Basis of the Commerzbank Group

Structure and organisation

Commerzbank is the leading bank for SMEs (the Mittelstand) and a strong partner to some 30,000 corporate client groups and around 11 million private and small-business customers in Germany. The Bank offers a comprehensive portfolio of financial services in two business segments – Private and Small-Business Customers and Corporate Clients.

Commerzbank focuses on German SMEs, large companies and institutional customers. In international business, the Bank supports customers who have business links with Germany and companies in selected future-oriented sectors. Following the integration of comdirect, private and small-business customers benefit from the services of one of Germany's most modern online banks combined with personal advisory services at a local level. The Polish subsidiary mBank is an innovative digital bank. It serves around 5.7 million private and small-business customers, mainly in Poland but also in the Czech Republic and Slovakia.

The two segments Private and Small-Business Customers and Corporate Clients are each managed by a member of the Board of Managing Directors. All staff and management functions are contained in Group Management: Group Audit, Group Communications, Group Compliance, Group Finance, Group Human Resources, Group Investor Relations, Group Legal, Group Research, Group Risk, Big Data & Advanced Analytics, Group Strategy Transformation & Sustainability, Group Tax, Group Treasury and the central risk functions. The support functions are provided by Group Services. These include Group Corporate Clients & Treasury Platforms, Group Business Platform, Group Digital Transformation, Group Banking & Market Operations, Group Technology Foundations, Group Operations Credit, Group Organisation & Security, Group Delivery Centre and Group Client Data. The staff, management and support functions are combined in the Others and Consolidation division for reporting purposes.

On the domestic market, Commerzbank Aktiengesellschaft is headquartered in Frankfurt am Main, from where it manages its branch network serving all customer groups. Following the merger with comdirect Bank AG, Commerz Real AG is now the biggest domestic subsidiary. Outside of Germany, Commerzbank has 6 material subsidiaries, 20 operational foreign branches and 30 representative offices in just under 50 countries and is represented in all major financial centres, such as London, New York, Tokyo and Singapore. However, the focus of the Bank's international activities is on Europe.

Commerzbank prepares Group financial statements which, in addition to Commerzbank Aktiengesellschaft as operating lead company, incorporate all material subsidiaries over which the Bank exercises control. The financial year is the calendar year.

Objectives and strategy

Commerzbank adopted its new "Strategy 2024" programme in February 2021. The measures announced mark the start of an in-depth restructuring process and the comprehensive digitalisation of the Bank. The aim of the restructuring is to combine the benefits of a fully digitalised bank with personal advisory services, an unwavering customer focus and sustainability. The key elements are described below.

Private and Small-Business Customers: transferring the strengths of comdirect to the entire segment

Commerzbank is to radically restructure its business with private and small-business customers. The objective is to create an attractive combination of highly efficient direct banking and first-class advisory services by merging the digital and innovative strengths of comdirect with Commerzbank's advisory expertise.

Services will be geared to customers' individual needs. The digital services of a direct bank will in future be available to all 11 million private and small-business customers in Germany. Efficient use of data will ensure that customers receive solutions tailored to their specific requirements – at the right time and through the right channel. The Bank will offer personal advice at branches and through 24-hour advisory centres.

Commerzbank will reduce the number of branches from the current number of 790 to 450 locations nationwide, where customers will be able to seek advice on topics such as accounts, cards and instalment loans and the use of the Bank's digital services. At 220 of these locations, affluent clients and small-business customers requiring more in-depth advisory services will receive comprehensive, personal advisory support and individual solutions for all issues relating to wealth management and financing. Commerzbank intends to significantly expand its business with affluent clients and small-business customers in Private Banking and Wealth Management.

At the 24-hour advisory centres, personal banking advisors will support customers' digital, mobile and telephone banking service requirements. Customers will also be able to obtain comprehensive advice on topics such as securities investment and real estate financing.

Corporate Clients: focus on customers with a clear connection to Germany and future-oriented sectors

Commerzbank is the leading bank for SMEs. During the coronavirus crisis, it reaffirmed its role as a strong and reliable financing partner for the German economy. Going forward, the Bank will continue to serve German SMEs and large companies, along with international customers who have business links with Germany. Commerzbank will only serve other international corporate clients if they operate in selected future-oriented sectors. The Bank will remain true to its responsibilities as a strong financing and hedging partner for German companies engaging in import and export business throughout the world.

Commerzbank will adopt a more nuanced approach to advisory services for corporate clients and align them more directly with individual needs. Corporate clients will continue to receive personal advisory support and will have access to a network of regional branches. However, individual services for companies will focus on customers who require sophisticated advisory support that can be delivered on a profitable basis. At the same time, an innovative direct banking offering will gradually be established for corporate clients who require standard products and advisory services. Profitability is to be significantly increased by digitalising processes, optimising pricing and, in particular, making greater use of data-driven services.

The product range is to be streamlined and further digitalised, while investment banking activities will be geared even more strongly to the requirements of corporate clients. This applies in particular to the equity capital markets (ECM) business and support for mergers and acquisitions (M&A). In future, these services will only be offered to corporate clients of the Bank whose advisory needs warrant it (e.g. in connection with business succession). Cooperations are being examined for equity trading and sales and for equity research.

Commerzbank will remain a strong partner for its customers both in Germany and abroad. Its local presence will be structured more efficiently, however, for instance by bundling back office functions in regional service units and optimising the correspondent bank portfolio. As a result, the Bank is planning to exit 15 international locations and convert two branches into local representative offices. This means the Bank will have a presence in nearly 40 countries going forward.

Cost savings

Following the restructuring, Commerzbank is targeting a return on equity (RoTE) of around 7% for the 2024 financial year. Costs will be reduced by €1.4bn or around 20% by 2024 compared with the figures for 2020. Income, on the other hand, is expected to remain largely stable, the exception being mBank, where further growth should be seen. Commerzbank is anticipating total restructuring expenses of €1.8bn, which will be financed entirely from its own funds. The restructuring expenses are due to be fully recognised in the balance sheet by the end of the current financial year. Provisions of €0.8bn were already recognised in 2020 to cover a significant portion of these restructuring expenses. A provision of €0.1bn had already been recognised in 2019. Overall, Commerzbank is aiming to eliminate around 10,000 full-time positions (FTEs) in gross terms by 2024.

Despite the significant restructuring, the capital ratio (CET1) will consistently be at least 200 to 250 basis points above the minimum regulatory requirements (MDA). This will enable Commerzbank to remain robust and resilient in the future while still managing its capital efficiently.

mBank will continue to press ahead with its growth strategy as part of the Group.

Full details of the "Strategy 2024" programme can be found on the Commerzbank website at https://www.commerzbank.com.

Corporate management

Corporate management in the Commerzbank Group is based on a value-oriented steering concept. This concept is focused on ensuring that the risks entered into by the business units are in line with the external and internal guidelines on risk-bearing capacity and on striving to achieve an appropriate return over the long term on the capital employed. In this respect, the Bank regularly monitors the allocation of scarce resources to business units and actively adapts its business strategy to changing market circumstances in order to boost the enterprise value over the long term.

The annual planning process is a key corporate management tool. In this process, the Board of Managing Directors sets targets for the business units based on the business strategy. Existing resources such as capital and risk limits are allocated to the segments in a way that reflects the targets and risk profiles. The segments operationalise the targets based on the business strategy and the results of the planning process. The Board of Managing Directors carries out regular checks to ensure that business planning is being followed. This ensures that any deviations are identified at an early stage through monthly management reporting, and corrective measures are taken.

In order to manage the Group and its segments, the Bank uses the standard controlling indicators described below, which cover all the essential dimensions of Group management. Their development is monitored as part of regular management reporting.

The management of the Bank takes account of both pillars of capital adequacy requirements. To ensure internal risk-bearing capacity at all times, planning includes allocating economic capital to the segments according to type of risk. The average capital employed in the segments is calculated based on the average segmented risk-weighted assets. At Group level, Common Equity Tier 1 (CET1) is shown. The reconciliation of average capital employed in the segments to the Group's CET1 capital is carried out in Others and Consolidation. The Common Equity Tier 1 ratio is a key indicator for the Bank in capital management.

The key figures used for measuring success in the corporate management process are operating profit/loss and group profit/loss after tax and non-controlling interests, along with the cost/income and return on equity ratios and the economic value added calculated from these ratios. The cost/income ratio is used to assess cost efficiency and is defined as the ratio of operating expenses (excluding impairments of goodwill and restructuring expenses) to income before the risk result. The cost/income ratio is calculated in two variants: with and without the inclusion of compulsory contributions in the item "expenses". Segment return on equity is calculated as the ratio of operating profit/loss or pre-tax profit/loss to the average amount of regulatory capital employed. It shows the return on the equity invested in a given business segment. As is standard for value-based management concepts, the target minimum return on capital employed is derived from the expected return on the capital market. Here the focus at Group level is on the return on tangible equity.

Economic value added is the indicator used for determining the performance of the Group. It is defined as the difference between the Group's return on equity and the capital cost rate, multiplied by the Group's equity. The Group's return on equity is the ratio of the consolidated profit after tax and non-controlling interests to the average CET1 capital of the Group.

The calculation of the capital cost rate is based on the capital-market-oriented Capital Asset Pricing Model (CAPM) and is subject to an annual review.

As Group figures, the controlling data listed above form part of a system of other segment-specific data that vary from segment to segment depending on the business strategy.

Remuneration report

The remuneration report is part of the "Corporate responsibility" section. It forms part of the Group Management Report.

Details pursuant to Art. 315 (4) of the German Commercial Code (HGB)

Details pursuant to Art. 315 (4) of the German Commercial Code (HGB) can be found in the section on corporate responsibility. They form part of the Group Management Report.

Details pursuant to Art. 315a (1) of the German Commercial Code (HGB) and explanatory report

Details pursuant to Art. 315a (1) of the German Commercial Code (HGB) and explanatory report can be found in the section on corporate responsibility. They form part of the Group Management Report.

Details pursuant to Art. 315d of the German Commercial Code (HGB)

Details pursuant to Art. 315d in conjunction with Art. 289f of the German Commercial Code (HGB), "Declaration on corporate governance", can be found in the section on corporate responsibility. They form part of the Group Management Report. The declaration on corporate governance can be found at https://www.commerzbank.de/geschaeftsbericht2020.

Details pursuant to Art. 340i (5) in conjunction with Art. 315b (3) of the German Commercial Code (HGB)

Details pursuant to Art. 340i (5) in conjunction with Art. 315b (3) of the German Commercial Code (HGB) can be found in the section on corporate responsibility as a combined separate non-financial report and online at www.commerzbank.com/NFR2020.

Important staffing and business policy events

A report on important staffing changes at management level and special business policy events during the past financial year and at the beginning of the current year is provided below.

The most important current business policy events include the new "Strategy 2024" programme announced in February 2021. Through the new strategy, the Bank plans to streamline and digitalise its business model, significantly reduce costs in all areas and substantially increase its profitability by 2024. Detailed information can be found in "Objectives and strategy" on page 89 f.

There were changes in the composition of both the Board of Managing Directors and the Supervisory Board during the year under review. The Bank also made progress in streamlining the Group structure and further reducing complexity. The optimisation of the Bank's capital structure was also on the agenda. Supported by the Task Force on Climate-Related Financial Disclosures, the Bank will in future be guided by the former's framework to help companies manage the impacts of climate-related risks and produce the relevant disclosures. The Bank is using the proceeds from the issue of another green bond to finance renewable energy projects. The Bank also further strengthened its compliance function.

Changes in the Board of Managing Directors of Commerzbank

On 3 July 2020, Martin Zielke, Chairman of the Board of Managing Directors of Commerzbank, proposed to the Presiding and Nomination Committee of the Supervisory Board that his appointment to the Board of Managing Directors be terminated prematurely by mutual agreement if, in the view of the Supervisory Board, this was in the Bank's interest. On the recommendation of the Presiding and Nomination Committee, the Supervisory Board resolved by mutual agreement at its meeting on 8 July 2020 to terminate Martin Zielke's appointment and employment contract as Chairman of the Board of Managing Directors. He stepped down on 31 December 2020.

Michael Mandel, who was previously the member of the Board of Managing Directors responsible for the Private and Small-Business Customers segment, made an offer to the Supervisory Board to terminate his contract by mutual agreement. At its meeting on 17 September 2020, the Supervisory Board of Commerzbank approved the departure of Michael Mandel by mutual agreement. Michael Mandel's term of office as a member of the Board of Managing Directors therefore ended on 30 September 2020. Sabine Schmittroth assumed responsibility for Private and Small-Business Customers at Group management level as of 1 October 2020, in addition to her role as Director of Human Resources. Dr. Marcus Chromik, Chief Risk Officer, assumed responsibility for Compliance as of the same date.

At its meeting on 26 September 2020, the Supervisory Board of Commerzbank decided to appoint Dr. Manfred Knof as Chairman of the Board of Managing Directors of Commerzbank. He took up his position with effect from 1 January 2021. Dr. Manfred Knof was Chairman of the Board of Deutsche Bank Privat- und Firmenkundenbank AG from 1 August 2019 until its merger with Deutsche Bank Group and then Head of Deutsche Bank's Private Bank Germany.

Roland Boekhout, the member of the Board of Managing Directors responsible for the Corporate Clients segment, made an offer to the Supervisory Board at the end of November 2020 to terminate his contract by mutual agreement. At its meeting on 27 November 2020, the Supervisory Board of Commerzbank approved the departure of Roland Boekhout by mutual agreement. Roland Boekhout's term of office therefore ended on 31 December 2020.

At the same meeting, the Supervisory Board decided to appoint Michael Kotzbauer, most recently the Divisional Board member in charge of the Mittelstandsbank in the Central/East region, as the new member of the Board of Managing Directors responsible for the Corporate Clients segment effective 1 January 2021. Michael Kotzbauer had been the Divisional Board member in charge of the Mittelstandsbank in the Central/East region since 2017. Prior to that, he was the Divisional Board member responsible for large and capital-market-oriented companies in southern and eastern Germany until 2015. From 2010 to 2013 he was the Regional Board member responsible for the Bank's corporate banking business in Asia, based in Shanghai.

Changes in the Supervisory Board of Commerzbank

Anja Mikus and Dr. Markus Kerber both resigned as members of the Supervisory Board with effect from the date of the Annual General Meeting on 13 May 2020. As proposed by the Supervisory Board, the Annual General Meeting elected Dr. Jutta A. Dönges (Managing Director of the Bundesrepublik Deutschland – Finanzagentur GmbH) and Dr. Frank Czichowski (former Senior Vice President/Treasurer of KfW Group) to the Supervisory Board of Commerzbank Aktiengesellschaft on 13 May 2020.

On 3 July 2020, Dr. Stefan Schmittmann announced his resignation as Chairman of the Supervisory Board of Commerzbank with effect from 3 August 2020. At its meeting on 3 August 2020, the Supervisory Board of Commerzbank elected Hans-Jörg Vetter as the future Chairman of the Supervisory Board. This election became effective upon his appointment by a court on 4 August 2020.

Nicholas Teller resigned as a member of the Supervisory Board of Commerzbank with effect from 31 December 2020. Effective 1 January 2021, the District Court of Frankfurt appointed Andreas

Schmitz, former Chairman of the Supervisory Board of HSBC Trinkaus & Burkhardt AG and former President of the Association of German Banks, as a member of the Supervisory Board until the end of the Annual General Meeting which decides on the discharge of liability for the 2020 financial year.

For full details of the Supervisory Board and the composition of the individual committees, please refer to the Commerzbank website at http://www.commerzbank.de/en/hauptnavigation/konzern/management_1/aufsichtsrat/index.html.

Commerzbank completes takeover of comdirect bank AG

On 5 May 2020, the Annual General Meeting of comdirect bank AG approved the squeeze-out under merger law in return for payment of an appropriate cash settlement. The merger was entered in the Commercial Register on 2 November 2020, formally ending comdirect's independent status and stock market listing. Post-merger, Commerzbank and comdirect will initially retain their respective service offerings unchanged. The aim is to merge and expand the offerings of both banks. The new joint business model has yet to be negotiated with the employee representative committees. Quickborn and Rostock will remain as locations. The employment relationships of all comdirect employees as at the time of the merger were transferred to Commerzbank.

Economic completion of the sale of the Equity Markets & Commodities division

At the beginning of May 2020, Commerzbank achieved the economic completion of the sale of its Equity Markets & Commodities (EMC) division to Société Générale. In addition to trading books, customer business and employees, Commerzbank had been gradually transferring parts of its IT landscape to the French bank since the beginning of 2019. Legally, a few portfolios still remain temporarily with Commerzbank; these have already been economically transferred using derivatives. The economic completion of the sale enabled the Bank to reduce its complexity and free up capital for Commerzbank's core business areas. Nothing has changed in the offer for customers. Existing Commerzbank products have been transferred to Société Générale. Société Générale is now the issuer of all certificates and warrants previously offered by Commerzbank. The securities can be traded as normal.

Commerzbank successfully issues two Additional Tier 1 bonds

At the end of May 2020, the Bank launched an issuance programme that will enable it to issue successive subordinated debt securities with a total nominal value of up to €3bn over the next few years.

Under this issuance programme, Commerzbank Aktiengesellschaft successfully issued an Additional Tier 1 bond (AT1 bond) at the beginning of June 2020. The bond has a volume of €1.25bn and a fixed coupon of 6.125% per annum. At €9.5bn, the order book was heavily oversubscribed. The AT1 bond has a perpetual maturity and the first call date is in the period from October 2025 to April 2026. Commerzbank Aktiengesellschaft successfully issued another AT1 bond at the beginning of September 2020. The bond has a volume of €500m and a fixed coupon of 6.5% per annum. At more than €2.4bn**,** the order book was heavily oversubscribed. This AT1 bond also has a perpetual maturity and the first call date is in the period from October 2029 to April 2030. The bond terms for both issues provide for a temporary write-down in the event that the Bank's Common Equity Tier 1 ratio (CET1 ratio) drops below 5.125%. For both issues, shareholders' subscription rights were excluded.

With the issue of the AT1 bonds, Commerzbank is strengthening and optimising its capital structure and taking advantage of the most recent regulatory changes, which now allow Additional Tier 1 capital to be used to a greater extent to meet capital requirements.

Reduced regulatory capital requirements for Commerzbank

At the end of November 2020, the German Federal Financial Supervisory Authority (BaFin) reduced Commerzbank Aktiengesellschaft's capital buffer for other systemically important institutions (O-SIIs) from 1.5% to 1.25% as part of its annual review and following changes in methodology.

The European Central Bank (ECB) has left the bank-specific capital requirements for 2020 defined for the Commerzbank Group as part of the Supervisory Review and Evaluation Process (SREP) unchanged for 2021. The additional Pillar 2 capital requirement (P2R) of 2% is backed by Common Equity Tier 1 (CET1) capital, Additional Tier 1 capital (AT1) and Tier 2 capital.

With a CET1 ratio of 13.2% as at 31 December 2020, the gap to the MDA (Maximum Distributable Amount) threshold – taking the reduction in the O-SII capital buffer into account – is very comfortable at around 370 basis points.

Commerzbank makes climate risks in its portfolio transparent and comparable

Since the beginning of September 2020, Commerzbank has been an official supporter of the Task Force on Climate-Related Financial Disclosures (TCFD). The TCFD recommendations form the basis for consistent and comparable reporting on the impact of climate change. They provide a framework to help companies manage the impacts of climate-related risks and produce the relevant disclosures. Commerzbank plans to publish its first TCFD report in 2022, covering the 2021 financial year.

Commerzbank issues a second green bond

In mid-September 2020, Commerzbank issued another green bond with an issuance volume of €500m. This is the Bank's second green bond and follows the inaugural issue in October 2018. Commerzbank will use the proceeds to finance renewable energy projects. The bond has a term of 5.5 years with a call date in March 2025 and a coupon of 0.75% per annum. Commerzbank has earmarked the bond proceeds for loans for onshore and offshore wind and for solar projects in Germany, other European countries and North America. The projects financed by the green bond will help cut CO_2 emissions by around 850,000 tonnes per year. Commerzbank has been a signatory of the Green Bond Principles since 2014. The Bank has been a partner in the Climate Bonds Initiative since January 2020.

Further strengthening of the compliance function

The Bank continued its activities in 2020 to further strengthen the compliance function. As before, this pertains not only to structural changes. We also diligently pushed ahead with staff training and the successful recruitment of qualified compliance experts to work at head office and in foreign locations. Eight graduates were hired for the international compliance trainee programme in 2020. The trainees from the 2019 programme were hired as specialists in 2020.

As part of the consistent and sustainable further development of the relationship management model, the new International Compliance department was established midway through the year under review to harmonise management of the Bank's European and Asian locations. The aim is to provide even greater assurance that global compliance standards are implemented while also meeting local regulatory requirements by combining or consolidating global compliance activities.

The compliance function implemented various measures relating to global financial crime, global markets compliance and anti-bribery and corruption in order to further improve the management of compliance risks. Steps were also taken to further strengthen compliance structures in Germany and abroad. To this end, the Bank rigorously pressed ahead with the further development of the global compliance system landscape in line with the latest market standards. For example, a global upgrade of the systems and models for monitoring transactions with regard to money laundering and terrorist financing was completed in 2020, ensuring compliance with global standards on the basis of a uniform set of rules while also taking local circumstances into account in parametrisation. A uniform due diligence business partner was also established in 2020 and the corresponding IT system rolled out globally. In 2020, Global Markets Compliance continued the Global Surveillance Implementation Programme (GSIP) launched in 2018. The programme is aimed at expanding global surveillance of trade and communications. In addition to the implementation of the Behavox communications surveillance system in several locations such as New York, London, Singapore and Tokyo, the "Foreign Exchange" asset class was made available for the SCILA trade surveillance system.

At the same time, Commerzbank continued its drive to further develop existing governance structures and further expanded the global compliance processes in the business units. This includes integrating existing elements of the compliance framework into a compliance sub-risk strategy in the form of a fundamental strategy document that above all defines the strategic fields of action. The governance processes for managing and monitoring compliance controls at international level were also further strengthened.

A significantly expanded sanctions compliance function has been established subsequent to the Deferred Prosecution Agreement (DPA) with various US authorities. It addresses the rapid response to existing sanctions and the approach to future sanctions in close cooperation with the risk function.

For more information on compliance risks and on integrity and compliance at Commerzbank, please see page 156 ff. of the Group Risk Report and page 81 ff. of the combined separate non-financial report.

Economic report

Economic conditions

Economic environment

The coronavirus pandemic has plunged the global economy into its deepest recession since the end of World War II. China was the first country to shut down large parts of its economy at the start of 2020 and impose massive restrictions on social life. These measures enabled it to contain the spread of the virus comparatively quickly, allowing the Chinese economy to make up for the slump at the beginning of the year as early as the second quarter of 2020.

In the USA, where the virus outbreak did not begin to accelerate until March, the economy hit its low point in the second quarter. The US economy then recovered markedly in the second half of the year despite further sharp rises in new coronavirus infections. Demand from private households was higher in particular, boosted by a very extensive government aid package. The government approved four aid programmes worth a total of USD 3,400bn. The US Federal Reserve also agreed measures designed to absorb the impact of the economic slump. It lowered the key interest rate corridor in March, taking it down in two steps by a total of 150 basis points to 0.00–0.25%, and provided USD 2,300bn of liquidity to ease the situation on the markets. The Federal Reserve also initiated another large-scale securities purchase programme.

In the eurozone, in March large parts of the retail sector were forced to close, cultural events were banned and tourism was effectively brought to a standstill. With many industrial companies also shutting down their operations, macroeconomic performance nosedived by more than 11% in the second quarter, having already contracted by nearly 4% in the first quarter. As in the USA, the eurozone economy recovered markedly after coronavirus restrictions were eased in the summer. However, tighter restrictions were then reintroduced in the autumn in response to a renewed sharp rise in new coronavirus infections. Macroeconomic output contracted by 0.7% in the final quarter of 2020 compared with the previous quarter.

Here too, enormous aid packages were put together to prop up the eurozone economy. The national aid programmes alone add up to several hundred billion euros. The European Union is also making a total of €750bn available to its member states for recovery purposes. The European Central Bank (ECB) responded to the pandemic with an emergency purchase programme, which it has since expanded several times and recently topped up to €1,850bn. The ECB also provided banks with additional liquidity under TLTRO III (targeted longer-term refinancing operations).

For a long time, Germany succeeded in preventing a rapid spread of the coronavirus. However, from October onwards, the number of new infections rose sharply here too, prompting politicians to impose a second lockdown in mid-December. This meant that economic growth largely ground to a halt again in the final quarter of 2020. The economy is also set to contract significantly again in the first quarter of 2021, although the decline is unlikely to be anywhere near as severe as in spring 2020. This is backed up by the continued recovery in industry, which is benefiting greatly from the improvement in global demand. Sectors such as hotels and catering, event management and tourism have been hit hard once again. Thanks to the extensive government aid package, particularly for short-time work, there has so far been only a slight rise in unemployment as a result of the crisis. At its peak in the summer, the unemployment rate reached 6.4%, just 1.4 percentage points higher than at the end of 2019. It has since fallen back to below 6%. By contrast, it is estimated that more than two million employees were still on short-time working hours at the start of the year.

The expansive monetary and fiscal policy provided reassurance on the financial markets, with the yield on ten-year German Bunds remaining in clearly negative territory at the end of 2020 at −0.5%. Share prices even rose sharply, with indices such as the DAX, Dow Jones and Nasdaq in many cases briefly reaching new all-time highs. The euro gained significantly against the US dollar over the course of 2020.

Sector environment

The difficult economic situation brought about primarily by the coronavirus pandemic meant 2020 was a particularly challenging year for the banking sector, with serious consequences for business performance. While comprehensive government aid programmes cushioned the economic impact during the year under review, the negative economic consequences of the pandemic have not yet been overcome. As such, 2020 earnings performance includes some considerable losses on lending business.

The major central banks eased their monetary policy during the reporting period as a means of stimulating the economy. The US Federal Reserve, for example, cut its key interest rate to almost zero and announced unlimited purchases of US government bonds and mortgage-backed securities if need be. Similarly, the ECB massively expanded its pandemic emergency purchase programme (PEPP) and also extended its duration. This support was in addition to its existing bond purchase programmes.

The EU's Recovery and Resilience Facility, funds from which the European Commission says will be available from mid-2021 onwards to support post-pandemic reconstruction, also points to a change of tack in European financial policy. Against this backdrop, a low interest rate environment has become structurally embedded and will remain in place during the current year and probably well beyond. This means that, based on the net interest margins achievable in the market, interest margins in the banking sector will be barely profitable over the long term. The US dollar is also now noticeably weaker against the euro than it was a year ago due to the loss of the US interest rate advantage. This is affecting Germany's important export business and thus reducing industry's foreign trade financing needs, which in turn has a direct negative impact on domestic banking business.

While Germany's real estate and construction sectors have so far come through the crisis unscathed, the services sector and, to some degree, industry have suffered as a result of the economic restrictions imposed. Business with corporate clients and small-business customers therefore came under noticeable pressure throughout Europe in 2020. According to the European Banking Authority (EBA), the average return on equity of European banks fell to just above zero as at the middle of the year as a result.

Retail banking business fared better than business with corporate clients and small-business customers, benefiting from a labour market that has remained astonishingly robust thus far thanks to support measures such as the short-time working allowance. A record number of new securities accounts were also opened last year, with direct banks in particular benefiting from this trend. The sharp rise in securities volatility significantly increased trading volumes. The DAX recovered its spring losses within a few months and by the end of 2020 was actually trading almost 4% higher than at the end of 2019 – close to its all-time high. Bond business also recorded its highest issuance volume for many years due to companies' large-scale capital and restructuring requirements. There was also a noticeable improvement in equity issuance business, making investment banking a key revenue generator in 2020. Most German banks were unable to benefit from this, however, as many had significantly scaled back their operations in this business area.

Business performance was more favourable for banks in another area – real estate financing – with Germany experiencing its third real estate boom since the 1970s. Residential property prices have been rising since 2010 at rates that are well above comparable parameters such as consumer prices, rents and disposable income of private households.

The German banking sector was able to expand its lending business once again due to the increasing flight into tangible assets, meaning that the volume of housing loans again increased considerably faster than that of consumer instalment loans in 2020.

In Poland, macroeconomic performance fell far less sharply overall than in either the eurozone or Germany. Although the country's economy has thus weathered the coronavirus pandemic relatively well so far, there is still considerable uncertainty due chiefly to the smouldering conflict with the EU over policy issues. On top of this, interest rates in Poland are now also close to zero and thus at an all-time low. With the exception of mortgage loans, demand for credit fell over the last few months, while deposit business recorded high inflows of liquidity. This put considerable pressure on interest margins in the Polish banking sector, although this was offset by higher commission income and thus limited the overall pressure on bank results over the course of 2020.

Financial performance, assets, liabilities and financial position

The coronavirus pandemic had a major impact on the German economy and the global economy as a whole in the 2020 financial year and has therefore also affected Commerzbank's Group financial statements. The effects of the pandemic on the different divisions of the Commerzbank Group were reviewed in various working groups and projects, and appropriate measures were decided upon. Explanations of these effects and of amendments to the accounting and measurement methods can be found in Notes 2 and 4 to the Group financial statements.

The Commerzbank Group recorded an operating loss of €–233m for the year under review, significantly lower than the prior-year figure. The consolidated loss attributable to Commerzbank shareholders for the period under review was €–2,870m.

Total assets of the Commerzbank Group as at 31 December 2020 were €506.9bn, compared with €463.5bn at the end of 2019. The significant growth of 9.4% was due in particular to the Bank's participation in the targeted longer-term refinancing operations III programme (TLTRO III) of the European Central Bank (ECB).

The decline in risk-weighted assets (RWA) to €178.6bn was mainly due to the change in credit risk, which was chiefly attributable to declines relating to two new securitisations and to lower volumes as a result of active RWA management and reduced drawdowns of credit lines. There was also a slight decline in risk-weighted assets from operational risks. By contrast, risk-weighted assets from market price risks increased.

Common Equity Tier 1 capital was €23.6bn and the corresponding Common Equity Tier 1 ratio 13.2%.

Income statement of the Commerzbank Group

The individual items in the income statement were as follows in 2020:

At €4,975m, net interest income in the period under review was 1.9% below the prior-year level. Net interest income in the Private and Small-Business Customers segment was below the prior-year level. Interest-bearing business in Germany recorded a significant decline in interest income from deposit business that was only partially offset by higher interest income from continued volume growth in lending business, particularly in residential mortgage financing. It was a similar picture at mBank following several interest rate cuts by the Polish central bank in the first half of 2020. The pressure on margins in deposit business was offset by higher income from lending business. The Corporate Clients segment also recorded a year-on-year decline in net interest income, with the impact of the low interest rate environment and intense price competition resulting in lower income. This was particularly true for lending business, which was hit by falling margins. Others and Consolidation recorded a significant increase in net interest income, due mainly to improved interest rate risk management for the commercial segments.

Net commission income rose by 8.6% year on year to €3,317m. In the Private and Small-Business Customers segment, a marked increase in net commission income was the main income driver in the reporting period. In Germany, this income figure benefited from the strong revival of the domestic securities business, with online banking in particular seeing record transaction volumes. Net commission income at mBank also increased significantly due to a marked rise in income from securities business. In the Corporate Clients segment, net commission income was also up compared with the prior-year period.

The net income from financial assets and liabilities measured at fair value through profit or loss was €66m in the period under review, after €244m in the prior-year period. The decline was mainly attributable to valuation fluctuations in connection with the coronavirus pandemic that were only partially offset by positive remeasurement effects, especially in relation to CommerzVentures investments.

Statement of comprehensive income I €m	**2020**	**2019**[1]	**Change**
Net interest income	4,975	5,070	−95
Dividend income	37	35	2
Risk result	−1,748	−620	−1,129
Net commission income	3,317	3,056	261
Gain or loss from financial assets and liabilities measured at fair value through profit and loss and net income from hedge accounting	273	348	−75
Other profit or loss from financial instruments, income from at-equity investments and other net income	−416	130	−546
Operating expenses	6,160	6,313	−153
Compulsory contributions	512	453	59
Operating profit/loss	**−233**	**1,253**	**−1,486**
Impairments of goodwill and other intangible assets	1,578	28	1,551
Restructuring expenses	814	101	713
Pre-tax profit or loss from continuing operations	**−2,626**	**1,124**	**−3,751**
Taxes on income	264	421	−157
Consolidated profit or loss from discontinued operations	30	−18	48
Consolidated profit/loss	**−2,861**	**685**	**−3,545**
Consolidated profit or loss attributable to Commerzbank shareholders and investors in additional equity components	−2,870	585	−3,455

[1] Figures adjusted due to restatements (see Group financial statements, Note 4).

The other net income figure of €–357m includes allocations of €229m to provisions for legal risks in connection with mortgage loans issued in foreign currencies at mBank and a penalty payment of €41m to the UK financial conduct regulator in the second quarter of 2020.

The corresponding prior-year figure of €93m included the gain on the sale of the interest in ebase.

The risk result was €–1,748m in the reporting period, compared with €–620m a year earlier. The significant increase was mainly attributable to the effects of the coronavirus pandemic. The risk result includes a top-level adjustment (TLA) of €–505m that anticipates the potential impact of the coronavirus pandemic, including the second lockdown, based on information as at the turn of the year. Further information on the TLA can be found in the Risk Report on page 138 ff. and in Note 36 of the notes to the financial statements. The risk result in the Private and Small-Business Customers segment was significantly higher than in the previous year. The increase was largely due to effects from the coronavirus pandemic. The TLA charge for the period under review amounted to €–129m. In the Corporate Clients segment, the increase in the risk result compared with the previous year was also due to impacts of the coronavirus pandemic, such as larger individual counterparties where the crisis was the main reason for default or made it necessary to increase existing risk provisions. The risk result was also affected by the default of a large exposure in the second quarter of 2020. The TLA charge for the period under review amounted to €–373m.

Thanks to continued systematic cost management, operating expenses for the reporting period were 2.4% lower year on year at €6,160m. Personnel expenses were 1.2% below the prior-year level at €3,500m, in part due to further progress in headcount reduction, while administrative expenses, including depreciation on fixed assets and amortisation of other intangible assets, were reduced by 4.0% to €2,660m. The significant decline was primarily due to a reduction in advertising costs and lower expenses for business travel, external staff and depreciation.

Compulsory contributions, which include the European banking levy, contributions to the Deposit Protection Fund and the Polish bank tax, were reported separately and were significantly above the previous year's level at €512m. The rise was mainly attributable to a higher target volume for the European banking levy and an increase in covered deposits.

Due to deteriorating market parameters, including the level of interest rates in the eurozone and in Poland, impairments of €1,578m were recognised on goodwill and other intangible assets in the Private and Small-Business Customers segment in the period under review.

Restructuring expenses of €814m during the reporting period also affected earnings performance. These mainly related to the recognition of restructuring provisions. The Board of Managing Directors decided to bring forward the implementation of two voluntary programmes as part of the socially responsible headcount reduction and concluded corresponding works agreements with the Central Works Council in the third quarter of 2020. Furthermore, in December 2020 the Board of Managing Directors passed a resolution to implement a restructuring plan with reference to the strategy adopted in the 2019 financial year for a headcount reduction of 2,900 full-time positions and also concluded a corresponding works agreement with the Group Works Council.

The pre-tax loss from continuing operations was €–2,626m, compared with a pre-tax profit of €1,124m in the prior-year period.

Tax expense on continuing operations for the period under review was €264m, compared with €421m in the previous year. Group tax expense mainly comprised taxes on taxable income in foreign units and tax expenses relating to other periods.

The loss from continuing operations after tax was €–2,890m, compared with a profit of €703m in the prior-year period. Discontinued operations posted a profit after tax of €30m. This includes the income and expenses of the Equity Markets & Commodities (EMC) division sold to Société Générale.

Net of non-controlling interests, a consolidated loss of €–2,870m was attributable to Commerzbank shareholders and investors in additional equity components for the 2020 financial year, compared with a consolidated profit of €585m in the previous year.

Despite Commerzbank Aktiengesellschaft also reporting significantly negative results for the 2020 financial year in accordance with the German Commercial Code (HGB), the plan is to service all capital instruments issued by Commerzbank Aktiengesellschaft for the 2020 financial year. We will not be proposing a dividend distribution at the Annual General Meeting.

Total comprehensive income, which includes both consolidated profit/loss and other comprehensive income for the period, showed a net total of €–3,235m in 2020.

Other comprehensive income of €–375m consists of the sum of changes in the revaluation reserve (FVOCImR) (€94m), the cash flow hedge reserve (€67m) and the currency translation reserve (€–522m), changes in companies accounted for using the equity method (€1m), changes from the remeasurement of defined benefit plans not recognised in the income statement (€29m), changes in the measurement of equity instruments (FVOCIoR) (€–4m) and in own credit spreads of liabilities FVO not recognised in the income statement (€–42m), and the change in remeasurement effects from net investment hedges (€3m). Further information on other comprehensive income can be found on page 168 of the Group financial statements.

Operating profit per share was €–0.19 and earnings per share €–2.33. The comparable figures in the prior-year period were €1.00 and €0.47 respectively.

Balance sheet of the Commerzbank Group

Total assets of the Commerzbank Group as at 31 December 2020 were €506.9bn, up 9.4% compared with year-end 2019.

Cash on hand and cash on demand rose by €34.4bn to €75.6bn. The strong increase compared with the end of 2019 was due in particular to a rise in demand deposits held with central banks related to the use of the targeted longer-term refinancing operations III programme (TLTRO III) offered to banks by the ECB.

Financial assets at amortised cost fell slightly by €1.3bn to €292.4bn compared with the end of 2019. While there was growth in lending to private customers, particularly in retail mortgage financing, there were corresponding declines in business with domestic corporate clients and international customers.

Financial assets in the fair value OCI category were €42.9bn, up €11.9bn from the end of 2019. This 38.5% rise resulted from an increase in debt securitised.

At €28.7bn, financial assets mandatorily measured at fair value through profit or loss were €1.5bn lower than at the end of the previous year. The decline was mainly caused by a fall in the volume of secured money market transactions in the form of reverse repos and cash collateral.

Financial assets held for trading were €52.2bn at the reporting date, up €7.3bn on the figure at the end of 2019, due largely to higher positive fair values of derivative financial instruments. While positive fair values of interest-rate-related and currency-related products rose significantly by a total of €5.8bn, debt securitised increased by €0.3bn.

Non-current assets held for sale and disposal groups were €2.0bn, compared with €8.0bn at the end of 2019. The decline resulted from portfolio transfers in connection with the sale of the EMC business to Société Générale.

Assets I €m	**31.12.2020**	**31.12.2019**[1]	**Change in %**
Financial assets – Amortised cost	292,420	293,676	–0.4
Financial assets – Fair value OCI	42,862	30,942	38.5
Financial assets – Mandatorily fair value P&L	28,677	30,196	–5.0
Financial assets – Held for trading	52,176	44,840	16.4
Other assets	90,781	63,796	42.3
Total	**506,916**	**463,450**	**9.4**

Liabilities and equity I €m	**31.12.2020**	**31.12.2019**[1]	**Change in %**
Financial liabilities – Amortised cost	397,725	351,909	13.0
Financial liabilities – Fair value option	20,104	19,964	0.7
Financial liabilities – Held for trading	42,843	39,366	8.8
Other liabilities	17,644	21,711	–18.7
Equity	28,600	30,500	–6.2
Total	**506,916**	**463,450**	**9.4**

[1] Figures adjusted due to restatements (see Group financial statements, Note 4).

On the liabilities side, financial liabilities at amortised cost were up €45.8bn to €397.7bn compared with the end of 2019. The growth compared with the end of 2019 was driven by a significant increase in money market transactions with central banks, which was attributable in particular to the Bank's participation in the targeted longer-term refinancing operations III programme (TLTRO III) of the European Central Bank (ECB) and high cash inflows from private customers and corporate clients.

Financial liabilities under the fair value option were at almost the same level as at year-end 2019 at €20.1bn. Debt securities issued increased by €1.3bn, while deposits and other financial liabilities decreased by €1.2bn. The decrease was mainly attributable to the seasonal decline in secured money market transactions with central banks.

Financial liabilities held for trading were €42.8bn, up €3.5bn compared with the end of 2019. The increase was due to the negative fair values of derivative financial instruments, especially interest-rate-related derivative transactions, which rose by €3.3bn.

Liabilities from disposal groups were €2.1bn, compared with €8.5bn at the end of 2019. The decline resulted from portfolio transfers in connection with the sale of the EMC business to Société Générale.

Equity

The equity capital attributable to Commerzbank shareholders reported in the balance sheet on 31 December 2020 was €24.9bn, down 12.2% compared with year-end 2019. Further information on the change in equity can be found on page 171 ff. of the Group financial statements.

Risk-weighted assets were €178.6bn as at 31 December 2020, €3.2bn lower than at year-end 2019. The decline was mainly due to the change in credit risk, which was chiefly attributable to declines relating to the two new CoCo II-3 and CoCo III-4 securitisations and to lower volumes as a result of active RWA management and reduced draw-downs of credit lines. This was offset to some extent by parameter effects caused in part by the impact of the coronavirus pandemic. There was also a slight decline in risk-weighted assets from operational risks. By contrast, risk-weighted assets from market price risks increased.

As at the reporting date, Common Equity Tier 1 capital was €23.6bn, compared with €24.4bn as at 31 December 2019. The decrease of €0.8bn was due to the loss recorded for the financial year and in particular to the change in the currency translation reserve. Offsetting effects resulted from the decrease in regulatory capital deductions, which was mainly attributable to the goodwill write-down and the change in the calculation method for software deduction. The goodwill write-down therefore had no impact on the Common Equity Tier 1 ratio of 13.2%. The Tier 1 ratio (with transitional provisions) was 15.0% as at the reporting date, compared with 14.3% as at the end of 2019. The higher Tier 1 ratio was due to the rise in additional Tier 1 capital resulting from the issue of two AT1 capital instruments. The increase in Tier 1 capital and the issue of a Tier 2 capital instrument led to an increase in the Bank's total capital to €31.6bn. The total capital ratio was 17.7% as at the reporting date, compared with 16.8% as at the end of 2019.

The leverage ratio based on the CRD IV/CRR rules applicable on the reporting date, which is equal to Tier 1 capital divided by leverage exposure, was 4.9%, both with transitional provisions and fully loaded.

The Bank complies with all regulatory requirements. This information includes the consolidated profit attributable to Commerzbank shareholders and eligible for regulatory purposes.

Funding and liquidity of the Commerzbank Group

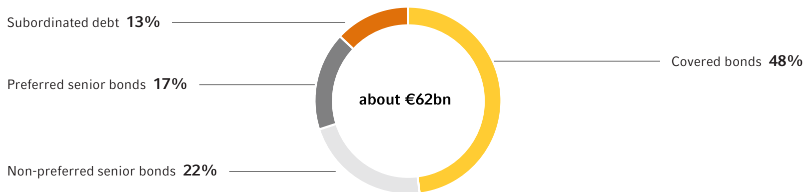
The liquidity management of the Commerzbank Group is the responsibility of Group Treasury, which is represented in all major Group locations in Germany and abroad and has reporting lines in all subsidiaries.

Liquidity management comprises both operational and strategic components. Operational liquidity management encompasses management of daily payment inflows and outflows, planning for payment flows expected in the short term and management of access to central banks. The division is also responsible for access to unsecured and secured sources of funding in the money and capital markets and the management of the liquidity reserve portfolio. Strategic liquidity management involves managing maturity profiles for liquidity-relevant assets and liabilities within specified limits and corridors. Additional information on this subject can be found in the "Liquidity risk" section of the Group Risk Report.

Guidelines for the funding profile and funds are derived from the business strategy and reflect risk tolerance. The Group's funding is appropriately diversified in terms of investor groups, regions, products and currencies. Top-level decisions about liquidity management are taken by the central Asset Liability Committee (ALCO), which meets at regular intervals.

The quantification and limitation of liquidity risks is carried out via an internal model in which expected cash inflows are compared against expected cash outflows. The limits set are monitored by the independent risk function. ALCO and the Board of Managing Directors receive regular reports on the liquidity risk situation.

Capital market funding structure[1]
As at 31 December 2020



[1] Based on reported figures.

Commerzbank had access to the money and capital markets at all times during the reporting period, and its liquidity and solvency were always adequate. Furthermore, Commerzbank's liquidity management is always able to respond promptly to new market circumstances. Even against the background of increasing uncertainty due to the coronavirus pandemic, the Bank's liquidity situation is comfortable and complies with both internal limits and applicable regulatory requirements.

The Commerzbank Group raised a total of around €7bn in long-term funding on the capital market in 2020. The average term of the issues made during the period under review was around eight years for unsecured issues and Pfandbriefe.

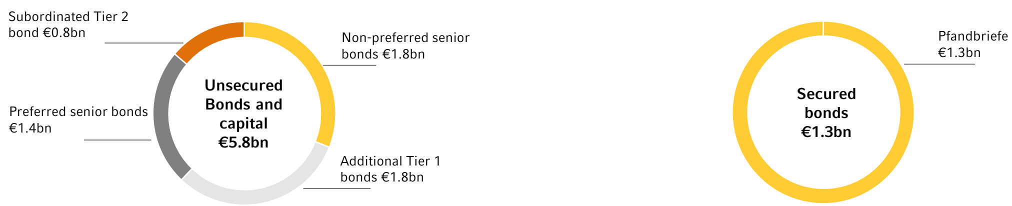
Following the uncertainty in the second quarter caused by the coronavirus pandemic, the capital markets were stable over the second half of the year. Commerzbank used the positive issue windows to implement planned issues.

At the end of May 2020, Commerzbank launched an issuance programme for Additional Tier 1 capital (AT1 capital) that will enable it to issue successive subordinated debt securities with a total nominal value of up to €3bn over the next few years. Commerzbank Aktiengesellschaft issued the first AT1 bond under its new issuance programme, with a volume of €1.25bn and a fixed coupon of 6.125% per annum, in June. It has a perpetual maturity and the first call date is in the period from October 2025 to April 2026. This was followed in September by a second AT1 bond with a volume of €500m and a fixed coupon of 6.5% per annum. This issue also has a perpetual maturity and the first call date is in the period from October 2029 to April 2030. The bond terms for both issues provide for a temporary write-down in the event that the Bank's Common Equity Tier 1 ratio (CET1 ratio) drops below 5.125%. In addition, a subordinated bond (Tier 2) with a volume of €750m was issued in May. This bond has a term of 10.5 years with the first call date being in the period from September to December 2025 and a fixed coupon of 4% per annum. The three capital issues were heavily oversubscribed and attracted great interest from foreign investors, who accounted for over 90% of demand. With the issue of the bonds, Commerzbank is further strengthening and optimising its capital structure.

In the unsecured area, Commerzbank very successfully issued its second green bond in September with a volume of €500m. The non-preferred senior bond has a term of 5.5 years with a call date in March 2025 and a coupon of 0.75% per annum. The bond attracted an exceptional level of investor interest, particularly from France, the Benelux countries and Scandinavia. 55% of the issue was placed in these countries. The green bond has enabled Commerzbank to significantly expand its investor base. Two non-preferred senior bonds were also placed, one for €750m and for the first time one for GBP 400m, with terms of seven and five years respectively. In the area of preferred senior bonds, a benchmark bond with a volume of €750m was issued at the end of August, and a benchmark bond issued in 2019 was increased by €500m at the beginning of the year. Both bonds have a term of seven years. Around €260m in private placements were also issued.

In the secured area, a ten-year mortgage Pfandbrief for €1.25bn was issued in March.

Group capital market funding 2020
Volume €7.0bn



The eurozone money markets also continued to be significantly influenced by the rapidly developing coronavirus pandemic and its repercussions.

In view of this, the ECB is implementing the comprehensive measures it decided on in March 2020 to counter the economic down-turn in the eurozone and the resulting impact on the financial sector. According to the ECB Governing Council, there have not yet been any significant tensions in the money market or liquidity shortfalls in the banking system, but additional long-term refinancing operations have nonetheless been made available to the banks, mainly for the purpose of supporting lending to small and medium-sized enterprises.

Under TLTRO III (targeted longer-term refinancing operations), the ECB provided banks with additional liquidity of around €1,300bn. Commerzbank participated in this programme with a volume of €32.3bn. The resulting further increase in excess liquidity would also make it possible to raise the tiering system for central bank balances, which exempts part of the excess liquidity from negative interest rates. The interest rates for the main refinancing operations, the marginal lending facility and the deposit facility were unchanged.

At the end of 2020, the Bank had a liquidity reserve of €94.8bn in the form of highly liquid assets. The liquidity reserve portfolio works as a buffer in stress situations. It is funded in line with the liquidity risk appetite to ensure that it is kept at the required size throughout the entire reserve period stipulated by the Board of Managing Directors. Part of this liquidity reserve is held in a separate stress liquidity reserve portfolio managed by Group Treasury to cover liquidity out-flows should a stress event occur and to ensure solvency at all times.

The Bank also holds an intraday liquidity reserve portfolio. As at the reporting date, the total value of this portfolio was €6.1bn.

At 135.68% (average of the last 12 month-end values), Commerzbank was well above the minimum 100% level required for the liquidity coverage ratio (LCR). Further information on the LCR can be found in Note 65 to the Group financial statements. Commerzbank's liquidity situation therefore is comfortable given its conservative and forward-looking funding strategy.

Summary of 2020 business position

The difficult economic situation brought about primarily by the coronavirus pandemic meant 2020 was a particularly challenging year for the banking sector.

We managed to achieve key strategic goals with the comdirect merger and the economic completion of the sale of the Equity Markets & Commodities (EMC) division to Société Générale. We also further strengthened the Bank's capital structure with the issue of two Additional Tier 1 bonds, partially in response to the amended regulatory requirements imposed by the European Banking Authority.

The massive impact of the coronavirus pandemic can be seen in Commerzbank's business performance. The first lockdown in spring 2020 had already altered the market environment so markedly that in our interim report as at 30 June 2020 we adjusted our guidance regarding the Bank's earnings performance given in the Annual Report 2019. We had previously assumed that we would be able to report a profit for 2020, but had to revise our profit expectations in view of the ongoing difficult market environment and risk factors, the higher risk result due to provisioning for a specific case in the first half of the year, and the planned provisions for restructuring expenses. Under the revised guidance, a consolidated loss was expected for the 2020 financial year. This forms the basis for the following comments.

The Private and Small-Business Customers segment made good progress in implementing its strategic measures in the 2020 financial year, the focus being on the expansion of its online and mobile banking channels. For example, a large number of new functions were added to the banking app – a popular portal for many of our customers – making it even more attractive. The segment achieved an encouraging performance in customer business despite the ongoing challenging conditions. The lending volume in Germany grew to €112bn, with the volume of mortgage lending alone increasing by 7% on the back of record new business. The securities volume recorded strong growth of €20bn to €177bn, some €12bn of which were net inflows. The segment proved to be robust in the face of adverse conditions, particularly with respect to the interest rate environment and slowing economic growth and was able to keep total operating income, net of specual effects, stable in the 2020 financial year after adjustment for extraordinary effects thanks to the high level of customer activity. It also almost completely offset the negative impact of a further rise in provisions for foreign-currency loans at mBank. As expected, there was a marked increase in the risk result due largely to the effects of the coronavirus pandemic. The segment recorded a pleasing cost trend. Contrary to our expectations, we were able to keep operating expenses at the prior-year level; this did not lead to an improvement in the cost/income ratio due to the slightly lower reported operating income. Overall, the segment's operating profit fell more strongly than forecast. The operating return on equity fell significantly year on year.

The coronavirus pandemic, the persistently low level of interest rates and ongoing intense price competition had a major impact on the performance of the Corporate Clients segment in the past financial year. The global economic slowdown also weighed on demand for trade finance. Lending volume fell due to the Bank's rigorous RWA management and lower customer demand for credit and liquidity as a result of the coronavirus pandemic. The resulting decline in income from trade finance and lending business was only partially offset by growth in capital market business. Against this backdrop, our expectations of a slight rise in operating income could not be met in the course of the year. As expected, the risk result increased significantly due primarily to the coronavirus pandemic and the default of a large exposure in the second quarter of 2020. Contrary to our expectations, however, costs were lower compared with the previous year. Overall, the decline in earnings, which became increasingly marked over the course of the year, and the considerably higher impact of the risk result led to a significant operating loss. Although there was only a slight increase in the cost/income ratio, the operating return on equity fell significantly compared with the previous year.

At Group level, the Bank laid some important foundations for the upcoming restructuring in the 2020 financial year, and this was reflected in significant charges against earnings. Substantial restructuring expenses were recognised for the year under review. In addition to the provisions recognised for the forthcoming restructuring, the goodwill write-down and amortisation of other intangible assets also affected earnings, although this had no impact on the regulatory capital base. At operating level, the coronavirus pandemic was the most significant negative factor in the past financial year. Commerzbank recognised a top-level adjustment (TLA) of €–505m that anticipates the potential impact of the coronavirus pandemic, including the second lockdown, based on information as at the turn of the year. The provision for legal risks in connection with foreign-currency loans at mBank was also significantly increased. Together with negative remeasurement effects, this resulted in an operating loss in 2020. Higher charges for compulsory contributions were more than offset through strict cost management. Total operating expenses including compulsory contributions were lower than in the previous year. The net return on equity of –11.7% was markedly lower than the prior-year level of 2.2%, while the cost/income ratio including compulsory contributions increased by 3.2 percentage points to 81.5%.

Despite the consolidated loss, the Common Equity Tier 1 ratio of 13.2% reported as at the end of December 2020 remained around 370 basis points above the minimum regulatory requirement of 9.5% (MDA threshold). We have cleaned up our balance sheet and recognised provisions for what remains an uncertain economic environment. Our comfortable capital position gives us sufficient financial leeway to implement the "Strategy 2024" programme over the coming years.

Segment performance

The comments on the segments' results are based on the segment structure described on pages 276 ff. of the Group financial statements.

More information and explanations regarding restatements of prior-year figures can be found in Notes 4 and 61 to the Group financial statements.

Private and Small-Business Customers

The Private and Small-Business Customers segment encompasses branch business in Germany, the comdirect brand, Commerz Real and the mBank Group. The segment again saw growth in net new customers and assets under management in 2020. With around 11 million customers in Germany and roughly 5.7 million in Poland, the Czech Republic and Slovakia, Commerzbank is one of the leading banks for private and small-business customers in these markets.

Performance

€m	2020	2019[1]	Change in %/%-points
Income before risk result	4,776	4,876	–2.0
Risk result	–562	–254	.
Operating expenses	3,515	3,506	0.3
Compulsory contributions	331	285	16.2
Operating profit/loss	**368**	**831**	**–55.7**
Average capital employed	5,680	5,329	6.6
Operating return on equity (%)	6.5	15.6	–9.1
Cost/income ratio in operating business (%) – excl. compulsory contributions	73.6	71.9	1.7
Cost/income ratio in operating business (%) – incl. compulsory contributions	80.5	77.7	2.8

[1] Figures adjusted due to restatements (see Group financial statements, Notes 4 and 61).

The Private and Small-Business Customers segment slightly increased its operating income year on year – excluding the gain on the sale of the interest in ebase – and thus performed well despite the difficult market environment. It also kept operating expenses at the prior-year level. The operating profit was more than halved in the year under review, falling to €368m compared with €831m in the prior-year period, with the decline caused primarily by the extremely weak economic environment. This is clear from the significantly higher risk result of €–562m.

Total segment income before risk result was €4,776m in the year under review, down €100m year on year. Allocations to provisions for legal risks in connection with mortgage loans issued in foreign currencies at mBank increased by €150m year on year, while the prior-year result was boosted by the gain of €103m on the sale of the comdirect subsidiary ebase GmbH.

Net interest income decreased by €107m to €2,576m year on year. Interest-bearing business in Germany recorded a significant decline in interest income from deposit business that was only partially offset by higher interest income from continued volume growth in lending business, particularly in residential mortgage financing. It was a similar picture at mBank following several interest rate cuts by the Polish central bank in the first half of 2020. The pressure on margins in deposit business was offset by higher income from lending business.

Net commission income was the main earnings driver in the year under review, rising significantly in both core regions by a total of €237m to €2,151m. In Germany, this income figure benefited from the strong revival of the domestic securities business, with online banking in particular seeing record transaction volumes. Net commission income at mBank also increased significantly due to a marked rise in income from securities business.

The other net income figure of €–237m includes allocations of €229m to provisions for legal risks in connection with mortgage loans issued in foreign currencies at mBank. The prior-year figure of €23m also included an allocation of €79m to these provisions and the gain of €103m on the sale of the interest in ebase.

The sharp increase in the risk result, which grew by €–308m to €–562m, is largely attributable to effects from the coronavirus pandemic. The associated TLA for the period under review amounted to €–129m.

Operating expenses for the period under review were on a par with the prior-year level at €3,515m. While operating expenses were slightly higher in Germany, at mBank they were slightly lower year on year due to exchange rate effects. The total cost of compulsory contributions amounted to €331m, an increase of €46m compared with the prior-year period. The largest increase related to costs for deposit protection funds.

Impairments of €1,578m were recognised on intangible assets due to the deteriorating market parameters, including the level of interest rates in the eurozone and in Poland.

Overall, the Private and Small-Business Customers segment posted a pre-tax loss of €–1,210m in the period under review, compared with a pre-tax profit of €831m in the previous year.

Corporate Clients

The Corporate Clients segment comprised four reporting areas in 2020. The Mittelstand, International Corporates and Institutionals divisions are responsible for business with our core customers: the Mittelstand division covers Mittelstand (SME) customers and domestic large corporates with the relevant products they require. The International Corporates division looks after corporate clients headquartered abroad and large German multinational companies. The Institutionals division is responsible for managing relationships with banks in Germany and abroad, as well as those with central banks and selected non-bank financial institutions (NBFIs) such as insurance companies and pension funds.

The segment offers customers the complete range of products of an international full-service bank, from traditional credit products and individually tailored financing solutions to cash management and trade finance, investment and hedging products and customised capital market solutions. The Others division handles all business that either has a cross-segment risk management function or falls outside the strategic focus of the Corporate Clients segment. These mainly relate to assets transferred from the former Non-Core Assets and Portfolio Restructuring Unit run-off segments and effects from hedging positions.

Performance

€m	2020	2019[1]	Change in %/%-points
Income before risk result	3,120	3,274	–4.7
Risk result	–1,081	–342	.
Operating expenses	2,380	2,478	–3.9
Compulsory contributions	117	118	–0.5
Operating profit/loss	**–458**	**336**	**.**
Average capital employed	11,544	11,927	–3.2
Operating return on equity (%)	–4.0	2.8	–6.8
Cost/income ratio in operating business (%) – excl. compulsory contributions	76.3	75.7	0.6
Cost/income ratio in operating business (%) – incl. compulsory contributions	80.1	79.3	0.8

[1] Figures adjusted due to restatements (see Group financial statements, Notes 4 and 61).

The performance of the Corporate Clients segment was affected by the difficult market environment in the year under review, particularly the high level of customer and market uncertainty stemming from the coronavirus pandemic. Although individual sectors and companies suffered severe economic consequences despite extensive coronavirus aid and the provision of credit lines, the capital markets continued to recover over the course of the year thanks above all to a decline in new coronavirus infections and the development of vaccines.

In particular, significantly higher valuation allowances for credit risks meant that the Corporate Clients segment recorded an operating loss of €–458m in the year under review, compared with an operating profit of €336m in the previous year. This figure also included negative remeasurement effects of €–55m due to spread widening, which primarily reflects higher credit risk with counterparties in derivatives business and lower contributions from fair value items caused in part by the coronavirus crisis.

Despite solid contributions from capital market business, the Mittelstand division recorded lower income overall, including from lending business, which struggled with declining margins. Commercial business was also hit by the consequences of the coronavirus pandemic, which resulted in lower income from cash management and trade finance. The International Corporates division recorded a positive performance, benefiting in particular from increased hedging in customer business and a significant contribution from primary market business with bonds. In the Institutionals division, however, higher income from capital market business did not offset the decline in income from trade finance and cash management. The Others division was affected by a significant widening of credit spreads caused by the coronavirus pandemic, which resulted in negative remeasurement effects in counterparty business. Lower contributions from fair value items and wind-down portfolios also affected the result, as did a penalty payment of around €41m to the UK financial conduct regulator recorded in the second quarter of 2020.

In the year under review, income before risk result was €153m lower than in the prior-year period at €3,120m. At €1,799m, net interest income was below the prior-year level of €1,895m, while net commission income was up to €1,205m, just above the prior-year level of €1,176m. Net income from financial assets and liabilities measured at fair value through profit or loss fell to €146m, however. This was €37m lower than the figure for the prior-year period, which included income from successful restructuring measures.

The risk result in the Corporate Clients segment was €–1,081m in the period under review, compared with €–342m in the prior-year period. The increase was due in part to impacts of the coronavirus pandemic, such as larger individual counterparties where the crisis was the main reason for default or made it necessary to increase existing risk provisions. The risk result was also affected by the default of a large exposure in the second quarter of 2020. The TLA charge for the period under review amounted to €–373m.

Operating expenses were €2,380m, down €97m on the prior-year figure. The decline resulted from lower personnel and administrative expenses achieved through strict cost management. The reported compulsory contributions of €117m relate primarily to the European banking levy. Compulsory contributions of €118m were recorded in the previous year.

Overall, the segment posted a pre-tax loss of €–458m, compared with a pre-tax profit of €309m in the prior-year period.

Others and Consolidation

The Others and Consolidation segment contains the income and expenses which are not attributable to the business segments. Others covers, for example, Group Treasury, equity holdings not allocated to the business segments and overarching specific individual matters such as expenditure on regulatory fees. Consolidation reconciles the figures shown in segment reporting with the Group financial statements in accordance with IFRS. Others and Consolidation also covers staff, management and support functions, which are likewise charged to the segments. For these units, restructuring costs are an exception to transfer charging, as they are reported centrally in the division.

The Others and Consolidation segment reported an operating loss of €–143m for 2020, compared with an operating profit of €55m in the prior-year period. The decline was primarily attributable to net negative effects from the recognition and reversal of provisions, consolidation adjustments, a change in the estimate of the remaining term of a liability and higher net loan loss provisions for a residual portfolio in the dissolved Asset & Capital Recovery segment. This was offset by net positive remeasurement effects, especially from investments held by CommerzVentures. Group Treasury also recorded a higher result year on year despite an increase in bank levies. The improvement was mainly due to better interest rate risk management for the commercial segments. Others and Consolidation recorded a pre-tax loss of €–958m for 2020, which included restructuring expenses of €814m. These mainly related to the recognition of restructuring provisions. The Board of Managing Directors has decided to bring forward the implementation of two voluntary programmes as part of the socially responsible headcount reduction, and concluded corresponding works agreements with the Central Works Council in the third quarter of 2020. Furthermore, in December 2020 the Board of Managing Directors passed a resolution to implement a restructuring plan with reference to the strategy adopted in the 2019 financial year for a headcount reduction of 2,900 full-time positions and also concluded a corresponding works agreement with the Group Works Council. The prior-year figure included restructuring expenses of €101m relating to the implementation of the strategy.

Outlook and opportunities report

Future economic situation

The ongoing coronavirus pandemic will continue to shape the global economy in 2021. Provided that the pandemic does not worsen further, we expect to have to wait until the spring for a sustained decline in the number of new infections in western industrialised countries, when people spend more time outdoors again as temperatures rise. Vaccination programmes should then result in enough of the population being immunised to allow social life to return to normal in the second half of the year.

China has not yet defeated the virus either. It is seeing repeated outbreaks at regional level, with the authorities responding by imposing lockdown measures. Any negative impact of these measures on the economy is likely to be limited, however. Nevertheless, it can be assumed that economic performance will be much slower to recover. The worsening situation on the labour market is dampening private consumption, while high levels of corporate debt are holding back investment. There are also ongoing problems such as the trade conflict with the USA, which China is responding to with a costly drive for economic independence.

In the USA, the economic recovery is likely to pick up speed again from spring onwards, with the new US president, Joe Biden, planning another extensive stimulus package. There is also an expectation that 2021 will perhaps see consumers finally part with some of the USD 1,500bn they were unable to spend last year because shops were closed. The ongoing vaccination campaign is also likely to have a positive impact on economic sentiment, and companies will probably remain very willing to invest. We expect the US economy to return to pre-crisis levels by mid-2021, with annual average growth of 5%.

The eurozone economy is likely to recover strongly from spring onwards after a difficult autumn/winter period. Provided that the coronavirus pandemic does not worsen further, we anticipate that restrictions will be largely lifted by the end of March at the latest. High-contact services such as hotels and restaurants will then gradually return to normal operations in the second half of the year. The economic recovery will receive an additional boost once people start to spend some of the extensive savings they built up while shops were closed, particularly in the spring of 2020. According to our estimates, these amount to around 4% to 5% of annual disposable income in Germany/the eurozone.

The recovery is also being supported by the continuation of the highly expansive monetary and fiscal policy. The suspension of the Stability and Growth Pact will continue into 2021, meaning that member states will still be allowed to have budget deficits that exceed 3% of GDP. EU member states will also receive the first funds from the Recovery and Resilience Facility in 2021 in the form of loans and non-repayable grants.

We expect the eurozone economy to return to fourth-quarter 2019 levels by the end of 2021. Germany's economy may even be back to normal by the third quarter of the year. In terms of the annual average for 2021, we are expecting economic growth of 5.0% for the eurozone and 4.5% for Germany.

Real gross domestic product Change from previous year	**2020**	**2021**[1]
USA	–3.5%	5.0%
Eurozone	–6.8%	5.0%
Germany	–5.0%	4.5%
Central and Eastern Europe	–3.9%	3.4%
Poland	–3.5%	3.1%

[1] The figures for 2021 are Commerzbank forecasts.

The prospect of a highly expansive fiscal and monetary policy over the longer term means that the eurozone financial markets will remain disconnected from fundamentals. The yield on ten-year German Bunds is likely to remain in negative territory over the next two years, which is unusual from a historical perspective.

We expect fluctuations around the –0.5% mark. However, with the vaccination programme now under way, the yield is likely to rise somewhat in the short term once the current wave of infection has subsided.

Yield premiums in the peripheral countries should tend to narrow further this year despite unresolved economic problems, as the ECB's net bond purchases will continue to match the countries' net issues in 2021.

Germany's DAX share index should continue to make gains in 2021, even though the price-earnings ratio is already noticeably above the ten-year average. We are expecting a price level of around 14,200 points by the end of 2021.

The euro should continue to appreciate against the US dollar in 2021 and end the year at 1.24. This is not because the euro is strong, however, but because the dollar is losing some of its own strength.

Exchange rates	31.12.2020	31.12.2021[1]
Euro/US-dollar	1.22	1.24
Euro/Sterling	0.89	0.89
Euro/Zloty	4.56	4.60

[1] The figures for 2021 are Commerzbank forecasts.

Future situation in the banking sector

The outlook for the banking industry remains very challenging. In addition to ensuring sufficient capitalisation, reducing non-performing exposures and combating IT cyber risks, dealing with credit risks in particular is one of the key topics for banking regulators. Supervisory authorities want to implement risk provisioning measures at an early stage in order to avoid cliff-edge effects that could arise when government support measures and credit moratoriums come to an end in the post-pandemic period. Temporary regulatory relief has been granted as a result of the pandemic. Further key elements of the Basel III framework are also being implemented at European level through the EU banking package, and these are now gradually coming into force. The new rules include more risk-sensitive capital requirements, particularly with regard to market risk, and the introduction of a binding leverage ratio and a binding net stable funding ratio. Going forward, banks must hold a minimum amount of capital that is available to cover losses in the event of restructuring or resolution. However, requirements for higher risk buffers always entail the risk that the banking system will be less able to fulfil its economic functions.

The forthcoming revision of European banking regulation is intended to implement new approaches for determining risk-weighted assets and hence the capital requirements for credit risk. There are also plans to abolish the model-based approach for operational risk, revise the procedure for calculating credit value adjustments in derivatives business and introduce a minimum capital requirement (output floor) for institutions that calculate their risks using internal models. According to an EBA impact study, this output floor will increase capital requirements, especially for banks in the EU that are systemically important and operate globally. The Financial Stability Board is also keen to strengthen regulation of the financial sector going forward, including extending regulation to cover non-bank financial institutions, with a view to considerably reducing systemic risks.

Planning uncertainties and risks have increased massively as a result of the coronavirus pandemic. Many countries have so far been unable to stem the rate of infection effectively. For the global economy, the prospect of further waves of infection – potentially massive ones at regional level – is the central forecasting risk for the coming months. This uncertainty has led to considerably higher volatilities in the valuation of assets than seen previously. Banks worldwide are facing special challenges, especially with regard to their earnings expectations and their risk provisioning and capital requirements.

As the intermediary between providers and users of capital, the financial sector has a key role to play in overcoming the coronavirus crisis. There is a time lag, however, meaning that the impact of the pandemic on banks is only now starting to become apparent. Germany must also be braced for a mounting number of corporate and personal insolvencies and thus more loan defaults over the coming quarters. This is due not least to the temporary suspension of the three-week rule for filing for insolvency. To mitigate the negative impact, the Corporate Stabilisation and Restructuring Act (Unternehmensstabilisierungs- und -restrukturierungsgesetz, StaRUG), which came into force at the beginning of 2021, is intended to establish new rules for restructuring law, which comes into play before insolvency law, going forward and follow on seamlessly from the COVID-19 Insolvency Suspension Act (COVID-19-Insolvenzaussetzungsgesetz, COVInsAG). The planned new measures, which include early risk detection and early restructuring settlements or restructuring plans as a core measure to avert imminent insolvency, are all designed to significantly improve companies' restructuring prospects and thus specifically prevent insolvencies.

Exposures to companies and self-employed persons in sectors such as personal services, gastronomy, tourism and events are subject to disproportionately high risks. These sectors have been particularly hard hit by the closures required as a result of the pandemic. It is currently impossible to estimate the scale of the impairments that will ultimately be required. There are also fears of loan defaults on commercial property financing if recent changes to working and shopping habits are maintained over the long term. Against this backdrop, there are concerns that Germany will see a noticeable increase in payment defaults and insolvencies in 2021. This is likely to affect SMEs in particular, but also private individuals. European supervisory authorities in particular also consider the high concentrations of government bonds in numerous banks' balance sheets to be a critical issue. The German banking sector is likely to be robust at present, however, due to the capital provisioning measures that have been in place for some time.

Even before the coronavirus crisis, the prospect of prolonged low interest rates was seen as a key challenge for the banking sector. In view of the far-reaching economic impact of the pandemic and the response of the central banks in the form of a massive expansion of bond purchase programmes, zero interest rate policy and extensive provision of liquidity, capital market interest rates will remain low for the foreseeable future. This will improve banks' liquidity position and financing conditions, but at the same time will put ongoing pressure on interest margins and thus adversely impact earnings in the financial sector. Net interest margins are now very low throughout Europe, and in Germany in particular. At the same time, funding costs have risen as credit growth is exceeded by deposit growth on the customer side. Government lending programmes are also narrowing margins, even though the respective credit risk of non-state banks has been noticeably reduced or even completely eliminated.

Increased revenues in the highly important interest business can only be achieved by not only raising lending rates and fees but also introducing negative interest rates for customer deposits on a broad basis. This process has already begun, as even the two-tier system for reserve remuneration implemented by the ECB, which exempts part of banks' excess liquidity holdings from the negative deposit rate, will do little to change the negative consequences of the low interest rate environment. All in all, there is barely any scope for the vast majority of banks to achieve a sustainable improvement in their margins.

The outlook for trading business is more favourable than for the dominant interest-bearing business, although many institutions have already withdrawn partially or even completely from this area of activity. Even the current boom in cashless payments is only benefiting the commission-bearing payment services business to a limited extent due to strong competition from fintech companies. By contrast, the outlook for banks' securities commission business is better than expected. The number of private shareholders in Germany will continue to increase over the next few years due to the lack of investment alternatives. This will primarily benefit direct banks, which are likely to see further significant growth in new customers.

The considerable uncertainty among bank customers in recent months has also led not only to greater use of digital and mobile products but also to a marked increase in demand for individual financial advice. Given the existing demand for advice on complex banking transactions such as retail mortgage financing, branch business will therefore remain part of the basic service provided by banks, albeit on a smaller scale.

Given the earnings problems and ongoing competitive pressure, cost reduction remains the main issue both for German banks and for many of their European competitors. For this reason, digitalisation of business processes and the utilisation of the data generated will advance rapidly. This calls for highly automated IT processes that permit rapid adjustments in response to changing market conditions. The trends in customer behaviour that have been accelerated during the crisis – more online banking and new payment habits – are set to continue. Financial institutions that focus increasingly on customers' use of multimedia channels and offer a wide range of online banking tools and tailor-made financial solutions will be at an advantage in the future. This is encouraging the increasing shift away from branch-based retail banking, whereby the range of products and services is reduced but it becomes more difficult to generate commission income. The result is that the German banking market in particular is on the brink of a major upheaval. The next decade will see a drastic reduction in the number of institutions and even more intense competition. More and more global technology groups, fintech companies, foreign banks and market infrastructure providers such as stock exchanges, clearing houses and information service providers will start offering traditional banking products.

The economic situation both in Germany and in the eurozone as a whole will remain very challenging until the spring. As a result, business with corporate clients and small-business customers will initially remain under significant pressure in the first six months of 2021, but we expect it to then gradually pick up over the second half of the year. Banks' interest and commission business will benefit from the revival of the export industry, which is so important for the German economy, although there is every likelihood that this will be accompanied in the short term by an increase in insolvencies and business closures.

Retail banking business is likely to benefit from private consumption, which is set to pick up considerably again in the next few months after people tended to prioritise saving during the coronavirus crisis. Demand for residential mortgages should also continue unabated, driven by the lack of affordable housing and the related boom in new building, and in particular by the persistently low level of interest rates. However, retail banking business also continues to offer only limited earnings potential due to the national competition among banks and the narrow interest margins.

In addition to the possibility of further packages of measures to mitigate the economic consequences of the pandemic, banking regulators are focusing more and more on the management of ESG (environmental, social and governance) risks. Climate change in particular is one of the great challenges of our time. With this in mind, the EBA intends to embed climate and environmental risks more firmly in banks' risk management processes over the next few years. Climate risks are also set to be a focus of future ECB stress tests, enabling banks to better assess their consequences for their business environment. The financing requirements of the European Commission's planned green deal could also lead to green quantitative easing. This is new, because to date none of the world's central banks have pursued a monetary policy that is explicitly oriented towards climate protection goals. The EU is also planning to make sustainability information a mandatory element of sales prospectuses for mutual funds, probably from the beginning of 2022.

The Polish banking sector has so far proved itself to be comparatively robust in assessments of financial stability, and this continued to be the case during the coronavirus pandemic. The country's big banks still have a strong capital position and are well above the minimum requirements set by the supervisory authorities. There are risks, however, from unsecured consumer loans and mortgage loans in zloty. There are currently numerous lawsuits from private customers pending in Poland relating to Swiss franc real estate loans with indexing clauses. Case law on such lawsuits is inconsistent, but the majority of rulings currently favour consumers. To date, neither the Polish courts nor the European Court of Justice have come up with a clear and conclusive solution to the issue of foreign currency loans. As a result, since the end of 2019 the banks concerned have been recognising increasingly large provisions to cover the growing number of lawsuits and the rise in the total value of disputed claims, which is weighing on their earnings.

In December 2020, the Polish banking regulator proposed that foreign currency loans issued by Polish banks be converted into zloty on the basis of voluntary agreements between the banks and their affected customers and that interest be charged based on Poland's WIBOR reference rate. As the Polish zloty has depreciated considerably against the Swiss franc over the past few years, such a conversion based on historical rates is likely to have a significant negative impact on the earnings of the banks concerned.

All in all, the situation may result in considerable costs for the banking sector in Poland – and thus also for Commerzbank through its subsidiary mBank – particularly for litigation. The provisions for these risks may also need to be adjusted significantly in the future.

The decision by the Polish central bank (NBP) to cut its key interest rate to just above zero in response to the coronavirus crisis will also pose major challenges for the Polish banking sector over the coming months, with the central bank set to maintain its expansive monetary policy until at least the end of 2021. At the same time, the ongoing high inflows of liquidity in deposit business are likely to continue to outstrip demand for credit, while a decline in the quality of the loan portfolio will lead to significantly higher risk costs and increased loan defaults. Bank earnings will therefore remain under pressure over the coming months, which is likely to result in further increases in bank fees and a continuation of the trend towards consolidation in the Polish banking market.

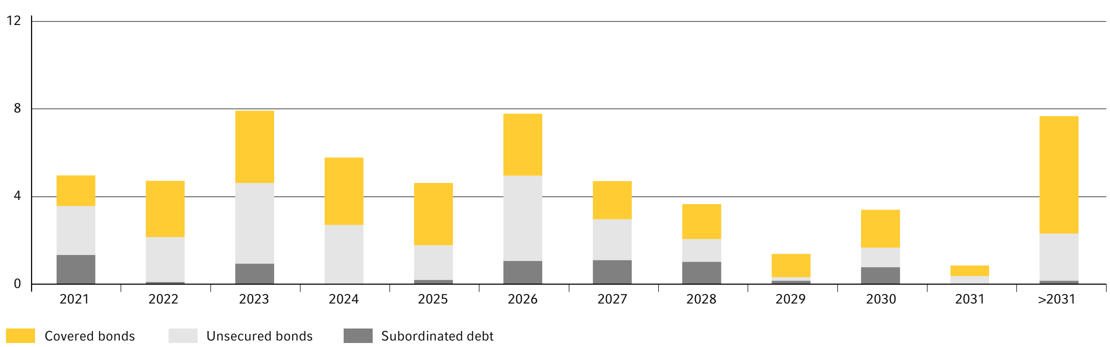
The trade agreement recently agreed between the EU and the UK is in principle intended to avoid tariffs in bilateral trade. Since the UK is no longer bound by EU rules, goods will now only be granted tariff-free access to the EU if UK companies do not benefit from any unfair competitive advantages in the form of subsidies or lower standards for workers' rights and environmental requirements. Services were largely omitted from the negotiations, however, meaning that UK financial firms have lost their automatic access to the EU market. They now need to be granted equivalence rights, whereby the EU authorities can allow them to operate in the EU if they consider regulation in their domestic market to be equivalent. These equivalence rights can be revoked at any time, which will give rise to considerable uncertainty owing to the fundamental risk that the UK supervisory authority may lower its regulatory standards in order to strengthen London as a financial centre. This would affect the competitive position of banks in the remaining EU countries. At the same time, however, the fragmentation of the investment banking sector will inevitably increase if London's financial centre loses its unrestricted access to the European single market. Further negotiations are therefore required on this topic. In those areas of financial services where the bulk of EU business is currently handled out of London, the EU is likely to work towards shifting this business to one of its own financial centres in the future.

Financial outlook for the Commerzbank Group

Planned funding measures

The ECB's TLTRO III (targeted longer-term refinancing operations) refinancing option will influence Commerzbank's borrowing on the capital market over the coming years. The Bank's participation in the June 2020 TLTRO will mean a lower planned funding volume of less than €5bn for 2021. Commerzbank has access to the capital market through a broad range of products. In addition to unsecured funding instruments (preferred and non-preferred senior bonds, Tier 2 sub-ordinated debt and Additional Tier 1 capital), when refinancing Commerzbank can also issue secured funding instruments, in particular mortgage Pfandbriefe and public-sector Pfandbriefe. As such, Pfandbriefe are a key element of Commerzbank's funding mix. These give Commerzbank stable access to long-term funding with cost advantages compared with unsecured sources of funding. Issuance formats range from large-volume benchmark bonds to private placements.

Group maturity profile of capital market issues as at 31 December 2020
€bn



By regularly reviewing and adjusting the assumptions used for liquidity management and the long-term funding requirement, Commerzbank will continue to respond actively to changes in the market environment and business performance in order to secure a comfortable liquidity cushion and an appropriate funding structure.

Planned investments

Commerzbank is planning a total of €1.7bn in direct costs for IT investments under "Strategy 2024", €0.6bn of which relates to the 2021 financial year. Just under half of the investment for the current year relates to the restructuring of the business model and the digitalisation of retail banking business, which also encompasses the integration of our direct banking subsidiary comdirect. The other half will be invested in the further digitalisation of processes in corporate client business, the IT infrastructure and regulatory measures.

Private and Small-Business Customers
The main investment targets for the branch bank in 2021 are the central initiatives relating to the "Strategy 2024" programme and the integration of comdirect.

In the Private and Small-Business Customers segment, Commerzbank is building on the existing strategic thrusts of the previous strategy while at the same time using the integration of comdirect to further develop the digital and personal aspects of the business model. The main focus is on creating the most efficient digital bank – complete with comprehensive mobile offerings – and achieving greater penetration of customer segments. A large portion of the investments will support the ongoing digitalisation of lending platforms in order to optimise customer service during the application process. Commerzbank also plans to digitalise further products and processes, while progress towards completion of the ONE digital platform will continue in 2021. Other key sales and product-relevant functions will also be implemented in the areas of accounts, cards, securities and deposits, along with functions relating to the creation and management of personal data.

Another large portion of the investments will be used to expand the online banking channel. The focus here is on implementing a completely new technological base and a new customer experience. The Bank will also invest in the systematic expansion of the banking app to create an additional sales channel, implementing a host of new functions such as the ability to create and delete securities savings plans or display third-party bank accounts. The technological foundations laid in 2020 will be further expanded in 2021 to ensure a more targeted customer approach across all sales channels. Interaction between individual channels and touchpoints will also be stepped up to consolidate the initial effects of profitable growth.

As well as establishing a digital bank in the German market, Commerzbank will also focus on improving the efficiency of its branch business in 2021. The Customer Centre is becoming increasingly important and is gradually being expanded to create an efficient and effective remote sales channel.

The implementation of various regulatory requirements will continue to be a challenging task in 2021 and will entail corresponding investments. The objective is still to reduce compliance risks to the lowest possible level by driving the development of innovative digital solutions for the effective and resource-efficient management of compliance risks. The main focus in this regard remains the digitalisation of the "know-your-customer" process. Other areas of investment include the ongoing restructuring of processes subject to the German Securities Trading Act (WpHG) in order to meet regulatory requirements under the suitability and sustainability rules, and work relating to the technical integration of comdirect. The Bank is also investing in process automation and the harmonisation of technical applications to ensure tax compliance both in Germany and abroad.

mBank is planning investments in the 2021 financial year to strengthen its competitive position, continue the optimisation and automation of customer-related and internal processes and hence improve its cost efficiency. Initiatives at business unit level will also be supported in order to participate in future market potential and opportunities. New applications include the standardisation of interfaces (OpenAPI), biometric authorisation procedures, integrated payment transactions, voice assistants and chatbots.

The planned investments are set to include a review of the positioning and service scope of the mKiosk service points for retail customers in mBank's sales network. These mKiosks will in future offer customers individual financial advice via a separate additional channel, thereby enhancing customer service and sales performance.

mBank also plans to optimise its existing sales network in respect of all branch models. In Warsaw, the existing mBank headquarters locations are due to be brought together in the Mennica Legacy Tower by the beginning of 2021. There are also plans to optimise the various locations in the Czech Republic and Slovakia.

mBank is also planning further investment in the optimisation of corporate client processes in 2021, for example to improve cash services and the processes for handling payment transaction requests from third-party banks. It will also further optimise the mobile app for corporate clients developed in 2020 and press ahead with the automation and digitalisation of back office processes such as digital account opening for corporate clients. Advisors in the Customer Centre will be equipped to support corporate clients directly online via remote access.

Key regulatory projects such those concerning the new definition of default, the standard initial margin model (SIMM) and the Benchmarks Regulation (BMR) will be continued.

Corporate Clients

Investments in the Corporate Clients segment in 2021 will focus on the implementation of Commerzbank's strategic realignment. The aim behind the new strategy is to create a fully digitalised bank that offers personalised advisory services, maintains an unwavering customer focus and is geared to sustainability. To achieve this, the Bank will in future focus on serving corporate clients with a clear connection to Germany, along with international corporate clients who have business links with Germany or operate in selected future-oriented sectors. Investments are planned in the sales organisation and back office areas to support growth there. The programme will aim to expand the Bank's market position in Germany and with its customers in other European countries.

Commerzbank will remain a strong partner for its customers both in Germany and abroad and will continue to expand its service offering through a nuanced relationship management model. Its local presence will be structured more efficiently, for instance by bundling back office functions in regional service units and optimising the correspondent bank portfolio. Further harmonisation of European IT systems will drive the ongoing development of competitive products.

Extensive digitalisation projects will further increase the degree of digitalisation, creating additional customer care time by reducing administrative tasks in sales.

Profitability will be significantly increased, for instance by digitalising processes, optimising pricing and, in particular, making greater use of data-driven services. An innovative direct banking offering will gradually be established for corporate clients who require specific products and advisory services. The product range will be streamlined and further digitalised.

The importance of mobile applications for corporate clients is also set to increase. With this in mind, the Bank's plans for 2021 also include the rollout of additional functions to further expand the cash management app. Open Banking/API (Application Programming Interface) will also be a key area of focus. Improved communication between IT systems will ultimately enable us to work even more closely with our customers and partners.

There will also be continued development of compliance-related processes in order to actively and efficiently manage compliance risks.

IT & Operations

Commerzbank will continue the ongoing optimisation of its IT structure in 2021. There will also be further significant investment in payment transactions and securities processing. In mid-2018, Commerzbank entered into a strategic partnership in payments processing with the payment processing provider equensWorldline. Elements of the planned integration of the direct banking subsidiary comdirect will be implemented as part of the partnership with HSBC Transaction Services GmbH, which is currently being set up. Through these two IT infrastructure projects, Commerzbank is continuing to streamline its operations so that it can concentrate fully on the strategic restructuring. On the IT side, the focus is on modernising the IT architecture and putting the technological base on a more professional footing. Investments to increase automation and boost IT and operational stability are also planned.

Anticipated liquidity trends

Owing to the high excess liquidity in the market, the volume of longer-term securities repo transactions will remain restricted. The short-term repo market in high-quality securities such as government bonds, supranational bonds and covered bonds (high-quality liquid assets or HQLA) is still functioning smoothly, however, even in the face of the coronavirus pandemic, and it plays an important role in servicing the bond and cash markets.

The volume of securities has increased since the beginning of the coronavirus pandemic due to the increase in the German federal government's liquidity and financing requirements and its special funds. Following a general reduction in repo rates across all HQLA markets since March, initially due to the increased securities volume, after which they trended sideways around the ECB's deposit facility, repo rates became more expensive again towards the end of the year when – as usual – market participants became less willing to act and securities liquidity was therefore reduced. We expect demand for collateral via the repo markets to remain high due to the increase in the TLTRO volume from March 2021 and the general attractiveness of TLTROs.

The situation in the bond markets is still being influenced by the ECB's securities purchase programme and high surplus liquidity, as well as by ongoing trade conflicts and political uncertainties. This is resulting in ongoing steady demand for good-quality borrowers. With interest rates set to remain in negative territory, additional demand will come from financial investors in search of returns.

Liquidity in the secondary markets, which in this context is already significantly reduced, will thus remain low. Despite rising government debt, we expect German government bond yields to remain very low, even in the long-term segment (yields are currently negative up to over 30 years), and we anticipate persistently high demand from investors for high-quality securities. In view of this, we believe credit spreads will remain tight.

Managing opportunities at Commerzbank

The demands placed on modern, sustainable banking business and the overall framework conditions have changed markedly in the past few years. Whereas personal customer relationship management was formerly a key element of banking, these days customers expect multi-channel advisory services, digital financial offerings and individual, tailor-made products. We have responded to this in recent years through our strategic orientation: in both the Private and Small-Business Customers and Corporate Clients market segments we have gained new customers, pushed ahead with digitalisation projects and built an agile delivery organisation. However, the difficulties of the past financial year have shown that further far-reaching changes are necessary if Commerzbank is to remain profitable and efficient over the long term.

The "Strategy 2024" programme presented in February lays the foundations for this, marking the launch of a far-reaching restructuring and the comprehensive digitalisation of the Bank. The aim of the restructuring is to combine the benefits of a fully digitalised bank with personal advisory services, an unwavering customer focus and sustainability. We are aiming to significantly reduce costs and substantially increase profitability by 2024, thereby laying the foundations to consolidate Commerzbank's position as the leading bank for German SMEs (the Mittelstand) and a strong partner to some 11 million private and small-business customers. In the Corporate Clients segment, we will continue our success story with German SMEs and in future focus on serving customers with a clear connection to Germany.

Information on the planned strategic measures in the Private and Small-Business Customers and Corporate Clients segments can be found in "Objectives and strategy" on page 89 f.

We will further transform the Bank across all segments. This transformation will affect strategy, technology, competence and culture. We will actively drive digitalisation in our banking business, enabling us to offer our customers speed, security and convenience when it comes to technological applications.

For some time now we have been involved in start-ups, both directly and indirectly through our subsidiaries CommerzVentures (a venture capital fund that invests in promising fintech companies) and main incubator (a research and development unit for technologies of the future).

Speed, favourable conditions and transparency in the credit process are becoming increasingly important in this era of digital business models. This is much easier to achieve with standardised products for private customers, such as instalment loans or extensions of credit card limits, than it is with products for corporate clients, as these are more difficult to standardise.

Commerzbank works to encourage its own employees to engage in the kind of entrepreneurial thinking that distinguishes start-ups. The Digital Campus has become the engine driving the Commerzbank transformation, where we test and develop new, agile working methods and modern forms of cooperation. The cluster delivery organisation was introduced at head office for this purpose. The overarching goals of the digital strategy and the cluster delivery organisation are to modernise the IT architecture while maintaining operational stability, professionalise the technological base, expand capabilities and capacities, and develop and implement new functionality.

The topics of sustainability and ecology are now an integral element of Commerzbank's core business. In the current year alone, the Bank helped manage a significant volume of green and social bond issues for its customers, acted as joint lead manager in the issue of the German federal government's first green bond, very successfully issued its second own green bond, expanded its range of more sustainable investments with the new klimaVest mutual fund, and is now a leading provider of financing for renewable energy projects in Germany and Europe. One absolutely key area of focus is the provision of financial support for the transition to tomorrow's low-carbon economy. Since 2019, private customers have been able to take out green mortgage loans, which actively contribute to promoting energy-efficient construction, modernisation and acquisition. In addition, Commerzbank signed a climate commitment in June 2020 together with other players in the German financial sector. Since the beginning of September 2020, Commerzbank has been an official supporter of the Task Force on Climate-Related Financial Disclosures, whose recommendations provide a framework to help companies manage the impacts of climate-related risks and produce the relevant disclosures. As we continue our journey towards becoming a more sustainable bank, these measures help set out in transparent terms the risks and opportunities of climate change for our loan portfolio. We also want to help our corporate clients develop more sustainable business models.

To drive the sustainable alignment of the business model in all areas, Commerzbank has now also set up its own decision-making body to examine sustainability issues. The new Group Sustainability Board will define the Bank's strategic sustainability goals and monitor and manage concrete measures to support their implementation.

Overall, we are convinced that the rigorous implementation of the measures already initiated and those recently adopted will open up a huge window of opportunity to sustainably improve the Bank's profitability.

Anticipated performance of the Commerzbank Group

The new "Strategy 2024" programme approved in February 2021 is designed to place Commerzbank on a more efficient footing and achieve a significant and sustainable increase in the Bank's profitability over the medium-term period up to 2024 by means of a far-reaching restructuring. Profitability is being given a much higher priority than growth. At the core of the strategy is the comprehensive digitalisation of all business activities and internal processes, which, together with the combination of a high level of personalised and professional advisory expertise and maximum customer focus, is intended to strengthen the Bank's competitive position in its core markets – Germany in particular – and further expand it over the long term.

Commerzbank will build on its strengths in order to boost the return on equity, which has been unsatisfactory in recent years, to the considerably higher target of around 7% in 2024. These include the extensive portfolio of attractive relationships with both private customers and corporate clients, with strong positions in the affluent clients and SME segments, and the already high level of digital expertise in many areas of the Bank. For instance, following the integration of the subsidiary comdirect, which was merged with Commerzbank Aktiengesellschaft last autumn, its extraordinary expertise in direct banking and securities business will in future be made available to all private customers.

The Bank's solid capital position will enable it to cover the cost of restructuring measures and investments in the comprehensive modernisation of the IT infrastructure entirely from its own funds. This will pave the way for a substantial reduction of €1.4bn or around 20% in the cost base by the end of 2024, leading to a marked improvement in the cost/income ratio to 61% (2020: 81%). The first substantial steps towards the comprehensive and sustainable adjustment of the business model are planned on an ongoing basis over the rest of the year, with a particular focus on maximising the speed of implementation and constantly monitoring the progress made.

Commerzbank expects conditions for the German banking sector to remain extremely challenging during the entire 2021 forecast period. Economic forecasts are subject to increased uncertainty due to the insecurity surrounding the further course of the pandemic. As such, there may be major deviations over the course of the year in terms of assumptions made regarding customer behaviour, such as expected demand for loans or customer activity in securities business. We also anticipate that extremely low or even negative interest rates and the intense competition in the two core markets of Germany and Poland will continue to have a massive impact on earnings. Nevertheless, Commerzbank believes that it is well positioned in this difficult environment thanks to the combination of a very favourable risk profile by international standards and high estimated risk bearing potential. The consistent and effective management of all risks will therefore continue to be of paramount importance.

The extraordinarily challenging environment, which is characterised by a high degree of uncertainty, is reflected in expectations of a slight decline in operating income. This in part reflects the subdued demand for credit among corporate clients in particular. At the same time, the capital market and securities business is unlikely to be able to match the at times extraordinarily strong overall performance of the past financial year. Commerzbank expects the risk result to remain substantial, in a broad range between €–0.8bn and €–1.2bn due to the unusually high level of uncertainty.

As for total operating expenses (including compulsory contributions), which are expected to be lower year on year at €6.5bn, initial cost-saving potential is set to be realised despite the significantly higher investments required in connection with the far-reaching transformation of the business model. Overall, Commerzbank is aiming to post an operating profit again in the 2021 financial year. It is targeting a figure in the low triple-digit millions even if the risk result is towards the upper negative end of the €–0.8bn to €–1.2bn range.

Anticipated performance of individual earnings components

In terms of net interest income, the most important source of earnings, Commerzbank is aiming to largely replicate the prior-year level assuming the unfavourable negative interest rate environment persists. This forecast is based on different trends, however. With regard to the lending volume in the Corporate Clients segment, growth aspects will in future play less of a role for strategic reasons. By contrast, there will be a significantly greater focus on the long-term profitability of customer relationships and the more efficient use of capital resources. With demand for credit among corporate clients expected to be generally restrained over the year as a whole, the Bank's withdrawal from certain business segments and regions will also be accompanied by a corresponding decline in both lending and the income resulting from it. Private customer business is expected to see a marked revival in demand for loans to business and small-business customers and instalment loans in particular. The increase in lending volumes coupled with a renewed rise in income from passing on negative interest rates should largely offset the significantly lower interest income expected from deposit business. Loans from the European Central Bank, which are provided at negative interest rates, should provide material support to net interest income in the Others and Consolidation segment in the current financial year. Collection of this interest income is dependent on certain lending criteria being met, however, and this can only be measured later in the year.

Opposing trends are also expected for net commission income and are set to result in a slight net decline in this earnings figure in the current financial year. The continued buoyancy of capital market business with institutional and corporate clients in the primary and secondary markets, coupled with the stronger strategic focus on generating additional, non-capital-binding income over and above lending business, should enable fee and commission income in corporate client business to remain at the prior-year level.

We believe that the at times extraordinarily strong performance in securities business with private and small-business customers, particularly in direct banking business, will remain at a high level. A decline is expected, however, and will probably not be wholly offset by earnings gains, mainly from payment transactions, owing to a large number of new product offerings and adjusted pricing models.

With regard to net income from financial assets and liabilities measured at fair value through profit or loss, Commerzbank pursues a risk-oriented, customer-focused approach designed to achieve contributions to earnings that are as high and as stable as possible. This earnings indicator is generally subject to increased volatility due to the limited scope to assess trends on the global capital markets. Similar circumstances may also be reflected in the fair value result in one period, whereas the interest component dominates in another, resulting over time in possible shifts to net interest income, and vice versa. A portion of this income component is therefore directly related to net interest income. For the 2021 financial year, the expectation of a decline in earnings is therefore accompanied by a correspondingly more positive trend for net interest income.

Experience has shown that the other income items, including realised profit or losses on financial instruments and other net income, are often affected by one-off income and measurement effects that are generally impossible to predict. Further charges cannot be ruled out in the current financial year in respect of the provisions for legal risks in connection with mortgage loans issued in foreign currencies at mBank, whose effects are reflected under other net income.

Provided that overly long-lasting measures in connection with the coronavirus pandemic do not significantly delay the expected major economic recovery and/or materially impair its extent, the risk result should show a substantial improvement on the 2020 figure of €–1.7bn. To reflect the unusually high degree of uncertainty, we are forecasting a broad range of between €–0.8bn and €–1.2bn. The expected reduction is also based on the additional provisions of around €0.5bn recognised in the 2020 financial year on the basis of information as at the turn of the year regarding the potential impact of the coronavirus pandemic, including the second lockdown.

The first steps in the implementation of the strategic measures targeting the far-reaching restructuring of the Group, the aim of which is to significantly improve profitability over the medium term, primarily by reducing costs, should have a positive impact on operating expenses (including compulsory contributions) in the 2021 reporting year. Despite the need for extensive investment in areas such as the digitalisation of the service offering, sales channels and underlying processes and the fundamental modernisation of the IT infrastructure, the Bank expects operating costs to be reduced slightly overall to around €6.5bn.

The intention is to recognise provisions for restructuring expenses in full in the current reporting period to cover all future efficiency improvement measures relating to the “Strategy 2024” programme. This will be subject to the progress of the corresponding negotiations with employee representatives over the course of the year. Along with the existing provisions of €0.9bn, expenses in the amount of €0.9bn recognised outside the operating result will provide material long-term relief on the cost side in subsequent years.

Anticipated segment performance

Private and Small-Business Customers

In the Private and Small-Business Customers (PSBC) segment, important strategic decisions will have to be taken in Germany this year to take advantage of the opportunities presented by last year’s legal merger of Commerzbank and comdirect to the mutual benefit of the Bank and its customers. Over the coming years, the business model of a digital direct bank with particular expertise in the securities business and the business model of a branch-based full-service bank offering a broad product range and in-depth personal advisory services are to be combined to create a banking platform that is unique in the marketplace. Following the far-reaching restructuring of the sales model, all customers will be able to purchase simple banking products conveniently and resolve most service issues using digital channels, in other words via online or mobile banking.

They will also have access to personal telephone support via advisory centres that are available 24 hours a day, every day of the week. A nationwide network of 450 advisory points, which are set to replace the existing branches by the end of 2022, will in future offer straightforward banking products that customers will largely be able to purchase independently there. Small-business customers and affluent customers requiring highly complex and tailor-made banking products will receive individual solutions at 220 premium branches, which will also use the self-service infrastructure of the advisory points at the same location.

The highly scalable nature of the more cost-effective direct banking model, which is to be made available to all customers in the future, and the gradual transfer of elements of the sales process to significantly more efficient channels providing enhanced customer benefits such as round-the-clock access, offer potential for substantial cost savings. At the same time, the intended far-reaching changes to the sales model are designed to continuously increase the income generated from each customer relationship. The most significant benefits are expected to come from the drive to seamlessly link the Bank’s distribution channels. Whatever stage a customer is at in life, they should be offered the best possible banking product via the appropriate channel and at the appropriate time.

The highest earnings growth in the coming years should be achieved through services for the Bank's most discerning premium customers with sophisticated advisory needs. This should offset the impact of temporary losses of customers and income that are likely to be inevitable to some degree during the transitional phase and the restructuring of the sales model, for example as a result of branch closures.

The focus in the current financial year will be on further penetrating the existing customer base with banking products and making better use of pricing flexibility. The aim is to essentially maintain the strong position in retail mortgage financing and securities business achieved in recent years and focus increasingly on growing other areas of the business. We are anticipating significantly higher new business volumes for both instalment loans and business loans as soon as the strong dampening effect of the pandemic, which has led to a sharp rise in the savings ratio and a marked reluctance to invest, eases and is replaced by growing confidence and a greater willingness to spend. Demand for residential mortgage loans is likely to remain high. Net interest income is expected to be roughly on a par with the prior-year level overall, in other words the intended growth in the loan portfolio at almost constant margin levels should at least offset the ongoing significant pressure on interest income from deposit business.

Net commission income is expected to remain almost at the prior-year level, with income from payment transactions in particular set to increase. Basic services, which will remain free of charge under certain circumstances, will be supplemented with additional services that customers can select on a modular basis or as attractive product bundles according to their needs. In securities business, special attention will be paid to small-business and wealth management customers, who can expect personally tailored premium services. For example, earnings potential can be created by converting deposits that offer no return to the customer – and do not generate any refinancing advantages for the Bank in the current interest rate environment – into a wide range of investment products. These include klimaVest, an impact fund for private investors that was launched by the Bank's subsidiary Commerz Real in 2020 and invests primarily in sustainable real assets. Capital investments also enable customers to avoid the fees that will otherwise become increasingly unavoidable for those with high deposit balances. We believe that the intended shift towards sustainably recurring commission income will be offset by lower transaction-related commissions in securities business in the current financial year. Direct banking business in particular recorded enormously high transaction figures in the year under review that are not expected to be repeated this year. Including other less significant income items, total domestic operating income is expected to be roughly on a par with the prior-year level.

The Polish subsidiary mBank will continue its ongoing growth strategy of recent years, targeting continued growth both in lending and deposits and in commission-bearing business. Its broad range of digital banking products and user-friendly digital settlement processes mean it occupies an excellent competitive position, particularly among younger customers, that offers a high level of long-term earnings potential. Following major growth in the year under review, especially in securities business, commission income is expected to increase significantly once again. With Poland's central bank slashing interest rates to almost zero last year, however, net interest income is set to decline significantly despite the marked expansion in lending volume expected this year. Unlike in 2020, declining refinancing costs on deposits will probably not adequately compensate for the growing margin pressure on the assets side. mBank's total income is likely to be higher, assuming no further allocations have to be made to provisions for legal risks in connection with mortgage loans issued in foreign currencies.

This means that operating income for the PSBC segment as a whole is expected to at least match the prior-year level.

Extensive and accelerated investments will be required in the current financial year to implement the planned strategic measures in Germany. These include the restructuring of sales channels and the ongoing digitalisation of products and processes, in part as a means of carrying out the desired optimisation of the branch network without any noticeable adverse impact on customers. The investments expenditure will be covered by the expected positive effects of measures such as the forthcoming closure of around 200 further branches and greater synergies from the integration of comdirect, not least the elimination of duplicate spending on digitalisation. The goal is to achieve a slight reduction in domestic operating expenses, including compulsory contributions. In connection with the expected completion of the negotiations with employee representatives, the main aim of which is to reduce personnel expenses, the anticipated fall in costs should become increasingly visible as the year progresses.

Higher operating expenses are expected at mBank, even though compulsory contributions look set to fall slightly for the first time in a long while. However, this increase is expected to be significantly outweighed by the growth in operating income.

The Bank is targeting a slight reduction in operating expenses for the PSBC segment as a whole in 2021.

We remain cautious about the risk result, but are forecasting lower loan loss provisions in Germany due to the provisions that were already recognised as at the end of 2020 to account for the identifiable potential impact of the coronavirus pandemic, including the second lockdown. The slight increase in the expected risk result for mBank relates primarily to the planned growth in lending volumes.

We expect the risk result for the PSBC segment to fall slightly overall.

Based on slightly higher operating income coupled with slightly lower operating expenses and risk costs, we are therefore forecasting an improved operating result for the PSBC segment as a whole in 2021. The operating return on equity is set to increase similarly, while the cost/income ratio is expected to improve.

Corporate Clients

Comprehensive measures will be implemented in the Corporate Clients (CC) segment over the coming years to substantially improve both the cost/income ratio and the efficiency of capital employed. In future, strategic considerations will focus less on growth in highly competitive German corporate client business and more on improving the penetration and thus profitability of customer relationships and long-term earnings and return prospects in business segments and regions, right down to product level. This will be accompanied by other measures including the planned downsizing of the international network through the step-by-step closure of 15 locations, the withdrawal from sub-segments such as equities business, which is to be replaced by sales cooperations, and the streamlining and simplification of the product catalogue. Corporate clients, especially SMEs, and large international companies who have business links with Germany will continue to benefit from Commerzbank's strengths such as its acknowledged high level of expertise and strong presence in international trade corridors. The scope of support offered and the product range will in future be more nuanced according to each client's specific needs. Going forward, the Bank should be able to meet many of the demands of its corporate clients much more efficiently via the simpler and more standardised product and service offering of a digital direct bank.

Services are to be offered to the entire corporate client base on an even more needs-oriented basis, supported by the planned comprehensive digitalisation of the product range and internal processes coupled with extensive data analyses. The Bank also intends to make significantly better use of existing pricing flexibility. Over the coming years, the risk-weighted assets freed up through the conscious reduction of less profitable customer relationships will increasingly be deployed for customers offering earnings potential who use the full range of Commerzbank services and require a high level of intensive individual support.

The Bank has also taken the strategic decision to focus on companies in especially promising sectors such as sustainability (energy/environment), mobility, communications and health/pharmaceuticals, areas in which it has built up particular expertise. RWA efficiency is set to become even more important in the future as a key management metric for the implementation of strategic measures.

Customer relationships that are largely based on low-margin credit products and offer no prospect of additional income in the medium term will no longer be pursued. Over time, the risk-weighted assets saved as a result of this approach will reduce the capital employed in the CC segment or will be reallocated to customer relationships offering greater earnings potential.

The key strategic objective in the current financial year is to implement the measures planned for the CC segment as quickly as possible. The segment is therefore targeting a significant reduction in allocated capital, even though this is likely to lead to a decline in net interest income. The financing requirements of corporate clients, which are considered to be low due to the ongoing reluctance to invest, are also a factor in this, however. During the pandemic, these requirements were largely covered by promotional loans from government-related institutions. By contrast, net commission income should at least match the prior-year level due to the efforts to increasingly exploit earnings opportunities through greater penetration of the customer base with services that do not involve a significant capital commitment. The more intensive servicing of corporate clients in the defined future-oriented sectors is also expected to result in higher earnings contributions. In view of the cautious assessment with regard to income that is based on changes in fair value, operating income in the Corporate Clients segment is expected to be lower overall in 2021.

The measures due to be implemented this year to substantially increase efficiency over the medium term are intended to fully cover the expenses resulting from the strategic investments. The segment is also targeting a slight reduction in total operating costs (including compulsory contributions) in 2021, even though positive effects, particularly from the headcount reduction, will probably not be realised until the second half of the year.

The forecast of a sharp decline in the risk result is essentially based on two assumptions. A case of fraud involving a single customer resulted in a loss of €0.2bn in 2020 that should not be repeated this year. In addition, a portion of the risk result recognised in the year under review had already anticipated the potential impact of the coronavirus pandemic, including the second lockdown. If the cautious assumptions made regarding a significant economic recovery as the pandemic slowly dies down prove to be largely correct over the course of the year, we believe it is realistic to expect credit losses to be considerably lower than they were last year.

Overall, sharply falling risk costs, slightly lower operating expenses and declining income lead us to expect a still negative but improved operating result, which should also manifest in corresponding improvements in the operating return on equity and the cost/income ratio.

General statement on the outlook for the Group

Commerzbank is aiming to post an operating profit in the 2021 financial year. It is targeting a figure in the low triple-digit millions even if the risk result is towards the upper negative end of the €–0.8bn to €–1.2bn range. With a slight decline in operating income and a risk result within the range from €–0.8bn to €–1.2bn, the initial impact of the comprehensive initiatives to significantly improve the return on equity over the medium term is set to make itself felt, particularly with regard to costs. The Bank plans to recognise the provisions for the remaining cost of the restructuring measures required to implement the new strategy – around €900m – by the end of the year. This will lay the foundations for a steady annual reduction in the cost base – with a focus on personnel expenses – over the coming financial years. After deducting restructuring expenses, we are anticipating a consolidated loss for the 2021 financial year based on a risk result towards the upper negative end of the €–0.8bn to €–1.2bn range. This would also mean that both the return on equity and economic value added would be in negative territory.

Commerzbank's Common Equity Tier 1 ratio is largely based on the capital requirements resulting from the Supervisory Review and Evaluation Process (SREP) carried out by the ECB as the responsible supervisory authority, plus a buffer deemed appropriate by Commerzbank's management to cover potential stress situations.

The ECB has left the SREP capital requirements valid for the 2020 financial year unchanged for 2021, while the capital buffer for other systemically important institutions (O-SII) set by the German banking regulator as part of the SREP requirements was reduced to 1.25% in November (previously: 1.5%).

Commerzbank intends to maintain a Common Equity Tier 1 ratio of more than 12%, significantly above the regulatory requirement imposed by the ECB, for the entirety of the 2021 financial year. This target compares with the ratio of 13.2% reported as at the end of 2020, after taking the consolidated loss for the past financial year into account. The Bank therefore believes it has a sufficiently comfortable capital buffer to be able to cover the restructuring and investment expenses required for the Group's transformation entirely from its own funds. This capitalisation is also evidence of a high risk-bearing capacity should the difficult conditions continue for a longer period.

Nonetheless, there are numerous risk factors that could affect the 2021 profit forecast to a considerable, though not reliably quantifiable extent, should events take an unfavourable turn. These include, first and foremost, exceptionally high global economic risks resulting from the coronavirus pandemic, the length and extent of which cannot yet be adequately assessed. These could have a particularly significant impact on the German economy, which is tightly interwoven with international trade flows, and cause risk costs in lending business to far exceed their forecast level. The geopolitical situation remains very uncertain, with trade conflicts between the economic blocs of Europe, North America and Asia – above all China – still eminently possible.

There appear to be clear signs of overheating in some segments of the capital markets; these may manifest themselves in sudden increases in volatility and sharp value corrections. Valuation levels are extraordinarily high in some cases by historical standards on both the international bond and equity markets, anticipating an economic upturn that is not yet sufficiently certain. Central banks have become an even more important factor influencing financial stability and the outlook for the banking sector. They have become major players on the capital markets with their unconventional monetary policy measures on an enormous scale. At the same time, the banking sector is making increasing use of central bank funding to cushion the effects of the negative interest rate environment. The host of additional responsibilities could increasingly exhaust their scope to perform their main task of safeguarding monetary stability without harmful side effects.

Other risk factors include unfavourable trends in the regulatory or legal environment and a further tightening of the competitive situation in Germany. In Poland, further charges cannot be ruled out in connection with numerous lawsuits filed by private customers regarding Swiss franc real estate loans.

A fall in margins to levels that are unattractive from a risk-return perspective could constrain Commerzbank's scope for earnings over the coming years and delay and/or reduce the extent of the expected positive effects of the measures to increase profitability.

For further information on other risks, see the Group Risk Report, page 121 ff.

Group Risk Report

The Group Risk Report is a separate reporting section in the Annual Report. It forms part of the Group Management Report.

Group Risk Report

› In the Group Risk Report, we give a comprehensive presentation of the risks we are exposed to. We provide a detailed insight into the organisation and key processes of our risk management. Our primary aim is to ensure that all risks in Commerzbank are fully identified, monitored and managed based on adequate procedures at all times.

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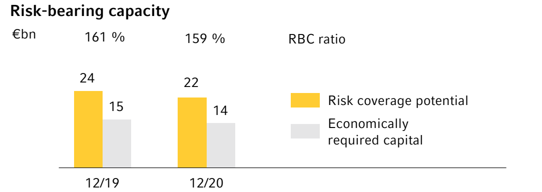
Executive summary 2020

The 2020 financial year was marked by the coronavirus pandemic. However, our sound portfolio quality and the measures taken by governments mean that the effects have so far had only a limited impact on the risk ratios. The negative economic performance expected as at the end of the year was taken into account primarily with a top-level adjustment in the risk result.

Risk-bearing capacity ratio stood at 159% as at 31 December 2020

- The risk-bearing capacity ratio remains well above the minimum requirement.
- The decrease in the risk coverage potential compared to December 2019 was mainly due to the consolidated loss for the 2020 financial year. At the same time, the write-down of goodwill included in this result led to a reduction in the risk buffer in the economically required capital.

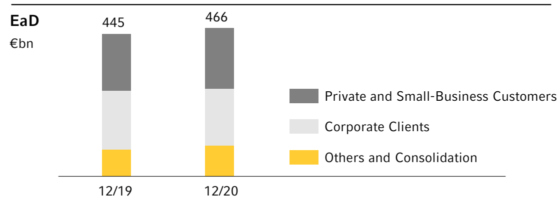
Risk-bearing capacity



The Group's exposure at default increased

- The Group's exposure at default increased from €445bn to €466bn in 2020.
- The risk density declined from 23 basis points to 21 basis points over the same period.

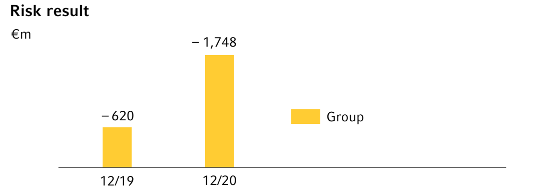
EaD



Risk result for the Group amounted to €–1,748m in 2020

- The risk result increased significantly compared with the previous year. The main reasons for this are effects of the coronavirus pandemic.
- Given the uncertainty of the further development of the pandemic we expect a risk result of between €–0.8bn and €–1.2bn for 2021.

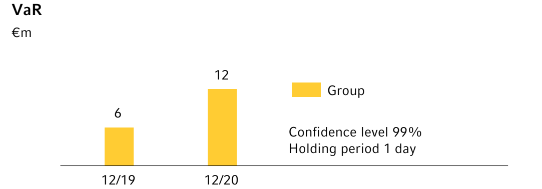
Risk result



Market risk in the trading book increased in 2020

- The value at risk (VaR) inclined from €6m to €12m over the course of 2020.
- Compared to the end of the third quarter of 2020, the VaR decreased by €3m.

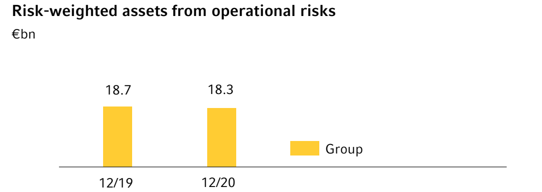
VaR



Operational risks decreased year-on-year

- In 2020 risk-weighted assets from operational risks decreased from €18.7bn to €18.3bn.
- The total charge for OpRisk events increased from €127m to €345m compared with the previous year.

Risk-weighted assets from operational risks



Risk-oriented overall bank management

Commerzbank defines risk as the danger of possible losses or profits foregone due to internal or external factors. In risk management, we normally distinguish between quantifiable and non-quantifiable types of risk. Quantifiable risks are those to which a value can normally be attached in financial statements or in regulatory capital requirements, while non-quantifiable risks include compliance and reputational risk.

Risk management organisation

Commerzbank regards risk management as a task for the whole Bank. The Chief Risk Officer (CRO) is responsible for developing and implementing the Group's risk policy guidelines for quantifiable risks, laid down by the Board of Managing Directors, as well as for measuring these risks. The CRO regularly reports to the full Board of Managing Directors and the Supervisory Board's Risk Committee on the overall risk situation within the Group.

Until 31 December 2020, the risk management organisation consisted of the following divisions: Group Credit Risk Management, Group Kredit, Group Market Risk Management, Group Risk Controlling & Capital Management and Group Cyber Risk & Information Security.

As of 1 January 2021, Commerzbank combined the divisions Group Market Risk Management and Group Risk Controlling & Capital Management to form the new Group Risk Control division. Furthermore, the Group Big Data & Advanced Analytics division was integrated into the risk management organisation.

In addition, the CRO has assumed responsibility for Group Compliance. It is Group Compliance's responsibility to establish appropriate governance, procedures and systems to avoid the Bank being unintentionally endangered as a consequence of compliance risks. Group Compliance is led by the Chief Compliance Officer.

All divisions have a direct reporting line to the CRO.

The full Board of Managing Directors has exclusive responsibility for fundamental strategic decisions. The Board of Managing Directors has delegated operative risk management to committees. Under the relevant rules of procedure, these are the Group Credit Committee, the Group Market Risk Committee, the Group OpRisk Committee, the Group Cyber Risk & Information Security Committee and the Group Strategic Risk Committee, which decides on risk issues of an overarching nature. The CRO chairs all these committees and has the right of veto. The CRO is also a member of the central Asset Liability Committee. Here the CRO also has a right of veto on certain topics (e.g. liquidity risk issues).

The tasks and competencies of the respective committees are described below:

The **Group Credit Committee** is the decision-making committee for operative credit risk management, comprising two representatives each from the back office and front office. The Group Credit Committee operates on the basis of the credit risk strategy. It takes decisions in line with the competencies delegated to it by the full Board of Managing Directors.

The **Group Market Risk Committee** monitors market risk throughout the Group and manages limit requirements in line with risk-bearing capacity. To do this, all market risks from the trading and banking book are analysed to identify risks early and for active risk management purposes. The focus here is on optimising the risk/return profile.

The **Group OpRisk Committee** (OpRiskCo) is responsible for managing operational risks within the Group and in this regard acts as the highest escalation and decision-making committee below the full Board of Managing Directors. The OpRiskCo also addresses all important regulatory issues that arise in connection with the management of operational risks and the implementation of the advanced measurement approach within the Group. In addition, it deals with standards on governance and assessing the functioning of the Internal Control System (ICS) within the Commerzbank Group. Details about the ICS can be found in the section on operational risks.

The **Cyber Risk & Information Security Committee** (CRISCo) monitors and manages cyber and information security risks in the overall interests of the Bank. In this respect, it acts as the highest decision-making and escalation committee below the full Board of Managing Directors. The CRISCo addresses all regulatory aspects relevant to cyber and information security issues and ensures appropriate risk management in this regard in accordance with internationally recognised standards.

The **Group Strategic Risk Committee** acts as the discussion and decision-making committee for all types of risk, and its main objective is to monitor and manage risks at portfolio level. This covers risk measurement, risk transparency and risk management.

The central **Asset Liability Committee** (ALCO) is the Commerzbank Group committee responsible for the Group-wide and integrated management of financial resources, namely capital, liquidity and balance sheet structure as well as net interest income, in accordance with the regulatory framework. The ALCO monitors in particular the Group's risk-bearing capacity and as such plays an important part in the Internal Capital Adequacy Assessment Process (ICAAP). The ALCO resolves the recovery plan. Resolutions of the central ALCO are presented to the full Board of Managing Directors for confirmation. In case of violation of a recovery plan indicator, the ALCO plays a central role regarding the escalation, the estimation of the situation and the introduction of measures.

Moreover, risk issues are dealt with in the Supervisory Board's Risk Committee and in other committees listed below:

The **Supervisory Board's Risk Committee** is the Bank's highest risk committee. It comprises at least 5 Supervisory Board members. The Risk Committee's tasks include monitoring the risk management system and dealing with all risks, particularly with regard to market, credit and operational risk as well as reputational risk. The Risk Committee determines the type, scope, format and frequency of the information that must be presented to the Board of Managing Directors about strategy and risk.

The **Group Risk Management Executive Committee** acts as the discussion and decision-making committee within Group Risk Management and is responsible in particular for the organisation and strategic development of risk management as well as the creation and maintenance of a uniform risk culture. It also ensures that the Group risk strategy and the resolutions of the full Board of Managing Directors are implemented in the risk function.

Compliance topics are dealt with in the **Global Compliance Board** (GCB). The GCB has been established as a forum to share updates on major compliance topics and supervisory actions regarding compliance in the Bank. Furthermore, the GCB serves as information platform for segments and functions about compliance culture, changes in compliance regulations, updates of compliance-related policies and their implications.

Risk strategy and risk management

The overall risk strategy, in line with the business strategy, governs the strategic risk focus of the Commerzbank Group. It sets the risk appetite as the maximum risk that the Bank is prepared and able to accept while following its business objectives without exposing itself to existential threats over and above the risks inherent in the business. The guiding idea is to ensure that the Group holds sufficient liquidity and capital. Based on these requirements, suitable limits are defined for the risk resources of capital and liquidity available to the Group. The overarching limits of the overall risk strategy are consistent with the indicator thresholds of the recovery plan.

Banks' core functions as transformers of liquidity and risk result in inevitable threats that can in extreme cases endanger the continued existence of the institution. For Commerzbank, in view of its business model, these inherent existential threats include the default of Germany, Poland, one or more of the other major EU countries (France, Italy, Spain or the UK, although Brexit is not deemed to be a default) or the default of the USA. Italy is an idiosyncratic special case due to the major legacy exposures to the Italian government, while in the other countries existential threats would arise from the impact of a government default on banks and companies and the repercussions for the other EU countries. Moreover, inherent threats include a deep recession lasting several years with serious repercussions for the German economy (caused, for instance, by a global pandemic or by the USA or China), a bank run and the collapse of global clearing houses or the foreign exchange markets, possibly triggered by a cyber attack. In general, cyber risk includes certain scenarios as the business environment becomes more digitalised which under certain circumstances can cause damage and could therefore be significant for Commerzbank.

As a result of the unexpected and abrupt global economic slump triggered by the outbreak of the coronavirus pandemic, the risks have increased, especially in view of Commerzbank's positioning as the leading bank for small and medium-sized enterprises in Germany.

When pursuing its business targets, the Bank accepts these existential threats. It may be necessary to adjust the business model and hence the business and risk strategies in the medium and long term if the full Board of Managing Directors' assessment of these threats to Commerzbank changes substantially. To the extent that it is able to do so, Commerzbank makes early preparations in anticipation of forthcoming changes in regulatory requirements and accounting standards. Such changes and their (retrospective) interpretation may have lasting implications for – and even threaten the survival of – Commerzbank's business model. Commerzbank accepts these regulatory risks because there are many cases where there is no option to mitigate or manage them.

The overall risk strategy covers all material risks to which Commerzbank is exposed. It is updated annually or on an ad hoc basis as required and set out in further detail in the form of sub-risk strategies for the risk types which are material. These are then specified and made operational through policies, regulations and instructions/guidelines. By means of the upstream risk inventory process, Commerzbank ensures that all risk types of relevance to the Group are identified and their materiality assessed. The assessment of the materiality of a risk is based on whether its occurrence could have a major direct or indirect impact on the Bank's risk-bearing capacity.

As part of the planning process, the Board of Managing Directors decides how much of the risk coverage potential of the Group should be utilised. On that basis, individual types of quantifiable risk contributing to the capital requirements are limited in a second stage. A capital framework is allocated to the management-relevant units through the planning process. Compliance with limits and guidelines is monitored during the year, and management measures are put in place where required. In addition, further qualitative and quantitative early warning indicators are established in the overall risk strategy. Potential negative developments can be identified at an early stage with the help of these indicators.

One of the primary tasks of risk management is the avoidance of risk concentrations. These can arise from the synchronous movement of risk positions both within a single risk type (intra-risk concentrations) and across different risk types (inter-risk concentrations). The latter result from common risk drivers or from interactions between different risk drivers of different risk types.

By establishing adequate risk management and controlling processes, Commerzbank provides for the identification, assessment, management, monitoring and communication of material risks and related risk concentrations. This ensures that all Commerzbank-specific risk concentrations are taken into account in its risk management. Stress tests are regularly used to ensure transparency regarding risk concentrations. The structure of the scenarios and the integrated approach ensure that the impact of adverse scenarios on portfolio priorities and risk concentrations are examined in a targeted manner. Management is regularly informed about the results of the analyses so that the potential risk of losses can be avoided in good time.

The Group Risk & Capital Monitor is the monthly risk report, designed for management purposes, on capital, credit risk, market risk, liquidity risk and OpRisk topics within Commerzbank risk management. It shows all the above risk types, including economic and regulatory risk-bearing capacity, for the Commerzbank Group. The report's aims include providing the full Board of Managing Directors and the Supervisory Board's Risk Committee with transparent and comprehensive information, highlighting important developments from a risk perspective and setting management measures. The report is also used in particular to monitor limits and guidelines within the overall risk strategy. Responsibility for approving the overall risk strategy and the Group Risk & Capital Monitor lies with the full Board of Managing Directors.

Commerzbank has adopted a code of conduct that defines binding minimum standards for Commerzbank's corporate responsibility, its dealings with customers, business partners and colleagues, and its day-to-day business. It goes without saying that the Bank complies with relevant laws, regulatory requirements, industry standards and internal rules, and this therefore forms a particularly important part of its risk culture. It actively requires employees to behave appropriately, courageously, with integrity and in compliance with rules, and any failure to comply with rules is penalised. Expanded procedures ensure that misconduct is evaluated in a uniform and fair manner, strengthening consequence management on a long-term basis.

The main pillar of the Bank's overall risk management and culture is the concept of three lines of defence, which is a core element of the Corporate Charter. Under the three lines of defence principle, protecting against undesirable risks is an activity that is not restricted to the risk function. Each unit (segment or function) forms the first line of defence within its area of operational responsibility and is directly responsible for identifying and managing risks within it while complying with the prescribed risk standards and policies. For example, the front office forms the first line of defence in all business decisions and has to take risk aspects into account in reaching them. The second line of defence for each type of risk lays down standards for appropriate management of risks of that type, monitors this and ensures the application of such standards, and analyses and evaluates the risks. The risk function forms the second line of defence against credit and market risks associated with business decisions. Particularly for credit risk, this includes involvement in the credit decision process by means of a second vote. Units outside the risk function (e.g. Group Compliance and Group Finance) also operate as the second line of defence for certain risk types. The third line of defence is Internal Audit.

Risk ratios

Commerzbank uses a comprehensive system of ratios and procedures for measuring, managing and limiting various types of risk. The most important of these are listed below:

Economically required capital is the amount, corresponding to a high confidence level (currently 99.90% at Commerzbank), that will cover unexpected losses arising from risk positions.

The **risk-bearing capacity ratio (RBC ratio)** indicates the excess coverage of the economically required capital by the risk coverage potential. Risk-bearing capacity is deemed to be assured as long as the RBC ratio is higher than 100%.

Exposure at default (EaD) is the expected exposure amount taking into account a potential (partial) drawing of open lines and contingent liabilities that will adversely affect risk-bearing capacity in the event of default. EaD is hereinafter also referred to as "exposure".

Expected loss (EL) measures the potential loss on a loan portfolio that can be expected within one year on the basis of historical loss data.

Risk density is the ratio of expected loss to exposure at default and thus represents the relative risk content of an exposure or a portfolio.

Value at risk (VaR) is a methodology for quantifying risk. It involves setting a holding period (such as one day) and a confidence level (such as 97.5%). The VaR value then denotes the relevant loss threshold that will not be exceeded within the holding period with a probability in line with the confidence level.

Credit value at risk (CVaR) is the economic capital requirement for credit risk with a confidence level of 99.90%. The term results from the application of the value at risk concept to credit risk measurement. Credit VaR is an estimate of the amount by which losses from credit risks could potentially exceed the expected loss within a single year, i.e. unexpected loss. The idea behind this approach is that expected loss simply represents the long-term average of lending losses, but this may vary (positively or negatively) from actual credit losses for the current financial year.

In relation to bulk risk, the **"all-in" concept** comprises all customer credit lines approved by the Bank in their full amount – irrespective of the loan utilisation to date. It is independent of statistically modelled parameters to the greatest possible extent and comprises internal as well as external credit lines.

Risk-bearing capacity and stress testing

Risk-bearing capacity analysis is a key part of overall bank management and Commerzbank's ICAAP. The purpose is to ensure that sufficient capital is held at all times. The risk-bearing capacity concept is reviewed and optimised annually.

When determining the economically required capital, allowance is made for potential unexpected fluctuations in value. Where such fluctuations exceed forecasts, they must be covered by the available economic capital to absorb unexpected losses (risk coverage potential). Only the economic value of equity components that absorb losses in the going concern approach is taken into account in determining the economic risk coverage potential.

The capital requirement for the risks taken is quantified using the internal economic capital model. All risk types of the Commerzbank Group classified as significant and quantifiable within the annual risk inventory are taken into account when determining the economically required capital. The economic risk approach therefore also comprises risk types that are not included in the regulatory requirements for banks' capital adequacy. The model also reflects diversification effects incorporating all types of risk. The confidence level for the calculation of economically required capital is 99.90% and is harmonised with the going concern approach. The quantifiable significant risks in the economic capital model are divided into default risk, market risk, operational risk and (not separately disclosed in the table on the next page) business risk and property value change risk. Business risk is the risk of a potential loss resulting from deviations in actual income and expense from the respective budgeted figures. Business risk is used to substantiate a higher-level management buffer that ensures the responsiveness of capital management. Physical asset risk is the risk of an unexpected fall in the value of owned property which is either already recognised as an asset in the Group's balance sheet or which can be recognised during the next 12 months under contractually assured obligations with option character (especially real estate). In the 2020 risk inventory, the reserve risk was again classified as material. Allowance is made for this risk by means of a corresponding risk buffer when considering risk-bearing capacity. The results of the risk-bearing capacity analysis are shown using the risk-bearing capacity ratio (RBC ratio), indicating the excess of the risk coverage potential in relation to the economically required capital.

Risk-bearing capacity is monitored and managed monthly at Group level. Risk-bearing capacity is deemed to be assured as long as the RBC ratio is higher than 100%. In 2020, the RBC ratio was consistently above 100% and stood at 159% as at 31 December 2020. The decrease in the risk coverage potential compared to December 2019 was mainly due to the consolidated loss for the 2020 financial year. At the same time, the write-down of goodwill included in this result led to a reduction in the risk buffer in the economic capital. The RBC ratio is still well above the minimum requirement.

Risk-bearing capacity Group | €bn	31.12.2020	31.12.2019
Economic risk coverage potential	**22**	**24**
Economically required capital[1]	**14**	**15**
thereof for default risk	10	10
thereof for market risk[2]	4	4
thereof for operational risk	1	1
thereof diversification effects	–2	–2
RBC ratio (%)[3]	**159**	**161**

[1] Including physical asset risk, risk of unlisted investments and the risk buffer for reserve risk and for the quantification of potential fluctuations in value of goodwill and intangibles. As a result of the write-down of goodwill, the corresponding risk buffer no longer applies as at 31 December 2020.
[2] Including deposit model risk.
[3] RBC ratio = economic risk coverage potential/economically required capital (including risk buffer).

Commerzbank uses macroeconomic stress tests to review the risk-bearing capacity in the event of assumed adverse changes in the economic environment. The underlying scenarios take into account the interdependence of the development of the real economy and the financial economy. They are updated quarterly and approved by the ALCO. The scenarios describe an extraordinary but plausible adverse development in the economy, focusing in particular on portfolio priorities (e.g. export-based sectors in Germany) and business strategies of relevance to Commerzbank. Current adverse developments (e.g. the coronavirus pandemic) are also taken into account when creating the scenarios. Stress tests in the economic perspective cover a time horizon of 12 months. The scenario simulation is run quarterly at Group level using the input parameters of the economic capital requirements calculation for all material and quantifiable risk types. In addition to the capital required, the income statement is also subjected to a stress test based on the macroeconomic scenarios. Based on this, changes in the risk coverage potential are simulated. Whereas the RBC ratio is embedded into Commerzbank's limit system, guidelines for risk-bearing capacity are set as an early warning system in the stressed environment. The ongoing monitoring of the limits and guidelines is a key part of internal reporting. Defined escalations are triggered if the limits are breached.

The risk-bearing capacity and stress testing concept is subject to an annual internal review and is refined on an ongoing basis. The development of the regulatory environment is also taken into account. In addition to the regular stress tests, reverse stress tests are implemented annually at Group level. Unlike regular stress testing, the result of the simulation – a sustained threat to the Bank – is determined in advance. The aim of the analysis process in the reverse stress test is to improve the transparency of Bank-specific risk potential and interactions of risk by identifying and assessing extreme scenarios and events. On this basis, for instance, action fields in risk management including the regular stress tests can be identified and taken into account in the ongoing development efforts.

In 2020, the risk-weighted assets resulting from Commerzbank's business activities decreased from €182bn to €179bn.

The table below gives an overview of the distribution of risk-weighted assets, broken down by segment and risk type:

	31.12.2020				31.12.2019			
Risk-weighted assets €bn	**Default risk**	**Market risk**	**Operational risk**	**Total**	**Default risk**	**Market risk**	**Operational risk**	**Total**
Private and Small-Business Customers	40	1	6	47	41	1	5	47
Corporate Clients	75	8	7	90	83	5	8	96
Others and Consolidation	33	3	5	41	29	5	5	39
Group	**148**	**12**	**18**	**179**	**152**	**11**	**19**	**182**

The coronavirus pandemic has plunged the world economy into the deepest recession since the end of World War II.

In the eurozone, the coronavirus restrictions, which were tightened from autumn 2020, have once again plunged the economy into recession. In Germany, the economy will probably even shrink significantly again in the first quarter of 2021, although the decline is unlikely to be anywhere near as severe as in spring 2020.

Provided that the coronavirus pandemic does not worsen further, we anticipate that restrictions will be lifted at least gradually by the end of March at the latest.

Further information on the effects of the coronavirus pandemic can be found in the economic report and in the outlook and opportunities report in the Group Management Report.

Regulatory environment

With Basel 3, the Basel Committee on Banking Supervision published among other things comprehensive rules on the components of equity and equity ratios as well as the management of liquidity risk. The Capital Requirements Directive and Regulation, constituting the European implementation of Basel 3, has been in force since 1 January 2014, with the more stringent capital requirements being phased in up to 2019. Numerous supplementary regulations have since been published by the European Banking Authority (EBA) in particular, and these will now gradually enter into force; this will continue in subsequent years. Commerzbank has mitigated the more stringent capital adequacy requirements by taking a number of steps.

In addition, under Basel 3 the leverage ratio has been introduced as a new and non-risk-sensitive debt ratio. Commerzbank has set its own leverage ratio targets and applies them in its capital management process.

The phasing in of capital buffers is a significant feature of the Basel 3 revision, which has now been completed. The capital conservation buffer, the buffer for other systemically relevant institutions and the countercyclical capital buffer, which the Federal Financial Supervisory Authority (BaFin) has set at 0% for German exposures for 2020, have applied since 1 January 2016. The buffer for other systemically relevant institutions was reduced by BaFin for Commerzbank from 1.5% to 1.25% from December 2020.

Liquidity risk is to be monitored by means of the liquidity coverage ratio (LCR) and the net stable funding ratio (NSFR). The LCR entered into force on 1 October 2015 and is binding on all European banks. The final version of the NSFR, which was approved by the Basel Committee in October 2014, was transposed into European law as part of the Capital Requirements Regulation II (CRR II) and will become binding from June 2021. Commerzbank is already calculating both ratios as part of its regulatory reporting processes, communicating them in its internal reporting and reporting them to the supervisory authority.

The CRR II was published together with the Capital Requirements Directive (CRD V) as part of the Risk Reduction Package in the Official Journal of the European Union on 7 June 2019. As a European directive, CRD V requires transposition into national law within 18 months. The legislation implements, among other things, the Basel Committee's requirements on leverage ratio, net stable funding ratio, provisions on trading book and large exposures, and the treatment of investment funds. While some provisions are already directly effective, large parts of the provisions did not finally enter into force until 2020 or will become binding at a later date. In addition, numerous specifications have yet to be made by the EBA.

The CRR relief enacted by the EU in 2020 in the wake of the coronavirus pandemic ("CRR Quick Fix"), such as the early relief for risk positions with small and medium-sized enterprises, was implemented accordingly by Commerzbank.

The ECB, in its capacity as the supervisory authority for the eurozone banks directly supervised by it, conducted the annual Supervisory Review and Evaluation Process (SREP). Due to the coronavirus pandemic, the ECB adopted a pragmatic approach to SREP for SSM banks in 2020. Consequently, the 2019 SREP decision remains valid for Commerzbank, including the capital and liquidity requirements set out therein. As part of SREP 2020, the ECB sent Commerzbank only an "operational letter", as was generally intended for all SSM banks, setting out the key supervisory issues.

A key aim of the ECB project is to harmonise RWA-relevant models for market, counterparty and credit risk that fall within the scope of the Single Supervisory Mechanism (SSM). In particular, the scope for interpretation permitted by the regulations or arising due to differences in national application is to be significantly reduced in future. The relevant guides include rules that are to be enacted in future and wide-ranging independent interpretations. In addition to a thematic inclusion of the “General Topics”, reviews of the counterparty risk, the internal market risk model and the retail, mortgage lending, SME, large corporates and bank portfolios were carried out between 2017 and 2019. Commerzbank has received the final ECB decisions for market and counterparty risk. Draft decisions have been received for the other portfolios, and we expect the final decisions in 2021.

The EU Bank Recovery and Resolution Directive has been in force since mid-2014. Responsibility for the drafting of resolution plans and the resolution of at-risk banks supervised by the ECB was transferred to the Single Resolution Board (SRB) in Brussels with effect from 1 January 2016. At the same time, eurozone banks started to fund the Single Resolution Fund. The SRB defines the formal minimum requirement for own funds and eligible liabilities (MREL) for the banks under its responsibility on a consolidated and individual basis.

The legal basis for setting MREL and TLAC was revised at European level and published on 7 June 2019 as part of the Risk Reduction Package in the form of the Single Resolution Mechanism Regulation (SRMR II), the Bank Recovery and Resolution Directive II (BRRD II) and the CRR II. The BRRD II as a European directive requires implementation into national law within 18 months. The amendments included, among other things, adjustments to the calculation logic and, for certain banks, a statutory subordination requirement for parts of MREL. Most of the new provisions came into force in December 2020.

The Group-wide recovery plan was updated in 2020 to reflect the regulatory requirements. The recovery plan describes in detail for instance the courses of action and recovery potential available to the Bank in the event of a crisis and which specific recovery measures, in various stress scenarios, will enable the Bank to complete its recovery.

Commerzbank operates in markets subject to national and supranational regulation. In addition, it is subject to the overarching requirements imposed by accounting standards. Changes in regulatory requirements and accounting standards have significantly grown in frequency and materiality in recent years. They may have lasting implications for the financial industry in general and Commerzbank’s business model in particular. Commerzbank continues to participate actively and at an early stage in the consultation processes aimed at preparing for the constant changes in the operating environment. It also monitors and evaluates current developments as regards future regulatory projects. Specific examples of these at global level are the final standards for revising capital requirements for market risk now published by the Basel Committee on Banking Supervision, and the revision of the framework for operational risk and credit risk, including the associated floor rules and disclosure requirements (“Basel 4”). At European level, Commerzbank is monitoring among other things the implementation of Basel 4 as well as European Commission initiatives to introduce a European deposit insurance scheme and establish a capital markets union.

The regulatory environment also remains challenging with regard to compliance risks. The focus here remains unchanged on the subject areas of anti-money laundering (including implementtation of the 5th and 6th EU Anti-Money Laundering Directive) and sanctions. In addition, anti-bribery and corruption (including the United Kingdom Bribery Act, the United States Foreign Corrupt Practices Act) and market compliance (amongst others US regulations, such as the Dodd-Frank Act, CFTC Regulations) are putting further risk types into the regulatory focus.

Default risk

Default risk is defined as the risk of losses sustained or profits foregone due to the default of a counterparty. It is a quantifiable material risk and includes the sub-risk types of credit default risk, issuer risk, counterparty risk, country and transfer risk, dilution risk and reserve risk.

Strategy and organisation

The credit risk strategy is the sub-risk strategy for default risks and is derived from the overall risk strategy. It is embedded in the ICAAP process of the Commerzbank Group and forms a link between the Bank's overall risk management across all risk types and the operationalisation of default risk management. The overriding aim is to ensure the adequate quality of the credit portfolio. To this end, the credit risk strategy defines the credit risk tolerance, specifies risk strategy priorities, provides an overview of the material credit risk management concepts and thereby plays an integral part in maintaining the Group's risk-bearing capacity. The credit risk strategy makes use of quantitative and qualitative management tools that give decision-makers clear guidance on both portfolio management and decisions in specific cases.

Credit risk management is a joint task of the front office and the risk function, based on a standardised Group-wide credit risk culture. Impeccable moral and ethical conduct in compliance with the law and regulations is a key element of a culture of integrity and core to the credit risk culture. Default risks are assessed against uniform standards, regardless of segment limits. In line with the three lines of defence principle, the front office is the first line of defence and must take risk aspects into account when taking business decisions. The risk function (back office and Risk Controlling) is the second line of defence, its fundamental task being to manage, limit and monitor risks. The third line of defence is Internal Audit. It is tasked with independently auditing the Bank's processes and safeguards, and as such also assesses the activities of the first and second lines of defence.

The Group Credit Committee is the highest decision-making committee for operative credit risk management, comprising two representatives each from the back office and front office. It takes decisions in line with the competencies delegated to it by the full Board of Managing Directors and is responsible for managing all credit risks. In so doing, the Group Credit Committee operates on the basis of the valid credit risk strategy. Reporting to the Group Credit Committee are sub-credit committees, which operate on the basis of their respective rules of procedure and within the competencies approved by the full Board of Managing Directors. They comprise at least two representatives from the segments and two representatives from Group Risk Management. The sub-credit committees are responsible for managing all credit risks in the sub-portfolios within their respective remit and are entitled, in turn, to sub-delegate certain credit decisions within their prescribed competencies.

Discrete back-office areas are responsible for operational credit risk management at portfolio level and on a case-by-case basis. The responsibilities are separated between the performing loan area on the one hand and Intensive Care on the other. All credit decisions in the performing loan area are risk/return decisions. The front and back office take joint responsibility for risk and return from an exposure, with the front office having primary responsibility for the return, and the back office for the risk. Accordingly, neither office can be overruled in its primary responsibility in the credit decision process.

Higher-risk customers are handled by specialist Intensive Care areas. The customers are moved to these areas as soon as they meet defined criteria for assignment or mandatory transfer. The principal reasons for assignment to Intensive Care areas are criteria relating to number of days overdrawn, together with event-related criteria such as rating, third-party enforcement measures or credit fraud. The Intensive Care function decides on further action based on the circumstances of individual cases. Customers must be transferred to Intensive Care if they are in default (for example due to insolvency). This graduated approach ensures that higher-risk customers can continue to be managed promptly by specialists in a manner appropriate to the risks involved and in defined standardised processes.

Risk management

Commerzbank manages default risk using a comprehensive risk management system. The management framework comprises an organisational structure, methods and models, quantitative and qualitative management tools and regulations and processes. The risk management system ensures that the entire portfolio and the sub-portfolios, right down to individual exposure level, are managed consistently and thoroughly on a top-down basis.

The ratios and measures required for the operational process of risk management are based on the overarching Group objectives. The principle of maintaining a low-risk profile in all business decisions is closely combined here with the risk function's aim of providing the front office with appropriate support. It prefers business and products with low complexity and pays attention to the responsiveness of credit lines and exposures.

Quantitative credit risk strategy guidelines limit risks with regard to poorer credit ratings and exposures with high loss-at-default contributions (concentration management) and for selected sub-portfolios with a high risk weight or regulatory importance, and, as applicable, for individual products with a high portfolio share. Detailed arrangements for operationalising the guidelines for selected sub-portfolios are set out in separate portfolio policies. In addition, qualitative management guidelines in the form of credit policies define the target business of the Bank. At the level of individual transactions, they regulate the transaction type for which the available risk resources are to be used. These credit policies are firmly embedded in the credit process: transactions which do not meet the requirements are escalated through a fixed competence regulation.

Group-wide guiding principles are based on risk-oriented analyses of trends (e.g. of the development of weaker credit ratings over time) combined with an assessment of external framework conditions and internal rules. Risk-oriented analyses on key dates (e.g. rating profile of individual asset classes) are used in particular to derive portfolio guiding principles. Trend analyses of product-specific risk drivers are key factors for determining product guiding principles (e.g. loan-to-value of mortgage lending). In contrast, credit and portfolio policies are primarily produced through a multi-level coordination process involving the product and portfolio managers from the front and back offices, combined with an assessment of internal and external information sources.

To monitor compliance with credit risk strategic rules, continuous monitoring and reporting has also been set up at whole Group level and at segment or sub-portfolio level. Asset quality reviews by the risk function make an important contribution here to quality assurance and early risk detection. The key aspects of monitoring vary according to the subject matter and target audience, and ad-hoc reporting processes are in place. In addition, crisis events may pose a risk to the Bank's capital and liquidity adequacy and thereby to its risk-bearing capacity. In a crisis, the Risk Mitigation Task Force will manage decisions flexibly in a coordinated, Group-wide process. For example, in the context of the current pandemic the Task Force Corona (TFC) was established at the beginning of 2020 in order to identify effects on the Group portfolio as quickly as possible and to be able to take countermeasures. As part of the process, emergency action plans ensure that risk-mitigation measures are implemented quickly and efficiently.

The avoidance of risk concentrations is a core strategy of risk management. Risk concentrations are actively managed in order to identify at an early stage and contain the increased potential for loss from the synchronous movement of risk positions. In addition to exposure-related credit risk concentrations (bulk risks), default risk also includes country and sector concentrations. Segment-specific features are taken into account here.

Management and the Supervisory Board's Risk Committee are regularly informed about the results of the analyses.

Overview of management instruments and levels

Level	Risk strategies and policies	Limit and guideline systems	Portfolio monitoring and reporting	Structures of organisation and committees
Group	Overall risk strategy plus sub-risk strategies for significant risk types Establishment of a general risk understanding and creation of a uniform risk culture	Definition of Group limits (across all risk types) for capital and liquidity management Additional definition of guidelines as key points of the aspired target portfolio	Group Risk & Capital Monitor plus risk type specific Group formats (including flash reporting) Uniform, consolidated data repository as basis for Group reporting	Ensuring exchange of information and networking in committees that operate across all risk types Retaining qualified staff in line with progressive product innovation or regulatory adjustments
Sub-portfolios	Clear formulation of risk policy in guidelines (portfolios, asset classes, etc.) Differenciated credit authorities based on compliance of transactions with the Bank's risk policy	Performance metrics on level of risk categories and sub-portfolios Expansion of Group-wide performance metrics using sub-portfolio-specific indicators	Portfolio batches as per established portfolio calendar* Asset quality review and analysis of High Attention Parts (HAP) Trigger monitoring with clear escalation and reporting lines	Interdisciplinary composition of segment committees Ensuring uniform economic opinions
Individual exposures	Rating-dependent and bulk-sensitive credit authority regulations with clear escalation processes	Limitation of bulk risk and uniform management according to model-independent all-in definition	Limit monitoring at individual exposure level Monthly report to the Board of Managing Directors on the development of bulk risks Review of individual customers/exposures resulting from asset quality review or HAP analyses	Deal team structures Institutionalized exchange within the risk function, also taking account of economic developments Sector-wise organization of domestic corporate business

* The portfolio batches were replaced in 2020 by comprehensive reports to the Supervisory Board's Risk Committee on the effects of the coronavirus pandemic on the credit portfolio.

When the coronavirus pandemic began, the Task Force Corona was established as part of crisis management under the leadership of the Chief Credit Risk Officer. Regular meetings ensure that there is agreement on the effects of the crisis across the different divisions, and the full Board of Managing Directors is informed of the results and decisions. The existing reporting set-up was expanded through the implementation of comprehensive coronavirus reporting, which was further developed over time into target-oriented weekly key figure reporting for the portfolio segments, supplemented by ad hoc reports and analyses on critical sectors, reports on the development of loan deferrals and special reporting of early warning indicators. Exchange formats with the supervisory authorities were established on a regular basis. For example, there are weekly meetings with the Joint Supervisory Team (JST) to answer specific questions, fortnightly meetings between the JST and CFO/CRO, and quarterly JST meetings with senior management. Workshops were also held with regulators to clarify specific issues.

Management of economic capital commitment

Economic capital commitment is managed in order to ensure that the Commerzbank Group holds sufficient capital. To this end, all relevant risk types in the overall risk strategy for economic risk capital are given limits on a Group-wide basis, with, in particular, a CVaR limit being specified. Due to the systematically restricted options for reducing default risk on a short-term basis, it is important to take account of expected trends (medium-term and long-term) in order to manage credit risk. For this reason, forecast values of credit risk parameters play a key role in ongoing management. At segment and business area level, changes to forecasts are monitored and adjustments made when necessary. There is no cascaded capital limit concept for credit risk below Group level.

Rating classification

The Commerzbank rating method comprises 25 rating classes for customers not in default (1.0 to 5.8) and 5 default classes (6.1 to 6.5). The Commerzbank master scale allocates precisely one rating class, stable over time, to each probability of default. The rating methods are validated annually and recalibrated where necessary so that they reflect the latest assessment based on all actual observed defaults. However, this is possible and expedient amid a pandemic only to a limited extent, which is why the associated negative developments will become apparent only with a time lag in the coming months.

The probability of default ranges assigned to the ratings are the same for all portfolios. This ensures internal comparability consistent with the master scale method. For guidance and indicative purposes, the Commerzbank master scale also shows external ratings as well as credit quality steps in accordance with Article 136 CRR. However, a direct reconciliation is not possible, because external ratings of different portfolios show fluctuating default rates from year to year.

The credit approval authorities of both individual staff and the committees (full Board of Managing Directors, Credit Committee, sub-credit committees) are graduated by a range of factors including size of exposure and rating class.

Commerzbank master scale

Commerzbank AG rating	PD and EL mid-point %	PD and EL range %	S&P scale		Credit quality steps in accordance with Article 136 CRR[1]	
1.0	0	0	AAA	AAA	I	Investment Grade
1.2	0.01	0 – 0.02				
1.4	0.02	0.02 – 0.03	AA+	AA		
1.6	0.04	0.03 – 0.05	AA, AA–			
1.8	0.07	0.05 – 0.08	A+, A	A	II	
2.0	0.11	0.08 – 0.13	A–			
2.2	0.17	0.13 – 0.21	BBB+	BBB	III	
2.4	0.26	0.21 – 0.31	BBB			
2.6	0.39	0.31 – 0.47				
2.8	0.57	0.47 – 0.68	BBB–			
3.0	0.81	0.68 – 0.96	BB+	BB	IV	Sub-investment grade
3.2	1.14	0.96 – 1.34	BB			
3.4	1.56	1.34 – 1.81				
3.6	2.10	1.81 – 2.40	BB–			
3.8	2.74	2.40 – 3.10				
4.0	3.50	3.10 – 3.90	B+	B	V	Non-investment grade
4.2	4.35	3.90 – 4.86	B			
4.4	5.42	4.86 – 6.04				
4.6	6.74	6.04 – 7.52				
4.8	8.39	7.52 – 9.35	B–			
5.0	10.43	9.35 – 11.64				
5.2	12.98	11.64 – 14.48	CCC+	CCC	VI	
5.4	16.15	14.48 – 18.01	CCC, CCC–			
5.6	20.09	18.01 – 22.41	CC, C	CC, C		
5.8	47.34	22.41 – 99.99				
6.1	100	> 90 days past due	D			Default
6.2		Imminent insolvency				
6.3		Restructuring with recapitalisation				
6.4		Termination without insolvency				
6.5		Insolvency				

[1] CRR = Capital Requirements Regulation (EU) No 575/2013.

Risk mitigation

The collateral taken into account in risk management changed in the period under review from €114.1bn to €121.2bn for positions in the Group's performing portfolio and from €1.0bn to €1.2bn for positions in the default portfolio.

Commerzbank mitigates credit risk through various measures including collateral and netting procedures.

Types of collateral include in particular land charges, financial collateral, guarantees, indemnities, credit derivatives, life insurance policies, other registered liens and other physical collateral.

There have been no visible effects of the coronavirus pandemic on the market values of typical loan collateral (especially real estate) to date; with the exception of aircraft, no further portfolio-based haircuts have been factored in.

The Bank takes account of credit risk mitigation effects from the acceptance of recognisable warranties (guarantees, comparable claims on third parties) by using the guarantor's risk parameters (PD and LGD) and/or, in the case of the CRSA, the regulatory risk weightings.

As at the reporting date, no loan loss provisions were created for transactions with a total volume of €6.0bn (31 December 2019: €5.5bn), as these are entirely collateralised.

Where eligible from a regulatory point of view, guarantors are subject to a creditworthiness check and rating assignment based on their sector and business as part of the assessment of their declaration of liability. The aim of the creditworthiness check is to establish the guarantor's creditworthiness and maximum solvency.

The quality of the collateralisation is rigorously checked in line with regulatory requirements and monitored on an ongoing basis. This includes in particular checks on legal enforceability and regular measurement of the collateral, carried out at appropriate intervals depending on the type of collateral, at least annually or on an event-driven basis. Positive correlations between the debtor's creditworthiness and the value of the collateral or guarantee are defined in the credit and collateral processing process; collateral instruments affected are not counted. Collateral processing is performed outside the front office.

The Bank analyses all credit collateral (physical and personal collateral) for evidence of collateral concentrations. The analysis includes checks on various dimensions such as collateral categories, the borrower's rating classes or regional allocations of collateral. The full Board of Managing Directors receives regular information in respect of the above dimensions about changes in the collateral pool and possible issues/concentrations.

The measurement and processing of collateral is governed by generally applicable standards and collateral-specific instructions (guidelines, process descriptions, IT instructions). Collateral agreements are legally reviewed; standard agreements and templates are used where possible. The standards established to hedge or mitigate credit risk include:

- Legal and operational standards for documentation and data collection and measurement standards.
- Standards to ensure the uniformity and timeliness of collateral measurement through the definition of measurement processes, uniform measurement methods, parameters and defined collateral discounts, clear definition of competences and responsibility for the processing and measurement process, and regular remeasurement frequencies.
- Other standards to take account of specific risks such as operational risk, correlation and concentration risk, market price change risk (e.g. due to currency fluctuations), country risk, legal and legal change risk and the risk of inadequate insurance coverage.

Commerzbank Group

Commerzbank focuses its business on two customer segments, Private and Small-Business Customers and Corporate Clients. In the fourth quarter of 2020, Commerzbank successfully completed the full acquisition of comdirect bank Aktiengesellschaft. On 2 November 2020, the merger was entered in the commercial register of Commerzbank and thus became effective.

The coronavirus pandemic has plunged the world economy into the deepest recession since the end of World War II.

In the eurozone, the coronavirus restrictions, which were tightened from autumn 2020, have once again plunged the economy into recession. In Germany, the economy will probably even shrink significantly again in the first quarter of 2021, although the decline is unlikely to be anywhere near as severe as in spring 2020.

The negative economic development expected at the end of the year has been taken into account in the risk result, primarily by means of a top-level adjustment as well as adjustments of models. For the most part, this negative trend is not yet perceptible in the remaining risk figures, as it will only become noticeable here with a time lag over the course of the following months.

Since the outbreak of the coronavirus pandemic, governments and institutions have been intervening on an unprecedented scale, providing liquidity, support and assistance programmes. In the fourth quarter of 2020, there was only moderate customer demand for KfW loans – a large proportion of the initial enquiries in the corporate sector have not yet been drawn upon. The vast majority of deferrals were terminated on schedule in the third quarter of 2020, with approximately 97% of deferral customers resuming payments without disruption. So far, only limited effects of the second lockdown have been observed.

Credit risk parameters

The credit risk parameters in the Commerzbank Group are distributed in the rating classes 1.0 to 5.8 over the segments as follows:

	31.12.2020				31.12.2019			
Credit risk parameters	**Exposure at default** €bn	**Expected loss** €m	**Risk density** bp	**CVaR** €m	**Exposure at default** €bn	**Expected loss** €m	**Risk density** bp	**CVaR** €m
Private and Small-Business Customers	190	401	21	2,025	178	425	24	2,207
Corporate Clients	180	430	24	4,647	184	473	26	4,607
Others and Consolidation[1]	96	141	15	2,721	83	120	14	3,003
Group	**466**	**971**	**21**	**9,393**	**445**	**1,017**	**23**	**9,817**

[1] Mainly liquidity portfolios of Treasury and, since 1 July 2019, the remaining portfolios of the dissolved ACR segment.

For the most part of the risk figures, this negative economic development due to the coronavirus pandemic is not yet perceptible, as it will only become noticeable here with a time lag over the course of the following months. When broken down on the basis of PD ratings, 85% of the Group's portfolio is in the internal rating classes 1 and 2, which comprise investment grade.

	31.12.2020					31.12.2019				
Rating breakdown EaD | %	**1.0-1.8**	**2.0-2.8**	**3.0-3.8**	**4.0-4.8**	**5.0-5.8**	**1.0-1.8**	**2.0-2.8**	**3.0-3.8**	**4.0-4.8**	**5.0-5.8**
Private and Small-Business Customers	32	52	13	3	1	31	51	14	3	1
Corporate Clients	20	59	16	4	2	20	60	16	3	2
Others and Consolidation	56	41	3	0	0	51	46	3	1	0
Group	**32**	**53**	**12**	**2**	**1**	**30**	**54**	**13**	**2**	**1**

The Group's country risk assessment covers both transfer risks and event risks driven by political and economic events which impact on the individual economic entities of a country. Country risks are managed on the basis of transfer risk limits defined at country level. Country exposures which are significant for Commerzbank due to their size are handled by the Credit Committee on a separate basis.

The regional breakdown of the exposure corresponds to the Bank's strategic direction and reflects the main areas of its global business activities.

	31.12.2020			31.12.2019		
Group portfolio by region	**Exposure at default** €bn	**Expected loss** €m	**Risk density** bp	**Exposure at default** €bn	**Expected loss** €m	**Risk density** bp
Germany	248	415	17	235	526	22
Western Europe	102	238	23	90	191	21
Central and Eastern Europe	51	207	41	49	207	42
North America	33	46	14	34	32	9
Asia	24	34	15	27	32	12
Other	10	31	31	10	29	29
Group	**466**	**971**	**21**	**445**	**1,017**	**23**

More than half of the Bank's exposure relates to Germany, another third to other countries in Europe, 7% to North America and 5% to Asia. The rest is broadly diversified and is split among a large number of countries where we serve German exporters in particular or where Commerzbank has a local presence. The expected loss of the Group portfolio is mainly divided between Germany and the other European countries.

Risk result

The risk result relating to the Group's lending business in 2020 amounted to €–1,748m (prior-year period: €–620m).

The following table shows the breakdown of the risk result by stage according to IFRS 9. In Note (32) of the Group financial statements (credit risks and credit losses) details regarding the stages can be found; in Note (11) (risk result) the definition of the risk result can be found.

Any fluctuations in the market values of fair value loans are not recognised in the risk result. They are recognised in the net income from financial assets and liabilities measured at fair value through profit or loss.

	2020				2019			
Risk result | €m	**Stage 1**	**Stage 2**[1]	**Stage 3**[1]	**Total**	**Stage 1**	**Stage 2**[1]	**Stage 3**[1]	**Total**
Private and Small-Business Customers	−9	−183	−369	−562	−21	−9	−224	−254
Corporate Clients	−35	−355	−690	−1,081	20	38	−400	−342
Asset & Capital Recovery	–	–	–	–	0	2	−25	−24
Others and Consolidation	−6	5	−106	−106	−6	57	−52	0
Group	**−50**	**−533**	**−1,165**	**−1,748**	**−6**	**88**	**−701**	**−620**

[1] Including allocated risk result from POCI (POCI – purchased or originated credit-impaired).

The risk result increased significantly compared with the previous year. The main reasons for this are effects of the coronavirus pandemic totalling €–961m (of which €–505m are in the form of a top-level adjustment, hereinafter referred to as a "TLA") and the default of a large exposure in the Corporate Clients segment in the second quarter of 2020.

Against the background of the coronavirus pandemic, Commerzbank included a TLA in the risk result as at 31 December 2020. The amount of €–170m already included during the year was subject to a review at this reporting date. The portion of the TLA amounting to €–23m which was recognised in the third quarter because of the necessary adjustment to point-in-time parameters was no longer necessary in the fourth quarter. The parameters underlying this amount were implemented and are included in the model result from the standard process. In the risk result, the release of the partial TLA is therefore offset by corresponding charges. The assumptions regarding increased probabilities of default compared with the model result were updated to take account of developments as at the reporting date. In particular, the impact of the new comprehensive lockdown measures, which became necessary due to the high number of infections at the turn of the year, was taken into account. In addition, a further increase in point-in-time parameters was included. Overall, compared with the third quarter (after reversal of the partial amount of €23m for the PiT factors implemented in the fourth quarter), this resulted in a TLA increase of €–359m, of which €–10m resulted from the parameter adjustment of the PiT factors in the fourth quarter. The addition is mainly attributable to the Corporate Clients segment. The new TLA for the Group amounts to €–505m. The necessity and adequacy of the TLA will be reviewed again at the next reporting date. In this context, materially important considerations will be the extent to which the ratings-based model result reflects the expected effects in the meantime, or whether expectations have changed as a result of current developments (for details on the adjustment, see also Note 32 of the Group financial statements (Credit risks and credit losses)).

Further drivers of the risk result in the reporting period are addressed in the following explanatory notes on the segments.

Key assumptions in our estimate of the impact of the crisis on default probabilities were the assumption that the lockdown measures in Europe, and in Germany in particular, would be eased at least progressively by the end of March at the latest, so that there would be an economic recovery in the spring.

Given the uncertainty of the further development of the pandemic we expect a risk result of between €–0.8bn and €–1.2bn for 2021.

Default portfolio

The Group's default portfolio increased by €1,060m in 2020 and stood at €4,795m as at the end of the year. The increase compared to the previous year is mainly due to the default of relatively large individual counterparties as well as subsequent effects from the application of the new default definition.

The following breakdown of the default portfolio shows the claims in the default portfolio in the amortised cost and fair value OCI (other comprehensive income) categories. The loans are assigned almost exclusively to the amortised cost category, of which by far the greatest share of €4.6bn (31 December 2019: €3.5bn) relates to the loans and receivables class and €211m (31 December 2019: €187m) to off-balance sheet transactions. As at 31 December 2020 there were no defaulted securities assigned to the securitised debt instruments class (31 December 2019: €–m fair value OCI category). The collateral shown shall be liable to the full extent for loans in the amortised cost category, with €1,136m (31 December 2019: €940m) relating to loans and receivables and €31m (31 December 2019: €27m) to off-balance sheet transactions.

The default portfolio of loans in the fair value OCI category amounts to €4m (31 December 2019: €1m).

	31.12.2020			31.12.2019		
Default portfolio Group | €m	**Loans**	**Securities**	**Total**	**Loans**	**Securities**	**Total**
Default portfolio	4,792	3	4,795	3,735	0	3,735
LLP[1]	2,272	0	2,272	1,745	0	1,745
Coverage ratio excluding collateral (%)[2]	47	–	47	47	–	47
Collateral	1,168	0	1,168	968	0	968
Coverage ratio including collateral (%)[2]	72	–	72	73	–	73
NPE ratio (%)[3]			1.0			0.9

[1] Loan loss provisions.
[2] Coverage ratio: LLP (and collateral) as a proportion of the default portfolio.
[3] NPE ratio: default portfolio (non-performing exposures – NPE) as a proportion of total exposures (EaD including NPE) according to EBA Risk Dashboard.

Commerzbank uses the definition in Article 178 CRR as the criterion for default. The EBA guidelines on the application of the definition of default referred to in Article 178 of Regulation (EU) No 575/2013 are taken into account (except mBank). The default portfolio is divided into the following 5 classes based on the nature of the default:

- Rating class 6.1: Over 90 days past due.
- Rating classes 6.2/6.3: Unlikely-to-pay, or the Bank is assisting in financial rescue or distressed restructuring at the customer by making concessions.
- Rating classes 6.4/6.5: The Bank recalls the loan and the customer has become insolvent respectively.

The table below shows the breakdown of the default portfolio based on the 5 rating classes:

	31.12.2020				31.12.2019			
Group rating classification | €m	**6.1**	**6.2/6.3**	**6.4/6.5**	**Total**	**6.1**	**6.2/6.3**	**6.4/6.5**	**Total**
Default portfolio	759	1,924	2,112	4,795	522	1,312	1,901	3,735
LLP	350	691	1,231	2,272	252	476	1,016	1,745
Collateral	333	416	419	1,168	214	353	401	968
Coverage ratio including collateral (%)	90	58	78	72	89	63	75	73

Overdrafts in the performing loan book
In order to avoid an increase in the default portfolio, overdrafts are closely monitored at Commerzbank. In addition to the 90 days-past-due trigger event, IT-based management of overdrafts starts on the first day the account is overdrawn. The table below shows overdrafts outside the default portfolio based on the exposure at default as at the end of December 2020. The changes may also be due to short-term overdrafts:

	31.12.2020					31.12.2019				
EaD €m	**> 0 ≤ 30 days**	**> 30 ≤ 60 days**	**> 60 ≤ 90 days**	**> 90 days**	**Total**	**> 0 ≤ 30 days**	**> 30 ≤ 60 days**	**> 60 ≤ 90 days**	**> 90 days**	**Total**
Private and Small-Business Customers	834	82	27	11	954	1,040	169	51	2	1,262
Corporate Clients	1,823	19	19	42	1,903	3,946	182	0	0	4,128
Group[1]	**2,657**	**101**	**46**	**53**	**2,857**	**4,986**	**351**	**51**	**2**	**5,390**

[1] Including Others and Consolidation.

Private and Small-Business Customers segment

The Private and Small-Business Customers segment (PSBC) comprises the activities of Private Customers, Small-Business Customers, comdirect and Commerz Real. mBank is also shown in the Private and Small-Business Customers segment. Private Customers includes Commerzbank's branch business in Germany for private customers as well as Wealth Management. Small-Business Customers comprises business customers and small corporate customers.

The focus of the portfolio is on traditional owner-occupied home financing and the financing of real estate capital investments (residential mortgage loans and investment properties with a total EaD of €95bn). We provide our business and small-business customers with credit in the form of individual loans with a volume of €25bn. In addition, we meet our customers' day-to-day demand for credit with consumer loans (overdrafts, instalment loans and credit cards, to a total of €16bn). The portfolio's expansion in the last 12 months was largely due to residential mortgage loans.

Compared with December 2019, the risk density of the portfolio decreased by 3 basis points to 21 basis points. There is currently no sign of increased risk in the portfolio. The increased risk for the Small-Business Customers sub-portfolio is not yet reflected in the portfolio performance at present, as the ratings are partly lagging the effects of the crisis. We have taken this into account in the risk result by posting a TLA (for details, see Note 32 (Credit risks and credit losses)).

	31.12.2020			31.12.2019		
Credit risk parameters	**Exposure at default** €bn	**Expected loss** €m	**Risk density** bp	**Exposure at default** €bn	**Expected loss** €m	**Risk density** bp
Private Customers	114	149	13	104	159	15
Small-Business Customers	34	60	18	31	73	23
comdirect	2	8	44	3	7	23
Commerz Real	0	0	16	1	2	43
mBank	41	184	45	39	183	47
PSBC	**190**	**401**	**21**	**178**	**425**	**24**

The risk result in the Private and Small-Business Customers segment was €–562m in the 2020 financial year (previous year: €–254m). The increase is largely due to effects from the coronavirus pandemic, which totalled €–273m in the reporting period (of which €–73m for mBank). €–129m of the higher negative impact on the Commerzbank portfolio year-on-year resulted primarily from the addition to the TLA (of which €–44m in the fourth quarter), which is almost entirely attributable to the Small-Business Customers portfolio. In addition, increases in point-in-time parameters, which were also induced by the pandemic, as well as changed macroeconomic expectations had a negative impact.

mBank's loan loss provisions, likewise influenced by the effects of the coronavirus pandemic, are at €–276m, significantly above the previous year's figure of €–168m.

Another reason for the year-on-year increase in loan loss provisions was the new definition of default that has been applied at Commerzbank since the end of November 2019. Partly due to the three-month probation period, this leads to an increase in the default portfolio with corresponding risk provisioning. In addition, the risk result for 2019 included a reversal of €10m of loan loss provisions at Commerz Real, as well as higher recoveries on receivables already written off.

The default portfolio in the segment stood at €2,041m as at the reporting date (31 December 2019: €1,795m). The increase compared with year-end 2019 is due to a rise of €99m in the mBank default portfolio and effects arising from the application of the new definition of default.

	31.12.2020			31.12.2019		
Default portfolio PSBC | €m	**Loans**	**Securities**	**Total**	**Loans**	**Securities**	**Total**
Default portfolio	2,041	0	2,041	1,795	0	1,795
LLP	969	0	969	895	0	895
Coverage ratio excluding collateral (%)	47	–	47	50	–	50
Collateral	727	0	727	575	0	575
Coverage ratio including collateral (%)	83	–	83	82	–	82

Corporate Clients segment

The Corporate Clients segment (CC) comprises the Group's activities with mid-size corporate clients, the public sector, institutional customers and multinational corporates. The segment is also responsible for the Group's relationships with banks and financial institutions in Germany and abroad, as well as with central banks. The regional focus of our activities is on Germany and Western Europe. The Group's customer-oriented capital markets activities are also bundled in this segment.

	31.12.2020			31.12.2019		
Credit risk parameters	**Exposure at default** €bn	**Expected loss** €m	**Risk density** bp	**Exposure at default** €bn	**Expected loss** €m	**Risk density** bp
Mittelstand	80	189	24	79	257	33
International Corporates	64	155	24	68	112	16
Financial Institutions	20	57	28	20	54	27
Other	16	29	18	17	49	29
CC	**180**	**430**	**24**	**184**	**473**	**26**

The EaD of the Corporate Clients segment decreased from €184bn to €180bn compared with 31 December of the previous year. Risk density decreased from 26 basis points to 24 basis points.

For details of developments in the Financial Institutions portfolio, please see page 142f.

The risk result for the Corporate Clients segment in the 2020 financial year was €–1,081m (previous year: €–342m). The segment was considerably impacted by the effects of the coronavirus pandemic totalling €–635m. These result on the one hand from the recognition of the TLA attributable to the segment in the amount of €–373m, of which €–313m was added in the fourth quarter with an effect on income. The requirement for a significant adjustment to the TLA resulted primarily from the new assumptions for industries/sub-portfolios for which direct effects are expected from the second lockdown. Relevant examples are tourism/hotels and retail. Other coronavirus effects impacted relatively large individual counterparties where the effects of the crisis were the main reason for default or which required an increase in existing risk provisions. The segment's risk result was also weighed down by the default of a large individual exposure in the second quarter.

The default portfolio in the segment stood at €2,334m as at the end of the year (31 December 2019: €1,707m). The increase compared to the previous year was mainly due to defaults on larger exposures, especially in the second quarter.

	31.12.2020			31.12.2019		
Default portfolio CC | €m	**Loans**	**Securities**	**Total**	**Loans**	**Securities**	**Total**
Default portfolio	2,331	3	2,334	1,707	0	1,707
LLP	1,106	0	1,106	755	0	755
Coverage ratio excluding collateral (%)	47	–	47	44	–	44
Collateral	402	0	402	306	0	306
Coverage ratio including collateral (%)	65	–	65	62	–	62

The risk result in the Others and Consolidation segment was €–106m in the 2020 financial year (previous year: €–24m) after assignment of the Asset & Capital Recovery segment. The driver of the increase versus the previous year was the coronavirus-related negative performance of a portfolio exposure, which required an increase in the existing risk provisions, as well as another significant individual case. The TLA for the segment was €–3m, of which €–1m was added in the fourth quarter with an effect on income.

Further portfolio analyses

The analyses below are independent of the existing segment allocation. The positions shown are already contained in full in the Group and segment presentations above.

Corporates portfolio by sector

Overall, the German industrial sectors are affected differently by the coronavirus pandemic and the fundamental structural challenges that are independent of it.

For example, there are sectors that are affected by the crisis, but which are otherwise facing only minor structural challenges, such as the construction sector. Other industries, on the other hand, already faced structural challenges before the pandemic began: stationary retail, the automotive industry and the metal industry, for example. The German metal industry was already grappling ahead of the coronavirus pandemic with the price increase of up to 25% as a result of punitive tariffs imposed by the US government, for example, and was also partially affected by the slump in the demand sectors that are relevant to it. However, there are also sectors that are only exposed to a limited extent to the effects of both economic structural change and the coronavirus pandemic. These include, among others, the information and communications industry as well as sectors that are essential for basic services for the population (e.g. energy, water and waste management). The sectors particularly affected by the pandemic include the bricks-and-mortar retail trade, the catering and events industry, the hotel industry, tourism and airlines.

A breakdown of the corporates exposure by sector is shown below.

	31.12.2020			31.12.2019		
Corporates portfolio by sector	**Exposure at default** €bn	**Expected loss** €m	**Risk density** bp	**Exposure at default** €bn	**Expected loss** €m	**Risk density** bp
Energy supply/Waste management	22	73	33	21	82	40
Consumption	15	51	34	15	49	34
Technology/Electrical industry	14	35	25	15	31	21
Transport/Tourism	12	56	45	12	37	31
Wholesale	12	43	35	14	47	35
Basic materials/Metals	10	28	27	11	46	41
Services/Media	10	34	34	10	28	27
Automotive	10	39	41	10	38	39
Chemicals/Plastics	9	23	26	9	46	49
Mechanical engineering	8	31	37	9	26	29
Construction	6	17	31	6	16	28
Pharma/Healthcare	5	22	41	5	9	20
Other	6	7	11	7	14	21
Total	**141**	**460**	**33**	**142**	**470**	**33**

Financial Institutions portfolio

Our network of correspondent banks continued to focus on trade finance activities on behalf of our corporate customers and on capital market activities. In derivatives, we enter into trades with selected counterparties under the European Market Infrastructure Regulation (EMIR) standards.

We continue to keep a close watch on the impact of regulatory requirements on banks. In this context, we continue to pursue our strategy of holding as few exposures as possible which might absorb losses in the event of a bail-in of an affected institution.

We are keeping a close eye on developments in various countries affected by specific issues such as recessions, embargoes and economic uncertainty caused by political events (e.g. trade wars) and are responding with flexible portfolio management that is tailored to the individual situation of each country. This applies in particular to the upheaval resulting from the coronavirus pandemic and oil price developments, which will have a major impact on the operating environment of our correspondent banks in both industrialised and developing countries. Overall, our risk appetite is geared to keeping the portfolio as responsive as possible.

	31.12.2020			31.12.2019		
FI portfolio by region	**Exposure at default** €bn	**Expected loss** €m	**Risk density** bp	**Exposure at default** €bn	**Expected loss** €m	**Risk density** bp
Germany	6	7	11	6	4	7
Western Europe	16	13	8	15	11	8
Central and Eastern Europe	2	12	60	3	15	55
North America	3	1	2	2	0	2
Asia	7	22	32	9	19	22
Other	5	18	37	5	19	38
Total	**39**	**72**	**18**	**40**	**70**	**18**

Non-Bank Financial Institutions portfolio

The Non-Bank Financial Institutions (NBFI) portfolio mainly comprises insurance companies, asset managers, regulated funds and central counterparties. Business activities are focused on Germany, Western Europe, the United States and Asia.

Commerzbank conducts new business with NBFIs partly in consideration of regulatory requirements (clearing via central counterparties) and partly in the interests of our institutional customers, with a focus on attractive opportunities with customers with good credit ratings and valuable security. We manage our portfolios with the aim of ensuring their high quality and responsiveness. We are keeping a close eye on risks stemming from global events and are responding with flexible portfolio management that is tailored to the individual situation. The main focus at present is the upheaval caused by the coronavirus pandemic, which is having an impact on the operating environment of NBFI customers. We currently expect knock-on effects from this, but these should be manageable for the affected parties, especially in light of the aid packages being implemented by the government to support the real economy, despite the considerable challenges.

	31.12.2020			31.12.2019		
NBFI portfolio by region	**Exposure at default** €bn	**Expected loss** €m	**Risk density** bp	**Exposure at default** €bn	**Expected loss** €m	**Risk density** bp
Germany	17	18	10	18	38	21
Western Europe	12	23	19	12	23	20
Central and Eastern Europe	2	12	53	2	19	100
North America	9	11	11	9	12	13
Asia	2	2	12	2	2	13
Other	1	4	55	1	2	23
Total	**44**	**71**	**16**	**43**	**96**	**22**

Originator positions

Commerzbank has in recent years securitised receivables from loans to the Bank's customers with a current volume of €12.3bn for capital management purposes (31 December 2019: €5.4bn).

As at the reporting date 31 December 2020, risk exposures with a value of €10.2bn were retained (31 December 2019: €5.0bn). By far the largest share of all positions was accounted for by €10.0bn (31 December 2019: €4.8bn) on senior tranches, which are almost entirely rated good to very good.

In the fourth quarter Commerzbank issued the two transactions CoCo Finance III-4 with a volume of €1.9bn and CoCo Finance II-3 with a volume of €6.0bn. The securitised assets are receivables from European, mainly German, companies.

We do not see any impacts from the coronavirus pandemic on risk positions in the reporting period of 2020.

		Commerzbank volume[1]			
Securitisation pool | €bn	**Maturity**	**Senior**	**Mezzanine**	**First loss piece**	**Total volume[1]**
Corporates	2025 – 2036	10.0	< 0.1	0.2	12.3
Total 31.12.2020		**10.0**	**< 0.1**	**0.2**	**12.3**
Total 31.12.2019		4.8	< 0.1	0.2	5.4

[1] Tranches/retentions (nominal): banking and trading book.

Conduit exposure and other asset-backed exposures

The Bank provides financing to securitise receivables, in particular trade and leasing receivables, from customers in the Corporate Clients segment. In this context, Commerzbank acts mainly as an arranger of asset-backed securities transactions via the Commerzbank-sponsored multi-seller conduit Silver Tower. The volume and risk values for the securitisation of receivables in the Corporate Clients segment rose by €0.1bn to €3.6bn in 2020.

Liquidity risk subsumes the risk that Commerzbank will be unable to meet its payment obligations on a day-to-day basis. Liquidity risks from securitisations are modelled in the internal liquidity risk model on a risk-adjusted basis. In the case of transactions subject to variable utilisation, it is assumed that the purchase facilities provided to the special-purpose companies must be refinanced almost in full by Commerzbank for the duration of their term and until the maturity of the last financed receivable. Securitisations only qualify as liquid assets if they are eligible for rediscount at the European Central Bank. These positions are only included in the liquidity risk calculation after risk-adjusted discounts are applied.

The other asset-backed exposures mainly comprise government-guaranteed asset-backed securities (ABS) held by Commerzbank Finance & Covered Bond S.A. and Commerzbank AG in Germany. Over the course of 2020 the volume rose to €4.4bn (December 2019: €4.2bn), as did the risk values[1] at €4.4bn (December 2019: €4.2bn).

There are also investments in the Structured Credit area. The volume of new investments entered into since 2014 stood at €5.9bn (December 2019: €4.9bn). We have invested in bonds of senior tranches of securitisation transactions in the consumer (auto) ABS, UK RMBS and CLO asset classes, which have a robust structure and a moderate risk profile. At 31 December 2020 this portfolio solely contained AAA-rated CLO positions (also the case at the end of 2019). Remaining structured credit positions with a volume of €0.3bn were already in the portfolio prior to 2014 (December 2019: €0.7bn), while risk values stood at €0.2bn (December 2019: €0.3bn).

Forbearance portfolio

The EBA's definition of forbearance comprises two requirements, which have to be met concurrently: the debtor is in financial difficulties and the measures of the bank to help the debtor include concessions to the debtor that the bank would not have agreed to under different circumstances. Examples of concessions include deferrals, increases in limits or loans and waivers in connection with restructuring. The definition of forbearance applies independently of whether the debtor is in the performing or the non-performing portfolio.

The following tables show Commerzbank's total forbearance portfolio on the basis of the EBA definition as well as the loan loss provisions for these positions:

	31.12.2020			31.12.2019		
Forbearance portfolio by segment	**Forborne exposure** €m	**LLP** €m	**LLP coverage ratio** %	**Forborne exposure** €m	**LLP** €m	**LLP coverage ratio** %
Private and Small-Business Customers	1,091	201	18	1,007	198	20
Corporate Clients	2,215	377	17	1,556	178	11
Others and Consolidation	298	156	53	176	78	45
Group	**3,604**	**735**	**20**	**2,739**	**454**	**17**

[1] Risk value is the balance sheet value of cash instruments. For long CDS positions, it comprises the nominal value of the reference instrument less the net present value of the credit derivative.

The forbearance portfolio by region is as follows:

	31.12.2020			31.12.2019		
Forbearance portfolio by region	**Forborne exposure** €m	**LLP** €m	**LLP coverage ratio** %	**Forborne exposure** €m	**LLP** €m	**LLP coverage ratio** %
Germany	1,912	376	20	1,587	189	12
Western Europe	745	48	6	218	6	3
Central and Eastern Europe	866	301	35	873	257	29
North America	2	0	1	6	0	2
Asia	3	2	47	6	2	26
Other	76	9	12	48	1	1
Group	**3,604**	**735**	**20**	**2,739**	**454**	**17**

In April last year, the EBA established a relief regime in relation to public and private payment moratoria in the context of the coronavirus pandemic. These payment moratoria do not trigger the classification as forbearance or distressed restructuring if the measures taken are based on applicable national law or on an industry-wide private initiative agreed and widely applied by the credit institutions involved.

Commerzbank also granted its customers corresponding moratoria in the second and third quarters of 2020 with terms of three to six months. The vast majority of borrowers resumed payment of their instalments on time after the end of the deferral period.

The increase in forbearance exposure in 2020 of around €850m took place almost exclusively in the fourth quarter of 2020 and was mainly driven by relatively large individual cases.

In addition to the LLP of €735m (31 December 2019: €454m), the risks in the forbearance portfolio are covered by collateral totalling €1,032m (31 December 2019: €816m).

Market risk

Market risk is the risk of potential financial losses due to changes in market prices (interest rates, commodities, credit spreads, exchange rates and equity prices) or in parameters that affect prices such as volatilities and correlations. Losses may impact profit or loss directly, e.g. in the case of trading book positions. However, for banking book positions they are generally reflected in the revaluation reserve or in hidden liabilities/reserves.

Strategy and organisation

Commerzbank's market risk strategy is derived from its overall risk strategy and the business strategies of the individual segments. It sets targets for market risk management in relation to Commerzbank's main business activities. The core market risk management tasks are the identification of all material market risks and drivers of market risk and the independent measurement and evaluation of these. The results and estimates serve as the basis for risk/return-oriented management.

The Board of Managing Directors of Commerzbank is responsible for ensuring the effective management of market risk throughout the Commerzbank Group. Specific levels of authority and responsibility in relation to market risk management have been assigned to the appropriate market risk committees.

Various market risk committees have been established within the Bank. In these, segment representatives, along with representatives from the risk function and finance area, discuss current risk positioning issues and decide on appropriate action. Chaired by the risk function, the Group Market Risk Committee, which meets monthly, deals with the Commerzbank Group's market risk position. Discussions centre on the monthly market risk report, which is also presented to the Board of Managing Directors for their consideration. The report summarises the latest developments on financial markets, the Bank's positioning and related risk ratios. The Segment Market Risk Committee focuses on the Corporate Clients segment and the Group Treasury division.

The risk management process involves the identification, measurement, management and monitoring of risks and reporting on them. It is the responsibility in functional terms of market risk management, which is independent of trading activities. Central market risk management is complemented by decentralised market risk management units at segment level and for regional units and subsidiaries. The close integration of central and local risk management with the business units means that the risk management process starts in the trading areas themselves. The trading units are responsible in particular for the active management of market risk positions, e.g. reduction measures or hedging.

Risk management

Commerzbank uses a wide range of quantitative and qualitative tools to manage and monitor market risk. Quantitative limits for sensitivities, value at risk, stress tests, scenario analyses and ratios on economic capital limit the market risk. Our comprehensive rulebook, in the form of market risk policies and guidelines as well as restrictions on portfolio structure, new products, maturities and minimum ratings, establishes the qualitative framework for market risk management. The market risk strategy lays down the weighting of figures in each segment by reference to their relevance. Thereby allowance is made for the varying impact of the parameters for the management of the segments in line with the business strategy.

Market risk is managed internally at Group level, segment level and in each segment's reporting units. A comprehensive internal limit system broken down to portfolio level is implemented and forms a core part of internal market risk management.

The quantitative and qualitative factors limiting market risk are determined by the market risk committees by reference to the Group's management of economic capital. The utilisation of these limits, together with the relevant net income figures, is reported daily to the Board of Managing Directors and the responsible heads of the Group divisions. Based on qualitative analyses and quantitative ratios, the market risk function identifies potential future risks, anticipates potential financial losses in collaboration with the finance function, and draws up proposals for further action, which are discussed with the front office units. Voting on the proposed measures or risk positions takes place in the above-mentioned market risk committees and is subsequently submitted to the Board of Managing Directors for approval.

Risk concentrations are restricted directly using specific limits or are indirectly avoided, for example, using stress test limits. In addition, the combination of various conventional risk measures (e.g. VaR, sensitivities) ensures the appropriate management of concentration risks. Furthermore, risk drivers are analysed on a regular basis in order to identify concentrations. The risk management of existing concentrations is also reviewed using situation-driven analyses and, where necessary, supplemented by targeted measures such as limits.

Any limits that are breached are handled in a separate escalation procedure. After a limit breach has been identified, the front office and risk units design adequate countermeasures. If the limit breach cannot be remedied within a reasonable period, it will be escalated by the market risk function to the next hierarchical level.

Regulatory risk measures that are not included in economic risk-bearing capacity are limited and managed separately. These include, for example, stressed VaR and incremental risk charge.

In internal management, all positions relevant to market risk are covered, and trading and banking book positions are jointly managed. In addition, for regulatory purposes the trading book is managed separately (in accordance with regulatory requirements, including currency and commodity risks in the banking book) and interest rate risks in the banking book are managed on a stand-alone basis. In order to provide a consistent presentation in this report, all figures relating to VaR are based on a confidence level of 99%, a holding period of one day, equally weighted market data and a 254-day history.

The change in the figures in 2020 was driven by the exceptionally sharp market movements in the context of the coronavirus pandemic and its economic impact. Due to a changed management approach at group level, the Group opts not to present a VaR for the overall book as this would not be comparable with the information in the previous reports. Essentially, risks from the pension funds and risks from unlisted equity investments were included in the current analysis at group level. Previously, the VaR values of these two portfolios were considered separately for internal risk management purposes.

Trading book

Below, we show how the regulatory market risk ratios of the trading book portfolio developed. Most of Commerzbank's trading book positions derive from the Corporate Clients segment and Group Treasury division. The VaR figures comprise all risks in the internal VaR model. Commerzbank subsidiaries use standardised approaches for their regulatory capital calculation under partial use rules. These figures are not contained in the VaR figures shown in this report.

The VaR rose from €6m to €12m in 2020. This was due to the sharp market movements caused by the coronavirus pandemic, which led to new extreme scenarios in the VaR calculation. Compared to the end of the third quarter of 2020, the VaR decreased by €3m.

VaR of portfolios in the trading book | €m	2020	2019
Minimum	5	4
Mean	13	7
Maximum	31	11
VaR at end of reporting period	**12**	**6**

The market risk profile is diversified across all asset classes.

VaR contribution by risk type in the trading book | €m	31.12.2020	31.12.2019
Credit spreads	2	1
Interest rates	4	1
Equities	0	1
FX	4	2
Commodities	3	1
Total	**12**	**6**

Further risk ratios are calculated for regulatory capital adequacy. This includes the calculation of stressed VaR. Stressed VaR is calculated using the internal model on the basis of the VaR method described above. The main difference lies in the market data used to value the assets. Stressed VaR measures the risk in the present position in the trading book by reference to market movements from a specified crisis period in the past. The crisis observation period used for this is checked regularly through model validation and approval processes and adjusted where necessary. The crisis observation period remained the same during the year. Stressed VaR rose from €26m at end-2019 to €28m at end-2020. This was due to changes in positions in the Corporate Clients segment and Treasury.

The market risk profile in stressed VaR is also diversified across all asset classes. The decrease in equity price risk resulted from the sale of the equity business. The increase in the asset classes interest rates and commodities resulted from position changes. The sharp market movements in the context of the coronavirus pandemic had only a minor impact on stressed VaR compared to the VaR, as stressed VaR is calculated on the basis of market data from a historical crisis period.

Stressed VaR contribution by risk type in the trading book | €m	31.12.2020	31.12.2019
Credit spreads	3	5
Interest rates	8	5
Equities	1	5
FX	7	5
Commodities	9	5
Total	**28**	**26**

In addition, the incremental risk charge and the equity event VaR figures quantify the risk of deterioration in creditworthiness and event risks in trading book positions. The incremental risk charge rose by €6m to €20m in the course of 2020. The decline is mainly attributable to changes in positions in the Corporate Clients segment.

The reliability of the internal model (historical simulation) is monitored in various ways, including backtesting, on a daily basis. The VaR calculated is set against actually occurring profits and losses. The VaR used in backtesting is based on the complete historical simulation and therefore represents all components of the internal model used in the market risk VaR calculation of capital adequacy requirements at Group level. The process draws a distinction between "clean P&L" and "dirty P&L" backtesting. In the former, exactly the same positions in the income statement are used as were used for calculating the VaR. This means that the profits and losses result only from changes in market prices (hypothetical changes in the portfolio value). In dirty P&L backtesting, by contrast, profits and losses from newly concluded and expired transactions from the day under consideration are also included (actual profits and losses induced by portfolio value changes). Profits and losses from valuation adjustments and model reserves are factored into dirty and clean P&L according to the regulatory requirements.

If the actual loss exceeds the VaR, it is described as a negative backtesting outlier. The analysis of the backtesting results is used to evaluate the appropriateness of the market risk model and provides evidence for the review of parameters and for potential improvements. In fiscal year 2020, three negative clean P&L outliers and two negative dirty P&L outliers were measured. The outliers are all related to exceptionally strong market movements in response to the coronavirus crisis, which obviously could not be predicted by historically calibrated VaR models. The market movements that caused the P&L observed on these days exceeded the historical fluctuation range in the one-year period on which the historical simulation was based. The outliers were caused by various factors, such as widening credit spreads, cross-currency basis spreads and fluctuations in interest rates, equity and currency prices, as well as widening future-forward basis spreads for precious metals.

Checks were carried out to verify that none of the observed backtesting outliers were caused by model weaknesses. Backtesting is also generally used by the supervisory authorities for evaluating internal risk models. Negative outliers are classified using a traffic light approach prescribed by the supervisory authorities and can lead to add-on factors in the capital calculation. All negative backtesting outliers at Group level (from both clean P&L and dirty P&L) must be reported to the supervisory authorities, citing their extent and cause.

As the described excesses were not due to deficiencies in the internal model, Commerzbank received permission to exclude the above-mentioned coronavirus-related three clean P&L and two dirty P&L outliers from March 2020 from the calculation of the add-on factor. The capital charge of Commerzbank is currently not affected by this and it is identical whether or not the backtesting outliers are excluded.

As the VaR concept gives a prediction of potential losses assuming normal market conditions, it is supplemented by stress tests. These stress tests measure the risk to which Commerzbank is exposed, based on unlikely but still plausible events. These events may be simulated using extreme movements on various financial markets. The key scenarios relate to major changes in credit spreads, interest rates and yield curves, exchange rates, share prices and commodities prices. Examples of events simulated in stress tests include all stock prices falling by 15%, a parallel shift in the yield curve and changes to the curve's gradient.

Extensive Group-wide stress tests and scenario analyses are carried out as part of risk monitoring.

The internal model's individual components are independently validated at regular intervals to assess their appropriateness for risk measurement. The identification and elimination of model weaknesses are of particular importance in this.

Banking book

The key drivers of market risk in the banking book are the Group Treasury portfolios, with their credit spread, interest rate and basis risks.

In market risk management, credit spread sensitivities in the banking and trading books are considered together. Credit spread sensitivities (downshift of 1 basis point) for all securities and derivative positions (excluding loans) were at €53m as at the end of 2020 (31 December 2019: €49m).

Most credit spread sensitivities related to securities positions measured at amortised cost. Changes in market price have no impact on the revaluation reserve or the income statement for these positions. The coronavirus pandemic resulted in a significant widening of credit spreads and cross-currency basis spreads, leading to losses in other comprehensive income as well as in the income statement for items in the banking book measured at fair value. After the sharp market movements in March, spreads recovered in the course of the year. However, credit spreads for European companies, as measured by the iTraxx index, were above the previous year's levels at the end of the year.

The impact of an interest rate shock on the economic value of the Group's banking book is simulated monthly in compliance with regulatory requirements. In accordance with the EU Banking Directive, the German Federal Financial Supervisory Authority and the European Central Bank have prescribed two scenarios of uniform, sudden and unexpected changes in interest rates (+/−200 basis points) to be used by all banks, which have to report on the results of this stress test every quarter. In the scenario −200 basis points, the yield curve is floored at 0 (negative sections of the yield curve are left unchanged).

As a result of the scenario +200 basis points, a potential economic loss of €2,776m as at 31 December 2020 (31 December 2019: €2,635m potential economic loss) was determined and in the scenario −200 basis points a potential economic profit of €343m (31 December 2019: €614m potential economic profit). Commerzbank does not, therefore, need to be classified as a bank with elevated interest rate risk, as the decline in net present value represents less than 20% of its regulatory capital.

The interest rate sensitivity of the overall banking book (excluding pension funds) amounted to €9.0m as at 31 December 2020 (31 December 2019: €9.4m) per basis point of declining interest rates.

As part of the Interbank Offered Rates reform (IBOR reform), the IBOR reference rates and the EONIA will be replaced by other reference rates called Risk-Free Rates (RFR). Commerzbank has implemented an IBOR reform programme with the aim of ensuring a smooth transition to the RFR reference interest rates. The main risks are identified and appropriate measures are taken. Further information on the IBOR reform can be found in Note 1 to the Group financial statements (Initially applicable, revised and new standards).

Pension fund risk is also part of market risk in the banking book. Our pension fund portfolio comprises a well-diversified investment section and a section comprising insurance-related liabilities. The duration of the liabilities is extremely long (cash outflows modelled over almost 90 years), and the main portion of the overall portfolio's present value risk is in maturities of 15 years and over. The main risk drivers are long-term euro interest rates, credit spreads and expected euro inflation due to anticipated pension dynamics. Equity, volatility and foreign exchange risk also need to be taken into consideration. Diversification effects between individual risks reduce the overall risk. The extremely long maturities of these liabilities represent the greatest challenge, particularly for hedging credit spread risk. This is because there is insufficient liquidity in the market for corresponding hedging products.

Market liquidity risk

Market liquidity risk is the risk of the Bank not being able to liquidate or hedge risky positions in a timely manner, to the desired extent and on acceptable terms as a result of insufficient liquidity in the market.

Market liquidity risk is taken into account in Commerzbank's risk-bearing capacity concept by scaling the value at risk to one year, i.e. the implicitly recognised liquidation period. Additional valuation adjustments for market liquidity risk are also reflected in the calculation of the risk coverage capital.

Liquidity risk

We define liquidity risk in the narrower sense as the risk that Commerzbank will be unable to meet its payment obligations on a day-to-day basis. In a broader sense, liquidity risk describes the risk that future payments cannot be funded for the full amount, in the required currency or at standard market conditions, as and when they are due.

Strategy and organisation

The Board of Managing Directors adopts the business strategy and the Bank's risk tolerance, which is associated with it. Liquidity risk tolerance is then operationalised by defining the liquidity reserve period and the limit framework. In order to ensure an appropriate liquidity risk management process, the Board of Managing Directors delegates certain competences and responsibilities in connection with the Group-wide liquidity risk strategy to the Risk and Treasury functions.

The central Asset Liability Committee (ALCO) is responsible for limiting, analysing and monitoring liquidity risk and for strategic liquidity positioning. ALCO is supported by various sub-committees in this.

Risk management

Commerzbank uses a wide range of tools to manage and monitor liquidity risks on the basis of its own liquidity risk model. The stress scenario within the Bank that underlies the model and is relevant for management purposes allows for the impact of both a bank-specific stress event and a broader market crisis. Binding regulatory requirements are an integral component of the management mechanism. Group Treasury is responsible for the Group's liquidity management operations.

Group Treasury is represented in all major locations of the Group in Germany and abroad and has reporting lines into all subsidiaries. Commerzbank manages its global liquidity centrally using cash pooling. This approach ensures that liquidity resources are used efficiently and that this occurs across all time zones, as Group Treasury units are located in Frankfurt, London, New York and Singapore. Additional information on this subject can be found in the "Funding and liquidity of the Commerzbank Group" section of the 2020 Group Management Report. Liquidity risk is monitored on the basis of the Bank's own liquidity risk model by the independent risk function.

The Bank has established early warning indicators for the purpose of managing liquidity risk. These ensure that appropriate steps can be taken in good time to secure long-term financial solidity.

Risk concentrations can lead to increased outflows of liquidity, particularly in a stress situation, and thus to increased liquidity risk. They can, for example, occur with regard to maturities, large individual creditors or currencies. By means of ongoing monitoring and reporting, emerging risk concentrations in funding can be recognised in a timely manner and mitigated through suitable measures.

This also applies to payment obligations in foreign currencies. The Bank also mitigates concentration by continuously using its access to broadly diversified sources of funding, in particular diverse customer deposits and capital market instruments.

Commerzbank also ensures that it monitors foreign exchange risks and fulfils the currency matching requirements for highly liquid assets and net liquidity outflows.

In the event of a liquidity crisis, the emergency plan provides for various measures for different types of crisis, which can be launched by the central ALCO. The emergency plan forms an integral part of Commerzbank's recovery plan and is updated at least once a year; the individual liquidity emergency measures are checked regularly during the year for plausibility. The emergency plan also defines a clear allocation of responsibilities for the processes to be followed in emergency situations and gives details of any action that may need to be taken.

Liquidity risk model

A key component of liquidity risk management is the daily calculation of the liquidity gap profile. The liquidity gap profile shows the deterministic or stochastic inflows and outflows expected in the future on a given reporting date and across all portfolios. This forms the basis for calculating liquidity requirements or excess liquidity per maturity band. This also includes modelling the proportion of customer deposits that will be permanently available, known as the core deposit base.

The liquidity gap profile is also used to set the issuance strategy of the Commerzbank Group, which is operationalised by the Group Treasury division. The Group Finance division is responsible for calculating and allocating liquidity costs on the basis of the liquidity gap profile, which are then incorporated in the management of the segments' business activities.

Based on the liquidity gap profile, management mechanisms such as recovery and early warning indicators are limited and monitored accordingly. The liquidity gap profile is limited in all maturity bands. The Group limits are broken down into individual Group units and currencies. The internal liquidity risk model is complemented by the regular analysis of additional adverse, reverse and historical stress scenarios.

Additional information on the current developments caused by the coronavirus pandemic can be found in the Group Management Report.

Quantification and stress testing

Commerzbank uses a wide range of tools to manage and monitor liquidity risks on the basis of its own liquidity risk model. In addition to internal economic considerations, liquidity risk modelling also factors in the binding regulatory requirements under the Capital Requirements Regulation (CRR) and the Minimum Requirements for Risk Management (MaRisk). Commerzbank incorporates this within its liquidity risk framework, thereby quantifying the liquidity risk appetite established by the full Board of Managing Directors.

The stress scenarios within the Bank that underlie the model and are relevant for management purposes allow for the impact of both a bank-specific stress event and a broader market crisis. The Commerzbank-specific idiosyncratic scenario simulates a stress situation arising from a rating downgrade of two notches, whereas the market-wide scenario is derived from experience of the subprime crisis and simulates an external market-wide shock. The main liquidity risk drivers of both scenarios are a markedly increased outflow of short-term customer deposits, above-average drawdown of credit lines, prolongations of lending business regarded as commercially necessary, the need to provide additional collateral for secured transactions and the application of higher risk discounts to the liquidation values of assets.

As a complement to the individual scenarios, the Bank also simulates the impact on the liquidity gap profile (net liquidity position) of a scenario that combines idiosyncratic and market-specific effects. The liquidity gap profile is shown for the whole of the modelling horizon across the full spectrum of maturities and follows a multi-level concept. This allows for a nuanced presentation – deterministic and modelled cash flows in existing business on the one hand and the inclusion of prolongations on the other.

The table below shows the liquidity gap profile values after application of the respective stress scenarios for periods of one and three months as at the end of the year. Significantly more liquidity flows out in a combined scenario compared with the individual scenarios. As at the end of 2020, in the one-month and three-month periods, the combined stress scenario leaves net liquidity of €14.7bn and €8.4bn respectively.

Net liquidity in the stress scenario | €bn		31.12.2020	31.12.2019
Idiosyncratic scenario	1 month	21.1	18.4
	3 months	16.8	20.1
Market-wide scenario	1 month	23.3	20.7
	3 months	16.9	20.2
Combined scenario	1 month	14.7	11.7
	3 months	8.4	11.2

Liquidity reserves

Significant factors in the liquidity risk appetite include the reserve period, the size of the liquidity reserve portfolio held to compensate for unexpected short-term liquidity outflows, and the limits in the various maturity bands. As the liquidity reserve portfolio consists of highly liquid assets, it functions as a buffer in stress situations. The liquidity reserve portfolio is funded in line with the liquidity risk appetite to ensure that it is kept at the required size throughout the entire reserve period stipulated by the Board of Managing Directors.

At the end of 2020, the Bank had a liquidity reserve of €94.8bn in the form of highly liquid assets. It is funded in line with the liquidity risk appetite to ensure that it is kept at the required size throughout the entire reserve period stipulated by the Board of Managing Directors. A part of this liquidity reserve is held in a separate stress liquidity reserve portfolio managed by Group Treasury to cover liquidity outflows should a stress event occur and to ensure solvency at all times. The Bank also holds an intraday liquidity reserve portfolio. At the end of the year, the total value of this portfolio was €6.1bn.

The liquidity reserves comprising highly liquid assets are made up of the following three components:

Liquidity reserves from highly liquid assets | €bn	31.12.2020	31.12.2019
Highly liquid assets	94.8	72.4
of which level 1	85.6	59.6
of which level 2A	8.6	11.5
of which level 2B	0.6	1.3

Liquidity ratios

Throughout the 2020 financial year, Commerzbank's internal liquidity ratios, including the regulatory liquidity coverage ratio (LCR), were above the limits set by the Board of Managing Directors. The same is true of compliance with the survival period calculation set down by MaRisk.

The LCR is calculated as the ratio of liquid assets to net liquidity outflows under stressed conditions. It is used to measure whether a bank has a large enough liquidity buffer to independently withstand any potential imbalance between inflows and outflows of liquidity under stressed conditions over a period of 30 calendar days.

In 2020, Commerzbank significantly exceeded the minimum ratio of 100% stipulated for that year on every reporting date. As at the end of 2020, the average month-end value of the LCR over the last twelve months was 135.68% (as at the end of 2019: 132.72%).

The Bank has established corresponding limits and early warning indicators to ensure the LCR minimum requirements are met. Further information on the composition of the LCR is given in Note 65 (liquidity coverage ratio) of the Group financial statements.

Operational risk

Based on the Capital Requirements Regulation (CRR), Commerzbank defines operational risk (OpRisk) as the risk of loss resulting from the inadequacy or failure of internal processes, people and systems or from external events. This definition includes legal risks. Strategic and reputational risks are not included in this definition. In view of their increased economic significance, compliance risk and cyber risk are managed as separate risk types. In line with the CRR, however, losses from compliance risks and cyber risks are still incorporated into the model for determining the regulatory and economic capital required for operational risks.

Strategy and organisation

Within Commerzbank, OpRisk and governance issues of the Internal Control System (ICS) are closely connected in terms of both organisational structure and methodology and are continuously being enhanced. This is because many OpRisk cases are closely linked with failures in the control mechanisms. A properly functioning ICS thereby helps to reduce or avoid losses from operational risks and thus to lower the amount of capital required to cover operational risks in the medium to long term. Conversely, the operational risk management systems enable the ICS to adapt itself consistently to them. The further development of the ICS structure is an essential aspect of the proactive reduction or prevention of operational risks. Accordingly, in the course of the Campus 2.0 realignment, the governance of the ICS was made more flexible by extending the phases of risk identification, control inventory and control evaluation to enable efficient implementation by the units.

Chaired by the CRO, the Group OpRisk Committee meets at least four times a year and deals with the management of operational risks within the Commerzbank Group. It also acts as the escalation and decision-making committee for key OpRisk topics that span all areas. The Management Boards and/or the Segment Committees with responsibility for operational risk deal with the management of operational risk in the relevant units. They analyse OpRisk issues that affect them, such as loss events, and define subsequent measures or recommend action.

Commerzbank's OpRisk strategy is approved on an annual basis by the full Board of Managing Directors after it has been discussed and voted upon in the Group OpRisk Committee. The OpRisk strategy describes the risk profile, key elements of the desired risk culture, its management framework and measures to be taken by Commerzbank to manage operational risk.

OpRisk management is based on three consecutive levels (three lines of defence) which, when taken together, are crucial for reaching the given strategic aims.

Risk management

Commerzbank takes an active approach to managing operational risk, aiming to systematically identify OpRisk profiles and risk concentrations and to define, prioritise and implement risk mitigation measures.

Operational risks are characterised by asymmetric distribution of losses. This means that most of the losses are relatively small, while isolated losses with a very low probability of occurrence have the potential to be large and devastating. This makes it necessary not only to limit high loss potential but also to proactively manage losses that can be expected to occur frequently.

To do this, Commerzbank has set up a multi-stage system that brings together the defined limits on economic capital (risk capacity) and those set for operative risk management during the year (risk appetite/tolerance), complemented by rules on the transparent and conscious acceptance and approval of individual risks (risk acceptance).

OpRisk management includes an annual evaluation of the Bank's ICS and a risk scenario assessment. Furthermore, OpRisk loss events are subjected to ongoing analysis and to ICS backtesting on an event-driven basis. Lessons learned activities are carried out after all material loss events. External OpRisk events at competitors are also systematically evaluated.

Commerzbank uses the advanced measurement approach (AMA) to measure regulatory and economic capital for operational risks. Risk-weighted assets for operational risks on this basis came to €18.3bn at the end of the fourth quarter of 2020 (31 December 2019: €18.7bn). The economically required capital was €1.5bn (31 December 2019: €1.5bn).

The following table gives an overview of risk-weighted assets (RWA) and the economically required capital (ErC) by segment:

	31.12.2020		31.12.2019	
€bn	RWA	ErC	RWA	ErC
Private and Small-Business Customers	6.1	0.5	5.2	0.4
Corporate Clients	7.4	0.6	8.3	0.7
Others and Consolidation	4.8	0.4	5.3	0.4
Group	**18.3**	**1.5**	**18.7**	**1.5**

The total charge for OpRisk events at the end of the fourth quarter of 2020 was approximately €345m (full-year 2019: €127m). The events mainly related to losses in the "Products and business practices" category. This includes the provision of mBank for legal risks related to CHF loan agreements, which is a key driver of the increase compared to the previous year.

The exceptional situation during the coronavirus pandemic is resulting in increased operational risk, especially due to changes in internal processes and the market environment. However, losses thus far are limited to cost items such as cancellations (business trips, events), higher security costs for branches, additional hygiene measures to protect employees and customers, and IT measures related to enhanced online availability, first and foremost, with a view to an extended mobile working environment. These are mainly seen as part of the new normality during the coronavirus pandemic.

OpRisk events[1] | €m	31.12.2020	31.12.2019
Internal fraud	1	6
External fraud	9	12
Damage and IT failure	29	2
Products and business practices	277	103
Process related	29	6
HR related	0	–1
Group	**345**	**127**

[1] Losses incurred and provisions, less OpRisk-based income and repayments.

A structured, centralised and decentralised reporting system ensures that the management of the Bank and its segments, members of the OpRisk Committee and the supervisory bodies are informed regularly, promptly and fully about operational risk. OpRisk reports are produced quarterly. They contain changes in OpRisk losses, the segments' main loss events, current risk analyses, changes in the capital requirement and the status of measures implemented. Operational risks are also part of the regular risk reporting process to the full Board of Managing Directors and to the Supervisory Board's Risk Committee.

Other risks

To meet the requirements of the Basel framework, MaRisk requires an integrated approach to risk that also includes unquantifiable risk categories. At Commerzbank, these are subjected to a qualitative management and control process. The following risk types except compliance risk, model risk and cyber risk are outside the responsibility of the CRO.

Legal risk

According to the CRR, legal risk falls within the definition of operational risk. It primarily arises for the Commerzbank Group when the Bank's claims cannot be enforced for legal reasons or when claims can be made against the Bank because the underlying law was not observed or has changed since a transaction was concluded.

The operation of banking and financial services transactions that are subject to regulatory provisions may also result in legal risk. This risk may also take the form of orders or sanctions issued or imposed by one or more authorities whose supervision Commerzbank is subject to anywhere in the world. Legal risk also arises in realised losses or provisions due to or in connection with court cases brought against Commerzbank (passive proceedings). Cases brought by Commerzbank (active proceedings) generally represent a credit risk rather than an operational risk, so the risk of loss is already taken into account through write-downs. However, the costs of legal action (court and lawyers' costs) for active proceedings are classified as legal risk.

Organisation
Within Commerzbank, the functional management of legal risk throughout the Group is the responsibility of Group Legal. All legal staff at the various Group Legal locations including the foreign branches as well as the legal staff of the legal departments of the domestic and foreign subsidiaries are as legal risk managers operationally responsible for the identification and management of the Group-wide legal risk within Commerzbank.

Risk management
The task of the Group's legal risk managers is to detect legal risks and all losses potentially resulting from them at an early stage, to highlight possible solutions that might avoid or minimise such losses, and to play an active part in reaching decisions concerning legal risks. They must ensure that they are always up to date with all legal changes or new findings within their area of responsibility and inform the business units affected about the impact on legal risk and any action that needs to be taken as a result.

The legal risk managers are responsible for arranging or adjusting legal provisions and look after and monitor new and ongoing court proceedings.

In the case of passive proceedings, provisions are recognised on the basis of the risk assessment carried out by the responsible legal risk manager. The expected risk of loss for proceedings generally corresponds to the size of the provisions to be recognised. To estimate the expected loss, the amount that the Bank would reasonably have to pay to settle the dispute at the current point in time is calculated after each significant stage in the proceedings. In the case of active proceedings, provisions are usually only recognised for the expected court and lawyers' costs.

Group Legal provides information about all major court proceedings and risk trends in the quarterly Litigation Report. This report is sent to the Bank's management and Supervisory Board, the supervisory authority and the OpRisk Committee.

Current developments
Commerzbank and its subsidiaries are involved in a variety of court and arbitration cases, claims and official investigations (legal proceedings) in connection with a broad range of issues. They include, for example, allegations of defective advice, disputes in connection with credit finance or payment transactions, entitlements to occupational pensions, allegedly false accounting and incorrect financial statements, enforcement of claims due to tax issues, allegedly incorrect prospectuses in connection with underwriting transactions, alleged violations of competition laws, and cases brought by shareholders and other investors as well as investigations by supervisory authorities. In addition, changes to rulings by supreme courts, which may render them more restrictive, as well as to legal conditions, e.g. in the private customer business, may result in more claims being brought against Commerzbank or its subsidiaries. In these court cases, claimants are mostly asking for the payment of compensation, claims on account of unjust enrichment or the reversal of agreements already entered into. If the courts were to find in favour of one or more of the claimants in these cases, Commerzbank could be liable to pay compensation, which could in some cases be substantial, or could incur the expense of reversing agreements or of other cost-intensive measures. Regulatory authorities and governmental institutions in various countries in which Commerzbank and its subsidiaries are or have been active have for some years been investigating irregularities in connection with the fixing of foreign exchange rates and with foreign exchange business in general. In the course of these investigations, regulatory authorities and governmental institutions have also sought checks on Commerzbank or have approached the company with requests for information. Commerzbank has cooperated fully with these bodies and also looked into the relevant matters on the basis of its own comprehensive investigations. The cases are no longer active with the exception of one case in which the investigating authority transferred the matter to the national competition tribunal. Financial consequences cannot be ruled out.

The public prosecutor's office in Frankfurt is investigating equity transactions conducted by Commerzbank and the former Dresdner Bank around the dividend record date (cum-ex transactions). Commerzbank had already initiated a forensic analysis of cum-ex transactions at the end of 2015, which was concluded at the start of 2018 in respect of Commerzbank's equity transactions and in September 2019 in respect of the equity transactions of the former Dresdner Bank. All back taxes demanded by the tax authorities have been paid.

The public prosecutor's office in Cologne has been conducting investigations at Commerzbank since September 2019 in connection with a separate case concerning cum-ex transactions. It is investigating on suspicion that the Bank (including Dresdner Bank) was involved in cum-ex transactions in various roles, including by supplying shares to third parties who were allegedly acting as short sellers. According to the current understanding, these proceedings do not involve Commerzbank's own tax credit claims with regard to capital gains tax and the solidarity surcharge on dividends.

The Bank is cooperating fully with authorities conducting investigations into cum-ex transactions. It is currently not possible to predict whether this will result in a burden, whether it will occur, or the amount of any resulting burden.

In the circular of the German Federal Ministry of Finance (BMF) dated 17 July 2017, the tax authorities addressed the treatment of cum-cum transactions, declaring their intention to critically examine past transactions for indications of abuse of law. According to the view put forward in the BMF circular, abuse of law pursuant to Article 42 of the German Tax Code (Abgabenordnung, AO) is indicated if there are no economically reasonable grounds for the transaction in question and the structure of the transaction appears to be largely tax-induced (tax arbitrage). The circular provides a non-exhaustive list of cases which the BMF will assess for tax purposes. Within the framework of Commerzbank AG's ongoing tax audit, the tax auditors commented on the treatment of these transactions in the form of audit notes. Further discussions are taking place on this issue. Furthermore, in the assessments for the years 2014 and 2015, the tax office reduced the credit for capital gains taxes. In response, Commerzbank AG made value adjustments to tax credits shown in the balance sheet and set up additional provisions for possible repayment claims in order to reflect the changed risk situation appropriately. The tax authorities are currently discussing a revision of the above-mentioned BMF circular following the ruling of the Fiscal Court of Hessen on 28 January 2020 (4 K 890/17). In light of an expected tightening up of the circular and on the basis of a notice issued to prevent the threat of limitation of payments applying to 2013, the risk provisioning for the years 2013 to 2015 was adjusted. It cannot be ruled out that a different estimate will result after the issuance of a new BMF circular or further fiscal court rulings.

With respect to cum-cum securities lending transactions, Commerzbank is exposed to compensation claims from third parties for crediting entitlements that have been denied. Based on the analyses performed, Commerzbank considers it unlikely that such claims could be enforced. However, it cannot be ruled out. Based on our estimates estimates the financial impact could be in the upper double-digit million range, plus interest on arrears. The possibility that this conclusion could alter as developments unfold, for example in connection with assessments made by the tax authorities and fiscal/civil courts, cannot be completely ruled out.

In May 2017, a Polish court admitted a class action lawsuit against a subsidiary of Commerzbank alleging the ineffectiveness of index clauses in loan agreements denominated in Swiss francs (CHF). A total of 1,731 plaintiffs have joined the class action. In October 2018, the class action suit was dismissed in its entirety by the court of first instance. In March 2020, the court of appeal partially overturned the judgement of the court of first instance and referred it back. In early June 2020, the court of appeal enacted a temporary order concerning the suspension of interest payment and repayment obligations and prohibited the subsidiary from issuing due date or cancellation notices. The temporary order is legally binding. A first hearing before the court of first instance is scheduled for March 2021.

Independently of this, numerous borrowers have also filed lawsuits for the same reasons. In addition to the class action, 6,870 other individual proceedings were pending as at 31 December 2020. The subsidiary is defending itself against all of the claims. The case law of the Polish courts on loans with indexation clauses has so far been inconsistent overall. As at 31 December 2020, there were 173 final rulings in individual proceedings against the subsidiary, of which 70 were decided in favour of the subsidiary and 103 were decided against the subsidiary. A total of 193 proceedings before courts of second instance are suspended because of legal issues that are being considered by the Polish Supreme Court and the European Court of Justice (ECJ).

The Polish Supreme Court has announced a decision in principle for March 2021. The Bank will analyse the decision once it is published, in particular with regard to the impact on further case law and on the provision. Preliminary ruling proceedings on loans with indexation clauses are pending before the European Court of Justice, two of which concern proceedings against the subsidiary. Decisions are not expected until early 2022.

Against the background of the inconsistent case law to date, the small number of rulings in the last instance and outstanding decisions in principle from the Supreme Court and the ECJ, the amount of the provision for this set of issues is subject to a high degree of judgement. In the calculation of the provisions, possible future lawsuits relating to the existing portfolio and the portfolio already repaid in addition to the lawsuits already filed are taken into account. The Group/ subsidiary measures the provision for individual claims relating to existing and already repaid loans with CHF indexation clauses using the expected value method permitted under IAS 37. The provision relates both to the portfolio existing as at 31 December 2020 with a carrying amount of 13.6bn Polish zloty and to the portfolio already repaid. The portfolio that was already repaid amounted to 6.8bn Polish zloty at the time of disbursement. The provision as at 31 December 2020 for individual lawsuits was €312,9m.

The methodology used to calculate the provision is based on parameters that are varied, subject to judgement and in some cases associated with considerable uncertainty. Key parameters are the estimated total number of plaintiffs, the probability of losing a lawsuit in the last instance, the amount of the loss and the development of the exchange rate. Fluctuations in the parameters and the interdependencies between them may mean that the amount of the provision has to be adjusted significantly in the future.

As at the reporting date, the subsidiary estimated the risk of defeat at 50%. This is based among other things on the Bank's expert assessments, which are supported by legal opinions on future case law trends.

Assuming otherwise unchanged parameters, the following sensitivities result for the main parameters underlying the recognition of provisions:

- The number of future claimants increases by 1% of borrowers: change in provisions of €+13m
- The probability of a ruling by the court of last instance that is unfavourable to the subsidiary changes by +/– 1 percentage point: change in provisions of €+/–6m
- The assumed weighted average loss changes by +/–1 percentage point: change in provisions of €+/–5m

In December 2020, a proposal by the local supervisory authority to convert foreign currency loans into local currency loans was announced; details have not yet been provided. According to the subsidiary's analyses, the application of the proposal to existing and repaid loans would lead to a potential financial charge in the order of €1.2bn. As at the reporting date, the subsidiary had not yet made any decisions on the implementation of the proposal, e.g. through settlement offers to customers. This is subject to further analysis and discussion among the banks concerned and with the responsible authorities.

Some of these cases could also have an impact on the reputation of Commerzbank and its subsidiaries. The Group recognises provisions for such proceedings if liabilities are likely to result from them and the amounts to which the Group is likely to be liable can be determined with sufficient accuracy. Since there are considerable uncertainties as to how such proceedings will develop, the possibility cannot be ruled out that some of the provisions recognised for them may prove to be inadequate once the courts' final rulings are known. As a result, substantial additional expense may be incurred. This is also true in the case of legal proceedings for which the Group did not consider it necessary to recognise provisions. The eventual outcome of some legal proceedings might have an impact on Commerzbank's results and cash flow in a specified reporting period; in the worst case it cannot be fully ruled out that the liabilities that might result from them may also have a significant impact on Commerzbank's earnings performance, assets and financial position.

Further information on legal proceedings may be found in Note 58 regarding provisions and Note 60 regarding contingent liabilities and lending commitments in the Group financial statements.

Compliance risk

Compliance risk falls within the definition of operational risk according to the Capital Requirements Regulation (CRR). Commerzbank acknowledges and understands the existence of inherent compliance risk in its global business, which is subject to the risk of abuse in general and in particular by financial crime. Compliance risk includes, in particular, the risks associated with money laundering, terrorist financing, sanctions/embargoes, markets compliance as well as fraud, corruption and preventing the facilitation of tax evasion.

The Board of Managing Directors of Commerzbank actively promotes a compliance culture and has set down and communicated corresponding values in the code of conduct.

Organisation

Group Compliance is led by the division head of Group Compliance, who reports directly to the Board of Managing Directors. Pursuant to Art. 87 (5) of the German Securities Trading Act (WpHG) and MaComp (minimum requirements of the compliance function) BT 1.1, the division head of Group Compliance is both the Group's Compliance Officer and, under Art. 25h (7) of the German Banking Act (KWG) and Arts. 7 and 9 of the German Anti-Money Laundering Act (GwG), the Anti-Money Laundering Officer; this person is supervised as such by the Federal Financial Supervisory Authority (BaFin).

Group Compliance is responsible for:

A. The four types of compliance risk:
   (1) anti money laundering/combating terrorism financing,
   (2) sanctions and embargoes,
   (3) combating fraud, bribery and corruption,
   (4) markets compliance
   as well as
B. Further responsibilities:

- coordination of the requirements under MaRisk section 4.4.2 ("MaRisk compliance function"),
- independent implementation of internal special investigations with compliance relevance.

The responsibilities based on the obligations under the QI (Qualified Intermediary), FATCA (Foreign Account Tax Compliance Act) and CRS (Common Reporting Standard) regimes as well as in relation to the prevention of the aiding and abetting of tax evasion (ATEF, Anti-Tax Evasion Facilitation) were bundled within the Group Tax function in October 2020 and have therefore no longer been part of the other tasks of Group Compliance since that date. The corresponding role of the QI and FATCA Responsible Officer will also be transferred to Group Tax in mid-2021.

Risk management

To prevent compliance risks, Commerzbank has implemented security systems and controls for its transactions, customers, products and processes. These procedures for ensuring compliance with material legal provisions and requirements are referred to in their entirety as a compliance management system. Commerzbank's compliance management system is based on international market standards and the regulatory requirements in the various countries which are relevant for Commerzbank's business activities. Commerzbank is constantly developing its compliance management system in order to meet its responsibilities and address the growing complexity and increasing regulatory requirements. Under the three lines of defence principle, protecting against undesirable compliance risks is an activity that is not restricted to the compliance function (Group Compliance). Instead, the organisational control and monitoring elements are aligned in three sequential levels. The units in the first line of defence (1st LoD) assume the main responsibility for identifying and managing risks and for complying with their own business rules; they are also responsible for setting up process-oriented control mechanisms. Group Compliance, the second line of defence (2nd LoD), oversees the appropriateness and effectiveness of the procedures and controls in the first line of defence, and assesses and communicates any deficiencies found. Internal Audit, the third line of defence (3rd LoD), uses regular and independent audits to check that compliance in both the 1st LoD and 2nd LoD is appropriate and effective.

Compliance risks are managed in a control circuit with interacting elements. Commerzbank constantly monitors relevant regulatory requirements as well as the definition and/or adjustment of corresponding internal standards meant to ensure compliance with the requirements. Where necessitated by changes in requirements and standards, internal training measures are defined and/or adapted and the Bank's units are advised how to implement these effectively. Implementation encompasses setting up and carrying out suitable processes and controls in daily work, assuring their quality and testing their effectiveness. Monitoring of the compliance risks is based on key figures and is part of regular internal reporting. Where necessary, matters are escalated according to their urgency and severity.

The compliance sub-risk strategy as a fundamental strategy document integrates the previous components of the compliance framework in dealing with compliance risks and contains a detailed description of compliance risk management in addition to strategic and organisational elements. In particular, the risk appetite per compliance risk type is specified and the strategic fields of action are defined.

A systematic risk analysis (compliance risk analysis) is a core element of risk management. It assesses the inherent risk arising from doing business with different customer groups and products and compares this with an assessment of the corresponding control environment. It produces a residual risk, the risk content of which is assessed. The Bank defines measures to further enhance risk management (e.g. introducing additional controls) as necessary and tracks implementation closely.

Current developments

In recent years, Commerzbank has worked through the majority of the findings from the settlements with various US authorities regarding violations of US sanctions and anti-money laundering provisions. The Deferred Prosecution Agreement with the District Attorney of New York and the Deferred Prosecution Agreement with the US Department of Justice were terminated in March 2018 and May 2018 respectively, after consultation with the respective district attorney's offices. The Bank has also received various interim reports and on 15 October 2018 received the final report from the monitor appointed by the New York State Department of Financial Services (DFS), to which it has responded with corresponding implementtation programmes. The Bank has made good progress in carrying out the implementation programmes and has executed most of the measures. The US monitor submitted its final report dated 15 October 2018, thus concluding its on-site investigations. In accordance with the terms of the engagement letter between the Bank and the monitor, the monitorship ended on 24 June 2019. Commerzbank continues to provide quarterly reports to the DFS on the progress of implement-tation plans.

In line with the requirements of the UK Financial Services and Markets Act 2000 (FSMA), in 2017 Commerzbank London mandated a consulting company as a "skilled person". The consulting company carried out a review of existing structures and processes (especially with regard to money laundering/financing of terrorism as well as sanctions/embargoes) and prepared a report for the UK Financial Conduct Authority (FCA). Commerzbank London subsequently launched a comprehensive remediation project, the implementation of which is being evaluated by the "skilled person", with half-yearly reports to the FCA. Substantial progress has been made since the fourth and final phase was completed. Accordingly, the FCA informed the Bank on 16 June 2020 that the "skilled person" process had been concluded. The Bank received a "warning notice" from the FCA on 14 May 2020. It addressed weaknesses identified by the FCA in 2017 for the years 2012 to 2017 (money laundering prevention, know-your-customer (KYC) and transaction monitoring). On 17 June 2020, the Bank reached an agreement with the FCA on a penalty payment of £37.8m. The small number of outstanding topics have been transferred to the line function, the handling of which will be monitored by Group Audit. A monthly status report will be submitted to the FCA. Currently, around 60% of the findings have already been closed.

Since 31 December 2012, Commerzbank has been provisionally registered as a swap dealer with the U.S. Commodity Futures Trading Commission (CFTC). In accordance with a consent order issued by the CFTC on 8 November 2018 after an investigation had been completed, Commerzbank engaged an outside consultant approved by the CFTC for a period of two years. The CFTC may extend this period by a further year at its discretion. During the review period, the outside consultant will produce annual reports assessing the swap dealer's compliance with the Commodity Exchange Act and the regulations of the CFTC and outline recommendations for improvements to its practices, policies and procedures. For the duration of the outside consultant's mandate, the Bank is also required to produce a full Chief Compliance Officer Report for the swap dealer in accordance with US regulations. The report must be submitted to the CFTC 90 days after receipt of each report from the outside consultant and must include a statement on the recommendations made by the outside consultant. The outside consultant started work in April 2019 and submitted the first report to the CFTC on 17 June 2020. The report contains 51 recommendations and 25 observations requiring processing or improvements. Commerzbank subsequently submitted its first complete Chief Compliance Officer Report for the swap dealer to the CFTC on 4 September 2020. In the third quarter of 2020, the National Futures Association (NFA) began its second periodic audit of the Bank in its capacity as a swap dealer (the first audit took place in 2018). The Bank expects to receive the formal audit report in the first quarter of 2021 and, upon receipt, will be required to submit a formal response to the audit report to the NFA outlining remediation plans for any audit findings.

Reputational risk

Reputational risk is the risk that stakeholders may lose confidence in Commerzbank or that its reputation may be damaged as a result of negative events in its business activities. Commerzbank's stakeholder groups include in particular the public and the media, non-governmental organisations and its customers. In the present-day competitive environment, a company's reputation is becoming more and more important. The main factor determining this is how companies handle sustainability considerations (environmental, ethical or social risks) in the market segments' customer business (intrinsic reputational risks). Companies are judged not only on the basis of people's personal experiences of them, but also on reports reaching the public, especially through the media. Reputational risk therefore goes hand in hand with communication risk.

Strategy and organisation

All employees and managers have a fundamental duty to protect and reinforce Commerzbank's good reputation as a significant element of its enterprise value. The segments and significant subsidiaries bear direct responsibility for reputational risk resulting from their particular business activity. The Reputational Risk Management department is part of the central Group Communications division of the Commerzbank Group and focuses on intrinsic reputational risk that may directly lead to reputational damage among stakeholder groups. The department maintains close links with the relevant front office units. Management of intrinsic reputational risk is the responsibility of the Chairman of the Board of Managing Directors. It is a component of Commerzbank's overall risk strategy. Reputational Risk Management's tasks include identifying, evaluating and addressing intrinsic reputational risk in systematic processes at an early stage and suggesting or implementing appropriate measures (early warning function).

Risk management

Managing intrinsic reputational risk means identifying and reacting to potential environmental, social and ethical risks at an early stage, thereby reducing any potential communication risk or even preventing it completely. Intrinsic reputational risk is managed by means of a qualitative approach. As part of a structured process, transactions, products and customer relationships in connection with sensitive areas are assessed with reference to environmental, social and ethical risks on a qualitative five-point scale. This assessment can contain conditions and in some cases a negative verdict, which could lead to a rejection.

The sensitive areas regularly and comprehensively analysed in Reputational Risk Management include armaments exports and transactions, products and customer relationships relating to power generation and commodities extraction. Commerzbank's attitude towards these areas is laid down in positions and guidelines that are binding for all employees. Commerzbank's Reputational Risk Management department regularly observes and analyses new environmental, ethical and social issues and informs the relevant parts of the Bank about these. The reputational risks identified and addressed by the department are incorporated into the quarterly reputational risk report – part 1: non-quantifiable risks; part 2: high and major intrinsic reputational risks (sustainability issues) – which is prepared for the full Board of Managing Directors and the Risk Committee of the Supervisory Board.

IT risk

IT risk is a form of operational risk. In our internal definition, we define IT risk as risks to the security of information processed in our systems in terms of meeting the four IT security objectives set out below:

Confidentiality: Information is confidential if it is not accessible to, or capable of being reconstructed by, unauthorised persons, business processes or IT systems.

Integrity: Information possesses integrity if it has not been modified or destroyed by any unauthorised means. An information-processing system (IT system) possesses integrity if it can perform its intended functions without hindrance and free of unauthorised manipulations, whether deliberate or accidental.

Traceability: Actions and technologies applied to information are traceable if they themselves and their source can be traced back without any ambiguity.

Availability: Information is available if it is always capable of being used to a predefined extent by authorised persons, business processes and IT systems when it is required.

Commerzbank attaches great importance to the protection and security of its own information, of that entrusted to it by customers, and of the business processes and systems used to process it. They form a permanent core element in our digital strategy. The processing of information is based increasingly on information technologies. As such, our IT security requirements are at the heart of information security management. IT security requirements are based on the IT security objectives referred to above and are set down in policies and procedural instructions.

IT risks are identified, evaluated and regularly reviewed as part of IT governance processes. IT risk is covered in the quarterly IT risk report. Information security is also established as a principal objective for our Internal Control System. In the context of the coronavirus pandemic, consideration of the four IT security objectives for home office technologies has become a more central focus. To this end, outsourced services in particular were examined and, from 2021, will be given greater focus with a separate GS-TF key risk indicator.

Relevant IT risks are also evaluated as part of operational risk management through risk scenarios and considered in the Bank's RWA calculation. This includes the risk of a breakdown of critical IT, the risk of external attack on the systems or data of the Bank (cyber crime and advanced persistent threat (APT)[1] scenarios), the theft of corporate data or the default of service providers and vendors. See also the description of cyber risk.

Given the major importance of IT security to Commerzbank, it is further developed and improved on an ongoing basis by means of strategic initiatives. We have taken into account the significance of the "human" factor in IT security and cyber security by introducing additional training and awareness-raising measures.

Cyber risk

Cyber risk comprises risks with direct relevance to security and risks that lead to relevance to security (with respect to cyber space). The part of cyber space of relevance to Commerzbank is all connected IT environments within the Bank and those outside the Bank that lead to customers, business partners and service providers. Cyber risk is therefore concerned with the digital representation of the Bank's assets (data, information) within cyber space.

The strategic guidelines from the overall risk strategy and the information security strategy apply without limitation to cyber risk.

In recent years, there have been a number of serious security incidents – not involving Commerzbank – in the financial sector, leading many of the world's key regulators and standard setters (such as the DFS500 – Department of Financial Services, Section 500 (Cybersecurity Requirements for Financial Services Companies) and NIST (National Institute of Standards and Technology) in the USA and the MAS (Monetary Authority of Singapore) in Singapore to place increasing emphasis on cyber security and publish additional requirements for the management of cyber risks. Within Europe and Germany, the EBA and BaFin are also focusing intensively on this topic.

[1] An advanced persistent threat is a special form of cyber attack. The intention of an APT attack is to remain undetected for as long as possible in order to steal sensitive information (internet espionage) or cause other types of damage over a longer period.

To adequately address both this trend and future challenges relating to the management of cyber risks, since January 2020 Commerzbank has managed cyber and information security risks via the new Group division "Group Risk Management – Cyber Risk & Information Security" (GRM-CRIS), which reports to the Group Chief Information Security Officer (CISO). In addition to established security functions such as the Information Security Management System (ISMS) as well as risk reporting on key risk indicators, GRM-CRIS focuses on managing cyber risk appropriately and on strengthening Commerzbank's cyber-resilience (including its information security incident management capabilities). It also addresses the interaction between cyber and information security risks and other types of risk relating to areas such as HR, procurement, BCM and physical security.

There are currently no concrete attack patterns or other anomalies specifically related to the coronavirus pandemic to which our institution, other financial service providers or financial market infrastructures are exposed. In addition, we are not currently seeing any additional attack methods or an expansion of our attack surface due to the increased remote use of Bank resources such as split operations or working from home.

However, there are a range of attack vectors that try to engage in criminal activity by capitalising on public fears (such as e-mails concerning precautionary measures purportedly sent by the WHO). This approach is known in the media as fearware and refers specifically to the most common form of its implementation, namely a combination of malware and social engineering powered by the fear of the person being targeted.

With regard to our customers, we are paying even more attention than usual to transactional anomalies, especially in the context of coronavirus-related fraud.

Human resources risk

Human resources risk falls within the definition of operational risk referred to in the Capital Requirements Regulation (CRR). The internal, management-oriented interpretation of this definition at Commerzbank includes the following elements in human resources risk:

Adjustment risk: Adjustment risk results when organisational and operational circumstances change (for example, restructuring, changes in management culture, qualification needs), these changes impact employees' scope of responsibilities and therefore require a greater willingness to change on the part of the staff. We offer selected internal and external training, continuing education and change programmes to ensure that the qualification levels of our employees keep pace with the current requirements, guidance is provided for structural changes and our employees can fulfil their duties and responsibilities.

Motivation risk: Motivation risk arises when demotivating factors are not eliminated and employees do not adequately perceive motivating factors such as management or remuneration. The effects (such as withheld performance by employees) can have a direct impact on the working environment and the organisation's productivity. Employee surveys enable us to respond as quickly as possible to potential changes in our employees' level of corporate loyalty and to initiate adequate measures.

Departure risk: Departure risk takes into account the consequences of undesired employee departures (for example, if an employee resigns voluntarily), particularly when high performers are involved. We take great care to ensure that the absence or departure of employees does not result in long-term disruptions to our operations. We also monitor staff turnover on a regular basis from both a quantitative and a qualitative perspective.

Supply risk: Supply risk reflects the consequences of insufficient staffing (for example, inadequate development of young staff) and the resulting consequences (operating bottlenecks, increased workload, lower productivity and illness). Appropriate quantitative and qualitative staffing aims to ensure that internal operating requirements, business activities and Commerzbank's strategy can be implemented.

Employees are a key resource for Commerzbank. Human resources risk is systematically managed by Group Human Resources with the aim of identifying, assessing and managing risks, for instance by applying selected personnel tools. The Board of Managing Directors is regularly informed about human resources risk.

Overall, the Bank will continue to monitor human resources risk. There is a risk that the human resources risk situation will deteriorate as a result of frequent structural changes due to a change in Group strategy. Change and organisational measures have already been initiated to counter human resources risk.

Business strategy risk

Business strategy risk is the medium- to long-term risk of negative influences on the achievement of Commerzbank's strategic goals, for example as a result of changes in the market or competitive environment, capital market requirements, regulatory/political factors or the inadequate implementation of the Group strategy (primary risk drivers).

Group strategy is developed further in a process that takes both external and internal factors into account. On the basis of these factors, the full Board of Managing Directors sets out a sustainable business strategy describing the major business activities and steps required to meet the targets. To ensure proper implementation of the Group strategy to achieve the business targets, strategic controls are carried out through regular monitoring of quantitative and qualitative targets in the Group and the segments.

Responsibility for strategic corporate management lies with the full Board of Managing Directors. Specific business policy decisions (acquisition and sale of equity holdings > €300m) also require the authorisation of the Supervisory Board's Risk Committee. In addition, all major initiatives and projects are decided by the full Board of Managing Directors.

Model risk

Model risk is the risk of incorrect management decisions based on an inaccurate depiction of reality by the models used. With regard to the causes of model risk we distinguish between model risk from exceeding model boundaries and model risk from model errors (manual errors in model development/ implementation). In line with the focus of the Group risk strategy, namely to ensure that the Bank has adequate capital and liquidity, the models for assessing risk-bearing capacity (capital requirements under the Basel framework and economic capital requirements, respectively) and liquidity resources are central for risk management.

The basic principles of model risk management are the identification and avoidance of model risks and appropriate consideration of known model risks (e.g. through conservative calibration or consideration of margins of conservatism or model reserves). Model risks that are unknown and hence cannot be mitigated are accepted as an inherent risk in the complexity of the Commerzbank business model. In respect of the governance of model risk management, requirements relating to model validation and model changes are established.

The current coronavirus pandemic, with its considerable economic and social impact as well as the mitigating support provided by governments, poses major challenges for the risk models used. Commerzbank has introduced a series of measures to counter the increased model risk and to ensure appropriate management even in the current phase. For example, the ongoing monitoring of model performance has been expanded and the processes for using the models have been partially refined and adapted.

Disclaimer

Commerzbank's internal risk measurement methods and models which form the basis for the calculation of the figures shown in this report are state-of-the-art and based on banking sector practice. The risk models produce results appropriate to the management of the Bank. The measurement approaches are regularly reviewed by Risk Controlling and Internal Audit as well as by German and European supervisory authorities. Despite being carefully developed and regularly checked, models cannot cover all the influencing factors that have an impact in reality or illustrate their complex behaviour and interactions. These limits to risk modelling apply in particular in extreme situations. Supplementary stress tests and scenario analyses can only show examples of the risks to which a portfolio may be exposed in extreme market situations. However, stress-testing all imaginable scenarios is not feasible. Stress tests cannot offer a final estimate of the maximum loss should an extreme event occur.