Half Year Report

1 January–30 June 2022

MuniFin

In brief: MuniFin Group in the first half of 2022

- The Group's net operating profit excluding unrealised fair value changes amounted to EUR 74 million (EUR 108 million) in the reporting period, decreasing by 31.0% from the comparison period's record-high result (15.6% growth). This drop was influenced by the change in credit terms applied in late 2021 and a non-recurring item related to terminated IT system implementation. In the reporting period, the Group's net interest income was EUR 122 million (EUR 138 million). Costs in the reporting period amounted to EUR 48 million (EUR 34 million). Costs excluding non-recurring item grew and were EUR 38 million, making the figure 13.4% greater than in the comparison period. The costs peaked the most in fees collected by authorities.

- The Group's net operating profit amounted to EUR 91 million (EUR 127 million). Unrealised fair value changes amounted to EUR 16 million (EUR 20 million) in the reporting period.

- The Group's leverage ratio was 10.6% (12.8%) at the end of June. The Group redeemed its only AT1 capital loan in Tier 1 capital, in April, which decreased Tier 1 capital by EUR 347 million. This explains the reduction in the leverage ratio.

- At the end of June, the Group's CET1 capital ratio was very strong at 83.8% (95.0%). CET1 capital ratio exceeded the total requirement of 13.2% by over six times, with capital buffers accounted for. The repayment of the AT1 capital loan decreased Tier 1 and total capital ratio to 83.8% (118.4%), bringing them currently on a par with the CET1 capital ratio.

- Russia's invasion of Ukraine has only had a minor effect on the Group's financial position and operating profit. Despite the market turbulence, the Group has continued to acquire funding in the normal manner during the reporting period. Because of the uncertainty arising from the war and inflation outlook, the Group has nevertheless maintained larger than normal liquidity buffers as a precaution.

- Long-term customer financing (long-term loans and leased assets) excluding fair value changes totalled EUR 29,807 million (EUR 29,064 million) at the end of June and saw a growth by 2.6% (2.8%). Long-term customer financing decreased by 1.3% (+2.0%) due to the unrealised fair value changes. New lending in January–June amounted to EUR 2,006 million (EUR 1,601 million). Short-term customer financing increased by 41.4% (a year earlier the growth was 13.1%) and reached EUR 1,540 million (EUR 1,089 million).

- Of all long-term customer financing, the amount of green finance aimed at environmentally sustainable investments totalled EUR 2,700 million (EUR 2,328 million) and the amount of social finance aimed at investments promoting equality and communality EUR 1,296 million (EUR 1,161 million) at the end of June. Green and social finance have been extremely well received by customers, and the total amount of this financing increased by 14.6% (24.3%) from the end of 2021.

- In January–June, new long-term funding reached EUR 5,962 million (EUR 6,025 million). At the end of June, the total funding was EUR 40,850 million (EUR 40,712 million), of which long-term funding made up EUR 37,315 million (EUR 36,893 million).

- The Group's total liquidity is very strong, and it was EUR 11,798 million (EUR 12,222 million) at the end of reporting period. The liquidity coverage ratio (*LCR*) stood at 292.6% (334.9%) and the net stable funding ratio (*NSFR*) at 129.4% (123.6%) at the end of June.

- Outlook for the second half of 2022: In 2021, the Group decided to change the terms of its long-term customer loans for the benefit of its customers. The decision was made knowing that it would significantly decrease the Group's net interest income in 2022. The Group expected in February and still expects its net operating profit excluding unrealised fair value changes to be significantly lower this year than in the previous year. The Group expects its capital adequacy ratio and leverage ratio to remain very strong. The valuation principles set in IFRS 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. A more detailed outlook is presented in the section *Outlook for the second half of 2022.*

Comparison figures deriving from the income statement and figures describing the change during the reporting period are based on figures reported for the corresponding period in 2021. Comparison figures deriving from the balance sheet and other cross-sectional items are based on the figures of 31 December 2021 unless otherwise stated.

Key figures

Net operating profit excluding unrealised fair value changes (EUR million)

74

New lending (EUR billion)

2.0

Long-term customer financing (EUR billion)

28.8

CET1 capital ratio, %

83.8

Municipality Finance Plc • Half Year Report 1 January–30 June 2022

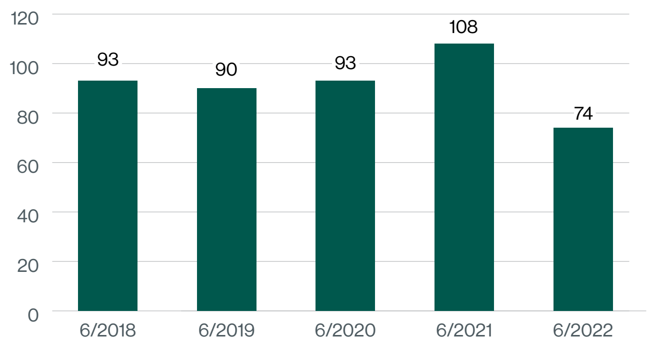
Key figures (Group)

	30 Jun 2022	30 Jun 2021	31 Dec 2021
Net operating profit excluding unrealised fair value changes (EUR million)*	74	108	213
Net operating profit (EUR million)*	91	127	240
Net interest income (EUR million)*	122	138	280
New lending (EUR million)*	2,006	1,601	3,275
Long-term customer financing (EUR million)*	28,831	28,582	29,214
New long-term funding (EUR million)*	5,962	6,025	9,395
Balance sheet total (EUR million)	47,491	45,658	46,360
CET1 capital (EUR million)	1,421	1,346	1,408
Tier 1 capital (EUR million)	1,421	1,694	1,756
Total own funds (EUR million)	1,421	1,694	1,756
CET1 capital ratio, %	83.8	91.1	95.0
Tier 1 capital ratio, %	83.8	114.7	118.4
Total capital ratio, %	83.8	114.7	118.4
Leverage ratio, %	10.6	12.6	12.8
Return on equity (*ROE*), annualised, %*	8.5	11.7	10.7
Cost-to-income ratio*	0.3	0.2	0.2
Personnel	180	163	164

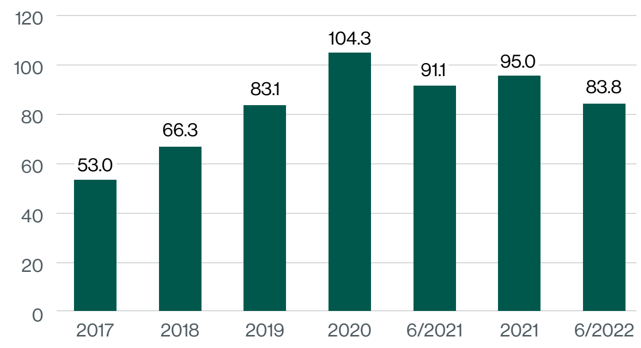
** Alternative performance measure.*

The calculation formulas for all key figures can be found on pages 37–44. All figures presented in this Half Year Report are those of MuniFin Group, unless otherwise stated.

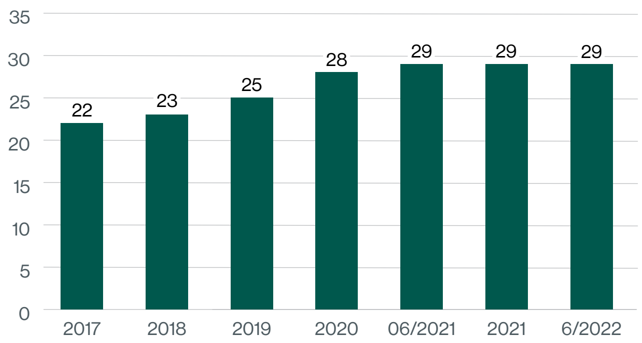
Net operating profit excluding unrealised fair value changes, EUR million*



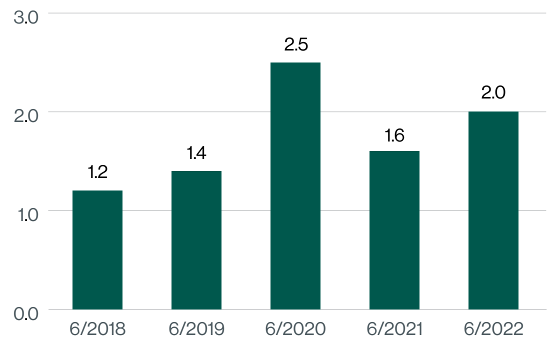
CET1 capital ratio, %



Long-term customer financing, EUR billion*



New lending, EUR billion*



** Alternative performance measure.*

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CEO's review

In the first half of 2022, the operating environment was again turbulent, but MuniFin's business operations remained stable and continued without disruptions. The COVID-19 pandemic began to calm down in the spring, but Russia's invasion of Ukraine gave rise to a new global humanitarian, political and economic crisis, which also heavily affects Finland through the accelerating inflation, rising interest rates and sanctions imposed on Russia. At MuniFin, we were able to operate steadily even during these turbulent times. Our core mandate is to offer our customers funding under all circumstances.

The ongoing economic upheaval and Russia's invasion of Ukraine have only had a minor impact on MuniFin so far. In the first half of 2022, the demand for our financing was somewhat lesser than expected, but it remained stable. The municipal sector's moderate demand for financing is partly due to pandemic recovery measures, such as the central government's COVID 19 support package, and partly due to non-recurring items from sales of health and social services assets by some municipalities during the ongoing health and social services reform.

Our other customer group, operators in state-subsidised housing production, have suffered more from the difficult operating environment in the first half of the year.

The materials shortage and the increasing price of raw materials, both of which started before the war but were further accelerated by it, have slowed down building contracts and decreased the demand for our finance in the housing sector.

Our funding has remained stable even under the new exceptional circumstances. Despite the market turbulence, our access to the capital markets has remained strong throughout the first half of the year. We have also enjoyed strong investor demand: for example, the green bond we issued in May was once again many times oversubscribed.

This year, MuniFin's contribution to the Single Resolution Fund for significant banks in euro area totals EUR 9 million, which is almost 40% higher than in the previous year, although there have been no significant changes in MuniFin's risk position. By way of comparison, the new contribution amounts to about two-thirds of the Group's salaries.

The pandemic has transformed our lives into something that is predicted to become the new normal, but the outlook has become even murkier than expected after the war broke out in Europe. Amidst all this uncertainty, it is important to note that at MuniFin, we work hard every day to create stability in these uncertain times and to ensure smooth operations for all our customers.

Once again, and this time with even more emphasis, I wish to warmly thank our customers for their confidence and forward-facing collaboration and our staff for their wonderful work and commitment to our shared goal.

Esa Kallio
President and CEO
Municipality Finance Plc

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MuniFin Group's

performance for the reporting period

1 January–30 June 2022

Operating environment in the first half of 2022

Russia's invasion of Ukraine transformed the global economic outlook. In Europe, the outlook in the first half of the year was shadowed by the security and refugee crisis and threats related to the security of supply. Military action and the economic sanctions imposed on Russia complicated international trade in energy, raw materials and food, further accelerating high inflation.

Monetary policy took an exceptionally sharp turn for a contractive stance, with the United States leading the way. The European Central Bank (*ECB*) decided to end net asset purchases under its asset purchase programme (*APP*) as of 1 July 2022 and started raising its key interest rates in July. In the United States, the rapidly rising interest rates already began to cool down rate-sensitive sectors of the economy, such as the housing market. In China, the COVID-19 lockdowns of the biggest cities sharply shrank service-sector production and caused disruptions in many supply chains essential to the global trade of goods.

In the first half of 2022, interest rate markets reflected the sudden change of course in central bank monetary policy brought on by the prolonged inflation. The 12-month Euribor rate rose from the -0.5% of the beginning of the year by 1.5 percentage points to around 1.0%. Long-term interest rates also saw a rapid rise. Germany's 10-year bond yield went up from -0.2% to around 1.3%, while Finland's corresponding rate went from zero to close to 2.0%.

Russia's invasion of Ukraine also reflected on the Finnish economy in many ways. Not only has consumer confidence slumped, but business expectations have also taken a slight downward turn. Rising costs and interest rates are impacting the construction sector in particular.

The Finnish economy continued to grow moderately in the first quarter of 2022, although the GDP growth rested on the exceptionally strong growth of public investments. Both private consumption and private investments declined slightly. Net exports fell considerably as a result of the dwindling Russian trade and the long-lasting strike in the Finnish forest industry.

Effects of the health and social services reform on MuniFin Group

The newly established wellbeing services counties will be responsible for organising health and social services in Finland as of 1 January 2023. The legislative package concerning their financing has now been finalised, also in terms of MuniFin's role. At this stage, the wellbeing services counties will largely be funded by the central government, but the wellbeing services counties will nevertheless have the right to borrow with a separate authorisation by the central government required for long-term borrowing. In addition, the wellbeing services counties can independently do short-term borrowing.

In terms of financing, the legislation adopted in the summer of 2021 allows MuniFin to continue to act as a lender and counterparty to the loans and other liabilities that will be transferred from municipalities to the wellbeing services counties at the start of 2023. The amendments to the Act on the Municipal Guarantee Board passed in the Parliament of Finland in April 2022 allow MuniFin to also finance new investments and other new financing needs by the wellbeing services counties.

In January 2022, the Finnish Financial Supervisory Authority (*FIN-FSA*) decided that as the central government and the municipalities, wellbeing services counties will also fall in the zero-risk category in the capital adequacy regulation of credit institutions. This decision will simplify financing arrangements because it means that government guarantees are not required.

At this stage, as wellbeing services counties will not be members in the Municipal Guarantee Board (*MGB*) unlike the municipalities, they will not be liable for the guarantee provided for MuniFin's funding. For this reason, the MGB grants an annual limit for MuniFin for wellbeing services counties' new financing in order to secure the autonomous position of municipalities as the final guarantors of MuniFin's funding as intended in legislation as part of the joint financing system of municipalities formed by MuniFin and the MGB.

In MuniFin's view, the legislation should be further developed to make wellbeing services counties liable for the funding guarantees that relate to their financing, the same way municipalities are.

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. The total amount of MuniFin's loans and other liabilities transferred to the wellbeing services counties on 1 January 2023 will become clear in the second half of the year, but it is estimated to be around EUR 3–4 billion. MuniFin can start granting short-term financing for wellbeing services counties already in 2022.

It is difficult to estimate the wider economic impact of the reform at this stage, when there is no information available on how the wellbeing services counties will operate in practice. MuniFin's financing volumes will be affected by the wellbeing services counties' future level of investments, the limit set by the MGB and the fact that the operating expenses of the wellbeing services counties are covered from the central government's budget. In MuniFin's current financing operations, lending to health and social services do not represent such a role that changes in it would have a material impact on the Group's financial position in the near future.

Information on the Group results

CONSOLIDATED INCOME STATEMENT (EUR million)	1–6/2022	1–6/2021	Change, %	1–12/2021
Net interest income	122	138	-11.9	280
Other income	1	3	-61.6	4
Income excluding unrealised fair value changes	**123**	**142**	**-13.1**	**285**
Commission expenses	-3	-2	13.8	-5
Personnel expenses	-9	-9	1.2	-18
Other items in administrative expenses	-9	-9	7.8	-17
Depreciation and impairment on tangible and intangible assets	-8	-3	>100	-16
Other operating expenses	-19	-11	79.1	-16
Costs	**-48**	**-34**	**42.1**	**-72**
Credit loss and impairments on financial assets	-1	0	>100	0
Net operating profit excluding unrealised fair value changes	**74**	**108**	**-31.0**	**213**
Unrealised fair value changes	16	20	-18.0	27
Net operating profit	**91**	**127**	**-29.0**	**240**
Profit for the period	**71**	**102**	**-29.9**	**192**

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

The Group's net operating profit excluding unrealised fair value changes

MuniFin Group's core business operations remained strong in the first half of 2022. The Group's net operating profit excluding unrealised fair value changes was EUR 74 million (EUR 108 million). Income excluding unrealised fair value changes was EUR 123 million (EUR 142 million) and fell by 13.1%.

As projected, the Group's net operating profit excluding unrealised fair value changes declined from a year earlier. In 2021, MuniFin decided to change the credit terms of negative interest rates in its long-term customer loans, enabled by the CRR II regulation that confirmed MuniFin's role as a public development credit institution. This change began to gradually lower customers' loan expenses as of October 2021. In the first half of 2022, the Group's result was also weighed down by the decision to terminate an IT project. Without these executive decisions, the Group's result would have improved from the comparison period. In addition, the result was weakened by the growth in fees collected by authorities. The COVID-19 pandemic and Russia's invasion of Ukraine only had a minor effect on the results both in the reporting period and in the comparison period.

Net interest income totalled EUR 122 million (EUR 138 million). The effect of the changed credit terms was about EUR -20 million. Net interest income was positively affected by growing business volumes and the continued low cost of funding.

On 1 April, MuniFin redeemed its AT1 capital loan (EUR 350 million), included in its Tier 1 capital. The Group's net interest income does not recognise the interest expenses of EUR 4 million (EUR 8 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 fell to EUR 1 million (EUR 3 million) from the comparison period due to the decrease in realised net income from securities transactions. Additionally, other income includes commission income, net income from 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 other income. At 1.1% (2.4%), other income relative to income excluding unrealised fair value changes forms only a minor part of the Group's income.

The Group's costs were EUR 48 million (EUR 34 million), rising by 42.1% from the year before. Costs were increased by a non-recurring item resulting from the discontinuation of a major IT project for a loan lifecycle management system, which the Group launched in late 2019. The Group decided to terminate this project during the reporting period, which resulted in expense entries and conservatively estimated provisions for possible future expenses of a total of EUR 10 million in depreciation and impairment on tangible and intangible assets and in operating expenses. The termination is not expected to have an effect on customer business. Expenses were also increased by the higher contribution to the Single Resolution Fund, which grew by 36.3% to EUR 9 million (EUR 7 million). Even without the non-recurring expenses resulting from the discontinued IT project and the increased contribution, costs grew slightly from the previous year.

Commission expenses totalled EUR 3 million (EUR 2 million) and consisted primarily of paid guarantee fees, custody fees and funding programme update fees.

Administrative expenses reached EUR 19 million (EUR 18 million) and grew by 4.4% (13.9%). Of this, personnel expenses comprised EUR 9 million (EUR 9 million) and other administrative expenses EUR 9 million (EUR 9 million). Employee numbers grew during the reporting period, and the average number of employees in the Group was 171 (161).

Other items in administrative expenses grew by 7.8% (26.1%) during the reporting period. The growth is mainly due to the increased costs of maintaining and developing information systems. The improved COVID-19 situation has also slightly increased travelling expenses and other types of running costs.

During the reporting period, depreciation and impairment of tangible and intangible assets reached EUR 8 million (EUR 3 million). The item was increased by the aforementioned IT project termination.

Other operating expenses increased by 79.1% (-1.1%) to EUR 19 million (EUR 11 million). Of these, fees collected by authorities comprised EUR 10 million (EUR 8 million), increasing by 30.9% (23.6%) from the comparison period. The growth in fees was mainly due to the higher contribution to the Single Resolution Fund. These fees excluded, other operating expenses totalled EUR 9 million (EUR 3 million), growing by 218.3% (-37.3%) mostly due to the terminated IT project.

The amount of expected credit losses (*ECL*), calculated according to IFRS 9, amounted to EUR -0.7 million (EUR -0.1 million). MuniFin Group updated the scenarios used to calculate ECL at the end of the reporting period. The scenarios and weights are reported in more detail in Note *10* to this Half Year Report. At the end of June 2022, the Group decided to record an additional discretionary provision (*management overlay*) of EUR 0.9 million to take into account the effects of the ECL model changes and the further development of the calculation principles in 2022. EUR 0.5 million of this amount is recorded in the first half of 2022.

The additional discretionary provision recorded for the ECL model changes in the 2021 consolidated financial statements was EUR 0.4 million. The updated ECL model and principles for loss given default (*LGD*) calculation of mortgage loans and lifetime ECL calculations will be adopted in the second half of 2022.

The Group's overall credit risk position has remained low. According to the management's assessment, all receivables from customers will be fully recovered and no final credit losses 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 real estate 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 of June 2022, the Group had a total of EUR 12 million (EUR 19 million) of guarantee receivables from public sector entities due to customer insolvency, which is under 0.1% of total customer exposure. The credit risk of the liquidity portfolio has remained at a low level, its average credit rating being AA+ (AA+). More information on the credit risks of financial assets and other commitments is available in Note *10* to this Half Year Report.

The Group's profit and unrealised fair value changes

The Group's net operating profit for the first half of 2022 was EUR 91 million (EUR 127 million). Unrealised fair value changes improved the Group's net operating profit by EUR 16 million (EUR 20 million). In January–June 2022, net income from hedge accounting amounted to EUR 13 million (EUR 5 million) and unrealised net income from securities transactions to EUR 3 million (EUR 15 million).

Taxes in the consolidated income statement amounted to EUR 19 million (EUR 26 million). After taxes, the Group's profit for January–June was EUR 71 million (EUR 102 million). The Group's annualised return on equity (*ROE*) was 8.5% (11.7%). Excluding unrealised fair value changes, the annualised ROE was 7.1% (9.9%).

The Group's other comprehensive income includes unrealised fair value changes of EUR -62 million (EUR -2 million). During the reporting period, the most significant item affecting the other comprehensive income was the fair value change due to changes in own credit risk of financial liabilities designated at fair value through profit or loss, totalled EUR -30 million (EUR 4 million). The cost-of-hedging totalled EUR -27 million (EUR 2 million).

On the whole, unrealised fair value changes net of deferred tax affected the Group's equity by EUR -37 million (30 Jun 2021: EUR +14 million) and CET1 capital net of deferred tax in capital adequacy by EUR -15 million (30 Jun 2021: EUR +17 million). At the end of June, the cumulative effect of unrealised fair value changes on the Group's own funds in capital adequacy calculations was EUR 16 million (30 Jun 2021: EUR +29 million).

Unrealised fair value changes reflect the temporary impact of market conditions on the valuation levels of financial instruments at the time of reporting. 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. The counterparty credit risk related to derivatives is comprehensively covered by collatetal management. 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 reporting period, 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.

Information on the consolidated statement of financial position

CONSOLIDATED STATEMENT OF FINANCIAL POSITION (EUR million)	30 Jun 2022	31 Dec 2021	Change, %
Cash and balances with central banks	8,423	8,399	0.3
Loans and advances to credit institutions	1,766	1,417	24.6
Loans and advances to the public and public sector entities	28,831	29,214	-1.3
Debt securities	4,847	4,841	0.1
Derivative contracts	2,452	2,000	22.6
Other items included in the assets	1,171	489	>100
Total assets	**47,491**	**46,360**	**2.4**
Liabilities to credit institutions	2,665	2,801	-4.9
Liabilities to the public and public sector entities	2,835	3,325	-14.7
Debt securities issued	35,905	35,328	1.6
Derivative contracts	3,691	2,224	65.9
Other items included in the liabilities	914	821	11.4
Total equity	1,481	1,862	-20.5
Total liabilities and equity	**47,491**	**46,360**	**2.4**

The Group's consolidated statement of financial position totalled EUR 47,491 million (EUR 46,360 million) at the end of June and saw a growth of 2.4% (3.7%). Loans and advances to the public and public sector entities grew during the reporting period, but their amount decreased due to the unrealised fair value changes resulting from the rise in interest rate levels. The increase in assets was mainly due to growth in the fair value of derivative contracts and cash collateral posted to the central counterparty in other assets. Also, loans and advances to credit institutions saw a growth due to the increase in cash collateral in bilateral derivative contracts. In liabilities, the largest change was in the fair value of derivative contracts.

At the end of the reporting period, the Group's equity stood at EUR 1,481 million (EUR 1,862 million). The year-end comparison figure includes EUR 347 million of the redeemed AT1 capital loan. With the AT1 capital loan redemption considered, the Group's equity fell by 2.2%. The reporting period's profit increased the equity, but on the other hand own credit revaluation reserve and cost-of-hedging reserve decreased the equity by EUR 46 million. In the consolidated accounts, interest expenses amounting to EUR 13 million (EUR 13 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 40 million (EUR 20 million) for the financial year 2021, paid to MuniFin's shareholders in April 2022.

Financing and other services for customers

MuniFin Group's customers include municipalities, joint municipal authorities and municipality-controlled entities, wellbeing services counties, as well as non-profit housing organisations and non-profit housing projects nominated by the Housing Finance and Development Centre of Finland (*ARA*). The Group is by far the largest single provider of financing for its customer segment, offering diverse financing services and extensive support in investment planning and financial management. 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.

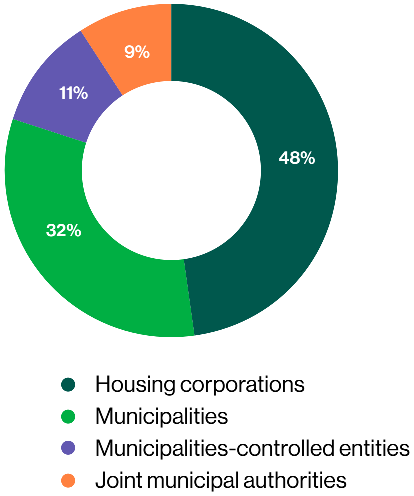
In the first half of 2022, Finnish municipalities have prepared for the practical implementation of the health and social services reform in January 2023, in which the responsibility for organising health and social services will be transferred from municipalities to the wellbeing services counties. Municipalities will nevertheless always have mandatory investments that cannot be postponed, so the demand for financing is not expected to significantly change despite the health and social services reform. MuniFin Group's customers also required additional financing in the first half of 2022 as joint municipal authorities and hospital districts prepared for future needs of the wellbeing services counties.

Interest rates began to rise in 2022 after a long period of negative rates.

In the first half of 2022, MuniFin Group's business operations developed levelly: the turbulent operating environment caused customers to use moderation in their seek of financing. The shortage of raw materials and increasing costs have slowed down some investments, especially in the housing sector, and postponed the launch of some projects. Rising costs may also delay municipal investments. During the reporting period, MuniFin Group further strengthened its strong market position among its customers. The demand for financing among MuniFin's customers increased and new lending totalled EUR 2,006 million (EUR 1,601 million) in January–June.

The Group's long-term customer financing (long-term loans and leased assets) amounted to EUR 28,831 million (EUR 29,214 million) at the end of June 2022, decreasing by 1.3% (2.0%) from the turn of the year. The decrease was due to growth in the unrealised fair value changes. Instead, long-term customer financing excluding unrealised fair value changes grew by 2.6% (2.8%) and amounted to EUR 29,807 million (EUR 29,064 million) at the end of the reporting period.

Long-term loan portfolio by customer type 30 Jun 2022, %



Short-term customer financing (commercial papers to municipalities and municipal companies) totalled EUR 1,540 million (EUR 1,089 million) at the end of June 2022.

Customer interest in sustainable finance products remains strong. Of long-term customer financing, green finance accounted for EUR 2,700 million (EUR 2,328 million) and social finance for EUR 1,296 million (EUR 1,161 million) at the end of June 2022. The Group continued its work to measure the emissions of both its own operations and the projects it finances. These calculations will help the Group to systematically reduce its own carbon footprint, offer customers more support with emission reductions, and better manage climate and environmental risks.

MuniFin's subsidiary company Inspira specialises in financial advisory services for the municipal sector. The most popular services were comprehensive financial planning and services that help analyse and prepare for the impacts of the health and social services reform.

In June 2022, MuniFin started to provide short-term customer financing in the form of commercial papers to municipalities and municipal companies on a real-time digital service platform. Digital developments will continue in other services as well.

The Group is also preparing to finance the future investments of Finland's new wellbeing services counties. MuniFin's loans for joint municipal authorities for social and health services and hospital districts will be transferred to the wellbeing services counties on 1 January 2023, under the same terms and conditions.

Funding and liquidity management

MuniFin Group acquires primarily its funding from the international capital markets as standardised issuances under debt programmes. The Group's funding strategy relies on diversification of funding sources in order to secure funding under all market conditions. MuniFin Group diversifies into multiple currencies, maturities, geographical areas and investor groups.

The Group's long-standing liquidity and funding strategy, based on diversification, has proven to be very successful during the upheaval of economic and security policies in early 2022.

In the first half of 2022, Russia's invasion of Ukraine caused interest rates and inflation to shoot up and economic growth to slow down. MuniFin Group's funding operations have continued normally despite the market turbulence.

The Group has retained good access to capital markets even with the challenging market conditions, which proves the Group's strategy successful. The timing of issuances has become even more critical due to increased volatility, which is why MuniFin has used more than before also other transactions in addition to public benchmark bonds to acquire funding. The funding cost for the reporting period was lower than expected.

The Group estimates to acquire EUR 9–10 billion in funding in 2022. In the reporting period, the Group's new long-term funding totalled EUR 5,962 million (EUR 6,025 million). Funding operations have proceeded on schedule, and 61.5% of the planned total funding has been acquired by the end of June. A total of 116 (113) funding arrangements were made in 12 (8) different currencies. The Group uses derivatives to hedge against market risks related to its funding issuances.

At the end of June, MuniFin Group's total funding amounted to EUR 40,850 million (EUR 40,712 million), of which MuniFin's short-term debt instruments under the Euro Commercial Paper (*ECP*) programme totalled EUR 3,536 million (EUR 3,819 million). Of total funding, 48.7% (49.0%) were denominated in euros and 51.3% (51.0%) in foreign currencies.

MuniFin is committed to issue new green and social bonds regularly. The green bond issued in May was many times oversubscribed despite the challenging market backdrop. Of investors that participated, as many as 80% were dedicated ESG investors.

Russia's invasion of Ukraine has made it necessary to revise MuniFin Group's liquidity planning in order to ensure financing for customers. The Group has substantially increased its sufficiency in liquidity, and with the amount held at the end of June, it could uphold all its commitments with no additional funding for over 20 months (15 months). As a long-term requirement, total liquidity must be enough to cover uninterrupted business for a survival horizon of at least 12 months.

At the end of June 2022, the Group's total liquidity amounted to EUR 11,798 million (EUR 12,222 million). Of this, central bank deposits totalled EUR 8,458 million (EUR 8,435 million) and investments in liquid, low-risk securities totalled EUR 3,308 million (EUR 3,753 million), with the average credit rating of AA+ (AA+) and average maturity of 2.5 years (2.9). In addition to this, money market deposits in credit institutions totalled EUR 32 million (EUR 34 million).

The Group has integrated the constant development of sustainability into its investment processes as well. MuniFin's Sustainable Investment Framework, published in 2021, summarises the sustainability principles, processes and responsibilities of the Group's investment operations. In addition to low credit risk and high liquidity, the Group actively monitors the sustainability of its liquidity investments through ESG score[1] (*Environmental, Social and Governance*).

At the end of June 2022, the Group's liquidity investments had an average ESG score of 59.0 (59.3) on a scale of 1–100, above the benchmark index of 56.5 (55.9). The Group also holds direct socially responsible investments (*SRIs*). These amounted to EUR 444 million (EUR 456 million), which is 13.4% (12.1%) of all investment in securities. The Group's ratio of sustainable investments is higher than the market benchmark of 6.9% (5.0%). The ratio of socially responsible investments to the Group's own green and social funding was 12.9% (15.6%).

[1] *The ESG score is calculated quarterly by an external service provider. It takes into account the quality of ESG governance, the business model and possible controversies in ESG matters, among other factors.*

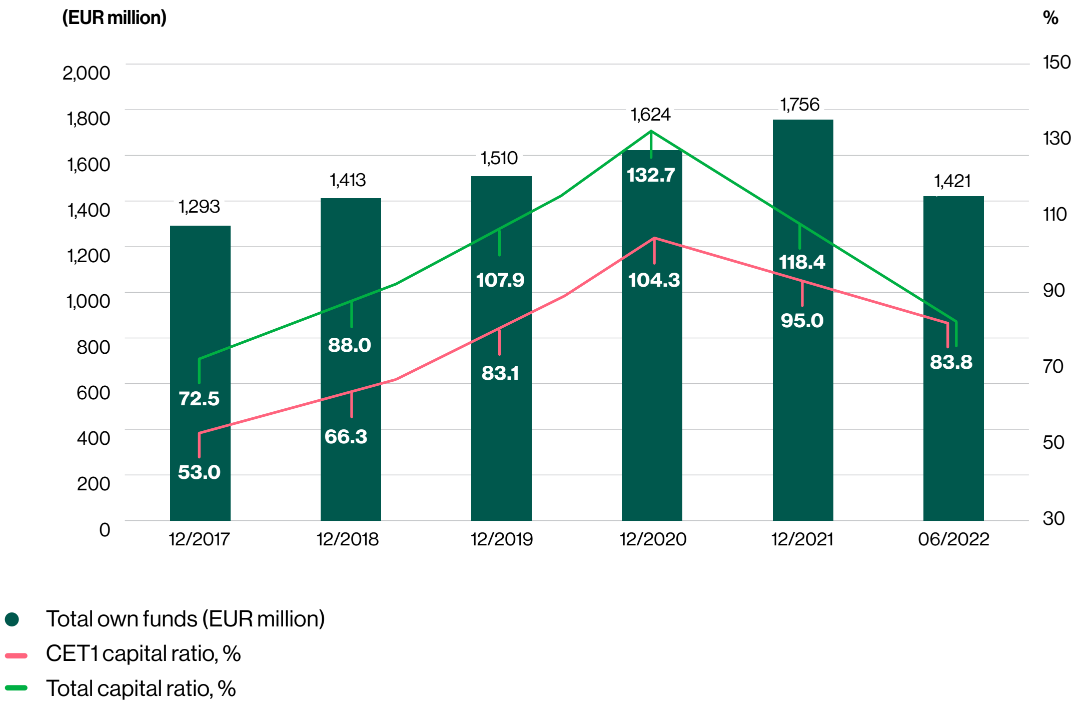
MuniFin's credit ratings

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 in the reporting period. MuniFin's funding is guaranteed by the Municipal Guarantee Board, which has credit ratings corresponding to MuniFin's credit ratings.

Capital adequacy

Consolidated own funds



MuniFin Group's capital adequacy

MuniFin Group's capital adequacy is very strong. The CET1 capital ratio was 83.8% (95.0%), which corresponds to its Tier 1 capital ratio and total capital ratio at the end of June (118.4%) because the Group only had CET1 capital at the time. The total capital ratio fell due to the redemption of the AT1 capital loan, which reduced the total capital ratio at the end of June by 20.5%. The credit valuation adjustment risk (*CVA VaR*) increased significantly at the end of June, and this change decreased capital ratios. The reason behind the change is the higher-than-normal market interest and FX rates that occurred on the reporting date. The Group's CET1 capital ratio is over six times the required minimum, taking capital buffers into account.

CONSOLIDATED OWN FUNDS (EUR 1,000)	30 Jun 2022	31 Dec 2021
Common Equity Tier 1 before regulatory adjustments	1,456,461	1,464,442
Regulatory adjustments to Common Equity Tier 1	-35,000	-56,172
Common Equity Tier 1 (*CET1*)	**1,421,461**	**1,408,270**
Additional Tier 1 capital before regulatory adjustments	-	347,454
Regulatory adjustments to Additional Tier 1 capital	-	-
Additional Tier 1 capital (*AT1*)	**-**	**347,454**
Tier 1 capital (*T1*)	**1,421,461**	**1,755,723**
Tier 2 capital before regulatory adjustments	-	-
Regulatory adjustments to Tier 2 capital	-	-
Tier 2 capital (*T2*)	**-**	**-**
Total own funds	**1,421,461**	**1,755,723**

At the end of June, the Group's CET1 capital totalled EUR 1,421 million (EUR 1,408 million). The Group no longer had any Additional Tier 1 instruments, and therefore its CET1 capital was equal to its Tier 1 capital, EUR 1,421 million (EUR 1,756 million). The redemption of the AT1 capital loan diminished the Group's Tier 1 capital by EUR 347 million. The Group had no Tier 2 capital. The Group's own funds totalled EUR 1,421 million (EUR 1,756 million) at the end of June.

The CET1 capital includes profit for the period of 1 January–30 June 2022. This profit has been subject to a 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*).

CONSOLIDATED MINIMUM REQUIREMENT FOR OWN FUNDS

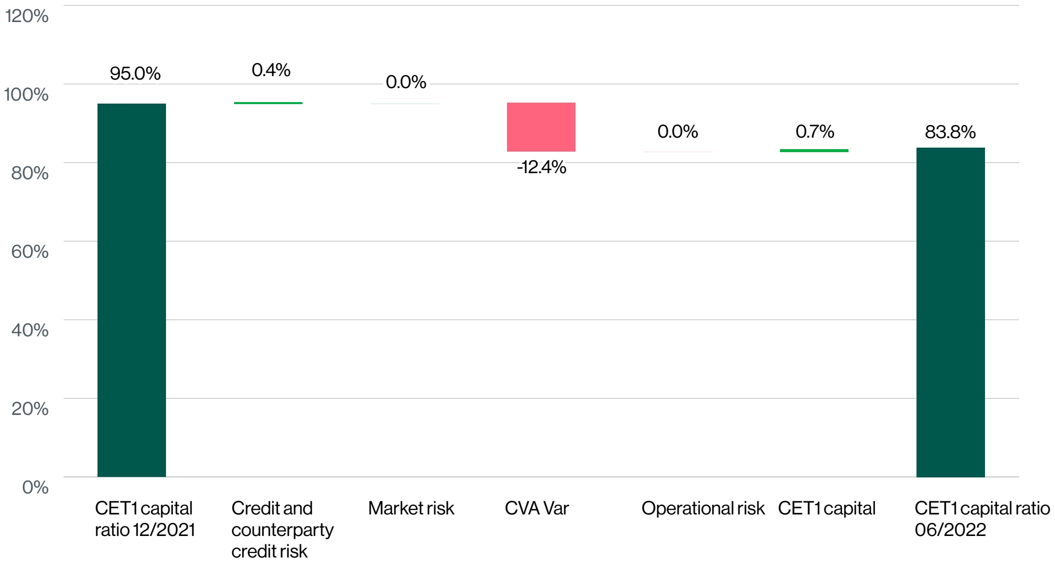
	30 Jun 2022		31 Dec 2021	
(EUR 1,000)	Capital requirement	Risk exposure amount	Capital requirement	Risk exposure amount
Credit and counterparty credit risk, standardised approach	**42,003**	**525,041**	**42,524**	**531,547**
Exposures to central governments or central banks	-	0	-	0
Exposures to regional governments or local authorities	434	5,419	451	5,634
Exposures to public sector entities	661	8,264	705	8,807
Exposures to multilateral development banks	-	0	-	0
Exposures to institutions	23,059	288,244	23,422	292,771
Exposures to corporates	7,540	94,255	6,038	75,471
Exposures in the form of covered bonds	7,874	98,425	9,734	121,670
Other items	2,435	30,434	2,176	27,194
Market risk	-	-	-	-
Credit valuation adjustment risk (*CVA VaR*), standard method	**57,205**	**715,067**	**39,549**	**494,362**
Operational risk, basic indicator approach	**36,527**	**456,587**	**36,527**	**456,587**
Total	**135,736**	**1,696,695**	**118,600**	**1,482,496**

The capital requirement for counterparty credit risk is EUR 7,344 thousand (EUR 4,727 thousand).

The Group's total risk exposure amount increased by 14.4% from the end of 2021, totalling EUR 1,697 million (EUR 1,482 million) at the end of the reporting period.

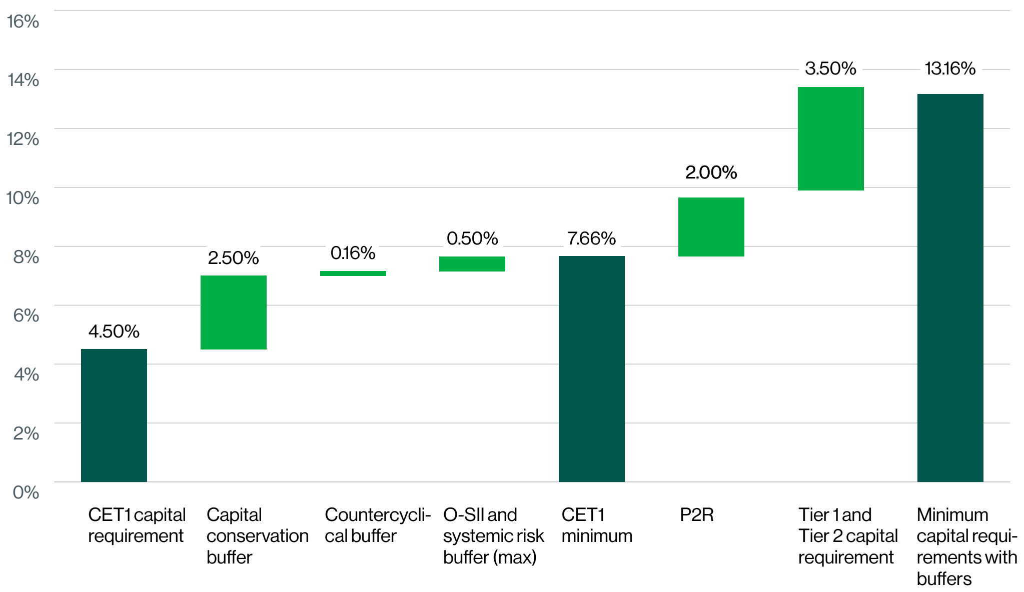
The risk exposure amount for credit and counterparty credit risk decreased by EUR 7 million from the end of 2021. There was no capital requirement for market risk at the end of June or in the comparison year, because the currency position was less than 2% of the Group's own funds, and, based on Article 351 of the CRR, the own funds requirement for market risk has therefore not been calculated. The CVA VaR increased to EUR 715 million (EUR 494 million). The growth was influenced by the higher-than-normal changes in market interest and FX rates that occurred on the last day of the reporting period, which increased derivative exposures and temporarily increased the CVA VaR. Due to the derivatives' collateral management, the CVA VaR returned to its normal level already the next day. The risk exposure amount of operational risk was EUR 457 million (EUR 457 million).

Changes in the Group's CET1 capital ratio, %



The Group will publish a separate Pillar III Report on risk management and capital adequacy on week 32. The Report will be available in English on the MuniFin website.

The Group's minimum capital requirement and capital buffers, %



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 an additional capital requirement for other systemically important credit institutions (*O-SII buffer*) is 0.5% for MuniFin Group. At the end of June 2022, the Finnish Financial Supervisory Authority (*FIN-FSA*) gave its annual decision on O-SII buffer and kept the buffer unchanged at 0.5%.

The FIN-FSA decides on an additional capital requirement based on the systemic risk buffer and adjusts it annually. For MuniFin Group, 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. So far, the FIN-FSA has not imposed a new systemic risk buffer for MuniFin Group. The systemic risk buffer and the O-SII buffer are parallel buffers, of which only the greater is applied.

In June 2022, the FIN-FSA decided not to impose countercyclical capital buffer requirement, which is decided on a quarterly basis. For MuniFin Group, the credit institution-specific countercyclical capital buffer requirement that is imposed based on the geographical distribution of exposures is 0.2% (0.2%). The Group therefore has a minimum requirement of 7.7% (7.7%) for CET1 capital ratio and 11.2% (11.1%) for total capital ratio.

In addition to the abovementioned requirements, the ECB has imposed a bank-specific Pillar 2 Requirement (*P2R*) of 2.0% on MuniFin Group as part of the annual Supervisory Review and Evaluation Process (*SREP*). This requirement decreased by 0.25 percentage points during the reporting period. Including this P2R requirement, the total SREP capital requirement ratio (*TSCR*) was 10.0% (10.25%) at the end of June 2022.

The minimum level of total capital ratio was 13.2% (13.4%) including P2R and other additional capital buffers.

Leverage ratio, liquidity coverage ratio and net stable funding ratio

At the end of June, MuniFin Group's leverage ratio was 10.6% (12.8%). 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 31,695 million (EUR 31,568 million) at the end of June. The reduced leverage ratio is explained by the redemption of the AT1 loan, which reduced the amount of the Group's own funds. The minimum required leverage ratio is 3%.

At the end of June, MuniFin Group's liquidity coverage ratio (*LCR*) was 292.6% (334.9%). The minimum requirement is 100%.

The net stable funding ratio (*NSFR*) requirement took effect in June 2021 as part of banks' capital adequacy regulation (*CRR II*). At the end of June 2022, the Group's NSFR was 129.4% (123.6%). The minimum requirement is 100%.

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 the 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 has had to fully comply with the final MREL target levels, which equal the capital and leverage ratio requirements, from January 2022 onwards. MuniFin's own funds and eligible liabilities currently exceed the MREL requirement by a wide margin, and there is no present need for MuniFin to issue Tier 3 instruments.

Future changes in banking regulation

At the end of October 2021, the European Commission published its proposal for the implementation of the final Basel III banking regulatory standards in the EU (*"CRR III package"*). This reform will affect banks' solvency calculation, especially in the context of credit, market and operational risks, credit valuation adjustment (*CVA VaR*), and leverage ratio. It also introduces a new output floor. MuniFin Group's business model is based on zero risk-weighted customer financing, which will not change with the implementation of the Basel III package. The reform will, however, affect MuniFin's capital adequacy calculations and reporting methods. The Group will specify its impact assessments later, as it prepares for the CRR III's entry into force.

MuniFin Group is also preparing 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. This regulation will take effect in several phases and starting from September 2022 initial margin requirement will be binding to MuniFin.

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 the 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 risk position

There were no material changes in MuniFin Group's risk position during the first half of 2022, and risks remained within the risk appetite limits set by the Board of Directors. The COVID-19 pandemic has only had a moderate effect on the Group's counterparty risk, liquidity portfolio credit risk and risks related to liquidity, lending and business processes. The war in Ukraine has had little effect on the Group's financial position and results. Despite the market turbulence, the Group's funding has continued in the usual manner during the reporting period. Because of the uncertainty arising from the war and inflation outlook, the Group has nevertheless maintained larger than normal liquidity buffers as a precaution. Russia's invasion of Ukraine mainly affects the Group's risks indirectly through market conditions. Cyberattacks targeted at the Group could also affect its risks, but the Group has carefully prepared for these.

Despite the changes in the operational environment, the Group's credit risk position remained stable and at a low level during the reporting period. Unrealised fair value changes of financial instruments caused usual earnings volatility during the first half of the 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 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 (real estate collateral and guarantees received) and exemptions set out in CRR II Article 400 related to the calculation of large exposures, MuniFin Group is not exposed to customer risk 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 increased in the first half of the year and was EUR -0.7 million (EUR -0.1 million) recognised in the income statement for the reporting period. The amount of forborne receivables was EUR 58 million (EUR 88 million), while non-performing exposures amounted to EUR 98 million (EUR 128 million) at the end of June. 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 0.3% (0.4%) of total customer exposures.

MuniFin's credit risk position remained stable and at a low level during the reporting period. 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. The Group actively monitors and hedges its interest rate risk. Eight scenarios are used in the calculation of the net interest income (*NII*) risk, of which the least favourable outcome is considered. One-year NII risk at the end of June was EUR -7 million with least favourable scenario being a decrease of 50 basis points in the whole interest curve (at the end of 2021, the least favourable scenario was a rise of 50 basis points in the whole interest curve, EUR 0 million). Several scenarios are also used in the calculation of the economic value of equity (*EVE*), of which the least favourable outcome is considered. At the end of June, the least favourable scenario was a rise of 200 basis points in the whole interest curve, when EVE was EUR -23 million (at the end of 2021, the least favourable scenario was a rise of 50 basis points in the whole interest curve, EUR -13 million).

MuniFin Group's foreign exchange (*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. During the reporting period, unrealised fair value changes of financial instruments caused usual earnings volatility for the Group. 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. 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.

MuniFin 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. The Group revised its calculation method for the survival horizon in 2022, and the figure stood at over 20 months (15 months) at the end of June, calculated with the new method. The Group's liquidity remained good, with the liquidity coverage ratio (*LCR*) being 292.6% (334.9%) at the end of June. The availability of long-term funding is monitored via the net stable funding ratio (*NSFR*), which stood at 129.4% (123.6%) at the end of the reporting period. The availability of funding remained good throughout the first half of the year. In January–June 2022, MuniFin Group issued EUR 5,962 million (EUR 6,025 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 during the first half of 2022. The Group's operating practices with remote work arrangements have changed, but the Group's 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 reporting period. 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.

MuniFin Group took part in the ECB's climate stress test in the first half of 2022. The results of the stress test were published in July.

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 in the reporting period.

General meeting

The Annual General Meeting (AGM) of MuniFin was held on 24 March 2022. The AGM confirmed the Financial Statements for 2021 and discharged the members of the Board of Directors, the CEO and the Deputy CEO from liability for the financial year 2021. In addition, in accordance with the proposal of the Board of Directors, the AGM authorised a dividend of EUR 1.03 per share to be paid, totalling EUR 40,235,711.94. The amount of distributable funds on the Group's balance sheet on 31 December 2021 was EUR 267,949,619.07.

Based on the proposal of the Shareholders' Nomination Committee, the AGM decided to appoint eight Board members for the 2022–2023 term, lasting from the 2022 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 Tiia Kataja as the principal auditor. Kataja acted as the principal auditor during the previous term as well.

The AGM also decided, based on the proposal of the Shareholders' Nomination Committee, that the Committee will be supplemented by a fifth member representing the municipal sector. MuniFin's three largest shareholders – public sector pension provider Keva, State of Finland and the City of Helsinki, as well as the Association of Finnish Local and Regional Authorities – have each nominated one member to the Committee. The fifth member will be appointed by a joint decision between the next five largest shareholders.

The AGM's resolutions are published on MuniFin's website.

Board of Directors

The Shareholders' Nomination Committee made a proposal to the AGM held on 24 March 2022 regarding the members to be elected for the term that began at the end of the 2022 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 and Leena Vainiomäki. As per the Committee's proposal, 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 Maaria Eriksson.

From the 2021 AGM to the 2022 AGM, the members of the Board of Directors were Kari Laukkanen (Chair), Maaria Eriksson (Vice Chair), Markku Koponen, Vivi Marttila, Tuomo Mäkinen, Minna Smedsten, Denis Strandell, Leena Vainiomäki and Kimmo Viertola. Viertola was not available for the Board's 2022–2023 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 June 2022, MuniFin Group had 180 (164) employees, of which 170 (153) worked for the Parent Company. Salaries and remuneration paid across the Group amounted to EUR 7.7 million (EUR 7.4 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.

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 operations, way of working and IT systems and that the risks associated with the operations are adequately managed.

Events after the reporting period

MuniFin's Board of Directors is not aware of any events having taken place after the end of the reporting period that would have a material effect on the Group's financial standing.

Outlook for the second half of 2022

Economic growth forecasts have been systematically revised downwards in the first half of 2022 because of the Russian invasion of Ukraine. According to the latest assessments, global economic growth will slump to about 3% from last year's growth of nearly 6%. The ECB's latest forecasts project a growth of 2.8% in the euro area in 2022. A trend this positive is explained by the growth momentum gathered last year. Within the year, growth will be feeble and negative quarters are likely. In 2023, the ECB expects the euro area growth to stand at 2.1%.

The Finnish economy will inevitably also see a distinct slowdown, but it faced the effects of the war in Ukraine from a better position than it did when the COVID-19 pandemic broke out two years ago. The service sector has revitalised after restrictions were lifted, and many industries still have such a strong order backlog that it will boost industrial production. The growing trend in employment has also continued despite the outbreak of the war.

Finland's GDP growth is expected to reach 1.5% in 2022, but then stand at 0.5% in 2023. Even though the economic outlook is cooling down, the average unemployment rate is projected to come down from 7.6% in 2021 to 6.8% in 2022 and remain at that level also in 2023. Finland's deficit-to-GDP ratio is expected to stand at just above 2% in 2022, with the debt-to-GDP ratio rising to a little over 62%.

Energy inflation is expected to increasingly filter into the price of food, other consumer goods and services. It now seems that inflation will not relent until early 2023. We expect Finnish consumer price inflation to stand at 5.5% in 2022 and at 2.5% in 2023.

According to the Local Government Finances Programme published by the Ministry of Finance, in 2022 and 2023, the financial position of Finnish municipalities is expected to be about EUR 1 billion stronger than previously projected. The projection was revised because tax income has grown more than expected and net investments significantly less than expected in the first half of the year. The government's COVID-19 support package still affects municipal finances to some extent, and the unexpected decline in net investments is partially explained by non-recurring items from sales of health and social services assets by some municipalities during the ongoing health and social services reform. Despite these non-recurring positive developments, the long-term investment needs of municipalities have remained at a high level, which is expected to increase the demand for financing in the future.

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. The total amount of MuniFin's loans and other liabilities transferred to the wellbeing services counties on 1 January 2023 will become clear in the second half of the year, but it is estimated to be around EUR 3–4 billion. MuniFin can start granting short-term financing for wellbeing services counties already in 2022. It is difficult to estimate the wider economic impact of the reform at this stage, when there is no information available on how the wellbeing services counties will operate in practice. In MuniFin's financing operations, health and social services lending plays such a moderate role that changes in it will not have a material impact on the Group's financial development in the near future.

After the 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 allowed customers to benefit from negative reference rates. The impact of this decision can be seen in the net interest income and profit of the first half of 2022. The Group expects its net interest income to be significantly lower in 2022 than in 2021, but net interest income is otherwise projected to develop favourably. In the first half of the year, costs increased because of non-recurring expenses resulting from the termination of an IT project and the higher contribution to the Single Resolution Fund. Costs in the second half of 2022 are expected to be lower than in the second half of 2021.

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. The Group nevertheless expects the result to surpass the long-term profitability target. The Group expects its capital adequacy ratio and leverage ratio to remain very strong. The valuation principles set in IFRS 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.

The estimates presented herein are based on current views of the development of the operating environment and MuniFin Group's operations.

Helsinki, 5 August 2022
Municipality Finance Plc
Board of Directors

Further information:
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Harri Luhtala, CFO, tel. +358 50 592 9454

The Group's development

	30 Jun 2022	30 Jun 2021	31 Dec 2021
Turnover (EUR million)	258	280	535
Net interest income (EUR million)*	122	138	280
% of turnover	47.1	49.4	52.4
Net operating profit (EUR million)*	91	127	240
% of turnover	35.0	45.6	44.8
Unrealised fair value changes (EUR million)*	16	20	27
Net operating profit excluding unrealised fair value changes (EUR million)*	74	108	213
Cost-to-income ratio*	0.3	0.2	0.2
Cost-to-income ratio excluding unrealised fair value changes*	0.4	0.2	0.2
Return on equity (*ROE*), %*	8.5	11.7	10.7
Return on equity (*ROE*) excluding unrealised fair value changes, %*	7.1	9.9	9.6
Return on assets (*ROA*), %*	0.3	0.5	0.4
Return on assets (*ROA*) excluding unrealised fair value changes, %*	0.3	0.4	0.4

	30 Jun 2022	30 Jun 2021	31 Dec 2021
Long-term customer financing (EUR million)*	28,831	28,582	29,214
New lending (EUR million)*	2,006	1,601	3,275
Total funding (EUR million)*	40,850	40,281	40,712
New long-term funding (EUR million)*	5,962	6,025	9,395
Equity (EUR million)	1,481	1,793	1,862
Total balance sheet (EUR million)	47,491	45,658	46,360
Total liquidity (EUR million)*	11,798	11,736	12,222
Liquidity Coverage Ratio (*LCR*), %	292.6	300.2	334.9
Net Stable Funding Ratio (*NSFR*), %	129.4	122.7	123.6
Equity ratio, %*	3.1	3.9	4.0
CET1 capital (EUR million)	1,421	1,346	1,408
Tier 1 capital (EUR million)	1,421	1,694	1,756
Total own funds (EUR million)	1,421	1,694	1,756
CET1 capital ratio, %	83.8	91.1	95.0
Tier 1 capital ratio, %	83.8	114.7	118.4
Total capital ratio, %	83.8	114.7	118.4
Leverage ratio, %	10.6	12.6	12.8
Personnel	180	163	164

** Alternative performance measure.*

The calculation formulas for all key figures can be found on pages 37-44. All figures presented in this Half Year Report are those of MuniFin Group, unless otherwise stated..

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–30 Jun 2022	1 Jan–30 Jun 2021
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)	241	257
		Interest and similar expense	-119	-118
		Net interest income	**122**	**138**
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	3	15
		Net income from hedge accounting	13	5
		Unrealised fair value changes	**16**	**20**
Net operating profit	Net operating profit describes the Group's operating profit before taxes.	**Net operating profit**	**91**	**127**
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	91	127
		- Unrealised fair value changes	16	20
		Net operating profit excluding unrealised fair value changes	**74**	**108**
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	122	138
		Commission income	1	1
		Net income from securities and foreign exchange transactions	3	17
		Net income on financial assets at fair value through other comprehensive income	-	-
		Net income from hedge accounting	13	5
		Other operating income	0	0
		Income	**139**	**161**

ALTERNATIVE PERFORMANCE MEASURE EUR million	DEFINITION / EXPLANATION	RECONCILIATION	1 Jan–30 Jun 2022	1 Jan–30 Jun 2021
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	139	161
		- Unrealised fair value changes	16	20
		Income excluding unrealised fair value changes	**123**	**142**
Other income	Other income includes all other income of the Group except net interest income and unrealised fair value changes.	Commission income	1	1
		Net income from securities transactions, realised	-	1
		Net income from foreign exchange transactions	0	1
		Net income on financial assets at fair value through other comprehensive income	-	-
		Other operating income	0	0
		Other income	**1**	**3**
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	3	2
		Administrative expenses	19	18
		Depreciation and impairment on tangible and intangible assets	8	3
		Other operating expenses	19	11
		Costs	**48**	**34**
Costs excluding the non-recurring item	Costs excluding the non-recurring item reflects the amount of costs comparable between financial periods.	Costs	48	34
		Non-recurring item (expenses on terminated IT system implementation)	-10	-
		Costs excluding the non-recurring item	**38**	**34**
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)	45	31
		÷ Income (incl. Net commission income)	136	159
		Cost-to-income ratio	**0.3**	**0.2**

ALTERNATIVE PERFORMANCE MEASURE EUR million	DEFINITION / EXPLANATION	RECONCILIATION	1 Jan–30 Jun 2022	1 Jan–30 Jun 2021
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 an performance measure is 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)	45	31
		÷ (Income (incl. Net commission income)	136	159
		- Unrealised fair value changes)	16	20
		Cost-to-income ratio excluding unrealised fair value changes	**0.4**	**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	16	20
		Taxes related to the unrealised fair value changes through PnL	-3	-4
		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	-24	-3
		Net change in Cost-of-Hedging, net of tax	-22	2
		Net change in fair value of financial assets at fair value through other comprehensive income, net of tax	-3	0
		The effect of unrealised fair value changes on other comprehensive income and equity net of tax	**-36**	**14**
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**	**2,006**	**1,601**
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**	**5,962**	**6,025**

ALTERNATIVE PERFORMANCE MEASURE EUR million	DEFINITION / EXPLANATION	RECONCILIATION	30 Jun 2022	31 Dec 2021
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. The key figure in reported annualised.	((Net operating profit	91	240
		- Taxes)	-19	-48
		÷ Equity and non-controlling interest (average of values at the beginning and end of the period)) x100	1,671	1,783
		Return on Equity (*ROE*), %	**8.5%**	**10.7%**
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. The key figure in reported annualised.	((Net operating profit excluding unrealised fair value changes	74	213
		- Taxes)	-15	-43
		÷ Equity and non-controlling interest (average of values at the beginning and end of the period)) x100	1,671	1,783
		Return on Equity (*ROE*) excluding unrealised fair value changes, %	**7.1%**	**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. The key figure in reported annualised.	((Net operating profit	91	240
		- Taxes)	-19	-48
		÷ Average balance sheet total (average of values at the beginning and end of the period)) x100	46,925	45,201
		Return on Assets (*ROA*), %	**0.3%**	**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. The key figure in reported annualised.	((Net operating profit excluding unrealised fair value changes	74	213
		- Taxes)	-15	-43
		÷ Average balance sheet total (average of values at the beginning and end of the period)) x100	46,925	45,201
		Return on Assets (*ROA*) excluding unrealised fair value changes, %	**0.3%**	**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	1,481	1,862
		÷ Balance sheet total) x100	47,491	46,360
		Equity ratio, %	**3.1%**	**4.0%**
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	28,831	29,214
		- Leasing	1,234	1,334
		Long-term loan portfolio	**27,597**	**27,880**
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	28,831	29,214
		Long-term customer financing	**28,831**	**29,214**

ALTERNATIVE PERFORMANCE MEASURE EUR million	DEFINITION / EXPLANATION	RECONCILIATION	30 Jun 2022	31 Dec 2021
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	28,831	29,214
		- Unrealised fair value changes	976	-150
		Long-term customer financing excluding unrealised fair value changes	**29,807**	**29,064**
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)	1,540	1,089
		Short-term customer financing	**1,540**	**1,089**
Total funding	Key indicator used in management reporting to describe MuniFin Group's funding volume.	Liabilities to credit institutions	2,665	2,801
		Liabilities to the public and public sector entities	2,835	3,325
		Debt securities issued	35,905	35,328
		Total	**41,405**	**41,453**
		- CSA collateral (received)	**-555**	**-741**
		Total funding	**40,850**	**40,712**
Long-term funding	Key indicator used in management reporting to describe MuniFin Group's funding volume.	Total funding	40,850	40,712
		- Short-term issued funding (*ECP*)	-3,536	-3,819
		Long-term funding	**37,315**	**36,893**
Total liquidity	Key indicator used in management reporting to describe MuniFin Group's liquidity position.	Debt securities	4,847	4,841
		- Short-term customer financing	-1,540	-1,089
		Shares and participations	-	-
		Investments in securities total	**3,308**	**3,753**
		Cash and balances with central banks	8,423	8,399
		Other deposits	67	70
		Other investments total	**8,491**	**8,469**
		Total liquidity	**11,798**	**12,222**
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	444	456
		÷Green and social funding) x100	3,430	2,930
		Ratio of socially responsible investments to MuniFin Group's own green and social funding	**12.9%**	**15.6%**

OTHER MEASURES EUR million	DEFINITION / EXPLANATION	RECONCILIATION	1 Jan–30 Jun 2022	1 Jan–30 Jun 2021
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)	241	257
		Commission income	1	1
		Net income from securities and foreign exchange transactions	3	17
		Net income on financial assets at fair value through other comprehensive income	-	-
		Net income from hedge accounting	13	5
		Other operating income	0	0
		Turnover	**258**	**280**
			30 Jun 2022	**31 Dec 2021**
Liquidity Coverage Ratio (*LCR*), %	Defined in CRR.	(Liquid assets	11,226	11,564
		÷ (Liquidity outflows - liquidity inflows in a stress situation)) x100	3,837	3,453
		Liquidity Coverage Ratio (*LCR*), %	**292.6%**	**334.9%**
Net Stable Funding Ratio (*NSFR*), %	Defined in CRR.	(Available Stable Funding (*ASF*)	34,224	33,638
		÷ Required Stable Funding (*RSF*)) x100	26,447	27,221
		Net Stable Funding Ratio (*NSFR*), %	**129.4%**	**123.6%**
CET1 capital ratio, %	Defined in CRR.	(Common Equity Tier 1 (*CET1*) capital	1,421	1,408
		÷ Risk exposure amount) x100	1,697	1,482
		CET1 capital ratio, %	**83.8%**	**95.0%**

OTHER MEASURES EUR million	DEFINITION / EXPLANATION	RECONCILIATION	30 Jun 2022	31 Dec 2021
Tier 1 capital ratio, %	Defined in CRR.	(Tier 1 capital	1,421	1,756
		÷ Risk exposure amount) x100	1,697	1,482
		Tier 1 capital ratio, %	**83.8%**	**118.4%**
Total capital ratio, %	Defined in CRR.	(Total own funds	1,421	1,756
		÷ Risk exposure amount) x100	1,697	1,482
		Total capital ratio, %	**83.8%**	**118.4%**
Leverage ratio, %	Defined in CRR.	(Tier 1 capital	1,421	1,756
		÷ Total exposure) x100	13,451	13,716
		Leverage ratio, %	**10.6%**	**12.8%**

Municipality Finance Plc

Half Year Report tables

MuniFin

Consolidated income statement

(EUR 1,000)	Note	1 Jan–30 Jun 2022	1 Jan–30 Jun 2021
Interest and similar income	(2)	240,952	256,572
Interest and similar expense	(2)	-119,236	-118,381
Net interest income		**121,716**	**138,191**
Commission income		1,175	899
Commission expense		-2,761	-2,426
Net income from securities and foreign exchange transactions	(3)	2,956	17,148
Net income on financial assets at fair value through other comprehensive income		-	-
Net income from hedge accounting	(4)	13,189	4,887
Other operating income		66	75
Administrative expenses		-18,603	-17,813
Depreciation and impairment on tangible and intangible assets	(9)	-7,549	-2,852
Other operating expenses		-18,916	-10,560
Credit loss and impairments on financial assets	(10)	-740	-62
Net operating profit		**90,532**	**127,487**
Income tax expense		-19,129	-25,560
Profit for the period		**71,403**	**101,927**

The accompanying notes are an integral part of the Half Year Report.

Consolidated statement of comprehensive income

(EUR 1,000)	Note	1 Jan–30 Jun 2022	1 Jan–30 Jun 2021
Profit for the period		71,403	101,927
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	(3)	-30,352	-4,201
Net change in Cost-of-Hedging	(4)	-26,975	2,075
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		-4,275	-295
Net change in expected credit loss of financial assets at fair value through other comprehensive income		0	3
Taxes related to components of other comprehensive income		12,320	484
Total components of other comprehensive income		-49,281	-1,934
Total comprehensive income for the period		**22,121**	**99,993**

The accompanying notes are an integral part of the Half Year Report.

Consolidated statement of financial position

(EUR 1,000)	Note	30 Jun 2022	31 Dec 2021
Assets			
Cash and balances with central banks	(7)	8,423,269	8,399,045
Loans and advances to credit institutions		1,765,966	1,417,310
Loans and advances to the public and public sector entities		28,830,928	29,214,043
Debt securities		4,847,402	4,841,428
Shares and participations		-	-
Derivative contracts	(8)	2,452,045	1,999,676
Intangible assets	(9)	9,371	12,296
Tangible assets	(9)	6,170	7,491
Other assets		1,009,125	256,117
Accrued income and prepayments		146,538	212,655
Total assets	**(5, 6)**	**47,490,814**	**46,360,060**

(EUR 1,000)	Note	30 Jun 2022	31 Dec 2021
Liabilities and equity			
Liabilities			
Liabilities to credit institutions	(11)	2,664,945	2,801,016
Liabilities to the public and public sector entities		2,834,846	3,324,685
Debt securities issued	(12)	35,905,065	35,327,525
Derivative contracts	(8)	3,690,649	2,224,294
Provisions and other liabilities	(13)	538,989	349,331
Accrued expenses and deferred income		84,702	181,732
Deferred tax liabilities		290,742	289,887
Total liabilities	**(5, 6)**	**46,009,938**	**44,498,470**
Equity			
Share capital		42,583	42,583
Reserve fund		277	277
Fair value reserve of investments		-3,111	309
Own credit revaluation reserve		-24,217	64
Cost-of-Hedging reserve	(4)	-7,960	13,621
Reserve for invested non-restricted equity		40,366	40,366
Retained earnings		1,432,937	1,416,916
Total equity attributable to parent company equity holders		**1,480,876**	**1,514,136**
Other equity instruments issued	**(14)**	**-**	**347,454**
Total equity		**1,480,876**	**1,861,590**
Total liabilities and equity		**47,490,814**	**46,360,060**

The accompanying notes are an integral part of the Half Year Report.

Consolidated statement of changes in 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	Other equity instruments issued	Total equity
	Total equity attributable to Parent Company equity holders									
Equity at 31 Dec 2021	**42,583**	**277**	**309**	**64**	**13,621**	**40,366**	**1,416,916**	**1,514,136**	**347,454**	**1,861,590**
Redemption of Additional Tier 1 capital instrument	-	-	-	-	-	-	-2,546	-2,546	-347,454	-350,000
Interest paid on Additional Tier 1 capital instrument	-	-	-	-	-	-	-12,600	-12,600	-	-12,600
Dividends paid for 2021	-	-	-	-	-	-	-40,236	-40,236	-	-40,236
Profit for the period	-	-	-	-	-	-	71,403	71,403	-	71,403
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	-	-	-	-24,281	-	-	-	-24,281	-	-24,281
Net change in Cost-of-Hedging	-	-	-	-	-21,580	-	-	-21,580	-	-21,580
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	-	-	-3,420	-	-	-	-	-3,420	-	-3,420
Net change in expected credit loss of financial assets at fair value through other comprehensive income	-	-	0	-	-	-	-	0	-	0
Equity at 30 Jun 2022	**42,583**	**277**	**-3,111**	**-24,217**	**-7,960**	**40,366**	**1,432,937**	**1,480,876**	**-**	**1,480,876**

(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									
Equity at 31 Dec 2020	**42,583**	**277**	**847**	**-255**	**15,624**	**40,366**	**1,258,224**	**1,357,666**	**347,454**	**1,705,120**
Interest paid on Additional Tier 1 capital instrument	-	-	-	-	-	-	-12,600	-12,600	-	-12,600
Dividends paid for 2020	-	-	-	-	-	-	-	-	-	-
Profit for the period	-	-	-	-	-	-	101,927	101,927	-	101,927
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	-	-	-	-3,361	-	-	-	-3,361	-	-3,361
Net change in Cost-of-Hedging	-	-	-	-	1,660	-	-	1,660	-	1,660
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	-	-	-236	-	-	-	-	-236	-	-236
Net change in expected credit loss of financial assets at fair value through other comprehensive income	-	-	3	-	-	-	-	3	-	3
Equity at 30 Jun 2021	**42,583**	**277**	**614**	**-3,616**	**17,284**	**40,366**	**1,347,551**	**1,445,059**	**347,454**	**1,792,513**

The accompanying notes are an integral part of the Half Year Report.

Consolidated statement of cash flows

(EUR 1,000)	1 Jan–30 Jun 2022	1 Jan–30 Jun 2021
Cash flow from operating activities	**454,679**	**2,071,302**
Net change in long-term funding	2,661,798	2,469,670
Net change in short-term funding	-243,885	-211,341
Net change in long-term loans	-761,974	-785,686
Net change in short-term loans	-458,508	-171,123
Net change in investments	312,761	453,410
Net change in collaterals	-1,069,729	201,603
Interest on assets	-11,516	4,098
Interest on liabilities	69,701	109,644
Other income	23,934	37,763
Payments of operating expenses	-32,793	-41,362
Taxes paid	-35,109	4,625
Cash flow from investing activities	**-2,702**	**-3,958**
Acquisition of tangible assets	-5	-1
Proceeds from sale of tangible assets	103	204
Acquisition of intangible assets	-2,800	-4,161
Cash flow from financing activities	**-406,918**	**-16,648**
Redemption of AT1 capital instrument	-350,000	-
Paid interest on AT1 capital instrument	-15,750	-15,750
Dividend paid	-40,236	-
Total cash flow from leases	-932	-898
Change in cash and cash equivalents	**45,059**	**2,050,696**
Cash and cash equivalents at 1 Jan	**8,435,504**	**5,730,680**
Cash and cash equivalents at 30 Jun	**8,480,563**	**7,781,376**

The accompanying notes are an integral part of the Half Year Report.

Notes to the Half Year Report

Note 1. Basis of preparation of the Half Year Report

The Half Year Report has been prepared in accordance with International Financial Reporting Standards (*IFRS*). The Half Year Report complies with IAS 34 *Interim Financial Reporting* standard and the accounting policies presented in the Consolidated Financial Statements 2021 (Note *1*). This Half Year Report should be read in conjunction with the audited Consolidated Financial Statements for the year ended 31 December 2021. No significant changes have been made to the accounting principles during the reporting period.

The figures in the Notes to the Half Year Report are presented in thousand euro. All figures in the Half Year Report have been rounded, so the total of individual figures may differ from the total figure presented. The Half Year Report has been subject to a review by the auditors.

The Half Year Report is available in Finnish and English. The Finnish version is official and will be used if there is any discrepancy between the language versions.

Management's judgement and estimates

Preparation of the Half Year Report in accordance with IFRS requires management judgement and estimates. The key assumptions made by the Group concern significant uncertainty factors pertaining to the future and the estimates at the reporting date.

The Group has recorded an additional discretionary provision (*management overlay*) of EUR 916 thousand to take into account the effects of the ECL model changes and the further development of the calculation principles in 2022. EUR 486 thousand of this amount is recorded in the first half of 2022. During the second half of 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, 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. In addition, MuniFin Group made changes to macro scenarios and loss given default parameters in expected credit loss calculations in the first half of the year, and this increased ECL by EUR 214 thousand.

More information on the Group's expected credit losses and the ECL calculations can be found in Note *10 Credit risks of financial assets and other commitments.*

More information on where management judgement is generally applied and where estimation uncertainty exists can be found in the accounting policies of the Consolidated Financial Statements 2021 (Note *1*) in Section *3. Accounting policies requiring management judgement and key uncertainty factors related to estimates.*

Note 2. Interest income and expense

(EUR 1,000)	1 Jan–30 Jun 2022 Interest and similar income	Interest and similar expense	Net	1 Jan–30 Jun 2021 Interest and similar income	Interest and similar expense	Net
Assets						
Amortised cost						
Cash and balances with central banks	-	-23,595	-23,595	-	-18,313	-18,313
Loans and advances to credit institutions	36	-3 822	-3,786	27	-4,059	-4,032
Loans and advances to the public and public sector entities	75,800	-	75,800	95,392	-	95,392
Debt securities	9	-2,485	-2,476	8	-2,568	-2,559
Other assets	1,186	-	1,186	310	-	310
Fair value through other comprehensive income						
Debt securities	-	-174	-174	-	-330	-330
Designated at fair value through profit or loss						
Loans and advances to the public and public sector entities	174	-	174	609	-	609
Debt securities	3,191	-	3,191	4,580	-	4,580
Mandatorily at fair value through profit or loss						
Loans and advances to the public and public sector entities	423	-	423	421	-	421
Debt securities	-	-	-	-	-	-
Fair value through profit or loss						
Derivative contracts at fair value through profit or loss	34,100	-43,382	-9,282	37,819	-50,897	-13,079
Derivative contracts in hedge accounting	-47,611	-	-47,611	-45,475	-	-45,475
Leased assets	4,247	-	4,247	2,980	-	2,980
Interest on non-financial other assets	4	-	4	3	-	3
Interest on assets	**71,559**	**-73,458**	**-1,899**	**96,676**	**-76,167**	**20,509**
, of which interest income/expense according to the effective interest method	*77,030*	*-30,075*		*95,738*	*-25,270*	

(EUR 1,000)	1 Jan–30 Jun 2022 Interest and similar income	1 Jan–30 Jun 2022 Interest and similar expense	1 Jan–30 Jun 2022 Net	1 Jan–30 Jun 2021 Interest and similar income	1 Jan–30 Jun 2021 Interest and similar expense	1 Jan–30 Jun 2021 Net
Liabilities						
Amortised cost						
Liabilities to credit institutions	12,228	-2,347	9,881	8,164	-383	7,781
Liabilities to the public and public sector entities	-	-20,408	-20,408	-	-28,041	-28,041
Debt securities issued	764	-129,049	-128,286	606	-123,484	-122,878
Provisions and other liabilities	-	-1,852	-1,852	-	-1,197	-1,197
Designated at fair value through profit or loss						
Liabilities to credit institutions	-	-27	-27	-	-7	-7
Liabilities to the public and public sector entities	-	-16,547	-16,547	-	-16,213	-16,213
Debt securities issued	-	-30,710	-30,710	14	-37,392	-37,378
Fair value through profit or loss						
Derivative contracts at fair value through profit or loss	156,401	-66,833	89,568	151,112	-44,102	107,010
Derivative contracts in hedge accounting	-	221,995	221,995	-	208,605	208,605
Interest on liabilities	**169,393**	**-45,779**	**123,615**	**159,896**	**-42,214**	**117,682**
, of which interest income/expense according to the effective interest method	*12,992*	*-153,656*		*8,771*	*-153,105*	
Total interest income and expense	**240,952**	**-119,236**	**121,716**	**256,572**	**-118,381**	**138,191**

Interest income on stage 3 financial assets in the expected credit loss (*ECL*) calculations totalled EUR 389 thousand (EUR 487 thousand) during the reporting period. 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 27 thousand (EUR 38 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 consist 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 consist 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 line items *Liabilities to credit institutions*, *Liabilities to the public and public sector entities and Debt securities issued.*

Note 3. Net income from securities and foreign exchange transactions

NET INCOME FROM SECURITIES AND FOREIGN EXCHANGE TRANSACTIONS 1 JAN–30 JUN 2022 (EUR 1,000)	Capital gains and losses (net)	Change in fair value	Total
Financial assets			
Designated at fair value through profit or loss	-	-146,401	-146,401
Mandatorily at fair value through profit or loss	-	-2,284	-2,284
Financial liabilities			
Designated at fair value through profit or loss	-	567,062	567,062
Derivative contracts at fair value through profit or loss	-	-415,503	-415,503
Day 1 gain or loss	-	20	20
Total net income from securities transactions	**-**	**2,895**	**2,895**
Net income from foreign exchange transactions	**4,132**	**-4 071**	**61**
Total	**4,132**	**-1,177**	**2,956**

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 reconciliation for Day 1 gain or loss is presented in *Note 6 Fair values of financial assets and liabilities*.

NET INCOME FROM SECURITIES AND FOREIGN EXCHANGE TRANSACTIONS 1 JAN–30 JUN 2021 (EUR 1,000)	Capital gains and losses (net)	Change in fair value	Total
Financial assets			
Designated at fair value through profit or loss	-	-15,785	-15,785
Mandatorily at fair value through profit or loss	-23	-1,430	-1,453
Financial liabilities			
Designated at fair value through profit or loss	-	57,206	57,206
Derivative contracts at fair value through profit or loss	1,246	-25,297	-24,052
Day 1 gain or loss	-	43	43
Total net income from securities transactions	**1,223**	**14,736**	**15,959**
Net income from foreign exchange transactions	**14**	**1,175**	**1,190**
Total	**1,237**	**15,911**	**17,148**

The following tables present carrying amounts of financial assets and liabilities designated at fair value through profit or loss and their fair value changes recognised during the reporting period in the income statement under *Net income from securities transactions* and 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.*

FINANCIAL ASSETS AND LIABILITIES DESIGNATED AT FAIR VALUE THROUGH PROFIT OR LOSS (EUR 1,000)	Nominal value 30 Jun 2022	Carrying amount 30 Jun 2022	Nominal value 31 Dec 2021	Carrying amount 31 Dec 2021
Financial assets				
Loans and advances to the public and public sector entities	30,000	30,966	30,000	38,941
Debt securities	3,202,981	3,113,139	3,484,223	3,539,074
Total financial assets *	**3,232,981**	**3,144,105**	**3,514,223**	**3 578,015**
Financial liabilities				
Liabilities to credit institutions	5,000	3,690	5,000	4,787
Liabilities to the public sector entities	1,482,197	1,421,164	1,445,202	1,548,394
Debt securities issued	11,163,695	10,243,560	10,680,831	10,008,299
Total financial liabilities	**12,650,892**	**11,668,414**	**12,131,032**	**11,561,479**

* Financial assets designated at fair value through profit or loss are exposed to credit risk up to the carrying amounts of those securities at 30 Jun 2022 and 31 Dec 2021.

CHANGE IN FAIR VALUE OF FINANCIAL ASSETS DESIGNATED AT FAIR VALUE THROUGH PROFIT OR LOSS (EUR 1,000)	30 Jun 2022	1 Jan 2022	Fair value change recognised in the income statement 1 Jan–30 Jun 2022	, of which due to credit risk	, of which due to market risk
Financial assets					
Loans and advances to the public and public sector entities	-8,396	-769	-7,627	143	-8,539
Debt securities	-118,549	20,226	-138,774	-3,815	-134,960
Total financial assets	**-126,944**	**19,457**	**-146,401**	**-3,671**	**-143,499**

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)	30 Jun 2022	1 Jan 2022	Fair value change recognised in the income statement 1 Jan–30 Jun 2022	Change in own credit risk recognised in the other comprehensive income 1 Jan–30 Jun 2022	Total fair value change in 1 Jan–30 Jun 2022
Financial liabilities					
Liabilities to credit institutions	1 331	187	1,144	-47	1,190
Liabilities to the public and public sector entities	125 137	-152,113	277,250	-18,156	295,406
Debt securities issued	861 722	573,054	288,668	-12,149	300,817
Total financial liabilities	**988,189**	**421,127**	**567,062**	**-30,352**	**597,414**

NET CHANGE IN FAIR VALUE IN NET INCOME FROM SECURITIES TRANSACTIONS (EUR 1,000)	Cumulative change in fair value 30 Jun 2022	Fair value change recognised in the income statement 1 Jan–30 Jun 2022
Financial liabilities designated at fair value through profit or loss	988,189	567,062
Derivative contracts at fair value through profit or loss hedging financial liabilities	-1,002,720	-567,161
Net change in fair value	**-14,531**	**-99**

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 previous table 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 the 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)	30 Jun 2021	1 Jan 2021	Fair value change recognised in the income statement 1 Jan–30 Jun 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	9,882	-	9,882	-56	9,939
Debt securities	44,192	69,859	-25,667	1,159	-26,826
Total financial assets	**54,074**	**69,859**	**-15,785**	**1,102**	**-16,887**

CHANGE IN FAIR VALUE OF FINANCIAL LIABILITIES DESIGNATED AT FAIR VALUE THROUGH PROFIT OR LOSS (EUR 1,000)	30 Jun 2021	1 Jan 2021	Fair value change recognised in the income statement 1 Jan–30 Jun 2021	Change in own credit risk recognised in the other comprehensive income 1 Jan–30 Jun 2021	Total fair value change in 1 Jan–30 Jun 2021
Financial liabilities					
Liabilities to credit institutions	199	418	-219	-	-219
Liabilities to the public and public sector entities	-190,593	-244,146	53,553	-65	53,488
Debt securities issued	389,295	385,424	3,872	-4,136	-265
Total financial liabilities	**198,902**	**141,696**	**57,206**	**-4,201**	**53,004**

NET CHANGE IN FAIR VALUE IN NET INCOME FROM SECURITIES TRANSACTIONS (EUR 1,000)	Cumulative change in fair value 30 Jun 2021	Fair value change recognised in the income statement 1 Jan–30 Jun 2021
Financial liabilities designated at fair value through profit or loss	198,902	57,206
Derivative contracts at fair value through profit or loss hedging financial liabilities	-218,612	-50,765
Net change in fair value	**-19,710**	**6,440**

Note 4. Hedge accounting

The interest rate and foreign exchange rate risks 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, and fixed rates 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 the Consolidated Financial Statements 2021 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 of the Consolidated Financial Statements 2021 (Note *1*) in Section *10. Hedge Accounting.*

In the following table hedged assets and liabilities are presented according to the 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

30 JUN 2022 (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	12,968,450	11,958,504	11,854,360	104,144	-
Loans and advances to the public and public sector entities – Leased assets	283,585	265,511	-	265,511	-
Total assets	**13,252,034**	**12,224,016**	**11,854,360**	**369,656**	**-**
Liabilities					
Liabilities to credit institutions	115,000	106,605	-	106,605	-
Liabilities to the public and public sector entities	1,400,710	1,413,682	-	1,413,682	-
Debt securities issued	27,592,814	25,661,505	-	12,902,185	12,759,320
Total liabilities	**29,108,524**	**27,181,791**	**-**	**14,422,471**	**12,759,320**

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 reporting period, in addition to the fair value change of the hedged risk and the hedging instrument during the reporting period. These figures presented in the table do not include the changes 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 aforementioned reason, the total amount of hedging instruments does not correspond to the fair value presented in Note *8 Derivatives* 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 *3*.

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)	30 Jun 2022	1 Jan 2022	Recognised in the income statement 1 Jan–30 Jun 2022
Assets			
IAS 39 portfolio hedge accounting			
Loans and advances to the public and public sector entities	-954,157	122,505	-1,076,662
Derivative contracts in hedge accounting	1,020,079	-78,911	1,098,990
Accumulated fair value accrual from the termination of hedge accounting	227	218	9
IAS 39 portfolio hedge accounting, net	**66,149**	**43,812**	**22,337**
IFRS 9 fair value hedge accounting			
Loans and advances to the public and public sector entities	-12,532	25,414	-37,946
Derivative contracts in hedge accounting	12,365	-25,669	38,034
IFRS 9 fair value hedge accounting, net	**-168**	**-255**	**88**
Liabilities			
IFRS 9 fair value hedge accounting			
Liabilities to credit institutions	8,395	-5,120	13,515
Liabilities to the public and public sector entities	-60,688	-340,433	279,745
Debt securities issued	1,734,452	-171,028	1,905,480
Derivative contracts in hedge accounting	-1,707,670	500,306	-2,207,975
IFRS 9 fair value hedge accounting, net	**-25,511**	**-16,275**	**-9,236**
IBOR reform related compensations *	-3,343	-3,343	0
Total hedge accounting	**37,127**	**23,938**	**13,189**

* Compensations relate to the IBOR reform of which more information is presented in the accounting policies of the Consolidated Financial Statements 2021 (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)	30 Jun 2022	1 Jan 2022	Impact on Cost-of-Hedging reserve
Cost-of-Hedging			
Derivative contracts in hedge accounting	-7,960	13,621	-21,580
Total	**-7,960**	**13,621**	**-21,580**

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 30 JUN 2022 (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	-954,157	1,020,079	65,922
IFRS 9 fair value hedge accounting				
Structured lending	Interest rate derivatives	5,540	-4,516	1,024
Fixed rate and revisable rate leased assets	Interest rate derivatives	-18,073	16,881	-1,191
Assets total		**-966,689**	**1,032,444**	**65,754**
Liabilities				
IFRS 9 fair value hedge accounting				
Financial liabilities denominated in EUR	Interest rate derivatives	1,223,135	-1,233,119	-9,984
Financial liabilities denominated in foreign currencies	Currency derivatives (Cross currency interest rate swaps) Interest rate derivatives	459,023	-474,550	-15,527
Liabilities total		**1,682,159**	**-1,707,670**	**-25,511**

VALUE OF HEDGED RISK (EUR 1,000)	30 Jun 2021	1 Jan 2021	Recognised in the income statement 1 Jan–30 Jun 2021
Assets			
IAS 39 portfolio hedge accounting			
Loans and advances to the public and public sector entities	258,661	464,688	-206,027
Derivative contracts in hedge accounting	-221,058	-428,083	207,024
Accumulated fair value accrual from the termination of hedge accounting	30	47	-17
IAS 39 portfolio hedge accounting, net	**37,633**	**36,653**	**981**
IFRS 9 fair value hedge accounting			
Loans and advances to the public and public sector entities	30,328	41,424	-11,095
Derivative contracts in hedge accounting	-30,757	-42,044	11,287
IFRS 9 Fair value hedge accounting, net	**-429**	**-620**	**191**
Liabilities			
IFRS 9 fair value hedge accounting			
Liabilities to credit institutions	-4,041	-13,800	9,759
Liabilities to the public and public sector entities	-386,712	-481,546	94,833
Debt securities issued	-479,411	-859,986	380,575
Derivative contracts in hedge accounting	860,024	1,340,456	-480,432
IFRS 9 fair value hedge accounting, net	**-10,140**	**-14,876**	**4,735**
IBOR reform related compensations	-3,061	-2,041	-1,020
Total hedge accounting	**24,002**	**19,116**	**4,887**

HEDGING IMPACT ON EQUITY (EUR 1,000)

	30 Jun 2021	1 Jan 2021	Impact on Cost-of-Hedging reserve
Cost-of-Hedging			
Derivative contracts in hedge accounting	17,284	15,624	1,660
Total	**17,284**	**15,624**	**1,660**

EFFECTIVENESS OF HEDGE ACCOUNTING 30 JUN 2021 (EUR 1,000)

HEDGED ITEM	Hedging instruments	Gains/losses attributable to the hedged risk: Hedged items	Hedging instruments	Hedge ineffectiveness
Assets				
IAS 39 portfolio hedge accounting				
Fixed rate and revisable rate loans	Interest rate derivatives	258,661	-221,058	37,603
IFRS 9 fair value hedge accounting				
Structured lending	Interest rate derivatives	28,569	-28,767	-198
Fixed rate and revisable rate leased assets	Interest rate derivatives	1,759	-1,990	-231
Assets total		**288,989**	**-251,816**	**37,174**
Liabilities				
IFRS 9 fair value hedge accounting				
Financial liabilities denominated in EUR	Interest rate derivatives	-623,068	618,217	-4,851
Financial liabilities denominated in foreign currencies	Currency derivatives (Cross currency interest rate swaps) Interest rate derivatives	-247,097	241,808	-5,289
Liabilities total		**-870,165**	**860,024**	**-10,140**

Note 5. Financial assets and liabilities

FINANCIAL ASSETS 30 JUN 2022 (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	8,423,269	-	-	-	-	8,423,269	8,423,269
Loans and advances to credit institutions	1,765,966	-	-	-	-	1,765,966	1,765,966
Loans and advances to the public and public sector entities *	27,800,016	-	30,966	31,360	-	27,862,341	29,568,136
Debt securities	1,539,892	194,371	3,113,139	-	-	4,847,402	4,847,291
Shares and participations	-	-	-	-	-	-	-
Derivative contracts at fair value through profit or loss	-	-	-	-	496,028	496,028	496,028
Derivative contracts in hedge accounting	-	-	-	-	1,956,017	1,956,017	1,956,017
Other assets **	984,686	-	-	-	-	984,686	984,686
Total	**40,513,828**	**194,371**	**3,144,105**	**31,360**	**2,452,045**	**46,335,709**	**48,041,393**

* Line item includes EUR 265,512 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

30 JUN 2022 (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	2,661,255	3,690	-	2,664,945	2,667,010
Liabilities to the public and public sector entities	1,413,682	1,421,164	-	2,834,846	2,849,222
Debt securities issued	25,661,505	10,243,560	-	35,905,065	36,012,749
Derivative contracts at fair value through profit or loss	-	-	1,431,033	1,431,033	1,431,033
Derivative contracts in hedge accounting	-	-	2,259,616	2,259,616	2,259,616
Provisions and other liabilities *	521,013	-	-	521,013	521,013
Total	**30,257,454**	**11,668,414**	**3,690,649**	**45,616,516**	**45,740,643**

* Line item includes EUR 517,189 thousand of cash collateral received from central counterparties and EUR 3,824 thousand of lease liabilities in accordance with IFRS 16 standard.

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.
** 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.

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.

RECLASSIFIED FINANCIAL ASSETS (EUR 1,000)	Original measurement category under IAS 39	New measurement category under IFRS 9	Fair value 30 Jun 2022	Fair value gain or loss for the reporting period *	EIR determined as at 1 Jan 2018 **	Interest revenue recognised during 1 Jan–30 Jun 2022
Loans and advances to the public and public sector entities	Fair value option	Amortised cost	95,405	-800	0.14%	236

* The fair value gain or loss that would have been recognised in the income statement during the reporting period if the financial assets had not been reclassified.
** Effective interest rate determined on the date of initial application.

RECLASSIFIED 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 1 Jan–31 Dec 2021
Loans and advances to the public and public sector entities	Fair value option	Amortised cost	99,253	-1,589	0.14%	422

Note 6. 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 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. The same principle applies to other portfolios and levels of the hierarchy as well. In addition to financial assets and liabilities, 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 30 JUN 2022 (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	194,371	154,221	40,150	-	194,371
Designated at fair value through profit or loss					
Loans and advances to the public and public sector entities	30,966	-	30,966	-	30,966
Debt securities	3,113,139	3,022,080	91,059	-	3,113,139
Mandatorily at fair value through profit or loss					
Loans and advances to the public and public sector entities	31,360	-	169	31,191	31,360
Fair value through profit or loss					
Derivative contracts at fair value through profit or loss	496,028	-	464,172	31,855	496,028
Derivative contracts in hedge accounting	1,956,017	-	1,955,005	1,012	1,956,017
Total at fair value	**5,821,880**	**3,176,302**	**2,581,521**	**64,058**	**5,821,880**
In fair value hedge accounting					
Amortised cost					
Loans and advances to the public and public sector entities	12,224,016	-	12,878,118	-	12,878,118
Total in fair value hedge accounting	**12,224,016**	**-**	**12,878,118**	**-**	**12,878,118**
At amortised cost					
Cash and balances with central banks	8,423,269	8,423,269	-	-	8,423,269
Loans and advances to credit institutions	1,765,966	124,664	1,641,302	-	1,765,966
Loans and advances to the public and public sector entities	15,576,000	-	16,627,693	-	16,627,693
Debt securities	1,539,892	-	1,539,781	-	1,539,781
Other assets	984,686	-	984,686	-	984,686
Total at amortised cost	**28,289,813**	**8,547,933**	**20,793,462**	**-**	**29,341,395**
Total financial assets	**46,335,709**	**11,724,234**	**36,253,101**	**64,058**	**48,041,393**

FINANCIAL LIABILITIES 30 JUN 2022 (EUR 1,000)		Fair value			
	Carrying amount	Level 1	Level 2	Level 3	Total
At fair value					
Designated at fair value through profit or loss					
Liabilities to credit institutions	3,690	-	3,690	-	3,690
Liabilities to the public and public sector entities	1,421,164	-	1,193,686	227,477	1,421,164
Debt securities issued	10,243,560	-	9,052,136	1,191,424	10,243,560
Fair value through profit or loss					
Derivative contracts at fair value through profit or loss	1,431,033	-	692,660	738,373	1,431,033
Derivative contracts in hedge accounting	2,259,616	-	2,256,096	3,519	2,259,616
Total at fair value	**15,359,062**	**-**	**13,198,269**	**2,160,793**	**15,359,062**
In fair value hedge accounting					
Amortised cost					
Liabilities to credit institutions	106,605	-	108,671	-	108,671
Liabilities to the public and public sector entities	1,413,682	-	1,428,059	-	1,428,059
Debt securities issued *	25,661,505	-	25,718,152	51,037	25,769,189
Total in fair value hedge accounting	**27,181,791**	**-**	**27,254,881**	**51,037**	**27,305,918**
At amortised cost					
Liabilities to credit institutions	2,554,650	-	2,554,650	-	2,554,650
Debt securities issued	-	-	-	-	-
Provisions and other liabilities	521,013	-	521,013	-	521,013
Total at amortised cost	**3,075,663**	**-**	**3,075,663**	**-**	**3,075,663**
Total financial liabilities	**45,616,516**	**-**	**43,528,813**	**2,211,831**	**45,740,643**

* 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 Half Year Report, 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 2021 (EUR 1,000)	Carrying amount	Fair value 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
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)		Fair value			
	Carrying amount	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**

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 instrument 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. MuniFin Group applies the market-based approach when the instrument has a functioning market and public price quotations are available. The Group uses 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 income approach for many of its financial instruments, for example derivatives, lending and funding. The Group does not use cost approach for the valuation of any of its financial instruments.

To determine the fair value of common and simple financial instruments, such as interest rate and currency swaps, the Group uses widely recognised valuation models 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 values of certain types of instruments. The choice of base model 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, the instruments are broken down into different categories granular enough to capture the most important risk drivers and different kinds of calibration techniques. The specific combinations of base models and 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 instrument* classes are mainly classified as level 3 instruments.

The 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 Executive Management Team (*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. 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 explanation of the changes in fair values by Risk Management and a monthly fair value explanation report to the CFO and quarterly to the Finance Management Team. The independent price verification is performed monthly as a 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 the reporting period 1 Jan–30 Jun 2022 transfers totalling EUR 293,418 thousand have been made between level 1 and level 2. There were no transfers from level 2 to level 3.

LEVEL 3 TRANSFERS (EUR 1,000)	1 Jan 2022	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	30 Jun 2022
Financial assets							
At fair value							
Mandatorily at fair value through profit or loss							
Loans and advances to the public and public sector entities	34,861	-3,590	-	-80	-	-	31,191
Fair value through profit or loss							
Derivative contracts at fair value through profit or loss	62,829	-29,255	871	-2,589	-	-	31,855
Derivative contracts in hedge accounting	407	831	110	-	-	-336	1,012
Financial assets in total	**98,097**	**-32,014**	**980**	**-2,670**	**-**	**-**	**64,058**
Financial liabilities							
At fair value							
Designated at fair value through profit or loss							
Liabilities to the public and public sector entities	263,793	-36,315	-	-	-	-	227,477
Debt securities issued	1,759,569	-104,308	132,142	-552,124	-	-43,855	1,191,424
Fair value through profit or loss							
Derivative contracts at fair value through profit or loss	744,299	146,368	22,816	-170,154	-	-4,956	738,373
Derivative contracts in hedge accounting	25,690	-1,337	352	-133	-	-21,053	3,519
In fair value hedge accounting							
Amortised cost							
Debt securities issued	86,040	2,013	9,204	-3,066	-	-43,154	51,037
Financial liabilities in total	**2,879,390**	**6,421**	**164,513**	**-725,477**	**-**	**-113,017**	**2,211,831**
Level 3 financial assets and liabilities in total *	**2,977,487**	**-25,593**	**165,493**	**-728,146**	**-**	**-113,017**	**2,275,888**

* 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.

During 2021 transfers totalling EUR 50,127 thousand were made between level 1 and level 2. During 2021, there were no transfers from level 2 to level 3..

LEVEL 3 TRANSFERS (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**

Sensitivity analysis of unobservable inputs

Sensitivity analysis illustrates the impact of the reasonably possible alternative 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 the extremes of reasonably possible alternative assumptions 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 reporting 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 30 June 2022, these assumptions could have increased fair values by EUR 68.4 million or decreased fair values by EUR 61.9 million. 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.

SENSITIVITY ANALYSIS OF SIGNIFICANT UNOBSERVABLE INPUTS BY INSTRUMENT TYPE (EUR 1,000)	30 Jun 2022		31 Dec 2021	
	Positive range of fair value	Negative range of fair value	Positive range of fair value	Negative range of fair value
Loans and advances to the public and public sector entities				
Loans	68	-15	133	-84
Derivative contracts				
Equity-linked derivatives	28,242	-15,378	18,864	-11,446
FX-linked cross currency and interest rate derivatives	3,883	-3,632	2,644	-1,537
Other interest rate derivatives	7,384	-8,205	13,173	-13,344
Debt securities issued and Liabilities to the public and public sector entities				
Equity-linked liabilities	18,387	-24,667	12,350	-18,115
FX-linked liabilities	3,189	-3,255	704	-2,233
Other liabilities	7,227	-6,750	12,412	-12,810
Total	**68,380**	**-61,901**	**60,279**	**-59,570**

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 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, 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 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 significant unobservable input, consists of the Group'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 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 the fair value of complex interest rate structures. The future cash flows and their fair value are 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 reporting date.

SENSITIVITY ANALYSIS OF UNOBSERVABLE INPUTS 30 JUN 2022 (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	31,191	Stochastic model	Volatility – Extrapolated or Illiquid	68	-15
Derivative contracts					
			Correlation parameters	577	337
Equity-linked derivatives	-126,959	Stochastic model	Volatility – Extrapolated or Illiquid	26,318	-14,357
			Dividend yield	1,348	-1,358
			Correlation parameters	564	-289
FX-linked cross currency and interest rate derivatives	-501,693	Stochastic model	Volatility – Extrapolated or Illiquid	3,319	-3,343
			Interest rates – Extrapolated or Illiquid	0	0
			Correlation parameters	-2	-18
Other interest rate derivatives	-80,373	Stochastic model	Volatility – Extrapolated or Illiquid	7,162	-7,963
			Interest rates – Extrapolated or Illiquid	224	-224
Debt securities issued and Liabilities to the public and public sector entities					
			Correlation parameters	393	257
Equity-linked liabilities	625,839	Stochastic model	Volatility – Extrapolated or Illiquid	16,181	-24,891
			Dividend yield	1,813	-32
			Correlation parameters	211	-163
FX-linked liabilities	418,064	Stochastic model	Volatility – Extrapolated or Illiquid	2,978	-3,091
			Interest rates – Extrapolated or Illiquid	1	-1
			Correlation parameters	2	0
Other liabilities	426,036	Stochastic model	Volatility – Extrapolated or Illiquid	7,169	-6,694
			Interest rates – Extrapolated or Illiquid	56	-56
Total				**68,380**	**-61,901**

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					
			Correlation parameters	759	653
Equity-linked derivatives	-37,319	Stochastic model	Volatility – Extrapolated or Illiquid	17,551	-11,504
			Dividend yield	554	-595
			Correlation parameters	498	-353
FX-linked cross currency and interest rate derivatives	-647,461	Stochastic model	Volatility – Extrapolated or Illiquid	2,145	-1,183
			Interest rates – Extrapolated or Illiquid	1	-1
			Correlation parameters	7	0
Other interest rate derivatives	-21,972	Stochastic model	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					
			Correlation parameters	229	-149
Equity-linked liabilities	741,554	Stochastic model	Volatility – Extrapolated or Illiquid	11,455	-16,829
			Dividend yield	666	-1,137
			Correlation parameters	17	-123
FX-linked liabilities	785,053	Stochastic model	Volatility – Extrapolated or Illiquid	677	-2,099
			Interest rates – Extrapolated or Illiquid	11	-11
			Correlation parameters	1	0
Other liabilities	582,795	Stochastic model	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)	1 Jan–30 Jun 2022	1 Jan–31 Dec 2021
Opening balance in the beginning of the reporting period	-236	-29
Recognised gain in the income statement	498	412
Recognised loss in the income statement	-470	-711
Deferred gain or loss on new transactions	-8	91
Total at the end of the reporting period	**-216**	**-236**

The definition and amortisation method for the Day 1 gain or loss are presented in the accounting policies of the Consolidated Financial Statements 2021 (Note 1) in Section *13. Determination of fair value.*

Note 7. Cash and cash equivalents

30 JUN 2022 (EUR 1,000)	Total	Cash and cash equivalents	Expected credit losses
Cash	2	2	-
Central bank deposits payable on demand	8,423,267	8,423,267	0
Cash and balances with central banks	**8,423,269**	**8,423,269**	**0**
Loans and advances to credit institutions payable on demand	57,294	57,294	0
Total cash and cash equivalents	**8,480,563**	**8,480,563**	**0**

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**

Note 8. Derivative contracts

DERIVATIVE CONTRACTS 30 JUN 2022 (EUR 1,000)	Nominal value of underlying instrument	Fair value	
		Positive	Negative
Derivative contracts in hedge accounting			
Interest rate derivatives			
Interest rate swaps	34,845,368	1,138,983	-1,510,631
, of which cleared by the central counterparty	*33,392,600*	*1,105,299*	*-1,489,464*
Currency derivatives			
Cross currency interest rate swaps	13,282,780	817,034	-748,985
Total derivative contracts in hedge accounting	**48,128,148**	**1,956,017**	**-2,259,616**
Derivative contracts at fair value through profit or loss			
Interest rate derivatives			
Interest rate swaps	16,619,219	260,786	-733,939
, of which cleared by the central counterparty	*9,757,779*	*177,893*	*-12,839*
Interest rate options	40,000	60	-60
Currency derivatives			
Cross currency interest rate swaps	4,384,286	130,743	-562,606
Forward exchange contracts	3,665,147	104,439	-7,468
Equity derivatives	735,329	-	-126,959
Total derivative contracts at fair value through profit or loss	**25,443,981**	**496,028**	**-1,431,033**
Total derivative contracts	**73,572,129**	**2,452,045**	**-3,690,649**

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 2021 (EUR 1,000)	Nominal value of underlying instrument	Fair value	
		Positive	Negative
Derivative contracts in hedge accounting			
Interest rate derivatives			
Interest rate swaps	32,607,387	756,203	-384,289
, of which cleared by the central counterparty	*31,014,295*	*682,416*	*-308,205*
Currency derivatives			
Cross currency interest rate swaps	12,616,756	482,450	-726,003
Total derivative contracts in hedge accounting	**45,224,143**	**1,238,653**	**-1,110,291**
Derivative contracts at fair value through profit or loss			
Interest rate derivatives			
Interest rate swaps	16,475,777	475,940	-357,092
, of which cleared by the central counterparty	*9,814,584*	*46,821*	*-163,327*
Interest rate options	40,000	101	-101
Currency derivatives			
Cross currency interest rate swaps	4,516,786	133,656	-718,888
Forward exchange contracts	3,354,738	150,723	-
Equity derivatives	816,109	604	-37,922
Total derivative contracts at fair value through profit or loss	**25,203,409**	**761,023**	**-1,114,003**
Total derivative contracts	**70,427,552**	**1,999,676**	**-2,224,294**

Note 9. Changes in intangible and tangible assets

	Intangible assets	Tangible assets			
(EUR 1,000)	Total	Other real estate	Other tangible assets	Right-of-use assets	Total
Acquisition cost 1 Jan 2022	39,841	299	8,585	9,335	18,219
+ Additions	3,142	-	5	209	214
- Disposals	-	-	-151	-9	-160
Acquisition cost 30 Jun 2022	42,983	299	8,439	9,535	18,273
Accumulated depreciation 1 Jan 2022	27,545	-	5,835	4,893	10,728
- Accumulated depreciation on disposals	-	-	-107	-	-107
+ Depreciation for the reporting period	1,404	-	584	899	1,483
+ Impairment *	4,662	-	-	-	-
Accumulated depreciation 30 Jun 2022	33,612	-	6,311	5,792	12,103
Carrying amount 30 Jun 2022	**9,371**	**299**	**2,128**	**3,743**	**6,170**

* Line item consists of a non-recurring item of impairment related to IT system implementation.

	Intangible assets	Tangible assets			
(EUR 1,000)	Total	Other real estate	Other tangible assets	Right-of-use 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**

Note 10. Credit risks of financial assets and other commitments

MuniFin Group's credit risks are described in the Consolidated Financial Statements 2021 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 of the Consolidated Financial Statements 2021 (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 *			
30 JUN 2022 (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	8,423,269	0	-	-	-	-	8,423,269	0
Loans and advances to credit institutions at amortised cost	1,765,966	-100	-	-	-	-	1,765,966	-100
Loans and advances to the public and public sector entities at amortised cost	27,133,983	-38	303,011	-1,520	97,511	-268	27,534,504	-1,826
Leased assets in Loans and advances to the public and public sector entities at amortised cost	1,233,948	-3	-	-	150	0	1,234,098	-3
Debt securities at amortised cost	1,533,536	0	6,356	0	-	-	1,539,892	0
Debt securities at fair value through other comprehensive income	194,371	-41	-	-	-	-	194,371	-41
Cash collateral to CCPs in Other assets at amortised cost	984,686	-52	-	-	-	-	984,686	-52
Guarantee receivables from the public and public sector entities in Other assets	-	-	-	-	-	-	-	-
Credit commitments (off-balance sheet)	2,675,504	-6	-	-	-	-	2,675,504	-6
Total	**43,945,263**	**-241**	**309,367**	**-1,520**	**97,661**	**-268**	**44,352,291**	**-2,029**

* The Group has collateral and guarantee arrangements that fully cover the stage 3 receivables as described in the Consolidated Financial Statements 2021 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 2,208 thousand (EUR 2,345 thousand) of originated credit impaired receivables (*purchased or originated credit impaired, POCI*). Expected credit losses for the POCI receivables amount to EUR 6 thousand (EUR 7 thousand).

	Not credit-impaired				Credit-impaired		Total	
	Stage 1		Stage 2		Stage 3			
EXPOSURES BY ASSET GROUPS AND IMPAIRMENT STAGES 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 table below presents a summary of total changes and reconciliation of expected credit losses by impairment stages during the reporting period.

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 2022	**-166**	**-578**	**-546**	**-1,289**	**43,092,161**
New assets originated or purchased	-109	192	-87	-4	6,267,732
Assets derecognised or repaid (excluding write-offs)	50	45	10	105	-5,006,762
Transfers to Stage 1	0	88	-	88	88
Transfers to Stage 2	0	-230	0	-230	-230
Transfers to Stage 3	0	0	0	0	0
Additional provision (*Management overlay*)	-	-842	356	-486	-486
Changes to contractual cash flows due to modifications not resulting in derecognition	-	-	-	-	-
Changes to models * and inputs ** used for ECL calculations	-16	-196	-1	-214	-213
Write-offs	-	-	-	-	-
Recoveries	-	-	-	-	-
Total 30 Jun 2022	**-241**	**-1,520**	**-268**	**-2,029**	**44,352,291**

* Represents changes in the model.
** Represents changes to model parameters (e.g. GDP rates, unemployment rates)

In the first half of 2022, MuniFin Group made changes to macro scenarios and loss given default parameters in expected credit loss calculations, which increased ECL by EUR 214 thousand. There were no changes in ECL model.

MuniFin Group has recorded an additional discretionary provision (*management overlay*) of EUR 916 thousand from which EUR 486 thousand is an additional provision recognised in the first half of the year 2022, to take into account ECL model changes that will take place in the second half of 2022. During the second half of 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, 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. For MuniFin Group customers, the situation remained quite stable during the first half of the year, and the changed market situation and Russia's invasion of Ukraine have not been seen to affect the Group's customers significantly. 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 2022 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 30 June 2022, MuniFin Group has total of EUR 12 million (EUR 19 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 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**

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. In addition, MuniFin Group recorded an additional discretionary provision (*management overlay*) of EUR 430 thousand to take into account ECL model changes in 2022. The additional provision was recognised in balance sheet line item *Loans and advances to the public and public sector entities*. The additional provision was not allocated to contract level.

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. MuniFin Group has updated its scenarios for Finland to take into account Russia's invasion of Ukraine and changed market situation in the calculation of expected credit losses. These macroeconomic projections cover a period of 3 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 described in the following table.

	30 Jun 2022			31 Dec 2021		
SCENARIO	2022	2023	2024	2022	2023	2024
Adverse	40%	40%	40%	40%	40%	40%
Base	50%	50%	50%	50%	50%	40%
Optimistic	10%	10%	10%	10%	10%	20%

The 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.

		30 Jun 2022			31 Dec 2021		
MACROECONOMIC VARIABLES	**Scenario**	**2022**	**2023**	**2024**	**2022**	**2023**	**2024**
10Y Fin Government rate, %	Adverse	2.65	2.35	2.15	1.2	0.5	0.25
	Base	1.6	1.7	1.75	0.25	0.6	0.75
	Optimistic	1.5	1.65	1.75	0.75	1.1	1.15
Residential Real Estate (selling price, YoY change), %	Adverse	-5.0	-10.0	1.5	-8.0	-7.0	-2.0
	Base	1.0	1.5	1.5	-2.0	-3.0	-1.4
	Optimistic	3.5	3.0	2.5	3.5	3.0	1.5
Unemployment rate, %	Adverse	8.5	9.5	9.0	8.7	9.2	8.5
	Base	7.0	6.8	6.6	6.9	6.5	6.3
	Optimistic	6.3	6.0	5.8	6.5	6.0	5.8

The Russian invasion of Ukraine has fundamentally changed the outlook of the Finnish economy. Not only has consumer confidence weakened, but business expectations have also taken a slight downward turn. Despite the challenging outlook, however, the Finnish economy is facing the future from a better position than it did when the COVID-19 pandemic hit. The service sector has revitalised after COVID restrictions were lifted, and many industries still have strong order books. The Finnish economy is relatively strong, but the growth outlook is bound to deteriorate because of the war in Ukraine, the rising inflation and the rapidly tightening monetary policy. MuniFin Group expects output to grow 1.0% in 2022 and only 0.5% in 2023. From 2024 onwards, the economy will gradually converge back to its long-term growth path and the annual pace of expansion will be around 1.5%.

Moderate decline in unemployment is expected to continue over the projection horizon. In the near term, high energy and commodity prices continue to contribute to inflationary pressures. In the base scenario, Finnish consumer prices rise 5.0% in 2022. Annual CPI inflation is expected to decline to 2.1% in 2023 and stabilize below 2% in 2024–2025. To make sure that future inflation expectations remain well anchored, the European Central Bank (*ECB*) is expected to raise interest rates relatively rapidly in the second half of 2022. The pace of monetary tightening slows down from 2023 onwards as cost pressures gradually ease off. On the national level, higher interest rates mitigate households' home buying intentions. Home price inflation moderates to 1.0% in 2022. For the rest of the forecasting period, the annual increase in home prices is expected to reach 1.5%.

Compared to the base scenario, the Group's upside (optimistic) scenario factors in the economic impact of the war in Ukraine to be less severe and inflationary pressures to ease somewhat quicker. As a result, the Finnish GDP would grow faster in the subsequent two years (2.0% in both 2022 and 2023). In the upside scenario, unemployment rate declines below the pre-pandemic level of 6.7% already in 2022. Consumer price inflation accelerates to 4.5% in 2022 but cools down back to 2.0% next year. Despite rising interest rates, relatively steady housing demand keeps home price inflation within 3.0–3.5% range in 2022–2023. Thereafter, consumer and home prices rise at about 2.0–2.5% pace in 2024–2025. As inflation starts declining earlier, monetary tightening in the optimistic scenario is less front-loaded than in base scenario. As a result, market interest rates also rise more slowly.

MuniFin Group's downside (adverse) scenario represents a deeply stagflationary outcome where the war in Ukraine leads to more persistent inflation and a contracting real economy. Economic recession continues well into 2023. Unemployment rises more and remains high much longer than in the base scenario. Rising energy and food prices trigger a wage inflation spiral, making it harder for the ECB to get future inflation expectations under control. The ECB is forced to hike interest rates much faster than in the base case, deepening the contraction in GDP. CPI inflation remains well above ECB's target through 2023. Lack of demand in the housing market leads to a sharp decline in home prices. Prolonged global recession creates tensions in financial markets, giving rise to wider risk premia in asset pricing.

The following table below presents the sensitivity of expected credit losses assuming 100% weight for the adverse scenario until the end of 2024 (2023).

SENSITIVITY ANALYSIS (EUR 1,000)

	30 Jun 2022		31 Dec 2021	
	Weighted scenario	Adverse scenario (100%)	Weighted scenario	Adverse scenario (100%)
ECL	1,113	2,000	859	1,150
Proportion of the exposure in Stage 2 and 3	0.91%	2.15%	0.86%	1.15%

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 30 JUN 2022 (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	-	12,062	12,062	-169	11,893
Unlikely to be paid	-	75,040	75,040	-3	75,038
Forborne exposures	47,664	10,826	58,491	-136	58,355
Total	**47,664**	**97,929**	**145,593**	**-307**	**145,286**

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**

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. Only a few individual repayment holidays have been extended during 2021 and in the first half of 2022. The uncollected installments were mainly transferred to the end of the loan term to be paid in connection with the last installment. 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 reporting period or the comparison period.

Note 11. Liabilities to credit institutions

(EUR 1,000)	30 Jun 2022	31 Dec 2021
Bilateral loans to credit institutions	110,295	59,906
TLTRO *	2,000,000	2,000,000
Received collateral on derivatives	554,650	741,110
Total	**2,664,945**	**2,801,016**

* In September 2020, MuniFin participated in the third series of targeted longer-term refinancing operations 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 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 2022 was determined based on the net lending review period expired on 31 December 2021. MuniFin Group met the net lending criteria for this period to the lower interest rate and recognises the interest with the -1% rate. The final interest rate will be determined when the TLTRO III debt matures.

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 12. Debt securities issued

	30 Jun 2022		31 Dec 2021	
(EUR 1,000)	Carrying amount	Nominal value	Carrying amount	Nominal value
Bonds	32,369,425	35,091,362	31,508,271	32,041,076
Other *	3,535,640	3,665,147	3,819,254	3,820,738
Total	**35,905,065**	**38,756,509**	**35,327,525**	**35,861,814**

* Line item contains short-term funding issued by MuniFin.

All funding issued by MuniFin is guaranteed by the Municipal Guarantee Board.

BENCHMARK ISSUANCES DURING THE REPORTING PERIOD	Value date	Maturity date	Interest-%	Nominal value (1,000)	Currency
Fixed rate benchmark bond, issued under the MTN programme	25 Jan 2022	25 Feb 2032	0.25%	1,000,000	EUR
Fixed rate benchmark bond, issued under the MTN programme	17 May 2022	17 May 2029	1.5%	500,000	EUR

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 13. Provisions and other liabilities

(EUR 1,000)	30 Jun 2022	31 Dec 2021
Provisions		
Restructuring provision	-	-
Other provisions	5,546	446
Other liabilities		
Lease liabilities	3,824	4,528
Cash collateral taken from CCPs	517,189	333,295
Other	12,430	11,062
Total	**538,989**	**349,331**

Line item *Other provisions* relates to a tax interpretation issue for which the Group requested a preliminary ruling and for which the Group is waiting for the final decision of the Supreme Administrative Court, and to the terminated IT project for which the Group has recognised a provision based on conservative estimate.

	Restructuring provision		Other provisions	
(EUR 1,000)	1 Jan–30 Jun 2022	1 Jan–31 Dec 2021	1 Jan–30 Jun 2022	1 Jan–31 Dec 2021
Carrying amount in the beginning of the reporting period	-	562	446	-
Increase in provisions	-	-	5,100	446
Provisions used	-	-562	-	-
Carrying amount at the end of the reporting period	**-**	**-**	**5,546**	**446**

During the financial year 2021, the restructuring provision related to the reorganisation of the Group's operations in financial year 2020 was fully used.

Note 14. Capital instruments

30 JUN 2022 (EUR 1,000)	Currency	Nominal value	Carrying amount	Interest rate	Earliest repayment
AT1 capital instrument	EUR	-	-	-	-
Total		**-**	**-**		

31 DEC 2021 (EUR 1,000)	Currency	Nominal value	Carrying amount	Interest rate	Earliest repayment
AT1 capital instrument	EUR	350,000	347,454	Fixed	1 Apr 2022
Total		**350,000**	**347,454**		

MuniFin redeemed its EUR 350 million Perpetual Fixed rate Resettable Additional Tier 1 Securities originally issued on 1 October 2015. The redemption date was 1 April 2022, which is the first repayment date of the Securities in accordance with the terms and conditions thereof. The Securities were redeemed at 100% of the aggregate nominal amount together with accrued and unpaid interest until the redemption date.

Instrument's terms and conditions:
The capital instrument issued by the Parent Company 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 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. The loan capital will be written off if the proportion of MuniFin's Common Equity Tier 1 (CET1) capital to risk-weighted assets falls below 5.125%. MuniFin may decide to reinstate the written off loan capital partially or entirely if the Capital Requirements Regulation permits this based on an improvement in MuniFin's finances. 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 buyback 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 MuniFin loses the right to deduct the interest in full, or if MuniFin 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 MuniFin'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 MuniFin's dissolution or bankruptcy. AT1 capital loan is recognised in equity in the Consolidated Financial Statements. In Parent Company's Financial Statements AT1 capital loan is recognised under balance sheet item *Subordinated liabilities.*

Note 15. Collateral given

GIVEN COLLATERALS ON BEHALF OF OWN LIABILITIES AND COMMITMENTS (EUR 1,000)	30 Jun 2022	31 Dec 2021
Loans and advances to credit institutions to the counterparties of derivative contracts *	1,641,302	1,310,576
Loans and advances to credit institutions to the central bank **	35,082	35,984
Loans and advances to the public and public sector entities to the central bank **	4,402,226	4,716,147
Loans and advances to the public and public sector entities to the Municipal Guarantee Board ***	11,315,043	11,474,101
Other assets to the counterparties of derivative contracts *	984,686	238,930
Total	**18,378,339**	**17,775,738**

* 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 his 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 MuniFin'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 reporting date.

Note 16. Contingent assets and liabilities

The Group has no contingent assets or liabilities at 30 June 2022. Previously, the accrued interest on AT1 capital instrument, issued by the Parent Company, comprised contingent liability at the reporting date. The contingent liability was realised as a deduction of equity once the Parent Company decided on the payment of interest. AT1 capital instrument was redeemed at 1 April 2022. At 31 December 2021, MuniFin had a contingent liability of EUR 9,459 thousand.

Note 17. Off-balance-sheet commitments

(EUR 1,000)	30 Jun 2022	31 Dec 2021
Credit commitments	2,675,510	2,592,877
Total	**2,675,510**	**2,592,877**

Note 18. 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, wellbeing services counties and joint county authorities for wellbeing services, other units of wellbeing services counties that are wholly owned or under control of wellbeing services county administration and wellbeing services enterprises, 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 after 31 December 2021.

Note 19. Events after the reporting period

MuniFin's Board of Directors is not aware of any events having taken place after the end of the reporting period that would have a material effect on the Group's financial standing.

Report on review of the interim financial information of Municipality Finance Plc as of and for the six-month period ending 30 June 2022

To the Board of Directors of Municipality Finance Plc

Introduction

We have reviewed the consolidated balance sheet as of 30 June 2022 and the consolidated income statement, the statement of comprehensive income, the statement of changes in equity and the cash flow statement of Municipality Finance Plc for the six-month period then ended, as well as explanatory notes to the interim financial information. The Board of Directors and the Managing Director are responsible for the preparation of this interim financial information in accordance with the IAS 34 Interim Financial Reporting -standard. We will express our conclusion on the interim financial information based on our review.

Scope of review

We conducted our review in accordance with the International Standard on Review Engagements ISRE 2410, "*Review of Interim Financial Information Performed by the Independent Auditor of the Entity*". A review of interim financial information consists of making inquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit conducted in accordance with the standards on auditing and consequently does not enable us to obtain an assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

Conclusion

Based on our review, nothing has come to our attention that causes us to believe that the interim financial information has not been prepared in accordance with the IAS 34 Interim Financial Reporting standard.

Helsinki 5 August 2022

KPMG OY AB

Tiia Kataja
Authorised Public Accountant, KHT

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