Management Report

Economic report

GENERAL ECONOMIC CONDITIONS

Economic development

The global economy picked up again in 2021 after the slump triggered by the COVID-19 pandemic. However, the upswing progressively weakened over the course of the year. New waves of infection caused by mutations of the virus and persistent supply bottlenecks slowed economic recovery from mid-year onwards. According to IMF data from January 2022, global gross domestic product rose by 5.9 percent. This strong growth was mainly due to the easing of massive lockdown restrictions in many countries, which greatly boosted demand after the previous year's decline. Economic recovery, supply bottlenecks and rising food and energy prices drove inflation to 3.1 percent in the industrialised countries and 5.7 percent in the developing countries in 2021.

It was a similar picture for the eurozone. Strong recovery in economic output, with growth of 5.2 percent, concealed economic problems triggered by the latest waves of COVID-19 and supply bottlenecks. Moreover, economic performance varied quite considerably between member states. Inflation increased to 4.9 percent as of November 2021, up from just 0.3 percent during 2020. After a significant rise in unemployment at the start of the year, the labour market remained fairly stable thereafter, resulting in the eurozone unemployment rate of 7.3 percent in October 2021 being half a percentage point below the annual average for 2020.

In Germany, gross domestic product grew less strongly than expected in 2021, reaching 2.8 percent. As in other countries, the pandemic, together with supply and material bottlenecks, had a dampening effect on the German economy. Economic output has not yet returned to pre-pandemic levels. Growth was again supported in particular by public consumption which, like last year, rose by 3.4 percent. Foreign trade also recovered. Construction investment, having grown strongly in past years, rose by only 0.5 percent. This was due to shortages of labour and materials.

Consumer prices rose by 3.1 percent on average over the year, the highest increase since 1993. Inflation was driven mainly by energy prices, which rose by 10.4 percent overall. Food and goods prices also increased significantly. The labour market, on the other hand, remained robust. With 44.9 million people in work, employment stayed at the previous year's level. The number of unemployed people fell by around 80,000 to 2.6 million, with the unemployment rate declining by 0.2 percentage points to 5.7 percent as a result. Short-time (Kurzarbeit) work programmes were used considerably less than in the previous year.

Financial markets

For another year, financial markets were severely impacted by the development of the COVID-19 pandemic. Optimism about vaccination campaigns initially buoyed stock markets, but was dampened again by further waves of infection. Steadily rising inflation rates over the course of the year were another negative influencing factor.

Most central banks therefore began to adjust monetary policy. The US Federal Reserve ("Fed") announced in November that it would end its asset purchase programmes by mid-2022. In view of positive economic data and low unemployment, a faster exit from bond purchases by March 2022 was already decided in December 2021. The Bank of England also responded to rising inflation by raising interest rates by 0.15 percentage points to 0.25 percent in December 2021. The ECB, on the other hand, acted more cautiously. Although the Pandemic Emergency Purchase Programme (PEPP) will be discontinued in March 2022, the Asset Purchase Programme (APP) will continue until the end of 2022. According to the ECB's forward guidance, an interest rate hike is not expected until net new purchases have ended. The main refinancing rate thus remained at 0.0 percent in 2021.

The extremely low yields on ten-year German government bonds at the beginning of 2021 did not last long. With the start of the vaccination campaign, the easing of the COVID-19

YIELD ON TEN-YEAR BUNDS 2021
IN %

Source: Bloomberg

wave in spring and rising inflation rates, Bund yields rose from minus 0.57 percent at the beginning of the year to minus 0.10 percent in May of last year. To maintain favourable financing conditions, the ECB tried to limit the rise in yields and increased the monthly purchase volume under the PEPP programme. As a result, yields fell back to a low of minus 0.5 percent in August. By the end of the year, they had risen once more to a level of minus 0.18 percent with relatively high volatility.

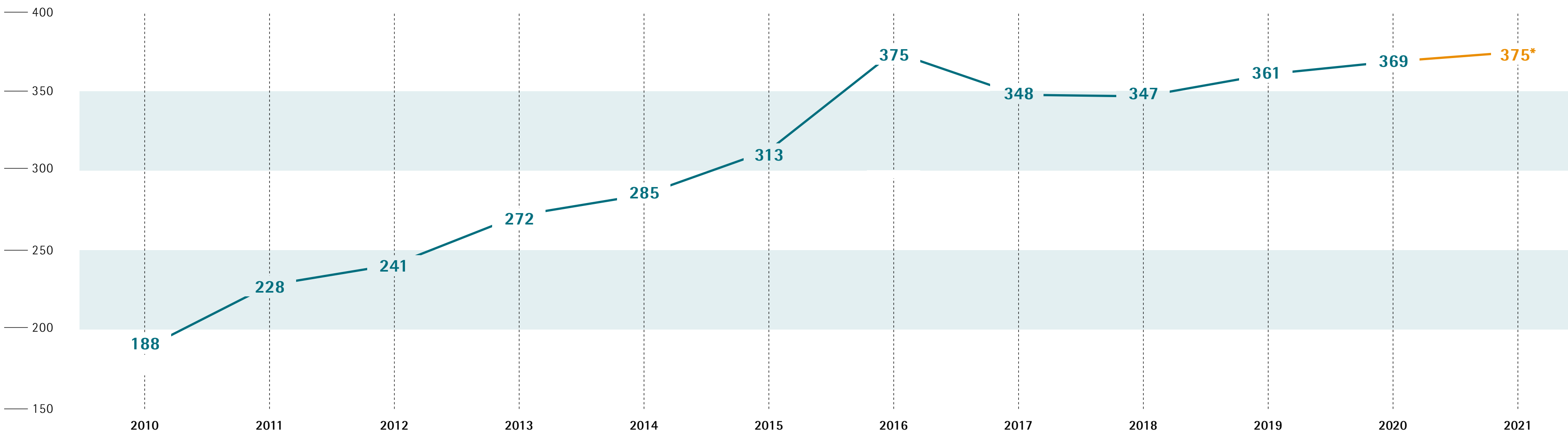
On the foreign exchange market, the US dollar made significant gains against the euro over the course of the year. From USD 1.22 at the beginning of the year, it peaked at USD 1.12 and ended the year at USD 1.13. The US dollar was supported by higher growth rates in the USA, which increased significantly due to the US government's stimulus and relief packages. In the second half of the year, the Fed also announced a more restrictive monetary policy, which provided additional support for the US dollar.

The Swiss franc also gained against the euro over the course of the year, ending 2021 at CHF 1.035, CHF 0.05 lower than the rate at year-end 2020. The British pound posted comparable gains, rising over the course of the year from GBP 0.89 at 31 December 2020 to GBP 0.84 at the end of 2021.

Despite quite attractive spread levels on the covered bond market, many issuers took advantage of especially favourable long-term tender opportunities at the central bank to refinance. The ECB provided further liquidity on the capital market in March 2021 by increasing the volume of possible tender amounts and implementing the monthly securities purchases in a very flexible manner. The ECB's monetary policy kept yields on many bonds in negative territory. Institutional investors therefore extended their investment term or increased their credit risk in order to continue generating positive interest income.

Issuing activities on the primary market for covered bonds were similarly restrained as last year. In particular, the ECB's further series of TLTRO tenders affected the volume of publicly traded covered bond issues. Moreover, the wave-like development of the pandemic repeatedly unsettled the markets. All in all, the euro-denominated issue volume of benchmark covered bonds came to around EUR 95 billion in 2021, a slight increase of 3 percent compared with the previous year. The countries with the highest issuance were France with 24 percent of total volume and Germany with 17 percent.

RESIDENTIAL BUILDING PERMITS IN GERMANY 2010–2021
FIGURES IN 000



* Estimated.

Source: German Federal Statistical Office

Property markets and property financing markets

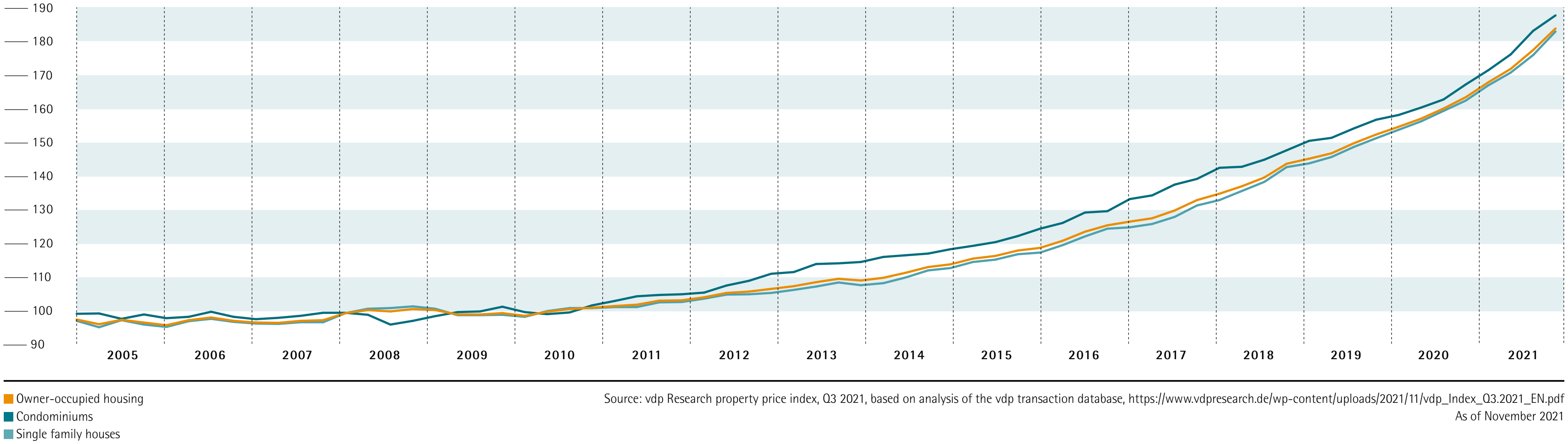
Residential property, Germany

The German residential property market remained buoyant. The pandemic had no negative effects. High demand combined with short supply in metropolitan areas thus caused prices to rise more significantly than in the previous year. Analyses conducted by vdpResearch show that prices for houses and apartments increased by 12.5 percent in the third quarter of 2021 compared with the same period of the previous year. Prices of single and two-family houses were up by 12.6 percent, with condominium prices rising by 12.2 percent. Despite higher price growth momentum, this was driven not by speculation but rather by the overall conditions: high excess demand, low interest rates, rising prices for building land and higher construction costs.

Thus, construction costs for residential property rose dramatically in 2021, in particular because vital raw materials such as timber and steel were in short supply. The rise in the number of building permits slowed down slightly compared with the previous year. By the end of November 2021, the construction of over 340,000 housing units had been approved, up 2.8 percent on the previous-year period. The construction backlog, which includes all construction projects that have been approved but not yet started or completed, increased further, rising to just under 780,000 housing units by the end of 2020. This is essentially because many construction companies are working at full capacity.

Stable growth in rents meant that multi-family houses remained an attractive asset class for investors. Rent increases averaging 4.0 percent compared with the previous year led to price rises for multi-family houses, resulting in the capital value index for multi-family houses rising by an average of 10.4 percent year on year. In the top seven cities, growth momentum was only slightly below the national average. Rent levels in the cities rose by an average of 3.9 percent and capital values by 9.5 percent compared with the previous year.

DEVELOPMENT OF PROPERTY PRICES IN GERMANY
YE 2010 = 100



Source: vdp Research property price index, Q3 2021, based on analysis of the vdp transaction database, https://www.vdpresearch.de/wp-content/uploads/2021/11/vdp_Index_Q3.2021_EN.pdf
As of November 2021

Partly as a result of this trend, more was invested in German residential property during 2021 than ever before. According to surveys by Ernst & Young, institutional investors invested almost EUR 53 billion in German residential property portfolios, two and a half times as much as in the previous year. Of this figure, the takeover of Deutsche Wohnen by Vonovia alone accounted for EUR 23.5 billion. But even without this extraordinary transaction, the capital invested in German residential property increased by over 40 percent compared with the previous year. The institutional housing market continued to be dominated by domestic investors with a share of 76 percent. Furthermore, the German residential property market remained a safe investment target compared with other countries.

Consequently, demand for construction financing was strong. In the first three quarters of 2021, loans with a total volume of around EUR 223 billion were granted for the purchase of residential property (existing and new builds), an increase of 13.6 percent compared with the same period of the previous year.

Against the background of the continuing boom in the German residential property market, in its Financial Stability Report the ECB called on European countries to counter this development with macroprudential measures. In January 2022, BaFin announced the introduction of additional capital requirements due to the rise in residential property prices. The countercyclical capital buffer of previously 0 percent was set at 0.75 percent of risk-weighted assets as of 1 February 2022. In addition, a 'sectoral systemic risk buffer' of 2.0 percent of risk-weighted assets on loans secured by residential property is to be introduced. However, the debt-to-equity and asset encumbrance ratios of private households in residential property financing, which have been stable for years, showed no sign that banks' lending criteria were relaxed in 2021.

Residential property, international

European residential property markets showed similar momentum to Germany, with rising demand for housing and strong price growth. Eurostat's house price index showed a year on year increase of 7.2 percent in the first half of the year.

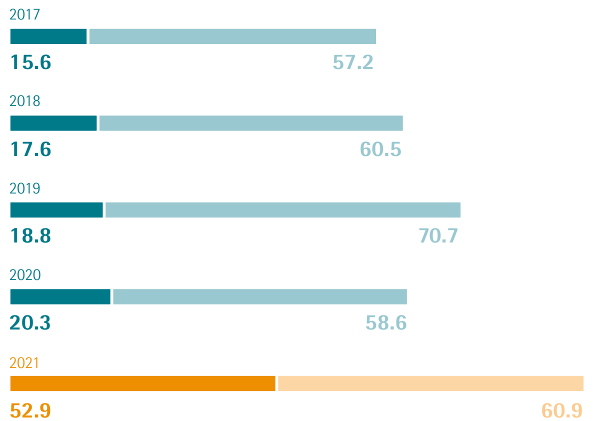
The European residential property markets with the strongest price momentum were Austria, the Netherlands and the UK, with increases of over 10 percent compared with the same period in the previous year. The Austrian federal government is therefore planning to introduce stricter lending rules to oblige mortgage providers to adopt more cautious lending policies.

The Swiss residential property market recorded price growth of 4.7 percent in the first half of 2021 compared with the equivalent previous-year period, with prices for single-family houses in particular rising sharply. Price growth momentum is therefore continuing. On the rental housing market, the vacancy rate declined slightly for the first time, but a supply surplus still remains.

Commercial property, Germany

EUR 60.9 billion was invested in German commercial properties, an increase of 4 percent. Including investments in commercial residential property, 2021 was a record year for the German commercial property market, with a total volume of EUR 113.8 billion. For the first time, residential property was the strongest asset class, accounting for almost 60 percent of transaction volume. Only around a quarter of total volume was attributable to office properties. Logistics and retail properties each accounted for less than 10 percent of transaction volume.

DEVELOPMENT OF COMMERCIAL PROPERTY TRANSACTIONS IN GERMANY 2017–2021
IN € BILLION



Residential (only portfolio)
Commercial

Source: EY Research
As of January 2021

Measures to combat the COVID-19 pandemic – lockdowns in particular – continued to put a noticeable strain on commercial property markets, and this was also reflected in price performance during 2021. According to vdpResearch, for example, prices of commercial properties declined by 0.9 percent in the third quarter of 2021 compared with the same period of the previous year. One reason for this was that prices of retail properties fell by 3.6 percent. On the other hand, office properties recovered slightly with a price increase of 0.3 percent.

Office prime yields in Germany's top property markets remained stable over the course of the year, averaging 2.7 percent on a net basis. Office properties in Berlin generated the lowest prime yields at 2.5 percent net.

The positive performance of the German office investment market is essentially due to the low interest rate environment and the lack of alternative asset classes. After all, office letting markets remain characterised by caution and hesitation on the part of tenants, especially with regard to new leases or expansion plans. In the first three quarters of 2021, around 2.6 million square metres of office space was let in the top seven office cities, down by 4 percent on the same period of the previous year. Compared with market activity in 2019 – before the outbreak of the COVID-19 pandemic – lease turnover actually declined by almost 30 percent. Vacancy rates have thus risen in all German metropolitan areas, with Berlin recording the largest increase from 2.8 to 3.9 percent. Frankfurt am Main has the highest vacancy rate among the German cities at 7.7 percent. Prime rents for office properties again recorded slight year on year growth of 1 percent on average in 2021.

The pandemic has accelerated the process of change in the retail sector which was already under way before 2020. Many retail chains have reduced their branch networks and floor space due to declining sales in bricks-and-mortar retailing. In all German cities, vacancy rates in retail locations have risen and market rents have declined. The change is most pronounced in Berlin, where the retail vacancy rate rose to 13.4 percent and prime rents fell by 5 percent in 2021. The most expensive location for inner city retail properties was Munich with a net initial yield of 2.9 percent. Since the start of the pandemic, shopping centre yields have risen to 5.3 percent net, reflecting uncertainty over investments in this segment. At the same time, the decline in rents for shopping centres was more pronounced than in the city centres.

Commercial property, international

Transaction volume on European commercial property markets recovered in 2021 following a significant slump in the previous year. EUR 275 billion was invested in commercial properties across Europe, an increase of 23 percent. Germany accounted for one third of European transaction volume, followed by the UK with 24 percent, France with 10 percent and the Netherlands with 5 percent. Residential portfolios and office properties each accounted for one third of transaction volume, putting the residential segment at European level on a par with office properties for the first time.

In the UK, investment volume was the highest since 2015, reaching a figure of EUR 67 billion, representing a year on year increase of 50 percent. The period between the Brexit referendum and the UK's actual exit from the EU greatly unsettled investors because the impacts of Brexit on the labour market and on demand for commercial property were difficult to predict. Net initial yields for all property types therefore rose significantly, because investors had priced the uncertainty into their yield forecasts. Yields rose most strongly in regional markets, especially for retail properties in those markets. In 2021, prime yields for shopping centres in the UK were 7.5 percent. Prime office properties in the City of London returned to a net yield level of 3.5 percent in 2021, a figure last recorded in 2015.

In France, EUR 27 billion was invested in commercial property and residential portfolios in 2021, down by 18 percent compared with the previous year. The decline is explained by the very selective behaviour of investors in the office segment, which is the most important type of use in the French commercial property market. Due to the strict measures taken to combat the pandemic, office properties stood empty for several weeks and users began to reduce their space requirements. As a result, prime rents in central Paris fell by 3 percent year on year. Rents for commercial properties fell by 16 percent in France during 2021, while shopping centre rents declined by 4 percent. Net initial yields were unchanged at 3.2 percent for commercial buildings and rose to 4.8 percent for shopping centres.

In the Netherlands, transaction volume fell by 26 percent year on year to EUR 14 billion. This was due to government intervention in the residential property market, which made investors in commercial residential property portfolios far more cautious. Yields remained unchanged at 3.1 percent on a net basis for office properties in Amsterdam and 3.4 percent on average for all Dutch cities. Office rents were unchanged compared with the previous year. Retail rents also declined in the Netherlands, with rents dropping by 6 percent for commercial buildings and by 10 percent for shopping centres.

In Spain, transaction volume recovered to just under EUR 11.3 billion, up 27 percent on the previous year. Investor interest in prime office properties in Spanish cities was so great that the net initial yields in Madrid and Barcelona each fell by 10 basis points. The net initial yield for office properties in Madrid was 3.1 percent and in Barcelona 3.2 percent. In both cities, vacancy rates rose slightly and prime office rents declined by an average of 3 percent in 2021. At 5 percent, the decline in rents for shopping centres was relatively moderate compared with other European cities, as footfall rapidly recovered once lockdown restrictions were eased. Yields for commercial properties were stable at 3.4 percent in 2021, while net initial yields for shopping centres rose to 5.3 percent.

In the US, commercial property and residential portfolios worth USD 582 billion had changed hands by the end of the third quarter of 2021, up by 39 percent year on year. Multi-family apartments were the most sought-after asset class, accounting for almost 40 percent of investment volume. Logistics properties were the second strongest asset class with a market share of 23 percent, followed by office properties with a market share of 19 percent.

BUSINESS DEVELOPMENT

New mortgage business

In the year under review, we more than made up for the pandemic-related decline in new business during 2020. We achieved a record result with a commitment volume of EUR 6.8 billion, representing an increase of 6.3 percent. With growth recorded in both private and commercial property financing, we are satisfied with the overall development of new business.

MÜNCHENERHYP NEW MORTGAGE BUSINESS 2017–2021
COMMITMENTS IN € MILLION

New business in private property financing grew by 7.9 percent, the same rate as last year, to reach EUR 4.3 billion. The continuing property boom and the low level of interest rates contributed to this growth, leading to very strong demand for financing with long fixed interest rate periods – an area in which our offering puts us in a particularly competitive position.

In brokerage business with our partner banks from the Cooperative Financial Network, we matched the previous year's record result with a commitment volume of EUR 3.1 billion. We achieved this in particular through further improvements in digital processes and services for our cooperative brokerage partners.

Sales of private property finance generated via independent financial service providers in Germany increased by 22 percent year on year, to EUR 818 million.

In our partnership with PostFinance in Switzerland, we were able to significantly expand new business thanks to high demand for property financing and a very successful joint sales campaign. The commitment volume rose by 49 percent to EUR 415 million. In the Austrian market, we entered into partnerships with other financial service providers, enabling us to expand new business to EUR 48 million (previous year: EUR 16 million).

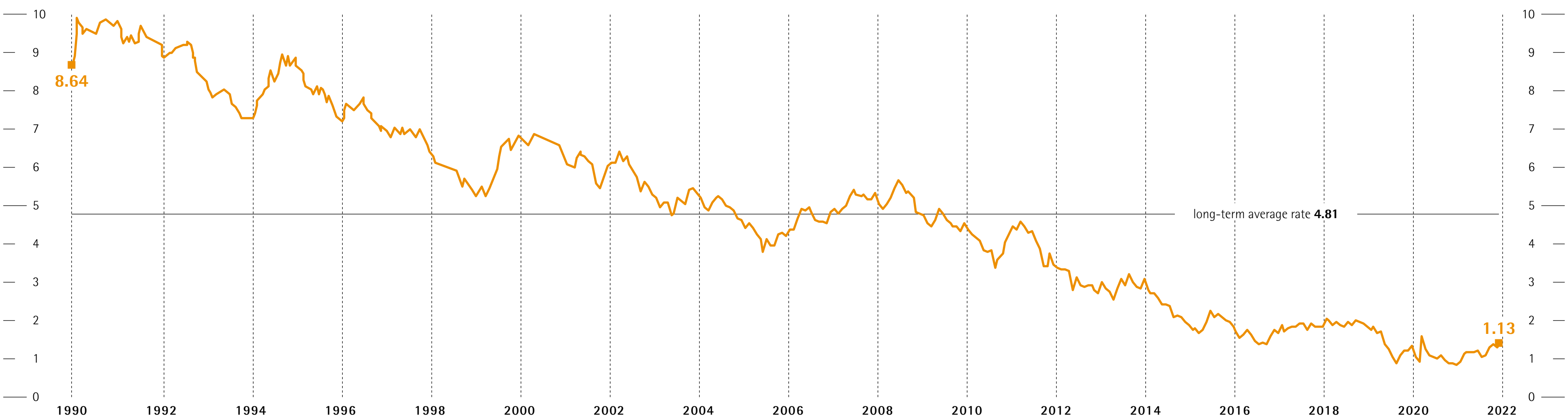
In commercial property financing, our lending business continued to be affected by the economic consequences of the COVID-19 pandemic. Against this background, we are satisfied that we were able to expand our new business by 3.5 percent to around EUR 2.5 billion. This means that we have returned to our growth path after last year's significant decline.

This was attributable in particular to our domestic business, which contributed the lion's share with a new business volume of EUR 1.7 billion. At EUR 0.7 billion, international business was around EUR 0.2 billion below the previous year's result of EUR 0.9 billion. The most important international market for us in 2021 was the Netherlands with 28 percent of new business, replacing last year's leader, the USA (syndicated business only), which accounted for 19 percent, followed by Spain with 16 percent, and France and the UK with 14 percent each. New business was thus more evenly distributed across our target markets than in the previous year. By asset class, office properties accounted for 44 percent of new business, residential portfolios for 23 percent, retail properties for 13 percent, logistics properties for 11 percent and mixed use for the remaining 9 percent.

Earnings performance in commercial new business improved further. We were able to significantly exceed the earnings target without increasing the risks. This applies to domestic business and even more so to international business. Average loan volumes, having increased significantly in previous years, declined slightly.

From a risk perspective, we maintained our conservative financing approach with a focus on conventional financing at completion, giving due consideration to adequate, sustainable minimum cash flows and locations. We consider the high equity ratios in the financing structures, which average approximately 45 percent and increased slightly compared with the previous year, to be a positive aspect. Despite price trends in the market, which have further widened the gap between market and lending values, our average loan-to-value ratios declined slightly.

MORTGAGE RATES MÜNCHENERHYP
TEN YEAR FIXED RATE | IN %



As of: 02.01.2022

Capital markets business

In line with the business strategy, capital markets business is conducted with restraint. New purchases serve primarily to meet regulatory requirements. Liquid securities are needed to manage liquidity and the cover pools, and also as collateral in ECB repo transactions or tender operations.

Highly liquid sovereign and bank securities continued to trade at very high spread levels and resulted in high total asset costs. As a result, securities purchases were kept to the bare minimum.

New business increased significantly to EUR 743.0 million in 2021 after EUR 97 million in 2020. This was due to reallocations. The portfolio volume fell slightly to EUR 3.6 billion (previous year: EUR 3.7 billion).

Refinancing

MünchenerHyp consistently enjoyed access to funding at good conditions during the reporting year.

In the first six months of the year our focus in terms of large-volume funding transactions was on the issue of Pfandbriefe and uncovered bonds in euros and Swiss francs (CHF).

This began in January 2021 with the issue of a Mortgage Pfandbrief with a volume of EUR 500 million, a term of just under 19 years at a spread of 1 basis point above the mid-swap rate and a coupon of 0.01 percent.

At the beginning of March 2021, we successfully issued a green (uncovered) senior non-preferred bond with a volume of EUR 500 million. This was a first for the Bank in two respects: It is its first green bond in this product category, and also the first time it has issued a senior non-preferred bond in benchmark format. The bond has a term of eight years and a coupon of 0.375 percent. The issue was placed at a price of 57 basis points above the mid-swap rate.

At the end of April 2021, MünchenerHyp reported a record spread for long-dated Pfandbriefe. An issue with a volume of EUR 500 million and a term of 15 years was issued at a price 3 basis points below the mid-swap rate and a coupon of 0.25 percent. Investor demand was so brisk that the order book was closed after two hours at EUR 1.35 billion.

In addition to the above-mentioned bonds in euros, we issued around 1.1 billion in Swiss francs up to mid-July. Of this, around CHF 700 million was issued via syndicated bonds on the capital market and approximately CHF 400 million via private placements. This lively issuance activity included various terms (from two to 20 years) and product categories (Pfandbrief, senior preferred and senior non-preferred). Most of the senior products were issued as green bonds, which enabled the Bank to appeal to and win over new groups of investors.

The very successful issuing activity in Swiss francs continued in the second half of the year. We issued further Pfandbriefe with a volume of CHF 0.7 billion. About CHF 550 million of this sum was issued via syndicated bonds on the capital market and approximately CHF 150 million via private placements. In 2021 as a whole, bonds in Swiss francs totalling around CHF 1.8 billion were sold, making MünchenerHyp once again one of the most important foreign issuers in Switzerland.

In the second half of the year, we also made a very successful return to the British capital market. For the first time since 2013, we issued a benchmark Pfandbrief in British pounds (GBP). The volume is GBP 350 million, the term just under 3.5 years and the coupon 0.5 percent. Owing to high demand, it was possible to reduce the spread in the course of the transaction. The spread is 39 basis points above gilts (UK sovereign bonds).

In November 2021, we tapped an existing EUR 500 million Pfandbrief with a remaining term of almost 18 years by a further EUR 250 million. The issue was placed at a price of 2 basis points above the mid-swap rate. The outstanding nominal volume of this bond, which matures in 2039, is now EUR 750 million.

MünchenerHyp's total issue volume on the capital market in the year under review was around EUR 6.6 billion. In covered funding, Mortgage Pfandbriefe accounted for EUR 4.1 billion, including our own Mortgage Pfandbriefe deposited with the ECB, with a volume of EUR 2.5 billion for uncovered funding. Once again, no Public Pfandbriefe were issued, in keeping with MünchenerHyp's business strategy.

FINANCIAL PERFORMANCE, FINANCIAL POSITION AND NET ASSETS

Development of earnings

Net interest income[1] increased in the year under review, rising by EUR 54.8 million, or 15.8 percent, to EUR 402.6 million. The increase was driven primarily by strong new business in the year under review and previous years. Net interest income also includes a premium for targeted longer-term refinancing operations III (TLTRO III) with the European Central Bank in the amount of EUR 18.3 million.

Commission paid totalled EUR 142.2 million, up by EUR 19.7 million or 16.1 percent on the previous-year level, thanks to very successful new business. Commission received fell to EUR 12.0 million, resulting in net commission income[2] of minus EUR 130.2 million, compared with minus EUR 109.5 million in the previous year.

This resulted in net interest and commission income[3] of EUR 272.4 million, which corresponds to an increase of EUR 34.1 million, or 14.3 percent compared with the previous year.

General administrative expenses rose by EUR 8.5 million to EUR 126.7 million. This included an increase in personnel costs of EUR 5.0 million, or 8.7 percent. This is due to the continued need to expand the workforce and salary increases.

Other administrative expenses rose by EUR 3.5 million, or 5.8 percent. The expense for the bank levy alone increased by EUR 3.7 million. This means that the increase in the bank levy alone exceeded the increase in the overall item. This shows that very close attention was paid to cost discipline in the year under review.

Depreciation, amortisation and value adjustments of intangible assets and fixed assets fell by EUR 4.0 million year on year to EUR 6.2 million.

Total administrative expenses[4] amounted to EUR 132.9 million compared with EUR 128.4 million in the previous year. The cost-income ratio[5] was 48.8 percent after 53.9 percent in the previous year, and is thus within the target corridor of below 50 percent.

The net result of other operating expenses and income amounted to minus EUR 3.3 million.

The operating result before risk provisions[6] increased by 28.1 percent year on year, to EUR 136.2 million.

The item "Depreciation, amortisation and value adjustments on accounts receivable and certain securities as well as allocations to provisions for possible loan losses" amounted to minus EUR 27.0 million. The required loan loss provisions remained at a very low level despite the ongoing COVID-19 pandemic. The net result of changes in loan loss provisions (including direct write-downs) amounted to minus EUR 5.9 million (previous year: minus EUR 10.1 million).

The early application of IDW RS BFA 7 for the formation of general loan loss provisions for the lending business resulted in an effect of minus EUR 8.0 million. An amount of EUR 6.0 million was set aside for risks arising from a legal dispute.

The item "Income from reversals of write-downs on participating interests, shares in affiliated companies and securities treated as fixed assets" amounted to EUR 3.5 million.

Income from ordinary business activities amounted to EUR 112.7 million. After tax expenses of EUR 53.6 million, net income for the financial year comes to EUR 59.1 million, a year on year increase of 56.7 percent.

The return on equity (RoE) before tax amounted to 6.7 percent[7]. After tax, the Bank achieved an RoE of 3.5 percent[8].

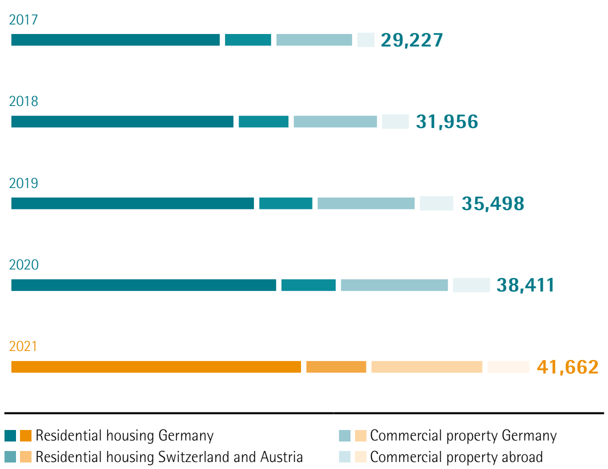
[1] Net interest income is calculated by adding item 1 'Interest income' plus item 3 'Current income' plus item 4 'Income from profit-pooling, profit transfer or partial profit transfer agreements' minus item 2 'Interest expenses' as shown in the income statement.
[2] Net commission income is calculated by offsetting item 5 'Commission received' and item 6 'Commission paid' as shown in the income statement.
[3] The net interest and commission income is the sum of net interest income and net commission income.
[4] Total administrative expenses are the sum total of item 8 'General administrative expenses' and item 9 ,Depreciation, amortisation and write downs of intangible assets and tangible assets' as shown in the income statement.
[5] Ratio of total administrative expenses to net interest and net commission income
[6] Net result of items 1 to 10 in the income statement.
[7] RoE before tax is calculated as the ratio of income statement item 14 'Results from ordinary activities' to balance sheet liability item 9 ,Fund for general banking risks (previous year)' plus liability item 10aa 'Members capital contributions (current year)' plus item 10b 'Revenue reserves (previous year)' plus income statement item 18 ,Retained earnings brought forward from previous year'.
[8] RoE after tax is calculated as the ratio of income statement item 16 'Allocation to fund for general banking risks' plus item 17 'Net income' to balance sheet liability item 9 ,Fund for general banking risks (previous year)' plus liability item 10aa 'Members capital contributions (current year)' plus item 10b 'Revenue reserves (previous year)' plus income statement item 18 'Retained earnings brought forward from previous year'.

Balance sheet structure

Total assets increased to EUR 52.5 billion at the end of the 2021 financial year, compared with EUR 48.6 billion at 31 December 2020. This 8 percent increase is mainly due to growth in the mortgage loan business portfolio.

During the course of the year, the mortgage loan portfolio grew by EUR 3.2 billion, to EUR 41.7 billion. Private residential property financing in Germany was once again the fastest growing segment, with growth of EUR 2.0 billion.

PORTFOLIO DEVELOPMENT MÜNCHENERHYP 2017–2021
IN € MILLION



The private residential property financing portfolio is structured as follows: domestic – EUR 23.5 billion (previous year: EUR 21.5 billion); foreign – EUR 5.2 billion (previous year: EUR 4.7 billion). In addition to the financing business in Switzerland, this portfolio also includes financing in Austria. The commercial property financing portfolio totals EUR 13.0 billion (previous year: EUR 12.2 billion). Of this amount, EUR 3.7 billion (previous year EUR 3.2 billion) is attributable to financing outside Germany. The most important international market is the Netherlands with 23 percent (previous year: 21 percent), followed by the USA with 22 percent (previous year: 23 percent), Spain with 18 percent (previous year: 19 percent) and the UK with 15 percent (previous year: 17 percent).

In line with our business and risk strategy, the portfolio of public-sector and bank loans and securities decreased from EUR 3.7 billion to EUR 3.6 billion, EUR 2.2 billion of which was made up of securities and bonds.

At the end of 2021, the net sum of hidden charges and hidden reserves in the securities portfolio amounted to EUR 33 million (previous year: EUR 43 million).

A detailed examination of all securities indicated that there are no permanent impairments. We have accounted for bonds on a held-to-maturity basis. Write-downs to a lower fair value were not necessary.

The portfolio of long-term funding instruments increased by EUR 2.4 billion to EUR 42.0 billion. Mortgage Pfandbriefe accounted for EUR 30.3 billion of this amount, Public Pfandbriefe for EUR 1.5 billion and uncovered bonds for EUR 10.2 billion. The total volume of funding instruments – including money market funds and customer deposits – increased to EUR 49.7 billion as of 31 December 2021.

The item "Other liabilities to customers" can be broken down as follows:

OTHER LIABILITIES TO CUSTOMERS
IN € 000

	Remaining term < one year	Remaining term > one year	Total
Other liabilities to customers as of 31 Dec. 21	**2,065,449**	**2,393,353**	**4,458,802**
Registered bonds	**27,908**	**1,514,764**	**1,542,672**
of which institutional investors	27,572	1,360,764	1,388,336
Promissory note loans on the liabilities side	**485,077**	**808,589**	**1,293,666**
of which institutional investors	119,289	507,589	626,878
Other	**1,552,464**	**70,000**	**1,622,464**
of which institutional investors	860,015	70,000	930,015

Members capital contributions grew by EUR 90.1 million, to EUR 1,243.2 million. Together with the issue of the Additional Tier 1 bond in the amount of CHF 125 million in 2019, regulatory equity capital totalled EUR 1,790.1 million (previous year: EUR 1,676.4 million).

Common Equity Tier 1 capital rose from EUR 1,517 million in the previous year to EUR 1,626 million. At 31 December 2021, the Common Equity Tier 1 capital ratio was 20.4 percent (previous year: 20.6 percent), the Tier 1 capital ratio was 21.9 percent (previous year: 22.2 percent) and the total capital ratio was 22.5 percent (previous year: 22.8 percent). The leverage ratio at 31 December 2021 was 3.6 percent (previous year: 3.6 percent).

RATINGS, SUSTAINABILITY AND REGULATORY CONDITIONS

Ratings

In October 2021, the rating agency Moody's confirmed all of MünchenerHyp's ratings. At the same time, it changed the outlook from "negative" to "stable".

Moody's remains positive about the fact that MünchenerHyp has a strong reputation on the capital market as an issuer of Pfandbriefe, noting that it has an accordingly high level of refinancing strength, and also acknowledges the firm ties and corresponding support the Bank enjoys within the Cooperative Financial Network.

CURRENT RATINGS AT A GLANCE

	Rating
Mortgage Pfandbriefe	Aaa
Junior Senior Unsecured	A2
Senior Unsecured	Aa3
Short-term liabilities	Prime-1
Long-term deposits	Aa3

MünchenerHyp has not issued any Public Pfandbriefe for some years now, as these are only profitable through cross-selling income. As a result, it withdrew its rating for Public Pfandbriefe in 2020.

Even to achieve the highest Pfandbrief rating of Aaa, Moody's still only requires compliance with the legally required over-collateralisation, but no additional over-collateralisation.

The long-term unsecured liabilities have ratings from the other two major rating agencies, Standard & Poor's (A+) and Fitch (AA-), via the combined rating of the Cooperative Financial Network.

Sustainability

The regulatory requirements of the EU, the ECB, the European Banking Authority (EBA) and BaFin regarding sustainability in corporate governance increased significantly in the year under review. These requirements relate primarily to MünchenerHyp's core business, risk management and reporting.

In the year under review, the focus was particularly on the topics of EU taxonomy, the ECB guide on climate-related and environmental risks, disclosure pursuant to CRR II and the guidelines on loan origination and monitoring (LOaM). In order to implement these requirements, the Board of Management launched a project that encompasses almost all areas of MünchenerHyp and aims to create the processes, structures and data foundations needed for appropriate sustainability management.

In order to embed sustainability even more deeply in the Bank's organisation, an ESG framework was developed in 2021 that defines structures and responsibilities for all sustainability issues, including ESG risk management issues. For this purpose, an ESG committee was set up to advise the Board of Management on all matters relating to sustainability. It consists of representatives from all affected areas and in particular has the task of further developing the sustainability strategy and preparing sustainability-relevant decision proposals for the Board of Management.

The focus of our sustainability activities remains on our core business. In the private residential property financing business, our loans with a social and environmental focus (MünchenerHyp Green Loan and MünchenerHyp Family Loan) accounted for more than 20 percent of new business in private property financing. We publish an annual impact report on the specific environmental value-added of sustainable loans for private and commercial property.

In terms of sustainable securities, in 2021 we issued ESG Pfandbriefe, uncovered senior preferred and non-preferred bonds and commercial paper. Approximately EUR 875 million was successfully placed in this segment in 2021.

In its sustainability rating, ISS ESG awarded MünchenerHyp a rating of C+ for sustainability management in 2020. Although this is a slight downgrade compared with the B- rating received in previous years, it still places us among the top performers in the Financials/Mortgage & Public Sector rating peer group. As a result, ISS ESG has granted us "Prime Status" again.

The agency Sustainalytics introduced a new rating methodology in 2020. It now assesses sustainability commitment using a scoring system from 0 to plus 40. The lower the risk score, the stronger the sustainability management.

MünchenerHyp's risk score in 2021 was 18.5, which corresponds to a low risk. This puts the bank in 5th place in the Thrifts and Mortgages peer group.[9]

The development of the sustainability ratings in 2021/2022 and the two previous years at a glance:

THE DEVELOPMENT OF THE SUSTAINABILITY RATINGS SINCE 2019

	2019	2020	2021/2022
ISS-ESG	B – (Prime Status)	C + (Prime Status)	C + (Prime Status)
Sustainalytics	65 out of 100 points	Risk score of 17.4 (low risk)	Risk score of 18.5 (low risk)

Separate non-financial report

MünchenerHyp has been reporting on the non-financial aspects and the material economic, environmental and social impacts of its business activities since 2012. We comply with the requirements set out in the German CSR Directive Implementation Act (CSR-Richtlinie-Umsetzungsgesetz – CSR-RUG) by publishing a non-financial report. In accordance with the Delegated Act specifying the disclosure obligations under Article 8 of the Taxonomy Regulation, we will publish information on our taxonomy-eligible economic activities for the first time in 2021, as well as further key indicators relating to selected risk positions. The non-financial report is published at the same time as the annual report on the Bank's website and in the electronic Federal Gazette (Bundesanzeiger).

Regulatory conditions

Capital

MünchenerHyp calculates its capital requirements largely using the internal ratings based approach (IRBA).

Liquidity

The Liquidity Coverage Ratio (LCR) was maintained without issue throughout the year, with values above 400 percent on average. The minimum was above 200 percent. The Net Stable Funding Ratio (NSFR) was always above 110 percent.

Single Supervisory Mechanism for EU banks

The "finalisation" of Basel III also includes the gradual introduction of an output floor of 72.5 percent to limit the effects of internal approaches compared with standard approaches. This means that in particular banks with low risk weightings for their receivables, such as MünchenerHyp, will be adversely affected by the changes. The introduction of this floor will also impact MünchenerHyp's capital ratios. Overall, we take a critical view of the new regulation, because it will make lending more expensive. The Bank is monitoring developments and, given the currently high Common Equity Tier 1 ratio, believes that this regulatory change will be manageable.

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The Bank's Compliance unit follows discussions on the publication of new national and international regulations very closely and forwards any new regulations to the responsible departments within the Bank, where they are implemented in various measures and projects. The abundance of additional regulatory requirements imposed by supervisory authorities causes significant costs and poses a considerable challenge for our Bank's human and financial resources.

As every year, the ECB conducted the so-called Supervisory Review and Evaluation Process (SREP), comprising a very detailed evaluation of the business model, internal governance and capital and liquidity adequacy. Any additional capital and liquidity requirements are derived from that process. The additional capital adequacy requirement (P2R) imposed within the framework of the SREP amounts to 1.75 percent of total capital; no additional requirements were set for liquidity.

Minimum Requirements for Risk Management (MaRisk)
The German Minimum Requirements for Risk Management (Mindestanforderungen an das Risikomanagement – MaRisk) were updated in the year under review by way of an amendment. However, because the existing European requirements, which MünchenerHyp already fulfilled, were essentially transposed into German law, hardly any change was needed.

Recovery and resolution plan
The recovery plan was updated and the information required for the resolution plan was sent to the resolution authority. There were no significant changes compared with the previous year.

IBOR reform
IBOR reference interest rates came under heavy criticism in the wake of the manipulation scandals a few years ago; at the same time, the abolition of the submission obligation for panel banks made it necessary to replace the LIBOR rates. Alternative risk-free rates (RFRs) were developed and established; existing IBOR reference rates are gradually being replaced based on the new RFR benchmarks.

MünchenerHyp is affected both by the announced changes in relation to the interest rate benchmarks and by the Benchmarks Regulation. However, due to the highly specialised business model, there is much less of a need for change than for most other banks directly supervised by the ECB. The necessary adjustments are being undertaken as part of a project.

REGISTERED OFFICE, EXECUTIVE BODIES, COMMITTEES AND EMPLOYEES

Registered office

Münchener Hypothekenbank eG has its registered office in Munich. The Bank also has a branch in Berlin and 10 regional offices.

Executive bodies and committees

The Supervisory Board appointed Ulrich Scheer – previously General Executive Manager – as a member of the Board of Management (CFO) effective as of 1 September 2021.

The Supervisory Board appointed Dr. Holger Horn as Deputy Chairman of the Board of Management (CRO) effective as of 1 January 2022.

The Supervisory Board intends to appoint Markus Wirsen as a member of the Board of Management effective as of 1 April 2022. He was previously Head of Restructuring & Recovery at DZ HYP AG.

In June 2021, the four employee representatives on the Supervisory Board were regularly elected for a new period of office. Reimund Käsbauer, Michael Schäffler and Frank Wolf-Kunz were re-elected. Claudia Schirsch was newly elected to the Supervisory Board. Barbara von Grafenstein stood down from the Board.

The Delegates Meeting was regularly elected for a new period of office during the year under review. Due to the COVID-19 pandemic, the election was conducted by postal vote. Eighty delegates and six substitute delegates were elected.

Employees

In a second year dominated by the COVID-19 pandemic, employee health was the particular focus of our human resources work. With the measures in place, such as the crisis team, working from home and hygiene rules, we were able to maintain the Bank's operations at all times and to contain infections to the extent possible. Since March 2020, around 70 employees have had the coronavirus, almost all of them having been infected outside the Bank. Happily, all have since recovered.

In the second year of the pandemic, there was less inclination to join or leave MünchenerHyp. Both new hires and employee turnover declined compared with 2020. Recruitment remains a key challenge for the Bank given the tight labour market. For this reason, MünchenerHyp's human resources strategy is focused on, among other things, enhancing our employer brand, attracting and promoting talent, creating attractive overall conditions for all employees and offering attractive remuneration.

The Bank employed 624 employees[10] (previous year: 611) on average over the year.

Corporate governance statement in accordance with Section 289f HGB

The proportion of women in the Bank as a whole came to 50 percent in the reporting year. At Board of Management level, the proportion came to 0 percent, while the proportion at the first management level below the Board was 22 percent, at the second level 18 percent and at the third level 31 percent. The proportion of women on the Supervisory Board was 17 percent in 2021. MünchenerHyp has set itself the objective of increasing the proportion of women in management positions. For the Supervisory Board and the two management levels below the Board of Management, the Bank is aiming for a proportion of women of 20 percent, with a target quota for the Board of Management of 33 percent. In December 2020, the Nomination Committee of MünchenerHyp's Supervisory Board addressed the issue of the proportion of women on the Board of Management and Supervisory Board and decided to retain the existing target quotas and to strive to achieve them by 2026 in the context of upcoming succession arrangements.

[10] Number of employees in accordance with Section 267 (5) of the German Commercial Code (Handelsgesetzbuch – HGB); excludes trainees, employees on parental leave, in early retirement or in partial retirement (non-working phase) and employees on leave of absence.

Risk, outlook and opportunities report

RISK REPORT

Continuous risk control and monitoring is essential to managing business development at MünchenerHyp. Risk management is therefore a high priority in terms of the overall management of the Bank.

The framework governing business activities is laid down in the business and risk strategy. The MünchenerHyp Board of Management as a whole is responsible for this strategy, which is reviewed regularly to ensure its objectives are being met, revised where necessary and discussed with the Supervisory Board at least once a year.

The Supervisory Board's Risk Committee is informed of the Bank's risk profile at least once a quarter and additionally as necessary, so that it can exercise its supervisory function. This information is based on, among other things, reports on ICAAP and ILAAP and on credit risks, operational risk reports and the risk report prepared in accordance with MaRisk. The Risk Committee also receives numerous detailed reports from internal management, regarding funding and liquidity, for example.

Risk management is based firstly on the analysis and presentation of existing risks, and secondly on comparing these risks with the available risk coverage potential (risk-bearing capacity). There are also various other relevant analyses that need to be viewed as a whole to enable adequate management of the Bank. Extensive control procedures involving internal, process-dependent monitoring are employed for this purpose. The Internal Audit department, which is independent of all processes, has an additional supervisory role in this respect.

When analysing and presenting the existing risks, a distinction is made between counterparty risks, market price risks, credit spread risks, liquidity risks, participation risks, model risks, property risks and operational risks. Additional risks, such as placement risk, reputational risk, business risk and ESG risk, etc. are each seen as elements of the above risks and are taken into account at the appropriate point in the respective calculations.

Counterparty risk

Counterparty risk (credit risk) is of major importance for MünchenerHyp. Counterparty risk is the risk that a counterparty will fail to meet its payment obligations towards the Bank, by paying late or by defaulting completely or in part.

The Credit Manual sets forth the credit approval procedures and process regulations for those units involved in the lending business and the permissible credit products. The business and risk strategy also contains more detailed explanations on the sub-strategies for target customers and target markets, as well as basic specifications for measuring and managing credit risks at individual transaction and portfolio level. Individual limits have been set for all types of lending, e.g. depending on the rating. Another factor is regional diversification, which is ensured by country limits.

In the mortgage business, we ensure that we grant senior loans predominantly with moderate loan-to-value ratios; in the commercial business, limits also apply with regard to DSCR and LTV. The current loan-to-value ratios break down as follows:

TOTAL PORTFOLIO OF MORTGAGES AND OTHER LOANS
INCLUDING OPEN COMMITMENTS IN €

Loan-to-value ratio	31 Dec. 2021	Relative	31 Dec. 2020	Relative
Up to 60 %	17,712,207,741.73	39.5 %	16,401,392,390.88	39.6 %
> 60 % and <= 70 %	6,840,677,939.84	15.3 %	7,042,011,598.28	17.0 %
> 70 % and <= 80 %	7,817,675,352.88	17.4 %	7,619,966,869.31	18.4 %
> 80 % and <= 90 %	4,114,483,751.81	9.2 %	3,423,715,652.17	8.3 %
> 90 % and <= 100 %	3,513,107,035.49	7.8 %	2,918,027,657.66	7.1 %
Over 100 %	4,826,847,133.62	10.8 %	3,921,580,700.76	9.5 %
Without	1,656,656.42	0.0 %	52,169,575.59	0.1 %
Total	**44,826,655,611.79**	**100.0 %**	**41,378,864,444.65**	**100.0 %**

The regional breakdown within Germany is summarised below:

TOTAL PORTFOLIO OF MORTGAGE AND OTHER LOANS
INCLUDING OPEN COMMITMENTS IN €

Region	31 Dec. 2021	Relative	31 Dec. 2020	Relative
Baden-Württemberg	3,756,142,446.13	8.4 %	3,459,145,234.81	8.4 %
Bavaria	8,474,865,821.42	18.9 %	7,698,948,641.11	18.6 %
Berlin	2,275,822,809.98	5.1 %	2,156,619,521.57	5.2 %
Brandenburg	764,316,946.44	1.7 %	614,702,291.86	1.5 %
Bremen	146,032,821.18	0.3 %	117,028,114.15	0.3 %
Hamburg	1,216,985,454.59	2.7 %	1,218,687,423.53	2.9 %
Hesse	3,276,664,075.86	7.3 %	3,015,553,722.32	7.3 %
Mecklenburg-West Pomerania	595,844,836.17	1.3 %	556,461,832.57	1.3 %
Lower Saxony	3,196,387,918.79	7.1 %	2,996,660,642.83	7.2 %
North Rhine-Westphalia	5,609,760,400.35	12.5 %	5,223,538,665.42	12.6 %
Rhineland-Palatinate	1,813,885,036.53	4.0 %	1,702,546,791.15	4.1 %
Saarland	431,112,825.77	1.0 %	424,211,558.98	1.0 %
Saxony	1,113,316,958.79	2.5 %	1,088,839,097.08	2.6 %
Saxony-Anhalt	695,276,822.37	1.6 %	634,003,054.63	1.5 %
Schleswig-Holstein	2,052,971,928.16	4.6 %	1,955,811,355.81	4.7 %
Thuringia	355,371,130.18	0.8 %	334,394,103.65	0.8 %
Total domestic	**35,774,758,232.71**	**79.8 %**	**33,197,152,051.47**	**80.2 %**

The international breakdown is as follows:

TOTAL PORTFOLIO OF MORTGAGE AND OTHER LOANS
INCLUDING OPEN COMMITMENTS IN €

Country	31 Dec. 2021	Relative	31 Dec. 2020	Relative
Austria	224,186,194.19	0.5 %	181,484,755.12	0.4 %
France	472,425,600.20	1.1 %	441,156,481.80	1.1 %
United Kingdom	541,450,654.06	1.2 %	544,295,423.01	1.3 %
Spain	659,341,232.09	1.5 %	611,836,583.85	1.5 %
Luxembourg	105,094,688.44	0.2 %	64,900,000.00	0.2 %
Switzerland	5,224,247,514.15	11.7 %	4,803,985,406.13	11.6 %
Netherlands	868,016,719.22	1.9 %	701,825,145.19	1.7 %
Belgium	105,544,541.73	0.2 %	38,101,461.97	0.1 %
USA	851,590,235.00	1.9 %	794,127,136.11	1.9 %
Total foreign	**9,051,897,379.08**	**20.2 %**	**8,181,712,393.18**	**19.8 %**
Total domestic and foreign	**44,826,655,611.79**	**100.0 %**	**41,378,864,444.65**	**100.0 %**

Credit risk management starts when the target transaction is selected with the drafting of loan terms and conditions. Regularly reviewed risk cost functions are used for this purpose. Depending on the type and risk level of the transaction, various rating and scoring procedures are used.

In property financing, a broadly diversified portfolio of mainly residential property finance and credit approval processes that have been tried and tested for years are reflected in a portfolio with a low credit risk. Our lending business with public sector borrowers and banks is focused on central and regional governments, public local authorities and Western European banks (covered bonds only). The regional focus is on Germany and Western Europe, respectively. Highly liquid sovereign bonds and other highly rated securities will continue to be needed to a certain extent, in order to guarantee compliance with CRR liquidity requirements.

Mortgage loans are checked for the need for a specific loan loss provision based on their rating, any payment arrears or other negative factors. Workout Management carries out more extensive specific loan loss provision monitoring, especially in non-retail business.

Broken down by rating classes, the portfolio distribution is as follows:

TOTAL PORTFOLIO OF MORTGAGE AND OTHER LOANS
INCLUDING OPEN COMMITMENTS IN €

Rating category	31 Dec. 2021	Relative	31 Dec. 2020	Relative
0a to 0b	0.00	0.0 %	0.00	0.0 %
0c to 0e	10,321,572,171.81	23.0 %	9,247,515,408.72	22.3 %
1a to 1c	22,541,286,450.37	50.3 %	21,862,138,711.57	52.8 %
1d to 2a	9,367,647,410.66	20.9 %	8,002,947,835.60	19.3 %
2b to 2c	1,183,501,713.56	2.6 %	1,031,810,223.26	2.5 %
2d to 2e	374,436,327.41	0.8 %	330,512,201.14	0.8 %
3a to 3b	567,687,876.18	1.3 %	530,722,388.44	1.3 %
3c to 3d	212,184,459.98	0.5 %	146,036,067.04	0.4 %
3e	36,082,435.09	0.1 %	20,611,297.77	0.0 %
4a to 4e	221,905,737.35	0.5 %	206,086,646.53	0.5 %
without rating	351,029.38	0.0 %	483,664.58	0.0 %
Total	**44,826,655,611.79**	**100.0 %**	**41,378,864,444.65**	**100.0 %**

The Bank sets up a general loan loss provision as a precaution to cover latent credit risks. This general loan loss provision is calculated based on an expected credit loss model, with the IFRS 9 methodology being adopted for levels 1 and 2 and applied to the HGB assessment basis. Latent default risks are thus taken into account at an early stage compared with the previous calculation based on the letter by the German Federal Ministry of Finance dated 10 January 1994. The early application of IDW RS BFA 7 via an expected credit loss model leads to an increase in general loan loss provisions of EUR 8 million.

As property markets remain largely very stable despite the COVID-19 pandemic, specific loan loss provisions continue to be recognised at a very low level for both the residential property financing business and the commercial property financing business.

Business relations with financial institutions are based on master agreements that allow the netting of receivables from and liabilities to the other institution. Collateral agreements exist with all derivative counterparties. Derivative transactions, insofar as they are subject to clearing, are settled via a central counterparty (CCP).

Specific and general loan loss provisions changed as follows in the year under review:

TOTAL LENDING BUSINESS*
IN EUR MILLION

	Opening balance	Additions	Reversals	Utilisation	Exchange rate-related and other changes	Closing balance
Specific provisions	29.5	7.7	– 2.6	– 0.7	0.7	34.6
General provisions	13.0	8.0	0.0	0.0	0.0	21.0

* Including a provision for irrevocable loan commitments in the amount of EUR 1.0 million.

Market price risks

Market price risks include the risks to the value of positions due to changes in market parameters, including interest rates, volatility and exchange rates. They are quantified as a potential present value loss using a present value model. This distinguishes between interest rate, option and currency risks.

In the case of the interest rate risk, a distinction is made between general and specific interest rate risks. General interest rate risk is the risk that the market value of investments or liabilities that depend on general interest rates will be adversely affected if interest rates change.

Specific interest rate risk, also known as the credit spread risk, is also included under market price risk. The credit spread is defined as the difference in yield between a risk-free and a risky bond. Spread risks take account of the risk that the spread may change even without any change to the rating. The reasons for a change to yield spreads may include:

- varying opinions among market participants regarding positions;
- an actual change in the creditworthiness of the issuer not already reflected in its rating;
- macroeconomic aspects that influence creditworthiness categories.

The risks inherent in options include: volatility risk (vega: the risk that the value of a derivative instrument will change due to increasing or decreasing volatility), time risk (theta: the risk that the value of a derivative instrument will change over time), rho risk (the risk of change to the value of the option if the risk-free interest rate changes) and gamma risk (the risk of a change to the option delta if the price of the underlying asset changes; the option delta describes the change in value of the option due to a change in price of the underlying asset). Options in capital market business are not contracted for the purposes of speculation. All option positions arise implicitly as a result of borrower's option rights (e.g. statutory termination rights under Section 489 of the German Civil Code (Bürgerliches Gesetzbuch – BGB) or the right to make unscheduled repayments) and are hedged where necessary. These risks are carefully monitored in the daily risk report and are limited.

Currency risk is the risk that the market value of investments or liabilities that depend on exchange rates will be adversely affected due to changes in exchange rates. Foreign currency transactions of MünchenerHyp are hedged to the maximum possible extent against currency risks; only the margins included in interest payments are not hedged.

Share price risk is low for MünchenerHyp; it results almost exclusively from participations in companies in the Cooperative Financial Network. In addition, the Bank has invested in a mixed fund (as a special fund of Union Investment), in which a mix of shares is also possible. Responsibility for calculating risk ratios is transferred to the investment fund company; the results are reviewed for plausibility and then input into the Bank's systems.

In order to manage market price risks, the present value of all MünchenerHyp transactions is determined on a daily basis. All transactions are valued using the 'Summit' application. Interest rate risk is managed based on the BPV vector (Base Point Value), which is calculated daily from the change in present value per maturity band that would occur if the mid-swap curve changed by one basis point. Sensitivities to exchange rates and in relation to rotations in the interest rate curve and changes to the base spread and volatilities are also determined.

Market risks are recorded and limited at MünchenerHyp using the value at risk (VaR) indicator. The VaR calculation takes account of both linear and non-linear risks by means of a historic simulation. The impact of extreme movements in risk factors is also measured here and for other types of risks using various stress scenarios.

The daily stress scenarios (others are tested with less frequency) are:

- Supervisory requirements:
  - The yield curve is shifted up and down in parallel by 200 basis points for each currency separately. The poorer of the two results is taken into account and is limited.
  - In addition, six further stress tests (parallel shift up/down, steepening/flattening, parallel shift up/down in the short-term segment) are calculated. The poorest result is monitored as an early warning indicator for the limit. The stress tests are prescribed by EBA Guideline 2018/02.
- Parallel shifting: the current yield curve is shifted up and down completely by 50 basis points across all currencies at the same time. The poorer of the two results is taken into account.
- Sensitivities:
  - Exchange rates: all foreign currencies change by 10 percent.
  - Volatilities: all volatilities increase by 1 percentage point.
  - Steepening/flattening: a moderate steepening/flattening of the yield curve is simulated, i.e. at the short end by up to +/– 10 basis points, at the long end by up to +/– 20 basis points, rotation around the 5-year grid point
- Historic simulation:
  - Terrorist attack in New York on 11 September 2001: changes in market prices between 10 September 2001 and 24 September 2001, i.e. the direct market reaction to the attack, are applied to the current level.
  - 2008 financial market crisis: changes in interest rates between 12 September 2008 (last banking day before the collapse of investment bank Lehman Brothers) and 10 October 2008 are applied to the current level.
  - Brexit: change in interest rates and exchange rates due to the Brexit referendum on 23 and 24 June 2016.

In the reporting year, the maximum VaR of the entire portfolio (interest, currencies and volatilities) at a confidence level of 99 percent with a ten-day holding period was EUR 42 million. The average figure was approximately EUR 29 million.

Although MünchenerHyp is a trading book institution (for futures only), it has not concluded any trading transactions since 2012.

In order to manage credit spread risks, the present value of asset-side capital market transactions of MünchenerHyp is calculated and the credit spread risks determined on a daily basis. The credit spread VaR, credit spread sensitivities and various credit spread stress scenarios are calculated in the Summit valuation system.

Credit spread risks are recorded and limited at MünchenerHyp using the VaR indicator. The VaR is calculated based on a historic simulation.

The current (daily) credit spread stress scenarios are:

- Parallel shifting: all credit spreads are shifted up and down by 100 basis points. The poorer of the two results is taken into account.
- Historic simulation of the collapse of the investment bank Lehman Brothers: the scenario assumes an immediate change in spreads based on the change that was measured in the period from one banking day before the collapse of Lehman Brothers to four weeks after this date.
- Flight to government bonds: this scenario simulates a highly visible risk aversion seen on the markets in the past. The spreads of risky security classes widen, while the spreads of safe sovereign bonds tighten.
- Euro crisis: this scenario replicates the change in spreads during the euro crisis between 1 October 2010 and 8 November 2011. During that period, in particular the spreads of poorly rated sovereign bonds increased sharply.
- COVID-19 crisis: this scenario reflects the change in credit spreads in the wake of the COVID-19 crisis between 28 February and 18 March 2020. Spreads increased significantly in all asset classes during this period.

The credit spread VaR for the entire portfolio using a 99.9 percent confidence level and a holding period of one year stood at a maximum of EUR 223 million in the reporting year, while the average figure was about EUR 212 million.

Liquidity risk

Liquidity risk includes the following risks:

- Inability to honour payment obligations on time (liquidity risk in the narrower sense).
- Inability to procure sufficient liquidity when needed at anticipated conditions (funding risk).
- Inability to close out, extend or settle transactions without incurring a loss due to insufficient market depth or market disruptions (market liquidity risk).

MünchenerHyp distinguishes between short-term solvency measures and medium-term structural liquidity planning.

Short-term solvency measures
The purpose of short-term solvency measures is to ensure that the Bank is able on a daily basis to honour payment obligations in due form, in time and in full, even during stress situations (willingness to pay). Current supervisory requirements (MaRisk and CRD IV) regarding banks' liquidity reserves have been implemented.

MünchenerHyp classes itself as a capital market-oriented institution within the meaning of MaRisk and therefore also fulfils the requirements of BTR 3.2.

MaRisk distinguishes between five different scenarios, which have been implemented accordingly:

1) Base case: corresponds to normal management of the Bank.
2) Bank stress: the reputation of the institution deteriorates, for example due to large on-balance-sheet losses.
3) Market stress: short-term event affecting one part of the financial market. Examples of this include the terrorist attack on 11 September 2001 or the financial market/sovereign debt crisis.
4) Combined stress: simultaneous occurrence of bank and market stress.
5) Combined stress without countermeasures: it is assumed that it is no longer possible to obtain any liquidity at all.

According to MaRisk, the Bank must meet the liquidity requirements arising from scenarios 1 to 4 for a minimum of 30 days. Scenario 5 is the worst-case scenario for internal management purposes.

Depending on the scenario, various modelling assumptions have been deduced for all important cash flows, such as drawdowns of liquidity lines, drawdowns of loan commitments already made or changes to collateral. In addition, all securities were allocated to various liquidity classes in order to deduce the volume in each scenario that could be sold or placed in a securities repurchase agreement, and in what time frame, in order to generate additional liquidity. In all cases, statutory restrictions, such as the 180-day rule in the German Pfandbrief Act (Pfandbriefgesetz – PfandBG), were met at all times. The result is a day-by-day presentation of available liquidity over a three-year horizon in three currencies (euros, US dollars and Swiss francs). Positions in other currencies are negligible. Limits are set in the stress scenarios across various horizons as early warning indicators for each scenario.

In addition, the liquidity coverage ratio (LCR) and a forecast in accordance with CRD IV are calculated across all currencies at least once a week.

Medium-term structural liquidity planning
The purpose of structural liquidity planning is to safeguard medium-term liquidity. The legal basis for this is both MaRisk BTR 3 and CRD IV on the net stable funding ratio (NSFR).

Medium-term liquidity management in accordance with MaRisk is based on short-term liquidity management in accordance with MaRisk, i.e. both use the same scenarios and modelling assumptions. Due to the longer observation period, however, additional modelling is taken into account that is not critical to short-term liquidity management, such as new business planning or current expenses such as salaries and taxes.

Medium-term liquidity planning has the following liquidity ratios over time as profit or loss components:

- cumulative overall cash flow requirement;
- available covered and uncovered funding potential, including planned new business and extensions in accordance with Moody's over-collateralisation requirements;
- other detailed data for planning and management activities.

Liquidity risks are limited via the structural liquidity forecast and stress scenarios, based on available liquidity within a year.

In addition, the NSFR is computed monthly across all currencies in accordance with CRD IV. Forecasts are also created for monitoring purposes. Since 30 June 2021, the mandatory minimum level of 100 percent imposed by the supervisory authority for compliance with the NSFR has applied.

In order to reduce refinancing risks, MünchenerHyp strives to refinance loans with matching maturities where possible. The Bank continuously checks if its relevant refinancing sources (above all, those within the Cooperative Financial Network) are still available. In order to limit market liquidity risk, in its business with governments and banks, the Bank predominantly acquires ECB-eligible securities that can be used as collateral for ECB open market operations at any time.

In order to diversify its refinancing sources, the Bank has built up a modest deposit business. At the end of 2021, the portfolio volume was EUR 524 million.

MünchenerHyp does not have any illiquid bonds, such as mortgage-backed securities (MBS) or similar securities, in its portfolio.

Investment risk

This describes the risk of potential losses if the price of investments falls below their carrying amount. This applies to long-term participations held by MünchenerHyp for strategic reasons in companies of the Cooperative Financial Network and, to a small extent, positions within its special mixed fund.

Operational risks

Operational risks are the risk of potential losses caused by human error, process or project management weaknesses, technical failures or negative external factors. Human error includes unlawful action, inappropriate selling practices, unauthorised actions, transactional errors and information and communication risks.

We minimise our operational risks by using skilled staff, transparent processes, automated standard workflows, written work instructions, comprehensive IT system function tests, appropriate contingency plans and preventive measures. Insurable risks are covered by insurance policies to the normal extent required by banks.

The materiality of all services outsourced by MünchenerHyp in connection with banking transactions and financial services or other standard banking services has been examined in a risk analysis. All outsourced services are monitored in accordance with ECB guidelines and included in the risk management process.

Risk-bearing capacity

The technical concepts and models used to calculate risk-bearing capacity, known as ICAAP, are continually updated in accordance with supervisory requirements. MünchenerHyp calculates its risk-bearing capacity in accordance with the requirements of the ECB, based on both the normative and the economic perspective.

Market risks, loan default risks, operational risks, spread and migration risks, refinancing risks, investment risks, property risks and model risks, which include other risks not specifically listed, are deducted. Risks are allocated to risk-coverage potential conservatively, disregarding any diversification effects between different types of risks.

The Bank maintained its risk-bearing capacity at all times throughout the year under review.

Use of financial instruments for hedging purposes

We engage in hedging activities – interest rate and currency derivatives – in order to further reduce our risks and to hedge our business activities. We do not use credit derivatives. Asset swaps are used as micro-hedges at the level of larger individual transactions. Structured underlying transactions, such as callable securities, are hedged accordingly with structured swaps. Exchange rate risks for commitments in foreign currency are hedged primarily by endeavouring to secure funding in matching currencies; any remaining transactions are hedged using (interest rate) cross-currency swaps. At portfolio level, we prefer to use interest rate swaps and swaptions as hedging instruments. Bermuda options on interest rate swaps (swaptions) are used in addition to linear instruments to hedge embedded statutory termination rights or interest rate cap agreements.

Accounting-related internal control and risk management processes

The accounting-related internal control system is documented in organisational guidelines, process descriptions, accounting manuals and operating instructions. It comprises organisational security measures and ongoing automatic measures and controls that are integrated into work processes. The main controls are segregation of functions, the dual control principle, access restrictions, payment guidelines, the new product and new structure processes and balance confirmations. Non-process-specific audits are conducted primarily by Internal Audit.

The risk management methods described in the risk report provide ongoing qualitative and quantitative information on the financial situation of MünchenerHyp, such as performance development. Aspects of all types of risks are included in this assessment.

At MünchenerHyp there is close coordination between the risk control and financial reporting units. This process is monitored by the entire Board of Management.

The output from the risk management system is used as a basis for multi-year planning calculations, year-end projections and reconciliation procedures for the accounting ratios calculated in the Bank's financial reporting process.

CORPORATE PLANNING

MünchenerHyp regularly analyses its business model based on the challenges that the Bank will face in future, and further develops its business and risk strategy on this basis. In order to achieve its strategic objectives, numerous measures have been defined across various areas of activity, some of which have already been implemented and which we will continue to implement consistently in the years ahead. The MaRisk-compliant strategic process plays a crucial role in this. The starting point for the annual strategy cycle is a strategic review comprising an audit of the implementation and impact of the adopted measures. As part of the annual planning that follows the strategy process, sales targets and centralised and decentralised components of administrative expenses are reconciled with the projected rolling multi-year income statement. All earnings and cost components and our risk-bearing capacity are monitored continually or projected on a rolling basis, so that the Bank can react promptly and appropriately to fluctuations in earnings or costs.

Planning also includes matters in relation to capital adequacy, to ensure the Bank complies with supervisory requirements.

OUTLOOK – OPPORTUNITIES AND RISKS

Economic development and financial markets

The global economic recovery lost momentum at the start of 2022. Above all, the possible effects of the new, rapidly spreading Omicron variant, are creating new uncertainties. Many economic researchers fear that Omicron could severely inhibit the recovery of the global economy by delaying the normalisation of economic and social life. Rising energy prices accompanied by higher-than-expected inflation across a broad front pose a further risk to the global economy. Against this background, the IMF expects the global economy to grow by 4.4 percent in 2022, a far more moderate rate compared with the year under review. At the time of writing this report, it was not yet possible to foresee the consequences for the global economy of the Russian attack on Ukraine. Massively rising energy prices and a slowing recovery of the global economy are expected.

For the eurozone, the IMF forecasts growth of 3.9 percent. Here, too, the current wave of the coronavirus pandemic in particular is delaying the economic recovery. Inflation will also remain high. The ECB forecasts an inflation rate of 3.2 percent for 2022.

The German economy, on the other hand, is expected to grow at a higher rate in 2022 than in the year under review. In its Annual Economic Report, the German government expects gross domestic product to grow by 3.6 percent in 2022. According to forecasts, the economic recovery will be interrupted by the winter phase of the pandemic, but not as severely as in 2021. An increasing upswing is predicted from the second quarter onwards, which will receive impetus primarily from private consumption and corporate investment. Forecasts for the construction industry are also positive. The German Institute for Economic Research (DIW) expects residential construction volume to increase by 12.7 percent in 2022, due in particular to spending on energy-saving renovations. Inflation will remain high in 2022, reaching 3.3 percent according to German government estimates. A stable trend is expected for the labour market, as the shortage of skilled workers is likely to increase. The German government therefore expects the unemployment rate to fall to 5.1 percent.

In view of rising inflation rates and the weakened but nevertheless continuing economic recovery, many central banks are planning to tighten monetary policy. The US Federal Reserve, for example, intends to cease bond purchases as early as March 2022 and start raising interest rates. The Fed is now expected to hike interest rates three to four times during 2022. Two rate hikes are expected from the Bank of England. The ECB will end its PEPP purchase programme in March and plans to end the APP purchase programme by the end of 2022. After that, interest rate hikes could also be on the cards for the eurozone.

On the foreign exchange market, a slightly positive performance is expected for the euro and more of a downward trend for the US dollar, as the eurozone's economic recovery is thought to have greater potential. In the medium term, however, it remains to be seen how far the ECB will follow other central banks in raising interest rates, potentially causing higher euro exchange rates due to its own interest rate measures. The British pound could benefit from further interest rate hikes by the Bank of England in the short term. As far as the Swiss franc is concerned, we expect only minor fluctuations and more or less stable exchange rates in 2022.

Funding spreads for banks could come somewhat under pressure due to the repayment of TLTRO tenders. A prolongation of the long-term tenders is generally expected, but at less attractive conditions. All in all, the ECB's reduced purchase programmes and repayments of TLTRO tenders should result in less excess liquidity on the market and lead to slightly rising interest rates and higher funding spreads for banks.

For covered bond markets, experts predict significantly higher issuing activity in 2022 due to the repayment of TLTRO tenders. Covered bonds which were previously funded in part via the ECB's low-cost tender programme would then be increasingly offered through public transactions once more. A slight widening of spreads is therefore expected. A new issue volume for benchmark covered bonds denominated in euros of EUR 120 billion is forecast for 2022.

Property markets and property financing markets

The outlook for the residential and commercial property markets is mixed. On the one hand, experts do not expect any fundamental changes compared with the positive trend of 2021; on the other hand there are risks and uncertainties. This applies in particular to the further course of the COVID-19 pandemic and its economic effects as well as possible exaggerations, especially in residential property markets. In addition, there are uncertainties about possible economic effects of the war in Ukraine.

For residential property markets in our target countries of Germany, Switzerland and Austria, prices are forecast to continue rising, as demand continues to exceed supply, especially in Germany. With regard to interest rates, experts expect a slight increase in 2022. Nevertheless, interest rates will remain low in a long-term comparison. Demand will be supported by higher inflation, as property is also seen as protecting against inflation. High purchase prices and the new building campaign (Neubauoffensive) planned by the German government are perceived as having a dampening effect on price development. Overall, the experts therefore expect a certain slowdown in price growth compared with the previous year.

Against this background, we expect demand for property financing to remain high in our three target markets. How the introduction of the countercyclical capital buffer and the capital buffer for systemic risks by BaFin in Germany will affect prices and demand for property could not yet be reliably estimated at the time of writing this report.

Demand is predicted to remain high in the commercial residential property markets, as Germany is internationally regarded as one of the most stable and liquid markets in this segment.

In the case of commercial properties, the pandemic's impact on the market differs depending on the various types of use, for which there are different forecasts. Overall, however, demand is expected to remain stable. For example, a transaction volume of between EUR 80 and 90 billion for commercial properties and commercial residential investments is forecast for Germany, which is on a par with the level recorded in 2021 excluding the Vonovia/Deutsche Wohnen deal.

The outlook for office property in our target markets in Europe and the USA has improved. In some markets, demand for space is rising again and rents are growing as a result. Both tenants and investors place increasing value on modern spaces that meet sustainability criteria. We expect this trend to continue, resulting in an increase in vacancies in most cities due to older and outdated spaces. For institutional investors, office properties thus remain an attractive asset class, especially as stable prime rents are expected for 2022. In competing for the best properties, investors are prepared to pay high prices, meaning that net initial yields are expected to decline in the cities.

The market for retail properties will see further consolidation of retail chains in 2022, leading to rising vacancies in the city centres and shopping centres. Prime rents will continue to fall in both commercial buildings and shopping centres; market value corrections must also be expected. International retail chains will take advantage of competitors' branch closures to secure business premises in prime locations. Hence, we expect letting activity to continue, but at lower rents and with shorter terms, because retail chains do not want to make long-term commitments. Investors, on the other hand, are increasingly interested in specialist stores, retail parks and local shopping facilities, because these usually have longer lease terms than shopping centres or commercial buildings.

Business development at Münchener Hypothekenbank

In our new business plans, we anticipate further economic recovery and stable demand in our target markets for private and commercial property financing. Therefore, we are planning for moderate growth of new business in our two core business segments in 2022. Whether we achieve this goal is accompanied by increasing uncertainties. This applies in particular to the potential impact of the war in Ukraine on economic development and consequently on the property markets. In addition, there is the continuing high inflation as well as possible new waves of the pandemic caused by mutations of the coronavirus.

In the business segment of private residential property financing, we want to take advantage of the opportunities offered by the expected high demand for property financing in particular. Since competition among providers in Germany, Switzerland and Austria will remain as keen as ever, we will step up our market cultivation efforts.

In association business with the banks of the Cooperative Financial Network, we will carry out two regional sales campaigns that will strengthen our market presence with attractive offers. We will also continue to digitalise and speed up our lending processes.

In our cooperation with independent financial service providers, we see further potential for growth due to strong demand for housing in the property and financing markets, although we do not expect new business to continue developing at the dynamic rate seen in 2021.

In Switzerland, we want to at least maintain the level of new business achieved in 2021. We see potential for further new business in the market strength of PostFinance and the high demand for residential property financing in Switzerland. For the financing business in Austria, we expect significant growth and plan to gradually enter into further partnerships with Austrian financing intermediaries.

We aim to strategically expand the second core business segment of commercial property financing by pursuing a moderate growth trajectory. This applies to both domestic and international business. Implementation depends on the general economic conditions and the pandemic. As for the COVID-19 pandemic, we assume it will have a significant but temporary impact. It is important to assess the associated risks in a forward-looking and conservative manner, paying particular attention to the economic risks. In this respect, when making financing decisions we will continue to prioritise the criteria for a positive assessment, being the viability of the location and the sustainability of individual cash flows, in line with our business and risk strategy.

As we expect interest rates to rise only slightly, we assume stable financing conditions. The inflow of capital from investors and institutional buyers into the asset class of property will therefore remain high, given the continuing lack of alternative, more profitable forms of investment. Hence, there will continue to be sufficient financing opportunities for MünchenerHyp.

We also expect increasing transaction activity on the national and international syndication markets in 2022, as this market has largely tolerated the uncertainty created by the COVID-19 pandemic and the trend towards large volumes of financing is continuing. However, only a few banks are willing to leave such financing volumes entirely on the balance sheet. We therefore expect MünchenerHyp's loan participation volume to rise in 2022 compared with the previous year. On the other hand, we expect demand for underwriting transactions in direct business to increase again. Here, MünchenerHyp provides the overall financing and subsequently surrenders portions of the financing to other banks or institutional investors. In this regard we will also continue to use our established syndication programme with the Cooperative Financial Network.

The objective of our lending business with the public sector and banks continues to be primarily to manage liquidity. For 2022, we expect stable development of our portfolio volume, as maturing securities will have to be replaced to manage liquidity.

For 2022, we forecast a funding requirement of between EUR 9.0 billion and EUR 10.5 billion, of which EUR 7.5 billion to EUR 8.0 billion is expected to be raised on the capital market and the remainder on the money market. We plan to launch three to four large-scale issues. Due to its partnership with PostFinance in Switzerland, MünchenerHyp will continue to have a funding requirement in Swiss francs.

Two large-volume bonds will mature and fall due for repayment in the 2022 financial year: a Mortgage Pfandbrief with a volume of EUR 1.125 billion in June and a Mortgage Pfandbrief with a volume of USD 600 million in December.

We will further develop our sustainability strategy in 2022 based on the defined key themes (sustainable business model, responsible corporate governance, climate change and CO_2 emissions, risk management, social responsibility, customers and business partners, employees). We will also focus on the implementation of regulatory requirements with regard to sustainability and ESG risks.

We are aiming to achieve a moderate increase in net interest income generated from business operations in 2022. Stable trends in our key markets will again provide opportunities to expand our new business and thus our mortgage portfolios.

This will continue to have a positive impact on the Bank's earnings. On the other hand, mounting competition and ongoing high regulatory pressure will have the opposite effect.

We expect loan loss provisions to increase slightly compared with 2021. This is due to the increased portfolios and, in particular, the macroeconomic uncertainties described above.

In the current market environment, we are nevertheless confident that we will attain our targets for the 2022 financial year and succeed in further expanding our market position. We expect net income to be in line with the previous year's level.

Disclaimer regarding forward-looking statements

This annual report contains statements concerning our expectations and forecasts for the future. These forward-looking statements, in particular those regarding MünchenerHyp's business development and earnings performance, are based on planning assumptions and estimates and are subject to risks and uncertainties. Our business is exposed to a plethora of factors, most of which are beyond our control. These mainly include economic developments, the state and further development of financial and capital markets in general and our funding conditions in particular, as well as unexpected defaults on the part of our borrowers. Actual results and developments may therefore differ from the assumptions that have been made today. Such statements are therefore only valid at the time this report was prepared.