

# 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 %
<b>Total</b>	<b>44,826,655,611.79</b>	<b>100.0 %</b>	<b>41,378,864,444.65</b>	<b>100.0 %</b>

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 %
<b>Total domestic</b>	<b>35,774,758,232.71</b>	<b>79.8 %</b>	<b>33,197,152,051.47</b>	<b>80.2 %</b>

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 %
<b>Total foreign</b>	<b>9,051,897,379.08</b>	<b>20.2 %</b>	<b>8,181,712,393.18</b>	<b>19.8 %</b>
<b>Total domestic and foreign</b>	<b>44,826,655,611.79</b>	<b>100.0 %</b>	<b>41,378,864,444.65</b>	<b>100.0 %</b>

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 %
<b>Total</b>	<b>44,826,655,611.79</b>	<b>100.0 %</b>	<b>41,378,864,444.65</b>	<b>100.0 %</b>

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 Hypothekbank

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<sub>2</sub> 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.