risk concentration in customer financing in i.e. geographical areas (locally), customer types (municipality sector, state-subsidised housing production) and collaterals (mortgages). The Group'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. In addition, a considerable portion of the exposure to customers is indirectly related to Finnish sovereign risk due to the deficiency guarantee in loan arrangements for the state-subsidised housing production. This is inextricably linked to MuniFin's business model and to its place in the Finnish social system. Furthermore, MuniFin has been established specifically to finance the municipal sector and social housing and its operations are limited by the MGB Act. Therefore, the concentration risk inherent in the business model cannot be significantly modified. On the other hand, all Group's receivables are in the zero risk weight class in capital adequacy calculations and therefore the concentration risk is acceptable considering the Group's business model and in line with the Group's business strategy. In addition, in the calculation of large exposures, all receivables from customers are zero after mitigation techniques. Due to these factors, the Group accepts the concentration risk in its customer financing as inherent to its business model.

Concentration risk is also inherent in the liquidity portfolio due to investments being made in a narrow selection of high-quality liquid assets. In order to manage this to the extent possible, MuniFin Group defines country-specific limits on the concentration of its liquidity portfolio in any single country. The following table presents the geographical distribution of the liquidity portfolio investments (including Central bank counterparty).

COUNTRY/ COUNTERPARTY	31 Dec 2021	31 Dec 2020
Finland	16.0%	19.2%
Sweden	10.5%	10.1%
France	12.1%	10.5%
Canada	11.8%	10.0%
Norway	10.5%	9.5%
The Netherlands	3.8%	5.7%
Supranational	6.4%	6.3%
Great Britain	1.1%	3.7%
Denmark	7.3%	5.7%
Germany	6.3%	5.8%
Australia	2.1%	2.4%
Belgium	2.8%	3.0%
New Zealand	2.6%	2.5%
South Korea	3.0%	2.1%
Japan	0.8%	0.4%
Luxembourg	1.6%	1.3%
Switzerland	0.4%	1.1%
Austria	0.8%	0.7%
Total	**100.0%**	**100.0%**

In addition, MuniFin Group has central bank deposit in total EUR 8,435 million (EUR 5,601 million).

The COVID-19 pandemic has not weakened MuniFin Group's credit risk position, and the credit risk position is also expected to remain stable in the future in accordance with the Group's credit risk strategy. Few of MuniFin Group's customers run into economic challenges in the spring 2020 due to the COVID-19 crisis. If the pandemic impacted their repayment ability, MuniFin offered them repayment holidays and concessions to the payment terms of the loans. More information on repayment holidays and expected credit losses is presented in Note *27 Credit risks of financial assets and other commitments*. The sudden worsening of the pandemic could affect the Group through a widening of credit risk premiums and through valuations of the liquidity portfolio. In addition, an increase in customers' financial difficulties could increase the Group's credit risk and, to some extent, also the expected credit losses.

8. Market risk

Market risk is the risk of the Group 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 Group has identified under RAF the following sources of material market risks: Interest rate risk (*Interest Rate Risk in the Banking Book, IRRBB*), FX risk and spread risk as well as fair valuation risk.

The Group hedges its market risk with derivative contracts. Derivative contracts may only be used for hedging purposes. The Group applies fair value hedge accounting in accordance with IFRS 9 and IAS 39 standards. The application of hedge accounting is described in more detail in the accounting policies (Note *1*) in Section *10. Hedge accounting* and quantitative information on current hedging relationships and their impact on earnings is presented in the Notes *26 Hedge accounting* and *8 Net income from hedge accounting*. The Group also makes use of the fair value option (*FVO*) permitted by IFRS 9 standard in some of its hedging relationship to eliminate or to significantly reduce accounting mismatch due to hedging. The use of fair value option is described in the accounting policies (Note *1*) in Section *7.2 Classification and measurement of financial liabilities / 7.2.3 Designated at fair value through profit or loss.* Quantitative information of the use of fair value option is presented in Note *6 Financial assets and liabilities designated at fair value through profit or loss* and in Note *16 Financial assets and liabilities*.

8.1 Interest rate risk

MuniFin Group manages the interest rate risk arising from the business operations by means of derivative contracts. Interest rate risk arises mainly from the difference in euribor rate terms between assets and liabilities.

MuniFin Group's strategy for interest rate risk in the banking book (*IRRBB*) is to ensure sustainable profitability regardless of the level of interest rates. Therefore, the focus is to stabilise earnings by minimising NII risk measure. Economic Value of Equity (*EVE*) of interest rate sensitivity is a secondary measure but also kept within risk appetite.

The main principle for managing the Group'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.

However, given the strategy of earnings stabilisation, the Group may decide on strategic mismatch position, i.e. leave fixed rate exposures unhedged in order to steer the Group'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.

8.1.1 NII risk

NII risk refers to the negative impact of interest rate changes on the Group's net interest income. Several different scenarios are used to measure interest rate risk, the most unfavourable one being considered. The impact is examined in relation to the Group's total net interest income for the previous year. The Group measures the NII risk both with and without the zero floor option. The following table takes into account the zero floor option in the loans.

NII RISK (EUR 1,000)	Impact	In relation to net interest income
31 Dec 2021	0	0.0%
31 Dec 2020	-32,180	13.4%

The following scenarios are used in calculating the NII risk:

1. Parallel shock up (+50 bp) (2020: +100bp)
2. Parallel shock up (+200bp)
3. Parallel shock down (-50 bp) (2020: -100bp)
4. Parallel shock down (-200bp)
5. Steepener shock (short rates down and long rates up)
6. Flattener shock (short rates up and long rates down)
7. Short rates shock up
8. Short rates shock down.

At the end of 2021, the least favourable scenario was based on the assumption of the parallel shock up of 50 basis points. All scenarios in NII risk calculations had positive impact, so there was no NII risk at 31 December 2021.

8.1.2 Economic Value of Equity

Economic Value describes the interest rate sensitivity of the present value of the statement of financial position. It is measured by calculating the change in the present value of interest rate sensitive cash flows for different interest rate curve changes. Several interest rate scenarios are used to measure interest rate risk, the most unfavourable one being considered. The impact will be examined in relation to the Group's total own funds. The Group measures the Economic Value of Equity both with and without the zero floor option. The following table below takes into account the zero floor option in the loans.

ECONOMIC VALUE OF EQUITY (EUR 1,000)	Impact	In relation to own funds
31 Dec 2021	-13,180	0.75%
31 Dec 2020	-344,620	21.2%

8.1.3 Basis risk

The basis risk measure captures interest rate risk that results from narrowing or widening of tenor basis swap spreads. The impact is examined in relation to the Group's total net interest income for the previous year. The figures below take into account the zero floor option in the loans.

BASIS RISK (EUR 1,000)	Impact	In relation to net interest income
31 Dec 2021	-450	0.19%
31 Dec 2020	-12,550	5.2%

The worst of two scenarios is used to measure basis risk:

- Narrowing basis swap spreads assuming that the basis swap spreads are narrowed to zero from their current level.
- Widening basis swap spreads is based on basis swap spread changes experienced during the euro area crisis in 2011.

8.2 FX risk

MuniFin Group's FX risk strategy is in line with its conservative market risk management. The Group does not bear any material foreign exchange risk. The Group's lending and other customer finance items are denominated in euros. FX risk is hedged by translating all foreign currency denominated funding and liquidity investments into euros using derivatives. However, due to collateral management related to Central Counterparty clearing (*CCP*) activities, minor FX risk may temporarily incur to the Group. The functionality of the cross-currency derivative markets is always assessed before entering into new funding or liquidity 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 foreign currency denominated funding transactions with early call options are hedged fully for potential call situations.

The following tables present the breakdown of the Group's financial assets and liabilities into domestic and foreign currency denominated items.

FINANCIAL ASSETS IN DOMESTIC AND FOREIGN CURRENCIES

31 Dec 2021 (EUR 1,000)	Domestic currency	Foreign currency	Total
Cash and balances with central banks	8,399,045	-	8,399,045
Loans and advances to credit institutions	1,388,667	28,643	1,417,310
Loans and advances to the public and public sector entities	28,122,834	-	28,122,834
Debt securities	4,811,225	30,202	4,841,428
Shares and participations	-	-	-
Other assets	238,930	-	238,930
Total	**42,960,701**	**58,845**	**43,019,546**

FINANCIAL LIABILITIES IN DOMESTIC AND FOREIGN CURRENCIES

31 Dec 2021 (EUR 1,000)	Domestic currency	Foreign currency	Total
Liabilities to credit institutions	2,801,016	-	2,801,016
Liabilities to the public and public sector entities	3,262,800	61,885	3,324,685
Debt securities issued	14,636,794	20,690,731	35,327,525
Provisions and other liabilities	310,555	27,267	337,823
Total	**21,011,165**	**20,779,883**	**41,791,049**

FINANCIAL ASSETS IN DOMESTIC AND FOREIGN CURRENCIES
31 Dec 2020

(EUR 1,000)	Domestic currency	Foreign currency	Total
Cash and balances with central banks	5,565,801	-	5,565,801
Loans and advances to credit institutions	1,680,218	161,635	1,841,853
Loans and advances to the public and public sector entities	27,146,828	-	27,146,828
Debt securities	5,718,838	44,375	5,763,214
Shares and participations	27	-	27
Other assets	243,269	-	243,269
Total	**40,354,982**	**206,010**	**40,560,992**

FINANCIAL LIABILITIES IN DOMESTIC AND FOREIGN CURRENCIES
31 Dec 2020

(EUR 1,000)	Domestic currency	Foreign currency	Total
Liabilities to credit institutions	2,001,478	-	2,001,478
Liabilities to the public and public sector entities	3,796,824	87,202	3,884,026
Debt securities issued	14,027,359	18,884,547	32,911,906
Provisions and other liabilities	77,723	159,489	237,212
Total	**19,903,384**	**19,131,238**	**39,034,622**

The following tables present the currency breakdown of the Group's financial assets and liabilities at their carrying amount and their corresponding hedges.

DISTRIBUTION OF FINANCIAL ASSETS BY CURRENCY BASED ON CARRYING AMOUNTS AND HEDGES 31 Dec 2021

(EUR 1,000)	USD	NOK	GBP	JPY	Other currencies	Total
Loans and advances to credit institutions	27,726	3	411	3	499	28,643
Debt securities	30,202	-	-	-	-	30,202
Other assets	-	-	-	-	-	-
Currency risk total	**57,928**	**3**	**411**	**3**	**499**	**58,845**
Hedging derivatives	-30,202	-	-	-	-	-30,202
Total	**27,726**	**3**	**411**	**3**	**499**	**28,643**

DISTRIBUTION OF FINANCIAL LIABILITIES BY CURRENCY BASED ON CARRYING AMOUNTS AND HEDGES 31 Dec 2021

(EUR 1,000)	USD	NOK	GBP	JPY	Other currencies	Total
Long-term funding	-8,070,182	-2,608,081	-2,031,462	-1,551,376	-3,138,643	-17,399,744
Short-term funding	-3,115,038	-	-237,835	-	-	-3,352,872
Provisions and other liabilities	-27,267	-	-	-	-	-27,267
Currency risk total	**-11,212,487**	**-2,608,081**	**-2,269,297**	**-1,551,376**	**-3,138,643**	**-20,779,883**
Hedging derivatives	11,185,219	2,608,081	2,269,297	1,551,376	3,138,643	20,752,616
Total	**-27,267**	**0**	**0**	**0**	**0**	**-27,267**
Net currency position	**459**	**3**	**411**	**3**	**499**	**1,376**

DISTRIBUTION OF ASSETS BY CURRENCY BASED ON CARRYING AMOUNTS AND HEDGES

31 Dec 2020 (EUR 1,000)	USD	NOK	JPY	CHF	Other currencies	Total
Loans and advances to credit institutions	159,986	3	768	361	517	161,635
Debt securities	44,375	-	-	-	-	44,375
Other assets	-	-	-	-	-	-
Currency risk total	**204,361**	**3**	**768**	**361**	**517**	**206,010**
Hedging derivatives	-44,375	-	-	-	-	-44,375
Total	**159,986**	**3**	**768**	**361**	**517**	**161,635**

DISTRIBUTION OF FINANCIAL LIABILITIES BY CURRENCY BASED ON CARRYING AMOUNTS AND HEDGES

31 Dec 2020 (EUR 1,000)	USD	NOK	JPY	CHF	Other currencies	Total
Long-term funding	-7,432,620	-2,012,624	-1,957,647	-1,264,680	-2,788,493	-15,456,063
Short-term funding	-3,515,686	-	-	-	-	-3,515,686
Provisions and other liabilities	-159,489	-	-	-	-	-159,489
Currency risk total	**-11,107,796**	**-2,012,624**	**-1,957,647**	**-1,264,680**	**-2,788,493**	**-19,131,238**
Hedging derivatives	10,948,306	2,012,624	1,957,647	1,264,680	2,788,493	18,971,749
Total	**-159,489**	**0**	**0**	**0**	**0**	**-159,489**
Net currency position	**497**	**3**	**768**	**361**	**517**	**2,146**

8.2.1 Currency position

The currency position is calculated as the euro-denominated difference between assets and liabilities in various currencies.

CURRENCY POSITION (EUR 1,000)	Currency position
31 Dec 2021	1,376
31 Dec 2020	2,146

8.3 Price risk

Price risk refers to the possibility of changes in the market values of the prefunding liquidity investments due to a change in the market's required return as a consequence of a change in the investment's risk or in the market's risk sensitivity. Main principle in portfolio management is to guarantee a sufficient amount of earnings within the liquidity requirements, such as LCR, NSFR and Survival horizon.

SPREAD RISK (EUR 1,000)	Impact	In relation to own funds
31 Dec 2021	-22,700	1.3%
31 Dec 2020	-22,300	1.4%

The change in required return is calculated at a 99.9% confidence level.

8.4 Fair valuation risk

MuniFin Group has identified fair valuation risk as material risk for its operations. Unrealised fair value changes of financial instruments increase the volatility of profits. In addition to the profit, the Group's own funds are also affected by valuations measured at fair value through other comprehensive income (*OCI*). The classification and measurement of financial instruments are described in more detail in the accounting policies (Note *1*) in Section *7. Classification, recognition and measurement of financial instruments*. The volatility of the fair valued instruments arises from changes in market risk factors, such as tenor basis spreads as the spread between different interest rate curves changes. In accordance with the market practice and IFRS 13 standard, the Group discounts the financial assets and liabilities measured at fair value and the hedged items with the swap curve and the hedging derivatives with the OIS curve, which causes a significant part of the Group's valuation volatility. The unrealised fair value changes of financial instruments are recorded in the income statement under line item *Net income from securities and foreign exchange transactions* and they are specified in Note *5*. In addition, the unrealised fair values of financial instruments in hedge accounting (both hedged items and hedging instruments) are recorded under line item *Net income from hedge accounting* and specified in Note *8*. The Group continuously monitors and analyses the volatility arising from valuations and prepares for its potential profitability and solvency impacts. A sensitivity analysis related to valuations is presented in Note *17*.

The COVID-19 pandemic caused market volatility, especially in the spring 2020, which was also reflected in increased valuation volatility in MuniFin Group's profit. The market situation has since calmed down and volatility has not been so significant during the financial year 2021 due to the pandemic. Valuations have also returned close to the pre-COVID-19 levels.

9. Operational risks

Operational risk refers to 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 failure to comply with internal and external regulation (compliance risk) and legal risks. Operational risks may result in expenses, payable compensation, loss of reputation, false information on position, risk and financial results or the interruption of operations.

Operational risks are recognised as part of the Group's operations and processes. This has been implemented with an annual mapping of operational risk, which is carried out by units through a self-assessment. The operational risk management is the responsibility of each division and unit. In addition, the Risk Management and Compliance division supports the other divisions and units and have the responsibility for coordinating the management of operational risks.

MuniFin Group uses various methods for managing operational risks. The Group 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 RAF approved by the Board of Directors of the Parent Company. 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 and accounting are separated. The Group has adequate substitution systems to ensure the continuity of key functions. The expertise of the personnel is maintained and developed through regular development discussions and training plans. The Group has a contingency plan for situations in which business operations are interrupted. The plan is designed to ensure that the Group is able to continue functioning and to limit its losses in different disruptive scenarios. The annual mapping of operational risks and the operational risk event report process support the Group's continuity planning. In addition, the Group has insurance policies related to its operations and the level of the insurance coverage is assessed on a regular basis.

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

The Group 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 Group 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.

The Group has an approval process for new products and services. The process aims to ensure that all material risks and operational requirements are taken into account when developing new products and services. The Group has outsourcing arrangements of which the most important are IT and infrastructure services. 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. Operational risk events are reported to the Executive Management Team and the Board of Directors of the Parent Company. Only small losses from operational risks have been realised during 2021.

The effects of the COVID-19 pandemic on the Group's continuity and operational risks have been small. The organisation's transition to remote working did not significantly increase operational risks or the resulting losses. The functions and processes of the various units were adapted on a fast schedule to suit continuous remote working. In addition, efforts were made to improve internal communication and continuity, as well as to reduce operational risks.

10. ESG risks

ESG risks include environmental, social and governance risks. There have been no material changes in ESG risks during the year. According to the Group's estimate, it is currently not exposed to any substantial social or governance risks. Also, the Group's current estimate is that environmental and climate risks are unlikely to manifest substantially in the short-term. In the medium and long-term, climate risks may nevertheless have an adverse economic effect on the Group's customers. However, any changes in the customers' financial situation are not expected to affect the Group's credit risk position.

Notes to the income statement

Note 3. Interest income and expense

(EUR 1,000)	2021 Interest and similar income	2021 Interest and similar expense	2021 Net	2020 Interest and similar income	2020 Interest and similar expense	2020 Net
Assets						
Amortised cost						
Cash and balances with central banks	-	-38,619	-38,619	-	-23,479	-23,479
Loans and advances to credit institutions	46	-7,845	-7,800	51	-6,035	-5,984
Loans and advances to the public and public sector entities	188,484	-	188,484	193,108	-	193,108
Debt securities	9	-5,335	-5,326	369	-3,247	-2,878
Other assets	1,121	-	1,121	251	-	251
Fair value through other comprehensive income						
Debt securities	-	-589	-589	-	-1,063	-1,063
Designated at fair value through profit or loss						
Loans and advances to the public and public sector entities	236	-	236	-	-	-
Debt securities	8,422	-	8,422	13,206	-	13,206
Mandatorily at fair value through profit or loss						
Loans and advances to the public and public sector entities	933	-	933	955	-	955
Debt securities	-	-	-	-	-	-
Fair value through profit or loss						
Derivative contracts at fair value through profit or loss	76,104	-99,734	-23,630	71,077	-95,237	-24,160
Derivative contracts in hedge accounting	-93,724	-	-93,724	-79,399	-	-79,399
Leased assets	6,366	-	6,366	5,986	-	5,986
Interest on non-financial other assets	8	-	8	6	-	6
Interest on assets	**188,005**	**-152,123**	**35,883**	**205,610**	**-129,061**	**76,549**
, of which interest income/expense according to the effective interest method	*189,660*	*-52,389*		*193,779*	*-33,824*	

(EUR 1,000)	2021 Interest and similar income	2021 Interest and similar expense	2021 Net	2020 Interest and similar income	2020 Interest and similar expense	2020 Net
Liabilities						
Amortised cost						
Liabilities to credit institutions	20,118	-949	19,169	8,089	-	8,089
Liabilities to the public and public sector entities	-	-51,503	-51,503	-	-60,239	-60,239
Debt securities issued	1,711	-219,984	-218,273	1,971	-255,909	-253,937
Provisions and other liabilities	-	-2,181	-2,181	-	-2,062	-2,062
Designated at fair value through profit or loss						
Liabilities to credit institutions	-	-30	-30	-	-49	-49
Liabilities to the public and public sector entities	-	-32,726	-32,726	-	-35,494	-35,494
Debt securities issued	14	-78,466	-78,452	-	-139,066	-139,066
Fair value through profit or loss						
Derivative contracts at fair value through profit or loss	293,688	-96,628	197,061	317,265	-138,029	179,236
Derivative contracts in hedge accounting	-	411,252	411,252	-	481,095	481,095
Interest on liabilities	**315,531**	**-71,216**	**244,315**	**327,325**	**-149,753**	**177,572**
, of which interest income/expense according to the effective interest method	*21,829*	*-274,618*		*10,060*	*-318,210*	
Total interest income and expense	**503,536**	**-223,339**	**280,197**	**532,935**	**-278,814**	**254,121**

Interest income on stage 3 financial assets in the expected credit loss (*ECL*) calculations totalled EUR 951 thousand (EUR 548 thousand) during the financial year. These are included in the line items *Loans and advances to the public and public sector entities* and *Leased assets*.

Interest expense on provisions and other liabilities includes EUR 70 thousand (EUR 91 thousand) of interest on lease liabilities recognised in accordance with IFRS 16 Leases standard.

Interest expenses on financial assets at amortised cost on cash and balances with central banks consists of interest paid on central bank deposits and interest on loans and advances to credit institutions of interest on cash collateral receivables. Interest expenses on debt securities consists of interest paid on short-term lending. Negative interest arises on debt securities at fair value through other comprehensive income due to the premium / discount amortisation of debt securities and commercial papers. Interest expenses on derivative contracts at fair value through profit or loss consist of negative interest income on derivative contracts that are not included in hedge accounting. The derivative contracts contained in this line item hedge financial assets which are designated at fair value through profit or loss, derivative contracts with municipalities and derivative contracts hedging derivatives with municipalities, in addition to derivative contracts used for hedging interest rate risk of the balance sheet, for which no hedged item has been specified. Derivative contracts in hedge accounting hedge line items *Loans and advances to the public and public sector entities* and *Leased assets*.

Interest income on financial liabilities at amortised cost to credit institutions consists of interest received on cash collateral liabilities as well as on TLTRO III debt, and interest income on debt securities issued consists of interest received on ECPs. Interest income on derivative contracts at fair value through profit or loss consists of positive interest expense on derivatives that are not included in hedge accounting. Derivative contracts contained in this line item hedge financial liabilities which are designated at fair value through profit or loss. Derivative contracts in hedge accounting are used as hedges for liabilities to credit institutions, liabilities to the public and public sector entities and debt securities issued.

Note 4. Commission income and expense

(EUR 1,000)	2021	2020
Commission income		
Financial advisory services	1,149	2,158
Digital services	747	676
Other operations	229	-
Total	**2,126**	**2,834**
Commission expense		
Commission fees paid	-251	-669
Other	-4,805	-4,396
Total	**-5,056**	**-5,066**
Net commission income	**-2,930**	**-2,232**

Commission income from the contracts with customers are divided by service type. EUR 1,871 thousand (EUR 2,812 thousand) out of commission income from the contracts with customers has been received from municipalities, joint municipal authorities and municipality-controlled entities.

MuniFin Group does not disclose segment information of IFRS 8 standard in the Consolidated Financial Statements as the Group operates in a single segment, which also forms the basis of reporting to the Group's chief operating decision-maker. Information regarding segment reporting can be found in the accounting policies (Note *1*) in Section *5. Segment reporting*.

The commissions for advisory services are mainly charged from the customer after the service has been performed in accordance with the terms of the agreement and commission for digital services are charged once a year and recognised over time. Other commissions are charged and recognised at the time of the service is provided. The accounting treatment of the commission income from the contracts with customers is presented in the accounting policies (Note *1*) in Section *20.2 Commission income and expenses*.

In commission expense, line item *Other* includes i.e. paid guarantee fees, custody fees and funding programme update costs.

Note 5. Net income from securities and foreign exchange transactions

2021 (EUR 1,000)	Capital gains	Capital losses	Change in fair value	Total
Financial assets				
Designated at fair value through profit or loss				
Loans and advances to the public and public sector entities	-	-	-769	-769
Debt securities	-	-	-49,633	-49,633
Mandatorily at fair value through profit or loss				
Loans and advances to the public and public sector entities	-	-	-2,532	-2,532
Debt securities	-	-	-	-
Shares and participations	-	-23	-	-23
Financial liabilities				
Designated at fair value through profit or loss				
Issued commercial papers	-	-	1,245	1,245
Liabilities to credit institutions	-	-	-231	-231
Liabilities to the public and public sector entities	-	-	92,032	92,032
Debt securities issued	-	-	186,385	186,385
Fair value through profit or loss				
Derivative contracts at fair value through profit or loss	1,419	-508	-204,471	-203,560
Day 1 gain or loss	-	-	-208	-208
Total net income from securities transactions	**1,419**	**-531**	**21,819**	**22,707**
Net income from foreign exchange transactions	**22,648**	**-22,596**	**1,336**	**1,388**
Total	**24,067**	**-23,127**	**23,155**	**24,095**

Net income from securities transactions includes fair value changes of financial assets and liabilities measured at fair value through profit or loss, fair value changes of derivative contracts not included in hedge accounting (derivative contracts at fair value through profit or loss) as well as capital gains and losses related to these items. Net income from foreign exchange transactions includes unrealised and realised translation differences for all items denominated in foreign currencies. The definition for Day 1 gain or loss is presented in the accounting policies (Note *1*) in Section *13. Determination of fair value*. The reconciliation for Day 1 gain or loss is presented in Note *17 Fair values of financial assets and liabilities.*

2020 (EUR 1,000)	Capital gains	Capital losses	Change in fair value	Total
Financial assets				
Designated at fair value through profit or loss				
Debt securities	853	-	16,750	17,603
Mandatorily at fair value through profit or loss				
Loans and advances to the public and public sector entities	-	-	-515	-515
Debt securities	-	-	-	-
Shares and participations	-	-111	231	119
Financial liabilities				
Designated at fair value through profit or loss				
Issued commercial papers	-	-	1,318	1,318
Liabilities to credit institutions	-	-	418	418
Liabilities to the public and public sector entities	-	-	-25,235	-25,235
Debt securities issued	-	-	55,304	55,304
Fair value through profit or loss				
Derivative contracts at fair value through profit or loss	3,878	-1,008	-55,499	-52,629
Day 1 gain or loss	-	-	-29	-29
Total net income from securities transactions	**4,732**	**-1,119**	**-7,257**	**-3,644**
Net income from foreign exchange transactions	**37,031**	**-34,380**	**-6,797**	**-4,146**
Total	**41,763**	**-35,500**	**-14,053**	**-7,790**

Note 6. Financial assets and liabilities designated at fair value through profit or loss

FINANCIAL ASSETS AND LIABILITIES DESIGNATED AT FAIR VALUE THROUGH PROFIT OR LOSS (EUR 1,000)	Nominal value 31 Dec 2021	Carrying amount 31 Dec 2021	Nominal value 31 Dec 2020	Carrying amount 31 Dec 2020
Financial assets				
Loans and advances to the public and public sector entities	30,000	38,941	-	-
Debt securities	3,484,223	3,539,074	3,912,451	4,029,859
Total financial assets *	**3,514,223**	**3,578,015**	**3,912,451**	**4,029,859**
Financial liabilities				
Liabilities to credit institutions	5,000	4,787	25,000	24,558
Liabilities to the public sector entitities	1,445,202	1,548,394	1,908,373	1,637,674
Debt securities issued	10,680,831	10,008,299	10,927,113	10,454,282
Total financial liabilities	**12,131,032**	**11,561,479**	**12,860,486**	**12,116,514**

* Financial assets designated at fair value through profit or loss are exposed to credit risk up to the carrying amounts of those securities at 31 Dec 2021 and 31 Dec 2020.

CHANGE IN FAIR VALUE OF FINANCIAL ASSETS DESIGNATED AT FAIR VALUE THROUGH PROFIT OR LOSS (EUR 1,000)	31 Dec 2021	1 Jan 2021	Fair value change recognised in the income statement 2021	, of which due to credit risk	, of which due to market risk
Financial assets					
Loans and advances to the public and public sector entities	-769	-	-769	13	-782
Debt securities	20,226	69,859	-49,633	4,434	-54,067
Total financial assets	**19,457**	**69,859**	**-50,402**	**4,446**	**-54,849**

Financial assets that MuniFin Group has designated at fair value through profit or loss include debt securities in the liquidity portfolio and some lending agreements of which the interest rate risk is hedged with interest rate and cross currency interest rate swaps. The designation is made as it significantly reduces accounting mismatch which would otherwise arise from measuring the derivative contract at fair value through profit or loss and the debt security at fair value through other comprehensive income and lending agreements at amortised cost based on the IFRS 9 business model. MuniFin Group does not have credit derivatives hedging these financial assets.

CHANGE IN FAIR VALUE OF FINANCIAL LIABILITIES DESIGNATED AT FAIR VALUE THROUGH PROFIT OR LOSS (EUR 1,000)	31 Dec 2021	1 Jan 2021	Fair value change recognised in the income statement 2021	Change in own credit risk recognised in the other comprehensive income 2021	Total fair value change in 2021
Financial liabilities					
Liabilities to credit institutions	187	418	-231	26	-257
Liabilities to the public sector entitities	-152,113	-244,146	92,032	1,729	90,303
Debt securities issued	573,054	385,424	187,630	-1,356	188,986
Total financial liabilities	**421,127**	**141,696**	**279,431**	**400**	**279,031**

NET CHANGE IN FAIR VALUE IN NET INCOME FROM SECURITIES TRANSACTIONS (EUR 1,000)	Cumulative change in fair value 31 Dec 2021	Fair value change recognised in the income statement 2021
Financial liabilities designated at fair value through profit or loss	421,127	279,431
Derivative contracts at fair value through profit or loss hedging financial liabilities	-435,559	-267,712
Net change in fair value	**-14,432**	**11,719**

MuniFin Group has designated short-term debt instruments denominated in foreign currencies, which have been hedged with FX swaps, at fair value through profit or loss. The designation reduces accounting mismatch which would otherwise arise between the measurement of the derivative contract and financial liability. Financial liabilities designated at fair value through profit or loss consist of financial liabilities, which have been hedged according to the Group's risk management policy, but which are not subject to IFRS 9 fair value hedge accounting. The fair value changes of the financial liabilities impact the income statement, but as they have been hedged, the expected profit or loss is restricted to interest. The table above describes the net impact of these financial liabilities and their hedges on the income statement.

When a financial liability is designated at fair value through profit or loss, the fair value change, with exception to MuniFin's own credit risk that is presented in other comprehensive income as change of the own credit revaluation reserve, is presented in *Net income from securities transactions*.

MuniFin Group applies the income approach of IFRS 13 to the separation of fair value changes related to changes in own credit risk from the fair value changes of the financial liability. For the majority of financial liabilities designated at fair value through profit or loss, no market price is available as there is no active secondary market. The methodology for separation of own credit risk utilises MuniFin's benchmark curves, cross currency basis spreads and credit spreads of MuniFin's issued debt securities on the primary market as input. Based on the aforementioned inputs, valuation curves can be constructed for various reporting periods for valuing financial liabilities designated at fair value through profit or loss. By comparing fair values calculated using the trade date and reporting date, the impact of change in own credit risk on the fair value of the financial liability can be determined.

Financial liabilities designated at fair value through profit or loss are not traded.

CHANGE IN FAIR VALUE OF FINANCIAL ASSETS DESIGNATED AT FAIR VALUE THROUGH PROFIT OR LOSS (EUR 1,000)	31 Dec 2020	1 Jan 2020	Fair value change recognised in the income statement 2020	, of which due to credit risk	, of which due to market risk
Financial assets					
Debt securities	69,859	53,109	16,750	3,203	13,547
Total financial assets	**69,859**	**53,109**	**16,750**	**3,203**	**13,547**

CHANGE IN FAIR VALUE OF FINANCIAL LIABILITIES DESIGNATED AT FAIR VALUE THROUGH PROFIT OR LOSS (EUR 1,000)	31 Dec 2020	1 Jan 2020	Fair value change recognised in the income statement 2020	Change in own credit risk recognised in the other comprehensive income 2020	Total fair value change in 2020
Financial liabilities					
Liabilities to credit institutions	418	-	418	-	418
Liabilities to the public sector entitities	-244,146	-218,911	-25,235	-813	-26,048
Debt securities issued	385,424	328,802	56,622	-15,739	40,883
Total financial liabilities	**141,696**	**109,891**	**31,805**	**-16,551**	**15,254**

NET CHANGE IN FAIR VALUE IN NET INCOME FROM SECURITIES TRANSACTIONS (EUR 1,000)	Cumulative change in fair value 31 Dec 2020	Fair value change recognised in the income statement 2020
Financial liabilities designated at fair value through profit or loss	141,696	31,805
Derivative contracts at fair value through profit or loss hedging financial liabilities	-167,847	-36,391
Net change in fair value	**-26,151**	**-4,586**

Note 7. Net income on financial assets at fair value through other comprehensive income

(EUR 1,000)	2021	2020
Capital gains from financial assets	-	-
Capital losses from financial assets	-	-3
Unrealised gains transferred from fair value reserve	-	-
Unrealised losses transferred from fair value reserve	-	-
Total	**-**	**-3**

Note 8. Net income from hedge accounting

(EUR 1,000)	2021	2020
Unrealised gains from hedging instruments	365,546	317,380
Unrealised losses from hedging instruments	-840,150	-100,701
Net income from hedging instruments	**-474,604**	**216,679**
Unrealised gains from hedged items	838,751	135,530
Unrealised losses from hedged items	-358,022	-345,985
Net income from hedged items	**480,729**	**-210,455**
IBOR reform related compensations *	-1,302	-2,041
Net income from hedge accounting	**4,823**	**4,183**

* Compensations relate to the IBOR reform of which more information is presented in the accounting policies (Note *1*) in Section *23. IBOR reform*.

Unrealised gains and losses from hedged items include fair value of the risks to which fair value hedge accounting is applied and which are measured at fair value. The foreign exchange difference of both hedging instruments and hedged items are presented on line item *Net income from foreign exchange transactions* in Note *5*. A specification of the net income from hedge accounting is presented in Note *26*.

Note 9. Impact of the reclassified financial assets and liabilities

The following table shows the impact of reclassification of financial assets in the implementation of IFRS 9 standard (as of 1 Jan 2018) from at fair value through profit or loss under IAS 39 into amortised cost under IFRS 9 standard. MuniFin Group did not reclassify any financial liabilities from fair value through profit or loss into amortised cost.

FINANCIAL ASSETS (EUR 1,000)	Original measurement category under IAS 39	New measurement category under IFRS 9	Fair value 31 Dec 2021	Fair value gain or loss for the financial year *	EIR determined as at 1 Jan 2018 **	Interest revenue recognised during 2021
Loans and advances to the public and public sector entities	Fair value option	Amortised cost	99,253	-1,589	0.14%	422

* The fair value gain or loss that would have been recognised in the income statement during the financial year if the financial assets had not been reclassified.
** Effective interest rate determined on the date of initial application.

FINANCIAL ASSETS (EUR 1,000)	Original measurement category under IAS 39	New measurement category under IFRS 9	Fair value 31 Dec 2020	Fair value gain or loss for the financial year	EIR determined as at 1 Jan 2018	Interest revenue recognised during 2020
Loans and advances to the public and public sector entities	Fair value option	Amortised cost	113,143	1,119	0.14%	187

Note 10. Other operating income

(EUR 1,000)	2021	2020
Other income from credit institution operations *	95	127
Total	**95**	**127**

* Line item includes capital gains from sold tangible assets.

Note 11. Administrative expenses

(EUR 1,000)	2021	2020
Personnel expenses		
Salaries and remuneration	-14,618	-14,925
Pension costs	-2,375	-2,290
Other social security expenses	-650	-481
Total personnel expenses	**-17,643**	**-17,696**
Other personnel related costs	-1,303	-1,233
Marketing and communication expenses	-624	-726
IT and information expenses	-14,211	-12,605
Other administrative expenses	-943	-744
Total	**-34,722**	**-33,004**

	2021		2020	
PERSONNEL	Average	End of year	Average	End of year
Permanent full-time	154	155	157	154
Permanent part-time	1	1	2	3
Fixed term	7	8	8	8
Total	**162**	**164**	**167**	**165**

Note 12. Depreciation and impairment on tangible and intangible assets

(EUR 1,000)	2021	2020
Depreciation		
Depreciation on tangible assets	-2,946	-2,513
Depreciation on intangible assets	-2,780	-3,281
Total depreciation	**-5,726**	**-5,794**
Impairment		
Impairment on intangible assets *	-10,482	-
Total impairment	**-10,482**	**-**
Total depreciation and impairment	**-16,208**	**-5,794**

* Line item includes a non-recurring item of EUR 10,482 thousand, which consists of impairment on on-going IT system implementation.

Note 13. Other operating expenses

(EUR 1,000)	2021	2020
Regulatory expenses		
Contributions to the Single Resolution Fund	-6,737	-5,163
Other administrative and supervisory fees	-2,352	-2,227
Rental expenses	-127	-375
External services	-4,031	-5,171
Credit rating fees	-753	-894
Audit fees	-426	-394
Insurances	-592	-358
Other expenses from credit institution operations	-550	-28
Total	**-15,568**	**-14,610**

Paid fees to the auditor (KPMG Oy Ab) in 2021 totalled EUR 426 thousand (EUR 394 thousand) for audit, EUR 21 thousand (EUR 13 thousand) for tax services and EUR 181 thousand (EUR 128 thousand) for other services. There were no assigments as referred to in section 1, subsection 1, paragraph 2 of the Auditing Act in 2021 (EUR 9 thousand).

Note 14. Credit losses and impairments on financial assets

MuniFin Group's credit risks are described in Note *2 Risk management principles and the Group's risk position* in Section *7. Credit Risk*. The accounting policies of the expected credit loss calculations and impairment stages are described in the accounting policies (Note *1*) in Section *9. Impairment of financial assets.*

CREDIT LOSSES AND IMPAIRMENTS 2021 (EUR 1,000)	Expected credit losses			Realised credit losses		
	Additions	Subtractions	Recognised in the income statement	Additions	Subtractions	Recognised in the income statement
Expected credit losses on financial assets at amortised cost						
Cash and balances with central banks	0	0	0	-	-	-
Loans and advances to credit institutions	-53	14	-39	-	-	-
Loans and advances to the public and public sector entities	-713	655	-58	-	-	-
Leased assets in Loans and advances to the public and public sector entities	0	1	0	-	-	-
Debt securities	0	0	0	-	-	-
Cash collateral to CCPs in Other assets	-9	0	-9	-	-	-
Credit commitments (off-balance sheet)	-2	3	1	-	-	-
Total expected credit losses on financial assets at amortised cost	**-778**	**674**	**-105**	**-**	**-**	**-**
Expected credit losses and impairments on other financial assets						
Debt securities at fair value through other comprehensive income	-18	19	0	-	-	-
Guarantee receivables from the public and public sector entities in Other assets	-	-	-	-	-	-
Total expected credit losses and impairments on other financial assets	**-18**	**19**	**0**	**-**	**-**	**-**
Total	**-797**	**692**	**-104**	**-**	**-**	**-**

CREDIT LOSSES AND IMPAIRMENTS 2020 (EUR 1,000)	Expected credit losses			Realised credit losses		
	Additions	Subtractions	Recognised in the income statement	Additions	Subtractions	Recognised in the income statement
Expected credit losses on financial assets at amortised cost						
Cash and balances with central banks	0	0	0	-	-	-
Loans and advances to credit institutions	-36	21	-15	-	-	-
Loans and advances to the public and public sector entities	-1,026	121	-904	-	-	-
Leased assets in Loans and advances to the public and public sector entities	-1	0	-1	-	-	-
Debt securities	0	0	0	-	-	-
Cash collateral to CCPs in Other assets	-2	2	0	-	-	-
Credit commitments (off-balance sheet)	-3	3	0	-	-	-
Total expected credit losses on financial assets at amortised cost	**-1,068**	**148**	**-920**	**-**	**-**	**-**
Expected credit losses and impairments on other financial assets						
Debt securities at fair value through other comprehensive income	-29	92	62	-	-	-
Guarantee receivables from the public and public sector entities in Other assets	-	-	-	-	-	-
Total expected credit losses and impairments on other financial assets	**-29**	**92**	**62**	**-**	**-**	**-**
Total	**-1,097**	**240**	**-857**	**-**	**-**	**-**

Note 15. Income tax expense

(EUR 1,000)	2021	2020
Tax based on the profit for the financial year	-34,386	-5,604
Tax based on the profit for previous financial years	-	-9
Deferred tax	-13,687	-33,228
Total	**-48,073**	**-38,840**

(EUR 1,000)	2021	2020
Profit before tax	239,678	194,141
Taxes at domestic tax rate	-47,936	-38,828
Other deductibles	10	8
Non-deductible expenses	-145	-11
Taxes for previous financial years	-2	-9
Total	**-48,073**	**-38,840**
Income tax percentage	20.0%	20.0%
Effective tax base	20.1%	20.0%

Notes to the statement of financial position

Note 16. Financial assets and liabilities

FINANCIAL ASSETS 31 Dec 2021 (EUR 1,000)	Amortised cost	Fair value through other comprehensive income	Designated at fair value through profit or loss	Mandatorily at fair value through profit or loss	Fair value through profit or loss	Total	Fair value
Cash and balances with central banks	8,399,045	-	-	-	-	8,399,045	8,399,045
Loans and advances to credit institutions	1,417,310	-	-	-	-	1,417,310	1,417,310
Loans and advances to the public and public sector entities *	28,048,688	-	38,941	35,204	-	28,122,834	30,306,686
Debt securities	1,088,888	213,466	3,539,074	-	-	4,841,428	4,841,792
Shares and participations	-	-	-	-	-	-	-
Derivative contracts at fair value through profit or loss	-	-	-	-	761,023	761,023	761,023
Derivative contracts in hedge accounting	-	-	-	-	1,238,653	1,238,653	1,238,653
Other assets **	238,930	-	-	-	-	238,930	238,930
Total	**39,192,861**	**213,466**	**3,578,015**	**35,204**	**1,999,676**	**45,019,222**	**47,203,439**

* Line item includes EUR 242,937 thousand of leased assets for which the Group applies fair value hedge accounting. Unhedged leased assets are not presented in this note of financial assets and liabilities as leased assets are not regarded as financial assets for the purpose of IFRS 9 classification.

** Line item includes cash collateral given to central counterparties.

FINANCIAL LIABILITIES 31 Dec 2021 (EUR 1,000)	Amortised cost	Designated at fair value through profit or loss	Fair value through profit or loss	Total	Fair value
Liabilities to credit institutions	2,796,230	4,787	-	2,801,016	2,800,913
Liabilities to the public and public sector entities	1,776,291	1,548,394	-	3,324,685	3,344,334
Debt securities issued	25,319,226	10,008,299	-	35,327,525	35,434,600
Derivative contracts at fair value through profit or loss	-	-	1,114,003	1,114,003	1,114,003
Derivative contracts in hedge accounting	-	-	1,110,291	1,110,291	1,110,291
Provisions and other liabilities *	337,823	-	-	337,823	337,823
Total	**30,229,570**	**11,561,479**	**2,224,294**	**44,015,343**	**44,141,965**

* Line item includes EUR 333,295 thousand of cash collateral received from central counterparties and EUR 4,528 thousand of lease liabilities in accordance with IFRS 16 standard.

FINANCIAL ASSETS 31 Dec 2020 (EUR 1,000)	Amortised cost	Fair value through other comprehensive income	Designated at fair value through profit or loss	Mandatorily at fair value through profit or loss	Fair value through profit or loss	Total	Fair value
Cash and balances with central banks	5,565,801	-	-	-	-	5,565,801	5,565,801
Loans and advances to credit institutions	1,841,853	-	-	-	-	1,841,853	1,841,853
Loans and advances to the public and public sector entities *	27,102,391	-	-	44,438	-	27,146,828	29,643,718
Debt securities	1,310,305	423,050	4,029,859	-	-	5,763,214	5,763,793
Shares and participations	-	-	-	27	-	27	27
Derivative contracts at fair value through profit or loss	-	-	-	-	833,293	833,293	833,293
Derivative contracts in hedge accounting	-	-	-	-	1,524,870	1,524,870	1,524,870
Other assets **	243,269	-	-	-	-	243,269	243,269
Total	**36,063,619**	**423,050**	**4,029,859**	**44,465**	**2,358,163**	**42,919,155**	**45,416,624**

* Line item includes EUR 215,444 thousand of leased assets for which the Group applies fair value hedge accounting. Unhedged leased assets are not presented in this note of financial assets and liabilities as leased assets are not regarded as financial assets for the purpose of IFRS 9 classification.

** Line item includes cash collateral given to central counterparties.

FINANCIAL LIABILITIES 31 Dec 2020 (EUR 1,000)	Amortised cost	Designated at fair value through profit or loss	Fair value through profit or loss	Total	Fair value
Liabilities to credit institutions	1,976,920	24,558	-	2,001,478	2,001,414
Liabilities to the public and public sector entities	2,246,352	1,637,674	-	3,884,026	3,906,619
Debt securities issued	22,457,624	10,454,282	-	32,911,906	32,968,471
Derivative contracts at fair value through profit or loss	-	-	1,403,900	1,403,900	1,403,900
Derivative contracts in hedge accounting	-	-	1,456,670	1,456,670	1,456,670
Provisions and other liabilities *	237,212	-	-	237,212	237,212
Total	**26,918,108**	**12,116,514**	**2,860,570**	**41,895,193**	**41,974,287**

* Line item includes EUR 231,180 thousand of cash collateral received from central counterparties and EUR 6,032 thousand of lease liabilities in accordance with IFRS 16 standard.

Note 17. Fair values of financial assets and liabilities

Fair value is the price that would be received to sell the asset or paid to transfer the liability in an orderly transaction between market participants at the measurement date. The Group measures fair values using the following fair value hierarchy, which reflects the significance of the inputs used in making the fair value measurements:

Level 1
Inputs that are quoted market prices (unadjusted) for identical instruments in active markets that the Group can access at the measurement date. The market is considered to be active if trading is frequent and price data is regularly available. These quotes (mid) represent the price for an orderly transaction between parties in the market on the valuation date. Level 1 instruments comprise mainly investments in debt securities.

Level 2
Inputs other than quoted prices included within level 1 that are observable either directly (i.e. as prices) or indirectly (i.e. derived from prices). This level includes instruments valued using quoted prices for identical instruments in markets that are considered less than active or other valuation techniques in which all significant inputs are directly or indirectly observable from market data. Level 2 instruments comprise mainly OTC derivatives, the Group's issued plain-vanilla financial liabilities and the Group's lending agreements.

Level 3
This level includes all instruments for which the valuation technique includes inputs that are not observable and the unobservable inputs have a significant effect on the instrument's valuation. Unobservable inputs are used only to the extent that no relevant observable inputs are available. If the valuation input is illiquid, extrapolated or based on historical prices, the valuation input will be defined as a level 3 valuation input as these types of inputs are per definition unobservable. This level includes financial instruments with equity and FX structures due to the impact of the utilisation of inputs such as dividend yield on the fair value measurement. In addition, level 3 contains some interest rate structures with long maturities (exceeding e.g. 35 years) or in currencies where the interest rate curve is not considered liquid for all maturities.

Due to the nature of MuniFin Group's funding portfolio (i.e. issued bonds are hedged back-to-back), if a swap that is hedging an issued bond is designated as a level 3 instrument, then the issued bond will also be designated as a level 3 instrument. Same principle applies to other portfolios and levels of the hierarchy as well. The Group does not hold other assets or liabilities which are measured at fair value or assets or liabilities which are non-recurringly measured at fair value.

The following table presents financial instruments by the level of the fair value hierarchy into which the fair value measurement is categorised.

FINANCIAL ASSETS 31 Dec 2021 (EUR 1,000)		Fair value			
	Carrying amount	Level 1	Level 2	Level 3	Total
At fair value					
Fair value through other comprehensive income					
Debt securities	213,466	172,717	40,748	-	213,466
Designated at fair value through profit or loss					
Loans and advances to the public and public sector entities	38,941	-	38,941	-	38,941
Debt securities	3,539,074	3,451,809	87,265	-	3,539,074
Mandatorily at fair value through profit or loss					
Loans and advances to the public and public sector entities	35,204	-	344	34,861	35,204
Shares and participations	-	-	-	-	-
Fair value through profit or loss					
Derivative contracts at fair value through profit or loss	761,023	-	698,194	62,829	761,023
Derivative contracts in hedge accounting	1,238,653	-	1,238,246	407	1,238,653
Total at fair value	**5,826,360**	**3,624,526**	**2,103,737**	**98,097**	**5,826,360**
In fair value hedge accounting					
Amortised cost					
Loans and advances to the public and public sector entities	12,968,390	-	13,749,512	-	13,749,512
Total in fair value hedge accounting	**12,968,390**	**-**	**13,749,512**	**-**	**13,749,512**
At amortised cost					
Cash and balances with central banks	8,399,045	8,399,045	-	-	8,399,045
Loans and advances to credit institutions	1,417,310	106,734	1,310,576	-	1,417,310
Loans and advances to the public and public sector entities	15,080,299	-	16,483,029	-	16,483,029
Debt securities	1,088,888	-	1,089,253	-	1,089,253
Other assets	238,930	-	238,930	-	238,930
Total at amortised cost	**26,224,472**	**8,505,779**	**19,121,788**	**-**	**27,627,567**
Total financial assets	**45,019,222**	**12,130,305**	**34,975,037**	**98,097**	**47,203,439**

FINANCIAL LIABILITIES 31 Dec 2021 (EUR 1,000)	Carrying amount	Fair value Level 1	Level 2	Level 3	Total
At fair value					
Designated at fair value through profit or loss					
Liabilities to credit institutions	4,787	-	4,787	-	4,787
Liabilities to the public and public sector entities	1,548,394	-	1,284,601	263,793	1,548,394
Debt securities issued	10,008,299	-	8,248,729	1,759,569	10,008,299
Fair value through profit or loss					
Derivative contracts at fair value through profit or loss	1,114,003	-	369,705	744,299	1,114,003
Derivative contracts in hedge accounting	1,110,291	-	1,084,602	25,690	1,110,291
Total at fair value	**13,785,774**	**-**	**10,992,423**	**2,793,350**	**13,785,774**
In fair value hedge accounting					
Amortised cost					
Liabilities to credit institutions	55,120	-	55,016	-	55,016
Liabilities to the public and public sector entities	1,776,291	-	1,795,941	-	1,795,941
Debt securities issued *	24,852,845	-	24,873,880	86,040	24,959,920
Total in fair value hedge accounting	**26,684,256**	**-**	**26,724,837**	**86,040**	**26,810,877**
At amortised cost					
Liabilities to credit institutions	2,741,110	-	2,741,110	-	2,741,110
Debt securities issued	466,381	-	466,381	-	466,381
Provisions and other liabilities	337,823	-	337,823	-	337,823
Total at amortised cost	**3,545,314**	**-**	**3,545,314**	**-**	**3,545,314**
Total financial liabilities	**44,015,343**	**-**	**41,262,574**	**2,879,390**	**44,141,965**

* MuniFin Group's fixed-rate benchmark bond issuances are presented on level 2 due the fact that these bonds are in fair value hedge accounting with respect to the hedged risk. Valuation of the hedged risk is based on the level 2 inputs. In the Notes of the Financial Statements the Group's fixed-rate benchmark bonds' fair values are adjusted to reflect fair value based on the quoted prices from Bloomberg. The market price is a level 1 input.

FINANCIAL ASSETS 31 Dec 2020 (EUR 1,000)	Carrying amount	Fair value Level 1	Fair value Level 2	Fair value Level 3	Fair value Total
At fair value					
Fair value through other comprehensive income					
Debt securities	423,050	321,308	101,741	-	423,050
Designated at fair value through profit or loss					
Debt securities	4,029,859	3,922,131	107,728	-	4,029,859
Mandatorily at fair value through profit or loss					
Loans and advances to the public and public sector entities	44,438	-	702	43,735	44,438
Shares and participations	27	-	-	27	27
Fair value through profit or loss					
Derivative contracts at fair value through profit or loss	833,293	-	753,841	79,452	833,293
Derivative contracts in hedge accounting	1,524,870	-	1,524,298	572	1,524,870
Total at fair value	**6,855,536**	**4,243,439**	**2,488,310**	**123,787**	**6,855,536**
In fair value hedge accounting					
Amortised cost					
Loans and advances to the public and public sector entities	11,829,557	-	12,614,580	-	12,614,580
Total in fair value hedge accounting	**11,829,557**	**-**	**12,614,580**	**-**	**12,614,580**
At amortised cost					
Cash and balances with central banks	5,565,801	5,565,801	-	-	5,565,801
Loans and advances to credit institutions	1,841,853	298,085	1,543,769	-	1,841,853
Loans and advances to the public and public sector entities	15,272,833	-	16,984,700	-	16,984,700
Debt securities	1,310,305	-	1,310,885	-	1,310,885
Other assets	243,269	-	243,269	-	243,269
Total at amortised cost	**24,234,062**	**5,863,886**	**20,082,621**	**-**	**25,946,507**
Total financial assets	**42,919,155**	**10,107,325**	**35,185,512**	**123,787**	**45,416,624**

FINANCIAL LIABILITIES 31 Dec 2020 (EUR 1,000)	Carrying amount	Fair value Level 1	Level 2	Level 3	Total
At fair value					
Designated at fair value through profit or loss					
Liabilities to credit institutions	24,558	-	24,558	-	24,558
Liabilities to the public and public sector entities	1,637,674	-	1,413,261	224,413	1,637,674
Debt securities issued	10,454,282	-	8,328,568	2,125,714	10,454,282
Fair value through profit or loss					
Derivative contracts at fair value through profit or loss	1,403,900	-	757,607	646,293	1,403,900
Derivative contracts in hedge accounting	1,456,670	-	1,432,280	24,391	1,456,670
Total at fair value	**14,977,085**	**-**	**11,956,273**	**3,020,811**	**14,977,085**
In fair value hedge accounting					
Amortised cost					
Liabilities to credit institutions	68,800	-	68,736	-	68,736
Liabilities to the public and public sector entities	2,246,352	-	2,268,946	-	2,268,946
Debt securities issued	22,077,489	-	22,040,007	94,048	22,134,054
Total in fair value hedge accounting	**24,392,642**	**-**	**24,377,688**	**94,048**	**24,471,736**
At amortised cost					
Liabilities to credit institutions	1,908,120	-	1,908,120	-	1,908,120
Debt securities issued	380,134	-	380,134	-	380,134
Provisions and other liabilities	237,212	-	237,212	-	237,212
Total at amortised cost	**2,525,467**	**-**	**2,525,467**	**-**	**2,525,467**
Total financial liabilities	**41,895,193**	**-**	**38,859,428**	**3,114,859**	**41,974,287**

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. The Group applies different types of valuation inputs depending on the type and complexity of the instruments and the related risk factors and payoff structures. The Group's defined categorisation to the fair value hierarchy levels is based on the analysis performed with regards to the valuation input, stress testing (reasonable possible alternative assumption) and model complexity. If the inputs used to measure fair value are categorised into different levels on the fair value hierarchy, the fair value measurement is categorised in its entirety on the level of the lowest level input that is significant to the entire measurement.

IFRS 13 classifies valuation models and techniques into three different categories: market approach, income approach and cost approach. The Group applies the market-based approach when the instrument has a functioning market and public price quotations are available. The Group uses the market approach for the valuation of investment bonds of the liquidity portfolio. For all level 1 assets, the Group uses market prices available for identical assets (same ISIN). The Group does not make use of prices for comparable assets.

Income approach is applied when valuation is based, for example, on determining the present value of future cash flows (discounting). Valuation methods take into account an assessment of the credit risk, discount rates used, the possibility of early repayment and other factors that influence the fair value of a financial instrument reliably. The Group uses the income approach for many of its financial instruments, for example derivatives, lending and funding. The Group does not use the cost approach for the valuation of any of its financial instruments.

The Group 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 management 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.

MuniFin Group applies different models in order to derive the fair value of a certain type of instruments. The choice of base models and model 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 kinds of calibration techniques. The specific combination of base models and the different assumptions and calibration techniques are documented. The Group's fair value instruments that are subject to mark-to-model valuation techniques consist of four asset classes:

- Interest rate instruments,
- FX instruments,
- Equity-linked instruments and
- Hybrid instruments.

Financial instruments under *FX, equity-linked* and *hybrid* classes are mainly classified as level 3 instruments.

Fair value of financial instruments is generally calculated as the net present value of the individual instruments. This calculation is supplemented by counterparty level adjustments. The Group incorporates credit valuation adjustments (*CVA*) and debit valuation adjustments (*DVA*) into derivative valuations. CVA reflects the impact of the counterparty's credit risk on fair value and DVA MuniFin Group's own credit quality. The Group uses the same methodology to compute CVA and DVA. They are both assessed as the result of three inputs: Loss Given Default (*LGD*), Probability of Default (*PD, own for DVA and of the counterparty for CVA*) and Expected Exposure (*EE*).

Valuation framework

MuniFin Group has implemented a framework for the arrangements, activities and procedures with regards to the Group's 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. All approved valuation models within the model inventory are subject to annual review and re-approval by the EMT.

The Finance Management Team acts as a valuation control group for MuniFin Group's fair values and is responsible for the final approval of the Group's fair values for financial reporting. The Finance Management Team monitors and controls MuniFin Group's valuation process and the performance of valuation models, decides on the necessary measures and reports to the EMT. The Finance Management Team assesses whether the valuation models and valuation process provide sufficiently accurate information to be used in financial reporting and, based on the information received, decides on possible adjustments to the values generated by the valuation process.

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:

- Counterparty valuation control (*CVC*),
- Fair value explanation,
- Independent price verification (*IPV*) and
- Independent model validation.

Counterparty valuation control (*CVC*) is performed daily by Risk Management with the purpose to assess any deviations in valuation model output compared to MuniFin Group's own earlier valuations and to counterparty valuations. The results of the assessment are reported monthly to the CFO and quarterly to the Finance Management Team. Fair value explanation process consists of a daily analysis and explain of the changes in fair values by Risk Management and a monthly fair value explain report to the CFO and quarterly to the Finance Management Team. The independent price verification is performed monthly as part of MuniFin Group's IPV process by a third party service provider. The results of the control activities are reported monthly to the CFO and quarterly to the Finance Management Team. The independent model validation is performed annually for a subset of MuniFin Group's valuation models by a third-party service provider. The results of the model validation are reported to the Finance Management Team.

Transfers in the fair value hierarchy

MuniFin Group assesses the appropriateness and correctness of the categorisation with regards to the fair value hierarchy classification at initial recognition and at the end of each reporting period. This is to determine the initial classification of a level 1, 2 and 3 instrument and the subsequent potential transfers between levels within the fair value hierarchy. A transfer between the fair value hierarchies can occur for example when a previously assumed observed input requires an adjustment using an unobservable input. The procedure is the same for transfers into and out of the fair value levels. Transfers between the levels are considered to take place at the end of the quarter during which an event causes such a transfer or when circumstances change.

During 2021, transfers totaling EUR 50,127 thousand have been made between level 1 and level 2. During 2021, there were no transfers from level 2 to level 3.

LEVEL 3 TRANSFERS 2021 (EUR 1,000)	1 Jan 2021	Change in fair value in the income statement	Purchases and new contracts	Sales and matured contracts	Transfers into level 3	Transfers out of level 3	31 Dec 2021
Financial assets							
At fair value							
Mandatorily at fair value through profit or loss							
Loans and advances to the public and public sector entities	43,735	-4,878	-	-3,997	-	-	34,861
Shares and participations	27	-	-	-27	-	-	-
Fair value through profit or loss							
Derivative contracts at fair value through profit or loss	79,452	-14,590	604	-2,636	-	-	62,829
Derivative contracts in hedge accounting	572	-366	317	-	-	-117	407
Financial assets in total	**123,787**	**-19,834**	**921**	**-6,660**	**-**	**-117**	**98,097**
Financial liabilities							
At fair value							
Designated at fair value through profit or loss							
Liabilities to the public and public sector entities	224,413	-8,408	47,787	-	-	-	263,793
Debt securities issued	2,125,714	-144,658	762,861	-975,731	-	-8,617	1,759,569
Fair value through profit or loss							
Derivative contracts at fair value through profit or loss	646,293	136,055	38,581	-76,252	-	-378	744,299
Derivative contracts in hedge accounting	24,391	6,797	450	-	-	-5,948	25,690
In fair value hedge accounting							
Amortised cost							
Debt securities issued	94,048	-1,802	27,162	-	-	-33,368	86,040
Financial liabilities in total	**3,114,859**	**-12,015**	**876,840**	**-1,051,984**	**-**	**-48,310**	**2,879,390**
Level 3 financial assets and liabilities in total *	**3,238,646**	**-31,849**	**877,761**	**-1,058,644**	**-**	**-48,427**	**2,977,487**

* The Group recognises these gains and losses within the line items *Net income from securities and foreign exchange transactions* and *Net income from hedge accounting*. The fair value change due to changes in own credit risk of financial liabilities designated at fair value through profit or loss is recognised in the other comprehensive income.

Sensitivity analysis of unobservable inputs

Sensitivity analysis illustrates the impact of the reasonably possible assumptions on the fair value of financial instruments for which valuation is dependent on unobservable inputs. However, it is unlikely in practice that all unobservable inputs would simultaneously move to extremes of reasonably possible alternatives used in the sensitivity analysis. Hence, the impact of the sensitivity analysis disclosed in this Note is likely to be greater than the true uncertainty in the fair values at the financial statement date. Furthermore, the disclosure is neither predictive nor indicative of future movements in the fair value of financial instruments.

Although the Group believes that its estimates of fair value are appropriate, the use of different methodologies or assumptions could lead to different measurements of fair value. For fair value measurements on level 3, changing one or more of the assumptions to the reasonably possible alternative assumptions would have the following effects: as of 31 December 2021, these assumptions could have increased fair values by EUR 60.3 million or decreased fair values by EUR 59.6 million and as of 31 December 2020, they could have increased fair values by EUR 44.6 million or decreased fair values by EUR 33.6 million.

SENSITIVITY ANALYSIS OF SIGNIFICANT UNOBSERVABLE INPUTS BY INSTRUMENT TYPE (EUR 1,000)	Positive range of fair value 2021	Negative range of fair value 2021	Positive range of fair value 2020	Negative range of fair value 2020
Loans and advances to the public and public sector entities				
Loans	133	-84	542	327
Derivative contracts				
Equity-linked derivatives	18,864	-11,446	12,416	-7,240
FX-linked cross currency and interest rate derivatives	2,644	-1,537	1,786	-365
Other interest rate derivatives	13,173	-13,344	8,686	-10,165
Debt securities issued and Liabilities to the public and public sector entities				
Equity-linked liabilities	12,350	-18,115	11,690	-5,248
FX-linked liabilities	704	-2,233	-941	-1,681
Other liabilities	12,412	-12,810	10,430	-9,276
Total	**60,279**	**-59,570**	**44,609**	**-33,648**

The behaviour of the fair value of the unobservable inputs on level 3 is not necessarily independent, and dynamic relationships often exist between the unobservable inputs and the observable inputs. Such relationships, where material to the fair value of a given instrument, are controlled via pricing models or valuation techniques. MuniFin Group uses stochastic models to generate a distribution of future cash flows of each financial instrument. The future cash flows are then discounted back to present to get the fair value of each financial instrument. The stochastic models used by the Group are Hull-White model and Dupire volatility model.

The unobservable inputs used by the Group are described next. The unobservable inputs are used only to the extent that no relevant observable inputs are available.

Correlation parameters

If the fair value of a financial instrument is impacted by more than one unobservable input, correlations describe the relationship between these different underlyings. For example for equity-linked instruments, correlation has a significant impact on fair value, if the underlying is dependent on more than one equity. For FX-linked cross currency and interest rate derivatives, correlations exist between FX rates of currencies, which impact the fair value of the financial instrument. If a high correlation exists between the unobservable inputs, it will lead to an increase in fair value. A low correlation between the unobservable inputs will lead to a decrease in fair value. MuniFin Group has financial instruments, in which the correlation is a significant unobservable input, mainly in funding products and their hedging instruments.

Volatility (extrapolated or illiquid)

A financial instrument whose value is based on a stochastic model will typically require the volatility of the underlying instrument as an input. The Group uses Dupire local volatility model as its stochastic valuation model. For interest rate volatilities at-the-money implied volatility is used. For FX and equity components (both equity indices and single stock prices), a full volatility surface is used that includes quotes for different strikes and maturities. The Group uses implied volatility for the majority of the equity-linked structures. In some cases no liquid volatility surface exists. In these cases, a proxy volatility is typically used instead. The majority of the financial instruments, which use volatility as a significant unobservable input, are the Group's funding products and their hedging instruments.

Dividend yield

The main drivers influencing the fair value of equity-linked instruments are dividend yield and volatility of the underlying equities. Equity-linked instruments require a dividend parameter as an input to the fair value. The equity component is modelled using the Dupire local volatility model where the underlying equity prices are assumed to follow a random walk. Instruments that have dividend yield as a significant unobservable input are the Group's funding products and their hedging instruments.

Interest rates (extrapolated or illiquid)

The Group uses unobservable inputs in defining fair value of complex interest rate structures. The future cash flows and their fair value is determined by using forward rates and volatilities of the underlying interest rates using Hull-White stochastic model. Financial instruments whose payoffs are dependent on the value of complex interest rate structures are categorised on level 3. The majority of these instruments requiring extrapolated or illiquid interest rates as input are the Group's funding products and their hedging instruments.

The following table illustrates the effect that changing one or more of the assumptions in the unobservable input (reasonably possible alternative assumptions) could have on the valuations at the financial statement date.

SENSITIVITY ANALYSIS OF UNOBSERVABLE INPUTS 31 Dec 2021 (EUR 1,000)	Fair value	Valuation technique	Unobservable input	Positive range of fair value	Negative range of fair value
Loans and advances to the public and public sector entities					
Loans	34,861	Stochastic model	Volatility – Extrapolated or Illiquid	133	-84
Derivative contracts					
Equity-linked derivatives	-37,319	Stochastic model	Correlation parameters	759	653
			Volatility – Extrapolated or Illiquid	17,551	-11,504
			Dividend yield	554	-595
FX-linked cross currency and interest rate derivatives	-647,461	Stochastic model	Correlation parameters	498	-353
			Volatility – Extrapolated or Illiquid	2,145	-1,183
			Interest rates – Extrapolated or Illiquid	1	-1
Other interest rate derivatives	-21,972	Stochastic model	Correlation parameters	7	0
			Volatility – Extrapolated or Illiquid	12,870	-13,048
			Interest rates – Extrapolated or Illiquid	296	-296
Debt securities issued and Liabilities to the public and public sector entities					
Equity-linked liabilities	741,554	Stochastic model	Correlation parameters	229	-149
			Volatility – Extrapolated or Illiquid	11,455	-16,829
			Dividend yield	666	-1,137
FX-linked liabilities	785,053	Stochastic model	Correlation parameters	17	-123
			Volatility – Extrapolated or Illiquid	677	-2,099
			Interest rates – Extrapolated or Illiquid	11	-11
Other liabilities	582,795	Stochastic model	Correlation parameters	1	0
			Volatility – Extrapolated or Illiquid	12,313	-12,711
			Interest rates – Extrapolated or Illiquid	98	-98
Total				**60,279**	**-59,570**

DAY 1 GAIN OR LOSS (EUR 1,000)	2021	2020
Opening balance 1 Jan	-29	-
Recognised gain in the income statement	412	242
Recognised loss in the income statement	-711	-67
Deferred gain or loss on new transactions	91	-204
Total 31 Dec	**-236**	**-29**

The definition and amortisation method for the Day 1 gain or loss is presented in the accounting policies (Note *1*) in Section *13. Determination of fair value*.

Transfers in the fair value hierarchy and sensitivity analysis 2020

During 2020 transfers totaling EUR 205,516 thousand have been made between level 1 and level 2. During 2020 transfers totaling EUR 35,796 thousand from level 2 to 3.

LEVEL 3 TRANSFERS 2020 (EUR 1,000)	1 Jan 2020	Change in fair value in the income statement	Purchases and new contracts	Sales and matured contracts	Transfers into level 3	Transfers out of level 3	31 Dec 2020
Financial assets							
At fair value							
Mandatorily at fair value through profit or loss							
Loans and advances to the public and public sector entities	50,028	-4,714	-	-1,578	-	-	43,735
Shares and participations	-	-	-	-	27	-	27
Fair value through profit or loss							
Derivative contracts at fair value through profit or loss	133,007	-12,405	-32	-41,804	686	-	79,452
Derivative contracts in hedge accounting	3,728	-2,118	117	-	-	-1,154	572
Financial assets in total	**186,764**	**-19,238**	**84**	**-43,382**	**713**	**-1,154**	**123,787**
Financial liabilities							
At fair value							
Designated at fair value through profit or loss							
Liabilities to the public and public sector entities	138,684	9,860	49,782	-	26,088	-	224,413
Debt securities issued	3,077,729	-259,858	868,572	-1,566,659	8,617	-2,686	2,125,714
Fair value through profit or loss							
Derivative contracts at fair value through profit or loss	458,243	289,125	37,906	-139,179	378	-181	646,293
Derivative contracts in hedge accounting	12,646	18,479	1,432	-	-	-8,167	24,391
In fair value hedge accounting							
Amortised cost							
Debt securities issued	151,671	-13,650	21,314	-	-	-65,286	94,048
Financial liabilities in total	**3,838,973**	**43,955**	**979,006**	**-1,705,838**	**35,083**	**-76,320**	**3,114,859**
Level 3 financial assets and liabilities in total	**4,025,735**	**24,717**	**979,090**	**-1,749,220**	**35,796**	**-77,474**	**3,238,646**

SENSITIVITY ANALYSIS OF UNOBSERVABLE INPUTS 2020 (EUR 1,000)	Fair value	Valuation technique	Unobservable input	Positive range of fair value	Negative range of fair value
Loans and advances to the public and public sector entities					
Loans	43,735	Stochastic model	Volatility – Extrapolated or Illiquid	542	327
Derivative contracts					
			Correlation parameters	1,324	-932
Equity-linked derivatives	-75,037	Stochastic model	Volatility – Extrapolated or Illiquid	9,142	-7,641
			Dividend yield	1,951	1,333
			Correlation parameters	51	-368
FX-linked cross currency and interest rate derivatives	-517,779	Stochastic model	Volatility – Extrapolated or Illiquid	1,642	96
			Interest rates – Extrapolated or Illiquid	93	-93
			Correlation parameters	8	-6
Other interest rate derivatives	2,156	Stochastic model	Volatility – Extrapolated or Illiquid	8,230	-9,711
			Interest rates – Extrapolated or Illiquid	447	-448
Debt securities issued and Liabilities to the public and public sector entities					
			Correlation parameters	2,810	2,088
Equity-linked liabilities	885,327	Stochastic model	Volatility – Extrapolated or Illiquid	7,733	-7,746
			Dividend yield	1,148	410
			Correlation parameters	213	54
FX-linked liabilities	1,027,104	Stochastic model	Volatility – Extrapolated or Illiquid	-1,161	-1,729
			Interest rates – Extrapolated or Illiquid	6	-6
			Correlation parameters	1	-1
Other liabilities	531,744	Stochastic model	Volatility – Extrapolated or Illiquid	10,220	-9,066
			Interest rates – Extrapolated or Illiquid	209	-209
Total				**44,609**	**-33,648**

Note 18. Breakdown of financial assets and liabilities at carrying amount by maturity

FINANCIAL ASSETS 31 Dec 2021 (EUR 1,000)	0–3 months	3–12 months	1–5 years	5–10 years	Over 10 years	Total
Cash and balances with central banks	8,399,045	-	-	-	-	8,399,045
Loans and advances to credit institutions	1,383,018	-	34,292	-	-	1,417,310
Loans and advances to the public and public sector entities	411,001	1,534,589	6,632,277	6,396,852	13,148,116	28,122,834
*, of which leased assets **	*7,025*	*18,391*	*72,819*	*43,699*	*101,002*	*242,936*
Debt securities	1,194,336	644,292	2,489,779	513,020	-	4,841,428
Shares and participations	-	-	-	-	-	-
Derivative contracts	176,162	85,276	652,855	444,830	640,553	1,999,676
Other assets **	238,930	-	-	-	-	238,930
Total	**11,802,492**	**2,264,157**	**9,809,202**	**7,354,702**	**13,788,669**	**45,019,222**

* Line item includes leased assets for which the Group applies fair value hedge accounting. Unhedged leased assets are not presented in this note of the financial assets and liabilities by maturity, as leased assets are not regarded as financial assets for the purpose of IFRS 9 classification.

** Line item includes cash collateral given to central counterparties.

FINANCIAL LIABILITIES 31 Dec 2021 (EUR 1,000)	0–3 months	3–12 months	1–5 years	5–10 years	Over 10 years	Total
Liabilities to credit institutions	1,991,110	750,000	10,613	19,599	29,695	2,801,016
Liabilities to the public and public sector entities	75,992	112,562	1,031,895	856,943	1,247,293	3,324,685
Debt securities issued	4,991,578	5,235,547	18,221,438	4,174,502	2,704,459	35,327,525
Derivative contracts	788,530	584,682	287,038	143,757	420,287	2,224,294
Provisions and other liabilities *	333,732	1,308	2,782	-	-	337,823
, of which lease liabilities	*437*	*1,308*	*2,782*	-	-	*4,528*
Total	**8,180,943**	**6,684,099**	**19,553,767**	**5,194,802**	**4,401,733**	**44,015,343**

* Line item includes cash collateral received from central counterparties and lease liabilities in accordance with IFRS 16 standard.

Liabilities and hedging derivative contracts that may be called before maturity have been classified in the maturity class corresponding to the first possible call date. The Group estimates it will call 25–50% of its callable liabilities in 2022. In 2021, the Group called 47% of its callable liabilities.

FINANCIAL ASSETS 31 Dec 2020 (EUR 1,000)	0–3 months	3–12 months	1–5 years	5–10 years	Over 10 years	Total
Cash and balances with central banks	5,565,801	-	-	-	-	5,565,801
Loans and advances to credit institutions	1,806,864	-	34,989	-	-	1,841,853
Loans and advances to the public and public sector entities	361,651	1,567,812	6,373,992	6,099,127	12,744,246	27,146,828
, of which leased assets	*8,059*	*19,545*	*64,691*	*37,320*	*85,829*	*215,444*
Debt securities	1,474,537	761,052	2,737,816	789,809	-	5,763,214
Shares and participations	-	-	-	-	27	27
Derivative contracts	21,851	86,840	551,548	718,929	978,995	2,358,163
Other assets	243,269	-	-	-	-	243,269
Total	**9,473,973**	**2,415,705**	**9,698,345**	**7,607,864**	**13,723,269**	**42,919,155**

FINANCIAL LIABILITIES 31 Dec 2020 (EUR 1,000)	0–3 months	3–12 months	1–5 years	5–10 years	Over 10 years	Total
Liabilities to credit institutions	658,120	1,250,000	24,558	34,106	34,694	2,001,478
Liabilities to the public and public sector entities	118,097	342,933	777,940	1,257,086	1,387,970	3,884,026
Debt securities issued	6,285,271	3,729,067	15,784,772	4,702,293	2,410,503	32,911,906
Derivative contracts	799,531	143,081	1,119,670	200,609	597,678	2,860,570
Provisions and other liabilities	231,598	1,261	4,353	-	-	237,212
, of which lease liabilities	*418*	*1,261*	*4,353*	-	-	*6,032*
Total	**8,092,617**	**5,466,342**	**17,711,294**	**6,194,095**	**4,430,845**	**41,895,193**

Liabilities and hedging derivatives that may be called before maturity have been classified in the maturity class corresponding to the first possible call date. In 2020, the Group called 34% of its callable liabilities.

Note 19. Offsetting financial assets and liabilities

The following financial assets and liabilities are subject to enforceable master netting agreements:

Cash given as collateral is included on the statement of financial position on line *Loans and advances to credit institutions*, excluding cash given as collateral to central counterparties, which is presented on line *Other assets*. Cash received as collateral is included on the statement of financial position on line *Liabilities to credit institutions*, excluding cash received from central counterparties, which is presented on line *Provisions and other liabilities.*

				Amounts not offset in the statement of financial position		
31 Dec 2021 (EUR 1,000)	Carrying amount, gross	Offset in the statement of financial position, gross	Carrying amount, net	Received cash collateral *	Given cash collateral **	Net
Financial assets						
Derivative contracts	1,999,676	-	1,999,676	1,074,405	-	925,271
Total	**1,999,676**	**-**	**1,999,676**	**1,074,405**	**-**	**925,271**
Financial liabilities						
Derivative contracts	2,224,294	-	2,224,294	-	1,549,593	674,702
Total	**2,224,294**	**-**	**2,224,294**	**-**	**1,549,593**	**674,702**

* Includes EUR 333,295 thousand of cash collateral received from central counterparties.
** Includes EUR 238,943 thousand of cash collateral given to central counterparties.

The Group has not offset any financial assets or liabilities in its statement of financial position in 2021.

31 Dec 2020 (EUR 1,000)	Carrying amount, gross	Offset in the statement of financial position, gross	Carrying amount, net	Amounts not offset in the statement of financial position		
				Received cash collateral *	Given cash collateral **	Net
Financial assets						
Derivative contracts	2,358,163	-	2,358,163	889,300	-	1,468,863
Total	**2,358,163**	**-**	**2,358,163**	**889,300**	**-**	**1,468,863**
Financial liabilities						
Derivative contracts	2,860,570	-	2,860,570	-	1,850,372	1,010,198
Total	**2,860,570**	**-**	**2,860,570**	**-**	**1,850,372**	**1,010,198**

* Includes EUR 231,180 thousand of cash collateral received from central counterparties.
** Includes EUR 243,272 thousand of cash collateral given to central counterparties.

The Group has not offset any financial assets or liabilities in its statement of financial position in 2020.

Note 20. Cash and cash equivalents

31 Dec 2021 (EUR 1,000)	Total	Cash and cash equivalents	Expected credit losses
Cash	2	2	-
Central bank deposits payable on demand	8,399,043	8,399,043	0
Cash and balances with central banks	**8,399,045**	**8,399,045**	**0**
Loans and advances to credit institutions payable on demand	36,458	36,459	0
Total cash and cash equivalents	**8,435,503**	**8,435,504**	**0**

31 Dec 2020 (EUR 1,000)	Total	Cash and cash equivalents	Expected credit losses
Cash	2	2	-
Central bank deposits payable on demand	5,565,799	5,565,799	0
Cash and balances with central banks	**5,565,801**	**5,565,801**	**0**
Loans and advances to credit institutions payable on demand	164,878	164,879	-1
Total cash and cash equivalents	**5,730,679**	**5,730,680**	**-1**

Note 21. Loans and advances to credit institutions

31 Dec 2021 (EUR 1,000)	Payable on demand	Other than payable on demand *	Expected credit losses	Total
Receivables from central bank	35,984	-	0	35,984
Domestic credit institutions	13,128	34,300	-8	47,420
Foreign credit institutions	23,330	1,310,650	-74	1,333,906
Total	**72,442**	**1,344,950**	**-82**	**1,417,310**

* Loans and advances to credit institutions other than payable on demand does not include reverse repo agreements at the financial statement date 31 Dec 2021 or 31 Dec 2020.

31 Dec 2020 (EUR 1,000)	Payable on demand	Other than payable on demand	Expected credit losses	Total
Receivables from central bank	34,918	-	0	34,918
Domestic credit institutions	89,636	98,300	-11	187,925
Foreign credit institutions	75,242	1,543,800	-32	1,619,011
Total	**199,796**	**1,642,100**	**-43**	**1,841,853**

Note 22. Loans and advances to the public and public sector entities

(EUR 1,000)	31 Dec 2021 Total	31 Dec 2021 , of which expected credit losses	31 Dec 2020 Total	31 Dec 2020 , of which expected credit losses
Enterprises and housing corporations	14,665,818	-1,002	13,794,905	-983
Public sector entities	12,847,172	-88	12,772,899	-38
Non-profit organisations	366,908	-57	363,580	-67
Leased assets	1,334,146	-2	1,090,940	-2
Total	**29,214,043**	**-1,148**	**28,022,325**	**-1,091**

Note 23. Debt securities

DEBT SECURITIES ISSUED BY PUBLIC SECTOR ENTITIES 31 Dec 2021 (EUR 1,000)	Publicly quoted	Other	Total	Expected credit losses*
Amortised cost	**-**	**930,252**	**930,252**	**0**
Commercial papers issued by other public sector entities	-	930,252	930,252	0
Fair value through other comprehensive income	**74,959**	**-**	**74,959**	**1**
Bonds issued by other public sector entities	74,959	-	74,959	1
Designated at fair value through profit or loss	**1,703,953**	**-**	**1,703,953**	**-**
Government bonds	180,437	-	180,437	-
Bonds issued by other public sector entities	1,523,516	-	1,523,516	-
Total	**1,778,912**	**930,252**	**2,709,164**	**1**
, of which eligible for central bank refinancing	*1,572,169*	-	*1,572,169*	*0*

DEBT SECURITIES ISSUED BY OTHER THAN PUBLIC SECTOR ENTITIES 31 Dec 2021 (EUR 1,000)	Publicly quoted	Other	Total	Expected credit losses*
Amortised cost	**-**	**158,636**	**158,636**	**0**
Commercial papers	-	158,636	158,636	0
Fair value through other comprehensive income	**138,506**	**-**	**138,506**	**41**
Bank bonds	138,506	-	138,506	41
Designated at fair value through profit or loss	**1,835,121**	**-**	**1,835,121**	**-**
Bank bonds	1,835,121	-	1,835,121	-
Total	**1,973,627**	**158,636**	**2,132,263**	**41**
, of which eligible for central bank refinancing	*1,739,885*	-	*1,739,885*	*30*

31 Dec 2021 (EUR 1,000)	Publicly quoted	Other	Total	Expected credit losses*
Debt securities total	**3,752,539**	**1,088,888**	**4,841,428**	**41**

* The expected credit losses have been recognised on debt securities, which have been classified at fair value through other comprehensive income. Therefore, the expected credit losses are not recognised as a deduction from the gross carrying amount of the debt securities in the statement of financial position, but through other comprehensive income to the fair value reserve as described in the accounting policies (Note *1*) in Section *9.4 Presentation of allowance for ECL in the statement of financial position.*

Debt securities do not contain any securities given as collateral for reverse repo agreements at the financial statement date 31 Dec 2021.

At the financial statement date 31 Dec 2021, MuniFin Group has no debt securities measured mandatorily at fair value through profit or loss.

DEBT SECURITIES ISSUED BY PUBLIC SECTOR ENTITIES 31 Dec 2020 (EUR 1,000)	Publicly quoted	Other	Total	Expected credit losses
Amortised cost	**-**	**1,199,621**	**1,199,621**	**0**
Commercial paper issued by other public sector entities	-	1,199,621	1,199,621	0
Fair value through other comprehensive income	**124,157**	**-**	**124,157**	**2**
Bonds issued by other public sector entities	124,157	-	124,157	2
Designated at fair value through profit or loss	**1,869,431**	**-**	**1,869,431**	**-**
Government bonds	266,874	-	266,874	-
Bonds issued by other public sector entities	1,602,557	-	1,602,557	-
Total	**1,993,588**	**1,199,621**	**3,193,209**	**3**
, of which eligible for central bank refinancing	*1,780,922*	-	*1,780,922*	*2*

DEBT SECURITIES ISSUED BY OTHER THAN PUBLIC SECTOR ENTITIES 31 Dec 2020 (EUR 1,000)	Publicly quoted	Other	Total	Expected credit losses
Amortised cost	**-**	**110,684**	**110,684**	**0**
Commercial papers	-	110,684	110,684	0
Fair value through other comprehensive income	**298,893**	**-**	**298,893**	**39**
Bank bonds	298,893	-	298,893	39
Designated at fair value through profit or loss	**2,160,427**	**-**	**2,160,427**	**-**
Bank bonds	2,160,427	-	2,160,427	-
Total	**2,459,320**	**110,684**	**2,570,005**	**39**
, of which eligible for central bank refinancing	*2,169,064*	-	*2,169,064*	*25*

31 Dec 2020 (EUR 1,000)	Publicly quoted	Other	Total	Expected credit losses
Debt securities total	**4,452,908**	**1,310,305**	**5,763,214**	**42**

Note 24. Shares and participations

31 Dec 2021 (EUR 1,000)	Publicly quoted	Other	Total	, of which in credit institutions
Mandatorily at fair value through profit or loss	-	-	-	-
Total	**-**	**-**	**-**	**-**

31 Dec 2020 (EUR 1,000)	Publicly quoted	Other	Total	, of which in credit institutions
Mandatorily at fair value through profit or loss	-	27	27	-
Total	**-**	**27**	**27**	**-**

Note 25. Derivative contracts

DERIVATIVE CONTRACTS 31 Dec 2021 (EUR 1,000)	Nominal value of underlying instrument – Remaining maturity: Less than 1 year	1–5 years	Over 5 years	Total	Fair value: Positive	Negative
Derivative contracts in hedge accounting						
Interest rate derivatives						
Interest rate swaps	2,409,728	12,470,328	17,727,331	32,607,387	756,203	-384,289
, of which cleared by the central counterparty	*2,233,780*	*11,834,195*	*16,946,320*	*31,014,295*	*682,416*	*-308,205*
Currency derivatives						
Cross currency interest rate swaps	3,437,953	8,396,354	782,448	12,616,756	482,450	-726,003
Total derivative contracts in hedge accounting	**5,847,682**	**20,866,681**	**18,509,780**	**45,224,143**	**1,238,653**	**-1,110,291**
Derivative contracts at fair value through profit or loss						
Interest rate derivatives						
Interest rate swaps	3,940,682	8,043,879	4,491,216	16,475,777	475,940	-357,092
, of which cleared by the central counterparty	*2,864,097*	*5,372,343*	*1,578,144*	*9,814,584*	*46,821*	*-163,327*
Interest rate options	-	40,000	-	40,000	101	-101
Currency derivatives						
Cross currency interest rate swaps	2,467,039	1,940,380	109,367	4,516,786	133,656	-718,888
Forward exchange contracts	3,354,738	-	-	3,354,738	150,723	-
Equity derivatives	816,109	-	-	816,109	604	-37,922
Total derivative contracts at fair value through profit or loss	**10,578,567**	**10,024,259**	**4,600,583**	**25,203,409**	**761,023**	**-1,114,003**
Total derivative contracts	**16,426,249**	**30,890,940**	**23,110,363**	**70,427,552**	**1,999,676**	**-2,224,294**

Derivative contracts at fair value through profit or loss contain all derivatives of the Group which are not included in hedge accounting, even if they are entered into for risk management purposes. The category contains derivative contracts used for hedging financial assets and liabilities designated at fair value through profit or loss, all derivative contracts with municipalities and all derivative contracts hedging derivatives with municipalities. In addition to these, the category contains derivative contracts used for hedging interest rate risk of the balance sheet, for which no hedged item has been specified.

Interest received or paid from derivative contracts is included in the statement of financial position line items *Accrued income and prepayments* and *Accrued expenses and deferred income*.

DERIVATIVE CONTRACTS 31 Dec 2020 (EUR 1,000)	Nominal value of underlying instrument				Fair value	
	Remaining maturity					
	Less than 1 year	1–5 years	Over 5 years	Total	Positive	Negative
Derivative contracts in hedge accounting						
Interest rate derivatives						
Interest rate swaps	2,933,188	11,186,060	15,825,475	29,944,724	1,155,265	-470,736
, of which cleared by the central counterparty	*1,474,582*	*10,182,656*	*13,852,888*	*25,510,126*	*684,090*	*-314,856*
Currency derivatives						
Cross currency interest rate swaps	1,577,593	7,155,034	1,105,354	9,837,981	369,605	-985,934
Total derivative contracts in hedge accounting	**4,510,781**	**18,341,095**	**16,930,830**	**39,782,706**	**1,524,870**	**-1,456,670**
Derivative contracts at fair value through profit or loss						
Interest rate derivatives						
Interest rate swaps	3,800,843	9,751,683	5,000,317	18,552,843	749,891	-488,850
, of which cleared by the central counterparty	*2,784,644*	*6,910,928*	*1,515,808*	*11,211,380*	*5,605*	*-189,246*
Interest rate options	-	40,000	-	40,000	106	-106
Currency derivatives						
Cross currency interest rate swaps	2,385,939	2,284,168	130,374	4,800,480	82,985	-713,063
Forward exchange contracts	3,516,421	-	-	3,516,421	-	-126,805
Equity derivatives	932,553	-	-	932,553	313	-75,076
Total derivative contracts at fair value through profit or loss	**10,635,756**	**12,075,850**	**5,130,691**	**27,842,297**	**833,293**	**-1,403,900**
Total derivative contracts	**15,146,537**	**30,416,945**	**22,061,521**	**67,625,003**	**2,358,163**	**-2,860,570**

Note 26. Hedge accounting

The interest rate and foreign exchange rate risk of the Group are managed by entering into derivative transactions. According to the Market Risk Policy, the Group's hedging strategy is mainly to hedge all material foreign exchange and interest rate risks of financial assets and liabilities with maturities exceeding one year. As a result, foreign currency denominated items are translated into euros, fixed rate and long-term reference rates are swapped to floating interest rates with shorter terms. The risk management principles related to the Group' s hedging of market risk are described in more detail in Note *2 Risk Management principles and the Group's risk position.*

The Group applies both fair value hedge accounting according to IFRS 9 and fair value portfolio hedge accounting according to IAS 39. The Group does not apply cash flow hedge accounting. Accounting policies related to hedge accounting are described in the accounting polices (Note *1*) in Section *10. Hedge Accounting*.

In the following table, the hedged assets and liabilities are presented according to statement of financial position line items divided into IAS 39 portfolio hedge accounting and IFRS 9 fair value hedge accounting, which is further subdivided into whether hedging is subject to the separation of the Cost-of-Hedging.

HEDGE ACCOUNTING 31 Dec 2021 (EUR 1,000)	Nominal value	Fair value hedge accounting total	IAS 39 portfolio hedge accounting	IFRS 9 fair value hedge accounting	IFRS 9 fair value hedge accounting incl. Cost-of-Hedging
Assets					
Loans and advances to the public and public sector entities – Loans	12,626,073	12,725,453	12,598,775	126,678	-
Loans and advances to the public and public sector entities – Leased assets	243,432	242,936	-	242,936	-
Total assets	**12,869,504**	**12,968,390**	**12,598,775**	**369,615**	**-**
Liabilities					
Liabilities to credit institutions	50,000	55,120	-	55,120	-
Liabilities to the public and public sector entities	1,504,060	1,776,291	-	1,737,750	38,541
Debt securities issued	24,714,983	24,852,845	-	12,207,796	12,645,049
Total liabilities	**26,269,043**	**26,684,256**	**-**	**14,000,666**	**12,683,589**

The figures presented in the following table contain the cumulative fair value change at the beginning and end of the financial year, in addition to the fair value change of the hedged risk and the hedging instrument during the financial year. The figures presented in the table do not include the change in fair value due to foreign exchange differences of hedging instruments and the hedged items, which are recognised in the income statement under *Net income from securities and foreign exchange transactions*. Due to the above mentioned reason, the total amount of the hedging instruments does not correspond to the fair value presented in Note *25 Derivative contracts* on line *Total derivative contracts in hedge accounting*. The fair value changes of the hedged risk of the hedged items and all other fair value changes of the hedging instruments are recognised in the income statement under *Net income from hedge accounting*. The ineffective portion of the hedging relationship is thus shown on this line in the income statement. Net income from securities and foreign exchange transactions is specified in Note *5* and net income from hedge accounting in Note *8.*

In accordance with the market practice and IFRS 13 *Fair value measurement* standard, the Group discounts hedged items with the swap curve and the hedging derivatives with the OIS curve, which causes a significant part of the Group's hedge ineffectiveness. In addition, ineffectiveness may also arise to some extent from differences in notional, day count methods or timing of the cash flows.

VALUE OF HEDGED RISK (EUR 1,000)	31 Dec 2021	1 Jan 2021	Recognised in the income statement 2021
Assets			
IAS 39 portfolio hedge accounting			
Loans and advances to the public and public sector entities	122,505	464,688	-342,182
Derivative contracts in hedge accounting	-78,911	-428,083	349,171
Accumulated fair value accrual from the termination of hedge accounting	218	47	170
IAS 39 portfolio hedge accounting, net	**43,812**	**36,653**	**7,159**
IFRS 9 fair value hedge accounting			
Loans and advances to the public and public sector entities	25,414	41,424	-16,010
Derivative contracts in hedge accounting	-25,669	-42,044	16,375
IFRS 9 fair value hedge accounting, net	**-255**	**-620**	**365**
Liabilities			
IFRS 9 fair value hedge accounting			
Liabilities to credit institutions	-5,120	-13,800	8,681
Liabilities to the public and public sector entities	-340,433	-481,546	141,113
Debt securities issued	-171,028	-859,986	688,958
Derivative contracts in hedge accounting	500,306	1,340,456	-840,150
IFRS 9 fair value hedge accounting, net	**-16,275**	**-14,876**	**-1,399**
IBOR reform related compensations *	-3,343	-2,041	-1,302
Total hedge accounting	**23,938**	**19,116**	**4,822**

* Compensations relate to the ongoing IBOR reform of which more information is presented in the accounting policies (Note *1*) in Section *23. IBOR reform.*

The following table presents the impact of Cost-of-Hedging of cross currency derivatives on equity in the *Cost-of-Hedging reserve*. The figures are presented net of deferred taxes. For all foreign currency hedge relationships the Group has elected to utilise Cost-of-Hedging. For each hedge relationship, when the cross currency swap is designated as a hedging instrument, the cross currency basis spread is separated and excluded from the designation and accounted for as Cost-of-Hedging.

The difference between the changes in fair value of the actual derivative and the designated portion of the derivative are recorded in other comprehensive income as Cost-of-Hedging to the *Cost-of-Hedging reserve*. Thus, changes in cross currency basis spreads will impact other comprehensive income and do not create ineffectiveness in the hedge relationship.

HEDGING IMPACT ON EQUITY (EUR 1,000)	31 Dec 2021	1 Jan 2021	Impact on Cost-of-Hedging reserve
Cost-of-Hedging			
Derivative contracts in hedge accounting	13,621	15,624	-2,004
Total	**13,621**	**15,624**	**-2,004**

The following table presents the cumulative effectiveness of hedge accounting by hedged items. In addition, the table shows the hedging instruments used.

EFFECTIVENESS OF HEDGE ACCOUNTING
31 Dec 2021 (EUR 1,000)

		Gains/losses attributable to the hedged risk		
Hedged item	**Hedging instruments**	**Hedged items**	**Hedging instruments**	**Hedge ineffectiveness**
Assets				
IAS 39 portfolio hedge accounting				
Fixed rate and revisable rate loans	Interest rate derivatives	122,505	-78,911	43,594
IFRS 9 fair value hedge accounting				
Structured lending	Interest rate derivatives	25,908	-25,880	28
Fixed rate and revisable rate leased assets	Interest rate derivatives	-495	211	-283
Assets total		**147,919**	**-104,580**	**43,339**
Liabilities				
IFRS 9 fair value hedge accounting				
Financial liabilities denominated in EUR	Interest rate derivatives	-435,365	426,733	-8,633
Financial liabilities denominated in foreign currencies	Currency derivatives (Cross currency interest rate swaps) Interest rate derivatives	-81,215	73,573	-7,642
Liabilities total		**-516,581**	**500,306**	**-16,275**

HEDGE ACCOUNTING 31 Dec 2020 (EUR 1,000)	Nominal value	Fair value hedge accounting total	IAS 39 portfolio hedge accounting	IFRS 9 fair value hedge accounting	IFRS 9 fair value hedge accounting incl. Cost-of-Hedging
Assets					
Loans and advances to the public and public sector entities – Loans	11,183,657	11,614,114	11,483,819	130,295	-
Loans and advances to the public and public sector entities – Leased assets	211,223	215,444	-	215,444	-
Total assets	**11,394,880**	**11,829,557**	**11,483,819**	**345,739**	**-**
Liabilities					
Liabilities to credit institutions	55,000	68,800	-	68,800	-
Liabilities to the public and public sector entities	1,853,956	2,246,352	-	2,181,931	64,421
Debt securities issued	21,260,721	22,077,489	-	11,898,132	10,179,357
Total liabilities	**23,169,677**	**24,392,642**	**-**	**14,148,863**	**10,243,779**

VALUE OF HEDGED RISK (EUR 1,000)	31 Dec 2020	1 Jan 2020	Recognised in the income statement 2020
Assets			
IAS 39 portfolio hedge accounting			
Loans and advances to the public and public sector entities	464,688	303,139	161,548
Derivative contracts in hedge accounting	-428,083	-276,831	-151,252
Accumulated fair value accrual from the termination of hedge accounting	47	-	47
IAS 39 portfolio hedge accounting, net	**36,653**	**26,308**	**10,344**
IFRS 9 fair value hedge accounting			
Loans and advances to the public and public sector entities	41,424	30,934	10,489
Derivative contracts in hedge accounting	-42,044	-33,193	-8,851
IFRS 9 Fair value hedge accounting, net	**-620**	**-2,258**	**1,638**
Liabilities			
IFRS 9 fair value hedge accounting			
Liabilities to credit institutions	-13,800	-12,916	-884
Liabilities to the public and public sector entities	-481,546	-434,953	-46,593
Debt securities issued	-859,986	-524,923	-335,063
Derivative contracts in hedge accounting	1,340,456	963,674	376,782
IFRS 9 fair value hedge accounting, net	**-14,876**	**-9,118**	**-5,757**
IBOR reform related compensations	-2,041	-	-2,041
Total hedge accounting	**19,115**	**14,932**	**4,183**

HEDGING IMPACT ON EQUITY (EUR 1,000)	31 Dec 2020	1 Jan 2020	Impact on Cost-of-Hedging reserve
Cost-of-Hedging			
Derivative contracts in hedge accounting	15,624	28,075	-12,451
Total	**15,624**	**28,075**	**-12,451**

EFFECTIVENESS OF HEDGE ACCOUNTING
31 Dec 2020 (EUR 1,000)

Hedged item	Hedging instruments	Gains/losses attributable to the hedged risk: Hedged items	Gains/losses attributable to the hedged risk: Hedging instruments	Hedge ineffectiveness
Assets				
IAS 39 portfolio hedge accounting				
Fixed rate and revisable rate loans	Interest rate derivatives	464,688	-428,083	36,605
IFRS 9 fair value hedge accounting				
Structured lending	Interest rate derivatives	37,203	-37,739	-537
Fixed rate and revisable rate leased assets	Interest rate derivatives	4,221	-4,305	-84
Assets total		**506,111**	**-470,126**	**35,985**
Liabilities				
IFRS 9 fair value hedge accounting				
Financial liabilities denominated in EUR	Interest rate derivatives	-952,949	945,353	-7,596
Financial liabilities denominated in foreign currencies	Currency derivatives (Cross currency interest rate swaps) Interest rate derivatives	-402,383	395,103	-7,280
Liabilities total		**-1,355,332**	**1,340,456**	**-14,876**

Note 27. Credit risks of financial assets and other commitments

MuniFin Group's credit risks are described in Note *2 Risk management principles and the Group's risk position* in Section *7. Credit Risk*.
The accounting policies of the expected credit loss calculations and impairment stages are described in the accounting policies (Note *1*) in Section *9. Impairment of financial assets*.

The following table presents exposures under expected credit loss calculations by asset groups and impairment stages.

EXPOSURES BY ASSET GROUPS AND IMPAIRMENT STAGES	Not credit-impaired				Credit-impaired		Total	
	Stage 1		Stage 2		Stage 3 *			
31 Dec 2021 (EUR 1,000)	Gross carrying amount	12-month ECL	Gross carrying amount	Lifetime ECL	Gross carrying amount	Lifetime ECL	Gross carrying amount	Expected credit losses
Cash and balances with central banks at amortised cost	8,399,045	0	-	-	-	-	8,399,045	0
Loans and advances to credit institutions at amortised cost	1,417,310	-82	-	-	-	-	1,417,310	-82
Loans and advances to the public and public sector entities at amortised cost	27,457,506	-23	220,730	-578	127,517	-546	27,805,752	-1,147
Leased assets in Loans and advances to the public and public sector entities at amortised cost	1,333,987	-2	-	-	159	-	1,334,146	-2
Debt securities at amortised cost	1,079,338	0	9,550	0	-	-	1,088,888	0
Debt securities at fair value through other comprehensive income	213,466	-41	-	-	-	-	213,466	-41
Cash collateral to CCPs in Other assets at amortised cost	238,930	-13	-	-	-	-	238,930	-13
Guarantee receivables from the public and public sector entities in Other assets	1,752	-	-	-	-	-	1,752	-
Credit commitments (off-balance sheet)	2,585,201	-4	3,167	0	4,506	0	2,592,873	-4
Total	**42,726,533**	**-166**	**233,447**	**-578**	**132,182**	**-546**	**43,092,161**	**-1,289**

* The Group has collateral and guarantee arrangements that fully cover the stage 3 receivables as described in Note *2 Risk management principles and the Group's risk position* in Section *7. Credit risk*. The Group's management expects that all the stage 3 reveivables will be recovered and no final credit loss will emerge. Stage 3 receivables include EUR 2,345 thousand (EUR 2,404 thousand) of originated credit impaired receivables (*purchased or originated credit impaired, POCI*). Expected credit losses for the POCI receivables amount to EUR 7 thousand (EUR 4 thousand).

EXPOSURES BY ASSET GROUPS AND IMPAIRMENT STAGES	Not credit-impaired				Credit-impaired		Total	
	Stage 1		Stage 2		Stage 3			
31 Dec 2020 (EUR 1,000)	Gross carrying amount	12-month ECL	Gross carrying amount	Lifetime ECL	Gross carrying amount	Lifetime ECL	Gross carrying amount	Expected credit losses
Cash and balances with central banks at amortised cost	5,565,801	0	-	-	-	-	5,565,801	0
Loans and advances to credit institutions at amortised cost	1,841,853	-43	-	-	-	-	1,841,853	-43
Loans and advances to the public and public sector entities at amortised cost	26,606,595	-30	145,061	-835	135,291	-224	26,886,947	-1,089
Leased assets in Loans and advances to the public and public sector entities at amortised cost	1,090,768	-2	-	-	173	-	1,090,940	-2
Debt securities at amortised cost	1,303,105	0	7,200	-	-	-	1,310,305	0
Debt securities at fair value through other comprehensive income	423,050	-42	-	-	-	-	423,050	-42
Cash collateral to CCPs in Other assets at amortised cost	243,269	-4	-	-	-	-	243,269	-4
Guarantee receivables from the public and public sector entities in Other assets	1,606	-	-	-	-	-	1,606	-
Credit commitments (off-balance sheet)	2,348,271	-4	4,506	0	1,201	0	2,353,978	-4
Total	**39,424,318**	**-126**	**156,767**	**-835**	**136,665**	**-224**	**39,717,750**	**-1,184**

The following table presents a summary of total changes and reconciliation of expected credit losses by impairment stages during the financial year.

TOTAL EXPECTED CREDIT LOSSES BY IMPAIRMENT STAGES	Not credit-impaired		Credit-impaired	Total	
	Stage 1	Stage 2	Stage 3		
(EUR 1,000)	12-month ECL	Lifetime ECL	Lifetime ECL	ECL	Gross carrying amount
Opening balance 1 Jan 2021	**-126**	**-835**	**-224**	**-1,184**	**39,717,750**
New assets originated or purchased	-41	56	-13	3	9,637,333
Assets derecognised or repaid (excluding write-offs)	46	101	55	203	-6,262,613
Transfers to Stage 1	0	18	-	18	18
Transfers to Stage 2	0	-203	60	-143	-143
Transfers to Stage 3	-	1	-1	1	1
Additional provision (*Management overlay*)	-	340	-430	-90	-90
Changes to contractual cash flows due to modifications not resulting in derecognition	-	-	-	-	-
Changes to models * and inputs ** used for ECL calculations	-46	-56	6	-96	-94
Write-offs	-	-	-	-	-
Recoveries	-	-	-	-	-
Total 31 Dec 2021	**-166**	**-578**	**-546**	**-1,289**	**43,092,161**

* Represents changes in the model.
** Represents changes to model parameters (e.g. GDP rates, unemployment rates)

In 2021, MuniFin Group made changes to macro scenarios and loss given default parameters in expected credit loss calculations, which increased ECL by EUR 96 thousand. There were no changes in ECL model.

MuniFin Group has recorded an additional discretionary provision (*management overlay*) of EUR 430 thousand to take into account ECL model changes that will take place in 2022. During 2022, the Group will further develop loss given default (*LGD*) calculation of mortgage loans as well as lifetime ECL calculations. As this change is expected to have an impact on ECL amount, MuniFin Group's management decided to record an additional discretionary provision based on a group-specific assessment. The additional provision relates to the balance sheet line item *Loans and advances to the public and public sector entities*. The additional provision has not been allocated to contract level.

The assessment of the need for additional provision is based on the fact that the Group's management estimates that due to the model changes, part of the exposures would transfer to stage 2 in the expected credit loss calculations when ECL is calculated for the lifetime of the contract instead of a 12-month ECL, or in some cases LGD would increase. In addition, LGD model changes are expected to have an effect on the amount of ECL in stage 3. More detailed information on the contracts subject to the additional provision will be obtained as the model change progresses, so that any change in ECL can be allocated to individual contracts and determined according to the normal ECL calculation process.

MuniFin Group's total credit risk has remained low and the amount of ECL remains low. The finances of municipal customers developed mainly positively in 2020 and 2021 due to the central government's COVID-19 support package among other things. For companies, the situation remained relatively stable during the year. MuniFin Group's customer exposures have zero risk weight in the capital adequacy calculation because they are from Finnish municipalities or involve a municipal guarantee or a state deficiency guarantee supplementing the real estate collateral as described in the Consolidated Financial Statements' Note *2 Risk management principles and the Group's risk position* under Section *7. Credit risk*. The Group's management estimates that all receivables will be recovered in full and therefore no final credit loss will arise. On 31 December 2021, MuniFin Group has total of EUR 19 million (EUR 24 million) in guarantee receivables from the public sector due to the insolvency of customers. Credit risk of the liquidity portfolio has remained on a good quality level with the average rating of AA+ (AA+).

TOTAL EXPECTED CREDIT LOSSES BY IMPAIRMENT STAGES	Not credit-impaired		Credit-impaired	Total	
	Stage 1	Stage 2	Stage 3		
(EUR 1,000)	12-month ECL	Lifetime ECL	Lifetime ECL	ECL	Gross carrying amount
Opening balance 1 Jan 2020	**-167**	**-80**	**-80**	**-327**	**34,772,275**
New assets originated or purchased	-83	-30	-13	-126	10,624,630
Assets derecognised or repaid (excluding write-offs)	119	10	43	173	-5,678,253
Transfers to Stage 1	0	30	-	30	30
Transfers to Stage 2	0	-50	9	-41	-41
Transfers to Stage 3	0	19	-7	12	12
Additional provision (*Management overlay*)	-	-340	-	-340	-340
Changes to contractual cash flows due to modifications not resulting in derecognition	-	-	-	-	-
Changes to models and inputs used for ECL calculations	5	-395	-176	-566	-564
Write-offs	-	-	-	-	-
Recoveries	-	-	-	-	-
Total 31 Dec 2021	**-126**	**-835**	**-224**	**-1,184**	**39,717,750**

During 2020, MuniFin Group specified the methods for estimating and modeling expected credit losses as well as the assumptions used in the model. The change in the modeling methodology affected the modeling of the probability of default over the lifetime of the loan and thus affected the amount of expected credit losses on stages 2 and 3, which increased by approximately EUR 0.5 million due to the change.

In 2020, MuniFin Group recorded an additional discretionary provision (*management overlay*) of EUR 340 thousand to take into account the financial effects of the COVID-19 pandemic. Year 2020 can be said to have been financially exceptionally weak for certain customer segments such as the arts sector and the operation of sports halls. However, the deteriorating financial situation did not yet reflect in MuniFin Group's internal risk ratings, which were mainly updated based on the 2019 financial statements. As the credit risk of certain customer segments was estimated to have increased since then, the Group's management decided to record an additional discretionary provision based on a group-specific assessment. The additional provision relates to the balance sheet line item *Loans and advances to the public and public sector entities*. The additional provision was not allocated to contract level. More detailed information on the financial condition of the companies subject to the additional provision was received in the second half of 2021, and the possible change in ECL could be allocated to the contracts through updated internal credit ratings and determined according to the normal ECL calculation process. There was no longer need for the additional provision based on management judgement and it was decided to be removed in the second half of the year 2021. The impact of the COVID-19 pandemic on MuniFin Group's ECL remained low.

The following tables present changes and reconciliation of expected credit losses by impairment stages and asset groups during the financial year.

EXPECTED CREDIT LOSSES ON CASH AND BALANCES WITH CENTRAL BANKS AT AMORTISED COST BY IMPAIRMENT STAGES	Not credit-impaired		Credit-impaired	Total	
	Stage 1	Stage 2	Stage 3		
(EUR 1,000)	12-month ECL	Lifetime ECL	Lifetime ECL	ECL	Gross carrying amount
Opening balance 1 Jan 2021	**0**	**-**	**-**	**0**	**5,565,801**
New assets originated or purchased	0	-	-	0	2,833,244
Assets derecognised or repaid (excluding write-offs)	0	-	-	0	0
Transfers to Stage 1	-	-	-	-	-
Transfers to Stage 2	-	-	-	-	-
Transfers to Stage 3	-	-	-	-	-
Changes to models and inputs used for ECL calculations	-	-	-	-	-
Total 31 Dec 2021	**0**	**-**	**-**	**0**	**8,399,045**

EXPECTED CREDIT LOSSES ON LOANS AND ADVANCES TO CREDIT INSTITUTIONS AT AMORTISED COST BY IMPAIRMENT STAGES

	Not credit-impaired		Credit-impaired	Total	
	Stage 1	Stage 2	Stage 3		
(EUR 1,000)	12-month ECL	Lifetime ECL	Lifetime ECL	ECL	Gross carrying amount
Opening balance 1 Jan 2021	**-43**	**-**	**-**	**-43**	**1,841,853**
New assets originated or purchased	-10	-	-	-10	353,939
Assets derecognised or repaid (excluding write-offs)	14	-	-	14	-778,439
Transfers to Stage 1	-	-	-	-	-
Transfers to Stage 2	-	-	-	-	-
Transfers to Stage 3	-	-	-	-	-
Changes to models and inputs used for ECL calculations	-43	-	-	-43	-43
Total 31 Dec 2021	**-82**	**-**	**-**	**-82**	**1,417,310**

EXPECTED CREDIT LOSSES ON LOANS AND ADVANCES TO THE PUBLIC AND PUBLIC SECTOR ENTITIES AT AMORTISED COST BY IMPAIRMENT STAGES

	Not credit-impaired		Credit-impaired	Total	
	Stage 1	Stage 2	Stage 3		
(EUR 1,000)	12-month ECL	Lifetime ECL	Lifetime ECL	ECL	Gross carrying amount
Opening balance 1 Jan 2021	**-30**	**-835**	**-224**	**-1,089**	**26,886,947**
New assets originated or purchased	-11	56	-13	33	3,238,833
Assets derecognised or repaid (excluding write-offs)	10	101	55	167	-2,319,771
Transfers to Stage 1	0	18	-	18	18
Transfers to Stage 2	0	-203	60	-143	-143
Transfers to Stage 3	-	1	-1	1	1
Additional provision (*Management overlay*)	-	340	-430	-90	-90
Changes to contractual cash flows due to modifications not resulting in derecognition	-	-	-	-	-
Changes to models and inputs used for ECL calculations	7	-56	6	-44	-44
Write-offs	-	-	-	-	-
Total 31 Dec 2021	**-23**	**-578**	**-546**	**-1,147**	**27,805,752**

EXPECTED CREDIT LOSSES ON LEASED ASSETS IN LOANS AND ADVANCES TO THE PUBLIC AND PUBLIC SECTOR ENTITIES AT AMORTISED COST BY IMPAIRMENT STAGES

(EUR 1,000)	Not credit-impaired		Credit-impaired	Total	
	Stage 1	Stage 2	Stage 3		
	12-month ECL	Lifetime ECL	Lifetime ECL	ECL	Gross carrying amount
Opening balance 1 Jan 2021	**-2**	**0**	**0**	**-2**	**1,090,940**
New assets originated or purchased	0	-	-	0	310,062
Assets derecognised or repaid (excluding write-offs)	0	-	0	0	-66,857
Transfers to Stage 1	-	-	-	-	-
Transfers to Stage 2	-	-	-	-	-
Transfers to Stage 3	-	-	-	-	-
Changes to models and inputs used for ECL calculations	1	-	0	1	1
Total 31 Dec 2021	**-2**	**0**	**0**	**-2**	**1,334,146**

EXPECTED CREDIT LOSSES ON DEBT SECURITIES AT AMORTISED COST BY IMPAIRMENT STAGES

(EUR 1,000)	Not credit-impaired		Credit-impaired	Total	
	Stage 1	Stage 2	Stage 3		
	12-month ECL	Lifetime ECL	Lifetime ECL	ECL	Gross carrying amount
Opening balance 1 Jan 2021	**0**	**0**	**-**	**0**	**1,310,305**
New assets originated or purchased	0	0	-	0	1,088,888
Assets derecognised or repaid (excluding write-offs)	0	0	-	0	-1,310,305
Transfers to Stage 1	-	-	-	-	-
Transfers to Stage 2	-	-	-	-	-
Transfers to Stage 3	-	-	-	-	-
Changes to models and inputs used for ECL calculations	-	-	-	-	-
Total 31 Dec 2021	**0**	**0**	**-**	**0**	**1,088,888**

EXPECTED CREDIT LOSSES ON DEBT SECURITIES AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME BY IMPAIRMENT STAGES

	Not credit-impaired		Credit-impaired	Total	
	Stage 1	Stage 2	Stage 3		
(EUR 1,000)	12-month ECL	Lifetime ECL	Lifetime ECL	ECL	Gross carrying amount
Opening balance 1 Jan 2021	**-42**	**-**	**-**	**-42**	**423,050**
New assets originated or purchased	-16	-	-	-16	28,176
Assets derecognised or repaid (excluding write-offs)	19	-	-	19	-237,760
Transfers to Stage 1	-	-	-	-	
Transfers to Stage 2	-	-	-	-	
Transfers to Stage 3	-	-	-	-	
Changes to models and inputs used for ECL calculations	-2	-	-	-2	
Total 31 Dec 2021	**-41**	**-**	**-**	**-41**	**213,466**

The loss allowance on debt instruments classified at fair value through fair value reserve is recognised in the fair value reserve. The accumulated loss allowance is recognised to the profit or loss upon derecognition of the assets. More details regarding presentation of allowance for expected credit losses is presented in the accounting policies of the Consolidated Financial Statements (Note *1*) in Section *9.4 Presentation of allowance for ECL in the statement of financial position*.

EXPECTED CREDIT LOSSES ON CASH COLLATERAL TO CCPS IN OTHER ASSETS AT AMORTISED COST BY IMPAIRMENT STAGES

	Not credit-impaired		Credit-impaired	Total	
	Stage 1	Stage 2	Stage 3		
(EUR 1,000)	12-month ECL	Lifetime ECL	Lifetime ECL	ECL	Gross carrying amount
Opening balance 1 Jan 2021	**-4**	**-**	**-**	**-4**	**243,269**
New assets originated or purchased	-1	-	-	-1	22,942
Assets derecognised or repaid (excluding write-offs)	0	-	-	0	-27,272
Transfers to Stage 1	-	-	-	-	-
Transfers to Stage 2	-	-	-	-	-
Transfers to Stage 3	-	-	-	-	-
Changes to models and inputs used for ECL calculations	-8	-	-	-8	-8
Total 31 Dec 2021	**-13**	**-**	**-**	**-13**	**238,930**

EXPECTED CREDIT LOSSES ON GUARANTEE RECEIVABLES FROM THE PUBLIC AND PUBLIC SECTOR ENTITIES IN OTHER ASSETS BY IMPAIRMENT STAGES

	Not credit-impaired		Credit-impaired	Total	
	Stage 1	Stage 2	Stage 3		
(EUR 1,000)	12-month ECL	Lifetime ECL	Lifetime ECL	ECL	Gross carrying amount
Opening balance 1 Jan 2021	**-**	**-**	**-**	**-**	**1,606**
New assets originated or purchased	-	-	-	-	145
Assets derecognised or repaid (excluding write-offs)	-	-	-	-	-
Transfers to Stage 1	-	-	-	-	-
Transfers to Stage 2	-	-	-	-	-
Transfers to Stage 3	-	-	-	-	-
Changes to models and inputs used for ECL calculations	-	-	-	-	-
Recoveries	-	-	-	-	-
Total 31 Dec 2021	**-**	**-**	**-**	**-**	**1,752**

EXPECTED CREDIT LOSSES ON CREDIT COMMITMENTS (OFF-BALANCE SHEET) BY IMPAIRMENT STAGES	Not credit-impaired		Credit-impaired	Total	
	Stage 1	Stage 2	Stage 3		
(EUR 1,000)	12-month ECL	Lifetime ECL	Lifetime ECL	ECL	Gross carrying amount
Opening balance 1 Jan 2021	**-4**	**0**	**0**	**-4**	**2,353,978**
New assets originated or purchased	-2	0	-	-2	1,761,104
Assets derecognised or repaid (excluding write-offs)	3	-	0	3	-1,522,209
Transfers to Stage 1	-	-	-	-	
Transfers to Stage 2	-	-	-	-	
Transfers to Stage 3	-	0	0	0	
Changes to models and inputs used for ECL calculations	0	-	0	0	
Total 31 Dec 2021	**-4**	**0**	**0**	**-4**	**2,592,873**

The loss allowance on binding credit commitments is recognised under *Other liabilities*. More details regarding presentation of allowance for expected credit losses is presented in the accounting policies of the Consolidated Financial Statements (Note *1*) in Section *9.4 Presentation of allowance for ECL in the statement of financial position.*

EXPECTED CREDIT LOSSES ON CASH AND BALANCES WITH CENTRAL BANKS AT AMORTISED COST BY IMPAIRMENT STAGES	Not credit-impaired		Credit-impaired	Total	
	Stage 1	Stage 2	Stage 3		
(EUR 1,000)	12-month ECL	Lifetime ECL	Lifetime ECL	ECL	Gross carrying amount
Opening balance 1 Jan 2020	**0**	**-**	**-**	**0**	**4,909,338**
New assets originated or purchased	0	-	-	0	656,463
Assets derecognised or repaid (excluding write-offs)	0	-	-	0	0
Transfers to Stage 1	-	-	-	-	-
Transfers to Stage 2	-	-	-	-	-
Transfers to Stage 3	-	-	-	-	-
Changes to models and inputs used for ECL calculations	-	-	-	-	-
Total 31 Dec 2020	**0**	**-**	**-**	**0**	**5,565,801**

EXPECTED CREDIT LOSSES ON LOANS AND ADVANCES TO CREDIT INSTITUTIONS AT AMORTISED COST BY IMPAIRMENT STAGES

	Not credit-impaired		Credit-impaired	Total	
	Stage 1	Stage 2	Stage 3		
(EUR 1,000)	12-month ECL	Lifetime ECL	Lifetime ECL	ECL	Gross carrying amount
Opening balance 1 Jan 2020	**-28**	**-**	**-**	**-28**	**818,323**
New assets originated or purchased	-35	-	-	-35	1,687,210
Assets derecognised or repaid (excluding write-offs)	21	-	-	21	-663,679
Transfers to Stage 1	-	-	-	-	-
Transfers to Stage 2	-	-	-	-	-
Transfers to Stage 3	-	-	-	-	-
Changes to models and inputs used for ECL calculations	-1	-	-	-1	-1
Total 31 Dec 2020	**-43**	**-**	**-**	**-43**	**1,841,853**

EXPECTED CREDIT LOSSES ON LOANS AND ADVANCES TO THE PUBLIC AND PUBLIC SECTOR ENTITIES AT AMORTISED COST BY IMPAIRMENT STAGES	Not credit-impaired		Credit-impaired	Total	
	Stage 1	Stage 2	Stage 3		
(EUR 1,000)	12-month ECL	Lifetime ECL	Lifetime ECL	ECL	Gross carrying amount
Opening balance 1 Jan 2020	**-24**	**-80**	**-80**	**-185**	**23,918,874**
New assets originated or purchased	-15	-30	-13	-58	4,825,655
Assets derecognised or repaid (excluding write-offs)	3	10	43	56	-1,856,679
Transfers to Stage 1	0	30	-	30	30
Transfers to Stage 2	0	-50	9	-41	-41
Transfers to Stage 3	0	19	-7	12	12
Additional provision (*Management overlay*)	-	-340	-	-340	-340
Changes to contractual cash flows due to modifications not resulting in derecognition	-	-	-	-	-
Changes to models and inputs used for ECL calculations	6	-395	-176	-564	-564
Write-offs	-	-	-	-	-
Total 31 Dec 2020	**-30**	**-835**	**-224**	**-1,089**	**26,886,947**

EXPECTED CREDIT LOSSES ON LEASED ASSETS IN LOANS AND ADVANCES TO THE PUBLIC AND PUBLIC SECTOR ENTITIES AT AMORTISED COST BY IMPAIRMENT STAGES	Not credit-impaired		Credit-impaired	Total	
	Stage 1	Stage 2	Stage 3		
(EUR 1,000)	12-month ECL	Lifetime ECL	Lifetime ECL	ECL	Gross carrying amount
Opening balance 1 Jan 2020	**-1**	**0**	**-**	**-1**	**828,458**
New assets originated or purchased	-1	-	0	-1	318,638
Assets derecognised or repaid (excluding write-offs)	0	-	-	0	-56,155
Transfers to Stage 1	-	-	-	-	-
Transfers to Stage 2	-	-	-	-	-
Transfers to Stage 3	-	0	-	0	0
Changes to models and inputs used for ECL calculations	0	-	-	0	0
Total 31 Dec 2020	**-2**	**0**	**0**	**-2**	**1,090,940**

EXPECTED CREDIT LOSSES ON DEBT SECURITIES AT AMORTISED COST BY IMPAIRMENT STAGES	Not credit-impaired		Credit-impaired	Total	
	Stage 1	Stage 2	Stage 3		
(EUR 1,000)	12-month ECL	Lifetime ECL	Lifetime ECL	ECL	Gross carrying amount
Opening balance 1 Jan 2020	**0**	**0**	**-**	**0**	**804,358**
New assets originated or purchased	0	0	-	0	1,310,305
Assets derecognised or repaid (excluding write-offs)	0	0	-	0	-804,358
Transfers to Stage 1	-	-	-	-	-
Transfers to Stage 2	-	-	-	-	-
Transfers to Stage 3	-	-	-	-	-
Changes to models and inputs used for ECL calculations	-	-	-	-	-
Total 31 Dec 2020	**0**	**0**	**-**	**0**	**1,310,305**

EXPECTED CREDIT LOSSES ON DEBT SECURITIES AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME BY IMPAIRMENT STAGES	Not credit-impaired		Credit-impaired	Total	
	Stage 1	Stage 2	Stage 3		
(EUR 1,000)	12-month ECL	Lifetime ECL	Lifetime ECL	ECL	Gross carrying amount
Opening balance 1 Jan 2020	**-104**	**-**	**-**	**-104**	**971,505**
New assets originated or purchased	-28	-	-	-28	159,570
Assets derecognised or repaid (excluding write-offs)	92	-	-	92	-708,025
Transfers to Stage 1	-	-	-	-	
Transfers to Stage 2	-	-	-	-	
Transfers to Stage 3	-	-	-	-	
Changes to models and inputs used for ECL calculations	-2	-	-	-2	
Total 31 Dec 2020	**-42**	**-**	**-**	**-42**	**423,050**

EXPECTED CREDIT LOSSES ON CASH COLLATERAL TO CCPS IN OTHER ASSETS AT AMORTISED COST BY IMPAIRMENT STAGES

	Not credit-impaired		Credit-impaired	Total	
	Stage 1	Stage 2	Stage 3		
(EUR 1,000)	12-month ECL	Lifetime ECL	Lifetime ECL	ECL	Gross carrying amount
Opening balance 1 Jan 2020	**-4**	**-**	**-**	**-4**	**158,494**
New assets originated or purchased	-2	-	-	-2	84,772
Assets derecognised or repaid (excluding write-offs)	1	-	-	1	1
Transfers to Stage 1	-	-	-	-	-
Transfers to Stage 2	-	-	-	-	-
Transfers to Stage 3	-	-	-	-	-
Changes to models and inputs used for ECL calculations	2	-	-	2	2
Total 31 Dec 2020	**-4**	**-**	**-**	**-4**	**243,269**

EXPECTED CREDIT LOSSES ON GUARANTEE RECEIVABLES FROM THE PUBLIC AND PUBLIC SECTOR ENTITIES IN OTHER ASSETS BY IMPAIRMENT STAGES

	Not credit-impaired		Credit-impaired	Total	
	Stage 1	Stage 2	Stage 3		
(EUR 1,000)	12-month ECL	Lifetime ECL	Lifetime ECL	ECL	Gross carrying amount
Opening balance 1 Jan 2020	**-**	**-**	**-**	**-**	**1,603**
New assets originated or purchased	-	-	-	-	184
Assets derecognised or repaid (excluding write-offs)	-	-	-	-	-180
Transfers to Stage 1	-	-	-	-	-
Transfers to Stage 2	-	-	-	-	-
Transfers to Stage 3	-	-	-	-	-
Changes to models and inputs used for ECL calculations	-	-	-	-	-
Recoveries	-	-	-	-	-
Total 31 Dec 2020	**-**	**-**	**-**	**-**	**1,606**

EXPECTED CREDIT LOSSES ON CREDIT COMMITMENTS (OFF-BALANCE SHEET) BY IMPAIRMENT STAGES	Not credit-impaired		Credit-impaired	Total	
	Stage 1	Stage 2	Stage 3		
(EUR 1,000)	12-month ECL	Lifetime ECL	Lifetime ECL	ECL	Gross carrying amount
Opening balance 1 Jan 2020	**-4**	**0**	**-**	**-4**	**2,361,323**
New assets originated or purchased	-3	-	0	-3	1,581,833
Assets derecognised or repaid (excluding write-offs)	3	0	-	3	-1,589,178
Transfers to Stage 1	-	-	-	-	
Transfers to Stage 2	0	0	-	0	
Transfers to Stage 3	-	-	-	-	
Changes to models and inputs used for ECL calculations	0	0	-	0	
Total 31 Dec 2020	**-4**	**0**	**0**	**-4**	**2,353,978**

Forward-looking information

In the assessment of whether the credit risk of an instrument has significantly increased *(SICR)* and in the measurement of expected credit losses, forward-looking information and macroeconomic scenarios are included in the model. The scenarios for Finland have been updated by MuniFin Group to take into account the effect of the pandemic. These macroeconomic projections cover a period of three years and as no reliable macroeconomic projections exceeding a three-year time horizon are available, forward-looking adjustment will be limited to a three-year period. Mainly three scenarios are used; base, optimistic and adverse. Scenarios include probability weights.

The scenario probability weightings are as following.

	31 Dec 2021			31 Dec 2020		
SCENARIO	2022	2023	2024	2021	2022	2023
Adverse	40%	40%	40%	50%	40%	40%
Base	50%	50%	40%	40%	40%	40%
Optimistic	10%	10%	20%	10%	20%	20%

MuniFin Group has identified key drivers of credit losses for each portfolio that share similar kind of credit risk characteristics and estimated the relationship between macroeconomic variables and credit losses. ECL model consists of the following macroeconomic variables for Finnish counterparties of financial assets; Finnish government long-term rate, the development of residential housing prices and unemployment rate. For non-Finnish financial assets, stress test scenarios published by the European Central Bank are employed in the model and scenario parameters. Each variable covers an estimate over a period of three years. The following table presents the macroeconomic variables and their forecasts over the three-year forecast period.

		31 Dec 2021			31 Dec 2020		
MACROECONOMIC VARIABLES	**Scenario**	**2022**	**2023**	**2024**	**2021**	**2022**	**2023**
10Y Fin Government rate, %	Adverse	1.2	0.50	0.25	0.10	-0.25	0.0
	Base	0.25	0.60	0.75	-0.37	-0.25	0.1
	Optimistic	0.75	1.10	1.15	0.00	0.3	0.6
Residential Real Estate (selling price, YoY change), %	Adverse	-8.0	-7.0	-2.0	-12.5	-2.5	2.0
	Base	-2.0	-3.0	-1.4	0.5	1.0	2.0
	Optimistic	3.5	3.0	1.5	2.0	2.5	2.0
Unemployment rate, %	Adverse	8.7	9.2	8.5	9.5	9.2	8.7
	Base	6.9	6.5	6.3	8.2	7.8	7.6
	Optimistic	6.5	6.0	5.8	7.7	7.2	6.9

The Finnish economy recovered faster than expected in 2021. Strong business and consumer confidence supported domestic demand, which was the main contributor to economic growth. Finland's GDP exceeded the pre-pandemic level already in the second quarter of 2021. Employment also recovered briskly, with the total number of people in employment reaching an all-time high in the last quarter of 2021. In base scenario, Finland's GDP is expected to grow 3.5% in 2021. Leading economic indicators point to somewhat slower growth going forward. Omicron, the new coronavirus variant, has raised short-term cyclical uncertainty. Consumer purchasing power has also been slashed particularly by the rising cost of living and fuel. Despite the short-term risks, there is still potential for faster-than-average growth in 2022. The output is expected to grow 2.6% in 2022 and 1.8% in 2023. From 2024 onwards, the economy gradually converges to its long-term growth path and the annual pace of expansion is around 1.0%.

Unemployment rate peaked at 7.8% in 2020. MuniFin currently estimates the average unemployment rate to go down to 6.9% in 2022 and to 6.5% in 2023. The average annual CPI inflation is poised to accelerate in 2022 as the transitory spike in energy prices elevates the overall price index. Cost pressures are assumed to ease off in the second half of 2022. Monetary policy remains accommodative in the near term, albeit the European Central Bank is expected to start gradually unwinding its non-standard monetary policy measures. The first rate hike is expected to take place around the year end of 2023. On the national level, home prices are expected to rise nearly 4% in 2021 and about 2.0% in 2022. From 2023 onwards, home prices inflation is expected to moderate to around 1.5% annual pace.

Compared to the base scenario, upside (optimistic) scenario factors in less severe economic scars from the COVID-19 pandemic and assumes somewhat speedier recovery in global economy and investment spending. As a result, the Finnish GDP would grow faster in the subsequent two years (3.5% and 3.0% in 2022 and 2023, respectively). In the upside scenario, unemployment rate declines below the pre-pandemic level of 6.7% already in 2022. In 2022, consumer price inflation rises to 3.8%. Inflationary pressures are mostly transitory, but as the output gap gradually turns positive, CPI inflation remains at 2.5% in 2023. Strong housing demand keeps home price inflation elevated at 3.0–3.5% range in 2022–2023. Thereafter, consumer and home prices rise at about 1.5–2.0% pace in 2024–2025. Reviving growth and inflation expectations lead to somewhat faster monetary tightening and higher interest rates than in the base scenario.

Downside (adverse) scenario represents an outcome where supply side bottle necks turn out to be more severe and more persistent than previously thought. Wide ranging shortage of inputs amplifies cost pressures in global supply chains, leading to a vicious circle in consumer prices and future inflation expectations. At the same time, downturn in Chinese real estate sector triggers a significant economic slowdown, which transmits to a wider growth recession in the world economy. In order to keep medium term inflation expectations anchored, central banks need to tighten monetary policy, despite deteriorating cyclical outlook. Finland's economy falls into another recession in 2022–2023 and unemployment starts rising again. Lack of demand in the housing market leads to sharp declines in home price indices. Prolonged global recession creates tensions in financial markets, giving rise to wider risk premia in asset pricing.

The following table presents the sensitivity of the expected credit losses assuming 100% weight for adverse scenario until 2024 (2023).

SENSITIVITY ANALYSIS (EUR 1,000)	31 Dec 2021		31 Dec 2020	
	Weighted scenario	Adverse scenario (100%)	Weighted scenario	Adverse scenario (100%)
ECL	859	1,150	844	1,083
Proportion of the exposure in Stage 2 and 3	0.86%	1.15%	0.75%	1.04%

The sensitivity analysis does not include the additional discretionary provisions (*management overlay*).

Non-performing and forborne exposures

Non-performing and forborne exposures refer to receivables that are more than 90 days past due, other receivables classified as risky and forborne exposures due to the customer's financial difficulties.

NON-PERFORMING AND FORBORNE EXPOSURES 31 Dec 2021 (EUR 1,000)	Performing exposures (gross)	Non-performing exposures (gross)	Total exposures (gross)	Total expected credit losses	Total exposures (net)
Over 90 days past due	-	16,813	16,813	-82	16,731
Unlikely to be paid	-	85,559	85,559	-8	85,551
Forborne exposures	61,862	25,849	87,711	-238	87,473
Total	**61,862**	**128,221**	**190,083**	**-328**	**189,755**

NON-PERFORMING AND FORBORNE EXPOSURES 31 Dec 2020 (EUR 1,000)	Performing exposures (gross)	Non-performing exposures (gross)	Total exposures (gross)	Total expected credit losses	Total exposures (net)
Over 90 days past due	-	22,732	22,732	-112	22,620
Unlikely to be paid	-	93,531	93,531	-50	93,482
Forborne exposures	68,715	19,584	88,299	-288	88,010
Total	**68,715**	**135,847**	**204,562**	**-450**	**204,112**

Forbearance measures are concessions to original contractual payment terms agreed at the customers' initiative to help the customer through temporary payment difficulties. Performing forborne exposures include forborne exposures reclassified as performing during their probation period or forbearance measures made into a performing loan. Loan modifications due to reasons other than the customer's financial difficulties are not classified as forborne exposures. The Group considers a loan forborne when such concessions or modifications are provided as a result of the borrower's present or expected financial difficulties and the Group would not have agreed to them if the borrower had been financially healthy.

The COVID-19 pandemic affected the financial situation and liquidity of MuniFin Group's customers. The Group therefore offered concessions to the payment terms of loans to those customers whose finances had been temporarily affected by the pandemic. The granted repayment holidays concerned mainly the year 2020 and were mainly between 6–9 months in length. Only a few individual repayment holidays have been extended during 2021. The uncollected installments were mainly transferred to the end of the loan term to be paid in connection with the last installment. Most of the repayment holidays were granted during April and May in 2020. No lease concessions were granted to the Group's leasing customers.

Realised credit losses

The Group has not had any final realised credit losses during the financial year or the comparison year.

Note 28. Intangible assets

(EUR 1,000)	31 Dec 2021	31 Dec 2020
IT systems	12,296	17,346
, of which assets not yet available for use	*3,752*	*6,592*
Total	**12,296**	**17,346**

The intangible assets not yet available for use consists of ongoing development projects of IT systems. The principles of MuniFin Group's impairment testing for intangible assets not yet available for use are described in the accounting policies (Note *1*) in Section *15. Intangible assets.*

Note 29. Tangible assets

(EUR 1,000)	31 Dec 2021	31 Dec 2020
Real estate	299	299
Office renovation expenses	9	12
Right-of-use assets	4,442	5,955
Other tangible assets	2,742	4,098
Total	**7,491**	**10,364**

Note 30. Changes in intangible and tangible assets during the financial year

2021 (EUR 1,000)	Intangible assets Total	Tangible assets Real estate	Tangible assets Other tangible assets	Tangible assets Right-of-use assets	Tangible assets Total
Acquisition cost 1 Jan 2021	31,630	299	8,950	9,152	18,401
+ Additions	8,660	-	3	212	215
– Disposals	-449	-	-367	-29	-396
Acquisition cost 31 Dec 2021	39,841	299	8,585	9,335	18,219
Accumulated depreciation 1 Jan 2021	14,283	-	4,840	3,197	8,037
– Accumulated depreciation on disposals	-	-	-226	-29	-255
+ Depreciation for the financial year	2,780	-	1,221	1,725	2,946
+ Impairment *	10,482	-	-	-	-
Accumulated depreciation 31 Dec 2021	27,545	-	5,835	4,893	10,728
Carrying amount 31 Dec 2021	**12,296**	**299**	**2,751**	**4,442**	**7,491**

* The line item includes a non-recurring item of impairment of EUR 10,482 thousand on MuniFin Group's significant on-going IT system implementation.

2020 (EUR 1,000)	Intangible assets Total	Tangible assets Real estate	Tangible assets Other tangible assets	Tangible assets Right-of-use assets	Tangible assets Total
Acquisition cost 1 Jan 2020	25,706	299	5,649	8,942	14,890
+ Additions	5,924	-	3,644	296	3,939
– Disposals	-	-	-343	-85	-428
Acquisition cost 31 Dec 2020	31,630	299	8,950	9,152	18,401
Accumulated depreciation 1 Jan 2020	11,002	-	4,247	1,602	5,849
– Accumulated depreciation on disposals	-	-	-252	-72	-324
+ Depreciation for the financial year	3,281	-	845	1,667	2,513
Accumulated depreciation 31 Dec 2020	14,283	-	4,840	3,197	8,037
Carrying amount 31 Dec 2020	**17,346**	**299**	**4,110**	**5,955**	**10,364**

Note 31. Other assets

(EUR 1,000)	31 Dec 2021	31 Dec 2020
Invoiced leasing payments	15,084	11,185
Given cash collateral to CCPs *	238,930	243,269
Other	2,103	5,331
Total	**256,117**	**259,785**

* Cash collaterals include expected credit losses amounting to EUR 13 thousand (EUR 4 thousand).

The Group did not have receivables related to payment transfers as at 31 Dec 2021 or at 31 Dec 2020.

Note 32. Accrued income and prepayments

(EUR 1,000)	31 Dec 2021	31 Dec 2020
Accrued interest income	211,067	198,057
Other accrued income	231	5,637
Prepayments	1,356	-147
Total	**212,655**	**203,547**

Note 33. Deferred tax

DEFERRED TAX LIABILITIES (EUR 1,000)	1 Jan 2021	Recognised in the income statement	Recognised in the other comprehensive income	Recognised in equity	31 Dec 2021
On fair value reserve	4,054	-	-555	-	3,499
On change in cumulative depreciation difference	4,105	1,439	-	-	5,544
On change in voluntary provisions	269,506	9,000	-	-	278,506
On reversing the accrued interest of the AT1 capital loan recorded in the financial statements of the parent company	2,365	3,150	-	-3,150	2,365
On reversing the amortisation of the AT1 capital loan transaction expenses recorded in the financial statements of the parent company	-122	98	-	-	-24
On right-of-use assets	-1	0	-	-	-1
Total	**279,906**	**13,687**	**-555**	**-3,150**	**289,887**

DEFERRED TAX LIABILITIES (EUR 1,000)	1 Jan 2020	Recognised in the income statement	Recognised in the other comprehensive income	Recognised in equity	31 Dec 2020
On fair value reserve	10,467	-	-6,413	-	4,054
On change in cumulative depreciation difference	2,732	1,373	-	-	4,105
On change in voluntary provisions	240,906	28,600	-	-	269,506
On reversing the accrued interest of the AT1 capital loan recorded in the financial statements of the parent company	2,358	3,156	-	-3,150	2,365
On reversing the amortisation of the AT1 capital loan transaction expenses recorded in the financial statements of the parent company	-221	98	-	-	-122
On right-of-use assets	-1	0	-	-	-1
Total	**256,241**	**33,228**	**-6,413**	**-3,150**	**279,906**

Note 34. Liabilities to credit institutions

(EUR 1,000)	31 Dec 2021	31 Dec 2020
Bilateral loans to credit institutions	59,906	93,358
TLTRO *	2,000,000	1,250,000
Received collateral on derivatives	741,110	658,120
Total	**2,801,016**	**2,001,478**

* In September 2020, MuniFin Group participated in the third series of targeted longer-term refinancing operation that is, the so-called TLTRO III operation (No. 5) with EUR 1.25 billion. In June 2021, MuniFin participated in TLTRO III operation (No. 8) with EUR 750 million. According to the terms of the TLTRO III operation, if eligible net lending is positive during the reference period (1 March 2020–31 March 2021) the interest rate for TLTRO III debt is 0.5% lower than the average deposit facility rate for borrowings between 24 June 2020 and 23 June 2021. This would currently equate to an all-in rate of -1%. On 10 December 2020, the ECB issued an update to the terms and conditions so that the low-interest period was extended from 24 June 2021 to 23 June 2022, if the conditions for net lending were met in the reference period from 1 October 2020 to 31 December 2021.

The interest rate until 23 June 2021 was determined based on the net lending review period expired on 31 March 2021. MuniFin Group met the net lending criteria for this period to the lower interest rate. The final interest rate will be determined when the TLTRO III debt matures. Based on the historical development of MuniFin Group's lending portfolio as well as business forecast for future years, the Group expects to meet the conditions of positive net lending in the reference period and recognises the interests with the -1% rate.

Although the interest rate for the TLTRO III debt described above is favorable for MuniFin Group, it is assessed not to differ from the Group's other funding price to the extent that the Group would have received a government grant in accordance with IAS 20. Therefore, the Group treats TLTRO III debt in its entirety as an IFRS 9 financial liability.

Note 35. Liabilities to the public and public sector entities

(EUR 1,000)	31 Dec 2021	31 Dec 2020
Liabilities to the public and public sector entities	3,324,685	3,884,026
Total	**3,324,685**	**3,884,026**

Note 36. Debt securities issued

	31 Dec 2021		31 Dec 2020	
(EUR 1,000)	Carrying amount	Nominal value	Carrying amount	Nominal value
Bonds	31,508,271	32,041,076	29,016,086	28,671,412
Other *	3,819,254	3,820,738	3,895,820	3,896,421
Total	**35,327,525**	**35,861,814**	**32,911,906**	**32,567,833**

* Line item contains short-term funding issued by MuniFin.

All funding issued by the Parent Company Municipality Finance Plc is guaranteed by the Municipal Guarantee Board.

BENCHMARK ISSUANCES DURING THE YEAR 2021	Value date	Maturity date	Interest-%	Nominal value (1,000)	Currency
Fixed rate benchmark bond, issued under the MTN programme	20 Jan 2021	20 Mar 2026	0.625%	1,500,000	USD
Fixed rate benchmark bond, issued under the MTN programme	2 Mar 2021	2 Mar 2031	0.000%	1,000,000	EUR
Fixed rate benchmark bond, issued under the MTN programme	21 Apr 2021	21 Apr 2028	0.000%	500,000	EUR
Fixed rate benchmark bond, issued under the MTN programme	2 Sep 2021	2 Sep 2026	0.875%	1,000,000	USD
Fixed rate benchmark bond, issued under the MTN programme	2 Nov 2021	16 Dec 2024	0.875%	250,000	GBP

In the above table, the benchmark issuances are included by the settlement date. The offering circular is available in English on the website at www.munifin.fi/investor-relations.

Note 37. Reconciliation of the carrying amount of the issued debt

(EUR 1,000)	2021			2020		
	Liabilities to credit institutions	Liabilities to the public and public sector entities	Debt securities issued	Liabilities to credit institutions	Liabilities to the public and public sector entities	Debt securities issued
Carrying amount 1 Jan	**1,343,358**	**3,884,026**	**32,911,906**	**82,916**	**3,862,053**	**29,983,585**
Cash flow changes from operating activities						
Additions to issued debt "bonds"	761,335	197,473	7,894,520	1,288,567	108,792	9,031,390
Additions to debt securities issued "other"	-	-	13,219,018	-	-	14,442,817
Additions total	**761,335**	**197,473**	**21,113,537**	**1,288,567**	**108,792**	**23,474,207**
Deductions to issued debt "bonds"	-38,567	-587,713	-5,119,486	-34,608	-155,105	-6,619,454
Deductions to debt securities issued "other"	-	-	-13,295,584	-	-	-13,274,709
Deductions total	**-38,567**	**-587,713**	**-18,415,070**	**-34,608**	**-155,105**	**-19,894,163**
Cash flow changes from operating activities in total	**722,767**	**-390,240**	**2,698,468**	**1,253,959**	**-46,314**	**3,580,044**
Changes in the balance sheet value including valuations and fx revaluations	-6,219	-169,101	-282,849	6,483	68,287	-651,724
Carrying amount 31 Dec	**2,059,906**	**3,324,685**	**35,327,525**	**1,343,358**	**3,884,026**	**32,911,906**

Note 38. Provisions and other liabilities

(EUR 1,000)	31 Dec 2021	31 Dec 2020
Provisions		
Restructuring provision	-	562
Other provisions	446	-
Other liabilities		
Lease liabilities	4,528	6,032
Cash collateral taken from CCPs	333,295	231,180
Other	11,062	9,247
Total	**349,331**	**247,021**

The restructuring provision is related to the reorganisation of the Group's operations and the co-operation negotiations conducted during the financial year 2020 due to the reorganisation. Other provisions relate to a tax interpretation issue for which MuniFin has requested a preliminary ruling.

	Restructuring provision		Other provisions
(EUR 1,000)	2021	2020	2021
Carrying amount 1 Jan	562	-	-
Increase in provisions	-	641	446
Provisions used	-562	-79	-
Carrying amount 31 Dec	**-**	**562**	**446**

Note 39. Accrued expenses and deferred income

(EUR 1,000)	31 Dec 2021	31 Dec 2020
Accrued interest expenses	123,056	132,030
Other accrued expenses	41,812	7,193
Deferred income *	16,864	13,175
Total	**181,732**	**152,398**

* Item consists mainly of leasing income.

Note 40. Equity

(1,000 EUR)	31 Dec 2021	31 Dec 2020
Share capital	42,583	42,583
Reserve fund	277	277
Fair value reserve of investments	309	847
Own credit revaluation reserve	64	-255
Cost-of-Hedging reserve	13,621	15,624
Reserve for invested non-restricted equity	40,366	40,366
Retained earnings	1,416,916	1,258,224
Total equity attributable to parent company equity holders	**1,514,136**	**1,357,666**
Other equity instruments issued	350,000	350,000
Transaction costs deducted from other equity instruments issued	-2,546	-2,546
Total other equity instruments issued	**347,454**	**347,454**
Total equity	**1,861,590**	**1,705,120**

Share capital

The shares of the Parent Company, Municipality Finance Plc, are divided into A and B shares. The two types are equal in terms of voting rights and the distribution of profit. Each share entitles its holder to one vote. The shares have no nominal value. The acquisition of shares is restricted through the consent and redemption clauses of the Articles of Association. All issued shares have been paid in full. Since September 2009 the amount of shares of the Parent Companyt has been 39,063,798.

Reserves in equity

Reserve fund is restricted equity referred to in Chapter 8, Section 1 of the Limited Liability Companies Act. Fair value reserve of investments contains the fair value changes of financial instruments at fair value through other comprehensive income. Own credit revaluation reserve contains the changes in own credit risk of financial liabilities designated at fair value through profit or loss. Cost-of-Hedging reserve contains the impact of Cost-of-Hedging of derivatives in fair value hedge accounting. The proportion of payment made for shares that is not recorded in share capital, is recognised in the Reserve for invested non-restricted equity. Under the terms of the Parent Company's 2009 share issue, the funds collected through the share issue are recorded in the Reserve for invested non-restricted equity. Retained earnings contains the profit of previous periods.

Other issued equity instruments

Other issued equity instruments contains a EUR 350 million unsecured debenture loan with special terms designed to fulfil the requirements set for so-called AT1 capital loans in the Capital Requirements Regulation (EU 575/2013). The loan does not have a maturity date. Interest on the loan may only be paid out of distributable funds in accordance with the terms set in the Capital Requirements Regulation, and MuniFin will decide whether interest will be paid on the interest payment date. The cancellation of interest payments is final, and unpaid interest will not be added to the loan capital. MuniFin has the right but not the obligation to repay the loan on 1 April 2022 or, after that, annually on the interest payment date, as long as the buy-back is approved in advance by the regulatory authority. Due to terms stated above, AT1 capital loan is recognised as equity in the Consolidated Financial Statements.

The main features of capital instruments are described in further detail in Pillar III Disclosure Report, which is available on MuniFin's website in English. The Pillar III Disclosure Report is separate from this Report of the Board of Directors and the Financial Statements.

Note 41. Contingent assets and liabilities

The accrued interest on the Parent Company's AT1 capital loan is a contingent liability, totalling EUR 9,459 thousand on the financial statement date 31 Dec 2021. The contingent liability will be realised as a deduction of equity once MuniFin decides on the payment of interest. In the comparative period of 2020, MuniFin had a contingent liability of EUR 9,459 thousand, which realised upon interest payment on 1 April 2021.

The Group has no contingent assets on the financial statement date 31 Dec 2021 or 31 Dec 2020.

Note 42. Collateral given

GIVEN COLLATERALS ON BEHALF OF OWN LIABILITIES AND COMMITMENTS (EUR 1,000)	31 Dec 2021	31 Dec 2020
Loans and advances to credit institutions to the counterparties of derivative contracts *	1,310,576	1,607,069
Loans and advances to credit institutions to the central bank **	35,984	34,918
Loans and advances to the public and public sector entities to the central bank **	4,716,147	5,181,646
Loans and advances to the public and public sector entities to the Municipal Guarantee Board ***	11,474,101	10,997,495
Other assets to the counterparties of derivative contracts *	238,930	243,269
Total	**17,775,738**	**18,064,396**

* MuniFin Group has pledged a sufficient amount of collateral to the counterparties of derivative contracts based on the CSA agreements of the derivative contracts (*ISDA/Credit Support Annex*).

** MuniFin is a monetary policy counterparty approved by the central bank and for this purpose, a sufficient amount of collateral has been pledged to the central bank for possible operations related to this counterparty position.

*** MuniFin Group has pledged a sufficient amount of loans shown in the table to the Municipal Guarantee Board. The Municipal Guarantee Board guarantees MunFin's funding and MuniFin places collateral for the Municipal Guarantee Board's guarantees as defined in the Act on the Municipal Guarantee Board.

Collateral given is presented at the carrying amounts of the financial statement date.

Note 43. Off-balance-sheet commitments

(EUR 1,000)	31 Dec 2021	31 Dec 2020
Credit commitments	2,592,877	2,353,978
Total	**2,592,877**	**2,353,978**

Note 44. Related-party transactions

MuniFin Group's related parties include:
* MuniFin's shareholders whose ownership and corresponding voting rights in the Company exceed 20%.
* The key management personnel including the CEO, the Deputy to the CEO, other members of the Executive Management Team, members of the Board of Directors, the spouses, children and dependents of these persons and the children and dependents of these persons' spouses.
* Entities, which are directly or indirectly controlled or jointly controlled by the above-mentioned persons or where these persons have significant influence.
* MuniFin's related party is also its Subsidiary Financial Advisory Services Inspira Ltd.

The Group's operations are restricted by the Act on the Municipal Guarantee Board and the framework agreement concluded between MuniFin and the Municipal Guarantee Board, pursuant to which MuniFin may only grant loans to parties stipulated by law (municipalities, joint municipal authorities, corporations that are wholly owned by municipalities or under their control and corporations designated by government authorities and engaged in the renting or production and maintenance of housing on social grounds).

The Group has carried out only employment-based remuneration transactions with the related party persons. The Group does not have loan or financial receivables from these related parties. Transactions with Inspira comprise fees related to administrative services, and advisory services MuniFin has purchased from Inspira.

There have been no material changes in the related party transactions and relationships during the financial year.

TRANSACTIONS WITH THE SUBSIDIARY (EUR 1,000)	2021	2020
Sales	37	38
Purchases	-548	-681

INTRA-GROUP RECEIVABLES AND LIABILITIES (EUR 1,000)	31 Dec 2021	31 Dec 2020
Receivables	6	4
Liabilities	78	53

Note 45. Salaries and remuneration

Employee benefits for management

Salaries and remuneration paid to MuniFin's CEO, Deputy to the CEO and other members of the Executive Management Team subject to withholding tax:

SALARIES AND REMUNERATION (EUR 1,000)	2021	2020
President and CEO	-430	-412
Deputy to the CEO	-224	-251
Other members of the Executive Management Team in total	-1,307	-1,122
Total	**-1,961**	**-1,785**

MuniFin has paid the following statutory pension contributions related to the CEO, the Deputy to the CEO and other members of the Executive Management Team.

STATUTORY PENSION CONTRIBUTIONS (EUR 1,000)	2021	2020
President and CEO	-71	-71
Deputy to the CEO	-37	-43
Other members of the Executive Management Team in total	-216	-194
Total	**-324**	**-308**

The salaries and remuneration shown in the table include both the fixed remuneration and paid variable remuneration. According to regulation on credit institutions, the payment of variable remuneration earned each year is delayed and paid over the following years if a person's remuneration exceeds EUR 50,000. More information on the salary and remuneration principles are available on a separate Pillar III Disclosure Report from this Report of Board of Directors and Financial Statements. Pillar III Disclosure Report is available in English on MuniFin's website. The salaries and remuneration consist of short-term employee benefits excluding termination benefits. Such termination benefits have not occurred in 2021 or 2020.

The Group has provided to those members of the Executive Management Team (*EMT*) that have been appointed as members (including CEO and the Deputy to the CEO) before 21 Dec 2017 with a contribution-based group pension insurance. Members of the EMT are entitled to pension from the insurance after they have turned 63 years.

In the event of a termination of the employment on MuniFin's initiative, the CEO and Deputy to the CEO are entitled to a severance payment of six times the total monthly salary. The period of notice for termination of employment is six months for the CEO and the Deputy to the CEO. Employee benefits for the CEO and the Deputy to the CEO are terminated at the end of the period of notice.

The CEO of MuniFin is Mr Esa Kallio and Executive Vice President Ms Mari Tyster acts as a Deputy to the CEO. Figures reported in this note include remuneration paid to Esa Kallio under President and CEO and respectively remuneration paid to Mari Tyster under Deputy to the CEO.

The retirement age for the CEO and the Deputy to the CEO is stipulated by the Employees Pensions Act.

Remuneration of the Board of Directors

During financial years 2021–2022 the members of the Board of Directors of the Company are paid an annual remuneration as well as remuneration for each meeting in accordance with the decision of the Annual General Meeting. The annual remuneration is EUR 35,000 for the Chair of the Board, EUR 23,000 for the Vice Chair, EUR 25,000 for the Chairs of Committees and EUR 20,000 for the other members of the Board. The remuneration paid for Board and Committee meetings is EUR 800 per meeting for the Chair of the Board and the Chairs of Committees and EUR 500 per meeting for the other members. In addition, meeting remuneration is paid for the meetings required by the supervisory authorities. These remunerations are valid also in term 2020–2021. Prior to this in term 2019–2020, the annual remuneration was EUR 35,000 for the Chair of the Board, EUR 23,000 for the Vice Chair and EUR 20,000 for the other members of the Board.

Salaries and remuneration

The remuneration paid to the management and employees of MuniFin Group consists of a fixed remuneration (base salary and fringe benefits) and a variable remuneration based on the conditions of the remuneration system. Principles of the remuneration system are confirmed by the Board of Directors on an annual basis. The Remuneration Committee of the Board of Directors is responsible for preparatory work concerning the matters of the remuneration system. More information about salaries and remuneration is available on MuniFin's website www.munifin.fi.

SALARIES AND REMUNERATION (EUR 1,000)

Members of the Board of Directors	2021	2020
Helena Walldén, Chair until 25 March 2021	-14	-56
Kari Laukkanen, Chair 25 March 2021 onwards	-52	-45
Tuula Saxholm, Vice Chair until 25 March 2021	-9	-36
Maaria Eriksson, Vice Chair 25 March 2021 onwards	-32	-32
Raija-Leena Hankonen, member until 21 February 2020	-	-6
Minna Helppi, member until 25 March 2020	-	-9
Markku Koponen	-42	-46
Jari Koskinen, member until 25 March 2020	-	-9
Vivi Marttila	-31	-34
Tuomo Mäkinen, elected 25 March 2021	-22	-
Minna Smedsten, elected 25 March 2021	-22	-
Denis Strandell, elected 25 March 2020	-31	-25
Leena Vainiomäki, elected 25 March 2021	-30	-
Kimmo Viertola, elected 25 March 2020	-28	-24
Total	**-313**	**-318**

Note 46. Events after the reporting period

The FIN-FSA decided in January 2022, based on the consultation round held in late 2021, that wellbeing services counties, similar to the central and local government, will also fall in the zero-risk category in the capital adequacy regulation of banks. This decision simplifies the financing arrangements because it means that separate government guarantees are not required and that MuniFin can finance wellbeing services counties in the same way it does municipalities.

For 2021 SREP, MuniFin Group received the decision early February 2022. The P2R is 2.00% from 1 March 2022 onwards, and the minimum level of total capital ratio is 13.15% and TSCR is 10.00%. At the end of December 2021, the minimum requirement of total capital ratio was 13.40% and TSCR was 10.25%.

Parent Company Financial Statements

MuniFin

Income Statement

(EUR 1,000)	Note	1 Jan–31 Dec 2021	1 Jan–31 Dec 2020
Interest income	(2)	497,170	526,949
Net income from leasing operations	(3)	6,366	5,986
Interest expense	(2)	-239,571	-295,078
Net interest income		**263,965**	**237,857**
Commission income	(5)	978	677
Commission expense	(5)	-5,053	-5,060
Net income from securities and foreign exchange transactions	(6, 7)	24,095	-7,790
Net income from securities		22,707	-3,644
Net income from foreign exchange transactions		1,388	-4,146
Net income on financial assets at fair value through fair value reserve	(8)	-	-3
Net income from hedge accounting	(9, 25)	4,823	4,183
Other operating income	(11)	132	165
Administrative expenses		-33,493	-31,811
Personnel expenses	(48)	-16,490	-16,598
Salaries and fees		-13,671	-13,991
Personnel-related costs		-2,820	-2,607
Pension costs		-2,208	-2,147
Other personnel-related costs		-612	-460
Other administrative expenses		-17,003	-15,213
Depreciation and impairment on tangible and intangible assets	(12)	-16,091	-5,679
Other operating expenses	(13)	-15,876	-13,880
Expected credit losses on financial assets at amortised cost	(14)	-105	-920
Expected credit losses and impairments on other financial assets	(14)	0	62
Net operating profit		**223,376**	**177,802**
Appropriations		-52,193	-149,866
Income taxes		-34,374	-5,599
Profit for the financial year		**136,809**	**22,336**

The accompanying notes are an integral part of the Financial Statements.

Balance Sheet

(EUR 1,000)	Note	31 Dec 2021	31 Dec 2020
Assets			
Cash and balances with central banks	(17)	8,399,045	5,565,801
Cash		2	2
Central bank receivables payable on demand		8,399,043	5,565,799
Debt securities eligible for central bank refinancing	(20)	3,312,054	3,949,985
Other		3,312,054	3,949,985
Loans and advances to credit institutions	(18)	1,416,564	1,840,980
Payable on demand		35,712	164,005
Other		1,380,851	1,676,975
Loans and advances to the public and public sector entities	(19)	27,879,897	26,931,384
Leased assets	(21)	1,334,146	1,090,940
Debt securities	(20)	1,529,374	1,813,228
From public sector entities		930,252	1,199,621
From others		599,122	613,607
Shares and participations	(23)	-	27
Shares and participations in Group companies	(23)	656	656
Derivative contracts	(24)	1,999,676	2,358,163
Intangible assets	(26, 28)	12,305	17,358
Tangible assets	(27, 28)	7,188	9,980
Other tangible assets		7,188	9,980
Other assets	(29)	255,938	259,635
Accrued income and prepayments	(30)	212,612	203,542
Total assets	**(16, 37, 38, 40)**	**46,359,453**	**44,041,681**

(EUR 1,000)	Note	31 Dec 2021	31 Dec 2020
Liabilities and equity			
Liabilities			
Liabilities to credit institutions and central banks		2,801,016	2,001,478
To central banks		2,000,000	1,250,000
To credit institutions		801,016	751,478
Other		801,016	751,478
Liabilities to the public and public sector entities		3,324,685	3,884,026
Other liabilities		3,324,685	3,884,026
Debt securities issued	(32)	35,327,525	32,911,906
Bonds		31,508,271	29,016,086
Other		3,819,254	3,895,820
Derivative contracts	(24)	2,224,294	2,860,570
Other liabilities	(33)	349,014	246,543
Other liabilities		348,568	246,543
Provisions		446	-
Accrued expenses and deferred income	(34)	193,323	163,963
Subordinated liabilities	(35)	349,878	349,388
Deferred tax liabilities	(31)	3,499	4,054
Total liabilities	**(16, 37, 38, 40)**	**44,573,233**	**42,421,929**
Appropriations			
Depreciation difference		27,718	20,524
Taxation based provisions		1,392,530	1,347,530
Total appropriations		**1,420,248**	**1,368,054**

(EUR 1,000)	Note	31 Dec 2021	31 Dec 2020
Equity	**(42, 43, 44)**		
Share capital		43,008	43,008
Other restricted reserves		14,271	16,493
Reserve fund		277	277
Fair value reserve		13,994	16,216
Change in fair value		13,994	16,216
Non-restricted reserves		40,743	40,743
Reserve for invested non-restricted equity		40,743	40,743
Retained earnings		131,141	129,118
Profit for the financial year		136,809	22,336
Total equity		**365,972**	**251,698**
Total liabilities and equity		**46,359,453**	**44,041,681**
Off-balance sheet commitments	**(47)**		
Irrevocable commitments given in favour of customer		2,592,877	2,353,978

The accompanying notes are an integral part of the Financial Statements.

Statement of cash flows

(EUR 1,000)	1 Jan–31 Dec 2021	1 Jan–31 Dec 2020
Cash flow from operating activities	**2,734,814**	**756,147**
Net change in long-term funding	3,085,073	3,702,396
Net change in short-term funding	-354,008	1,257,523
Net change in long-term loans	-1,580,112	-3,074,492
Net change in short-term loans	224,130	-506,296
Net change in investments	667,724	462,373
Net change in collaterals	480,083	-1,287,941
Interest on assets	16,879	83,394
Interest on liabilities	205,845	145,647
Other income	72,778	59,925
Payments of operating expenses	-87,158	-84,361
Taxes paid	3,579	-2,020
Cash flow from investing activities	**-7,747**	**-8,236**
Acquisition of tangible assets	-3	-3,644
Proceeds from sale of tangible assets	226	165
Acquisition of intangible assets	-7,970	-4,758
Cash flow from financing activities	**-22,116**	**-7,892**
Dividends paid	-20,313	-6,250
Total cash flow from leases	-1,803	-1,642
Change in cash and cash equivalents	**2,704,951**	**740,019**
Cash and cash equivalents at 1 January	**5,729,806**	**4,989,788**
Cash and cash equivalents at 31 December	**8,434,757**	**5,729,806**

The accompanying notes are an integral part of the Financial Statements.

Notes to the Parent Company Financial Statements

Notes to the income statement

Notes to the balance sheet

Notes on collateral and contingent liabilities

Notes on personnel and management

Related party transactions

Holdings in other companies

Other notes

Notes to the Parent Company Financial Statements

Note 1. Significant accounting policies of the Parent Company Financial Statements, FAS

Municipality Finance Plc (MuniFin) prepares its Financial Statements in accordance with the Act on Credit Institutions, the Ministry of Finance Decree on Credit Institutions and the Financial Supervisory Authority Regulations and Guidelines 2/2016. The Company reports regularly on its operations to the European Central Bank, the Finnish Financial Supervisory Authority, the Bank of Finland, the Municipal Guarantee Board and Statistics Finland. Municipality Finance Plc is the Parent Company of Municipality Finance Group (MuniFin Group). The significant accounting policies and the presentation of the Financial Statements of the Parent Company, Municipality Finance Plc, correspond to the accounting policies of the Consolidated Financial Statements (Note *1*) with the exceptions described next.

Debt securities

Debt securities are presented in the Parent Company's Financial Statements under two balance sheet items: *Debt securities eligible for central bank refinancing* and *Debt securities*, so that *Debt securities eligible for central bank refinancing*, contains as the name implies, debt securities eligible for central bank refinancing.

Leases

Leases in which MuniFin acts as the lessee are treated in the Parent Company in accordance with the accounting policies described in the Consolidated Financial Statements. Leases in which MuniFin is a lessor, have been classified as finance leases in the Financial Statements of both the Group and the Parent Company. The accounting treatment of finance leases does not differ from Group to Parent Company, but the leased assets are presented under *Loans and advances to the public and public sector entities* in the Consolidated Financial Statements. In the Parent Company, they are presented under *Leased assets*. Income related to leasing operations is presented under the income statement item *Net income from leasing operations*. In the Consolidated Financial Statements, this income is presented under *Interest and similar income*.

Other long-term expenses

Other long-term expenses include expenses intended to generate income in several financial years that are not objects, separately transferable rights or other assets. MuniFin's other long-term expenses consist of renovation expenses for leased premises. These items are presented in the Parent Company's Financial Statements as part of *Intangible assets* under item *Other intangible assets* and in the Consolidated Financial Statements as part of *Tangible assets* under item *Office renovation expenses*. The depreciation period for the renovation expenses of the leased premises is consistent with the lease term.

Appropriations

The difference between the depreciation according to plan and the depreciation of assets in taxation (*Depreciation difference*), and the voluntary credit loss provision (*Taxation based provisions*) are presented under *Total appropriations* in the balance sheet of the Parent Company. In the income statement, the change in depreciation difference and credit loss provision is shown under *Appropriations*. The voluntary credit loss provision and depreciation difference recognised under the Finnish Accounting Standards do not meet the recognition criteria set out in IAS 37 *Provisions, Contingent Liabilities and Contingent Assets*, and the credit loss provision and depreciation difference are thus released in the Consolidated Financial Statements into equity and deferred tax liability in accordance with IAS 12 *Income Tax*. The Parent Company's credit loss provisions are recognised in accordance with tax law (Act on the Taxation of Business Income 46§).

MuniFin

Fair value reserve

According to the Act on Credit Institutions, certain fair value changes are required to be recorded in the fair value reserve within equity. The fair value reserve corresponds to term other comprehensive income used in IFRS 9 and in the Note *1 Summary of significant accounting policies* of the Consolidated Financial Statements. The following fair value changes are presented in fair value reserve: fair value changes of financial assets at fair value through other comprehensive income, changes in fair value due to changes in own credit risk of financial liabilities designated at fair value through profit or loss and Cost-of-Hedging from fair value hedge accounting, consisting of cross currency basis spread which has been separated and excluded from the hedge relationship.

AT1 capital loan

MuniFin has issued an AT1 capital loan, which is an unsecured debenture loan included under Additional Tier 1 capital, with special terms designed to fulfil the requirements set for so-called AT1 capital loans in the Capital Requirements Regulation (EU 575/2013). The loan does not have a maturity date. Interest on the loan may only be paid out of distributable funds in accordance with the terms set in the Capital Requirements Regulation, and the Company will decide whether interest will be paid on the interest payment date. The cancellation of interest payments is final, and unpaid interest will not be added to the loan capital. The loan capital, interest payments and other repayments shall take lower priority than all other higher-level debts in case of the Company's dissolution or bankruptcy. The loan terms and conditions are disclosed in Note *35 Subordinated liabilities*. In the Parent Company's Financial Statements the AT1 capital loan is recognised as debt under the balance sheet item *Subordinated liabilities*. Interest paid on the AT1 capital loan is recognised in the income statement under *Interest expense*. AT1 capital loan is recognised as equity in the Consolidated Financial Statements. Interest payments are recognised in the Consolidated Financial Statements as a deduction from equity in accordance with the issuer's interest payment decisions.

Notes to the income statement

The Company has not combined any items in the income statement under Chapter 2, Section 14(4), of the Ministry of Finance Decree.

Note 2. Interest income and expense

(EUR 1,000)	2021 Interest and similar income	2021 Interest and similar expense	2021 Net	2020 Interest and similar income	2020 Interest and similar expense	2020 Net
Assets						
Amortised cost						
Cash and balances with central banks	-	-38,619	-38,619	-	-23,479	-23,479
Loans and advances to credit institutions	46	-7,841	-7,796	51	-6,030	-5,980
Loans and advances to the public and public sector entities	188,484	-	188,484	193,108	-	193,108
Debt securities	9	-5,335	-5,326	369	-3,247	-2,878
Other assets	1,121	-	1,121	251	-	251
Fair value through fair value reserve						
Debt securities	-	-589	-589	-	-1,063	-1,063
Designated at fair value through profit or loss						
Loans and advances to the public and public sector entities	236	-	236	-	-	-
Debt securities	8,422	-	8,422	13,206	-	13,206
Mandatorily at fair value through profit or loss						
Loans and advances to the public and public sector entities	933	-	933	955	-	955
Debt securities	-	-	-	-	-	-
Fair value through profit or loss						
Derivative contracts at fair value through profit or loss	76,104	-99,734	-23,630	71,077	-95,237	-24,160
Derivative contracts in hedge accounting	-93,724	-	-93,724	-79,399	-	-79,399
Leased assets	6,366	-	6,366	5,986	-	5,986
Interest on non-financial other assets	8	-	8	6	-	6
Interest on assets	**188,005**	**-152,119**	**35,886**	**205,610**	**-129,057**	**76,553**
, of which interest income/expense according to the effective interest method	*189,660*	*-52,385*		*193,779*	*-33,819*	

(EUR 1,000)	2021 Interest and similar income	2021 Interest and similar expense	2021 Net	2020 Interest and similar income	2020 Interest and similar expense	2020 Net
Liabilities						
Amortised cost						
Liabilities to credit institutions	20,118	-949	19,169	8,089	-	8,089
Liabilities to the public and public sector entities	-	-51,503	-51,503	-	-60,239	-60,239
Debt securities issued	1,711	-219,984	-218,273	1,971	-255,909	-253,937
Subordinated liabilities	-	-16,240	-16,240	-	-16,274	-16,274
Other liabilities	-	-2,177	-2,177	-	-2,057	-2,057
Designated at fair value through profit or loss						
Liabilities to credit institutions	-	-30	-30	-	-49	-49
Liabilities to the public and public sector entities	-	-32,726	-32,726	-	-35,494	-35,494
Debt securities issued	14	-78,466	-78,452	-	-139,066	-139,066
Fair value through profit or loss						
Derivative contracts at fair value through profit or loss	293,688	-96,628	197,061	317,265	-138,029	179,236
Derivative contracts in hedge accounting	-	411,252	411,252	-	481,095	481,095
Interest on liabilities	**315,531**	**-87,452**	**228,079**	**327,325**	**-166,021**	**161,304**
, of which interest income/expense according to the effective interest method	*21,829*	*-290,854*		*10,060*	*-334,478*	
Total	**503,536**	**-239,571**	**263,965**	**532,935**	**-295,078**	**237,857**
, of which interest income from leasing operations	*6,366*			*5,986*		
Total interest income excluding interest income from leasing operations	**497,170**			**526,949**		

Interest income on stage 3 financial assets in the expected credit loss (*ECL*) calculations totalled EUR 951 thousand (EUR 548 thousand) during the financial year. These are included in line items *Loans and advances to the public and public sector entities* and *Leased assets*.

Interest expense on other liabilities includes EUR 66 thousand (EUR 85 thousand) of interest on lease liabilities recognised in accordance with IFRS 16 *Leases* standard.

Interest expenses on financial assets at amortised cost on cash and balances with central banks consists of interest paid on central bank deposits and interest on loans and advances to credit institutions of interest on cash collateral receivables. Interest expenses on debt securities consists of interest paid on short-term lending. Negative interest arises on debt securities at fair value through fair value reserve due to the premium / discount amortisation of debt securities and commercial papers. Interest expenses on derivative contracts at fair value through profit or loss consist of negative interest income on derivative contracts that are not included in hedge accounting. The derivative contracts contained in this line item hedge financial assets which are designated at fair value through profit or loss, derivative contracts with municipalities and derivative contracts hedging derivatives with municipalities, in addition to derivative contracts used for hedging interest rate risk of the balance sheet, for which no hedged item has been specified. Derivative contracts in hedge accounting hedge line items *Loans and advances to the public and public sector entities* and *Leased assets*.

Interest income on financial liabilities at amortised cost to credit institutions consists of interest received on cash collateral liabilities as well as on TLTRO III debt and interest income on debt securities issued consists of interest received on ECPs. Interest income on derivative contracts at fair value through profit or loss consists of positive interest expense on derivatives that are not included in hedge accounting. The derivatives contained in this line item hedge financial liabilities which are designated at fair value through profit or loss. Derivative contracts in hedge accounting are used as hedges for liabilities to credit institutions, liabilities to the public and public sector entities and debt securities issued.

Note 3. Net income from leasing operations

(EUR 1,000)	2021	2020
Leasing income	71,463	59,427
Depreciation on leased assets according to plan	-65,111	-53,509
Capital gains on leased assets	15	69
Total	**6,366**	**5,986**

Note 4. Income from equity investments

The Company has not received dividend income from its subsidiary in financial years 2021 and 2020.

Note 5. Commission income and expense

(EUR 1,000) COMMISSION INCOME	2021	2020
From other operations	978	677
Total	**978**	**677**

COMMISSION EXPENSE	2021	2020
Commission fees paid	-248	-664
Other	-4,805	-4,396
Total	**-5,053**	**-5,060**
Net commission income	**-4,075**	**-4,383**

In commission expense line item *Other* includes i.e. paid guarantee fees, custody fees and funding programme update costs.

Note 6. Net income from securities and foreign exchange transactions

2021 (EUR 1,000)	Capital gains and losses (net)	Changes in fair value	Total
Derivative contracts at fair value through profit or loss	910	-204,471	-203,560
Designated at fair value through profit or loss	-	229,029	229,029
Mandatorily at fair value through profit or loss	-23	-2,532	-2,554
Day 1 gain or loss	-	-208	-208
Total net income from securities transactions	**888**	**21,819**	**22,707**
Net income from foreign exchange transactions	**53**	**1,336**	**1,388**
Total	**940**	**23,155**	**24,095**

2020 (EUR 1,000)	Capital gains and losses (net)	Changes in fair value	Total
Derivative contracts at fair value through profit or loss	853	48,555	49,408
Designated at fair value through profit or loss	2,870	-55,499	-52,629
Mandatorily at fair value through profit or loss	-111	-284	-395
Day 1 gain or loss	-	-29	-29
Total net income from securities transactions	**3,612**	**-7,257**	**-3,644**
Net income from foreign exchange transactions	**2,651**	**-6,797**	**-4,146**
Total	**6,263**	**-14,053**	**-7,790**

Note 7. Financial assets and liabilities designated at fair value through profit or loss

FINANCIAL ASSETS AND LIABILITIES DESIGNATED AT FAIR VALUE THROUGH PROFIT OR LOSS (EUR 1,000)	Nominal value 31 Dec 2021	Carrying amount 31 Dec 2021	Nominal value 31 Dec 2020	Carrying amount 31 Dec 2020
Financial assets				
Loans and advances to the public and public sector entities	30,000	38,941	-	-
Debt securities	3,484,223	3,539,074	3,912,451	4,029,859
Total financial assets *	**3,514,223**	**3,578,015**	**3,912,451**	**4,029,859**
Financial liabilities				
Liabilities to credit institutions	5,000	4,787	25,000	24,558
Liabilities to the public sector entitities	1,445,202	1,548,394	1,908,373	1,637,674
Debt securities issued	10,680,831	10,008,299	10,927,113	10,454,282
Total financial liabilities	**12,131,032**	**11,561,479**	**12,860,486**	**12,116,514**

* Financial assets designated at fair value through profit or loss are exposed to credit risk up to the carrying amounts of those securities at 31 Dec 2021 and 31 Dec 2020.

CHANGE IN FAIR VALUE OF FINANCIAL ASSETS DESIGNATED AT FAIR VALUE THROUGH PROFIT OR LOSS (EUR 1,000)	31 Dec 2021	1 Jan 2021	Fair value change recognised in the income statement 2021	, of which due to credit risk	, of which due to market risk
Financial assets					
Loans and advances to the public and public sector entities	-769	-	-769	13	-782
Debt securities	20,226	69,859	-49,633	4,434	-54,067
Total financial assets	**19,457**	**69,859**	**-50,402**	**4,446**	**-54,849**

Financial assets that MuniFin has designated at fair value through profit or loss include debt securities in the liquidity portfolio of which the interest rate risk is hedged with interest rate and cross currency interest rate swaps. The designation is made as it significantly reduces accounting mismatch which would otherwise arise from measuring the derivative contract at fair value through profit or loss and the debt security at fair value through fair value reserve based on the IFRS 9 business model. The Company does not have credit derivatives hedging these financial assets.

CHANGE IN FAIR VALUE OF FINANCIAL LIABILITIES DESIGNATED AT FAIR VALUE THROUGH PROFIT OR LOSS (EUR 1,000)	31 Dec 2021	1 Jan 2021	Fair value change recognised in the income statement 2021	Change in own credit risk recognised in the own credit revaluation reserve 2021	Total fair value change in 2021
Financial liabilities					
Liabilities to credit institutions	187	418	-231	26	-257
Liabilities to the public sector entitities	-152,113	-244,146	92,032	1,729	90,303
Debt securities issued	573,054	385,424	187,630	-1,356	188,986
Total financial liabilities	**421,127**	**141,696**	**279,431**	**400**	**279,031**

NET CHANGE IN FAIR VALUE IN NET INCOME FROM SECURITIES TRANSACTIONS (EUR 1,000)	Cumulative change in fair value 31 Dec 2021	Fair value change recognised in the income statement 2021
Financial liabilities designated at fair value through profit or loss	421,127	279,431
Derivative contracts at fair value through profit or loss hedging financial liabilities	-435,559	-267,712
Net change in fair value	**-14,432**	**11,719**

MuniFin has designated short-term debt instruments denominated in foreign currencies, which have been hedged with FX swaps, at fair value through profit or loss. The designation reduces accounting mismatch which would otherwise arise between the measurement of the derivative and financial liability. The financial liabilities designated at fair value through profit or loss consist of financial liabilities, which have been hedged according to the Company's risk management policy, but which are not subject to IFRS 9 fair value hedge accounting. The fair value changes of the financial liabilities impact the income statement, but as they have been hedged, the expected profit or loss is restricted to interest. The table above describes the net impact of these financial liabilities and their hedges on the income statement.

When a financial liability is designated at fair value through profit or loss, the fair value change, with exception to MuniFin's own credit risk that is presented as change of the *Own credit revaluation reserve*, is presented in *Net income from securities transactions*.

MuniFin applies the income approach of IFRS 13 to the separation of fair value changes related to changes in own credit risk from the fair value changes of the financial liability. For the majority of financial liabilities designated at fair value through profit or loss, no market price is available as there is no active secondary market. The methodology for separation of own credit risk utilises MuniFin's benchmark curves, cross currency basis spreads and credit spreads of MuniFin's issued debt securities on the primary market as input. Based on the aforementioned inputs, valuation curves can be constructed for various reporting periods for valuing financial liabilities designated at fair value through profit or loss. By comparing fair values calculated using the trade date and reporting date, the impact of change in own credit risk on the fair value of the financial liability can be determined.

Financial liabilities designated at fair value through profit or loss are not traded.

CHANGE IN FAIR VALUE OF FINANCIAL ASSETS DESIGNATED AT FAIR VALUE THROUGH PROFIT OR LOSS (EUR 1,000)	31 Dec 2020	1 Jan 2020	Fair value change recognised in the income statement 2020	, of which due to credit risk	, of which due to market risk
Financial assets					
Debt securities	69,859	53,109	16,750	3,203	13,547
Total financial assets	**69,859**	**53,109**	**16,750**	**3,203**	**13,547**

CHANGE IN FAIR VALUE OF FINANCIAL LIABILITIES DESIGNATED AT FAIR VALUE THROUGH PROFIT OR LOSS (EUR 1,000)	31 Dec 2020	1 Jan 2020	Fair value change recognised in the income statement 2020	Change in own credit risk recognised in the own credit revaluation reserve 2020	Total fair value change in 2020
Financial liabilities					
Liabilities to credit institutions	418	-	418	-	418
Liabilities to the public sector entitities	-244,146	-218,911	-25,235	-813	-26,048
Debt securities issued	385,424	328,802	56,622	-15,739	40,883
Total financial liabilities	**141,696**	**109,891**	**31,805**	**-16,551**	**15,254**

NET CHANGE IN FAIR VALUE IN NET INCOME FROM SECURITIES TRANSACTIONS (EUR 1,000)	Cumulative change in fair value 31 Dec 2020	Fair value change recognised in the income statement 2020
Financial liabilities designated at fair value through profit or loss	141,696	31,805
Derivative contracts at fair value through profit or loss hedging financial liabilities	-167,847	-36,391
Net change in fair value	**-26,151**	**-4,586**

Note 8. Net income on financial assets at fair value through fair value reserve

(EUR 1,000)	2021	2020
Capital gains from financial assets	-	-
Capital losses from financial assets	-	-3
Unrealised gains transferred from fair value reserve	-	-
Unrealised losses transferred from fair value reserve	-	-
Total	**-**	**-3**

Note 9. Net income from hedge accounting

(EUR 1,000)	2021	2020
Net income from hedging instruments	-474,604	216,679
Net income from hedged items	480,729	-210,455
IBOR reform related compensations *	-1,302	-2,041
Total	**4,823**	**4,183**

* Compensations relate to the IBOR reform of which more information is presented in the accounting policies of the Consolidated Financial Statements (Note *1*) in Section *23. IBOR reform.*

Unrealised gains and losses include fair value of the risks to which fair value hedge accounting is applied and which are measured at fair value. The foreign exchange difference of both hedging instruments and hedged items are presented under item *Net income from foreign exchange transactions* in Note *6*. A specification of the net income from hedge accounting is presented in Note *25*.

Note 10. Impact of the reclassified financial assets and liabilities

The following table shows the impact of reclassification of financial assets in the implementation of IFRS 9 standard (as of 1 Jan 2018) from at fair value through profit or loss under IAS 39 into amortised cost under IFRS 9 standard. MuniFin did not reclassify any financial liabilities from fair value through profit or loss into amortised cost.

FINANCIAL ASSETS (EUR 1,000)	Original measurement category under IAS 39	New measurement category under IFRS 9	Fair value 31 Dec 2021	Fair value gain or loss for the financial year *	EIR determined as at 1 Jan 2018 **	Interest revenue recognised during 2021
Loans and advances to the public and public sector entities	Fair value option	Amortised cost	99,253	-1,589	0.14%	422

* The fair value gain or loss that would have been recognised in the income statement during the financial year if the financial assets had not been reclassified.
** Effective interest rate determined on the date of initial application.

FINANCIAL ASSETS (EUR 1,000)	Original measurement category under IAS 39	New measurement category under IFRS 9	Fair value 31 Dec 2020	Fair value gain or loss for the financial year	EIR determined as at 1 Jan 2018	Interest revenue recognised during 2020
Loans and advances to the public and public sector entities	Fair value option	Amortised cost	113,143	1,119	0.14%	187

Note 11. Other operating income

(EUR 1,000)	2021	2020
Other income from credit institution operations	132	165
Total	**132**	**165**

Note 12. Depreciation and impairment on tangible and intangible assets

(EUR 1,000)	2021	2020
Depreciation		
Depreciation on tangible assets	-2,826	-2,394
Depreciation on intangible assets	-2,783	-3,285
Total depreciation	**-5,609**	**-5,679**
Impairment		
Impairment on intangible assets *	-10,482	-
Total impairment	**-10,482**	**-**
Total depreciation and impairment	**-16,091**	**-5,679**

* Line item includes a non-recurring item of EUR 10,482 thousand, which consists of impairment on on-going IT system implementation.

Note 13. Other operating expenses

(EUR 1,000)	2021	2020
Regulatory expenses		
Contributions to the Single Resolution Fund	-6,737	-5,163
Other administrative and supervisory fees	-2,352	-2,227
Rental expenses	-133	-381
External services	-4,368	-4,466
Credit rating fees	-753	-894
Audit fees	-422	-389
Insurances	-575	-348
Other expenses from credit institution operations	-535	-11
Total	**-15,876**	**-13,880**

Paid fees to the auditor (KPMG Oy Ab) in 2021 totalled EUR 422 thousand (EUR 389 thousand) for audit, EUR 21 thousand (EUR 13 thousand) for tax services and EUR 181 thousand (EUR 128 thousand) for other services. There were no assigments as referred to in section 1, subsection 1, paragraph 2 of the Auditing Act in 2021 (EUR 9 thousand).
Audit and other fees paid to the audit firm are specified in Note *51*.

Note 14. Credit losses and impairments on financial assets

MuniFin's credit risks are described in the Consolidated Financial Statements' Note *2 Risk management principles and the Group's risk position* in Section *7. Credit Risk*. The accounting policies of the expected credit loss calculations and impairment stages are described in the accounting policies of the Consolidated Financial Statements (Note *1*) in Section *9. Impairment of financial assets*.

CREDIT LOSSES AND IMPAIRMENTS 2021 (EUR 1,000)	Expected credit losses			Realised credit losses		
	Additions	Subtractions	Recognised in the income statement	Additions	Subtractions	Recognised in the income statement
Expected credit losses on financial assets at amortised cost						
Cash and balances with central banks	0	0	0	-	-	-
Loans and advances to credit institutions	-53	14	-39	-	-	-
Loans and advances to the public and public sector entities	-713	655	-58	-	-	-
Leased assets	0	1	0	-	-	-
Debt securities	0	0	0	-	-	-
Cash collateral to CCPs in Other assets	-9	0	-9	-	-	-
Credit commitments (off-balance sheet)	-2	3	1	-	-	-
Total expected credit losses on financial assets at amortised cost	**-778**	**674**	**-105**	**-**	**-**	**-**
Expected credit losses and impairments on other financial assets						
Debt securities at fair value through fair value reserve	-18	19	0	-	-	-
Guarantee receivables from the public and public sector entities in Other assets	-	-	-	-	-	-
Total expected credit losses and impairments on other financial assets	**-18**	**19**	**0**	**-**	**-**	**-**
Total	**-797**	**692**	**-104**	**-**	**-**	**-**

CREDIT LOSSES AND IMPAIRMENTS 2020 (EUR 1,000)	Expected credit losses			Realised credit losses		
	Additions	Subtractions	Recognised in the income statement	Additions	Subtractions	Recognised in the income statement
Expected credit losses on financial assets at amortised cost						
Cash and balances with central banks	0	0	0	-	-	-
Loans and advances to credit institutions	-36	21	-15	-	-	-
Loans and advances to the public and public sector entities	-1,026	121	-904	-	-	-
Leased assets	-1	0	-1	-	-	-
Debt securities	0	0	0	-	-	-
Cash collateral to CCPs in Other assets	-2	2	0	-	-	-
Credit commitments (off-balance sheet)	-3	3	0	-	-	-
Total expected credit losses on financial assets at amortised cost	**-1,068**	**148**	**-920**	**-**	**-**	**-**
Expected credit losses and impairments on other financial assets						
Debt securities at fair value through fair value reserve	-29	92	62	-	-	-
Guarantee receivables from the public and public sector entities in Other assets	-	-	-	-	-	-
Total expected credit losses and impairments on other financial assets	**-29**	**92**	**62**	**-**	**-**	**-**
Total	**-1,097**	**240**	**-857**	**-**	**-**	**-**

Note 15. Information on business areas and geographical market

Municipality Finance Plc's operating segment is credit institution operations and the market for lending is Finland.

Notes to the balance sheet

The Company has not combined any items on the balance sheet under Chapter 2, Section 14(4), of the Ministry of Finance Decree.

Note 16. Financial assets and liabilities

FINANCIAL ASSETS 31 Dec 2021 (EUR 1,000)	Amortised cost	Fair value through fair value reserve	Designated at fair value through profit or loss	Mandatorily at fair value through profit or loss	Fair value through profit or loss	Total	Fair value
Cash and balances with central banks	8,399,045	-	-	-	-	8,399,045	8,399,045
Loans and advances to credit institutions	1,416,564	-	-	-	-	1,416,564	1,416,564
Loans and advances to the public and public sector entities	27,805,752	-	38,941	35,204	-	27,879,897	30,050,779
Leased assets *	242,936	-	-	-	-	242,936	255,907
Debt securities	1,088,888	213,466	3,539,074	-	-	4,841,428	4,841,792
Shares and participations	-	-	-	-	-	-	-
Shares and participations in Group companies	-	-	-	656	-	656	656
Derivative contracts at fair value through profit or loss	-	-	-	-	761,023	761,023	761,023
Derivative contracts in hedge accounting	-	-	-	-	1,238,653	1,238,653	1,238,653
Other assets **	238,930	-	-	-	-	238,930	238,930
Total	**39,192,115**	**213,466**	**3,578,015**	**35,860**	**1,999,676**	**45,019,131**	**47,203,349**

* Line item includes leased assets for which MuniFin applies fair value hedge accounting. Unhedged leased assets are not presented in this Note of financial assets and liabilities as leased assets are not regarded as financial assets for the purpose of IFRS 9 classification.

** Line item includes cash collateral given to central counterparties.

FINANCIAL LIABILITIES 31 Dec 2021 (EUR 1,000)	Amortised cost	Designated at fair value through profit or loss	Fair value through profit or loss	Total	Fair value
Liabilities to credit institutions	2,796,230	4,787	-	2,801,016	2,800,913
Liabilities to the public and public sector entities	1,776,291	1,548,394	-	3,324,685	3,344,334
Debt securities issued	25,319,226	10,008,299	-	35,327,525	35,434,600
Derivative contracts at fair value through profit or loss	-	-	1,114,003	1,114,003	1,114,003
Derivative contracts in hedge accounting	-	-	1,110,291	1,110,291	1,110,291
Other liabilities *	337,526	-	-	337,526	337,526
Subordinated liabilities	349,878	-	-	349,878	354,683
Total	**30,579,151**	**11,561,479**	**2,224,294**	**44,364,925**	**44,496,351**

* Line item includes EUR 333,295 thousand of cash collateral received from central counterparties and EUR 4,231 thousand of lease liabilities in accordance with IFRS 16 standard.

FINANCIAL ASSETS 31 Dec 2020 (EUR 1,000)	Amortised cost	Fair value through fair value reserve	Designated at fair value through profit or loss	Mandatorily at fair value through profit or loss	Fair value through profit or loss	Total	Fair value
Cash and balances with central banks	5,565,801	-	-	-	-	5,565,801	5,565,801
Loans and advances to credit institutions	1,840,980	-	-	-	-	1,840,980	1,840,980
Loans and advances to the public and public sector entities	26,886,947	-	-	44,438	-	26,931,384	29,415,707
Leased assets	215,444	-	-	-	-	215,444	228,011
Debt securities	1,310,305	423,050	4,029,859	-	-	5,763,214	5,763,793
Shares and participations	-	-	-	27	-	27	27
Shares and participations in Group companies	-	-	-	656	-	656	656
Derivative contracts at fair value through profit or loss	-	-	-	-	833,293	833,293	833,293
Derivative contracts in hedge accounting	-	-	-	-	1,524,870	1,524,870	1,524,870
Other assets	243,269	-	-	-	-	243,269	243,269
Total	**36,062,746**	**423,050**	**4,029,859**	**45,121**	**2,358,163**	**42,918,938**	**45,416,406**

FINANCIAL LIABILITIES 31 Dec 2020 (EUR 1,000)	Amortised cost	Designated at fair value through profit or loss	Fair value through profit or loss	Total	Fair value
Liabilities to credit institutions	1,976,920	24,558	-	2,001,478	2,001,414
Liabilities to the public and public sector entities	2,246,352	1,637,674	-	3,884,026	3,906,619
Debt securities issued	22,457,624	10,454,282	-	32,911,906	32,968,471
Derivative contracts at fair value through profit or loss	-	-	1,403,900	1,403,900	1,403,900
Derivative contracts in hedge accounting	-	-	1,456,670	1,456,670	1,456,670
Other liabilities *	236,840	-	-	236,840	236,840
Subordinated liabilities	349,388	-	-	349,388	367,455
Total	**27,267,124**	**12,116,514**	**2,860,570**	**42,244,209**	**42,341,369**

* Line item includes EUR 231,180 thousand of cash collateral received from central counterparties and EUR 5,660 thousand of lease liabilities in accordance with IFRS 16 standard.

Note 17. Cash and cash equivalents

Cash and cash equivalents include the following balance sheet items:
Cash and balances with central banks and *Loans and advances to credit institutions payable on demand.*

(EUR 1,000)	31 Dec 2021	31 Dec 2020
Cash and balances with central banks	8,399,045	5,565,801
Loans and advances to credit institutions payable on demand	35,712	164,005
Total cash and cash equivalents	**8,434,757**	**5,729,806**

Note 18. Loans and advances to credit institutions

31 Dec 2021 (EUR 1,000)	Payable on demand	Other than payable on demand	Expected credit losses	Total
Receivables from central bank	-	35,984	0	35,984
Domestic credit institutions	12,382	34,300	-8	46,674
Foreign credit institutions	23,330	1,310,650	-74	1,333,906
Total	**35,712**	**1,380,934**	**-82**	**1,416,564**

31 Dec 2020 (EUR 1,000)	Payable on demand	Other than payable on demand	Expected credit losses	Total
Receivables from central bank	-	34,918	0	34,918
Domestic credit institutions	88,763	98,300	-11	187,052
Foreign credit institutions	75,242	1,543,800	-32	1,619,011
Total	**164,005**	**1,677,018**	**-43**	**1,840,980**

Note 19. Loans and advances to the public and public sector entities

	31 Dec 2021		31 Dec 2020	
(EUR 1,000)	Total	, of which expected credit losses	Total	, of which expected credit losses
Enterprises and housing corporations	14,665,818	-1,002	13,794,905	-983
Public sector entities	12,847,172	-88	12,772,899	-38
Non-profit organisations	366,908	-57	363,580	-67
Total	**27,879,897**	**-1,147**	**26,931,384**	**-1,089**

Note 20. Debt securities

DEBT SECURITIES ISSUED BY PUBLIC SECTOR ENTITIES 31 Dec 2021 (EUR 1,000)	Publicly quoted	Other	Total	Expected credit losses *
Amortised cost	**-**	**930,252**	**930,252**	**0**
Municipal commercial papers	-	930,252	930,252	0
Fair value through fair value reserve	**74,959**	**-**	**74,959**	**1**
Bonds issued by other public sector entities	74,959	-	74,959	1
Designated at fair value through profit or loss	**1,703,953**	**-**	**1,703,953**	**-**
Government bonds	180,437	-	180,437	-
Bonds issued by other public sector entities	1,523,516	-	1,523,516	-
Total	**1,778,912**	**930,252**	**2,709,164**	**1**
, of which eligible for central bank refinancing	*1,572,169*	-	*1,572,169*	*0*

DEBT SECURITIES ISSUED BY OTHER THAN PUBLIC SECTOR ENTITIES 31 Dec 2021 (EUR 1,000)	Publicly quoted	Other	Total	Expected credit losses *
Amortised cost	**-**	**158,636**	**158,636**	**0**
Commercial papers	-	158,636	158,636	0
Fair value through fair value reserve	**138,506**	**-**	**138,506**	**41**
Bank bonds	138,506	-	138,506	41
Designated at fair value through profit or loss	**1,835,121**	**-**	**1,835,121**	**-**
Bank bonds	1,835,121	-	1,835,121	-
Total	**1,973,627**	**158,636**	**2,132,263**	**41**
, of which eligible for central bank refinancing	*1,739,885*	-	*1,739,885*	*30*

31 Dec 2021 (EUR 1,000)	Publicly quoted	Other	Total	Expected credit losses *
Debt securities total	**3,752,539**	**1,088,888**	**4,841,428**	**41**

* The expected credit losses have been recognised on debt securities, which have been classified at fair value through fair value reserve. Therefore, the expected credit loss is not recognised as a deduction from the gross carrying amount of the debt securities in the balance sheet, but from fair value reserve as described in the accounting policies of the Consolidated Financial Statements (Note 1) in Section *9.4 Presentation of allowance for ECL in the statement of financial position.*

Debt securities do not contain any securities given as collateral for reverse repo agreements at the financial statement date 31 Dec 2021.

At the financial statement date 31 Dec 2021 MuniFin has no debt securities measured mandatorily at fair value through profit or loss.

DEBT SECURITIES ISSUED BY PUBLIC SECTOR ENTITIES 31 Dec 2020 (EUR 1,000)	Publicly quoted	Other	Total	Expected credit losses
Amortised cost	**-**	**1,199,621**	**1,199,621**	**0**
Municipal commercial papers	-	1,199,621	1,199,621	0
Fair value through fair value reserve	**124,157**	**-**	**124,157**	**2**
Bonds issued by other public sector entities	124,157	-	124,157	2
Designated at fair value through profit or loss	**1,869,431**	**-**	**1,869,431**	**-**
Government bonds	266,874	-	266,874	-
Bonds issued by other public sector entities	1,602,557	-	1,602,557	-
Total	**1,993,588**	**1,199,621**	**3,193,209**	**3**
, of which eligible for central bank refinancing	*1,780,922*	-	*1,780,922*	*2*

DEBT SECURITIES ISSUED BY OTHER THAN PUBLIC SECTOR ENTITIES 31 Dec 2020 (EUR 1,000)	Publicly quoted	Other	Total	Expected credit losses
Amortised cost	**-**	**110,684**	**110,684**	**0**
Commercial papers	-	110,684	110,684	0
Fair value through fair value reserve	**298,893**	**-**	**298,893**	**39**
Bank bonds	298,893	-	298,893	39
Designated at fair value through profit or loss	**2,160,427**	**-**	**2,160,427**	**-**
Bank bonds	2,160,427	-	2,160,427	-
Total	**2,459,320**	**110,684**	**2,570,005**	**39**
, of which eligible for central bank refinancing	*2,169,064*	-	*2,169,064*	*25*

31 Dec 2020 (EUR 1,000)	Publicly quoted	Other	Total	Expected credit losses
Debt securities total	**4,452,908**	**1,310,305**	**5,763,214**	**42**

Note 21. Leased assets

(EUR 1,000)	31 Dec 2021	31 Dec 2020
Prepayments	500,763	415,943
Machinery and equipment	267,337	230,343
Fixed assets and buildings	565,732	444,378
Other assets	315	278
Expected credit losses	-2	-2
Total	**1,334,146**	**1,090,940**

Note 22. Credit risks of financial assets and other commitments

MuniFin's credit risks are described in the Consolidated Financial Statements's Note *2 Risk management principles and the Group's risk position* in Section *7. Credit Risk*. The expected credit loss calculation method and impairment stages are described in the accounting policies of the Consolidated Financial Statements (Note *1*) in Section *9. Impairment of financial assets*.

The following table presents exposures under expected credit loss calculations by asset groups and impairment stages.

EXPOSURES BY ASSET GROUPS AND IMPAIRMENT STAGES

31 Dec 2021 (EUR 1,000)	Not credit-impaired				Credit-impaired		Total	
	Stage 1		Stage 2		Stage 3 *			
	Gross carrying amount	12-month ECL	Gross carrying amount	Lifetime ECL	Gross carrying amount	Lifetime ECL	Gross carrying amount	Expected credit losses
Cash and balances with central banks at amortised cost	8,399,045	0	-	-	-	-	8,399,045	0
Loans and advances to credit institutions at amortised cost	1,416,564	-82	-	-	-	-	1,416,564	-82
Loans and advances to the public and public sector entities at amortised cost	27,457,506	-23	220,730	-578	127,517	-546	27,805,752	-1,147
Leased assets at amortised cost	1,333,987	-2	-	-	159	-	1,334,146	-2
Debt securities at amortised cost	1,079,338	0	9,550	0	-	-	1,088,888	0
Debt securities at fair value through fair value reserve	213,466	-41	-	-	-	-	213,466	-41
Cash collateral to CCPs in Other assets at amortised cost	238,930	-13	-	-	-	-	238,930	-13
Guarantee receivables from the public and public sector entities in Other assets	1,752	-	-	-	-	-	1,752	-
Credit commitments (off-balance sheet)	2,585,201	-4	3,167	0	4,506	0	2,592,873	-4
Total	**42,725,787**	**-166**	**233,447**	**-578**	**132,182**	**-546**	**43,091,415**	**-1,289**

* MuniFin has collateral and guarantee arrangements that fully cover the stage 3 receivables as described in the Consolidated Financial Statements' Note *2 Risk management principles and the Group's risk position* in Section *7. Credit risk*. MuniFin's management expects that all the stage 3 receivables will be recovered and no final credit loss will emerge. Stage 3 receivables include EUR 2,345 thousand (EUR 2,404 thousand) of originated credit impaired receivables (*purchased or originated credit impaired, POCI*). Expected credit losses for the POCI receivables amount to EUR 7 thousand (EUR 4 thousand).

EXPOSURES BY ASSET GROUPS AND IMPAIRMENT STAGES

31 Dec 2020 (EUR 1,000)	Not credit-impaired				Credit-impaired		Total	
	Stage 1		Stage 2		Stage 3			
	Gross carrying amount	12-month ECL	Gross carrying amount	Lifetime ECL	Gross carrying amount	Lifetime ECL	Gross carrying amount	Expected credit losses
Cash and balances with central banks at amortised cost	5,565,801	0	-	-	-	-	5,565,801	0
Loans and advances to credit institutions at amortised cost	1,840,980	-43	-	-	-	-	1,840,980	-43
Loans and advances to the public and public sector entities at amortised cost	26,606,595	-30	145,061	-835	135,291	-224	26,886,947	-1,089
Leased assets at amortised cost	1,090,768	-2	-	-	173	-	1,090,940	-2
Debt securities at amortised cost	1,303,105	0	7,200	-	-	-	1,310,305	0
Debt securities at fair value through fair value reserve	423,050	-42	-	-	-	-	423,050	-42
Cash collateral to CCPs in Other assets at amortised cost	243,269	-4	-	-	-	-	243,269	-4
Guarantee receivables from the public and public sector entities in Other assets	1,606	-	-	-	-	-	1,606	-
Credit commitments (off-balance sheet)	2,348,271	-4	4,506	0	1,201	0	2,353,978	-4
Total	**39,423,445**	**-126**	**156,767**	**-835**	**136,665**	**-224**	**39,716,876**	**-1,184**

The following table presents summary of total changes and reconciliation of expected credit losses by impairment stages during the financial year.

TOTAL EXPECTED CREDIT LOSSES BY IMPAIRMENT STAGES	Not credit-impaired		Credit-impaired	Total	
	Stage 1	Stage 2	Stage 3		
(EUR 1,000)	12-month ECL	Lifetime ECL	Lifetime ECL	ECL	Gross carrying amount
Opening balance 1 Jan 2021	**-126**	**-835**	**-224**	**-1,184**	**39,716,876**
New assets originated or purchased	-41	56	-13	3	9,637,333
Assets derecognised or repaid (excluding write-offs)	46	101	55	203	-6,262,486
Transfers to Stage 1	0	18	-	18	18
Transfers to Stage 2	0	-203	60	-143	-143
Transfers to Stage 3	0	1	-1	1	1
Additional provision (*Management overlay*)	-	340	-430	-90	-90
Changes to contractual cash flows due to modifications not resulting in derecognition	-	-	-	-	-
Changes to models * and inputs ** used for ECL calculations	-46	-56	6	-96	-94
Write-offs	-	-	-	-	-
Recoveries	-	-	-	-	-
Total 31 Dec 2021	**-166**	**-578**	**-546**	**-1,289**	**43,091,415**

* Represents changes in the model.

** Represents changes to model parameters (e.g. GDP rates, unemployment rates)

In 2021, MuniFin made changes to macro scenarios and loss given default parameters in expected credit loss calculations, which increased ECL by EUR 96 thousand. There were no changes in ECL model.

MuniFin has recorded an additional discretionary provision (*management overlay*) of EUR 430 thousand to take into account ECL model changes that will take place in 2022. During 2022, MuniFin will further develop loss given default (*LGD*) calculation of mortgage loans as well as lifetime ECL calculations. As this change is expected to have an impact on ECL amount, MuniFin's management decided to record an additional discretionary provision based on a group-specific assessment. The additional provision relates to the balance sheet line item *Loans and advances to the public and public sector entities*. The additional provision has not been allocated to contract level.

The assessment of the need for additional provision is based on the fact that MuniFin's management estimates that due to the model changes, part of the exposures would transfer to stage 2 in the expected credit loss calculations when ECL is calculated for lifetime of the contract instead of 12-month ECL, or in some cases LGD would increase. In addition, LGD model changes are expected to have an effect on the amount of ECL in stage 3. More detailed information on the contracts subject to the additional provision will be obtained as the model change progresses, so that any change in ECL can be allocated to individual contracts and determined according to the normal ECL calculation process.

MuniFin's total credit risk has remained low and the amount of ECL remains low. The finances of municipal customers developed mainly positively in 2020 and 2021 due to the central government's COVID-19 support package among other things. For companies, the situation remained relatively stable during the year. MuniFin's customer exposures have zero risk weight in the capital adequacy calculation because they are from Finnish municipalities or involve a municipal guarantee or a state deficiency guarantee supplementing the real estate collateral as described in the Consolidated Financial Statements' Note *2 Risk management principles and the Group's risk position* under Section *7. Credit risk*. The Company's management estimates that all receivables will be recovered in full and therefore no final credit loss will arise. On 31 December 2021, MuniFin has total of EUR 19 million (EUR 24 million) in guarantee receivables from the public sector due to the insolvency of customers. Credit risk of the liquidity portfolio has remained on a good quality level with the average rating of AA+ (AA+).

TOTAL EXPECTED CREDIT LOSSES BY IMPAIRMENT STAGES	Not credit-impaired		Credit-impaired	Total	
	Stage 1	Stage 2	Stage 3		
(EUR 1,000)	12-month ECL	Lifetime ECL	Lifetime ECL	ECL	Gross carrying amount
Opening balance 1 Jan 2020	**-167**	**-80**	**-80**	**-327**	**34,771,414**
New assets originated or purchased	-83	-30	-13	-126	10,624,618
Assets derecognised or repaid (excluding write-offs)	119	10	43	173	-5,678,253
Transfers to Stage 1	0	30	-	30	30
Transfers to Stage 2	0	-50	9	-41	-41
Transfers to Stage 3	0	19	-7	12	12
Additional provision (*Management overlay*)	-	-340	-	-340	-340
Changes to contractual cash flows due to modifications not resulting in derecognition	-	-	-	-	-
Changes to models and inputs used for ECL calculations	5	-395	-176	-566	-564
Write-offs	-	-	-	-	-
Recoveries	-	-	-	-	-
Total 31 Dec 2020	**-126**	**-835**	**-224**	**-1,184**	**39,716,876**

In 2020, MuniFin has specified the methods for estimating and modeling expected credit losses as well as the assumptions used in the model. The change in the modeling methodology affected the modeling of the probability of default over the lifetime of the loan and thus affected the amount of expected credit losses on stages 2 and 3, which increased by approximately EUR 0.5 million due to the change.

In 2020, MuniFin recorded an additional discretionary provision (*management overlay*) of EUR 340 thousand to take into account the financial effects of the COVID-19 pandemic. Year 2020 can be said to have been financially exceptionally weak for certain customer segments such as the arts sector and the operation of sports halls. However, the deteriorating financial situation did not yet reflect in MuniFin's internal risk ratings, which were mainly updated based on the 2019 financial statements. As the credit risk of certain customer segments was estimated to have increased since then, MuniFin's management decided to record an additional discretionary provision based on a group-specific assessment. The additional provision relates to the balance sheet line item *Loans and advances to the public and public sector entities*. The additional provision was not allocated to contract level. More detailed information on the financial condition of the companies subject to the additional provision was received in the second half of 2021, and the possible change in ECL could be allocated to the contracts through updated internal credit ratings and determined according to the normal ECL calculation process. There was no longer need for the additional provision based on management judgement and it was decided to be removed in the second half of the year 2021. The impact of the COVID-19 pandemic for MuniFin's ECL remained low.

The following tables present changes and reconciliation of expected credit losses by impairment stages and asset groups during the financial year.

EXPECTED CREDIT LOSSES ON CASH AND BALANCES WITH CENTRAL BANKS AT AMORTISED COST BY IMPAIRMENT STAGES	Not credit-impaired		Credit-impaired	Total	
	Stage 1	Stage 2	Stage 3		
(EUR 1,000)	12-month ECL	Lifetime ECL	Lifetime ECL	ECL	Gross carrying amount
Opening balance 1 Jan 2021	**0**	**-**	**-**	**0**	**5,565,801**
New assets originated or purchased	0	-	-	0	2,833,244
Assets derecognised or repaid (excluding write-offs)	0	-	-	0	0
Transfers to Stage 1	-	-	-	-	-
Transfers to Stage 2	-	-	-	-	-
Transfers to Stage 3	-	-	-	-	-
Changes to models and inputs used for ECL calculations	-	-	-	-	-
Total 31 Dec 2021	**0**	**-**	**-**	**0**	**8,399,045**

EXPECTED CREDIT LOSSES ON LOANS AND ADVANCES TO CREDIT INSTITUTIONS AT AMORTISED COST BY IMPAIRMENT STAGES	Not credit-impaired		Credit-impaired	Total	
	Stage 1	Stage 2	Stage 3		
(EUR 1,000)	12-month ECL	Lifetime ECL	Lifetime ECL	ECL	Gross carrying amount
Opening balance 1 Jan 2021	**-43**	**-**	**-**	**-43**	**1,840,980**
New assets originated or purchased	-10	-	-	-10	353,939
Assets derecognised or repaid (excluding write-offs)	14	-	-	14	-778,312
Transfers to Stage 1	-	-	-	-	-
Transfers to Stage 2	-	-	-	-	-
Transfers to Stage 3	-	-	-	-	-
Changes to models and inputs used for ECL calculations	-43	-	-	-43	-43
Total 31 Dec 2021	**-82**	**-**	**-**	**-82**	**1,416,564**

EXPECTED CREDIT LOSSES ON LOANS AND ADVANCES TO THE PUBLIC AND PUBLIC SECTOR ENTITIES AT AMORTISED COST BY IMPAIRMENT STAGES	Not credit-impaired		Credit-impaired	Total	
	Stage 1	Stage 2	Stage 3		
(EUR 1,000)	12-month ECL	Lifetime ECL	Lifetime ECL	ECL	Gross carrying amount
Opening balance 1 Jan 2021	**-30**	**-835**	**-224**	**-1,089**	**26,886,947**
New assets originated or purchased	-11	56	-13	33	3,238,833
Assets derecognised or repaid (excluding write-offs)	10	101	55	167	-2,319,771
Transfers to Stage 1	0	18	-	18	18
Transfers to Stage 2	0	-203	60	-143	-143
Transfers to Stage 3	-	1	-1	1	1
Additional provision (*Management overlay*)	-	340	-430	-90	-90
Changes to contractual cash flows due to modifications not resulting in derecognition	-	-	-	-	-
Changes to models and inputs used for ECL calculations	7	-56	6	-44	-44
Write-offs	-	-	-	-	-
Total 31 Dec 2021	**-23**	**-578**	**-546**	**-1,147**	**27,805,752**

EXPECTED CREDIT LOSSES ON LEASED ASSETS AT AMORTISED COST BY IMPAIRMENT STAGES	Not credit-impaired		Credit-impaired	Total	
	Stage 1	Stage 2	Stage 3		
(EUR 1,000)	12-month ECL	Lifetime ECL	Lifetime ECL	ECL	Gross carrying amount
Opening balance 1 Jan 2021	**-2**	**0**	**0**	**-2**	**1,090,940**
New assets originated or purchased	0	-	-	0	310,062
Assets derecognised or repaid (excluding write-offs)	0	-	0	0	-66,857
Transfers to Stage 1	-	-	-	-	-
Transfers to Stage 2	-	-	-	-	-
Transfers to Stage 3	-	-	-	-	-
Changes to models and inputs used for ECL calculations	1	-	0	1	1
Total 31 Dec 2021	**-2**	**0**	**0**	**-2**	**1,334,146**

EXPECTED CREDIT LOSSES ON DEBT SECURITIES AT AMORTISED COST BY IMPAIRMENT STAGES	Not credit-impaired		Credit-impaired	Total	
	Stage 1	Stage 2	Stage 3		
(EUR 1,000)	12-month ECL	Lifetime ECL	Lifetime ECL	ECL	Gross carrying amount
Opening balance 1 Jan 2021	**0**	**0**	**-**	**0**	**1,310,305**
New assets originated or purchased	0	0	-	0	1,088,888
Assets derecognised or repaid (excluding write-offs)	0	0	-	0	-1,310,305
Transfers to Stage 1	-	-	-	-	-
Transfers to Stage 2	-	-	-	-	-
Transfers to Stage 3	-	-	-	-	-
Changes to models and inputs used for ECL calculations	-	-	-	-	-
Total 31 Dec 2021	**0**	**0**	**-**	**0**	**1,088,888**

EXPECTED CREDIT LOSSES ON DEBT SECURITIES AT FAIR VALUE THROUGH FAIR VALUE RESERVE BY IMPAIRMENT STAGES	Not credit-impaired		Credit-impaired	Total	
	Stage 1	Stage 2	Stage 3		
(EUR 1,000)	12-month ECL	Lifetime ECL	Lifetime ECL	ECL	Gross carrying amount
Opening balance 1 Jan 2021	**-42**	**-**	**-**	**-42**	**423,050**
New assets originated or purchased	-16	-	-	-16	28,176
Assets derecognised or repaid (excluding write-offs)	19	-	-	19	-237,760
Transfers to Stage 1	-	-	-	-	
Transfers to Stage 2	-	-	-	-	
Transfers to Stage 3	-	-	-	-	
Changes to models and inputs used for ECL calculations	-2	-	-	-2	
Total 31 Dec 2021	**-41**	**-**	**-**	**-41**	**213,466**

The loss allowance on debt instruments classified at fair value through fair value reserve is recognised in the fair value reserve. The accumulated loss allowance is recognised to the profit or loss upon derecognition of the assets. More details regarding presentation of allowance for expected credit losses is presented in the accounting policies of the Consolidated Financial Statements (Note *1*) in Section *9.4 Presentation of allowance for ECL in the statement of financial position*.

EXPECTED CREDIT LOSSES ON CASH COLLATERAL TO CCPS IN OTHER ASSETS AT AMORTISED COST BY IMPAIRMENT STAGES

	Not credit-impaired		Credit-impaired	Total	
	Stage 1	Stage 2	Stage 3		
(EUR 1,000)	12-month ECL	Lifetime ECL	Lifetime ECL	ECL	Gross carrying amount
Opening balance 1 Jan 2021	**-4**	**-**	**-**	**-4**	**243,269**
New assets originated or purchased	-1	-	-	-1	22,942
Assets derecognised or repaid (excluding write-offs)	0	-	-	0	-27,272
Transfers to Stage 1	-	-	-	-	-
Transfers to Stage 2	-	-	-	-	-
Transfers to Stage 3	-	-	-	-	-
Changes to models and inputs used for ECL calculations	-8	-	-	-8	-8
Total 31 Dec 2021	**-13**	**-**	**-**	**-13**	**238,930**

EXPECTED CREDIT LOSSES ON GUARANTEE RECEIVABLES FROM THE PUBLIC AND PUBLIC SECTOR ENTITIES IN OTHER ASSETS BY IMPAIRMENT STAGES

	Not credit-impaired		Credit-impaired	Total	
	Stage 1	Stage 2	Stage 3		
(EUR 1,000)	12-month ECL	Lifetime ECL	Lifetime ECL	ECL	Gross carrying amount
Opening balance 1 Jan 2021	**-**	**-**	**-**	**-**	**1,606**
New assets originated or purchased	-	-	-	-	145
Assets derecognised or repaid (excluding write-offs)	-	-	-	-	-
Transfers to Stage 1	-	-	-	-	-
Transfers to Stage 2	-	-	-	-	-
Transfers to Stage 3	-	-	-	-	-
Changes to models and inputs used for ECL calculations	-	-	-	-	-
Recoveries	-	-	-	-	-
Total 31 Dec 2021	**-**	**-**	**-**	**-**	**1,752**

EXPECTED CREDIT LOSSES ON CREDIT COMMITMENTS (OFF-BALANCE SHEET) BY IMPAIRMENT STAGES	Not credit-impaired		Credit-impaired	Total	
	Stage 1	Stage 2	Stage 3		
(EUR 1,000)	12-month ECL	Lifetime ECL	Lifetime ECL	ECL	Gross carrying amount
Opening balance 1 Jan 2021	**-4**	**0**	**0**	**-4**	**2,353,978**
New assets originated or purchased	-2	0	-	-2	1,761,104
Assets derecognised or repaid (excluding write-offs)	3	-	0	3	-1,522,209
Transfers to Stage 1	-	-	-	-	
Transfers to Stage 2	-	-	-	-	
Transfers to Stage 3	-	0	0	0	
Changes to models and inputs used for ECL calculations	0	-	0	0	
Total 31 Dec 2021	**-4**	**0**	**0**	**-4**	**2,592,873**

The loss allowance on binding credit commitments is recognised under *Other liabilities*. More details regarding presentation of allowance for expected credit losses is presented in the accounting policies of the Consolidated Financial Statements (Note *1*) in Section *9.4 Presentation of allowance for ECL in the statement of financial position.*

EXPECTED CREDIT LOSSES ON CASH AND BALANCES WITH CENTRAL BANKS AT AMORTISED COST BY IMPAIRMENT STAGES	Not credit-impaired		Credit-impaired	Total	
	Stage 1	Stage 2	Stage 3		
(EUR 1,000)	12-month ECL	Lifetime ECL	Lifetime ECL	ECL	Gross carrying amount
Opening balance 1 Jan 2020	**0**	**-**	**-**	**0**	**4,909,338**
New assets originated or purchased	0	-	-	0	656,463
Assets derecognised or repaid (excluding write-offs)	0	-	-	0	0
Transfers to Stage 1	-	-	-	-	-
Transfers to Stage 2	-	-	-	-	-
Transfers to Stage 3	-	-	-	-	-
Changes to models and inputs used for ECL calculations	-	-	-	-	-
Total 31 Dec 2020	**0**	**-**	**-**	**0**	**5,565,801**

EXPECTED CREDIT LOSSES ON LOANS AND ADVANCES TO CREDIT INSTITUTIONS AT AMORTISED COST BY IMPAIRMENT STAGES

	Not credit-impaired		Credit-impaired	Total	
	Stage 1	Stage 2	Stage 3		
(EUR 1,000)	12-month ECL	Lifetime ECL	Lifetime ECL	ECL	Gross carrying amount
Opening balance 1 Jan 2020	**-28**	**-**	**-**	**-28**	**817,462**
New assets originated or purchased	-35	-	-	-35	1,687,198
Assets derecognised or repaid (excluding write-offs)	21	-	-	21	-663,679
Transfers to Stage 1	-	-	-	-	-
Transfers to Stage 2	-	-	-	-	-
Transfers to Stage 3	-	-	-	-	-
Changes to models and inputs used for ECL calculations	-1	-	-	-1	-1
Total 31 Dec 2020	**-43**	**-**	**-**	**-43**	**1,840,980**

EXPECTED CREDIT LOSSES ON LOANS AND ADVANCES TO THE PUBLIC AND PUBLIC SECTOR ENTITIES AT AMORTISED COST BY IMPAIRMENT STAGES

	Not credit-impaired		Credit-impaired	Total	
	Stage 1	Stage 2	Stage 3		
(EUR 1,000)	12-month ECL	Lifetime ECL	Lifetime ECL	ECL	Gross carrying amount
Opening balance 1 Jan 2020	**-24**	**-80**	**-80**	**-185**	**23,918,874**
New assets originated or purchased	-15	-30	-13	-58	4,825,655
Assets derecognised or repaid (excluding write-offs)	3	10	43	56	-1,856,679
Transfers to Stage 1	0	30	-	30	30
Transfers to Stage 2	0	-50	9	-41	-41
Transfers to Stage 3	0	19	-7	12	12
Additional provision (*Management overlay*)	-	-340	-	-340	-340
Changes to contractual cash flows due to modifications not resulting in derecognition	-	-	-	-	-
Changes to models and inputs used for ECL calculations	6	-395	-176	-564	-564
Write-offs	-	-	-	-	-
Total 31 Dec 2020	**-30**	**-835**	**-224**	**-1,089**	**26,886,947**

EXPECTED CREDIT LOSSES ON LEASED ASSETS AT AMORTISED COST BY IMPAIRMENT STAGES	Not credit-impaired		Credit-impaired	Total	
	Stage 1	Stage 2	Stage 3		
(EUR 1,000)	12-month ECL	Lifetime ECL	Lifetime ECL	ECL	Gross carrying amount
Opening balance 1 Jan 2020	**-1**	**0**	**-**	**-1**	**828,458**
New assets originated or purchased	-1	-	0	-1	318,638
Assets derecognised or repaid (excluding write-offs)	0	-	-	0	-56,155
Transfers to Stage 1	-	-	-	-	-
Transfers to Stage 2	-	-	-	-	-
Transfers to Stage 3	-	0	-	0	0
Changes to models and inputs used for ECL calculations	0	-	-	0	0
Total 31 Dec 2020	**-2**	**0**	**0**	**-2**	**1,090,940**

EXPECTED CREDIT LOSSES ON DEBT SECURITIES AT AMORTISED COST BY IMPAIRMENT STAGES	Not credit-impaired		Credit-impaired	Total	
	Stage 1	Stage 2	Stage 3		
(EUR 1,000)	12-month ECL	Lifetime ECL	Lifetime ECL	ECL	Gross carrying amount
Opening balance 1 Jan 2020	**0**	**0**	**-**	**0**	**804,358**
New assets originated or purchased	0	0	-	0	1,310,305
Assets derecognised or repaid (excluding write-offs)	0	0	-	0	-804,358
Transfers to Stage 1	-	-	-	-	-
Transfers to Stage 2	-	-	-	-	-
Transfers to Stage 3	-	-	-	-	-
Changes to models and inputs used for ECL calculations	-	-	-	-	-
Total 31 Dec 2020	**0**	**0**	**-**	**0**	**1,310,305**

EXPECTED CREDIT LOSSES ON DEBT SECURITIES AT FAIR VALUE THROUGH FAIR VALUE RESERVE BY IMPAIRMENT STAGES

	Not credit-impaired		Credit-impaired	Total	
	Stage 1	Stage 2	Stage 3		
(EUR 1,000)	12-month ECL	Lifetime ECL	Lifetime ECL	ECL	Gross carrying amount
Opening balance 1 Jan 2020	**-104**	**-**	**-**	**-104**	**971,505**
New assets originated or purchased	-28	-	-	-28	159,570
Assets derecognised or repaid (excluding write-offs)	92	-	-	92	-708,025
Transfers to Stage 1	-	-	-	-	
Transfers to Stage 2	-	-	-	-	
Transfers to Stage 3	-	-	-	-	
Changes to models and inputs used for ECL calculations	-2	-	-	-2	
Total 31 Dec 2020	**-42**	**-**	**-**	**-42**	**423,050**

EXPECTED CREDIT LOSSES ON CASH COLLATERAL TO CCPS IN OTHER ASSETS AT AMORTISED COST BY IMPAIRMENT STAGES

	Not credit-impaired		Credit-impaired	Total	
	Stage 1	Stage 2	Stage 3		
(EUR 1,000)	12-month ECL	Lifetime ECL	Lifetime ECL	ECL	Gross carrying amount
Opening balance 1 Jan 2020	**-4**	**-**	**-**	**-4**	**158,494**
New assets originated or purchased	-2	-	-	-2	84,772
Assets derecognised or repaid (excluding write-offs)	1	-	-	1	1
Transfers to Stage 1	-	-	-	-	-
Transfers to Stage 2	-	-	-	-	-
Transfers to Stage 3	-	-	-	-	-
Changes to models and inputs used for ECL calculations	2	-	-	2	2
Total 31 Dec 2020	**-4**	**-**	**-**	**-4**	**243,269**

EXPECTED CREDIT LOSSES ON GUARANTEE RECEIVABLES FROM THE PUBLIC AND PUBLIC SECTOR ENTITIES IN OTHER ASSETS BY IMPAIRMENT STAGES	Not credit-impaired		Credit-impaired	Total	
	Stage 1	Stage 2	Stage 3		
(EUR 1,000)	12-month ECL	Lifetime ECL	Lifetime ECL	ECL	Gross carrying amount
Opening balance 1 Jan 2020	**-**	**-**	**-**	**-**	**1,603**
New assets originated or purchased	-	-	-	-	184
Assets derecognised or repaid (excluding write-offs)	-	-	-	-	-180
Transfers to Stage 1	-	-	-	-	-
Transfers to Stage 2	-	-	-	-	-
Transfers to Stage 3	-	-	-	-	-
Changes to models and inputs used for ECL calculations	-	-	-	-	-
Recoveries	-	-	-	-	-
Total 31 Dec 2020	**-**	**-**	**-**	**-**	**1,606**

EXPECTED CREDIT LOSSES ON CREDIT COMMITMENTS (OFF-BALANCE SHEET) BY IMPAIRMENT STAGES	Not credit-impaired		Credit-impaired	Total	
	Stage 1	Stage 2	Stage 3		
(EUR 1,000)	12-month ECL	Lifetime ECL	Lifetime ECL	ECL	Gross carrying amount
Opening balance 1 Jan 2020	**-4**	**0**	**-**	**-4**	**2,361,323**
New assets originated or purchased	-3	-	0	-3	1,581,833
Assets derecognised or repaid (excluding write-offs)	3	0	-	3	-1,589,178
Transfers to Stage 1	-	-	-	-	
Transfers to Stage 2	0	0	-	0	
Transfers to Stage 3	-	-	-	-	
Changes to models and inputs used for ECL calculations	0	0	-	0	
Total 31 Dec 2020	**-4**	**0**	**0**	**-4**	**2,353,978**

Forward-looking information

In the assessment of whether the credit risk of an instrument has significantly increased (*SICR*) and in the measurement of expected credit losses, forward-looking information and macroeconomic scenarios are included in the model. The scenarios for Finland have been updated by MuniFin to take into account the effect of the pandemic. The macroeconomic projections cover a period of three years and as no reliable macroeconomic projections exceeding a three-year time horizon are available, forward-looking adjustment will be limited to a three-year period. Mainly three scenarios are used; base, optimistic and adverse. Scenarios include probability weights. Due to uncertainty caused by the COVID-19 pandemic, MuniFin has given a larger weight to the adverse scenario.

The scenario probability weightings are as following.

	31 Dec 2021			31 Dec 2020		
SCENARIO	**2022**	**2023**	**2024**	**2021**	**2022**	**2023**
Adverse	40%	40%	40%	50%	40%	40%
Base	50%	50%	40%	40%	40%	40%
Optimistic	10%	10%	20%	10%	20%	20%

MuniFin has identified key drivers of credit losses for each portfolio that share similar kind of credit risk characteristics and estimated the relationship between macroeconomic variables and credit losses. ECL model consists of the following macroeconomic variables for Finnish counterparties of financial assets; Finnish government long-term rate, the development of residential housing prices and unemployment rate. For non-Finnish financial assets, stress test scenarios published by the European Central Bank are employed in the model and scenario parameters. Each variable covers an estimate over a period of three years.

The following table presents the macroeconomic variables and their forecasts over the three-year forecast period.

		31 Dec 2021			31 Dec 2020		
MACROECONOMIC VARIABLES	**Scenario**	**Adverse**	**2023**	**2024**	**2021**	**2022**	**2023**
10Y Fin Government rate, %	Adverse	1.20	0.50	0.25	0.10	-0.25	0.0
	Base	0.25	0.60	0.75	-0.37	-0.25	0.1
	Optimistic	0.75	1.10	1.15	0.00	0.3	0.6
Residential Real Estate (selling price, YoY change), %	Adverse	-8.0	-7.0	-2.0	-12.5	-2.5	2.0
	Base	-2.0	-3.0	-1.4	0.5	1.0	2.0
	Optimistic	3.5	3.0	1.5	2.0	2.5	2.0
Unemployment rate, %	Adverse	8.7	9.2	8.5	9.5	9.5	8.7
	Base	6.9	6.5	6.3	8.2	7.8	7.6
	Optimistic	6.5	6.0	5.8	7.7	7.2	6.9

The Finnish economy recovered faster than expected in 2021. Strong business and consumer confidence supported domestic demand, which was the main contributor to economic growth. Finland's GDP exceeded the pre-pandemic level already in the second quarter of 2021. Employment also recovered briskly, with the total number of people in employment reaching an all-time high in the last quarter of 2021. In base scenario, Finland's GDP is expected to grow 3.5% in 2021. Leading economic indicators point to somewhat slower growth going forward. Omicron, the new coronavirus variant, has raised short-term cyclical uncertainty. Consumer purchasing power has also been slashed particularly by the rising cost of living and fuel. Despite the short-term risks, there is still potential for faster-than-average growth in 2022. The output is expected to grow 2.6% in 2022 and 1.8% in 2023. From 2024 onwards, the economy gradually converges to its long-term growth path and the annual pace of expansion is around 1.0%.

Unemployment rate peaked at 7.8% in 2020. MuniFin currently estimates the average unemployment rate to go down to 6.9% in 2022 and to 6.5% in 2023. The average annual CPI inflation is poised to accelerate in 2022 as the transitory spike in energy prices elevates the overall price index. Cost pressures are assumed to ease off in the second half of 2022. Monetary policy remains accommodative in the near term, albeit the European Central Bank is expected to start gradually unwinding its non-standard monetary policy measures. The first rate hike is expected to take place around the year end of 2023. On the national level, home prices are expected to rise nearly 4% in 2021 and about 2.0% in 2022. From 2023 onwards, home prices inflation is expected to moderate to around 1.5% annual pace.

Compared to the base scenario, upside (optimistic) scenario factors in less severe economic scars from the COVID-19 pandemic and assumes somewhat speedier recovery in global economy and investment spending. As a result, the Finnish GDP would grow faster in the subsequent two years (3.5% and 3.0% in 2022 and 2023, respectively). In the upside scenario, unemployment rate declines below the pre-pandemic level of 6.7% already in 2022. In 2022, consumer price inflation rises to 3.8%. Inflationary pressures are mostly transitory, but as the output gap gradually turns positive, CPI inflation remains at 2.5% in 2023. Strong housing demand keeps home price inflation elevated at 3.0–3.5% range in 2022–2023. Thereafter, consumer and home prices rise at about 1.5–2.0% pace in 2024–2025. Reviving growth and inflation expectations lead to somewhat faster monetary tightening and higher interest rates than in the base scenario.

Downside (adverse) scenario represents an outcome where supply side bottle necks turn out to be more severe and more persistent than previously thought. Wide ranging shortage of inputs amplifies cost pressures in global supply chains, leading to a vicious circle in consumer prices and future inflation expectations. At the same time, downturn in Chinese real estate sector triggers a significant economic slowdown, which transmits to a wider growth recession in the world economy. In order to keep medium term inflation expectations anchored, central banks need to tighten monetary policy, despite deteriorating cyclical outlook. Finland's economy falls into another recession in 2022–2023 and unemployment starts rising again. Lack of demand in the housing market leads to sharp declines in home price indices. Prolonged global recession creates tensions in financial markets, giving rise to wider risk premia in asset pricing.

The following table presents the sensitivity of the expected credit losses assuming 100% weight for adverse scenario until 2023.

SENSITIVITY ANALYSIS

(EUR 1,000)	31 Dec 2021		31 Dec 2020	
	Weighted scenario	Adverse scenario (100%)	Weighted scenario	Adverse scenario (100%)
ECL	859	1,150	844	1,083
Proportion of the exposure in Stage 2 and 3	0.86%	1.15%	0.75%	1.04%

The sensitivity analysis does not include the additional discretionary provisions (*management overlay*).

Non-performing and forborne exposures

Non-performing and forborne exposures refer to receivables that are more than 90 days past due, other receivables classified as risky and forborne exposures due to the customer's financial difficulties.

NON-PERFORMING AND FORBORNE EXPOSURES 31 Dec 2021 (EUR 1,000)	Performing exposures (gross)	Non-performing exposures (gross)	Total exposures (gross)	Total expected credit losses	Total exposures (net)
Over 90 days past due	-	16,813	16,813	-82	16,731
Unlikely to be paid	-	85,559	85,559	-8	85,551
Forborne exposures	61,862	25,849	87,711	-238	87,473
Total	**61,862**	**128,221**	**190,083**	**-328**	**189,755**

NON-PERFORMING AND FORBORNE EXPOSURES 31 Dec 2020 (EUR 1,000)	Performing exposures (gross)	Non-performing exposures (gross)	Total exposures (gross)	Total expected credit losses	Total exposures (net)
Over 90 days past due	-	22,732	22,732	-112	22,620
Unlikely to be paid	-	93,531	93,531	-50	93,482
Forborne exposures	68,715	19,584	88,299	-288	88,010
Total	**68,715**	**135,847**	**204,562**	**-450**	**204,112**

Forbearance measures are concessions to original contractual payment terms agreed at the customers' initiative to help the customer through temporary payment difficulties. Performing forborne exposures include forborne exposures reclassified as performing during their probation period or forbearance measures made into a performing loan. Loan modifications due to reasons other than the customer's financial difficulties are not classified as forborne exposures. MuniFin considers a loan forborne when such concessions or modifications are provided as a result of the borrower's present or expected financial difficulties and MuniFin would not have agreed to them if the borrower had been financially healthy.

The COVID-19 pandemic affected the financial situation and liquidity of MuniFin's customers. MuniFin therefore offered concessions to the payment terms of loans to those customers whose finances had been temporarily affected by the pandemic. The granted repayment holidays concerned mainly the year 2020 and were mainly between 6–9 months in length. Only a few individual repayment holidays have been extended during 2021. The uncollected installments were mainly transferred to the end of the loan term to be paid in connection with the last installment. Most of the repayment holidays were granted during April and May in 2020. No lease concessions were granted to MuniFin's leasing customers.

Realised credit losses
MuniFin has not had any final realised credit losses during the financial year or the comparison year.

Note 23. Shares and participations

31 Dec 2021 (EUR 1,000)	Publicly quoted	Other	Total	, of which in credit institutions
Mandatorily at fair value through profit or loss	-	-	-	-
Shares and participations in Group companies	-	656	656	-
Total	**-**	**656**	**656**	**-**
, of which at acquisition cost	-	*656*	*656*	-

MuniFin does not have equity instruments valued at fair value through fair value reserve. MuniFin does not have shares and participations subject to securities lending.

31 Dec 2020 (EUR 1,000)	Publicly quoted	Other	Total	, of which in credit institutions
Mandatorily at fair value through profit or loss	-	27	27	-
Shares and participations in Group companies	-	656	656	-
Total	**-**	**683**	**683**	**-**
, of which at acquisition cost	-	*656*	*656*	-

Note 24. Derivative contracts

DERIVATIVE CONTRACTS 31 Dec 2021 (EUR 1,000)	Nominal value of underlying instrument – Remaining maturity: Less than 1 year	1–5 years	Over 5 years	Total	Fair value: Positive	Negative
Derivative contracts in hedge accounting						
Interest rate derivatives						
Interest rate swaps	2,409,728	12,470,328	17,727,331	32,607,387	756,203	-384,289
, of which cleared by the central counterparty	*2,233,780*	*11,834,195*	*16,946,320*	*31,014,295*	*682,416*	*-308,205*
Currency derivatives						
Cross currency interest rate swaps	3,437,953	8,396,354	782,448	12,616,756	482,450	-726,003
Total derivative contracts in hedge accounting	**5,847,682**	**20,866,681**	**18,509,780**	**45,224,143**	**1,238,653**	**-1,110,291**
Derivative contracts at fair value through profit or loss						
Interest rate derivatives						
Interest rate swaps	3,940,682	8,043,879	4,491,216	16,475,777	475,940	-357,092
, of which cleared by the central counterparty	*2,864,097*	*5,372,343*	*1,578,144*	*9,814,584*	*46,821*	*-163,327*
Interest rate options	-	40,000	-	40,000	101	-101
Currency derivatives						
Cross currency interest rate swaps	2,467,039	1,940,380	109,367	4,516,786	133,656	-718,888
Forward exchange contracts	3,354,738	-	-	3,354,738	150,723	-
Equity derivatives	816,109	-	-	816,109	604	-37,922
Total derivative contracts at fair value through profit or loss	**10,578,567**	**10,024,259**	**4,600,583**	**25,203,409**	**761,023**	**-1,114,003**
Total derivative contracts	**16,426,249**	**30,890,940**	**23,110,363**	**70,427,552**	**1,999,676**	**-2,224,294**

Derivative contracts at fair value through profit or loss contain all derivatives of the Company which are not included in hedge accounting, even if they are entered into for risk management purposes. The category contains derivative contracts used for hedging financial assets and liabilities designated at fair value through profit or loss, all derivative contracts with municipalities and all derivative contracts hedging derivatives with municipalities. In addition to these, the category contains derivative contracts used for hedging interest rate risk of the balance sheet, for which no hedged item has been specified.

Interest received or paid from derivative contracts is included in the balance sheet line items *Accrued income and prepayments* and *Accrued expenses and deferred income*.

DERIVATIVE CONTRACTS 31 Dec 2020 (EUR 1,000)	Nominal value of underlying instrument				Fair value	
	Remaining maturity					
	Less than 1 year	1–5 years	Over 5 years	Total	Positive	Negative
Derivative contracts in hedge accounting						
Interest rate derivatives						
Interest rate swaps	2,933,188	11,186,060	15,825,475	29,944,724	1,155,265	-470,736
, of which cleared by the central counterparty	*1,474,582*	*10,182,656*	*13,852,888*	*25,510,126*	*684,090*	*-314,856*
Currency derivatives						
Cross currency interest rate swaps	1,577,593	7,155,034	1,105,354	9,837,981	369,605	-985,934
Total derivative contracts in hedge accounting	**4,510,781**	**18,341,095**	**16,930,830**	**39,782,706**	**1,524,870**	**-1,456,670**
Derivative contracts at fair value through profit or loss						
Interest rate derivatives						
Interest rate swaps	3,800,843	9,751,683	5,000,317	18,552,843	749,891	-488,850
, of which cleared by the central counterparty	*2,784,644*	*6,910,928*	*1,515,808*	*11,211,380*	*5,605*	*-189,246*
Interest rate options	-	40,000	-	40,000	106	-106
Currency derivatives						
Cross currency interest rate swaps	2,385,939	2,284,168	130,374	4,800,480	82,985	-713,063
Forward exchange contracts	3,516,421	-	-	3,516,421	-	-126,805
Equity derivatives	932,553	-	-	932,553	313	-75,076
Total derivative contracts at fair value through profit or loss	**10,635,756**	**12,075,850**	**5,130,691**	**27,842,297**	**833,293**	**-1,403,900**
Total derivative contracts	**15,146,537**	**30,416,945**	**22,061,521**	**67,625,003**	**2,358,163**	**-2,860,570**

Note 25. Hedge accounting

The interest rate and foreign exchange rate risk of the Company are managed by entering into derivative transactions. According to the Market Risk Policy, the Company's hedging strategy is mainly to hedge all material foreign exchange and interest rate risks of financial assets and liabilities with maturities exceeding one year. As a result, foreign currency denominated items are translated into euros, fixed rate and long-term reference rates are swapped to floating interest rates with shorter terms. The risk management principles related to the Company's hedging of market risk are described in more detail in the Consolidated Financial Statements's Note *2 Risk Management principles and the Group's risk position.*

The Company applies both fair value hedge accounting according to IFRS 9 and fair value portfolio hedge accounting according to IAS 39. The Company does not apply cash flow hedge accounting. Accounting policies related to hedge accounting are described in the accounting polices of the Consolidated Financial Statements (Note *1*) in Section *10. Hedge accounting*.

In the following table, the hedged assets and liabilities are presented according to balance sheet line items divided into IAS 39 portfolio hedge accounting and IFRS 9 fair value hedge accounting, which is further subdivided into whether hedging is subject to the separation of the Cost-of-Hedging.

HEDGE ACCOUNTING 31 Dec 2021 (EUR 1,000)	Nominal value	Fair value hedge accounting total	IAS 39 portfolio hedge accounting	IFRS 9 fair value hedge accounting	IFRS 9 fair value hedge accounting incl. Cost-of-Hedging
Assets					
Loans and advances to the public and public sector entities	12,626,073	12,725,453	12,598,775	126,678	-
Leased assets	243,432	242,936	-	242,936	-
Total assets	**12,869,504**	**12,968,390**	**12,598,775**	**369,615**	**-**
Liabilities					
Liabilities to credit institutions	50,000	55,120	-	55,120	-
Liabilities to the public and public sector entities	1,504,060	1,776,291	-	1,737,750	38,541
Debt securities issued	24,714,983	24,852,845	-	12,207,796	12,645,049
Total liabilities	**26,269,043**	**26,684,256**	**-**	**14,000,666**	**12,683,589**

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The figures presented in the following table contain the cumulative fair value change at the beginning and end of the financial year, in addition to the fair value change of the hedged risk and the hedging instrument during the financial year. The figures presented in the table do not include the change in fair value due to foreign exchange differences of hedging instruments and the hedged items, which are recognised in the income statement under *Net income from securities and foreign exchange transactions*. Due to the above mentioned reason, the total amount of the hedging instruments does not correspond to the fair value presented in Note *24 Derivative contracts* under *Total derivative contracts in hedge accounting*. The fair value changes of the hedged risk of the hedged items and all other fair value changes of the hedging instruments are recognised in the income statement under *Net income from hedge accounting*. The ineffective portion of the hedging relationship is thus shown in this line in the income statement. Net income from securities and foreign exchange transactions is specified in Note *6* and net income from hedge accounting in Note *9*.

In accordance with the market practice and IFRS 13 *Fair value measurement* standard, MuniFin discounts hedged items with the swap curve and the hedging derivatives with the OIS curve, which causes a significant part of the MuniFin's hedge ineffectiveness. In addition, ineffectiveness may also arise to some extent from differences in notional, day count methods or timing of the cash flows.

VALUE OF HEDGED RISK (EUR 1,000)	31 Dec 2021	1 Jan 2021	Recognised in the income statement 2021
Assets			
IAS 39 portfolio hedge accounting			
Loans and advances to the public and public sector entities	122,505	464,688	-342,182
Derivative contracts in hedge accounting	-78,911	-428,083	349,171
Accumulated fair value accrual from the termination of hedge accounting	218	47	170
IAS 39 portfolio hedge accounting, net	**43,812**	**36,653**	**7,159**
IFRS 9 fair value hedge accounting			
Loans and advances to the public and public sector entities	25,908	37,203	-11,294
Leased assets	-495	4,221	-4,716
Derivative contracts in hedge accounting	-25,669	-42,044	16,375
IFRS 9 fair value hedge accounting, net	**-255**	**-620**	**365**
Liabilities			
IFRS 9 fair value hedge accounting			
Liabilities to credit institutions	-5,120	-13,800	8,681
Liabilities to the public and public sector entities	-340,433	-481,546	141,113
Debt securities issued	-171,028	-859,986	688,958
Derivative contracts in hedge accounting	500,306	1,340,456	-840,150
IFRS9 fair value hedge accounting, net	**-16,275**	**-14,876**	**-1,399**
IBOR reform related compensations *	-3,343	-2,041	-1,302
Total hedge accounting	**23,938**	**21,157**	**4,823**

* Compensations relate to the ongoing IBOR reform of which more information is presented in the accounting policies of the Consolidated Financial Statements (Note *1*) in Section *23. IBOR reform.*

The following table presents the impact of Cost-of-Hedging of cross currency derivatives on equity in the *Cost-of-Hedging reserve*. The figures are presented net of deferred taxes. For all foreign currency hedge relationships MuniFin has elected to utilise Cost-of-Hedging. For each hedge relationship, when the cross currency swap is designated as a hedging instrument, the cross currency basis spread is separated and excluded from the designation and accounted for as Cost-of-Hedging. The difference between the changes in fair value of the actual derivative and the designated portion of the derivative are recorded as Cost-of-Hedging to the *Cost-of-Hedging reserve*. Thus, changes in cross currency basis spreads do not create ineffectiveness in the hedge relationship.

HEDGING IMPACT ON EQUITY (EUR 1,000)	31 Dec 2021	1 Jan 2021	Impact on Cost-of-Hedging reserve
Cost-of-Hedging			
Derivative contracts in hedge accounting	13,621	15,624	-2,004
Total	**13,621**	**15,624**	**-2,004**

The following table presents the cumulative effectiveness of hedge accounting by hedged items. In addition, the table shows the hedging instruments used.

EFFECTIVENESS OF HEDGE ACCOUNTING
31 Dec 2021 (EUR 1,000)

Hedged item	Hedging instruments	Gains/losses attributable to the hedged risk: Hedged items	Gains/losses attributable to the hedged risk: Hedging instruments	Hedge ineffectiveness
Assets				
IAS 39 portfolio hedge accounting				
Fixed rate and revisable rate loans	Interest rate derivatives	122,505	-78,911	43,594
IFRS 9 fair value hedge accounting				
Structured lending	Interest rate derivatives	25,908	-25,880	28
Fixed rate and revisable rate leased assets	Interest rate derivatives	-495	211	-283
Assets total		**147,919**	**-104,580**	**43,339**
Liabilities				
IFRS 9 fair value hedge accounting				
Financial liabilities denominated in EUR	Interest rate derivatives	-435,365	426,733	-8,633
Financial liabilities denominated in foreign currencies	Currency derivatives (cross currency interest rate swaps) Interest rate derivatives	-81,215	73,573	-7,642
Liabilities total		**-516,581**	**500,306**	**-16,275**

HEDGE ACCOUNTING 31 Dec 2020 (EUR 1,000)	Nominal value	Fair value hedge accounting total	IAS 39 portfolio hedge accounting	IFRS 9 fair value hedge accounting	IFRS 9 fair value hedge accounting incl. Cost-of-hedging
Assets					
Loans and advances to the public and public sector entities	11,183,657	11,614,114	11,483,819	130,295	-
Leased assets	211,223	215,444	-	215,444	-
Total assets	**11,394,880**	**11,829,557**	**11,483,819**	**345,739**	**-**
Liabilities					
Liabilities to credit institutions	55,000	68,800	-	68,800	-
Liabilities to the public and public sector entities	1,853,956	2,246,352	-	2,181,931	64,421
Debt securities issued	21,260,721	22,077,489	-	11,898,132	10,179,357
Total liabilities	**23,169,677**	**24,392,642**	**-**	**14,148,863**	**10,243,779**

VALUE OF HEDGED RISK (EUR 1,000)	31 Dec 2020	1 Jan 2020	Recognised in the income statement 2020
Assets			
IAS 39 portfolio hedge accounting			
Loans and advances to the public and public sector entities	464,688	303,139	161,548
Derivative contracts in hedge accounting	-428,083	-276,831	-151,252
Accumulated fair value accrual from the termination of hedge accounting	47	-	47
IAS 39 portfolio hedge accounting, net	**36,653**	**26,308**	**10,344**
IFRS 9 fair value hedge accounting			
Loans and advances to the public and public sector entities	37,203	29,330	7,873
Leased assets	4,221	1,605	2,616
Derivative contracts in hedge accounting	-42,044	-33,193	-8,851
IFRS 9 fair value hedge accounting, net	**-620**	**-2,258**	**1,638**
Liabilities			
IFRS 9 fair value hedge accounting			
Liabilities to credit institutions	-13,800	-12,916	-884
Liabilities to the public and public sector entities	-481,546	-434,953	-46,593
Debt securities issued	-859,986	-524,923	-335,063
Derivative contracts in hedge accounting	1,340,456	963,674	376,782
IFRS9 fair value hedge accounting, net	**-14,876**	**-9,118**	**-5,757**
IBOR reform related compensations	-2,041	-	-2,041
Total hedge accounting	**19,115**	**14,932**	**4,183**

HEDGING IMPACT ON EQUITY (EUR 1,000)	31 Dec 2020	1 Jan 2020	Impact on Cost-of-Hedging reserve
Cost-of-Hedging			
Derivative contracts in hedge accounting	15,624	28,075	-12,451
Total	**15,624**	**28,075**	**-12,451**

EFFECTIVENESS OF HEDGE ACCOUNTING
31 Dec 2020 (EUR 1,000)

Hedged item	Hedging instruments	Gains/losses attributable to the hedged risk		Hedge ineffectiveness
		Hedged items	Hedging instruments	
Assets				
IAS 39 portfolio hedge accounting				
Fixed rate and revisable rate loans	Interest rate derivatives	464,688	-428,083	36,605
IFRS 9 fair value hedge accounting				
Structured lending	Interest rate derivatives	37,203	-37,739	-537
Fixed rate and revisable rate leased assets	Interest rate derivatives	4,221	-4,305	-84
Assets total		**506,111**	**-470,126**	**35,985**
Liabilities				
IFRS 9 fair value hedge accounting				
Financial liabilities denominated in EUR	Interest rate derivatives	-952,949	945,353	-7,596
Financial liabilities denominated in foreign currencies	Currency derivatives (cross currency interest rate swaps) Interest rate derivatives	-402,383	395,103	-7,280
Liabilities total		**-1,355,332**	**1,340,456**	**-14,876**

Note 26. Intangible assets

(EUR 1,000)	31 Dec 2021	31 Dec 2020
IT systems	12,296	17,346
Other intangible assets	9	12
Total	**12,305**	**17,358**

Intangible assets do not include other development costs or goodwill.

Note 27. Tangible assets

(EUR 1,000)	31 Dec 2021	31 Dec 2020
Real estate corporation shares	299	299
Right-of-use assets	4,151	5,588
Other tangible assets	2,738	4,093
Total	**7,188**	**9,980**

MuniFin does not have investment properties.

Note 28. Changes in intangible and tangible assets during the financial year

	Intangible assets	Tangible assets			
2021 (EUR 1,000)	Total	Real estate	Other tangible assets	Right-of-use assets	Total
Acquisition cost 1 Jan 2021	33,190	299	7,363	8,570	16,233
+ Additions	8,660	-	3	173	175
– Disposals	-449	-	-367	-	-367
Acquisition cost 31 Dec 2021	41,401	299	6,999	8,743	16,041
Accumulated depreciation 1 Jan 2021	15,831	-	3,271	2,982	6,253
– Accumulated depreciation on disposals	-	-	-226	-	-226
+ Depreciation for the financial year	2,783	-	1,216	1,610	2,826
+ Impairment *	10,482	-	-	-	-
Accumulated depreciation 31 Dec 2021	29,097	-	4,261	4,592	8,853
Carrying amount 31 Dec 2021	**12,305**	**299**	**2,738**	**4,151**	**7,188**

* The line item includes a non-recurring item of impairment of EUR 10,482 thousand on MuniFin's significant on-going IT system implementation.

2020 (EUR 1,000)	Intangible assets	Tangible assets			
	Total	Real estate	Other tangible assets	Right-of-use assets	Total
Acquisition cost 1 Jan 2020	27,266	299	4,062	8,355	12,716
+ Additions	5,924	-	3,644	295	3,939
– Disposals	-	-	-343	-79	-422
Acquisition cost 31 Dec 2020	33,190	299	7,363	8,570	16,233
Accumulated depreciation 1 Jan 2020	12,547	-	2,682	1,494	4,177
– Accumulated depreciation on disposals	-	-	-252	-66	-318
+ Depreciation for the financial year	3,285	-	840	1,554	2,394
Accumulated depreciation 31 Dec 2020	15,831	-	3,271	2,982	6,253
Carrying amount 31 Dec 2020	**17,358**	**299**	**4,093**	**5,588**	**9,980**

Note 29. Other assets

(EUR 1,000)	31 Dec 2021	31 Dec 2020
Invoiced leasing	15,084	11,185
Given cash collateral to CCPs*	238,930	243,269
Other	1,924	5,181
Total	**255,938**	**259,635**

* Cash collaterals include expected credit loss amounting to EUR 13 thousand (EUR 4 thousand).

MuniFin did not have receivables related to payment transfers as at 31 Dec 2021 or 31 Dec 2020.

Note 30. Accrued income and prepayments

(EUR 1,000)	31 Dec 2021	31 Dec 2020
Accrued interest income	211,067	198,057
Other accrued income	196	5,637
Prepayments	1,349	-152
Total	**212,612**	**203,542**

Liite 31. Deferred tax assets and liabilities

DEFERRED TAX LIABILITIES (EUR 1,000)	1 Jan 2021	Recognised in the income statement	Recognised in equity	Paid during the financial year	31 Dec 2021
On fair value reserve	4,054	-	-555	-	3,499
Total	**4,054**	**-**	**-555**	**-**	**3,499**

Voluntary credit loss provision and depreciation difference include EUR 284,050 thousand in non-recognised deferred tax liabilities.
The Company did not have deferred tax assets as at 31 December 2021.

DEFERRED TAX LIABILITIES (EUR 1,000)	1 Jan 2020	Recognised in the income statement	Recognised in equity	Paid during the financial year	31 Dec 2020
On fair value reserve	10,467	-	-6,413	-	4,054
Total	**10,467**	**-**	**-6,413**	**-**	**4,054**

Voluntary credit loss provision and depreciation difference include EUR 273,611 thousand in non-recognised deferred tax liabilities.
The Company did not have deferred tax assets as at 31 December 2020.

Note 32. Debt securities issued

(EUR 1,000)	31 Dec 2021 Carrying amount	31 Dec 2021 Nominal value	31 Dec 2020 Carrying amount	31 Dec 2020 Nominal value
Bonds	31,508,271	32,041,076	29,016,086	28,671,412
Other*	3,819,254	3,820,738	3,895,820	3,896,421
Total	**35,327,525**	**35,861,814**	**32,911,906**	**32,567,833**

* Line item contains short-term funding issued by MuniFin.

MuniFin's funding is guaranteed by the Municipal Guarantee Board.

BENCHMARK ISSUANCES DURING THE YEAR 2021	Value date	Maturity date	Interest-%	Nominal value (1,000)	Currency
Fixed rate benchmark bond, issued under the MTN programme	20 Jan 2021	20 Mar 2026	0.625%	1,500,000	USD
Fixed rate benchmark bond, issued under the MTN programme	2 Mar 2021	2 Mar 2031	0.000%	1,000,000	EUR
Fixed rate benchmark bond, issued under the MTN programme	21 Apr 2021	21 Apr 2028	0.000%	500,000	EUR
Fixed rate benchmark bond, issued under the MTN programme	2 Sep 2021	2 Sep 2026	0.875%	1,000,000	USD
Fixed rate benchmark bond, issued under the MTN programme	2 Nov 2021	16 Dec 2024	0.875%	250,000	GBP

In the above table, the benchmark issuances are included by the settlement date. The offering circular is available in English on the website at www.munifin.fi/investor-relations.

RECONCILIATION OF THE CARRYING AMOUNT OF ISSUED DEBT (EUR 1,000)	Liabilities to credit institutions	Liabilities to the public and public sector entities	Debt securities issued
Carrying amount 1 Jan 2021	**1,343,358**	**3,884,026**	**32,911,906**
Cash flow changes from operating activities			
Additions to issued debt "bonds"	761,335	197,473	7,894,520
Additions to debt securities issued "other"	-	-	13,219,018
Additions total	**761,335**	**197,473**	**21,113,537**
Deductions to issued debt "bonds"	-38,567	-587,713	-5,119,486
Deductions to debt securities issued "other"	-	-	-13,295,584
Deductions total	**-38,567**	**-587,713**	**-18,415,070**
Cash flow changes from operating activities in total	**722,767**	**-390,240**	**2,698,468**
Changes in the balance sheet value including valuations and FX revaluations	-6,219	-169,101	-282,849
Carrying amount 31 Dec 2021	**2,059,906**	**3,324,685**	**35,327,525**

RECONCILIATION OF THE CARRYING AMOUNT OF ISSUED DEBT (EUR 1,000)	Liabilities to credit institutions	Liabilities to the public and public sector entities	Debt securities issued
Carrying amount 1 Jan 2020	**82,916**	**3,862,053**	**29,983,585**
Cash flow changes from operating activities			
Additions to issued debt "bonds"	1,288,567	108,792	9,031,390
Additions to debt securities issued "other"	-	-	14,442,817
Additions total	**1,288,567**	**108,792**	**23,474,207**
Deductions to issued debt "bonds"	-34,608	-155,105	-6,619,454
Deductions to debt securities issued "other"	-	-	-13,274,709
Deductions total	**-34,608**	**-155,105**	**-19,894,163**
Cash flow changes from operating activities in total	**1,253,959**	**-46,314**	**3,580,044**
Changes in the balance sheet value including valuations and FX revaluations	6,483	68,287	-651,724
Carrying amount 31 Dec 2020	**1,343,358**	**3,884,026**	**32,911,906**

Note 33. Other liabilities

(EUR 1,000)	31 Dec 2021	31 Dec 2020
Mandatory provisions		
Restructuring provision	-	504
Other provisions	446	-
Other liabilities		
Lease liabilities	4,231	5,660
Cash collateral taken from CCPs	333,295	231,180
Other	11,042	9,199
Total	**349,014**	**246,543**

The restructuring provision is related to the reorganisation of MuniFin's operations and the co-operation negotiations conducted during the financial year 2020 due to the reorganisation. Other provisions relate to a tax interpretaion issue for which MuniFin has requested a preliminary ruling.

	Restructuring provision		Other provisions
(EUR 1,000)	2021	2020	2021
Carrying amount in the beginning of the reporting period	504	-	-
Increase in provisions	-	578	446
Provisions used	-504	-74	-
Carrying amount at the end of the reporting period	**-**	**504**	**446**

Note 34. Accrued expenses and deferred income

(EUR 1,000)	31 Dec 2021	31 Dec 2020
Accrued interest expenses	134,880	143,853
Other accrued expenses	41,579	6,935
Deferred income *	16,864	13,175
Total	**193,323**	**163,963**

* Item consists mainly of leasing prepayments.

Note 35. Subordinated liabilities

31 Dec 2021 (EUR 1,000)	Currency	Nominal value	Book value	Interest rate	Earliest repayment
AT1 capital loan	EUR	350,000	349,878	Fixed	1 April 2022
Total		**350,000**	**349,878**		

31 Dec 2020 (EUR 1,000)	Currency	Nominal value	Book value	Interest rate	Earliest repayment
AT1 capital loan	EUR	350,000	349,388	Fixed	1 April 2022
Total		**350,000**	**349,388**		

Loan terms and conditions:

The loan is an unsecured debenture loan included under Additional Tier 1 capital, with special terms designed to fulfil the requirements set for so-called AT1 capital loans in the Capital Requirements Regulation (EU 575/2013). The loan does not have a maturity date. Interest on the loan may only be paid out of distributable funds in accordance with the terms set in the Capital Requirements Regulation, and the Company will decide whether interest will be paid on the interest payment date. The cancellation of interest payments is final and unpaid interest will not be added to the loan capital. The loan capital will be written off if the proportion of the Company's Common Equity Tier 1 (*CET1*) capital to risk-weighted assets falls below 5.125%. The Company may decide to re-book the loan capital partially or entirely if the Capital Requirements Regulation permits this based on an improvement in the Company's finances. The Company has the right but not the obligation to repay the loan on 1 April 2022 or, after that, annually on the interest payment date, as long as the buy-back is approved in advance by the regulatory authority. The regulatory authority may authorise the repayment of the loan also for particular reasons, for example if legislation or regulatory practice should change in such a way that the Company loses the right to deduct the interest in full, or if the Company should be forced to make the additional payments mentioned in the loan terms. The authorities may also permit repayment of the loan if the loan's official classification changes in such a way that the loan would be likely to be excluded from the Company's own funds, or if it is reclassified as lower-value funds. The loan capital, interest payments and other repayments shall take lower priority than all other higher-level debts in case of the Company's dissolution or bankruptcy. AT1 capital loan is recognised as equity in the Consolidated Financial Statements. In the Parent Company's Financial Statements AT1 capital loan is recognised under balance sheet item *Subordinated liabilities*.

Note 36. Act on the Resolution of Credit Institutions (1194/2014)

MuniFin's crisis resolution authority is the EU's Single Resolution Board (*SRB*). The SRB has imposed on MuniFin a binding minimum requirement for own funds and eligible liabilities (*MREL*). The size of the MREL requirement is 10.25% of the total risk exposure amount and 3.00% of the leverage ratio exposure. The MREL requirement takes into account SRB's decision on that the simplified resolution strategy is applied to MuniFin.

The MREL requirement will take effect on 1 January 2024, but MuniFin must fully comply with the final MREL target levels from 1 January 2022 onwards. MuniFin's own funds and eligible liabilities currently fulfil the MREL requirement.

Note 37. Breakdown of financial assets and liabilities at carrying amount by maturity

FINANCIAL ASSETS 31 Dec 2021 (EUR 1,000)	0–3 months	3–12 months	1–5 years	5–10 years	Over 10 years	Total
Cash and balances with central banks	8,399,045	-	-	-	-	8,399,045
Debt securities eligible for central bank refinancing	247,349	444,766	2,173,184	446,755	-	3,312,054
Loans and advances to credit institutions	1,382,272	-	34,292	-	-	1,416,564
Loans and advances to the public and public sector entities	403,975	1,516,197	6,559,458	6,353,153	13,047,114	27,879,897
Leased assets *	7,025	18,391	72,819	43,699	101,002	242,936
Debt securities	946,987	199,527	316,595	66,265	-	1,529,374
Shares and participations	-	-	-	-	-	-
Shares and participations in group companies	-	-	-	-	656	656
Derivative contracts	176,162	85,276	652,855	444,830	640,553	1,999,676
Other assets **	238,930	-	-	-	-	238,930
Total	**11,801,746**	**2,264,157**	**9,809,202**	**7,354,702**	**13,789,324**	**45,019,131**

* Line item includes leased assets for which MuniFin applies fair value hedge accounting. Unhedged leased assets are not presented in this Note as leased assets are not regarded as financial assets for the purpose of IFRS 9 classification.

** Line item includes cash collateral given to central counterparties.

FINANCIAL LIABILITIES 31 Dec 2021 (EUR 1,000)	0–3 months	3–12 months	1–5 years	5–10 years	Over 10 years	Total
Liabilities to credit institutions	1,991,110	750,000	10,613	19,599	29,695	2,801,016
Liabilities to the public and public sector entities	75,992	112,562	1,031,895	856,943	1,247,293	3,324,685
Debt securities issued	4,991,578	5,235,547	18,221,438	4,174,502	2,704,459	35,327,525
Derivative contracts	788,530	584,682	287,038	143,757	420,287	2,224,294
Other liabilities *	333,703	1,221	2,602	-	-	337,526
, of which lease liabilities	*408*	*1,221*	*2,602*	-	-	*4,231*
Subordinated liabilities	-	349,878	-	-	-	349,878
Total	**8,180,913**	**7,033,890**	**19,553,587**	**5,194,802**	**4,401,733**	**44,364,925**

* Line item includes cash collateral received from central counterparties and lease liabilities in accordance with IFRS 16 standard.

Liabilities and hedging derivatives that may be called before maturity have been classified in the maturity class corresponding to the first possible call date. The Company estimates it will call 25–50% of its callable liabilities in 2022. In 2021, the Company called 47% of its callable liabilities.

FINANCIAL ASSETS 31 Dec 2020 (EUR 1,000)	0–3 months	3–12 months	1–5 years	5–10 years	Over 10 years	Total
Cash and balances with central banks	5,565,801	-	-	-	-	5,565,801
Debt securities eligible for central bank refinancing	275,640	493,648	2,448,794	731,904	-	3,949,985
Loans and advances to credit institutions	1,805,991	-	34,989	-	-	1,840,980
Loans and advances to the public and public sector entities	353,592	1,548,268	6,309,301	6,061,806	12,658,418	26,931,384
Leased assets	8,059	19,545	64,691	37,320	85,829	215,444
Debt securities	1,198,896	267,405	289,022	57,905	-	1,813,228
Shares and participations	-	-	-	-	27	27
Shares and participations in group companies	-	-	-	-	656	656
Derivative contracts	21,851	86,840	551,548	718,929	978,995	2,358,163
Other assets	243,269	-	-	-	-	243,269
Total	**9,473,100**	**2,415,705**	**9,698,345**	**7,607,864**	**13,723,925**	**42,918,938**

FINANCIAL LIABILITIES 31 Dec 2020 (EUR 1,000)	0–3 months	3–12 months	1–5 years	5–10 years	Over 10 years	Total
Liabilities to credit institutions	658,120	1,250,000	24,558	34,106	34,694	2,001,478
Liabilities to the public and public sector entities	118,097	342,933	777,940	1,257,086	1,387,970	3,884,026
Debt securities issued	6,285,271	3,729,067	15,784,772	4,702,293	2,410,503	32,911,906
Derivative contracts	799,531	143,081	1,119,670	200,609	597,678	2,860,570
Other liabilities	231,570	1,177	4,093	-	-	236,840
, of which lease liabilities	*390*	*1,177*	*4,093*	-	-	*5,660*
Subordinated liabilities	-	-	349,388	-	-	349,388
Total	**8,092,589**	**5,466,259**	**18,060,422**	**6,194,095**	**4,430,845**	**42,244,209**

Liabilities and hedging derivatives that may be called before maturity have been classified in the maturity class corresponding to the first possible call date. In 2020, the Company called 34% of its callable liabilities.

Note 38. Breakdown of balance sheet items into domestic and foreign currency

ASSETS 31 Dec 2021 (EUR 1,000)	Domestic currency	Foreign currency	Total	, of which intra-group
Debt securities eligible for central bank refinancing	3,312,054	-	3,312,054	-
Loans and advances to credit institutions	1,387,920	28,643	1,416,564	-
Loans and advances to the public and public sector entities	27,879,897	-	27,879,897	-
Leased assets	1,334,146	-	1,334,146	-
Debt securities	1,499,172	30,202	1,529,374	-
Derivative contracts	1,781,439	218,237	1,999,676	-
Other assets incl. cash and balances in central banks	8,887,743	-	8,887,743	656
Total	**46,082,371**	**277,082**	**46,359,453**	**656**

LIABILITIES AND EQUITY 31 Dec 2021 (EUR 1,000)	Domestic currency	Foreign currency	Total	, of which intra-group
Liabilities to credit institutions	2,801,016	-	2,801,016	-
Liabilities to the public and public sector entities	3,262,800	61,885	3,324,685	-
Debt securities issued	14,636,794	20,690,731	35,327,525	-
Derivative contracts	2,172,656	51,639	2,224,294	-
Other liabilities incl. appropriations and equity	2,304,767	27,287	2,332,054	78
Subordinated liabilities	349,878	-	349,878	-
Total	**25,527,910**	**20,831,542**	**46,359,453**	**78**

ASSETS

31 Dec 2020 (EUR 1,000)	Domestic currency	Foreign currency	Total	, of which intra-group
Debt securities eligible for central bank refinancing	3,949,985	-	3,949,985	-
Loans and advances to credit institutions	1,679,345	161,635	1,840,980	-
Loans and advances to the public and public sector entities	26,931,384	-	26,931,384	-
Leased assets	1,090,940	-	1,090,940	-
Debt securities	1,768,853	44,375	1,813,228	-
Derivative contracts	2,199,419	158,744	2,358,163	-
Other assets incl. cash and balances in central banks	6,056,999	-	6,056,999	656
Total	**43,676,926**	**364,755**	**44,041,681**	**656**

LIABILITIES AND EQUITY

31 Dec 2020 (EUR 1,000)	Domestic currency	Foreign currency	Total	, of which intra-group
Liabilities to credit institutions	2,001,478	-	2,001,478	-
Liabilities to the public and public sector entities	3,796,824	87,202	3,884,026	-
Debt securities issued	14,027,359	18,884,547	32,911,906	-
Derivative contracts	2,734,091	126,479	2,860,570	-
Other liabilities incl. appropriations and equity	1,874,810	159,503	2,034,313	53
Subordinated liabilities	349,388	-	349,388	-
Total	**24,783,950**	**19,257,731**	**44,041,681**	**53**

Note 39. Repurchase agreements

The Company did not have any receivables or liabilities related to repurchase agreements as at 31 Dec 2021 or 31 Dec 2020.

Note 40. Fair values and carrying amounts of financial assets and liabilities

FINANCIAL ASSETS (EUR 1,000)	31 Dec 2021		31 Dec 2020	
	Carrying amount	Fair value	Carrying amount	Fair value
Cash and balances with central banks	8,399,045	8,399,045	5,565,801	5,565,801
Debt securities eligible for central bank refinancing	3,312,054	3,312,054	3,949,985	3,949,985
Loans and advances to credit institutions	1,416,564	1,416,564	1,840,980	1,840,980
Loans and advances to the public and public sector entities	27,879,897	30,050,779	26,931,384	29,415,707
Leased assets *	242,936	255,907	215,444	228,011
Debt securities	1,529,374	1,529,739	1,813,228	1,813,808
Shares and participations	-	-	27	27
Shares and participations in group companies	656	656	656	656
Derivative contracts	1,999,676	1,999,676	2,358,163	2,358,163
Other assets **	238,930	238,930	243,269	243,269
Total	**45,019,131**	**47,203,349**	**42,918,938**	**45,416,406**

* Line item includes leased assets for which MuniFin applies fair value hedge accounting. Unhedged leased assets are not presented in this Note as leased assets are not regarded as financial assets for the purpose of IFRS 9 classification.

** Line item includes cash collateral given to central counterparties.

FINANCIAL LIABILITIES (EUR 1,000)	31 Dec 2021		31 Dec 2020	
	Carrying amount	Fair value	Carrying amount	Fair value
Liabilities to credit institutions	2,801,016	2,800,913	2,001,478	2,001,414
Liabilities to the public and public sector entities	3,324,685	3,344,334	3,884,026	3,906,619
Debt securities issued	35,327,525	35,434,600	32,911,906	32,968,471
Derivative contracts	2,224,294	2,224,294	2,860,570	2,860,570
Other liabilities *	337,526	337,526	236,840	236,840
Subordinated liabilities	349,878	354,683	349,388	367,455
Total	**44,364,925**	**44,496,351**	**42,244,209**	**42,341,369**

* Line item includes cash collateral received from central counterparties and lease liabilities in accordance with IFRS 16 standard.

Note 41. Fair value hierarchy of financial assets and liabilities

Fair value is the price that would be received to sell the asset or paid to transfer the liability in an orderly transaction between market participants at the measurement date. The Company measures fair values using the following fair value hierarchy, which reflects the significance of the inputs used in making the fair value measurements:

Level 1
Inputs that are quoted market prices (unadjusted) for identical instruments in active markets that the Company can access at the measurement date. The market is considered to be active if trading is frequent and price data is regularly available. These quotes (mid) represent the price for an orderly transaction between parties in the market on the valuation date. Level 1 instruments comprise mainly investments in debt securities.

Level 2
Inputs other than quoted prices included within level 1 that are observable either directly (i.e. as prices) or indirectly (i.e. derived from prices). This level includes instruments valued using quoted prices for identical instruments in markets that are considered less than active or other valuation techniques in which all significant inputs are directly or indirectly observable from market data. Level 2 instruments comprise mainly OTC derivatives, the Company's issued plain-vanilla financial liabilities and lending agreements.

Level 3
This level includes all instruments for which the valuation technique includes inputs that are not observable and the unobservable inputs have a significant effect on the instrument's valuation. Unobservable inputs are used only to the extent that no relevant observable inputs are available. If the valuation input is illiquid, extrapolated or based on historical prices, the valuation input will be defined as a level 3 valuation input as these types of inputs are per definition unobservable. This level includes financial instruments with equity and FX structures due to the impact of the utilisation of inputs such as dividend yield on the fair value measurement. In addition, level 3 contains some interest rate structures with long maturities (exceeding e.g. 35 years) or in currencies where the interest rate curve is not considered liquid for all maturities.

Due to the nature of MuniFin's funding portfolio (i.e. issued bonds are hedged back-to-back), if a swap that is hedging an issued bond is designated as a level 3 instrument, then the issued bond will also be designated as a level 3 instrument. Same principle applies to other portfolios and levels of the hierarchy as well. The Company does not hold other assets or liabilities which are measured at fair value or assets or liabilities which are non-recurringly measured at fair value.

The following table presents financial instruments by the level of the fair value hierarchy into which the fair value measurement is categorised.

FINANCIAL ASSETS 31 Dec 2021 (EUR 1,000)		Fair value			
	Carrying amount	Level 1	Level 2	Level 3	Total
At fair value					
Fair value through fair value reserve					
Debt securities	213,466	172,717	40,748	-	213,466
Designated at fair value through profit or loss					
Loans and advances to the public and public sector entities	38,941	-	38,941	-	38,941
Debt securities	3,539,074	3,451,809	87,265	-	3,539,074
Mandatorily at fair value through profit or loss					
Loans and advances to the public and public sector entities	35,204	-	344	34,861	35,204
Shares and participations	-	-	-	-	-
Shares and participations in group companies	656	-	-	656	656
Fair value through profit or loss					
Derivative contracts at fair value through profit or loss	761,023	-	698,194	62,829	761,023
Derivative contracts in hedge accounting	1,238,653	-	1,238,246	407	1,238,653
Total at fair value	**5,827,016**	**3,624,526**	**2,103,737**	**98,752**	**5,827,016**
In fair value hedge accounting					
Amortised cost					
Loans and advances to the public and public sector entities	12,725,453	-	13,493,605	-	13,493,605
Leased assets	242,936	-	255,907	-	255,907
Total in fair value hedge accounting	**12,968,390**	**-**	**13,749,512**	**-**	**13,749,512**
At amortised cost					
Cash and balances with central banks	8,399,045	8,399,045	-	-	8,399,045
Loans and advances to credit institutions	1,416,564	105,988	1,310,576	-	1,416,564
Loans and advances to the public and public sector entities	15,080,299	-	16,483,029	-	16,483,029
Debt securities	1,088,888	-	1,089,253	-	1,089,253
Other assets	238,930	-	238,930	-	238,930
Total at amortised cost	**26,223,725**	**8,505,033**	**19,121,788**	**-**	**27,626,821**
Total financial assets	**45,019,131**	**12,129,559**	**34,975,037**	**98,752**	**47,203,349**

FINANCIAL LIABILITIES 31 Dec 2021 (EUR 1,000)	Carrying amount	Fair value Level 1	Level 2	Level 3	Total
At fair value					
Designated at fair value through profit or loss					
Liabilities to credit institutions	4,787	-	4,787	-	4,787
Liabilities to the public and public sector entities	1,548,394	-	1,284,601	263,793	1,548,394
Debt securities issued	10,008,299	-	8,248,729	1,759,569	10,008,299
Fair value through profit or loss					
Derivative contracts at fair value through profit or loss	1,114,003	-	369,705	744,299	1,114,003
Derivative contracts in hedge accounting	1,110,291	-	1,084,602	25,690	1,110,291
Total at fair value	**13,785,774**	**-**	**10,992,423**	**2,793,350**	**13,785,774**
In fair value hedge accounting					
Amortised cost					
Liabilities to credit institutions	55,120	-	55,016	-	55,016
Liabilities to the public and public sector entities	1,776,291	-	1,795,941	-	1,795,941
Debt securities issued *	24,852,845	-	24,873,880	86,040	24,959,920
Total in fair value hedge accounting	**26,684,256**	**-**	**26,724,837**	**86,040**	**26,810,877**
At amortised cost					
Liabilities to credit institutions	2,741,110	-	2,741,110	-	2,741,110
Debt securities issued	466,381	-	466,381	-	466,381
Other liabilities	337,526	-	337,526	-	337,526
Subordinated liabilities	349,878	-	354,683	-	354,683
Total at amortised cost	**3,894,895**	**-**	**3,899,701**	**-**	**3,899,701**
Total financial liabilities	**44,364,925**	**-**	**41,616,961**	**2,879,390**	**44,496,351**

* MuniFin's fixed-rate benchmark bond issuances are presented on level 2 due the fact that these bonds are in fair value hedge accounting with respect to the hedged risk. Valuation of the hedged risk is based on the level 2 inputs. In the Notes of the Financial Statements the Company's fixed-rate benchmark bonds fair value is adjusted to reflect fair value based on the quoted prices from Bloomberg. The market price is a level 1 input.

FINANCIAL ASSETS 31 Dec 2020 (EUR 1,000)	Carrying amount	Fair value Level 1	Fair value Level 2	Fair value Level 3	Fair value Total
At fair value					
Fair value through fair value reserve					
Debt securities	423,050	321,308	101,741	-	423,050
Designated at fair value through profit or loss					
Debt securities	4,029,859	3,922,131	107,728	-	4,029,859
Mandatorily at fair value through profit or loss					
Loans and advances to the public and public sector entities	44,438	-	702	43,735	44,438
Shares and participations	27	-	-	27	27
Shares and participations in group companies	656	-	-	656	656
Fair value through profit or loss					
Derivative contracts at fair value through profit or loss	833,293	-	753,841	79,452	833,293
Derivative contracts in hedge accounting	1,524,870	-	1,524,298	572	1,524,870
Total at fair value	**6,856,192**	**4,243,439**	**2,488,310**	**124,443**	**6,856,192**
In fair value hedge accounting					
Amortised cost					
Loans and advances to the public and public sector entities	11,614,114	-	12,386,569	-	12,386,569
Leased assets	215,444	-	228,011	-	228,011
Total in fair value hedge accounting	**11,829,557**	**-**	**12,614,580**	**-**	**12,614,580**
At amortised cost					
Cash and balances with central banks	5,565,801	5,565,801	-	-	5,565,801
Loans and advances to credit institutions	1,840,980	297,211	1,543,769	-	1,840,980
Loans and advances to the public and public sector entities	15,272,833	-	16,984,700	-	16,984,700
Debt securities	1,310,305	-	1,310,885	-	1,310,885
Other assets	243,269	-	243,269	-	243,269
Total at amortised cost	**24,233,188**	**5,863,012**	**20,082,621**	**-**	**25,945,634**
Total financial assets	**42,918,938**	**10,106,452**	**35,185,512**	**124,443**	**45,416,407**

FINANCIAL LIABILITIES 31 Dec 2020 (EUR 1,000)	Carrying amount	Fair value Level 1	Level 2	Level 3	Total
At fair value					
Designated at fair value through profit or loss					
Liabilities to credit institutions	24,558	-	24,558	-	24,558
Liabilities to the public and public sector entities	1,637,674	-	1,413,261	224,413	1,637,674
Debt securities issued	10,454,282	-	8,328,568	2,125,714	10,454,282
Fair value through profit or loss					
Derivative contracts at fair value through profit or loss	1,403,900	-	757,607	646,293	1,403,900
Derivative contracts in hedge accounting	1,456,670	-	1,432,280	24,391	1,456,670
Total at fair value	**14,977,085**	**-**	**11,956,273**	**3,020,811**	**14,977,085**
In fair value hedge accounting					
Amortised cost					
Liabilities to credit institutions	68,800	-	68,736	-	68,736
Liabilities to the public and public sector entities	2,246,352	-	2,268,946	-	2,268,946
Debt securities issued	22,077,489	-	22,040,007	94,048	22,134,054
Total in fair value hedge accounting	**24,392,642**	**-**	**24,377,688**	**94,048**	**24,471,736**
At amortised cost					
Liabilities to credit institutions	1,908,120	-	1,908,120	-	1,908,120
Debt securities issued	380,134	-	380,134	-	380,134
Other liabilities	236,840	-	236,840	-	236,840
Subordinated liabilities	349,388	-	367,455	-	367,455
Total at amortised cost	**2,874,482**	**-**	**2,892,549**	**-**	**2,892,549**
Total financial liabilities	**42,244,209**	**-**	**39,226,510**	**3,114,859**	**42,341,369**

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. The Company applies different types of valuation inputs depending on the type and complexity of the instruments and the related risk factors and payoff structures. The Company's defined categorisation to the fair value hierarchy levels is based on the analysis performed with regards to the valuation input, stress testing (reasonable possible alternative assumption) and model complexity. If the inputs used to measure fair value are categorised into different levels on the fair value hierarchy, the fair value measurement is categorised in its entirety on the level of the lowest level input that is significant to the entire measurement.

IFRS 13 classifies valuation models and techniques into three different categories: market approach, income approach and cost approach. The Company applies the market-based approach when the instrument has a functioning market and public price quotations are available. The Company uses the market approach for the valuation of investment bonds of the liquidity portfolio. For all level 1 assets, the Company uses market prices available for identical assets (same ISIN). The Company does not make use of prices for comparable assets.

Income approach is applied when valuation is based, for example, on determining the present value of future cash flows (discounting). Valuation methods take into account an assessment of the credit risk, discount rates used, the possibility of early repayment and other factors that influence the fair value of a financial instrument reliably. The Company uses the income approach for many of its financial instruments, for example derivatives, lending and funding. The Company does not use the cost approach for the valuation of any of its financial instruments.

The Company 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 management 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.

MuniFin applies different models in order to derive the fair value of a certain type of instruments. The choice of base models and model 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 kinds of calibration techniques. The specific combination of base models and the different assumptions and calibration techniques are documented. The Company's fair value instruments that are subject to mark-to-model valuation techniques consists out of four asset classes:

- Interest rate instruments,
- FX instruments,
- Equity-linked instruments and
- Hybrid instruments.

Financial instruments under *FX, equity-linked* and *hybrid* classes are mainly classified as level 3 instruments.

Fair value of financial instruments is generally calculated as the net present value of the individual instruments. This calculation is supplemented by counterparty level adjustments. The Company incorporates credit valuation adjustments (*CVA*) and debit valuation adjustments (*DVA*) into derivative valuations. CVA reflects the impact of the counterparty's credit risk on fair value and DVA MuniFin's own credit quality. The Company uses the same methodology to compute CVA and DVA. They are both assessed as the result of three inputs: Loss Given Default (*LGD*), Probability of Default (*PD, own for DVA and of the counterparty for CVA*) and Expected Exposure (*EE*).

Valuation framework

MuniFin has implemented a framework for the arrangements, activities and procedures with regards to the Company's 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 Company 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 Company 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. All approved valuation models within the model inventory are subject to annual review and re-approval by the Executive Management Team (*EMT*).

The Finance Management Team acts as a valuation control group for MuniFin's fair values and is responsible for the final approval of MuniFin's fair values for financial reporting. The Finance Management Team monitors and controls MuniFin's valuation process and the performance of valuation models, decides on the necessary measures and reports to the EMT. The Finance Management Team assesses whether the valuation models and valuation process provide sufficiently accurate information to be used in financial reporting and, based on the information received, decides on possible adjustments to the values generated by the valuation process.

The Company 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:

- Counterparty valuation control (*CVC*),
- Fair value explanation,
- Independent price verification (*IPV*) and
- Independent model validation.

Counterparty valuation control (*CVC*) is performed daily by Risk Management with the purpose to assess any deviations in valuation model output compared to MuniFin's own earlier valuations and to counterparty valuations. The results of the assessment are reported monthly to the CFO and quarterly to the Finance Management Team. Fair value explanation process consists of a daily analysis and explain of the changes in fair values by Risk Management and a monthly fair value explain report to the CFO and quarterly to the Finance Management Team. The independent price verification is performed monthly as part of MuniFin's IPV process by a third party service provider. The results of the control activities are reported monthly to the CFO and quarterly to the Finance Management Team. The independent model validation is performed annually for a subset of MuniFin's valuation models by a third-party service provider. The results of the model validation are reported to the Finance Management Team.

Transfers in the fair value hierarchy

MuniFin assesses the appropriateness and correctness of the categorisation with regards to the fair value hierarchy classification at initial recognition and at the end of each reporting period. This is to determine the initial classification of a level 1, 2 and 3 instrument and the subsequent potential transfers between levels within the fair value hierarchy. A transfer between the fair value hierarchies can occur for example when a previously assumed observed input requires an adjustment using an unobservable input. The procedure is the same for transfers into and out of the fair value levels. Transfers between the levels are considered to take place at the end of the quarter during which an event causes such a transfer or when circumstances change.

During 2021, transfers totaling EUR 50,127 thousand have been made between level 1 and level 2. During 2021, there were no transfers from level 2 to level 3.

LEVEL 3 TRANSFERS 2021 (EUR 1,000)	1 Jan 2021	Change in fair value in the income statement	Purchases and new contracts	Sales and matured contracts	Transfers into level 3	Transfers out of level 3	31 Dec 2021
Financial assets							
At fair value							
Mandatorily at fair value through profit or loss							
Loans and advances to the public and public sector entities	43,735	-4,878	-	-3,997	-	-	34,861
Shares and participations	27	-	-	-27	-	-	-
Shares and participations in group companies	656	-	-	-	-	-	656
Fair value through profit or loss							
Derivative contracts at fair value through profit or loss	79,452	-14,590	604	-2,636	-	-	62,829
Derivative contracts in hedge accounting	572	-366	317	-	-	-117	407
Financial assets in total	**124,443**	**-19,834**	**921**	**-6,660**	**-**	**-117**	**98,753**
Financial liabilities							
At fair value							
Designated at fair value through profit or loss							
Liabilities to the public and public sector entities	224,413	-8,408	47,787	-	-	-	263,793
Debt securities issued	2,125,714	-144,658	762,861	-975,731	-	-8,617	1,759,569
Fair value through profit or loss							
Derivative contracts at fair value through profit or loss	646,293	136,055	38,581	-76,252	-	-378	744,299
Derivative contracts in hedge accounting	24,391	6,797	450	-	-	-5,948	25,690
In fair value hedge accounting							
Amortised cost							
Debt securities issued	94,048	-1,802	27,162	-	-	-33,368	86,040
Financial liabilities in total	**3,114,859**	**-12,015**	**876,840**	**-1,051,984**	**-**	**-48,310**	**2,879,390**
Level 3 financial assets and liabilities in total *	**3,239,302**	**-31,849**	**877,761**	**-1,058,644**	**-**	**-48,427**	**2,978,143**

* The Company recognises these gains and losses within the line items *Net income from securities and foreign exchange transactions* and *Net income from hedge accounting*. The fair value change due to changes in own credit risk of financial liabilities designated at fair value through profit or loss is recognised in the *Own credit revalution reserve.*

Sensitivity analysis of unobservable inputs

Sensitivity analysis illustrates the impact of the reasonably possible assumptions on the fair value of financial instruments for which valuation is dependent on unobservable inputs. However, it is unlikely in practice that all unobservable inputs would simultaneously move to extremes of reasonably possible alternatives used in the sensitivity analysis. Hence, the impact of the sensitivity analysis disclosed in this Note is likely to be greater than the true uncertainty in the fair values at the financial statement date. Furthermore, the disclosure is neither predictive nor indicative of future movements in the fair value of financial instruments.

Although the Company believes that its estimates of fair value are appropriate, the use of different methodologies or assumptions could lead to different measurements of fair value. For fair value measurements on level 3, changing one or more of the assumptions to the reasonably possible alternative assumptions would have the following effects: as of 31 December 2021, these assumptions could have increased fair values by EUR 60.3 million or decreased fair values by EUR 59.6 million and as of 31 December 2020, they could have increased fair values by EUR 44.6 million or decreased fair values by EUR 33.6 million.

SENSITIVITY ANALYSIS OF SIGNIFICANT UNOBSERVABLE INPUTS BY INSTRUMENT TYPE (EUR 1,000)	Positive range of fair value 2021	Negative range of fair value 2021	Positive range of fair value 2020	Negative range of fair value 2020
Loans and advances to the public and public sector entities				
Loans	133	-84	542	327
Derivative contracts				
Equity-linked derivatives	18,864	-11,446	12,416	-7,240
FX-linked cross currency and interest rate derivatives	2,644	-1,537	1,786	-365
Other interest rate derivatives	13,173	-13,344	8,686	-10,165
Debt securities issued and Liabilities to the public and public sector entities				
Equity-linked liabilities	12,350	-18,115	11,690	-5,248
FX-linked liabilities	704	-2,233	-941	-1,681
Other liabilities	12,412	-12,810	10,430	-9,276
Total	**60,279**	**-59,570**	**44,609**	**-33,648**

The behaviour of the fair value of the unobservable inputs on level 3 is not necessarily independent and dynamic relationships often exist between the unobservable inputs and the observable inputs. Such relationships, where material to the fair value of a given instrument, are controlled via pricing models or valuation techniques. MuniFin uses stochastic models to generate a distribution of future cash flows of each financial instrument. The future cash flows are then discounted back to present to get the fair value of each financial instrument. The stochastic models used by the Company are Hull-White model and Dupire volatility model.

The unobservable inputs used by the Company are described next. The unobservable inputs are used only to the extent that no relevant observable inputs are available.

Correlation parameters
If the fair value of a financial instrument is impacted by more than one unobservable input, correlations describe the relationship between these different underlyings. For example for equity-linked instruments, correlation has a significant impact on fair value, if the underlying is dependant on more than one equity. For FX-linked cross currency and interest rate derivatives, correlations exist between FX rates of currencies, which impact the fair value of the financial instrument. If a high correlation exists between the unobservable inputs, will it lead to an increase in fair value. A low correlation between the unobservable inputs will lead to a decrease in fair value. MuniFin Group has financial instruments, in which the correlation is a significant unobservable input, mainly in funding products and their hedging instruments.

Volatility (extrapolated or illiquid)
A financial instrument whose value is based on a stochastic model will typically require the volatility of the underlying instrument as an input. The Company uses Dupire local volatility model as its stochastic valuation model. For interest rate volatilities at-the-money implied volatility is used. For FX and equity components (both equity indices and single stock prices), a full volatility surface is used that includes quotes for different strikes and maturities. The Company uses implied volatility for the majority of the equity-linked structures. In some cases no liquid volatility surface exists. In these cases, a proxy volatility is typically used instead. The majority of the financial instruments, which use volatility as a significant unobservable input, are the Company's funding products and their hedging instruments.

Dividend yield
The main drivers influencing the fair value of equity-linked instruments are the dividend yield and volatility of the underlying equities. Equity-linked instruments require a dividend parameter as an input to the fair value. The equity component is modelled using the Dupire local volatility model where the underlying equity prices are assumed to follow a random walk. Instruments that have divident yield as a significant unobservable input, are the Company's funding products and their hedging instruments.

Interest rates (extrapolated or illiquid)
The Company uses unobservable inputs in defining fair value of complex interest rate structures. The future cash flows and their fair value is determined by using forward rates and volatilities of the underlying interest rates using Hull-White stochastic model. Financial instruments whose payoffs are dependent on the value of complex interest rate structures are categorised on level 3. The majority of these instruments requiring extrapolated or illiquid interest rates as input are the Company's funding products and their hedging instruments.

The following table illustrates the effect that changing one or more of the assumptions in the unobservable input (reasonably possible alternative assumptions) could have on the valuations at the financial statement date:

SENSITIVITY ANALYSIS OF UNOBSERVABLE INPUTS 31 Dec 2021 (EUR 1,000)	Fair value	Valuation technique	Unobservable input	Positive range of fair value	Negative range of fair value
Loans and advances to the public and public sector entities					
Loans	34,861	Stochastic model	Volatility – Extrapolated or Illiquid	133	-84
Derivative contracts					
Equity-linked derivatives	-37,319	Stochastic model	Correlation parameters	759	653
			Volatility – Extrapolated or Illiquid	17,551	-11,504
			Dividend yield	554	-595
FX-linked cross currency and interest rate derivatives	-647,461	Stochastic model	Correlation parameters	498	-353
			Volatility – Extrapolated or Illiquid	2,145	-1,183
			Interest rates – Extrapolated or Illiquid	1	-1
Other interest rate derivatives	-21,972	Stochastic model	Correlation parameters	7	0
			Volatility – Extrapolated or Illiquid	12,870	-13,048
			Interest rates – Extrapolated or Illiquid	296	-296
Debt securities issued and Liabilities to the public and public sector entities					
Equity-linked liabilities	741,554	Stochastic model	Correlation parameters	229	-149
			Volatility – Extrapolated or Illiquid	11,455	-16,829
			Dividend yield	666	-1,137
FX-linked liabilities	785,053	Stochastic model	Correlation parameters	17	-123
			Volatility – Extrapolated or Illiquid	677	-2,099
			Interest rates – Extrapolated or Illiquid	11	-11
Other liabilities	582,795	Stochastic model	Correlation parameters	1	0
			Volatility – Extrapolated or Illiquid	12,313	-12,711
			Interest rates – Extrapolated or Illiquid	98	-98
Total				**60,279**	**-59,570**

DAY 1 GAIN OR LOSS (EUR 1,000)	2021	2020
Opening balance 1 Jan	-29	-
Recognised gain in the income statement	412	242
Recognised loss in the income statement	-711	-67
Deferred gain or loss on new transactions	91	-204
Total 31 Dec	**-236**	**-29**

The definition and amortisation method for the Day 1 gain or loss is presented in the accounting policies of the Consolidated Financial Statements (Note *1*) in Section *13. Determination of fair value*.

Transfers in the fair value hierarchy and sensitivity analysis 2020

During 2020, transfers totaling EUR 205,516 thousand have been made between level 1 and level 2 and EUR 35,796 thousand from level 2 to 3.

LEVEL 3 TRANSFERS 2020 (EUR 1,000)	1 Jan 2020	Change in fair value in the income statement	Purchases and new contracts	Sales and matured contracts	Transfers into level 3	Transfers out of level 3	31 Dec 2020
Financial assets							
At fair value							
Mandatorily at fair value through profit or loss							
Loans and advances to the public and public sector entities	50,028	-4,714	-	-1,578	-	-	43,735
Shares and participations	-	-	-	-	27	-	27
Shares and participations in Group companies	656	-	-	-	-	-	656
Fair value through profit or loss							
Derivative contracts at fair value through profit or loss	133,007	-12,405	-32	-41,804	686	-	79,452
Derivative contracts in hedge accounting	3,728	-2,118	117	-	-	-1,154	572
Financial assets in total	**187,420**	**-19,238**	**84**	**-43,382**	**713**	**-1,154**	**124,443**
Financial liabilities							
At fair value							
Designated at fair value through profit or loss							
Liabilities to the public and public sector entities	138,684	9,860	49,782	-	26,088	-	224,413
Debt securities issued	3,077,729	-259,858	868,572	-1,566,659	8,617	-2,686	2,125,714
Fair value through profit or loss							
Derivative contracts at fair value through profit or loss	458,243	289,125	37,906	-139,179	378	-181	646,293
Derivative contracts in hedge accounting	12,646	18,479	1,432	-	-	-8,167	24,391
In fair value hedge accounting							
Amortised cost							
Debt securities issued	151,671	-13,650	21,314	-	-	-65,286	94,048
Financial liabilities in total	**3,838,973**	**43,955**	**979,006**	**-1,705,838**	**35,083**	**-76,320**	**3,114,859**
Level 3 financial assets and liabilities in total	**4,026,391**	**24,717**	**979,090**	**-1,749,220**	**35,796**	**-77,474**	**3,239,302**

SENSITIVITY ANALYSIS OF UNOBSERVABLE INPUTS 2020 (EUR 1,000)	Fair value	Valuation technique	Unobservable input	Positive range of fair value	Negative range of fair value
Loans and advances to the public and public sector entities					
Loans	43,735	Stochastic model	Volatility – Extrapolated or Illiquid	542	327
Derivative contracts					
			Correlation parameters	1,324	-932
Equity-linked derivatives	-75,037	Stochastic model	Volatility - Extrapolated or Illiquid	9,142	-7,641
			Dividend yield	1,951	1,333
			Correlation parameters	51	-368
FX-linked cross currency and interest rate derivatives	-517,779	Stochastic model	Volatility – Extrapolated or Illiquid	1,642	96
			Interest rates – Extrapolated or Illiquid	93	-93
			Correlation parameters	8	-6
Other interest rate derivatives	2,156	Stochastic model	Volatility - Extrapolated or Illiquid	8,230	-9,711
			Interest rates – Extrapolated or Illiquid	447	-448
Debt securities issued and Liabilities to the public and public sector entities					
			Correlation parameters	2,810	2,088
Equity-linked liabilities	885,327	Stochastic model	Volatility – Extrapolated or Illiquid	7,733	-7,746
			Dividend yield	1,148	410
			Correlation parameters	213	54
FX-linked liabilities	1,027,104	Stochastic model	Volatility – Extrapolated or Illiquid	-1,161	-1,729
			Interest rates – Extrapolated or Illiquid	6	-6
			Correlation parameters	1	-1
Other liabilities	531,744	Stochastic model	Volatility – Extrapolated or Illiquid	10,220	-9,066
			Interest rates – Extrapolated or Illiquid	209	-209
Total				**44,609**	**-33,648**

Note 42. Equity

(EUR 1,000)	Share capital	Reserve fund	Fair value reserve of investments	Own credit revaluation reserve	Cost-of-Hedging reserve	Reserve for invested non-restricted equity	Retained earnings	Total
Carrying amount 1 Jan 2021	43,008	277	847	-255	15,624	40,743	151,454	251,698
+ increase	-	-	-	320	-	-	136,809	137,129
– decrease	-	-	-538	-	-2,004	-	-20,313	-22,855
Carrying amount 31 Dec 2021	**43,008**	**277**	**309**	**64**	**13,621**	**40,743**	**267,950**	**365,972**

(EUR 1,000)	Share capital	Reserve fund	Fair value reserve of investments	Own credit revaluation reserve	Cost-of-Hedging reserve	Reserve for invested non-restricted equity	Retained earnings	Total
Carrying amount 1 Jan 2020	43,008	277	807	12,985	28,075	40,743	135,368	261,264
+ increase	-	-	40	-	-	-	22,336	22,376
– decrease	-	-	-	-13,241	-12,451	-	-6,250	-31,942
Carrying amount 31 Dec 2020	**43,008**	**277**	**847**	**-255**	**15,624**	**40,743**	**151,454**	**251,698**

Note 43. Share capital

The shares of Municipality Finance Plc are divided into A and B shares. The two types are equal in terms of voting rights and the distribution of profit. Each share entitles its holder to one vote. The shares have no nominal value. The acquisition of shares is restricted through the consent and redemption clauses of the Articles of Association. At the end of 2021, the Company's share capital, paid up and recorded in the Trade Register, amounted to EUR 43,008 thousand (EUR 43,008 thousand). The total number of shares is 39,063,798 (39,063,798) which is divided to A shares 26,331,646 (26,331,646) and B shares 12,732,152 (12,732,152).

Note 44. Largest shareholders

The ten largest shareholders in terms of voting rights and the number of shares held by them, their portion of all shares in the credit institution and of all votes carried by the shares as well as the total number of shareholders:

31 Dec 2021	No. of shares	Per cent
1. Keva	11,975,550	30.66%
2. Republic of Finland	6,250,000	16.00%
3. City of Helsinki	4,066,525	10.41%
4. City of Espoo	1,547,884	3.96%
5. VAV Asunnot Oy *	963,048	2.47%
6. City of Tampere	919,027	2.35%
7. City of Oulu	903,125	2.31%
8. City of Turku	763,829	1.96%
9. City of Kuopio	592,028	1.52%
10. City of Lahti	537,926	1.38%

* VAV Asunnot Oy is fully owned by City of Vantaa.

The total number of shareholders is 276 (277).
The number of shares in this table does not include possible shares held by the shareholders' group companies.

Notes on collateral and contingent liabilities

Note 45. Collateral given

GIVEN COLLATERALS ON BEHALF OF OWN LIABILITIES AND COMMITMENTS (EUR 1,000)	31 Dec 2021	31 Dec 2020
Loans and advances to credit institutions to the counterparties of derivative contracts *	1,310,576	1,607,069
Loans and advances to credit institutions to the central bank **	35,984	34,918
Loans and advances to the public and public sector entities to the central bank **	4,716,147	5,181,646
Loans and advances to the public and public sector entities to the Municipal Guarantee Board ***	11,474,101	10,997,495
Other assets to the counterparties of derivative contracts *	238,930	243,269
Total	**17,775,738**	**18,064,396**

* MuniFin has pledged a sufficient amount of collateral to the counterparties of derivative contracts based on the CSA agreements of the derivative contracts (*ISDA/Credit Support Annex*).

** MuniFin is a monetary policy counterparty approved by the central bank and for this purpose, a sufficient amount of collateral has been pledged to the central bank for possible operations related to this counterparty position.

*** MuniFin has pledged a sufficient amount of loans to the Municipal Guarantee Board. The Municipal Guarantee Board guarantees MunFin's funding and MuniFin places collateral for the Municipal Guarantee Board's guarantees as defined in the Act on the Municipal Guarantee Board.

Collateral given is presented at the carrying amounts of the financial statement date.

Note 46. Pension liabilities

Pension coverage has been arranged via an external pension insurance company. Pension plans are classified as defined contribution plans.

Note 47. Off-balance sheet commitments

(EUR 1,000)	31 Dec 2021	31 Dec 2020
Credit commitments	2,592,877	2,353,978
Total	**2,592,877**	**2,353,978**

Notes on personnel and management

Note 48. Personnel

	2021		2020	
	Average	End of year	Average	End of year
Permanent full-time	143	144	146	143
Permanent part-time	1	1	2	3
Fixed term	7	8	8	8
Total	**151**	**153**	**156**	**154**

Employee benefits for management
Salaries and remuneration paid to the CEO, Deputy to the CEO and other members of the Executive Management Team (*EMT*) subject to withholding tax:

SALARIES AND REMUNERATION (EUR 1,000)	2021	2020
President and CEO	-430	-412
Deputy to the CEO	-224	-251
Other members of the Executive Management Team in total	-1,307	-1,122
Total	**-1,961**	**-1,785**

MuniFin has provided to those members of the EMT that have been appointed as members (including CEO and the Deputy to the CEO) before 21 Dec 2017 with a contribution-based group pension insurance. Those members are entitled to pension from the insurance after they have turned 63 years.

The Company has paid the following statutory pension contributions related to the CEO, the Deputy to the CEO and other members of the EMT:

STATUTORY PENSION CONTRIBUTIONS (EUR 1,000)	2021	2020
President and CEO	-71	-71
Deputy to the CEO	-37	-43
Other members of the Executive Management Team in total	-216	-194
Total	**-324**	**-308**

Remuneration of the Board of Directors

During financial years 2021–2022 the members of the Board of Directors of the Company are paid an annual remuneration as well as remuneration for each meeting in accordance with the decision of the Annual General Meeting. The annual remuneration is EUR 35,000 for the Chair of the Board, EUR 23,000 for the Vice Chair, EUR 25,000 for the Chairs of Committees and EUR 20,000 for the other members of the Board. The remuneration paid for Board and Committee meetings is EUR 800 per meeting for the Chair of the Board and the Chairs of Committees and EUR 500 per meeting for the other members. In addition, meeting remuneration is paid for the meetings required by the supervisory authorities. These remunerations are valid also in term 2020–2021. Prior to this in term 2019–2020, the annual remuneration was EUR 35,000 for the Chair of the Board, EUR 23,000 for the Vice Chair and EUR 20,000 for the other members of the Board.

SALARIES AND REMUNERATION (EUR 1,000)

Members of the Board of Directors	2021	2020
Helena Walldén, Chair until 25 March 2021	-14	-56
Kari Laukkanen, Chair 25 March 2021 onwards	-52	-45
Tuula Saxholm, Vice Chair until 25 March 2021	-9	-36
Maaria Eriksson, Vice Chair 25 March 2021 onwards	-32	-32
Raija-Leena Hankonen, member until 21 February 2020	-	-6
Minna Helppi, member until 25 March 2020	-	-9
Markku Koponen	-42	-46
Jari koskinen, member until 25 March 2020	-	-9
Vivi Marttila	-31	-34
Tuomo Mäkinen, elected 25 March 2021	-22	-
Minna Smedsten, elected 25 March 2021	-22	-
Denis Strandell, elected 25 Marck 2020	-31	-25
Leena Vainiomäki, elected 25 March 2021	-30	-
Kimmo Viertola, elected 25 March 2020	-28	-24
Total	**-313**	**-318**

Related party transactions

Note 49. Loans and other financial receivables from the related parties

MuniFin does not have any loan or financial receivables, or other receivables referred to in Chapter 15 Section 13 (2) of the Act on Credit Institutions from related parties.

Holdings in other companies

Note 50. Holdings in other companies

(EUR 1,000)	2021 Proportion of all shares (%)	2021 Carrying amount	2020 Proportion of all shares (%)	2020 Carrying amount
Subsidiaries				
Financial Advisory Services Inspira Ltd	100.0	656	100.0	656
Total	**100.0**	**656**	**100.0**	**656**

Other notes

Note 51. Audit and other fees paid to the audit firm

(EUR 1,000)	2021	2020
Audit	-340	-306
Assignments as referred to in Subparagraph 2, Paragraph 1 Section 1 of the Auditing Act	-	-7
Tax advisory services	-17	-10
Other services	-146	-103
Total	**-504**	**-427**

Amounts do not include VAT. In 2020, part of the other services paid to the audit firm is recognised as part of the intangible assets in accordance with MuniFin's accounting policies for the recognition of intangible assets.

Signatures to the Report of the Board of Directors and Financial Statements

Helsinki, 4 February 2022

MUNICIPALITY FINANCE PLC

Kari Laukkanen
Chair of the Board

Maaria Eriksson
Vice Chair of the Board

Markku Koponen
Member of the Board

Vivi Marttila
Member of the Board

Tuomo Mäkinen
Member of the Board

Minna Smedsten
Member of the Board

Denis Strandell
Member of the Board

Leena Vainiomäki
Member of the Board

Kimmo Viertola
Member of the Board

Esa Kallio
President and CEO

Auditor’s Note

A report of the audit performed has been issued today.

Helsinki, 4 February 2022

KPMG Oy Ab

Tiia Kataja
Authorized Public Accountant

Auditor's Report

Municipality Finance Plc
Auditor's Report
for the year ended 31 December 2021

To the Annual General Meeting of Municipality Finance Plc

Report on the Audit of the Financial Statements

Opinion

We have audited the financial statements of Municipality Finance Plc (business identity code 1701683-4) for the year ended 31 December 2021. The financial statements comprise the the consolidated statement of financial position, income statement, statement of comprehensive income, statement of changes in equity, statement of cash flows and notes, including a summary of significant accounting policies, as well as the parent company's balance sheet, income statement, statement of cash flows and notes.

In our opinion

— the consolidated financial statements give a true and fair view of the group's financial position, financial performance and cash flows in accordance with International Financial Reporting Standards (IFRS) as adopted by the EU

— the financial statements give a true and fair view of the parent company's financial performance and financial position in accordance with the laws and regulations governing the preparation of financial statements in Finland and comply with statutory requirements.

Our opinion is consistent with the additional report submitted to the Audit Committee.

Basis for Opinion

We conducted our audit in accordance with good auditing practice in Finland. Our responsibilities under good auditing practice are further described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of our report.

We are independent of the parent company and of the group companies in accordance with the ethical requirements that are applicable in Finland and are relevant to our audit, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

In our best knowledge and understanding, the non-audit services that we have provided to the parent company and group companies are in compliance with laws and regulations applicable in Finland regarding these services, and we have not provided any prohibited non-audit services referred to in Article 5(1) of regulation (EU) 537/2014. The non-audit services that we have provided have been disclosed in note 50 to the parent company's financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Materiality

The scope of our audit was influenced by our application of materiality. The materiality is determined based on our professional judgement and is used to determine the nature, timing and extent of our audit procedures and to evaluate the effect of identified misstatements on the financial statements as a whole. The level of materiality we set is based on our assessment of the magnitude of misstatements that, individually or in the aggregate, could reasonably be expected to have influence on the economic decisions of the users of the financial statements. We have also taken into account misstatements and/or possible misstatements that in our opinion are material for qualitative reasons for the users of the financial statements.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements of the current period. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. The significant risks of material misstatement referred to in the EU Regulation No 537/2014 point (c) of Article 10(2) are included in the description of key audit matters below.

We have also addressed the risk of management override of internal controls. This includes consideration of whether there was evidence of management bias that represented a risk of material misstatement due to fraud.

THE KEY AUDIT MATTER	HOW THE MATTER WAS ADDRESSED IN THE AUDIT

Financial assets and financial liabilities measured at fair value (notes to group financial statements 1, 2, 3, 5, 6, 7, 16, 17 and 25)

THE KEY AUDIT MATTER	HOW THE MATTER WAS ADDRESSED IN THE AUDIT
— The carrying amount of financial assets measured at fair value totaled EUR 5.8 billion and that of financial liabilities measured at fair value EUR 13.8 billion. — Fair values of financial instruments carried at fair value are determined using either prices quoted in an active market, or Municipality Finance's own valuation techniques where no active market exists. Determining fair values involves management judgements, especially in respect of those instruments for which market-based data is not available. — Financial assets and financial liabilities measured at fair value account for a substantial part of the assets and liabilities in the consolidated statement of financial position. Changes in market interest rates and foreign exchange rates may have a significant impact on the profit or loss for the financial year and equity. Consequently, the accounting for fair-valued financial assets and liabilities was considered a key audit matter.	— We analysed the appropriateness of the accounting principles and the valuation methodologies applied by Municipality Finance, as well as tested key controls over the valuation process. — In respect of derivative instruments we considered the appropriateness of the accounting treatment by reference to the IFRS requirements. — As part of our year-end audit procedures we compared the fair values used in measurement of fair-valued financial assets and liabilities with market quotations and other external price references, and assessed the accuracy of the valuation inputs and the reasonableness of the assumptions and estimates used. — We involved our own IFRS and financial instruments specialists. — Furthermore, we considered the appropriateness of the notes provided on financial assets and financial liabilities measured at fair value.

Hedge accounting (notes to group financial statements 1, 2, 8, 25 and 26)

— Municipality Finance applies hedge accounting to hedge against interest rate and currency risks related to financial assets and financial liabilities, and to reduce the accounting mismatch.

— Municipality Finance applies fair value hedge accounting under IFRS 9 and fair value portfolio hedge accounting under IAS 39.

— Due to the application of hedge accounting, the carrying amounts of those financial assets and financial liabilities to which hedge accounting is applied, include unrealised fair value change related to hedged risks.

— The hedge accounting process includes various accounting phases and hedge accounting may have a significant impact on the consolidated financial statements. Accordingly, hedge accounting was considered as key audit matter.

— We evaluated the hedge accounting practices applied for compliance with the relevant financial reporting standards.

— We assessed the effectiveness of the hedge effectiveness testing and the appropriateness of the related documentation prepared by Municipality Finance.

— We involved our own IFRS and financial instrument specialists.

— Furthermore, we considered the appropriateness of the notes provided on hedge accounting.

Responsibilities of the Board of Directors and the Managing Director for the Financial Statements
The Board of Directors and the Managing Director are responsible for the preparation of consolidated financial statements that give a true and fair view in accordance with International Financial Reporting Standards (IFRS) as adopted by the EU, and of financial statements that give a true and fair view in accordance with the laws and regulations governing the preparation of financial statements in Finland and comply with statutory requirements. The Board of Directors and the Managing Director are also responsible for such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Board of Directors and the Managing Director are responsible for assessing the parent company's and the group's ability to continue as a going concern, disclosing, as applicable, matters relating to going concern and using the going concern basis of accounting. The financial statements are prepared using the going concern basis of accounting unless there is an intention to liquidate the parent company or the group or cease operations, or there is no realistic alternative but to do so.

Auditor's Responsibilities for the Audit of the Financial Statements
Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with good auditing practice will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

As part of an audit in accordance with good auditing practice, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

— Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

— Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the parent company's or the group's internal control.

— Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

— Conclude on the appropriateness of the Board of Directors' and the Managing Director's use of the going concern basis of accounting and based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the parent company's or the group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the parent company or the group to cease to continue as a going concern.

— Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events so that the financial statements give a true and fair view.

— Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Other Reporting Requirements

Information on our audit engagement

KPMG Oy Ab was first appointed as audit firm by the Annual General Meeting in 2001, and our appointment represents a total period of uninterrupted engagement of 21 years.

Other Information

The Board of Directors and the Managing Director are responsible for the other information. The other information comprises the report of the Board of Directors and the information included in in the Annual Report, but does not include the financial statements and our auditor's report thereon. We have obtained the report of the Board of Directors prior to the date of this auditor's report, and the Annual Report is expected to be made available to us after that date. Our opinion on the financial statements does not cover the other information.

In connection with our audit of the financial statements, our responsibility is to read the other information identified above and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. With respect to the report of the Board of Directors, our responsibility also includes considering whether the report of the Board of Directors has been prepared in accordance with the applicable laws and regulations.

In our opinion, the information in the report of the Board of Directors is consistent with the information in the financial statements and the report of the Board of Directors has been prepared in accordance with the applicable laws and regulations.

If, based on the work we have performed on the other information that we obtained prior to the date of this auditor's report, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Other Opinion

We support that the financial statements should be adopted. The proposal by the Board of Directors regarding the use of the profit shown in the balance sheet and the profit distribution is in compliance with the Limited Liability Companies Act. We support that the Members of the Board of Directors, the Managing Director and the Deputy Managing Director should be discharged from liability for the financial period audited by us.

Helsinki 4th February 2022

KPMG OY AB

Tiia Kataja
Authorised Public Accountant, KHT

MuniFin

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