J.P.Morgan

ANNUAL REPORT 2020 OF J.P. MORGAN AG

J.P. Morgan

INDICATORS J.P. MORGAN AG

€M	2020	2019
Total operating income	740.8	253.1
Net interest income	0.1	35.2
Net fee and commission income	707.1	232.3
Loan loss provision	176.6	19.9
Total administrative expenses, depreciation and amortization	388.0	162.1
Profit before tax	176.3	71.1
Profit for the year	139.9	48.6
Equity	**13,012**	**5,143**
Return on Equity (RoE) (Profit of the year / Equity)	1.1 %	0.9 %
Return on Investment (Profit of the year / Total Balance Sheet)	0.06 %	0.08 %
Cost-Income Ratio – before loan loss provision (Sum of administrative expenses and depreciation and amortization / Total operating income)	52.37 %	64.07 %
Pre-tax profit margin (Profit before tax / Total operating income)	23.80 %	28.08 %
Tier 1 capital ratio	30.5 %	27.8 %
Total capital ratio	32.9 %	28.8 %

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MANAGEMENT REPORT AS OF DECEMBER 31, 2020

Business and General Conditions

ORGANIZATION AND LEGAL STRUCTURE

J.P. Morgan AG (the "Bank"), with its registered office in Frankfurt am Main, is an indirectly wholly owned subsidiary of JPMorgan Chase & Co. with its registered office in Columbus, Ohio, in the United States of America. The Bank has a full banking license in accordance with Section 1 Para. 1 of the KWG [Kreditwesengesetz – German Banking Act] and conducts banking business with institutional clients, banks, corporate clients and clients from the public sector. The shares of J.P. Morgan AG are held directly by the J.P. Morgan International Finance Limited with its registered office in Newark, United States of America.

In fiscal year 2019, a branch of J.P. Morgan AG had been established in London. Nine further branches which are located in Amsterdam, Brussels, Copenhagen, Madrid, Milan, Oslo, Paris, Stockholm and Warsaw, started operations in 2020. In addition, J.P. Morgan AG applied for and received regulatory approval to open another branch in Athens. The opening is planned for July 2021.

Since October 31, 2020, J.P. Morgan AG has been managed by a five-person Management Board. The Board of Directors, which consisted of four members from November 1, 2020 to March 31, 2021, has been added with another member in April 2021, who is responsible for the areas of outsourcing, operations and technology. It is also planned to add at least one additional member to the board in the course of 2021. In 2020, the Management Board continued to be supervised by a six-member Supervisory Board. The Management Board usually meets on a monthly basis, while the Supervisory Board meets at least four times a year. The Board of Directors held nine meetings in 2020 and so far, four meetings in 2021. The names of the members of the Management Board and the Supervisory Board are listed in the appendix.

The various business segments, Banking (consisting of Global Investment Banking, Wholesale Payments and Lending), Markets, Securities Services and Commercial Bank, prepare detailed presentations for the meetings of the Management Board. These presentations are key to discuss business developments in the past month and developments in key performance indicators (KPIs) as well as in key risk indicators (KRIs) of the various segments. The Chief Financial Officer (CFO), the Chief Risk Officer (CRO), the Chief Compliance Officer and the Head of Internal Audit also provide their up-to-date reports. In addition, the implementation of the group-wide Brexit strategy by J.P. Morgan AG with regard to client activation, transfer of assets, capital planning and staffing has been monitored during the meetings of the Management Board. The Board meetings are minuted by a member of the legal department.

The Supervisory Board receives an up-to-date summary of the topics discussed in the Management Board meetings, with a view to the current status of the discussion and resolutions in the Management Board for its regular meetings. This summary contains the essential details of the course of business, new planned business activities, the financial development, the ICAAP results of the Bank, the status of the regulatory dialogue, the status of current projects with focus on the implementation of the group-wide Brexit strategy, as well as reports from the 2nd and 3rd Line of Defence functions (risk and compliance). In addition, the internal audit department informs the Supervisory Board in writing of the audits carried out and their results on a quarterly basis.

The Risk Committee of the Supervisory Board met five times in 2020 and so far once in 2021. It aims to form an opinion

about the ICAAP results of J.P. Morgan AG and about the development of the risk profile across the various risk stripes. In addition, the Risk Committee is closely involved in the definition of the recovery scenarios and their analysis. The Audit Committee of the Supervisory Board usually meets four times a year, with the auditors participating at least twice a year to discuss the audit plan, the annual financial statements and the final results of the statutory audit report. The Compensation Committee of the Supervisory Board met six times in 2020, and the Nomination Committee twice. The meetings of the Supervisory Board and its committees are minuted by a member of the legal department or by an external lawyer.

INTERNAL CONTROL SYSTEM

The four segments, Banking, Markets, Securities Services and Commercial Bank, are managed and supervised by two members of the Management Board, the CFO and the CRO.

The Management Board has delegated the monitoring of operational business activities and the associated operational risks to the Local Operational Risk & Control Committee ("LORCC"). The LORCC, which is chaired jointly by the CFO and the Location Control Manager, acts across segments and is made up of representatives from each segment, the various control functions and the corporate functions. In its monthly meetings, the LORCC deals with the course of business operations, with errors or problems that have occurred, and with operational risks that may arise. This enables the LORCC to (i) identify operational risks and control aspects, trends or issues that require escalation in accordance with the applicable criteria, (ii) ensure the necessary monitoring of operational risks and control issues, including the recommended remedial action, and (iii) take the necessary actions in order to address the identified operational risks accordingly. In addition, the LORCC has set up the following four sub-committees: Outsourcing Forum, Regulatory Change Forum, Change Advisory Forum, Technology Forum.

The Outsourcing Forum, chaired by the Board-appointed Outsourcing Manager, is an integral part of the J.P. Morgan AG's Outsourcing Governance Framework, which is responsible for monitoring the entirety of the outsourcing agreements and the associated risks. It also focuses on the implementation of the relevant EBA guidelines. The Regulatory Change Forum, chaired by the MaRisk Compliance Officer and the Chief Compliance Officer, is responsible for monitoring regulatory and legal changes as well as the full implementation of the those regulations which are classified as being relevant for J.P. Morgan AG. The Change Advisory Forum monitors the implementation of new products in accordance with MaRisk as well as essential change management projects. The Technology Forum ensures effective control of J.P. Morgan AG's technology infrastructure and the monitoring and limitation of the associated risks and should also ensure compliance with BAIT and the "EBA Guidelines on ICT and Security Risk Management".

The Management Board has also mandated the Risk Oversight Committee, which is chaired by the CRO and which consists of experts of all significant types of risk, with the following tasks. It is responsible for setting J.P. Morgan AG's risk appetite, for monitoring the risk strategy, developing adequate methods and procedures for the assessment of the risk-bearing capacity, for analyzing individual risk events and for regularly informing the Management Board about the risk profile of J.P. Morgan AG. In the light of expanded business activities and the implementation of the new ECB requirements for the "Internal Capital Adequacy Assessment Process" ("ICAAP"), the focus of the committee in 2020 laid on the expansion of risk management capabilities and governance – staff-wise and methodologically – including the changes to the risk appetite

and the associated limit structure to accommodate migrating business activities. The risk functions have been closely working with the CFO on this.

In addition, the Management Board has mandated the EU Asset & Liability Committee, which is chaired by the Treasurer of J.P. Morgan AG, to monitor the liquidity and refinancing risk as well as the interest rate risk in the banking book of the Bank. The focus in 2020 was, in particular, on the introduction of the "Internal Liquidity Adequacy Assessment Process" ("ILAAP"). The introduction took place in close cooperation with the CRO and CFO, especially taking into account the effects of the Brexit strategy and the associated transfer of risk positions.

During the monthly meetings of the Business Control Forums, which, in most cases, cover the business activities of a line of business in EMEA and in which sales, operations and control functions take part, the following aspects are being discussed: business development, KPIs and KRIs, feedback from customers, strategic projects, industry trends and changes of the legal and regulatory environment and its impact on the respective business area. This enables the Management Board to promptly identify changes or risks in the course of business and to take appropriate decisions and actions.

SEGMENTS AND ESSENTIAL PRODUCTS AND PROCESSES

J.P. Morgan AG is an integral part of the Group and is next to J.P. Morgan Bank Luxembourg SA one of the two strategic Group entities for the successful implementation of the Brexit strategy. In the past three years, J.P. Morgan AG has developed into the primary business unit for business activities in the areas of Investment Banking and Markets of the Corporate & Investment Bank for customers based in the EEA as well as for the management of significant risks in the Euro area. In 2020, the focus was on a controlled expansion of J.P. Morgan AG with regard to the implementation of our organizational structure and underlying processes, smooth client migration, transfer of customer portfolios, transfer of risk assets, capital planning and adequate staffing. In addition, J.P. Morgan AG continues to be the Group's central unit for Euro payments and acts as a depositary and global custodian bank for the German investment market.

Segment "Banking"

This segment comprises Global Investment Banking, Wholesale Payments and Lending.

Global Investment Banking

J.P. Morgan AG went live with the "Global Investment Banking" ("GIB") business in 2020, undertaking first pilot transactions across both "Debt Capital Markets" (DCM) and "Equity Capital Market" (ECM) were completed in the fourth quarter of 2020. This was in preparation for regulated EEA client facing activity for M&A, ECM and DCM businesses being undertaken from J.P. Morgan AG effective January 1, 2021. Those customer mandates, which had still been closed with J.P. Morgan Securities plc ("JPMS plc"), based in London, in 2020, were novated and transferred to J.P. Morgan AG accordingly.

The client base served by the GIB business includes corporates, governments, insurance companies and other financial institutions, private equity companies and family/start-up companies.

The GIB business in J.P. Morgan AG is currently supported by front office banking staff employeed by J.P. Morgan AG as well JPMs plc employees, whereby this employment relationship, especially for the EEA Coverage Banker and the EEA Product

Banker, has already changed from JPMS plc to J.P. Morgan AG (including its branches) with effect from July 1, 2020. Additional employees of the Global Investment Bank changed to J.P. Morgan AG on January 1, 2021.

Wholesale Payments

Wholesale Payments is the business division within the Group covering Treasury Services and Global Trade, offering our customers solutions for payment services, working capital management, liquidity management as well as financing and hedging solutions along the whole value creation chain across different industry segments and markets. Following the expansion of our range of products and services in Treasury Services over the past two years, offering accounts and payment processing in 38 currencies, and the introduction of SEPA Instant, the business is now focussing on offering open banking solutions and more efficient coordination of sales channels.

J.P. Morgan AG continues to bear the global responsibility for group-wide "high-value" payment transactions in Euro. We expect to deliver our payment handling products and services in the bulk payment markets centrally from J.P. Morgan AG, in cooperation with our affiliates in the next few years, to both corporate customers as well as financial institutions. It is also our goal to build up our position as the leading Euro-clearer in TARGET2 and EBA EURO1 with offers to our multi-national corporate customers and financial institutions in Germany and abroad.

In Global Trade we continue to expand our product offering, especially in our Supply Chain Financing programmes where we have added ESG-compliant sustainability elements for the first time in 2020. In addition, we are continuing to work on expanding our product range in order to be able to cover the financing and hedging needs of our target client base more effectively. This also includes expansion in the areas of Sales Finance and Inventory Finance.

Lending

In 2020 during the COVID-19 pandemic, J.P. Morgan AG continued to support its EEA clients, including private and public corporates, financial institutions and private equity companies, by granting further loan commitments. The product range comprised bilateral loans, syndicated loans and bridge loans as well as club deals and asset-based lending. Furthermore, J.P. Morgan AG also started providing facility agent and security trustee services in the fourth quarter of 2020.

At the end of the December 2020, J.P. Morgan AG had outstanding loan commitments to clients in the amount of € 10.5 billion.

The size of the credit portfolio in J.P. Morgan AG is expected to grow in 2021 as the Bank plans to gradually take over the existing loan portfolio for EEA customers that currently still exists in JPMS plc.

Segment "Markets"

The financial year 2020 was a year of significant changes for the "Markets" business in J.P. Morgan AG.

The UK's exit from the EU ("Brexit") required and still requires considerable adjustments to the business model in order to maintain the Group's current product range and EEA customer base. Therefore, the focus of the Bank in 2020 was on the continuous implementation of the necessary adjustments to the organizational structure and underlying processes in order to provide an uninterrupted range of services for our customers especially after January 1, 2021. These changes mainly consisted of the repapering of the contracts with the impacted

clients, the operational activation of customers, the set-up of market infrastructure providers that are required to enable day-to-day business operations, the set-up of the Bank as a primary dealer in selected EEA markets, the migration of the respective trading books as well as the relocation of the identified front office and support staff. The full implementation of the Brexit program is expected to be completed in December 2021. It is planned that J.P. Morgan AG will adopt the role as the central risk management within the Group for products with a strong EU nexus.

At the end of 2020, J.P. Morgan AG employed 61 Trading staff across Frankfurt, Paris and London as well as 103 Markets Sales employees across Brussels, Frankfurt, London, Madrid, Milan, Paris and Stockholm.

An overview of the various business areas in the "Markets" segment is provided below:

- Rates
- Fixed income financing
- Securitized Product Group
- Global Credit
- Commodities
- Currency & Emerging Markets
- Equities (Cash Equities, EDG, Prime Finance, Global Clearing)

Rates

Global Rates and Rates Exotics act as a market maker, providing prices and liquidity in G10-debt, OTC interest rate derivatives and exchange-traded futures and options worldwide via voice or electronic means. Rates Primary Frequent Borrower also allows for the origination and syndication of high grade public sector bonds in the primary debt market.

Fixed Income Financing

Fixed Income Financing engages in market maker and enables customers as well as the Group's own trading desks to have access to secured investments financing using a wide variety of securities and types of collateral.

Securitized Product Group

The Securitized Product Group in J.P. Morgan AG underwrites, places, finances and makes markets in asset-backed securities, mortgage-backed securities and private and commercial mortgage loans.

Global Credit

Global Credit Trading acts as a market maker for credit derivatives and bonds for investment Grade, high-yield and distressed products in the corporate bond market. The Global Credit Syndicate Desk is responsible for underwriting and distribution of high-grade and high-yield bonds, as well as emerging markets bonds to the primary market.

Commodities

Commodities engages in market making and offers hedging solutions to corporate and institutional customers across a wide range of commodity products. These products include, among others, Energy, Metals, Agricultural Commodities as well as customer-specific products. Instruments traded include swaps, forwards, vanilla and exotic options, indices and structured notes.

Currencies & Emerging Markets

Currencies & Emerging Markets also acts as a market maker and provides liquidity and risk management solutions in global currency markets and fixed income products from emerging markets.

Cash Equities

The Cash Equities brokerage business encompasses stock trading on behalf of customers and thus offers institutional investors access to the global stock markets. The focus is on the execution of physical cash securities (including stocks and exchange traded funds ("ETFs")). The business also trades futures on stocks, indices and/or ETFs as well as OTC derivatives for hedging purposes. The business focuses on executing client orders through algorithmic trading platforms and smart order routing.

Equity Derivatives Group

Equity Derivatives Group, as the second activity within Equities, engages in market making primarily on equities and equities related products. It thus provides liquidity in a variety of products, including linear equity products, listed and OTC equity derivatives, dividend products and convertible bonds in major European markets and in South Africa.

Prime Finance

Prime brokerage services include clearing, settlement and custody of client securities, securities lending and margin financing (both synthetic and cash). These services are provided primarily to hedge fund clients. The market making activities on "Delta One" products include futures, swaps and exchange traded funds (ETFs).

Global clearing

Since the end of 2018, the Global Clearing business has been offering the execution and clearing of orders for exchange-traded derivatives (futures & options) and clearing services for OTC derivatives for external and internal customers via a network of central counterparties ("CCP"). The range of services in Global Clearing also includes FX Prime Brokerage. Here, the first clients have been transferred to J.P. Morgan AG over the course of 2020.

The Bank has memberships on all relevant European stock exchanges and with CCPs. For the majority of European CCPs, the Group will get the membership of J.P. Morgan AG to handle all Group-wide activities centrally. The Bank has access to CCPs outside the EEA under indirect clearing agreements through the memberships of other sister companies within the Group.

Segment "Securities Services"

In the Group's global Securities Services business unit, J.P. Morgan AG acts as a regulated custodian in Germany and has been offering global custody and custodian services for institutional clients since 1995.

For its institutional clients (direct investors and investment funds managed by Kapitalverwaltungsgesellschaften), J.P. Morgan AG currently safekeeps a total volume of € 353 billion and with net fund assets of € 206 billion belongs once again to the largest depositaries in Germany at the end of this year according to the Bundesverband Investment und Asset Management e.V. ("BVI").

The custodian, as defined by the German Capital Investment Code [Kapitalanlagegesetzbuch, KAGB], has a special role in the investment triangle in protecting investors and fund assets. In addition to the custody of assets and the maintenance of a current inventory list (with regard to non-custodial assets), as well as settlement of ordered transactions, one of the core functions of the custodian is to perform various control functions to protect the investment assets and the investors. Within the framework of its control functions, it is the task of the Bank to supervise the capital management compa-

ny's day-to-day activity in a timely manner with respect to the relevant details and to ensures their compliance with statutory provisions, regulatory standards and contractual provisions. In addition to regulatory control tasks and services relating to the custody of securities and settlement of trading transactions, the Bank also offers its customers other services, such as a comprehensive reporting system.

As in the previous years, J.P. Morgan AG has given high priority to the implementation of product and process-related adjustments as part of its custody and depositary business. From the perspective of the Management Board, this focus will enable J.P. Morgan AG to continue to offer the business in the usual high quality and with a correspondingly unchanged high level of customer satisfaction, taking into account the increased customer expectations. In addition to various product extensions, for example in the area of reporting and various initiatives for automation and digitization, the expansion of services in the investment fund area is also planned for the coming year.

Segment "Commercial Bank"

The Commercial Banking ("CB") business in J.P. Morgan AG focuses on the following two clients businesses: MMBSI (Middle Market Banking & Specialized Industries) targets subsidiaries of foreign multinational companies headquartered in the EEA region with sales usually between USD 20 and 500 million, while CCBSI (Corporate Client Banking & Specialized Industries) has relationships with companies headquartered in Europe with sales between USD 500 million and USD 2 billion.

The product range includes the provision of Wholesale Payments, FX, credit and trading solutions, and also traditional corporate and investment banking products, including DCM, ECM, M&A and corporate derivatives.

New product areas

As part of the implementation of the group-wide Brexit strategy in order to establish J.P. Morgan AG as the future central legal entity for the segments, "Banking" and "Markets", within the Corporate & Investment Bank for customers in the European Union, the Bank had already started in 2019 to significantly expand its product range. Efforts continued in 2020 to complete the rollout of all product and service offerings for both segments as described above.

In 2020 J.P. Morgan AG also started trading Iron Ore futures on the Dalian Commodities Exchange in China in order to be able to offer global customers of the group access to these hedging instruments.

Wholesale Payments continued to supplement its range of products for treasury services, which had already been expanded in 2019, during 2020 with the introduction of Open-Banking services. In addition, Global Trade has expanded its product offerings especially in the area of Sales Finance, but also in Supply Chain Financing by having added ESG-compliant sustainability components to these products.

MARKETS AND COMPETITIVE POSITION

Segment "Banking"

In 2020, in the area of Investment Banking area which comprises M&A, ECM and DCM activities, J.P. Morgan prevailed with a market share of 9.0 % according to Dealogic against strong competition from European and US investment banks and was ranked Number 1 with customers based in the European Union.

Thanks to the expanded product range in Wholesale Payments, Treasury Services, according to Coalition, was able

to increase its market share (based on sales) in Germany, Austria and Switzerland from 1.8 % to 2.5 %. With regard to the Euro-clearing business, J.P. Morgan AG achieved third place in TARGET2 (according to Bundesbank) in terms of value and volume in January 2021. The competitive landscape did not change significantly in 2020.

Segment "Markets"

In the last five years, the Group has built up its leading position with clients in the European Union and currently holds a top 3 position in the following business areas of Rates, Credit and Equities according to external League Tables [1].

The strategic direction remains unchanged and aims to continuously gain market share as a full-service provider in Markets products and services. Our competitors are different depending on the asset class and very differentiated in detail. Typically, our competition consists of other US investment banks as well as some of the major European banks from Germany, France, Switzerland and the United Kingdom.

Segment "Securities Services"

According to BVI, J.P. Morgan AG is one of the top 5 custodian banks in terms of assets under custody and has a market share of approximately 8 % of the entire German funds market, measured in terms of assets under custody, and even a market share of 11 % in the segment of special funds under custody, which corresponds to the third place in the ranking.

KEY LEGAL AND ECONOMIC INFLUENCE FACTORS

Three central themes have characterized the financial year 2020. They had a significant impact on economic factors worldwide and thus also on our customer base across all J.P. Morgan AG segments.

The COVID-19 pandemic has reached almost every country in the world and has led to significant cost burdens for economies and corporates due to the necessary lockdown measures to tackle the uncontrolled spread of the virus. Most countries fell into recession, and significant volatility could be observed on stock markets. In response to the negative economic effects of the pandemic, the central banks' objective was to keep interest rates at a low level, to make borrowing cheaper and thus to give the economy a positive boost.

Another topic that had already prevailed in 2019, was the political process related to Britain's exit from the European Union and the extensive preparatory measures in the financial sector. The financial sector pursued the approach of preparing for a "hard" Brexit at the end of 2020 without further transition periods and without any other relief. Accordingly, the focus of banks and also of J.P. Morgan AG was on the complete implementation of the structure and process organization as well as on the intensive dialogue with future target clients. At the same time, this preparatory process was made more difficult by ongoing uncertainties regarding the future legal and regulatory framework and thus regarding market access between Great Britain and the EU.

Finally, the troubling events in Minneapolis, which sparked social unrest in the United States and at the same time sparked a worldwide discussion of racism and a growing awareness of social equality and diversity, created a high level of uncertainty among investors, also in the face of an extremely heated election campaign for the 46th US President. In our opinion, the outcome of the election was able to restore the lost confidence combined with growing optimism.

[1] Coalition Propietary Analytics

Other geopolitical conflicts in Asia and the Middle East as well as climate change remained on the radar in 2020, but in our view had no significant impact on the global economy.

According to our assessment, the legal and regulatory environment for banks in the EU remained stable in 2020 as governments and regulators intended to minimize additional burdens and instead provided temporary relief for the economy in the light of the severe impact of the COVID-19 pandemic.

Further topics that we have been dealing with since 2019 are increasing digitization and its effects on our business processes as well as IT security with a constantly growing threat from cybercrime. The COVID-19 pandemic and its consequences for organizations, employees, partners and customers encourage us to continue on this path for greater digitization and electronization internally, but also in our interactions with clients.

PERSONNEL DEVELOPMENT

The number of employees at J.P. Morgan AG increased in 2020 from 361 to an average of 626 employees compared to the previous year.[1] The staff turnover rate was 5 %. Of the total number of employees, 12 % took advantage of flexible work arrangements.

In line with our business concept, we continue to focus on the quality of new hires in the selection process, and on the continuous training and promoting education programs for our staff. The J.P. Morgan AG human resources strategy focuses on the highest quality and diversity of employees, and provides a clear commitment to align the strategy to the needs of our employees.

The remuneration system of J.P. Morgan AG is integrated into the remuneration structure for employees in the EMEA region ("EMEA Remuneration Policy").

[1] This does not include employees that have been seconded or placed on leave or are on parental leave.

BUSINESS DEVELOPMENT

2020 was a successful year for J.P. Morgan AG. The Bank was able to successfully complete the transformation from a transaction bank with a focus on payment processing and securities services to a strategic legal entity for the Corporate & Investment Banking Line of Business within the Group for its customers in the EEA area.

As a result, our dependency on strong interest income has decreased significantly thanks to the significant increase in commission and fee income due to the integration of Global Investment Banking and Markets activities.

2020 was marked by the COVID-19 pandemic, with some extreme market developments, as observed in March 2020. Our business development benefited greatly from our strategic direction. As an operationally stable and financially strong counterparty for our customers, we were able to process a multiple of the volume of a normal business day with regard to payment orders, securities processing, transfer of collateral, clearing of exchange-traded derivatives and other trade transactions without significant disruptions. Therefore, the financial year 2020 closed with strong growth in sales and earnings.

In addition, we continued to support our customers by providing loan commitments that increased to € 10.5 billion by the end of 2020.

The positive business development in 2020 is ultimately reflected in a satisfactory pre-tax profit of € 176.3 million despite an increase in our loan loss provision by € 156.7 million.

Earnings, Financial and Assets Position (IFRS)

J.P. Morgan AG's internal control and regulatory reporting is based on IFRS. For this reason, after the presentation of the earnings, financial and asset situation according to IFRS, a reconciliation for the profit after tax from IFRS to HGB will be provided and a subsequent presentation of earnings, financial and asset situation is presented according to HGB as well.

EARNINGS (IFRS)

Mainly thanks to the implementation of the Brexit strategy in the "Banking" and "Markets" segments, and also to the expansion of business activities in the Wholesale Payments business division, J.P. Morgan AG succeeded in significantly increasing net fee and commission income in 2020. In financial year 2020, the net fee and commission income was € 707.1 million, 204% up compared to the previous year. The net interest income shows a negative trend compared to the previous year and is reported at € 0.1 million, which is € 35.1 million lower than previous year. The increase in the balances at the Deutsche Bundesbank reported under the item cash and central bank balances is to be seen as a decisive factor influencing net interest income. The target figures for 2020 were largely achieved despite the political uncertainty and the ongoing COVID-19 pandemic and its effects on loan loss provisions in the lending business on profit of the year.

The net result from financial assets and liabilities measured at fair value in the amount of € 33.2 million was in 2020 with € 48.2 million significantly above the prior year. This change is mainly due to the migration of risk positions in the "Markets" segment.

In financial year 2020, mainly the effects of the COVID-19 pandemic led to an increase in loan loss provisions from € 19.9 million in 2019 to € 176.6 million in 2020, which reflects an increase of € 156.7 million from previous year.

The total administrative expenses and depreciations rose significantly by around 139 % in 2020, which was mainly due to the build-up of additional resources and the transfer of employees to the branches of J.P. Morgan AG and other costs incurred as part of the Brexit strategy.

Profit for the year increased significantly from € 71.1 million to € 176.3 million. The annual result in the financial year 2020 amounts to a profit after taxes of € 139.9 million.

This result means a Return on Equity of 1.1 % compared to 0.9 % in the prior year.

FINANCIAL POSITION (IFRS)

Principles and Objectives

The significant increase in trading assets and trading liabilities as a result of the migration of the risk positions in the trading area as well as the balances at the Deutsche Bundesbank need to be mentioned as the main drivers of the balance sheet development. The balance sheet of J.P. Morgan AG continues to be impacted by the deposits of its institutional clients and banks as part of the Euro-clearing business and the custodian business and continues to show a stable financial situation in 2020. We enable our customers in the "Securities Services" segment and the "Wholesale Payments" segment to access credit only by granting intraday lines and short-term overnight overdraft lines in case of incorrect disposition. In addition, the increase in lending business in the Lending business area also had an impact on the composition of the balance sheet.

The total balance sheet as of December 31, 2020 significantly increased by 280% compared to the balance sheet as of December 31, 2019. The main drivers were, on the one hand, the migration of risk positions in the trading area, which is reflected in the increase in trading assets and trading liabilities, and, on the other hand, the increase in balances at the Deutsche Bundesbank.

J.P. Morgan AG was always provided with sufficient liquidity in 2020. The liquidity coverage ratio of 146.7 % as of December 31, 2020 is also significantly above the mandatory minimum rate of 100 % which has applied since January 1, 2018.

Capital Structure

The liable equity has increased compared to December 31, 2019 by the profit from prior year which was transferred to reserves and above all, through the capital increase carried out in March, September and October 2020 in the form of a simple additional payment by J.P. Morgan International Finance Limited as the sole shareholder totalling € 0.9 billion, € 4.3 billion and € 2.6 billion respectively. In addition, a capital increase of the Tier 2 capital was carried out in December 2020 by issuing a subordinated Tier 2 note to J.P. Morgan International Finance Limited in the amount of € 0.8 billion. The new subordinated Tier 2 notes issued in financial year 2020 have a maturity date of December 3, 2030 and an interest rate based on the one-month EURIBOR plus 0.83% with a minimum interest rate of 0.00% and a monthly interest payment. Furthermore, there are still two subordinated loans, one from 2009 in the amount of € 150,000,000 (due date: December 21, 2039) as well as a further subordinated loan of € 35,790,432 (with an indefinite term) which in the course of the merger between J.P. Morgan Beteiligungs- und Verwaltungsgesellschaft mbH and J.P. Morgan AG was transferred to J.P. Morgan AG. As of December 31, 2020, this results in a Tier 1 capital ratio of 30.5% and a total capital ratio of 32.9% according to the CRR regulation. With these capital holdings, J.P. Morgan AG is in a solid position in the view of the Management Board to provide the required capital underpinning for the existing business as well as further business activities that J.P. Morgan AG will take over as part of the implementation of the Group-wide Brexit strategy. J.P. Morgan AG's regulatory equity was made up of the following components as at the reporting date of December 31, 2020:

Core capital (Tier 1):	€ 12.643 million	in share capital and reserves
Tier 2 capital:	€ 1.026 billion	from subordinated loans and issued Tier 2 notes

Off-Balance Sheet Business

In the Lending business, there are irrevocable loan commitments totalling € 10.5 billion related to the transfer of the lending portfolio in 2019 and new business in this business unit. In addition, in the Wholesale Payments business, J.P. Morgan AG has largely continued to directly collateralize its own credit risks in the form of contingent liabilities within the rest of the Group. Furthermore, J.P. Morgan AG concluded a total return swap for a promissory note for risk hedging and an interest rate swap with J.P. Morgan Chase Bank, N.A., to hedge interest rate risks from the securities portfolio.

Against the J.P. Morgan Structured Products BV (JPMSP), J.P. Morgan AG has issued a guarantee that bonds, warrants and certificates issued by the sister company and held by third parties up to a maximum nominal volume of USD 1 billion are secured against the insolvency of JPMSP. J.P. Morgan AG is committed to settle payments due to the holders of

the guarantees if JPMSP defaults. The fair value of the guarantees – and thus the payments due – can also be higher than the maximum nominal volume. For the guarantee, J.P. Morgan AG receives no separate remuneration. The guarantee should be seen more in the overall context of the expansion of the business activities as part of the implementation of the group-wide Brexit strategy. As of December 31, 2020, the fair value of the issued guarantee was € 626.3 million; in the same period in 2019 it was € 339 million. Of this, J.P. Morgan AG as of December 31, 2020 holds € 504.5 million in the portfolio and a further € 8.8 million in the portfolio of J.P. Morgan sister companies, in a way that € 113.0 million were held by clients. The guaranteed amount on the balance sheet date is therefore € 121.8 million. In the same period in 2019, it was € 339 million.

ASSET SITUATION (IFRS)

Loans and advances to customers increased mainly due to the expansion of business activities in the Lending business division by € 842 million to € 2,554 million. Claims on banks, including deposits with central banks, rose by € 56,763 million, primarily due to higher treasury activities, to € 83,624 million (thereof deposits with central banks: € 81,131 million). Other assets increased by € 23,093 million to € 30,970 million primarily due to cash collateral pledged to counterparties and held by other bilateral trading partners. Deposits from customers also increased significantly by € 5,345 million to € 13,863 million especially in the banking business segment. Deposits from banks rose by € 63,228 million, mainly due to the aforementioned higher treasury activities to € 82,983 million on the balance sheet date. Other reasons for the extension of the balance sheet are mainly related to the increase in trading book assets and liabilities of approx. € 90 billion on both sides of the balance sheet which are linked to the implementation of the Brexit strategy.

These increased the total balance sheet of J.P. Morgan AG by around 280 % compared to the balance sheet date in the previous year, and stood at € 244,618 million as of December 31, 2020. As of December 31, 2020 the total capital ratio was 32.9 % with the average for 2020 being 34.3 %.

Reconciliation of profit after taxes from IFRS to HGB

€M	2020	2019
Profit of the year (IFRS)	139,9	48,6
Amortization of intangible assets	−19,1	−3,2
Risk valuation adjustment according to § 340e HGB	−61,5	−0,5
Loan loss provision	4,8	−8,9
Changes in fair value of the plan assets	18,4	22,0
Trading Profit/Loss	−10,2	8,4
Taxes	−12,0	−15,8
Others	7,2	−9,4
Profit of the year (HGB)	67,5	41,2

Earnings, Financial and Asset Position (HGB)

EARNINGS (HGB)

Thanks to the expansion of the business activities in the Wholesale Payments area and, above all, through the migration of risk positions in the “Markets” business, J.P. Morgan AG was able to increase significantly its commission income in 2020. In the financial year, the commission income was € 650.4 million, up 232% from the prior year. Compared with the previous year, interest income has shown a negative trend and at € 2.8 million is € 19.0 million lower than in the prior year. The increase in balances with the

Deutsche Bundesbank can be seen as a significant impact on interest earnings. Despite the political uncertainty and the ongoing COVID-19 pandemic, the budget figures for 2020 were largely achieved in terms of result from operational business activities.

The result of the trading portfolio in the amount of € −38.5 million was in 2020 with € 31.8 million significantly below the prior year. This change is mainly due to the migration of risk positions in the "Markets" business and the associated increase in the value-at-risk discount.

In the financial year 2020, the effects of the COVID-19 pandemic, in particular, led to an increase in loan loss provisions to € 171.8 million from € 28.8 million in 2019.

The total administrative expenses, depreciation and other operating expenses rose significantly by around 143% in 2020, which was mainly driven by the buildup of additional resources and the transfer of employees to the branches of J.P. Morgan AG and other costs incurred as part of the Brexit strategy.

This increased earnings from normal business activities from € 79.5 million to € 116.0 million. The net income for the financial year 2020 amounts to € 67.5 million.

FINANCIAL POSITION (HGB)

Principles and Objectives

The basic statements about the composition of the balance sheet do not differ significantly from the statements made in the relevant IFRS section. The balance sheet as of December 31, 2020 significantly increased from € 44.2 billion to € 150.1 billion compared to the balance sheet as of December 31, 2019. The main drivers were, on the one hand, the increase in the positions in the trading portfolio and, on the other hand, the increase in deposits at the Deutsche Bundesbank.

Capital Structure

The information on the capital structure according to the German Commercial Code (HGB) does not differ from the information provided in the corresponding IFRS section.

Off-Balance Sheet Business

The information on off-balance sheet transactions does not differ between IFRS and HGB.

ASSET SITUATION (HGB)

Receivables from customers increased by € 5,405 million to € 8,094 million primarily due to the expansion of business activities in the Lending business and the expansion of business activities as part of the Brexit strategy. Receivables from banks, including the deposits with central banks reported under cash reserves, rose by € 56,621 million to € 90,032 million (thereof deposits with central banks: € 81,131 million), mainly due to greater treasury activities. Liabilities to customers increased significantly by € 7,795 million to € 16,601 million particularly in the banking business. Liabilities to banks rose by € 42,598 million to € 63,550 million mainly due to the aforementioned greater treasury activities on the balance sheet date. Other reasons for the extension of the balance sheet are mainly related to the increase in the trading portfolio of approx. € 90 billion on both sides of the balance sheet which are linked to the implementation of the Brexit strategy.

The total balance sheet of J.P. Morgan AG has increased by around 240% compared to the balance sheet of the prior

year, and stood at € 150,133 million as of December 31, 2020.

Overall statement on Earnings, Financial and Assets Position

In summary, the earnings, financial and asset position can be assessed as positive. The expectations from the beginning of 2020 for the development of the profit of the year have been almost met despite significantly higher risk provisioning in the lending business. The capital measures taken in 2020 had the expected effect on the capital ratios over the course of the year. As predicted, the requirements for the liquidity coverage ratio remained clearly over the threshold during the financial year.

Financial and Non-financial Performance Indicators

FINANCIAL PERFORMANCE INDICATORS

Financial performance indicators according to IFRS, which are used for the internal management of J.P. Morgan AG, include in particular absolute KPIs such as net interest income, fee and commission income and the profit of the year. In addition, return on equity, cost-income ratio and profit margin before taxes are used to assess the performance. The KPIs are derived directly from the information contained in the balance sheet and the income statement of the IFRS individual financial statements and are as follows for the current and previous year:

€M	2020	2019
Total operating income	740.8	253.1
Net interest income	0.1	35.2
Net fee and commission income	707.1	232.3
Loan loss provision	176.6	19.9
Total administrative expenses, depreciation and amortization	388.0	162.1
Profit before tax	176.3	71.1
Profit for the year	139.9	48.6
Equity	**13,012**	**5,143**
Return on Equity (RoE) (Profit of the year/Equity)	1.1 %	0.9 %
Return on Investment (Profit of the year/Total Balance Sheet)	0.06 %	0.08 %
Cost-Income Ratio [1] (Sum of administrative expenses and depreciation and amortization/Total operating income)	52.37 %	64.07 %
Pre-tax profit margin (Profit before tax/Total operating income)	23.80 %	28.08 %
Tier 1 capital ratio	30.5 %	27.8 %
Total capital ratio	32.9 %	28.8 %

[1] Indicator before loan loss provision

Despite an increase in loan loss provision, the profit for the year reported an increase from € 48.6 million to € 139.9 million in 2020. The return on equity (RoE) increased from 0.9% in the previous year to 1.1% in 2020. The cost-income ratio decreased from 64.1% in the previous year to 52.4%. Due to the expanded business model as part of the Brexit strategy and the capital increases that have been carried out, we are reporting a total capital ratio of 32.9% as of December 31, 2020.

NON-FINANCIAL PERFORMANCE INDICATORS

The non-financial performance indicators that measure the business volume of J.P. Morgan AG developed overall positively in the Banking and Markets business again in 2020.

The growth in the area of high-value payment transactions was among others impacted by the increased business activities of our clients during the first lockdown of the COVID-19 pandemic and demonstrates, in our opinion, the strength of our processing platform, which ultimately resulted in an increase in our market share for Euro payment by value and volume in 2020.

In the Markets segment, important drivers for a higher business volume were on the one hand the COVID-19 pandemic and on the other hand the transfer of customer relationships, which had already started during the course of 2020 as part of the group-wide Brexit strategy.

	2020 [1]	2019
Number of payment instructions – High-Value	6.3 Mio.	5.7 Mio.
Number of payment instructions – Low Value	203 Mio.	101 Mio.
Straight-Through-Processing Rate (High Value)	98.0 %	97.9 %
Asset under Custody (in € billion)	353	341
Number of transactions – Global Rates [2]	241,000	89,000
Number of transactions – Global Credit [2]	145,000	58,000
Number of transactions – Global Equities [2]	23 Mio.	43 Mio.
Number of transactions through CCPs	244 Mio.	227 Mio.
Customer complaints	30	5
Global Clearing – Percentage of active customers	99 %	90 %
Markets – Percentage of customer contracts signed	87 %	79 %
Markets – Percentage of active customers	52 %	13 %
Operational losses (€ million)	1.0	2.1
Gender Diversity (VP-Level)	34 %	38 %

[1] The Cash Equity volumes for 2020 have been calculated based on the orders received for the entity. In 2019 volumes were at execution level including the exchange and the client facing views.
[2] rounded

In view of increased volumes, the degree of change in the financial markets and the difficult working environment over the course of 2020, we are pleased to see that the number of complaints has remained at a low level and that our operational losses have even decreased by more than 50% compared to the previous year. From the point of view of the Management Board, these facts and the continuously high straight-through-process rate are indicators of the scalability of the global operating model of J.P. Morgan Group thanks to a high degree of automation, the set-up of Centres of Operational Excellence and thanks to our commitment to our clients.

We also see the 3.5% increase in assets under custody as a further signal of trust that our customers have in J.P. Morgan AG.

"Operational Excellence" remains our guiding principle and is directly linked to our efforts to continuously improve our technology platform, the internal control systems and the continuous training of our employees. It is important to us that we perform an in-depth analysis of our operational errors, learn from the outcome and draw the necessary conclusions for the future. For this reason, we are particularly committed to an open "risk and error culture".

In 2020, the Management Board paid less attention to the attrition rate than in the past financial year in view of the growth in headcount not only in Frankfurt, but in the entire network of our European branches, while continuing to face ongoing competition for talent in the financial sector in Frankfurt as well as in Paris.

Our goals remain the continuous improvement of our working environment and the determined implementation of a "Great Team & Winning Culture". We strive to proactively counter and eliminate biases and prejudices and to contribute to an inclusive and diverse environment not only in our workplace but in all aspects of our lives.

STATEMENT BY COMPANY MANAGEMENT

The Supervisory Board established a target in 2017 of 30% for inclusion of women for both the Supervisory Board and the Management Board; the Management Board likewise set a target of 30% women in 2017 for both senior management levels. J.P. Morgan AG plans to achieve these targets by June 2022.

BUSINESS PRINCIPLES "HOW WE DO BUSINESS"

J.P. Morgan AG is fully integrated into the corporate culture of J.P.Morgan Chase & Co., whose guiding principles are described by the four pillars of the group-wide business principles:

- Exceptional Client Service
- Operational Excellence
- A Commitment to Integrity, Fairness and Responsibility
- A Great Team and Winning Culture

Relationships with Related Companies and Persons

We identified our parent company, J.P. Morgan International Finance Ltd., and also J.P. Morgan Securities plc, JPMorgan Chase Bank, N.A., as well as the J.P. Morgan Structured Products B.V. as companies closely related to J.P. Morgan AG. We consider the members of the Management Board and the Supervisory Board of J.P. Morgan AG and their family members as well as related persons.

The following financial transactions are carried out with related companies:

- Money market transactions, investing and borrowing money as well as financial guarantees
- Transactions in total return swaps, OTC derivatives and other trading related positions
- Transactions in the Global Clearing and Cash Equity sector
- Reverse Repos
- Nostro accounts

– Provision of subordinated capital
– Purchasing and supplying corporate services

All transactions have been performed on normal market terms.

DECLARATION ON DEPENDENCY COMPANY REPORT IN ACCORDANCE WITH § 312 GERMAN STOCK CORPORATION ACT ("AKTG")

J.P. Morgan AG is a dependent company of J.P. Morgan International Finance Limited. Since there is no domination agreement between the companies, the Management Board of J.P. Morgan AG prepared a report on relationships with affiliated companies in accordance with § 312 of the German Stock Corporation Act ("AktG"), which concludes with the following declaration:

The Management Board declares that J.P. Morgan AG has received an appropriate consideration for each legal transaction in accordance with the circumstances that were known to it at the time when that individual legal transaction was entered into or the step undertaken or refrained from, and was not placed at a disadvantage due to the measure being taken or refrained from.

Outlook

SIGNIFICANT OPPORTUNITIES AND RISKS FOR THE UPCOMING FINANCIAL YEAR

One year after the outbreak of the COVID-19 pandemic at the beginning of 2020, J.P. Morgan AG and the Group continue to take a prudent view in the light of continued incremental uncertainty with regard to inconsistent development of infection rates across Europe, the risk of a 3rd wave and its severity and duration, the effective distribution of vaccine as well as the efficacy of the vaccine in the line of emerging new virus variants and finally with regard to the inconsistent political responses across Europe balancing the need of increased mobility and the risk of rising virus reproduction ratios. In the light of these uncertainties, we are not in a position to issue a statement about the medium-term effects of the pandemic over the 2nd half of 2021 and beyond. Essential conditions for an ongoing and sustainable economic recovery are on one hand a swift and effective execution of a vaccination strategy globally and on the other hand the ongoing effectiveness of the monetary and financial policy measures of central banks and governments to provide financial support to the economy, supporting global GDP growth which we could observe in the first two months of 2021, while keeping inflation under control.

Regarding the Bank's loan portfolio, we are still assuming slight growth in loan commitments with existing customers of J.P. Morgan AG. Due to the risk provision already booked in the amount of € 176.6 million, we are only planning to increase this by approximately 10 % and we do not expect any significant loan defaults that could have a material impact on our results.

We continue to closely monitor the spread of the virus and its impact with the prime objective to protect our own staff and our ability to service our clients. We are confident that we have implemented a robust concept globally which we will continuously adapt in line with the recommendations of the health authorities and government agencies.

The unresolved trade disputes between the United States and China remain on our radar. While we expect the new US administration to bring a change in direction with regard to foreign affairs, tensions between the US and China will remain, potentially representing the most important geopolit-

ical risk over the medium- to long-term. However, we do not see any immediate negative impact for 2021.

Climate change is a global challenge that has presented – and will continue to present – risks for businesses and communities around the world. Since the Paris Agreement in 2015, climate change has been one of the most important drivers of the market impacts of ESG factors. The impact will be manifold: Activities of businesses could be disrupted by the physical risks from climate change. In addition, these physical changes may prompt changes in regulations or consumer preferences which in turn could have significant consequences for the business models of our clients but also for the business activities of the Group and more specifically for the business activities of J.P. Morgan AG. While greenhouse gas emissions are increasingly being regulated and taxed by governments, we see and expect to continue to see a trend of most major economies committing to net-zero targets. As a consequence, companies with higher emissions might see their cost of doing business rising and other companies which do not credibly integrate climate change into their business strategy might also have impact on their competitive advantage. Climate change impacts every industry sector, including the financial industry. We see, on the one hand, new business opportunities for J.P. Morgan AG to support companies that are thinking strategically about this transition and that are positioning themselves to adapt to sustainably focused trends over time. Also within J.P. Morgan AG this transformation process has already started. For this purpose, a separate coordination office has been created that reports directly to the Bank's CEO.

UK's exit from the European Union at the end of 2020 happened with little disruptions to markets. However, we do not expect this to be the end of the Brexit negotiations, since most of the trade agreements are subject to periodic review and many aspects of the future EU-UK relationship remain to be settled. Especially the absence of "equivalence" rules not just for the manufacturing industry, but also for the financial industry, where, for example, the clearing of Euro-denominated derivatives is one the unresolved matters as the majority of European clearing activity takes place on London-based exchanges. During 2021, we expect the EU to continue to develop the Capital Markets Union. Considering UK's exit from the European Union and the expectation for the financial sector to support the European Member States in dealing with the economic consequences of the COVID-19 pandemic by creating effective funding opportunities, we expect new business opportunities to arise for J.P. Morgan AG.

The cybersecurity outlook for J.P. Morgan AG and the financial sector for 2021 is determined, in large part, by the continued socioeconomic volatility that businesses continue to face as a result of the pandemic. Throughout 2021, it is expected that nation-state threat actors will continue to conduct cyber espionage campaigns, while advanced cybercriminal groups will continue to evolve and adapt in order to maximize their returns. This includes ransomware attacks which have significantly increased and have resulted in higher pay-outs for threat actors.

In addition we expect attacks targeting the supply chain to continue and as long as suppliers fail to implement adequate security controls, the threat will persist in 2021. While J.P. Morgan AG and the financial sector are not a priority target for these attacks, the firm's suppliers could act as a conduit to systems and data. While we see these as a true risk for J.P. Morgan AG, we also see this as an opportunity to work with our clients, suppliers and the industry to mitigate cybersecurity threats.

Due to the impact of COVID-19, J.P. Morgan AG increased the use of remote access and also video conferencing solutions provided by third parties to facilitate remote work. As a result, the Bank took additional precautionary measures to mitigate cybersecurity risk.

We plan to have the implementation of the Brexit program fully completed by the end of 2021. This includes, on the one hand, the further transfer of risk assets , for which J.P. Morgan AG will become the central risk managing legal entity of the Group in the future, and on the other hand the migration of trading portfolios of our existing customers who still hold such portfolios at J.P. Morgan entities in the UK and which will be newly consolidated in J.P. Morgan AG. Together with the expansion of our current business activities, we assume that our total assets could increase by the end of 2021 in a similar way to the previous year.

As a result, we also expect an increase in risk-weighted assets (RWA) of up to 75 %, primarily driven by newly established market risk positions and the further expansion of customer relationships in the "Markets" business and the associated increase in credit risk. With further planned capital increases in 2021, we will be able to support these business activities with the necessary capital to meet the regulatory requirements. It is the objective to have a Tier 1 capital ratio of at least 20 % and a total capital ratio of at least 25 %. With regard to our liquidity situation, we consider the Bank to be comfortably positioned with a liquidity coverage ratio of over 150 % for 2021.

With regard to the 2021 earnings situation of J.P. Morgan AG and due to the implementation of the group-wide Brexit strategy and the strategic role of the Bank as the primary legal entity of the Corporate & Investment Bank for customers based in the EEA, we are anticipating a significant increase in our interest and commission income, with the contribution increasing 29 % from the "Banking" business and 69 % from the "Markets" business. At the same time we expect a significant increase in our total expenses of over 300 %, in view of a headcount of approx. 1,300 towards the end of the financial year and in view of the expansion of business activities that have taken place. Our expectation is that earnings before taxes will increase significantly again in 2021 and ultimately lead to a return on equity (RoE) of 2.7 % and a RORAC of 1 %.

Regarding the four Segments within J.P. Morgan AG, we see the following business development:

For the "Banking" segment, we expect the interest and commission income to double, especially through the Global Investment Banking activities, since this will be the first year in which we will fully benefit from the implementation of the group-wide Brexit strategy. For the Wholesale Payments business, we see again a good basis for continuing our growth path in terms of customer acquisition and payment volumes through a combination of market consolidation and the continuous expansion of our product offerings. For the loan portfolio in the Lending business, we are assuming an increase in interest and commission income of around 20 %, also thanks to anticipated increase in loan commitments, which were in the past in J.P. Morgan Securities plc.

The "Markets" segment in J.P. Morgan AG has started the new financial year 2021 with a full range of products for its prospects in the EEA. We therefore expect a significant increase in transaction volumes and an increase in sales of around 300 % compared to 2020. We are confident that we will benefit from our determined and timely implementation of the Brexit-related necessary changes to the organizational structure and

underlying processes. We expect continued strong competition for all of our business activities in Markets. However, it is also our expectation that we will further expand our market position and gain further market share in 2021, as some competitors have not yet been able to fully build and adapt their business model to the new Brexit requirements. It is also our expectation to further gain market share in 2021 as other participants adjust to the Brexit requirements, and that heightened volatility events become more frequent and severe with the large volumes of excess liquidity in the financial markets. Regardless, we do not see any significant systemic changes in general demand in 2021.

From our point of view, the cost pressure in the "Securities Services" segment will persist. We are therefore working both internally and with our customers on the broad automation of our processes. In addition, we are planning for the renegotiation of supplier contracts and new projects with the objective of realizing additional economies of scale through a stronger integration of external specialist providers and through a optimized usage of the group-wide infrastructure. While we are working on reducing our operating costs, we will continue to look for opportunities to target new client segments in the German market. With a stable interest and commission income, we expect to be able to improve our pre-tax profit in 2021.

We will continue to expand the "Commercial Bank" segmet in 2021, resulting in a planned increase in net interest and commission income of around 50 %. Since necessary investments will also lead to higher costs in 2021 and sustainable earnings growth only in subsequent years, we assume that this segment will show a small loss in 2021.

2021 will be also a year of major regulatory reforms, including Changes to the Capital Requirements Directive (CRD5), the Capital Requirements Regulation (CRR2), the Bank Recovery and Resolution Directive (BRRD2) and the Single Resolution Mechanism Regulation (SRMR2). This will lead to significant changes in terms of capital and financing requirements, governance structures in risk management, reporting, recovery and resolution planning and in some cases also to the corporate structures. As a result of these regulatory reforms, the financial sector will face complex implementation measures in 2021.

Risk Report 2020

RISK MANAGEMENT

Risk is an inherent part of the business activities of J.P. Morgan AG ("the entity") and JPMorgan Chase ("the Firm"). When J.P. Morgan AG extends a loan, advises customers and clients on their investment decisions, makes markets in securities, or offers other products or services, it takes on some degree of risk. The overall objective is to manage its businesses, and the associated risks, in a manner that balances serving the interests of its clients, customers and investors and protects the safety and soundness of the entity and the Firm.

Effective risk management in J.P. Morgan AG requires, among other things:

- Acceptance of responsibility, including identification and escalation of risk issues, by all individuals within the entity;
- Ownership of risk identification, assessment, data and management within each of the lines of business (LOBs) and Corporate functions; and
- Independent risk governance which is embedded into Firmwide structures as appropriate.

The entity and the Firm strive for continual improvement in their efforts to enhance controls, ongoing employee training and development, talent retention, and other measures.

RISK GOVERNANCE AND OVERSIGHT

The risk management governance and oversight framework involves understanding drivers of risks, types of risks, and impacts of risks.

Drivers of risks are factors that cause a risk to exist. Drivers of risks include the economic environment, regulatory and government policy, competitor and market evolution, business decisions, process and judgment error, deliberate wrongdoing, dysfunctional markets, and natural disasters.

Types of risks are categories by which risks manifest themselves. Risks are generally categorized in the following four risk types:

– Credit and investment risk is the risk associated with the default or change in credit profile of a client, counterparty or customer; or loss of principal or a reduction in expected returns on investments, including consumer credit risk, wholesale credit risk, and investment portfolio risk.
– Market risk is the risk associated with the effect of changes in market factors, such as interest and foreign exchange rates, equity and commodity prices, credit spreads or implied volatilities, on the value of assets and liabilities held for both the short and long term.
– Operational risk is the risk of an adverse outcome resulting from inadequate or failed internal processes or systems; human factors; or external events impacting processes or systems; Operational Risk includes compliance, conduct, legal, and estimations and model risk.
– Strategic risk is the risk to earnings, capital, liquidity or reputation associated with poorly designed or failed business plans or inadequate response to changes in the operating environment.

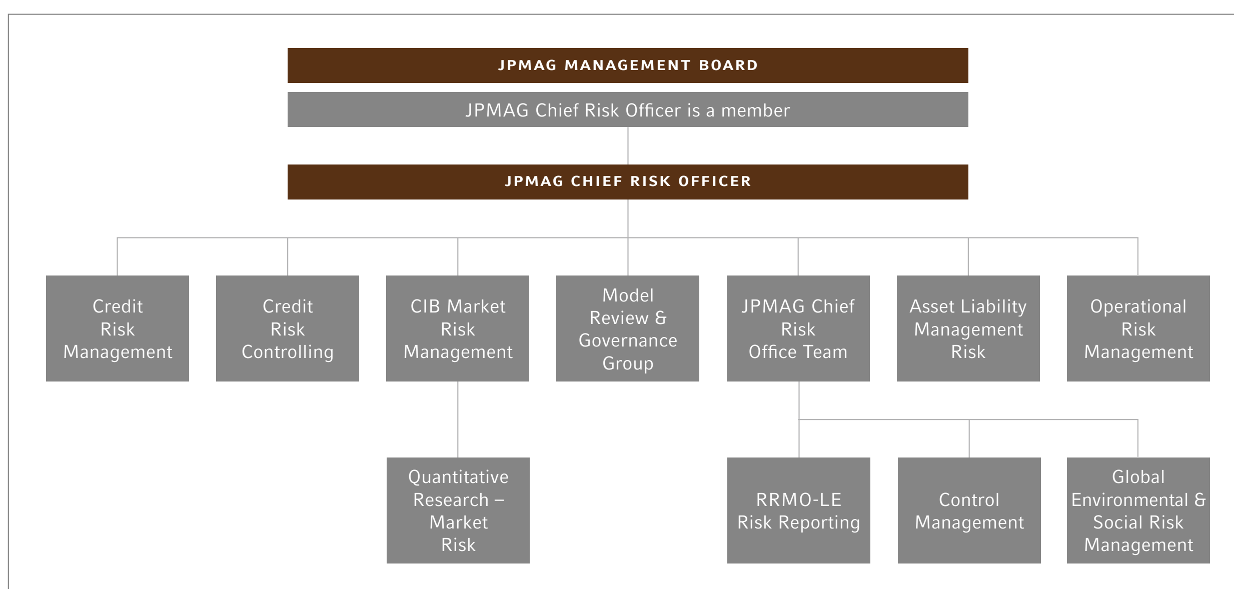
Impacts of risks are consequences of risks, both quantitative and qualitative. There may be many consequences of risks manifesting, including quantitative impacts such as a reduction in earnings and capital, liquidity outflows, and fines or penalties, or qualitative impacts such as reputation damage, loss of clients and customers, and regulatory and enforcement actions.

J.P. Morgan AG Risk Strategy

J.P. Morgan AG's approach to risk management builds on the Firmwide approach. The principles are set out in the risk strategy. The risk strategy is derived directly from J.P. Morgan AG's business strategy. It sets out the principles for risk management in J.P. Morgan AG as defined by the Management Board of J.P. Morgan AG and is approved annually by the Supervisory Board.

The risk strategy defines how J.P. Morgan AG manages the risks it has taken as part of its business activities. By limiting and managing the risks, the entity aims to ensure risk-bearing capacity and liquidity at all times. The risk strategy covers all material risks identified by the Risk Inventory and is, if necessary, further specified for individual risk categories in the form of partial risk strategies and then made concrete and operational using policies, frameworks, guidelines and operating procedures. The completeness and suitability of the risk strategy is reviewed at least annually based on the J.P. Morgan AG Business Strategy.

The following principles apply for overall risk management and monitoring:



- Clearly defined organizational structures and documented processes are in place for all risks and respective business activities, from which the responsibilities and competencies of all involved functions are derived.
- There is a clear segregation of duties between first and second line of defense in order to avoid potential conflicts of interest.
- J.P. Morgan AG defines and implements suitable procedures for risk identification, measurement, aggregation, management, monitoring and communication of the risk categories.

J.P. Morgan AG Risk Organization

J.P. Morgan AG has an Independent Risk Management ("IRM") function, which consists of the Risk Management and Compliance organizations. The Chief Risk Officer ("CRO"), a Management Board member, leads the IRM organization and is responsible for the risk governance of J.P. Morgan AG.

J.P. Morgan AG relies upon each of its LOB and Corporate functions giving rise to risk to operate within the parameters identified by the IRM function, and within its own management-identified risk and control standards. Each LOB as well as Treasury & Chief Investment Office (T/CIO) are J.P. Morgan AG's first line of defense and own the identification of risks, as well as the design and execution of controls to manage those risks. The first line of defense is responsible for adherence to applicable laws, rules and regulations and for the implementation of the risk management structure (which may include policy, standards, limits, thresholds and controls) established by IRM.

The IRM function is independent of the businesses and forms the second line of defense. The IRM function sets and oversees the risk management structure for risk governance, and independently assesses and challenges the first line of defense risk management practices. IRM is also responsible for its own adherence to applicable laws, rules and regulations and for the implementation of policies and standards established by IRM with respect to its own processes. The IRM function sets and oversees various standards for the risk management governance framework, including risk policy, identification, measurement, assessment, testing, limit setting (e.g., risk appetite, thresholds, etc.), monitoring and reporting, and conducts independent challenge of adherence to such standards.

In order to ensure optimal effectiveness and to leverage Firmwide expertise, J.P. Morgan AG Risk Management is integrated into Firmwide and EMEA[1] Risk Stripes aiming to achieve consistency across legal entities.

The Internal Audit function operates independently and performs independent testing and evaluation of processes and controls across the entity as the third line of defense.

In addition, other functions contribute to the J.P. Morgan AG control environment, including Finance, Human Resources, Legal and Control Management.

J.P. Morgan AG's risk management is structured into risk functions to cover the risk profile of the entity.

The independent status of the IRM function is supported by a governance structure that provides for escalation of risk issues to risk senior management, the J.P. Morgan AG Risk Oversight Committee (ROC), or the J.P. Morgan AG Management Board.

[1] Europe, Middle East and Africa

Based on a delegation by the J.P. Morgan AG Management Board, the J.P. Morgan AG ROC reviews the entity's overall risk situation on a monthly basis in the light of current market conditions and identifies future risk concerns and mitigation measures. The ROC provides oversight of any risk issues in relation to risk-bearing capacity and the J.P. Morgan AG ICAAP process, where appropriate or required.

If necessary, the J.P. Morgan AG ROC escalates issues to the Management Board, the Risk Committee of the Supervisory Board and/or the Supervisory Board of J.P. Morgan AG. The ROC can escalate to and feeds into the EMEA Risk Committee in order to ensure that the J.P. Morgan AG risk governance is closely aligned to the Firmwide governance.

J.P. MORGAN AG RISK MANAGEMENT FRAMEWORK

Risk identification

Part of J.P. Morgan AG's risk management framework is the ongoing identification of risks, as well as the design and execution of controls, inclusive of Risk Management-specified controls, to manage those risks. To support this activity, J.P. Morgan AG has established a risk identification framework which is based on the Firmwide risk identification process. It is designed to identify material risks inherent to the entity's business, catalogue them in a central repository and review the most material risks on a quarterly basis, respectively ad-hoc if required by material changes to risk profile.

The classification of individual risk categories as a material risk is based on whether the occurrence of the risk could have a serious negative effect on J.P. Morgan AG's risk-bearing capacity, liquidity or capital situation.

As per the risk inventory dated December 31, 2020, the following risk categories are considered material for J.P. Morgan AG:

– Credit risk including wholesale credit risk, and investment portfolio risk (pension risk),
– Market risk, including interest rate risk in the banking book (IRRBB),
– Operational risk,
– Strategic risk including capital risk, business risk, and liquidity risk.

Reputation Risk and Country Risk manifest across the risk types mentioned above and are therefore not considered as material risk categories individually.

Risk appetite

J.P. Morgan AG has developed a Risk Appetite Framework that sets out and operationalizes its Risk Strategy. Quantitative parameters are used to monitor and measure J.P. Morgan AG's risk bearing capacity consistent with its stated risk appetite.

Risk appetite is set for the material risks. It is set below risk capacity which is the maximum level of risk J.P. Morgan AG could bear without breaching constraints imposed by regulatory capital or liquidity requirements, other regulatory restrictions, or obligations to third parties which impact capital.

Where applicable, quantitative risk appetite parameters are expressed as losses under stress for individual risk types which can be used by risk stripes to propose more granular limits and policies calibrated to these risk appetite levels.

Risk measurement and reporting

Risk measurement and reporting in J.P. Morgan AG are performed by risk category on a daily (credit, market and liquidity risk), monthly (IRRBB) or quarterly cycle (operational, business and pension risks). The ICAAP is refreshed on a quarterly basis.

In addition to regulatory limits, the Management Board at J.P. Morgan AG has defined a series of early warning indicators, which are monitored in a timely manner. Indicators and risk limits are clearly documented and include inter alia recovery indicators, credit limits, investment limits, bidding limits, position limits, as well as the minimum liquidity of J.P. Morgan AG. These also consider concentration risks with respect to other J.P. Morgan entities.

For its monthly meetings, the Management Board receives a detailed overview of the development of the business areas, information on financial trends, a detailed risk report as well as a report from the Corporate functions. The scope of the quarterly risk report extends considerably beyond the monthly reporting and presents the risk situation in more detail.

For its meetings, the Supervisory Board receives a current summary of the topics discussed in the meetings of the Management Board, including a summary of the risk report.

COVID-19 Pandemic

The adverse economic conditions caused by the pandemic have had a negative impact on certain of J.P. Morgan AG's businesses and results of operations, including increases in the allowance for credit losses. The pandemic has resulted in increased reporting cycles, ad-hoc actions and significantly expanded regulatory interaction. This is detailed in the respective individual risk sections.

INTERNAL CAPITAL ADEQUACY ASSESSMENT PROCESS (ICAAP)

The Internal Capital Adequacy Assessment Process (ICAAP) including the risk bearing capacity analysis is a key steering instrument at J.P. Morgan AG with the goal of maintaining, at all times, an appropriate risk profile, adequate capitaliza-

tion and thereby ensuring business continuity on an ongoing basis.

The normative perspective is a multi-year assessment of J.P. Morgan AG's ability to meet all capital-related regulatory and supervisory requirements on an ongoing basis under a baseline and adverse scenarios.

The economic perspective assesses capital adequacy, covering all material risks, over a 1-year horizon using internal quantification methodologies and an internal definition of economic capital resources.

J.P. Morgan AG's ICAAP process consists of several building blocks which fit together to ensure that it is sufficiently capitalized to cover the risks that it is exposed to on an ongoing basis:

- Risk identification and assessment: This forms the basis of the ICAAP and results in an inventory of risks to which J.P. Morgan AG is exposed. These risks are assessed for materiality based on defined materiality thresholds. Further details can be found in the section "Risk Identification".
- Risk quantification: Risk measuring methods and models are used to quantify regulatory and economic capital requirements for all material risks with the exception of risks that cannot be adequately covered by capital, e. g., liquidity risk.
- Capital resources: The available capital resources represent the risk bearing capacity. While the normative perspective utilizes regulatory capital aligned with CRR rules and accounting standards, the economic perspective employs a more conservative definition of capital resources derived from regulatory capital whereby only capital items capable of absorbing losses in a business continuity environment are considered.
- Risk appetite: J.P. Morgan AG has established a risk appetite framework which expresses the level of risk the entity is willing to take to achieve its strategic objectives. Threshold breaches are subject to a dedicated governance framework triggering management actions aimed at maintaining capital adequacy. Further details can be found in the section "Risk Appetite ".
- Capital planning: Capital planning takes into account risk appetite thresholds in order to ensure capital adequacy on an ongoing and a forward-looking basis.
- Stress testing: Adverse scenarios are used, in the capital planning, to assess the resiliency of the Bank and test its risk bearing capacity. Capital adequacy metrics both under the normative and the economic perspective are subject to regular stress testing to evaluate J.P. Morgan AG's capital position and detect key vulnerabilities.
- Reverse stress testing: Reverse stress testing is carried out annually, as part of the ICAAP, to assess scenarios and circumstances that would render J.P Morgan AG's business model unviable thus enabling the implementation of appropriate measures.
- Capital adequacy assessment: Capital adequacy is monitored and reported on an ongoing basis. The monitoring and assessment are done for the current period as well as the medium-term perspective. Should an immediate or potential future capital adequacy issue be identified, the appropriate measures are implemented. J.P. Morgan AG's Management Board produces and signs a Capital Adequacy Statement (CAS) annually.

Normative Perspective

J.P. Morgan AG can, from a capital adequacy perspective, comfortably execute its business strategy for 2021–2023. Further capital injections are planned in 2021 in order to complete the implementation of the Firm's Brexit strategy.

According to its capital plan, J.P. Morgan AG's Tier 1 ratio is not expected to fall below 20 % in the next three years with a total capital ratio of about 32 % at year-end 2023.

Capital methodologies in the normative perspective

- Credit Risk and Counterparty Credit Risk: J.P. Morgan AG applies the standardized approach to calculate its pillar 1 capital requirements for credit risk. External credit ratings are used to determine the credit quality steps and the associated risk weights based on the exposure class. The risk weights are then applied to the exposure to derive risk weighted assets (RWAs).
  - For OTC derivatives, both the internal model method (IMM) and the mark-to-market method are used to calculate exposure until June 2021 when SA-CCR replaces the mark-to-market method.
  - For securities financing and other collateralized transactions, the financial collateral comprehensive method, including supervisory volatility adjustments, is used to calculate exposure values.
- Market Risk: J.P. Morgan AG currently uses the standardized approach to calculate its regulatory market risk capital requirements, which uses a "building block" approach to calculating each category of market risk:
  - Interest Rate Risk: J.P. Morgan AG currently uses the Maturity approach. Permission has been sought to apply sensitivity models for interest rate risk beginning in 2021.
  - Equity Risk: The standardized approach is used with a look-through for stock indices for the purposes of specific and general equity risk.
  - Commodity Risk: The maturity ladder approach is used to calculate capital requirements.
- Non-delta risks (i.e. gamma and vega): J.P. Morgan AG did not have any material non-delta risks as of December 31, 2020. This risk will increase significantly during the year 2021 due to the planned Equity migrations. The entity will use both the Delta-Plus method and the scenario approach to quantify non-delta risks.
- CVA Risk: J.P. Morgan AG currently uses the standardized approach to calculate a CVA risk charge for OTC derivatives. Both the Internal Model Method (IMM) as well as the mark-to-market method are used to calculate the exposures whereby the mark-to-market method will be replaced with SA-CCR as from June 2021 onwards in line with CRR 2.
- Operational Risk: Operational risk capital requirements are currently calculated using the Basic Indicator Approach (BIA).

Economic Perspective

J.P. Morgan AG assesses its internal capital adequacy from an economic perspective as the ratio of total economic capital demand to internal capital resources. As per December 31, 2020 utilization stood at 29% compared to 27% a year earlier. The economic capital demand increased by +172% in 2020 due to the implementation of the Firm's Brexit strategy. Over the same period, the internal capital increased by € 7.9 billion driven by Tier 1 capital injections. The economic capital demand is calculated by the responsible risk functions at least on a quarterly basis and reported, as part of J.P. Morgan AG's risk reporting, to the Management Board.

J.P. Morgan AG does not currently take into account inter-risk diversification (i.e. between risk types). All risk type-specific capital demands are added up to J.P. Morgan AG's total economic capital demand.

€M	Q4 2020	Q4 2019[1]
Internal Capital Usage under the Economic Perspective	29 %	27 %
Total Internal Capital	12,917	5,038
Total Risk Capital Demand	3,757	1,382
Credit Risk	1,141	713
Market Risk	1,186	9
IRRBB	30	57
Operational Risk	771	310
Business Risk	630	294
Pension Risk	0	0

[1] 2019 figures for Risk capital demand were updated retrospectively.

Economic capital risk measurement methodologies

All material risks are considered in the total economic capital demand and are quantified over a 1-year holding period at a 99.9 % confidence level.

– Credit Risk: Credit Risk is quantified using the wholesale Economic Credit Capital model (ECC), with add-ons for risks not yet covered by the model. ECC seeks to capture the distribution of portfolio losses arising from credit risk through either defaults or changes in value. The model produces loss distributions that are then used to assess the entity's capital adequacy in the ICAAP. The principal drivers of portfolio capital are the risk characteristics of individual exposures and the correlations among different borrowers.
– Market Risk: J.P. Morgan AG determines its market risk capital requirements under the economic internal perspective using a Basel 2.5 market risk model, which is based on a combination of full-revaluation and sensitivity approaches across all trading book positions within a consistent risk factor simulation framework capturing both linear and high-order risk factors during market movements.
– IRRBB: J.P. Morgan AG's IRR capitalization methodology under the economic perspective intends to capture the impact to the economic value of equity from an adverse interest rate scenario.
– Operational Risk: The operational Risk Capital for J.P. Morgan AG is determined using the information collected as part of a scenario analysis process. The risk scenarios quantified during the scenario analysis process are identified as part of the legal entity material risk identification process, and are therefore a representation of the most material risks within J.P. Morgan AG. The lower and upper bound of the exceptional but plausible loss calculated during the scenario analysis process is an input into the capital model to derive the Operational Risk capital for the entity.
– Business Risk: The quantification is based on historically observed deviations between planned and actual P&L items, which are not capitalized for elsewhere in the ICAAP. The methodology uses historical simulation of the observed deviations and recalculates a business risk factor by determining the 99.9 % confidence level from the historical distribution. Applied to the current P&L plan, it results in an estimated capitalization amount for Business Risk over a 1-year risk horizon.
– Pension Risk: Economic Capital is derived by stressing both assets and liabilities in J.P. Morgan AG's defined benefit pension schemes and capitalizing for any resulting deficits which the entity could be liable to fund.

While the general aim is to quantify all material risks, some of the defined risks are not (directly) quantified as part of the ICAAP. This is the case when the risk is covered in a separate process:

– General Liquidity Risk is covered as part of the ILAAP.
– Capital risk is considered intrinsically within the ICAAP framework.

In our view, all risks are adequately covered by capital and the capital in the entity is of high quality as it mainly consists of CET1 items.

Internal capital resources
J.P. Morgan AG uses its regulatory own funds as a starting point for deriving its internal capital. Adjustments are made for positions that do not reflect the fair value concept underlying the economic perspective. Furthermore, capital items that do not provide loss absorbing capacity in a going concern situation (e.g., Tier 2 capital) are de-recognized for internal capital purposes.

RISK CATEGORIES

The following paragraphs provide details of the individual risk types. The sections contain, apart from risk description, also the required quantitative and qualitative statements based on the requirements of the IFRS 7 Financial Instruments Disclosures.

Credit risk

Credit risk is the risk associated with the default or change in credit profile of a client, counterparty or customer. J.P. Morgan AG is exposed to credit risk through its underwriting, lending, market-making, capital markets and hedging activities with and for clients and counterparties, as well as through its operating services activities (such as clearing), securities financing activities, investment securities portfolio, and cash placed with banks.

In 2020, the impacts of the COVID-19 pandemic resulted in broad-based credit deterioration and an increase in the allowance for credit losses. During the course of the year, Expected Credit Losses assigned to loans and other lending-related commitments rose to € 65.9 million at the end of March and more materially to € 187.6 million at the end of September, before reducing slightly to € 151.8 million by year-end. At year-end, allowance for credit losses of non-performing loan (NPL) was € 21.0 million; while charge-offs for the year totalled € 44.2 million, across three of the NPL positions. The continuation or worsening of the effects of the COVID-19 pandemic on the macroeconomic environment could result in a further increase of credit risk in the credit portfolio of J.P. Morgan AG.

Credit Risk management
Credit Risk Management is an independent risk management function that monitors, measures and manages credit risk in J.P. Morgan AG and defines credit risk framework and procedures. This includes:

- establishing and maintaining a credit risk management framework;
- monitoring, measuring and managing credit risk across all portfolio segments, including transaction and exposure approval;
- setting portfolio concentration limits;
- assigning and managing credit authorities in connection with the approval of credit exposure;
- managing criticized exposures and delinquent loans; and
- estimating credit losses and ensuring appropriate credit risk-based capital management.

The comprehensive Firmwide Credit Risk Framework is supplemented by regional frameworks as required. As such, J.P. Morgan AG's Credit Risk Management framework supplements the Firmwide risk policy framework and is approved by J.P. Morgan AG's Management Board and the ROC. It specifies that credit decisions are made on the basis of clearly-defined, separate responsibilities for "Front Office" ("Markt") and "Back Office" ("Marktfolge") as well as the process of

assigning and managing credit authorities in connection with the approval of all credit exposure.

Risk identification and measurement

The Credit Risk Management function monitors, measures, manages and limits credit risk across J.P. Morgan AG's businesses. Credit risk measurement employs several methodologies for estimating the likelihood of obligor or counterparty default. Methodologies for measuring credit risk vary depending on several factors, including type of asset, risk measurement parameters, and risk management and collection processes. Credit risk measurement is based on the probability of default (PD) of an obligor or counterparty, the loss severity given a default event (LGD) and the exposure at default (EAD).

Risk ratings are reviewed regularly by Credit Risk Management and revised as needed to reflect the borrower's current financial position, risk profile and related collateral. The calculations and assumptions are based on both internal and external historical experience and management judgment and are reviewed regularly.

For portfolios that fluctuate in value based upon an underlying reference asset or index, potential future exposure is measured using probable and unexpected loss calculations based upon estimates of probability of default and loss severity given a default.

Expected credit losses

Credit impairment is estimated through an allowance for expected credit losses ("ECLs"), recognized in three stages. The measurement of ECLs must reflect:

- An unbiased and probability weighted amount that is determined by evaluating a range of possible outcomes;
- The time value of money; and
- Reasonable and supportable information about past events, current economic conditions, and forecasts of future economic conditions.

The effects of the COVID-19 pandemic are captured in macroeconomic scenarios which in turn are reflected in the calculation of ECLs. The ECL model and the staging logic were not influenced by the effects of the pandemic at the end of 2020. Existing uncertainties as a result of the COVID-19 pandemic were also taken into account in risk provisioning at the end of the year in the form of heavier weighting towards adverse macroeconomic scenarios.

The measurement of ECL also reflects how the Firm categorises and manages the financial instruments for credit risk purposes, specifically Traditional Credit Products ("TCP"), and Non-Traditional Credit Products ("Non-TCP"). Instruments in scope for TCP include loans and lending-related commitments stemming from extensions of credit to borrowers; whereas Non-TCP includes, but is not limited to, other debt instruments valued at amortized cost such as reverse repurchase agreements and margin loans.

The determination of the ECL is based on the Staging of financial instruments. Stage 1 captures the instruments for which credit risk has reduced or has not significantly increased since initial balance sheet recognition. The ECL for Stage 1 assets is the expected credit losses over the next year (12-month ECL). Stage 2 captures the instruments for which credit risk has increased significantly since initial balance sheet recognition. The ECL for Stage 2 assets considers the expected credit losses over the entire residual term of the instrument (Lifetime ECL). Stage 3 assets are those which are classified as impaired as of the reporting date.

The ECL is determined for Stage 1 and Stage 2 customers on a collective basis using statistical risk parameters. The ECL for impaired instruments is determined individually on the basis of individual borrowers. For Stage 3 customers below a threshold value, the ECL is determined on a collective basis, using statistical risk parameters, the appropriateness of which is separately checked and approved. In determining how exposures should be grouped for collective valuation, the Bank considers many factors including, but not limited to, internal credit ratings, loan duration, borrower country, and industry sector. Internal risk assessments generally correspond to those defined by Standard & Poor's ("S&P") and Moody's Investors Service.

Discounted Cash Flows (DCF)

An impaired loan's allowance estimate may be measured using the present value of expected cash flows, discounted using the contractual interest rate as of the date the loan was deemed to be impaired (or, in the case of a restructuring or another form of concession granted to the borrower, using the contractual interest rate before that event occurred). This estimation process must consider multiple scenarios, the time value of money, and reasonable and supportable information about past events, current conditions, and forecasts of future economic conditions. If the present value of expected cash flows is less than the gross carrying amount of the instrument, the ECL is equal to the shortfall.

Stress testing

Stress testing is important in measuring and managing credit risk in J.P. Morgan AG's credit portfolio. The process assesses the potential impact of alternative economic and business scenarios on estimated credit losses for J.P. Morgan AG. Economic scenarios and the underlying parameters are defined centrally, articulated in terms of macroeconomic factors and applied across the businesses. The stress test results may indicate credit migration, changes in delinquency trends and potential losses in the credit portfolio. In addition to the periodic stress testing processes, management also considers additional stresses outside these scenarios, including industry and country specific stress scenarios, as necessary. Stress testing is used to inform decisions on setting risk appetite, as well as to assess the impact of stress on individual counterparties.

Credit Risk Approval and Control

- Approval of clients: All clients are subject to credit analysis and financial review by Credit Risk Management before new business is accepted.
- Establishment of credit lines: All credit exposure must be approved in advance by a J.P. Morgan AG Credit Officer with the level of credit authority required by the applicable credit authority grid. Such approvals, together with details of the credit limits, are recorded in the Credit Systems.
- In some instances, credit lines can be approved according to predetermined rules that are subject to annual review by the appropriate J.P. Morgan AG Credit Officers and the CRO of J.P. Morgan AG.
- Intraday exposure control: Intraday credit risk arising from cash payments is captured by the Firm's intraday exposure control system. Any exposure which exceeds a facility and is outside of a tolerance range requires the approval of an authorized Credit Officer.

Risk monitoring and management

J.P. Morgan AG implements policies and practices developed by the Firm. The policy framework establishes credit approval authorities, concentration limits, risk-rating methodologies,

portfolio review parameters and guidelines for management of distressed exposures.

In addition, certain models, assumptions and inputs used in evaluating and monitoring credit risk are independently validated by groups separate from the LOBs.

As part of its management of credit and counterparty credit exposures, credit risk mitigation techniques are actively used to reduce the amount of credit risk, to spread the concentration of risk across the portfolio, and ultimately to ensure efficient use of capital in compliance with the applicable regulations. This is accomplished through a number of means, including receipt of collateral, master netting agreements, guarantees and credit derivatives and other risk-reduction techniques.

Credit risk is monitored regularly at an aggregate portfolio, industry, and individual client and counterparty level with established concentration limits that are reviewed and revised as deemed appropriate by management, typically on an annual basis. Industry and counterparty limits, as measured in terms of exposure and economic risk appetite, are subject to stress-based loss constraints.

In addition, wrong-way risk is actively monitored. This refers to the risk that exposure to a counterparty is positively correlated with the risk of a default by the same counterparty, which could cause exposure to increase at the same time as the counterparty's capacity to meet its obligations is decreasing.

At the start of the COVID-19 pandemic, daily reporting was produced on new liquidity facility requests, drawdowns under existing facilities and monitoring of covenant relief or modification requests. An early identification of industries affected by the COVID-19 pandemic was carried out. The economic development of borrowers of the J.P. Morgan AG in these industries was continuously monitored and intensified. This enhanced level of monitoring in coordination between the front and back office was a basis for proactive engagement with borrowers in order to determine and monitor their current and expected debt servicing ability and their liquidity requirements. Specific early assessment of clients within affected industries was conducted followed by a full review of the loan portfolio. Existing "Watchlist" and Credit Surveillance Review ("CSR") processes for intensive care were used in the COVID-19 crisis. The number of customers in the quarterly "watchlist" and "CSR" process for intensive support has multiplied in the COVID-19 pandemic.

In order to efficiently track COVID-19 impacted borrowers, new facility level flags were implemented in Credit Risk Infrastructure to identify (i) covenant relief, payment assistance or other modification of facilities for borrowers financially impacted by the COVID-19 pandemic; and (ii) facilities provided to borrowers where specific state support is provided. This is in addition to other pre-existing flags used to designate watch list and leveraged finance clients. Use of these flags augments existing data collection processes and capabilities, permitting efficient identification, assessment and monitoring of borrower, sector and market trends as needed. During 2020, these flags were assigned to 20 facilities (18 clients) with an aggregate exposure of $ 599 million as of YE 2020.

In addition to the above-mentioned flags, the Credit Risk Reporting Tool ("CRRT") provides the ability for live aggregation of loans and portfolios by isolation of client or facility level attributes, for example by obligor rating, industry (and sub-industry), product or geography, permitting J.P. Morgan

AG to monitor the risks intrinsic to this crisis, within the portfolio. A credit risk report is prepared and a forum held on a monthly basis, attended by the J.P. Morgan AG Head of Credit and Credit Risk Controlling, where key trends and any concentrations in the portfolio are highlighted, discussed, and further investigated as appropriate, with further escalation to the Risk Oversight Committee (ROC) as deemed appropriate – in particular, forborne and non-performing loans are escalated to the ROC on a monthly basis.

Risk reporting

Operational risk reporting is carried out daily (e.g., for overdrafts), while a monthly credit risk report is used for monitoring credit risk and to support effective decision-making on the part of J.P. Morgan AG. Monthly reporting includes aggregate credit exposure, concentration levels and risk profile changes and is reported regularly to senior members of Credit Risk Management. Detailed portfolio reporting of industry, clients, counterparties and customers, product and geographic concentrations also occurs monthly, and the appropriateness of the allowance for credit losses is reviewed by senior management at least on a quarterly basis.

Through the risk reporting and governance structure, credit risk trends and limit exceptions are provided regularly to, and discussed with, the Risk Oversight Committee, the Head of Credit Risk and Credit Risk Controlling, the CRO and the Management Board of directors as appropriate.

In response to the COVID-19 pandemic, the regular reporting package was supplemented with additional reporting. At the start of the pandemic, daily reporting was produced on new liquidity facility requests, drawdowns under existing facilities and monitoring of covenant relief or modification requests.

Credit Portfolio

J.P. Morgan AG's credit risk profile continued to evolve significantly throughout 2020. As at year end 2020, the credit portfolio consists of € 17.8 billion primary exposure which is comprised of Traditional Credit Products (TCP), Derivatives Risk Equivalent (DRE) and Securities Risk Equivalent (SRE). DRE is a measure of derivative exposure intended to be equivalent to the risk of loan exposures. SRE is the primary measure of credit exposure (i.e. expected plus unexpected potential loss) on counterparty securities trading, securities financing and margin lending transactions. The key risk components as at year end are € 9.4 billion of TCP (committed facilities and utilizations under advised lines) and € 8.3 billion of DRE.

In 2020, J.P. Morgan AG began to provide a securitization product offering to its EEA based clients. This client base was previously covered by JP Morgan's UK-based entities. A gradual build-up of risk positions is expected in the coming years.

J.P. Morgan AG focuses on the management and diversification of its industry exposures, and pays particular attention to industries with actual or potential credit concerns. The breakdown of the credit portfolio by industry is shown in the table below. The credit portfolio is considered well diversified by industry as at December 31, 2020. Asset Managers, Consumer and Retail, and Technology, Media and Telecoms represent 26.6 %, 12.6 %, and 9.1 % of the portfolio, respectively.

€M	2020	
	Exposure	% of portfolio
Asset Managers	4,728	26.6 %
Consumer and Retail	2,240	12.6 %
Technology, Media & Telecom	1,616	9.1 %
Other	1,238	7.0 %
Oil & Gas	1,217	6.8 %
Utilities	1,156	6.5 %
Industrials	1,059	6.06 %
Real Estate	747	4.2 %
Banks & Financial Institutions	656	3.7 %
Other Industries	3,121	17.6 %
Total	**17,778**	**100.0 %**

€M	2019	
	Exposure	% of portfolio
Consumer and Retail	2,221	18.0 %
Asset Managers	1,652	13.4 %
Technology, Media & Telecom	1,452	11.8 %
Real Estate	1,090	8.8 %
Chemicals / Plastics	927	7.5 %
Utilities	919	7.4 %
Oil & Gas	817	6.6 %
Healthcare	560	4.5 %
Automotive	423	3.4 %
Other Industries	2,297	18.6 %
Total	**12,357**	**100.0 %**

The breakdown of the credit portfolio by geography is shown in the following table. Geographic concentrations in the portfolio are monitored and reported on a monthly basis. The credit portfolio is considered well diversified as at December 31, 2020. France, Germany, and Spain represent the largest country concentrations with 16.3 %, 12.3 %, and 10.5 % of the credit portfolio, respectively.

€M	2020	
	Exposure	% of portfolio
Funds Global [1]	4,435	25.0 %
France	2,905	16.3 %
Germany	2,185	12.3 %
Spain	1,865	10.5 %
United States	1,479	8.3 %
Belgium	651	3.7 %
United Kingdom	589	3.3 %
Norway	539	3.0 %
Netherlands	497	2.8 %
Other	2,633	14.8 %
Total	**17,778**	**100.0 %**

[1] Funds Global: classification used for Investment Managers of mutual funds and hedge funds, as well as the investment vehicles themselves, whose business is managing investments in traditional and alternative financial products where the underlying assets are generally diversified across multiple countries and where no single country represents a significant concentration over a sustained period.

€M	2019	
	Exposure	% of portfolio
Funds Global [1]	1,683	13.6 %
France	2,531	20.5 %
Germany	1,545	12.5 %
United States	1,466	11.9 %
Spain	1,219	9.9 %
Norway	810	6.6 %
Belgium	635	5.1 %
Netherlands	404	3.3 %
Luxembourg	346	2.8 %
Japan	304	2.5 %
Other	1,414	11.4 %
Total	**12,357**	**100.0 %**

[1] Funds Global: classification used for Investment Managers of mutual funds and hedge funds, as well as the investment vehicles themselves, whose business is managing investments in traditional and alternative financial products where the underlying assets are generally diversified across multiple countries and where no single country represents a significant concentration over a sustained period.

The following table summarizes the ratings profile of the credit portfolio. Internal ratings equivalent to BBB–/Baa3 or higher are considered investment grade. Overall, we believe the portfolio has a good credit quality, with 72 % of the portfolio being classified investment grade and 28 % sub-investment grade as at December 31, 2020. Non-performing exposure represents less than 1.5 % of the credit portfolio and 5 clients were considered in default as at December 31, 2020.

Market risk

Market risk is the risk associated with the effect of changes in market factors such as interest and foreign exchange rates, equity and commodity prices, credit spreads or implied volatilities, on the value of assets and liabilities held for both the short and long term.

Market Risk Management monitors market risks and defines market risk policies and procedures. The Market Risk Management function reports to the Chief Risk Officer ("CRO"), and seeks to manage risk, facilitate efficient risk/return decisions, reduce volatility in operating performance and provide transparency into the market risk profile for the Management Board and regulators.

The following sections detail the market risk management framework of J.P. Morgan AG.

Risk Governance & Policy Framework

J.P. Morgan AG's approach to market risk governance mirrors the Firmwide approach and is outlined in J.P. Morgan AG's Market Risk Management Framework which outlines the following:

- Responsibilities of the CRO and the Market Risk Officer ("MRO");
- Market Risk measures utilized such as VaR, Stress and non-statistical measures; and
- Controls such as J.P. Morgan AG's market risk limit framework (limit levels, limit signatories, limit reviews and escalation).

The Management Board approves substantive changes to the Framework and approves the Framework annually.

€M	2020		2019	
Internal Rating Equivalent	Exposure	% of portfolio	Exposure	% of portfolio
AAA/Aaa to AA–/Aa3	3,059	17.2 %	1,169	9.5 %
A+/A1 to A–/A3	3,582	20.2 %	2,884	23.3 %
BBB+/Baa1 to BBB–/Baa3	6,158	34.6 %	4,307	34.9 %
BB+/Ba1 to B–/B3	3,371	19.0 %	3,455	28.0 %
CCC+/Caa1 and below	1,275	7.2 %	504	4.1 %
NR[1]	334	1.9 %	38	0.3 %
Total	**17,778**	**100.0 %**	**12,357**	**100.0 %**

[1] The NR category includes obligors not graded because J.P. Morgan AG relies on guarantor's grade, and obligors not graded because all exposure is fully secured by cash or marketable securities (with acceptable margin).

Risk measurement
There is no single measure to capture market risk and therefore J.P. Morgan AG uses various metrics, both statistical and non-statistical, to assess risk. The appropriate set of risk measures utilized for a given business activity is tailored based on business mandate, risk horizon, materiality, market volatility and other factors.

Value-at-Risk ("VaR"), based on Expected Shortfall
The entity utilizes VaR, a statistical risk measure, to estimate the potential loss from adverse market moves in the current market environment.

The VaR framework is employed using historical simulation based on data for the previous twelve months. The framework's approach assumes that historical changes in market values are representative of the distribution of potential outcomes in the immediate future.

VaR is calculated assuming a one-day holding period and an expected tail-loss methodology which approximates a 95 % confidence level. VaR provides a consistent framework to measure risk profiles and levels of diversification across product types and is used for aggregating risks and monitoring limits across businesses. These VaR results are reported to senior management and regulators.

As VaR is based on historical data, it is an imperfect measure of market risk exposure and potential future losses. In addition, based on their reliance on available historical data, limited time horizons, and other factors, VaR measures are inherently limited in their ability to measure certain risks and to predict losses, particularly those associated with market illiquidity and sudden or severe shifts in market conditions.

For certain products, specific risk parameters are not captured in VaR due to the lack of inherent liquidity and availability of appropriate historical data. The Firm uses proxies to estimate the VaR for these and other products when daily time series are not available. It is likely that using an actual price-based time series for these products, if available, would affect the VaR results presented. The Firm therefore considers other non-statistical measures such as stress testing, in addition to VaR, to capture and manage its market risk positions.

The table below shows the result of J.P. Morgan AG's VaR measure, using a 95 % confidence level.

Currently, J.P. Morgan AG's market risk profile is predominantly driven by Credit, IR and equities-related exposures. Of the standard stress scenario that J.P. Morgan AG is subject to, the worst case stress loss during 2020 was primarily driven by the Eurozone Crisis scenario.

Brexit trade migration to J.P. Morgan AG has commenced in November 2020, for products with significant EEA nexus.

	2020			2019			At December 31	
€T	Avg.	Min	Max[1]	Avg.	Min	Max	2020	2019
95 % VaR	1,313	25	12,852	108	1	580	9,951	86

[1] Maximum VaR (€ 12,852 thousand) for 2020 was driven by positions in Global Rates and Rates Exotics migrated to J.P. Morgan AG in 2020 as part of the Brexit strategy.

As of December 31, 2020, the market risk exposure in J.P. Morgan AG is driven by:

- Global Credit Trading & Syndicate business (95 % VaR: € 8.08 million), mainly from activities related to Corporate & Financial bonds as well as secondary loan facilities within EEA regulated borrowers and/or counterparties;
- Global Rates & Rates Exotics business (95 % VaR: € 5.37 million), mainly from activities related to European government bonds and Quasi-Sovereign issuers, e.g., Agency, Local, Supranational.

The activities described above are the primary drivers of J.P. Morgan AG's market risk exposure as of December 31, 2020. In addition, J.P. Morgan AG also risk manages equity warrants & single stocks with EEA underlyings, local sovereign bonds (by Poland, Czech Republic, Hungary, Romania) and securitized loans from other business areas. Minimal commodity exposure observed in J.P. Morgan AG as Commodity trades are typically back-to-backed through J.P. Morgan AG. J.P. Morgan AG reported the market risk exposure the entity manages in J.P. Morgan AG Daily Legal Entity Market Risk Summary (LE-542) report.

Other Business areas of the Segment "Markets" have been migrating trades into J.P. Morgan AG during the course of 2020 and continue into 2021. Other business areas such as Currencies & Emerging Markets, Global Equities, Securitized Products Group and Fixed Income Financing, which have high EEA nexus activities, have also been migrated into J.P. Morgan AG during the course of 2020 and continue into 2021. Due to diversification benefit, J.P. Morgan AG level VaR would be lower than the simple aggregation of VaR from individual business areas.

Stress testing

Along with VaR, stress testing is an important tool to assess risk. While VaR reflects the risk of loss due to adverse changes in markets using recent historical market behavior stress testing reflects the risk of loss from hypothetical changes in the value of market risk sensitive positions applied simultaneously.

J.P. Morgan AG runs weekly stress tests on market-related risks across the LOBs using multiple scenarios that assume significant changes in risk factors such as credit spreads, equity prices, interest rates, currency rates or commodity prices.

J.P. Morgan AG uses a number of standard scenarios that capture different risk factors across asset classes including geographical factors, specific idiosyncratic factors and extreme tail events. The stress testing framework calculates multiple magnitudes of potential stress for both market rallies and market sell-offs for each risk factor and combines them in multiple ways to capture different market scenarios. The flexibility of the stress testing framework allows risk managers to construct new, specific scenarios that can be used to form decisions about future possible stress events.

Stress testing complements VaR by allowing risk managers to shock current market prices to more extreme levels relative to those historically realized and to stress-test the relationships between market prices under extreme scenarios. Stress-test results, trends and qualitative explanations based on current market risk positions are reported to risk senior management, the Management Board, the Segments and Firm, to allow them to better understand the sensitivity of positions to certain defined events and to enable them to manage their risks with more transparency.

Multiple stress scenarios are run weekly and these include, but are not limited to, Equity Collapse, Credit Crisis, Bond Selloff, Eurozone Crisis, USD Crisis, Oil Crisis and Commodities Selloff. The stress results for each scenario are used to understand the position exposures responsible for those potential losses. Worst case scenario stress losses are monitored against limits set at the legal entity and business area level.

The table below shows J. P. Morgan AG's Stress Testing results (Worst Case Stress Loss), as of 2020 and 2019 year-end. The change in stress loss between year-end 2019 and 2020 was predominantly driven by an increment of trading positions migrated into J.P. Morgan AG in the 2020 period.

€T	December 31, 2020	December 31, 2019
Worst-Case-Stress Loss	−207,362	−4,452

As of December 31, 2020, the worst case scenario was Eurozone Crisis with a € 207.4 million stress loss. The key assumptions are that the stress test is a one-time, instantaneous event and that the sale of assets, or adaptive behavior such as hedging and re-hedging is not modelled. The Eurozone Crisis scenario models a severe sell-off in all risky assets associated with a number of Eurozone countries (Greece, Portugal, Spain and Italy), a large sell-off in risky assets in other European countries, an orderly contagion into risky assets globally and a flight to quality rally in G10 interest rates, most pronounced in North America.

Other Non-statistical risk measures

Aside from VaR and stress testing, other specific risk measures, such as, but not limited to, credit spread sensitivities, net open positions, basis point values, option sensitivities, are also utilized within specific market contexts and aggregated across businesses.

J.P. Morgan AG utilizes non-statistical risk measures, such as, but not limited to, Foreign Exchange Net Open Position (FX NOP) and Interest Rate Basis Point Value (IR BPV) to measure and monitor risk.

Risk Monitoring and Control

Limits

Market risk limits are employed as the primary control to align J.P. Morgan AG's market risk with certain quantitative parameters within J.P. Morgan AG's Risk Appetite framework.

Market Risk sets limits and regularly reviews and updates them as appropriate. Limits that have not been reviewed within a specified time period by Market Risk are escalated to senior management.

Limit breaches are required to be reported in a timely manner to limit approvers, which include Market Risk and the responsible members of the Management Board. In the event of a limit breach, Market Risk consults with the Management Board to determine the course of action required to return to compliance, which may include a reduction in risk in order to remedy the breach or granting a temporary increase in limits to accommodate an expected increase in client activity and/or market volatility. Certain J.P. Morgan AG level limits that have been breached are escalated to market risk senior management, the responsible Management Board Members, the ROC and the Regional Risk Committee.

J.P. Morgan AG's limits include 95 % VaR and Stress as well as non-statistical measures established for the legal entity in

aggregate, and for individual businesses operating out of the legal entity:

- J.P. Morgan AG's CEO, CRO and Market Risk Officer (MRO) are limit approvers of limits for the legal entity in aggregate;
- Appropriate Business area representatives and MRO are signatories to business area specific limits.

Risk Reporting
J.P. Morgan AG has its own set of regular market risk reports, which include daily notification of limit utilizations and limit breaches, and, where applicable, granular market risk metrics which provide transparency into potential risk concentrations.

Concentration Risk
Concentration Risk refers to any significant concentration of factors (e.g., single name, positions, etc.) that may lead to financial losses for J.P. Morgan AG. This risk is inherently measured, monitored and controlled as part of J.P. Morgan AG market risk management framework and related control. As described above, J.P. Morgan AG's market risk profile is predominantly driven by Credit, IR and equities-related exposures.

COVID-19 Pandemic
J.P. Morgan AG's market risk profile during the peak of the COVID-19 pandemic in the first two quarters of 2020 was not significant, given majority of the Brexit migration took place during the last quarter of 2020. For comparison, J.P. Morgan AG's 95% VaR as of March 31, 2020 was € 0.10 million, compared to December 31, 2020 95% VaR which was € 9.95 million.

Nevertheless, Market Risk Management has monitored the impact of the COVID-19 pandemic closely. The ICAAP market scenarios were reviewed against the market movements observed during the COVID-19 period. Most of the market shocks are as severe as the COVID-19 market movements, if not more severe.

Market Risk continues to review and assess the impact of the pandemic on market risk through existing market risk controls closely.

Non-Euro foreign exchange ("FX") risk
Non-Euro FX risk is the risk that changes in foreign exchange rates affect the value of J.P. Morgan AG's assets or liabilities or future results. J.P. Morgan AG's functional and presentation currency is Euro.

J.P. Morgan AG faces mismatches between its Euro functional currency and the currency in which planned future capital injections are denominated (USD) or Risk Weighted Assets ("RWAs") resulting from non-Euro denominated positions. This means that unfavourable changes in FX rates can negatively impact the capital ratios of the entity. Non-Euro FX risk is managed through the stress testing program which is an important component in managing FX risk, testing J.P. Morgan AG's financial resilience in a range of severe economic and market conditions.

Structural Interest Rate Risk
Structural Interest Rate Risk (IRR), or Interest Rate Risk in the Banking Book ("IRRBB"), is defined as the risk stemming from interest rate exposure resulting from traditional banking activities (accrual accounted positions); these include the extension of loans and credit facilities, taking deposits and issuing debt (collectively referred to as "non-trading" activities) and also the impact from the Treasury and Chief Investment Office ("T/CIO") investment portfolio and other related T/CIO activi-

ties. IRR from non-trading activities can occur due to a variety of factors, including, but not limited to:

- Differences in timing among the maturity or repricing of assets, liabilities and off-balance sheet instruments;
- Differences in the amounts of assets, liabilities and off-balance sheet instruments that are maturing or repricing at the same time;
- Differences in the amounts by which short-term and long-term market interest rates change (for example, changes in the slope of the yield curve); and
- The impact of changes in the maturity of various assets, liabilities or off-balance sheet instruments as interest rates change.

Oversight and governance

Management of IRRBB within J.P. Morgan AG is delegated to the EU Asset and Liability Committee (EU ALCO); the EU ALCO, chaired by the EU Treasurer, is responsible for reviewing the IRRBB exposures and/or profile of J.P. Morgan AG, and IRRBB assumptions applied within the entity.

Independent oversight of IRRBB within J.P. Morgan AG is delegated to the J.P. Morgan AG ROC.

In addition, oversight of structural interest rate risk is managed through IRR Management, a dedicated risk function reporting to the CIO, Treasury and Other Corporate ("CTC") CRO. IRR Management is responsible for, but not limited to:

- Measuring and monitoring IRR and establishing limits; and
- Creating and maintaining governance over IRR assumptions.

Risk Identification and Measurement

The J.P. Morgan AG Treasurer manages IRRBB exposure by identifying, measuring, modelling and monitoring IRR across the balance sheet. T/CIO identifies and understands material balance sheet impacts of new initiatives and products and will execute transactions to manage IRR as appropriate, and ensure compliance with internal and regulatory requirements. LOBs are responsible for developing and monitoring the appropriateness of LOB-specific IRR modelling assumptions.

Measures to manage IRR include:

- Earnings-at-Risk (EaR), which estimates the interest rate exposure for a given interest rate scenario. It is presented as a sensitivity to a baseline scenario, which includes net interest income and certain interest rate-sensitive fees.
- Economic Value Sensitivity (EVS), which measures the change in economic value (EV) of the J.P. Morgan AG balance sheet due to changes in interest rates.

The impact of a 200bps parallel rates increase and decrease on the economic value and net interest income of J.P. Morgan AG has been estimated as at December 31, 2020; the results for Economic Value Sensitivity (EVS) and EaR are presented in the table below.

€M		
Scenario	EVS	EaR
+200 bps	197	368
−200 bps [1]	−23	−46

[1] −200 bps includes the EBA zero rates floor.

At December 31, 2020, J.P. Morgan AG was compliant with the supervisory test for EVS/Equity.

Liquidity risk

Liquidity risk is the risk that J.P. Morgan AG will be unable to meet its contractual and contingent financial obligations as they arise or that it does not have the appropriate amount, composition and tenor of funding and liquidity to support its assets and liabilities. The risk arises as a result of the business activities undertaken by the entity, and is primarily driven by secured funding outflows, intraday risk contingent outflows related to derivatives, outflows from third party client deposits and a drawdown of commitments.

J.P. Morgan AG may be exposed to concentration risk as it pertains to major sources of funding and liquidity, e. g., deposits. The materiality of this risk is considered at a specific client, counterparty and / or sector level, as part of a quarterly sensitivity analysis of liquidity assumptions.

The J.P. Morgan AG Management Board has ultimate responsibility for liquidity and associated risks within the entity. The Management Board reviews and establishes an appropriate level of liquidity risk appetite. The latter steers risk taking and deployment of liquidity in order to execute the business strategy and continue to service reasonable client demands throughout ordinary and stressed but plausible market environments, whilst exceeding minimum regulatory liquidity requirements. The Management Board also reviews and approves the entity's liquidity risk management framework.

J.P. Morgan AG has an established liquidity management framework. The primary objectives of effective liquidity management are to ensure that J.P Morgan AG is able to operate in support of client needs, meet contractual and contingent obligations, to manage an optimal funding mix, and availability of liquidity sources, including under stressed conditions.

Liquidity risk oversight

The Bank has a liquidity risk oversight function whose primary objective is to provide independent assessment, measurement, monitoring, and control of liquidity risk across the entity. Liquidity Risk Oversight's responsibilities include:

- Defining, monitoring and reporting liquidity risk metrics;
- Establishing and monitoring limits and indicators, including Liquidity Risk Appetite;
- Developing a process to classify, monitor and report limit breaches;
- Performing independent reviews of liquidity risk management processes;
- Monitoring and reporting internal liquidity stress tests as well as regulatory defined liquidity stress tests;
- Approving or escalating for review new or updated liquidity stress assumptions; and
- Monitoring liquidity positions, balance sheet variances and funding activities.

Liquidity management

The J.P. Morgan AG Treasurer is responsible for liquidity management in J.P. Morgan AG. The primary objectives of effective liquidity management are to:

- ensure that the core businesses are able to operate in support of client needs and meet contractual and contingent financial obligations through normal economic cycles as well as during stress events; and
- manage an optimal funding mix and availability of liquidity sources.

As part of the overall liquidity management strategy, liquidity and funding are managed using a centralized, global approach in order to:

– optimize liquidity sources and uses;
– monitor exposures;
– identify constraints on the transfer of liquidity between J.P. Morgan AG and other legal entities of the Firm; and
– maintain the appropriate amount of surplus liquidity at a Firmwide and legal entity level.

In the context of liquidity management, the Treasury and CIO is responsible for:

– analyzing and understanding the liquidity characteristics of assets and liabilities, taking into account legal, regulatory, and operational restrictions;
– developing internal liquidity stress testing assumptions;
– defining and monitoring liquidity strategies, policies, reporting and contingency funding plans;
– managing liquidity within approved liquidity risk appetite tolerances and limits;
– managing compliance with regulatory requirements related to funding and liquidity risk; and
– setting transfer pricing in accordance with underlying liquidity characteristics of balance sheet assets and liabilities as well as certain off-balance sheet items.

The primary liquidity requirements applicable to J.P. Morgan AG are set out in the directly applicable EU legislation, principally Commission Delegated Regulation 2015/61. The Liquidity Coverage Ratio ("LCR") is intended to measure the amount of "high quality liquid assets ("HQLA") held by J.P. Morgan AG in relation to estimated net liquidity outflows within a 30 calendar day stress period. At December 31, 2020, J.P. Morgan AG was compliant with the LCR requirement.

The Basel Committee's final standard for the Net Stable Funding Ratio ("Basel NSFR") is intended to measure the "available" and "required" amounts of stable funding over a one-year horizon. The European Commission has introduced its legislative proposal for the NSFR ("EU NSFR"), amending Regulation (EU) No. 575/2013. J.P. Morgan AG is expected to comply with the EU NSFR at a level of 100% from June 28, 2021.

Key ratios monitored for liquidity risk are:

	31/12/2020	31/12/2019	31/12/2018
Liquidity Coverage Ratio	147 %	222 %	155 %

Through COVID-19, J.P. Morgan AG did not see any significant deterioration of its liquidity surplus.

Risk governance and measurement

The committees responsible for liquidity risk governance in J.P. Morgan AG include the EU Asset and Liability Committee ("EU ALCO") and the J.P. Morgan AG Risk Oversight Committee ("ROC").

The EU ALCO is responsible for overseeing J.P. Morgan AG's asset and liability management activities and the management of liquidity risk, balance sheet and interest rate risk, the oversight of liquidity risk and interest rate risk of EU entities including J.P. Morgan AG; with a specific focus on balance sheet and funding management considerations. The EU ALCO includes representatives of both first and second lines of defense and is chaired by the EU Treasurer.

Intraday liquidity risk governance

Intraday liquidity risk is managed centrally using the intraday dashboard (IDL Dashboard). The IDL dashboard provides realtime transparency into activity at key central banks, financial market utilities and correspondent banks.

The IDL dashboard provides real-time transparency into activity at key central banks, financial market utilities and correspondent banks. The IDL dashboard also includes real-time views into credit extended at a Firmwide level and at a detailed level for J.P. Morgan AG. The dashboard also provides various analytical capabilities on the historical data to help understand trends, averages, extremes and changes in standard deviation.

The IDL dashboard generates automated alerts should balances exceed an agreed target balance or should the daily net movement exceed an agreed tolerance. The target balances and movement tolerances are defined by Liquidity Risk Oversight ("LRO").

Intraday liquidity alerts may initiate a defined response involving collaboration from various teams representing mainly EMEA hub cash management, EMEA Treasury front office, LRO, impacted LOB, the Intraday Liquidity team and corresponding J.P. Morgan AG functions. The response process is designed to quickly understand the drivers of the liquidity alert and guide management into what action should be taken (if any) to restore liquidity. There are pre-approved actions to take in the event of limit breaches.

Internal stress testing

Liquidity stress tests are intended to ensure that J.P. Morgan AG retains sufficient liquidity under a variety of adverse scenarios, including scenarios analyzed as part of recovery and resolution planning. Stress scenarios are produced for JPMorgan Chase & Co. ("Parent Company") and the Firm's material legal entities – including J.P. Morgan AG – on a regular basis, and other stress tests are performed in response to specific market events or concerns. Liquidity stress tests assume all of the Firm's contractual financial obligations are met and take into consideration:

- varying levels of access to unsecured and secured funding markets;
- estimated non-contractual and contingent cash outflows; and
- potential impediments to the availability and transferability of liquidity between jurisdictions and material legal entities such as regulatory, legal or other restrictions.

Liquidity outflow assumptions are modelled across a range of time horizons and currency dimensions and contemplate both market and idiosyncratic stress.

Results of stress tests are considered in the formulation of the entity's funding plan and assessment of its liquidity position. The Parent Company acts as a source of funding for the Firm through equity and long-term debt issuances, and its intermediate holding company, JPMorgan Chase Holdings LLC (the "IHC") provides funding support to the ongoing operations of the Parent Company and its subsidiaries. The Firm maintains liquidity at the Parent Company, IHC, and operating subsidiaries at levels sufficient to comply with liquidity risk tolerances and minimum liquidity requirements, and to manage through periods of stress when access to normal funding sources may be disrupted.

Contingency funding plan

The Firm's contingency funding plan ("CFP"), which is approved by the Firmwide ALCO and the Board Risk Committee, and its J.P. Morgan AG-specific CFP Addendum, which is approved by the entity's Management Board, is a compilation of procedures and action plans for managing liquidity through stress events. The CFP incorporates the limits and indicators

set by LRO. These limits and indicators are reviewed regularly to identify emerging risks or vulnerabilities in the entity's liquidity position. The CFP identifies the alternative contingent funding and liquidity resources available to J.P. Morgan AG in a period of stress.

As part of the yearly refresh of the J.P. Morgan AG Contingency Funding Plan Addendum, approved by the J.P. Morgan AG Management Board in November 2020, no direct changes have been incorporated as a result of the COVID-19 period.

Funding

Management believes that the Firm's unsecured and secured funding capacity is sufficient to meet its on- and off-balance sheet obligations.

The Firm funds its global balance sheet through diverse sources of funding including stable deposits, secured and unsecured funding in the capital markets and stockholders' equity. The Firm's sources of short-term secured funding primarily consist of securities loaned or sold under agreements to repurchase and to a lesser extent of financial liabilities held for trading which typically have a corresponding funding need stemming from the established risk management structure. These instruments are secured predominantly by high-quality securities collateral, including government issued debt.

The table below presents the maturity details of all financial liabilities. Securities loaned or sold under agreements to repurchase, financial liabilities held for trading and financial liabilities designated at fair value through profit or loss have been disclosed at their fair values, consistent with how these financial liabilities are managed. Amounts greater than one year mainly relate to long term deposits and subordinated liabilities which are measured at amortized cost.

€M, December 2020	Up to 1 year	More than 1 year	Total
Securities sold under repurchase agreements or loaned	6,508	333	6,841
Financial liabilities held for trading	115,254	–	115,254
Financial liabilities designated at fair value through profit or loss	22	–	22
Trade creditors	10,747	–	10,739
Amounts owed to JPMorgan Chase undertakings	56	–	56
Deposits from customers	13,863	–	13,863
Deposits from banks	64,263	18,720	82,983
Other liabilities	705	–	705
Provisions for liabilities	83	–	83
Subordinated liabilities	–	1,026	1,026
Tax liabilities	39	–	39
Total	**211,539**	**20,079**	**231,611**

The majority of short-term funding transactions by way of deposits and securities loaned or sold under agreements to repurchase have short-dated maturities, typically less than one month. Trade creditors predominantly include unsettled trades, other liabilities include cash collateral received; both categories have short-dated maturities. Deposits from banks include unsecured Evergreen borrowing instruments with a maturity of greater one year. Financial liabilities held for trading include derivatives and short positions and are ordinarily classified as liabilities falling due within one year for the purpose of disclosure under IFRS 7 "Financial Instruments: Disclosures".

Credit ratings

The cost and availability of financing are influenced by credit ratings. Reductions in these ratings could have an adverse effect on access to liquidity sources, increase the cost of funds, trigger additional collateral or funding requirements and decrease

the number of investors and counterparties willing to lend to the Firm. The nature and magnitude of the impact of ratings downgrades depends on numerous contractual and behavioral factors, which the Firm believes are incorporated in its liquidity risk and stress testing metrics. J.P. Morgan AG believes that it maintains sufficient liquidity to withstand a potential decrease in funding capacity due to ratings downgrades.

Operational Risk Management
Operational risk is the risk of an adverse outcome resulting from inadequate or failed internal processes or systems, human factors, or external events impacting the Firm's processes or systems. Operational Risk includes compliance, conduct, legal, and estimations and model risk.

Operational risk is inherent in the entity's activities and can manifest itself in various ways, including fraudulent acts, business interruptions, cyber-attacks, inappropriate employee behavior, failure to comply with applicable laws and regulations, inappropriate model application or failure of vendors to perform in accordance with their agreements. Operational Risk Management attempts to manage operational risk at appropriate levels in light of the entity's financial position, the characteristics of its businesses, and the markets and regulatory environments in which it operates.

Operational Risk Management Framework
To monitor and control operational risk, J.P. Morgan AG utilizes the Firm's Compliance, Conduct, and Operational Risk ("CCOR") Management Framework to govern, identify, measure, monitor and test, manage and report on operational risk.

Operational Risk Governance
LOBs and Corporate functions are responsible for the management of operational risk. The Control Management Organization, which consists of control managers within each LOB and Corporate, is responsible for the day-to-day execution of the CCOR Framework and the evaluation of the effectiveness of their control environments to determine where targeted remediation efforts may be required.

The Location Operational Risk and Control Committee ("LORCC") receives reports on quality and stability of processes, addressing key operational risk issues, focusing on processes with control concerns, and overseeing control remediation.

The CCOR Management policy establishes the CCOR Management Framework. The CCOR Management Framework is articulated in the Risk Governance and Oversight Policy. In addition, the J.P. Morgan AG Operational Risk Manager Guidelines define the establishment of the second line of defense and the role of the J.P. Morgan AG Operational Risk Manager (ORM).

New operational risk concerns and actual operational risk events are escalated, as required, to the LORCC, as well as other relevant governance bodies.

The Firm's Global Chief Compliance Officer ("CCO") and Firmwide Risk Executive ("FRE") for Operational Risk is responsible for defining the CCOR Management Framework and establishing minimum standards for its execution. Operational Risk Officers ("OROs") report to both the LOB Chief Risk Officers ("CROs") and to the FRE for Operational Risk and are independent of the respective businesses or functions they oversee. At J.P. Morgan AG, the ORO reports to the CRO.

The Firm's CCOR Management policy establishes the CCOR Management Framework for the Firm. The CCOR Management Framework is articulated in the Risk Governance and Over-

sight Policy which is reviewed and approved by the Board Risk Committee periodically and is implemented in the J.P. Morgan AG Operational Risk Framework for J.P. Morgan AG.

Operational Risk Identification

The Firm utilizes a structured risk and control self-assessment process that is executed by the LOBs and Corporate. As part of this process, the LOBs and Corporate evaluate the effectiveness of their control environment to assess where controls have failed, and to determine where remediation efforts may be required. The Firm's Operational Risk and Compliance organization ("Operational Risk and Compliance") provides oversight of these activities and may also perform independent assessments of significant operational risk events and areas of concentrated or emerging risk.

J.P. Morgan AG Material Risk identification is facilitated by J.P. Morgan AG's second line of defense (including J.P. Morgan AG ORM) in conjunction with the relevant first line subject matter experts.

Operational Risk Measurement

Operational Risk and Compliance perform independent risk assessments of operational risks, which includes assessing the effectiveness of the control environment and reporting the results to risk senior management and the Management Board.

J.P. Morgan AG uses an internal approach to calculate operational risk capital in the ICAAP leveraging an operational risk scenario analysis framework.

Operational risk scenarios focus on exceptional but plausible operational risk events which may or may not have previously impacted J.P. Morgan AG. Such operational risk events result from inadequate or failed internal processes or systems, human factors, or due to external events. They include legal risk and regulatory fines and exclude business strategy and reputational risk. The scenario analysis process is an important tool for assessing the operational risk exposure, thereby providing a forward-looking view to the Management and Supervisory Board of potential future losses based on the risk profile of J.P. Morgan AG.

The outputs from the scenario analysis process are used as an input into the Capital Model to derive the Operational Risk Capital for J.P. Morgan AG.

J.P. Morgan AG ORM contributes to the LOB independent risk assessment by validating that J.P. Morgan AG operational risks and controls are appropriately included and assessed. Measurements such as operational risk loss events over time and other key risk and performance indicators are reported to key governance bodies including, but not limited to the LORCC.

In addition, J.P. Morgan AG operational risk measurement includes operational risk capital and operational risk loss projections under both baseline and stressed conditions.

Operational Risk Monitoring and Testing

The results of risk assessments performed by Operational Risk and Compliance are leveraged as one of the key criteria in the independent monitoring and testing of the LOBs and Corporate's compliance with laws and regulation. Through monitoring and testing, Operational Risk and Compliance independently identify areas of operational risk and tests the effectiveness of controls within the LOBs and Corporate.

J.P. Morgan AG ORM is directly involved as required in monitoring and testing activities impacting J.P. Morgan AG and lever-

ages the subject matter expertise of LOB and Corporate ORMs and the central second line of defense testing team as required.

Management of Operational Risk

The operational risk areas or issues identified through monitoring and testing are escalated to the LOBs and Corporate to be remediated through action plans, as needed, to mitigate operational risk. Operational Risk and Compliance may advise the LOBs and Corporate in the development and implementation of action plans.

J.P. Morgan AG ORM is involved in result reviews with the business as needed and where findings have a direct impact on the operating environment. In addition, the J.P. Morgan AG ORM can raise issues in the CORE system as needed to address any findings arising from CCOR activities, and the ongoing tracking thereof.

Operational Risk Reporting

Escalation of risks is a fundamental expectation for all employees at the Firm. Risks identified by Operational Risk and Compliance are escalated to the J.P. Morgan AG Risk Oversight Committee (ROC) and the Frankfurt Location Operational Risk and Control Committee, as needed.

Operational Risk and Compliance has established standards to ensure that consistent operational risk reporting and operational risk reports are produced on an entity-wide basis as well as by the LOBs and Corporate.

Reporting includes the evaluation of key risk indicators and key performance indicators against established thresholds as well as the assessment of different types of operational risk against stated risk appetite. The standards reinforce escalation protocols to Management Board and Supervisory Board.

COVID-19 Pandemic

Under the CCOR Management Framework, Operational Risk and Compliance monitors and assesses COVID-19-related legal and regulatory developments associated with the Firm's financial products and services offered to clients and customers as part of the existing change management process. The Firm will continue to review and assess the impact of the pandemic on operational risk and implement adequate measures as needed.

The J.P. Morgan AG ORM reports issues and identified risks to the J.P. Morgan AG CRO and the entity's ROC as necessary. This is part of the regular reporting to the J.P. Morgan AG Management Board.

Details on cybersecurity risk, business and technology resiliency risk, compliance risk, payment fraud risk, conduct risk, legal risk, third-party outsourcing risk, together with estimations and model risk are provided below.

Cybersecurity risk

Cybersecurity risk is the risk of the Firm's exposure to harm or loss resulting from misuse or abuse of technology by malicious actors. Cybersecurity risk is an important and continuously evolving focus for the Firm and J.P. Morgan AG. Third parties with which the Firm and J.P. Morgan AG do business or that facilitate business activities (e. g., vendors, supply chains, exchanges, clearing houses, central depositories, and financial intermediaries) are also sources of cybersecurity risk. As with other aspects of technology, J.P. Morgan AG outsources day-to-day operation of its Cybersecurity controls to the Firm. To protect the confidentiality, integrity and availability of the Firm's infrastructure, resources and information, the Firm maintains a Cybersecurity program designed to prevent, detect, and respond to cyberattacks

including three 24 hours/7 days a week Security Operations Centers. J.P. Morgan AG utilizes this program. The Firm continues to make significant investments in enhancing its cyber defense capabilities and to strengthen its partnerships with the appropriate government and law enforcement agencies and other businesses.

The Firmwide Cybersecurity and Technology controls (CTC) organization is represented locally through four full time staff members who provide governance, oversight and local coordination of Cybersecurity-related topics for the entity. The J.P. Morgan AG CTC manages and monitors a set of entity-specific controls and metrics to ensure appropriate ongoing monitoring and awareness of Cybersecurity-related risks. In addition, the role of the information security officer is part of the Operational Risk Management, the role regularly reports to the Management Board of J.P. Morgan AG and other committees within the entity in relation to information security items.

Third party Cybersecurity incidents such as system breakdowns or failures, misconduct by the employees of such parties, or cyberattacks could affect their ability to deliver a product or service to the Firm or result in lost or compromised information of the Firm or its clients. Clients are also sources of Cybersecurity risk to the Firm, particularly when their activities and systems are beyond the Firm's own security and control systems. However, where Cybersecurity incidents occur as a result of client failures to maintain the security of their own systems and processes, clients are responsible for losses incurred.

The Firm has a Cybersecurity incident response plan ("IRP") designed to enable the Firm to respond to attempted Cybersecurity incidents, coordinate such responses with law enforcement and other government agencies, and notify clients and customers, as applicable. Among other key focus areas, the IRP is designed to mitigate the risk of insider trading connected to a Cybersecurity incident and includes various escalation points. Due to the impact of COVID-19, the Firm increased the use of remote access and also video conferencing solutions provided by third parties to facilitate remote work. As a result, the Firm took additional precautionary measures to mitigate Cybersecurity risks.

Business and technology resiliency risk

Business disruptions can occur due to forces beyond J.P. Morgan AG's control such as the spread of infectious diseases or pandemics, severe weather, power or telecommunications loss, accidents, failure of a third party to provide expected services, cyberattack, flooding, transit strikes, terrorism, or health emergencies. The safety of employees and customers is of the highest priority.

The Firmwide resiliency program, which J.P. Morgan AG leverages, is intended to enable recovery of critical business functions and supporting assets (i. e., staff, technology and facilities) in the event of a business interruption. The program includes governance, awareness training, and testing of recovery strategies, as well as strategic and tactical initiatives to identify, assess, and manage business interruption and public safety risks. In connection with the COVID-19 pandemic, the J.P. Morgan AG decided for some branches to temporarily split work between the branch and the recovery site, in order to allow a return to the office that corresponds to the distance requirement. Throughout 2020, the COVID-19 pandemic and associated measures for remote work/return to the office were regularly discussed in permanent crisis management bodies such as the EMEA Regional Crisis Management Committee (EMEA RCMT) or the local site incident management committees (SIMT).

Third-party outsourcing risk

The Firm's Third-Party Oversight ("TPO") and Inter-affiliates Oversight ("IAO") framework assist J.P. Morgan AG in selecting, documenting, onboarding, monitoring and managing their supplier relationships including services provided by affiliates. The objectives of the TPO framework are to hold suppliers to a high level of operational performance and to mitigate key risks including data loss and business disruption. The Corporate Third-Party Oversight group is responsible for Firmwide training, monitoring, reporting and standards. J.P. Morgan AG governs this through a centralized outsourcing management which reports directly to the J.P. Morgan AG CFO.

Payment fraud risk

Payment fraud risk is the risk of external and internal parties unlawfully obtaining personal monetary benefit through misdirected or otherwise improper payment. The risk of payment fraud remains at a heightened level across the industry, particularly during the current COVID-19 pandemic due to the use of contingent forms of payment authentication methods, scams involving the pandemic being perpetrated including an increase in the level of fraud attempts against consumers. The complexities of these incidents and the strategies used by perpetrators continue to evolve. The Firm employs various controls for managing payment fraud risk as well as providing employee and client education and awareness trainings. The Firm's monitoring of customer behavior to detect new fraud strategies is periodically evaluated and enhanced in an effort to mitigate these fraud risks.

Compliance risk

Compliance risk, a subcategory of operational risk, is the risk of failing to comply with laws, rules, regulations or codes of conduct and standards of self-regulatory organizations applicable to the business activities of the Firm and the entity.

Each LOB and Corporate function within J.P. Morgan AG holds primary ownership and accountability for managing compliance risks. The Compliance Organization ("Compliance"), which is independent of the LOBs, works closely with the Management Board to provide independent review, monitoring and oversight of business operations with a focus on compliance with the regulatory obligations applicable to the offering of the Firm's products and services to clients and customers.

Compliance risks relate to a wide variety of legal and regulatory obligations, depending on the LOB and the jurisdiction, and include those related to products and services, relationships and interactions with clients and customers, and employee activities. For example, compliance risks include those associated with anti-money laundering compliance, trading activities, market conduct, and complying with the rules and regulations related to the offering of products and services across jurisdictional borders. Compliance risk is inherent in the Firm's and the entity's activities, including the risk of failure to exercise an applicable standard of care, to act in the best interest of clients and customers or to treat clients and customers fairly.

Other functions provide oversight of significant regulatory obligations that are specific to their respective areas of responsibility.

CCOR Management implements policies and standards designed to govern, identify, measure, monitor and test, manage, and report compliance risk.

Governance and oversight

Compliance is led by the J.P. Morgan AG Chief Compliance Officer ("CCO") who reports to the entity's CRO. The entity

maintains oversight and coordination of its compliance risk through the implementation of the CCOR Framework.

Code of Conduct
The Firm has a Code of Conduct (the "Code"). This relates equally to the employees of J.P. Morgan AG and sets out the expectation that employees will conduct themselves with integrity at all times and provides the principles that govern employee conduct with clients, customers, shareholders and one another, as well as with the markets and communities in which the entity does business. The Code requires employees to promptly report any known or suspected violation of the Code, any internal Firm policy, or any law or regulation applicable to the Firm's business. It also requires employees to report any illegal conduct or conduct that violates the underlying principles of the Code, by any of the Firm's employees, customers, suppliers, contract workers, business partners, or agents.

All newly hired employees are assigned Code training and current employees are periodically assigned Code training on an ongoing basis. Employees are required to affirm their compliance with the Code periodically. Employees can report any potential or actual violations of the Code through the Code Reporting Hotline by phone or the internet. The Hotline is administered by an outside service provider. The Code prohibits retaliation against anyone who raises an issue or concern in good faith.

Conduct risk
Conduct risk, a subcategory of operational risk, is the risk that any action or inaction by an employee or employees could lead to unfair client or customer outcomes, impact the integrity of the markets in which the entity operates, or compromise the entity's and the Firm's reputation.

Overview
Each LOB and Corporate function is accountable for identifying and managing its conduct risk to provide appropriate engagement, ownership and sustainability of a culture consistent with the Firm's How We Do Business Principles (the "Principles"). The Principles serve as a guide for how employees are expected to conduct themselves. With the Principles serving as a guide, the Firm's Code sets out the Firm's expectations for each employee and provides information and resources to help employees conduct business ethically and in compliance with the law everywhere the Firm operates. For further discussion of the Code, refer to Compliance Risk Management.

Governance and oversight
The Conduct Risk Program is governed by the CCOR Management policy, which establishes the framework for governance, identification, measurement, monitoring and testing, management and reporting of conduct risk in the Firm and the entity. J.P. Morgan AG utilizes this framework.

Conduct risk management encompasses various aspects of people management practices, including recruiting, onboarding, training and development, performance management, promotion and compensation processes. Each LOB, Treasury and CIO, and designated Corporate functions completes an assessment of conduct risk periodically, reviews metrics and issues which may involve conduct risk and provides business conduct training as appropriate.

Legal risk
Legal risk, a subcategory of operational risk, is the risk of loss primarily caused by the actual or alleged failure to meet legal obligations that arise from the rule of law in jurisdictions in which the Firm operates, agreements with clients and cus-

tomers, and products and services offered by the Firm and J.P. Morgan AG.

Overview

The Legal function ("Legal") provides legal services and advice. Legal is responsible for managing J.P. Morgan AG's exposure to legal risk by:

- managing actual and potential litigation and enforcement matters, including internal reviews and investigations related to such matters;
- advising on products and services, including contract negotiation and documentation;
- advising on offering and marketing documents and new business initiatives;
- managing dispute resolution;
- interpreting existing laws, rules and regulations, and advising on changes thereto;
- advising on advocacy in connection with contemplated and proposed laws, rules and regulations; and
- providing legal advice to the LOBs and Corporate functions, including their Operations, Technology and Oversight & Control functions (first line of defense), Risk Management and Compliance (second line of defense) and Internal Audit (third line of defense).

Legal selects, engages and manages outside counsel on all matters in which outside counsel is engaged. In addition, Legal advises the Conflicts Office which reviews the Firm's and J.P. Morgan AG's wholesale transactions that may have the potential to create conflicts of interest for the Firm and the entity.

Governance and oversight

The Head of Legal of J.P. Morgan AG reports to the CEO. The entity's Head of Legal and other members of Legal regularly report on significant legal matters to the Management Board.

Legal serves on and advises various committees (including new business initiative and reputation risk committees) and advises the LOBs and Corporate functions on potential reputation risk issues.

Estimations and Model risk

Risk definition

Estimations and Model risk, a subcategory of operational risk, is the potential for adverse consequences from decisions based on incorrect or misused estimation outputs.

Risk profile

J.P. Morgan AG uses models and other analytical and judgment-based estimations across various businesses and functions. The estimation methods are of varying levels of sophistication and are used for many purposes, such as the valuation of positions and measurement of risk, assessing regulatory capital requirements, conducting stress testing, and making business decisions. As estimations are simplified representations of real-world relationships, their use presents risk due to possible flaws in their methodology and numerical routines, inputs and assumptions, implementation, use, or relationships between interdependent estimations. Estimations are tiered based on complexity, exposure and reliance to provide an indicator of the potential risk posed by the estimation: the lower the tier, the higher the model risk, with Tier 1 posing the highest risk and Tier 4 the lowest.

Risk management objectives

J.P. Morgan AGs model risk management objectives are to identify, monitor, measure where possible and manage model

risk. To this end, model risk policies and procedures mandate the following:

– Robust review of models in order to identify model risks;
– Ensure compensating controls are considered where necessary;
– Perform ongoing performance monitoring of models to ensure that they continue to perform throughout their life;
– Ensure all models are adequately documented and tested.

Approach to risk management

The J.P. Morgan AG Model Risk Governance Framework is set out in the J.P. Morgan AG Estimations and Model Risk Management Policy and Procedure and follows the same principles and guidelines as laid out in the Firmwide Framework. The requirements of the policy and certain new model risk management activities have not been fully implemented yet.

Managing model risk throughout the model life cycle is the responsibility of multiple constituents, principally the Model Users, Model Developers, Model Owners, and Model Risk Governance and Review Group ("MRGR"). The J.P. Morgan AG Estimations Risk Committee (AGERC), a sub-committee of the J.P. Morgan AG ROC, is responsible for the oversight of the model risk and implementation of the model risk framework for the entity.

Model risks are owned by the users of the models within J.P. Morgan AG based on the specific purposes of such models. Users and developers of models are responsible for developing, implementing and testing their models, as well as referring models to MRGR for review and approval. Once models have been approved, model users and developers are responsible for maintaining a robust operating environment, and must monitor and evaluate the performance of the models on an ongoing basis. Model users and developers may seek to enhance models in response to changes in the portfolios and in product and market developments, as well as to capture improvements in available modelling techniques and systems capabilities. Model users within J.P. Morgan AG are responsible for ensuring that any model they use is captured both in the Firmwide inventory and in the J.P. Morgan AG inventory and for abiding by the scope and other conditions of the model's approval on an ongoing basis.

MRGR is an independent function in the risk management of J.P. Morgan AG reporting directly to the CRO, and staffed with personnel to assess model risk independently from Model Developers and Model users. MRGR resources from other JPM entities support J.P. Morgan AG MRGR, subject to outsourcing arrangements. In its review of a model, MRGR considers whether the model is suitable for the specific purposes for which it will be used. When reviewing a model, MRGR analyses and challenges the model methodology and the reasonableness of model assumptions and may perform or require additional testing, including back-testing of model outcomes. Model reviews are approved by the appropriate level of management within MRGR based on the relevant model tier.

Under the J.P. Morgan AG Estimation and Model Risk Management policy, MRGR reviews and approves new models, as well as material changes to existing models, prior to implementation in the operating environment. In certain circumstances exceptions may be granted to the policy to allow a model to be used prior to review or approval. MRGR may also require the user to take appropriate actions to mitigate the model risk if it is to be used in the interim. These actions will depend on the model and may include, for example, limitation of trading activity.

While models are inherently imprecise, the degree of imprecision or uncertainty can be heightened by the market or eco-

nomic environment. This is particularly true when the current and forecasted environment is significantly different from the historical macroeconomic environments upon which the models were calibrated, as the Firm has experienced during the COVID-19 pandemic. This uncertainty may necessitate a greater degree of judgment and analytics to inform adjustments to model outputs than in typical periods.

Capital risk

Capital risk is the risk that J.P. Morgan AG has an insufficient level and composition of capital to support its business activities and associated risks during both normal economic environments and under stressed conditions.

A strong capital position is essential to J.P. Morgan AG's business strategy and competitive position. J.P. Morgan AG's capital management strategy focuses on maintaining long-term stability to enable it to build and invest in market-leading businesses, even in a highly stressed environment. Prior to making any decisions on future business activities, the Management Board considers the implications on J.P. Morgan AG's capital. Accordingly, the entity's Capital Management Framework is designed to ensure that it is adequately capitalized at all times primarily in relation to:

- (Minimum) regulatory capital requirements;
- Minimum requirements on the leverage ratio;
- MREL requirements; and
- Risk appetite as determined by Management and expressed for example, through the setting of internal capital targets above minimum levels prescribed by regulation.

Regulatory minimum capital requirements

In 2020, J.P. Morgan AG had to comply with the following minimum capital requirements consisting of:

- Pillar 1 capital requirements: 8 % for total capital and 4.50 % for CET 1 capital;
- Pillar 2 capital requirements (SREP add-on): 3.25 % for total capital and 1.83 % for CET1 capital; and
- Combined Buffer Requirements: 2.56 % for both total capital and CET1 capital.

The minimum requirements for total capital decreased in 2020 compared to 2019 mainly due to the decreasing countercyclical buffer requirement, which is intended to protect banks against risks arising when credit growth is excessive from 0.36 % to 0.06 %. In response to the COVID-19 pandemic, some of the countries to which J.P. Morgan AG holds material credit exposure to the private sector reduced their countercyclical buffer rates, as a relief measure, resulting in an overall decrease in the countercyclical buffer requirement.

Regulatory Capital and Ratios

The regulatory capital for J.P. Morgan AG increased by € 8,503 million in 2020 compared to 2019. This was driven by three capital injections (CET1 capital) to the amount of € 7,725 million as well as a Tier 2 capital issuance of € 840 million in 2020 to support growth in business activities. During this period, the capital requirements increased significantly with risk weighted assets (RWAs) increasing significantly from € 17,923 million to € 41,492 million. The main drivers of the RWA increase are:

- Operational Risk: Increase is driven by a methodological change in the quantification of operational risk under the Basic Indicator Approach from using historical revenues to using forward-looking plan revenues.
- Market Risk: Increase is driven by migrations of risk positions to J.P. Morgan AG in Q4 2020.

	Actuals	
€M	31/12/2020	31/12/2019
Credit Risk (incl. Counterparty Credit Risk) [1]	27,821	16,519
CVA	2,049	913
Market Risk	10,402	234
Operational Risk	1,220	257
Total Risk Weighted Assets	**41,492**	**17,923**
Total Pillar 1 Requirement	3,319	1,434
P2R and Combined Buffer Requirements	2,409	1,095
Total Own Funds Requirement	**5,729**	**2,529**
Total CET1/Tier 1	**12,643**	**4,980**
Total Tier 2	**1,026**	**186**
Total Capital Resources	**13,668**	**5,165**
CET1/Tier 1 Capital Ratio	30.5 %	27.8 %
Total Capital Ratio	32.9 %	28.8 %
Leverage Ratio	10.1 %	7.3 %

[1] Includes securitizations, settlement risk and Other risk exposure amounts.

– Credit & Counterparty Credit Risk: Increase is driven by migrations of risk positions to J.P. Morgan AG and a significant increase in client-driven OTC derivatives trade activity.

Throughout the year 2020, regulatory capital ratios and leverage ratio were comfortably above minimum requirements and internal targets. The table on page 54 shows the RWAs and capital ratio development from 2019 to 2020.

Also in the next three planning years J.P. Morgan AG will be comfortably above all capital requirements.

Capital Management

The framework used to manage capital within J.P. Morgan AG is based around a regular cycle of point-in-time capital adequacy calculations and reporting, supplemented by forward-looking projections and stress-testing, with corrective action taken when required to maintain an appropriate level of capitalization.

Through this process, key capital-related metrics such as capital ratios, large exposure constraints, Leverage Ratios, MREL requirements and capital utilization in the ICAAP are calculated and monitored to ensure that minimum regulatory requirements as well as internally set capital targets are not breached. Each part of the process is subject to rigorous controls, including capital adequacy reporting at daily, weekly and quarterly frequencies to ensure appropriate oversight in line with the Capital Management framework.

J.P. Morgan AG became subject to internal MREL requirements under CRR 2 in December 2020 after it reached the material subsidiary[1] threshold. Since then, it is subject to leverage ratio-based and RWA-based internal MREL requirements which must be met in parallel. As of December 31, 2020, these requirements were 5.4% of the leverage ratio exposure and 16.96% (including combined buffer requirement) of RWAs and resulted in a minimum leverage ratio exposure-based MREL requirement of € 6.8 billion and a minimum RWA-based MREL requirement of € 7.0 billion. Each of these internal MREL requirements stood against an MREL capacity, consisting solely of regulatory own funds of € 13.7 billion. From January 2022 onwards, additional MREL requirements under BRRD II will become applicable, leading to higher requirements.

Escalation of issues is driven by a framework of specific triggers and early warning indicators defined in the Contingency Capital Plan. The J.P. Morgan AG Management Board receives at least quarterly updates on the capital position and projections and has oversight of decisions related to capital usage and capital strategy.

The quarterly Internal Capital Adequacy Assessment Process ("ICAAP") aims to ensure that J.P. Morgan AG is adequately capitalized in relation to its risk profile and appetite through the economic cycle and under a range of severe but plausible stress scenarios. The quarterly ICAAP results are reviewed by the Risk Oversight Committee and the J.P. Morgan AG Management Board.

Business risk

J.P. Morgan AG defines Business risk as the risk associated with J.P. Morgan AG's current and future business plans and objectives. Business risk includes the risk to current or anticipated earnings, capital, liquidity, enterprise value, or J.P. Morgan AG's reputation arising from adverse business decisions, poor implementation of business decisions, or lack of responsiveness to changes in the industry or external environment.

A regular comparison of the actuals with the plan, which might result in adjustments if necessary, should minimize such deviations.

The business risk quantification process determines an adverse view on the plan P&L by estimating adverse effects on P&L items not fully captured by other material risks such as market risk, credit risk, IRRBB etc. The methodology uses historically

	Actuals
€M	31/12/2020
MREL eligible resources	13,668
Regulatory MREL requirements (RWA-based)	7,036
Regulatory MREL requirements (LRE-based)	6,763
MREL surplus/(shortage) on most binding requirement	**6,633**
Regulatory MREL requirements (RWA-based) in %	17.0 %
Regulatory MREL requirements (LRE-based) in %	5.4 %

[1] J.P. Morgan AG became a material subsidiary as its Leverage Exposure exceeded 5% of the Leverage exposure of J.P. Morgan Group in December 2020.

observed absolute deviations between planned and actual P&L figures and computes a business risk factor by determining the 99.9% confidence level from the empirical distribution. The business risk factor is applied to the current P&L plan to obtain an estimate of the economic capital requirements for business risk over a 1-year horizon. This economic capital requirement for the Business Risk results together with the other economic risk categories in the total economic capital requirement of J.P. Morgan AG.

Pension Risk

J.P. Morgan AG defines Pension risk as the risk caused by contractual or other liabilities to or with respect to a pension scheme (whether established for its employees or those of a related company or otherwise). Pension risk is driven by market and demographic risk where the pension scheme may be unable to meet future expected benefit payments. Pension Risk therefore represents the potential necessity for increased pension risk provisions.

Risk Governance

J.P. Morgan AG manages Pension Risk with a dedicated pension governance. This includes regular reporting, a pension committee and a corresponding investment committee.

Risk Measurement

Pension risk is quantified on the basis of a VaR model with a 99.9% confidence level and a one year holding period, semi-annually evaluated by J.P. Morgan AG's pension administrator, and taken into account in a separate quantification. Should this VaR exceed the asset surplus of the pension fund, this amount will be deducted from the risk-bearing capacity.

Risks manifesting across various risk types

Country risk

J.P. Morgan AG, through its LOBs and Corporate functions, may be exposed to country risk resulting from financial, economic, political or other significant developments which adversely affect the value of the entity's exposures related to a particular country or set of countries.

J.P. Morgan AG has implemented a country risk framework based on the Firmwide approach. Entity specific thresholds for country risk are monitored monthly and reported to the Risk Oversight Committee and the Management Board.

Organization and Management

Country Risk Management is an independent risk management function that assesses, manages and monitors country risk and reports to the Firm's CRO. For J.P. Morgan AG, this group actively monitors the portfolio of the entity with the following activities:

- Maintaining policies, procedures and standards consistent with a comprehensive country risk framework;
- Assigning sovereign ratings, assessing country risks and establishing risk tolerance relative to a country;
- Measuring and monitoring country risk exposure and stress across the Firm;
- Managing and approving country limits and reporting trends and limit breaches to the Management Board;
- Developing surveillance tools, such as signalling models and ratings indicators, for early identification of potential country risk concerns; and
- Providing country risk scenario analysis.

Sources and measurement

Country exposure includes activity with both government and private-sector entities in a country. Under the internal country risk management approach, attribution of exposure to a specific country is based on the country where the largest proportion of the assets of the counterparty, issuer, obligor or guarantor are located or where the largest proportion of its revenue is derived. This may be different from the domicile (i.e., legal residence) or country of incorporation of the counterparty, issuer, obligor or guarantor. Country exposures are generally measured by considering the risk to an immediate default of the counterparty, issuer, obligor or guarantor, with zero recovery. Assumptions are sometimes required in determining the measurement and allocation of country exposure, particularly in the case of certain non-linear or index exposures. The use of different measurement approaches or assumptions could affect the amount of reported country exposure.

Under the internal country risk measurement framework:

- Lending exposures are measured at the total committed amount (funded and unfunded), net of the allowance for credit losses and eligible cash and marketable securities collateral received;
- Deposits are measured as the cash balances placed with central and commercial banks;
- Securities financing exposures are measured at their receivable balance, net of eligible collateral received;
- Debt and equity securities are measured at the fair value of all positions, including both long and short positions;
- Counterparty exposure on derivative receivables is measured at the derivative's fair value, net of the fair value of the eligible collateral received;
- Credit derivatives protection purchased and sold is reported based on the underlying reference entity and is measured at the notional amount of protection purchased or sold, net of the fair value of the recognized derivative receivable or payable. Credit derivatives protection purchased and sold in market making activities is measured on a net basis, as such activities often result in selling and purchasing protection related to the same underlying reference entity; this reflects the manner in which the Firm manages these exposures.

Some activities may create contingent or indirect exposure related to a country (for example, providing clearing services or secondary exposure to collateral on securities financing receivables). These exposures are managed in the normal course of business through the credit, market, and operational risk governance.

Stress testing

Stress testing is an important component of the country risk management framework, which aims to estimate and limit losses arising from a country crisis by measuring the impact of adverse asset price movements to a country based on market shocks combined with counterparty-specific assumptions.

Country Risk Management periodically designs and runs tailored stress scenarios to test vulnerabilities to individual countries or sets of countries in response to specific or potential market events, sector performance concerns, sovereign actions and geopolitical risks. These stress results are used to inform potential risk reduction, as necessary.

COVID-19 Pandemic
Country Risk Management continues to monitor the impact of the COVID-19 pandemic, leveraging existing stress testing, exposure reporting and controls, as well as tailored analysis, to assess the extent to which individual countries may be adversely impacted.

Risk reporting
To enable effective risk management of country risk to the Firm, country exposure and stress are measured and reported weekly, and used by Country Risk Management to identify trends, and monitor high usages and breaches against limits.

Reputation risk
Reputation risk is the risk that an action or inaction may negatively impact J.P. Morgan AG's integrity and reduce confidence in the entity's competence held by various constituents, including clients, counterparties, customers, investors, regulators, employees, communities or the broader public.

Organization and management
Reputation Risk Management establishes the governance framework for managing reputation risk across the Firm. J.P. Morgan AG manages reputation risk on the basis of the Firmwide approach. As reputation risk is inherently difficult to identify, manage, and quantify, an independent reputation risk management governance function is critical.

Reputation risk management includes the following activities:

- Establishing a Firmwide Reputation Risk Governance policy and standards consistent with the reputation risk framework;
- Managing the governance infrastructure and processes that support consistent identification, escalation, management and monitoring of reputation risk issues Firmwide;
- Providing guidance to LOB Reputation Risk Offices ("RRO"), as appropriate.

The types of events that give rise to reputation risk are wide-ranging and could be introduced in various ways, including by employees, clients, customers and counterparties. These events could result in financial losses, litigation and regulatory fines, as well as other damages to the Firm and J.P. Morgan AG.

Governance and oversight
The Firm's Reputation Risk Governance policy establishes the principles for managing reputation risk. J.P. Morgan AG has adopted these for the management of reputation risk within the entity. It is the responsibility of employees in each LOB and Corporate function to consider the reputation of the Firm and the entity when deciding whether to offer a new product, engage in a transaction or client relationship, enter a new jurisdiction, initiate a business process or other matters. Increasingly, sustainability, social responsibility and environmental impacts are important considerations in assessing reputation risk, and are considered as part of reputation risk governance.

Reputation risk issues deemed material are escalated as appropriate.

Risk Summary
In our view, a conservative risk policy and solid capital resources ensure the comfortable risk position of J.P. Morgan AG going forward. The quantification of the capital demands

for the occurring risks takes place as part of J.P. Morgan AG's ICAAP on a quarterly basis.

COVID-19

The adverse economic conditions caused by the pandemic have had a negative impact on certain of J.P. Morgan AG's businesses and results of operations, including increases in the allowance for credit losses. The pandemic has resulted in increased reporting cycles, ad-hoc actions and significantly expanded regulatory interaction. This is detailed in the respective individual risk sections.

The following key performance and risk indicators essentially represent the risk profile of J.P. Morgan AG as of year end 2020:

€M	2020	2019	2018
RWA Overall	**41,492**	**17,923**	**1,387**
Total Capital	13,668	5,165	2,539
Tier 1 Capital ratio	30.47 %	28 %	170 %
Total Capital ratio	32.94 %	29 %	183 %
Leverage Ratio	10.09 %	7.3 %	9.9 %
Liquidity Coverage Ratio	147 %	222 %	155 %
Risk capital demand Economic Perspective	3,757	1,382	n/a
Risk capital Economic Perspective	12,917	5,038	n/a

Risk control and monitoring

Timely, independent and risk-based reporting for all material risks is provided to the Management Board on a regular basis.

Internal Control System

GENERAL REMARKS

Please refer to the explanations provided in the risk report for a presentation of the risks and the measures for limiting risks. The internal control system (ICS) and the risk management system, which cover the J.P. Morgan AG accounting process, focus on the guidelines, procedures and measures taken to ensure the efficacy, economic viability and orderliness of the accounting as well as guaranteeing adherence to the key statutory regulations. The internal control system consists of two areas, Control and Monitoring. In organizational terms, the Financial Control & Tax division is responsible for the control.

The monitoring measures consist of elements integrated into the process and external, independent elements. Among other factors, the integrated measures include a monthly control process covering all Bank's activities, during which the balance sheet as at that date and the income statement are examined to assess and confirm their correct presentation and risks. Moreover, in all instances the four-eye principle is applied, along with technical controls, mainly by software-controlled audit mechanisms. In addition, qualified staff members with due expertise and specialist functions such as Financial Control & Tax take part in the process-integrated monitoring and control functions.

The Management Board and the Supervisory Board (in particular the Audit Committee) as well as the internal audit department are engaged in the internal monitoring system in the form of process-independent audit measures. The audit of the annual financial statements constitutes a key element of process-independent monitoring. With reference to accounting, the risk management system is geared to identify, evaluate

and communicate risks from faulty bookkeeping, accounting, and reporting in a timely manner.

IT USE

The software used in the Bank to support accounting processes is made up of the IT applications used throughout the Group. The proper running of programs and interfaces is regularly assessed and confirmed. As part of the audit of our IT, the Group auditors check the due operation of the accounting-related applications at all computer centre locations. The general IT system, including that for accounting, is secured against unauthorized access.

KEY REGULATIONS AND CONTROL ACTIVITIES TO ENSURE DUE, ORDERLY AND RELIABLE ACCOUNTING

The rules and measures of the internal control system aim to ensure that business transactions are recorded in compliance with legal and internal requirements in a timely and complete manner, and that assets and liabilities within the annual financial statements are properly estimated, valued and reported. The booking documentation provides a reliable information base and a clear paper trail.

In the J.P. Morgan Group, the regulations of the Financial Accounting Standard Board are applied as uniform valuation and accounting principles according to US GAAP and supplemented and commented on by the Group´s "Accounting Policies" department. Here, too, stipulations are made with regard to the Group accounting practices. As part of the preparation of the annual financial statements according to HGB and the IFRS individual financial statements for J.P. Morgan AG, a reconciliation is made from US GAAP to the HGB and IFRS financial statements. Local work directives regulate the formal requirements and the material information in the annual financial statements and respectively in the IFRS separate financial statements.

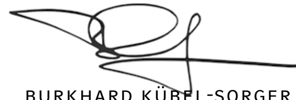
Frankfurt am Main, April 12, 2021

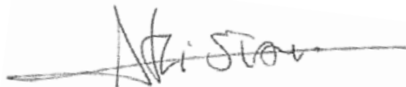
J.P. Morgan AG
Frankfurt am Main
The Management Board

STEFAN BEHR

NICHOLAS CONRON

GUNNAR REGIER


BURKHARD KÜBEL-SORGER


CINDYRELLA AMISTADI

Stand-alone Financial Statements of J.P. Morgan AG in Accordance with the International Financial Reporting Standards for the Year ended December 31, 2020

J.P. MORGAN AG INCOME STATEMENT AND OTHER COMPREHENSIVE INCOME

€T	Note	2020	2019
Income statement			
Interest income calculated using the effective interest method	6	276,296	145,646
Other interest income	6	71,857	44,073
Interest expense	6	348,058	154,489
Net interest income		**95**	**35,230**
Fee and commission income	7	773,839	264,664
Fee and commission expense	7	66,711	32,412
Net fee and commission income		**707,128**	**232,252**
Net income from financial assets and liabilities measured at fair value through profit and loss	8	33,201	−15,045
Other revenue	9	404	626
Total operating income		**740,828**	**253,063**
Loan loss provision	35	176,556	19,867
Administrative expenses	10	379,982	155,650
Depreciation and amortization	19	8,007	6,481
Total operating expenses		**564,545**	**181,998**
Profit or loss before tax		**176,283**	**71,065**
Income tax expense	11	36,359	22,475
Profit for the year		**139,924**	**48,590**
Other comprehensive income			
Items that will not be reclassified to profit or loss			
Remeasurement gains (+)/losses (–) on defined benefit plans		20,113	17,023
Net credit risk-related gains (+)/losses (–) on financial liabilities designated at FVTPL		−1,145	1,145
Related tax	11	−6,063	−5,794
Items that are or may be reclassified subsequently to profit or loss			
Change in fair value of financial assets (FVTOCI)			
Unrealized gains (+)/losses (–) recognized in the reporting period		25,850	6,014
Realized gains (–)/losses (+) reclassified to profit or loss in the reporting period		57,985	4,550
Related tax	11	−26,769	−3,372
Total other comprehensive income		**69,971**	**19,566**
Total comprehensive income for the year		**209,895**	**68,156**

Rounding differences may occur in the tables (€, %, etc.).

J.P. MORGAN AG BALANCE SHEET

€T	Note	December 31, 2020	December 31, 2019
Assets			
Cash and central bank balances	13	81,131,159	24,755,182
Loans and advances to banks	14	2,492,473	2,104,952
Loans and advances to customers	15	2,554,058	1,716,517
Securities purchased under agreements to resell or borrowed	16	15,943,986	3,906,768
Investment securities	17	54,911	55,720
Trading assets	18	111,243,513	23,958,983
Property and equipment	19	159,066	38,758
Deferred tax assets	11	29,194	31,681
Current tax asset		39,799	–
Other assets	20	30,969,992	7,877,146
Total assets		**244,618,151**	**64,445,705**
Liabilities			
Deposits from banks	23	82,982,716	19,754,575
Deposits from customers	24	13,862,725	8,517,926
Securities sold under repurchase agreements or loaned	16	6,841,193	1,555,260
Trading liabilities	18	115,254,075	23,928,212
Financial liabilities designated at fair value through profit or loss		21,715	–
Provisions	25	82,649	19,285
Current tax liabilities		33,767	27,476
Other liabilities	26	11,501,231	5,313,997
Subordinated liabilities	27	1,025,790	185,790
Total liabilities		**231,605,861**	**59,302,521**
Equity			
Subscribed capital	28	1,867,200	1,867,200
Capital reserves	28	10,748,588	3,090,157
Retained earnings	28	314,474	173,770
Other reserves	28	82,028	12,057
Total equity		**13,012,290**	**5,143,184**
Total liabilities and equity		**244,618,151**	**64,445,705**

Rounding differences may occur in the tables (€, %, etc.).

J.P. MORGAN AG
STATEMENT OF CHANGES IN EQUITY

€T	Note	Subscribed capital	Total Capital Reserves	Total Retained Earnings	OCI	Total
Balance as at January 1, 2019		**160,000**	**2,135,873**	**125,180**	**−7,508**	**2,413,545**
Profit for the year				48,590		48,590
Other comprehensive income for the year						
Actuarial gain on pension schemes					11,595	11,595
FV-changes of loans FVOCI					7,190	7,190
DVA on long-term debt under the fair value option					780	780
Total comprehensive income for the year		**–**	**–**	**48,590**	**19,565**	**68,156**
Capital injections	28		2,664,159			2,664,159
Capital increase using companies' funds	28	1,707,200	−1,707,200			–
Transfer of loans and loan commitments from JPMC-entities			9,660			9,660
Transfer of businesses and employees from JPMC-entities			−12,691			−12,691
Other changes			355			355
Balance as at December 31, 2019		**1,867,200**	**3,090,157**	**173,770**	**12,057**	**5,143,184**
Balance as at January 1, 2020		**1,867,200**	**3,090,157**	**173,770**	**12,057**	**5,143,184**
Profit for the year				139,924		139,924
Other comprehensive income for the year						
Actuarial gain on pension schemes					13,684	13,684
FV-changes of loans FVOCI					57,067	57,067
DVA on long-term debt under the fair value option					−780	−780
Total comprehensive income for the year		**–**	**–**	**139,924**	**69,971**	**209,895**
Capital injections	28		7,725,155			7,725,155
Capital increase using companies' funds	28					–
Transfer of loans and loan commitments from JPMC-entities						–
Transfer of businesses and employees from JPMC-entities			−66,725			−66,725
Reclass of Debt FVO OCI				780		780
Other changes			1			1
Balance as at December 31, 2020		**1,867,200**	**10,748,588**	**314,474**	**82,028**	**13,012,290**

J.P. MORGAN AG
CASH FLOW STATEMENT

€T	Note	2020	2019
Profit before tax		**176,283**	**71,066**
Non-cash movements	29	347,645	86,565
Changes in operating assets	29	−123,675,823	−30,309,237
Changes in operating liabilities	29	171,307,009	40,850,416
Cash flows from operating activities		**48,155,114**	**10,698,810**
Income taxes paid	11	−72,523	−35,056
Net cash generated from operating activities		**48,082,591**	**10,663,754**
Cash flow from investing activities			
Disposals and purchases of tangible fixed assets	19	−128,322	−7,661
Other investing activities	29	–	1,567
Net cash used in investing activities		**−128,322**	**−6,094**
Cash flow from financing activities			
Increase of share capital	28	7,658,431	2,661,484
Change in amounts owed to JPMorgan Chase undertakings	28	−73,861	−327,548
Change in subordinated liabilities with JPMorgan Chase undertakings	27	840,000	–
Lease liabilities	32	−2,862	−2,524
Net cash generated from financing activities		**8,421,708**	**2,331,412**
Net increase in cash and cash equivalents		**56,375,977**	**12,989,071**
Cash and cash equivalents at the beginning of the year	13	24,755,182	11,766,111
Cash and cash equivalents at the end of the year		**81,131,159**	**24,755,182**
Cash and balances at central banks	13	81,131,159	24,755,182
Cash and cash equivalents		**81,131,159**	**24,755,182**

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1. General information

J.P. Morgan AG (hereafter – the "Bank" or the "Company"), with registered offices in Frankfurt am Main, is a German stock corporation (Aktiengesellschaft) under German Law registered in the Trade Register of the Frankfurt District Court under number HRB 16861, which is active in Germany in the main business segments of Banking (consisting of Global Investment Banking, Wholesale Payments and Lending), Markets, Securities Services and Commercial Bank. The business year 2020 was shaped by the transfer of trading and banking books from JPMorgan Chase & Co. group entities domiciled in the United Kingdom in consequence of Brexit. The J.P. Morgan AG is an intermediate 100 % subsidiary of JPMorgan Chase & Co. with registered office in Columbus, Ohio, in the United States of America. The Bank has a full bank licence according to § 1 Para. 1 German Banking Act and pursues the banking business with institutional clients, banks, corporate clients and public authorities. The shares of J.P. Morgan AG are in full ownership of J.P. Morgan International Finance with registered office in Newark in the United States of America.

2. Basis of preparation

The stand-alone financial statements for the year ended December 31, 2020 have been prepared in accordance with the International Financial Reporting Standards ("IFRS") as applicable in the EU by the Bank.

The Standards have been applied in preparing the financial statements for the year ended December 31, 2020, the comparative information presented in these financial statements for the year ended December 31, 2019 and in the preparation of an opening IFRS Balance Sheet at January 1, 2019 for the stand-alone financial statements according to IFRS set up for the first time for business year 2019.

The legally required financial statements of the Bank are further prepared on the basis of the German Commercial Code (HGB). For the disclosure, the voluntarily prepared stand-alone IFRS financial statements according to § 325 Para. 2a HGB are utilized.

In order to apply the option according to § 325 Para. 2a sentence 1 HGB to disclose financial statements set up according to the International Financial Reporting Standards as denominated in § 315e Para. 1 HGB, in place of financial statements according to HGB, the additional German commercial law regulations according to § 325 Para. 2a sentence 3 HGB in connection with § 340l Para. 4 HGB have been followed.

The stand-alone financial statements have been prepared on a going concern basis under the historical cost convention as modified by the revaluation of certain financial assets and financial

liabilities measured at fair value through profit or loss (FVTPL) or measured at fair value through other comprehensive income (FVOCI).

The credit risk is described in note 35. Information on the market risk, the liquidity risk and the operational risk are included in the risk report as part of the Management Report.

3. Accounting and reporting developments

STANDARDS TO BE APPLIED FOR THE FIRST TIME AND REVISED STANDARDS

The following table provides an overview of the standards to be applied for the financial year 2020. There is no significant impact expected from the first time application or the revision of the standards in the IFRS stand-alone financial statement of the Bank.

Standard/Amendment	Application from 1/1/2020
Definition of "Material" – Amendments to IAS 1 and IAS 8	1/1/2020
Definition of "Business" – Amendments to IFRS 3	1/1/2020
Amendments to References to Conceptual Framework in IFRS Standards	1/1/2020
Amendment to IFRS 16, "Leases" – COVID-19 related rent concessions	1/6/2020

FUTURE STANDARDS NOT YET IMPLEMENTED DURING THE YEAR ENDED DECEMBER 31, 2020

The following IFRS have been adopted by the EU but were not mandatory to be applied before January 1, 2020. The future application of these standards is not expected to result in any material effects.

Future Standards/Amendments	Application in periods beginning on or after
Interest Rate Benchmark Reform – Amendments to IFRS 9, IAS 39 and IFRS 7, Phase 2	1/1/2021
Sale of Assets of an Investor to or Contribution to his Associated Entities or Joint Ventures – Amendments to IFRS 10 and IAS 28	n/a [1]

[1] In December 2015, the mandatory first-time application of the changes was postponed to a date to be determined after the end of the research project for the equity method.

The Annual Improvements to IFRS Standards 2018–2020 have an effective date of application for financial years beginning on or after January 1, 2022. All the changes and amendments not explicitly mentioned are assessed to not have a significant impact on the financial statements at present.

4. Material accounting estimates and judgements

The preparation of the financial statements requires management to make judgements, estimates and assumptions that affect the amounts recognized in the financial statements. The nature of estimation means that actual outcomes could differ from those estimates. The following judgements have had the most material effect on amounts recognized in the financial statements.

FAIR VALUE MEASUREMENT

The Company carries a significant portion of its assets and liabilities at fair value on a recurring basis. Estimating fair value often requires the application of judgement. The type and level of judgement required is largely dependent on the amount of observable market information available to the Company. For instruments valued using internally developed models that use significant unobservable inputs that are classified within level 3 of the valuation hierarchy, those judgements used to estimate the fair value are more material than those required when estimating the fair value of instruments classified within levels 1 and 2.

To estimate the fair value for an instrument within level 3, management must first determine the appropriate model to use. In addition, the lack of observability of certain inputs requires the management board to assess all relevant empirical data in deriving valuation inputs – including, for example, transaction details, yield curves, interest rates, prepayment rates, default rates, volatilities, correlations, equity prices, valuations of comparable instruments, foreign exchange rates and credit curves. For further discussion of the valuation of level 3 instruments, see note 30.

For instruments classified in levels 2 and 3, the management board's judgement must be applied to assess the appropriate level of valuation adjustments, the Company's and counterparty's credit-worthiness, market funding rates, liquidity considerations, unobservable parameters, and, for portfolios that meet specified criteria, the size of the net open risk position. The judgements made are typically affected by the type of product and its specific contractual terms, and the level of liquidity for the product or within the market as a whole. For further discussion of valuation adjustments applied by the Company, see note 30.

The use of methodologies or assumptions different than those used by the Company could result in a different estimate of fair value at the reporting date. For a detailed discussion of the Company's valuation process and hierarchy, its determination of fair value for individual financial instruments, and the potential impact of using reasonable possible alternative assumptions for the valuations, see note 30.

MEASUREMENT OF THE EXPECTED CREDIT LOSS ALLOWANCE

An expected credit loss allowance (ECL) is required for financial assets measured at amortized cost and fair value through other comprehensive income as well as lending-related commit-

ments such as loan commitments and financial guarantees. The measurement of ECL requires the use of complex models and assumptions about future economic conditions and credit behaviours. Explanation of the inputs, assumptions and estimation techniques used in measuring ECL is further detailed in note 35, which also sets out key sensitivities of the ECL to changes in these inputs.

A number of judgements are also required in measuring ECL, such as:

- Determining the criteria for identifying when financial instruments have experienced a significant increase in credit risk;
- Choosing the appropriate forecasts and assumptions for the measurement of ECL;
- Establishing the number and relative weightings of forward-looking scenarios for each type of financial instrument/market and the associated ECL; and
- Establishing groups of similar financial assets for the purposes of measuring ECL.

5. Significant accounting policies

The following are the significant accounting policies applied in the preparation of the financial statements. These policies have been applied consistently in each of the years presented, unless stated otherwise.

5.1. CONSOLIDATION

The sole shareholder of the Company is J.P. Morgan International Finance Limited, Newark/Delaware, and its ultimate parent company is JPMorgan Chase & Co., Columbus/Ohio, both incorporated in the United States of America. The Company is included in the consolidated financial statements of JPMorgan Chase & Co., which are publicly available.

According to § 290 in relation to § 296 Para. 1 No. 3 HGB, the Company is not required to prepare group financial statements. For further details we refer to note 18 – Trading assets and liabilities.

5.2. FOREIGN CURRENCY TRANSLATION

Monetary assets and liabilities denominated in foreign currencies are translated in Euro at the exchange rate on the balance sheet date. Income and expense items denominated in foreign currencies are translated in Euro at the exchange rate prevailing at the date of the transaction. Any gains or losses arising on translation are generally recognized in the income statement.

Non-monetary items that are measured based on historical cost in a foreign currency are translated in Euro at the exchange rate at the date of the transaction.

Non-monetary items denominated in foreign currencies that are stated at fair value are translated in Euro at the foreign exchange rate when the fair value was determined. Translation differences arising from non-monetary items measured at fair value are recognized in the income statement, except for differences arising on FVOCI non-monetary financial assets, which are included in the financial assets OCI reserve, respectively.

5.3. FUNCTIONAL AND PRESENTATION CURRENCY

Items included in the financial statements of the Company are measured using the currency of the primary economic environment in which the entity operates (the "functional currency"). Euro is considered as the functional currency and used as the presentation currency of the Company.

5.4. FINANCIAL INSTRUMENTS

5.4.1. Financial assets and financial liabilities

I. Recognition of financial assets and financial liabilities

The Company recognizes financial assets and financial liabilities when it becomes a party to the contractual provisions of the instrument. Regular way purchases and sales of financial assets are recognized on the trade-date, which is the date on which the Company commits to purchase or sell an asset. Certain margins from clients or margins to central counterparties in the global clearing business which are related to the clearing of trades at exchanges are not recorded on balance sheet, because they are not deemed assets or liabilities of the company.

II. Classification and measurement of financial assets and financial liabilities

On initial recognition, financial assets are classified as measured at amortized cost, fair value through other comprehensive income or fair value through profit or loss. The classification is based on both the business model for managing the financial assets and their contractual cash flow characteristics. Factors considered by the Company in determining the business model for a group of assets include past experience on how the cash flows for these assets were collected, how the assets' performance is evaluated and reported to the board of directors, how risks are assessed and managed, and how senior managers are compensated. This assessment results in a financial asset being classified in either a "hold to collect", "hold to collect and sell", or "other" business model.

Financial liabilities are measured at fair value on initial recognition and are classified as amortized cost or fair value through profit or loss ("FVTPL") for subsequent measurement.

Financial assets and financial liabilities measured at amortized cost

Financial assets are measured at amortized cost if they are held under a business model with the objective to collect contractual cash flows ("Hold to Collect") and they have contractual terms under which cash flows are solely payments of principal and interest ("SPPI"). In making the SPPI assessment, the Company considers whether the contractual cash flows are consistent

with a basic lending arrangement (i. e., interest includes only consideration for the time value of money, credit risk, other basic lending risks and a profit margin that is consistent with a basic lending arrangement). Where the contractual terms introduce exposure to risk or volatility that are inconsistent with a basic lending arrangement, the related financial asset is classified and measured at fair value through profit or loss.

Financial assets measured at amortized cost include cash and balances at central banks, loans and advances to banks, certain loans and advances to customers and certain securities purchased under agreements to resell.

Financial liabilities are measured at amortized cost unless they are held for trading or are designated as measured at fair value through profit or loss. Financial liabilities measured at amortized cost include trade payables, amounts owed to JPMorgan Chase undertakings and certain other liabilities.

Financial assets and financial liabilities measured at amortized cost are initially recognized at fair value including transaction costs (which are explained below). The initial amount recognized is subsequently reduced for principal repayments and for accrued interest using the effective interest method. In addition, the carrying amount of financial assets is adjusted by recognizing an expected credit loss allowance through to profit or loss.

The effective interest method is used to allocate interest income or interest expense over the relevant period. The effective interest rate is the rate that discounts estimated future cash payments or receipts through the expected life of the financial asset or financial liability or a shorter period when appropriate, to the net carrying amount of the financial asset or financial liability. The effective interest rate is established on initial recognition of the financial asset or financial liability. The calculation of the effective interest rate includes all fees and commissions paid or received, transaction costs, and discounts or premiums that are an integral part of the effective interest rate. Transaction costs are incremental costs that are directly attributable to the acquisition, issuance or disposal of a financial asset or financial liability.

Financial assets measured at fair value through other comprehensive income ("FVOCI")

Financial assets are measured at FVOCI if they are held under a business model with the objective of both collecting contractual cash flows and selling the financial assets ("Hold to Collect and Sell"), and they have contractual terms under which cash flows are SPPI. Financial assets measured at FVOCI include loans and advances that are held within the Company's Retained Lending business.

Financial assets measured at FVOCI are initially recognized at fair value, which includes direct transaction costs. The financial assets are subsequently remeasured at fair value with any changes

presented in other comprehensive income ("OCI") except for changes attributable to impairment, interest income and foreign currency exchange gains and losses. Impairment losses and interest income are measured and presented in profit or loss on the same basis as financial assets measured at amortized cost.

On derecognition of financial assets measured at FVOCI, the cumulative gains or losses in OCI are reclassified from equity, and recognized in the income statement.

Financial assets and financial liabilities measured at fair value through profit or loss (mandatory)
Financial assets and financial liabilities are measured at fair value through profit or loss ("FVTPL") if they are held for trading. Under IFRS 9, a financial asset or a financial liability is defined as "held-for-trading" if it is acquired or incurred principally for the purpose of selling or repurchasing it in the near term, or forms part of a portfolio of identified financial instruments that are managed together and for which there is evidence of a recent actual pattern of short-term profit taking or it is a derivative. However, such financial instruments are used by the Company predominantly in connection with its "client-driven" market-making and/or for hedging certain assets, liabilities, positions, cash flows or anticipated transactions (i.e. risk management activities).

Financial assets and financial liabilities held for trading comprise both debt and equity securities, loans and derivatives.

In addition, certain financial assets that are not held for trading are measured at FVTPL if they do not meet the criteria to be measured at amortized cost or FVOCI, for example, if the financial assets are managed on a fair value basis, have contractual cash flows that are not SPPI or are equity securities. The company has determined that securities purchased under agreement to resell within the Corporate and Investment Banking portfolios are managed on a fair value basis, these financial instruments are therefore classified at FVTPL.

Financial instruments measured at FVTPL are initially recognized at fair value in the balance sheet. Transaction costs and any subsequent fair value gains or losses are recognized in profit or loss as they arise.

The Company manages cash instruments, in the form of debt and equity securities, and derivatives on a unified basis, including hedging relationships between cash securities and derivatives. Accordingly, the Company reports the gains and losses on the cash instruments and the gains and losses on the derivatives on a net basis in trading profits.

Financial assets and financial liabilities designated at fair value through profit or loss
Subject to specific criteria, the Company can designate financial assets and financial liabilities to be measured at fair value through profit or loss. Designation is only possible when the financial

instrument is initially recognized and cannot be subsequently reclassified. Financial assets can be designated as measured at fair value through profit or loss only if such designation eliminates or significantly reduces a measurement or recognition inconsistency. Financial liabilities can be designated as measured at fair value through profit or loss only if such designation (a) eliminates or significantly reduces a measurement or recognition inconsistency; or (b) applies to a group of financial assets, financial liabilities or both that the Company manages and evaluates on a fair value basis; or (c) relates to an instrument that contains an embedded derivative unless the embedded derivative does not significantly modify the cash flows required by the contract or when a similar hybrid instrument is considered that separation of the embedded derivative is prohibited.

Financial assets and financial liabilities that the Company designates as measured at fair value through profit or loss are recognized at fair value at initial recognition, with transaction costs being recognized in profit or loss and subsequently measured at fair value. Gains and losses on financial assets and financial liabilities designated at fair value through profit or loss are recognized in profit or loss as they arise.

Changes in the fair value of financial assets designated as measured at FVTPL are recognized immediately in profit or loss.

Changes in the fair value of financial liabilities designated as measured at FVTPL are recognized in profit or loss except for gains/losses attributable to changes in the Company's own credit risk. These gains/losses are recognized in OCI unless doing so results in an accounting mismatch with directly offsetting financial assets measured at fair value through profit or loss.

The Company has designated one debt security to be measured at FVTPL to significantly reduce measurement inconsistency (i.e. an accounting mismatch), as this financial asset is managed together with a derivative, which is measured at FVTPL.

The Company has designated certificates of indebtedness (Schuldschein) to be measured at FVTPL to significantly reduce measurement inconsistencies (i.e. an accounting mismatch), as these financial liabilities are managed together with either B2B reverse repo or derivatives, which are measured at FVTPL.

The Company has designated securities sold under agreements to repurchase and securities loaned within the Company's Corporate and Investment Banking portfolios to be measured at FVTPL. These financial liabilities are managed together with securities purchased under agreements to resell and securities borrowed, which are managed on the fair value basis and measured at FVTPL. Correspondingly the Company elected to designate these liabilities as measured at FVTPL to eliminate or significantly reduce measurement inconsistencies (i.e., an accounting mismatch).

5.4.2. Interest income and expense

Unless a financial asset is credit-impaired, interest income is recognized by applying the effective interest method to the carrying amount of a financial asset before adjusting for any allowance for expected credit losses. If a financial asset is credit-impaired, interest income is recognized by applying the effective interest rate to the carrying amount of the financial asset including any allowance for expected credit losses.

Interest expense on financial liabilities is recognized by applying the effective interest method to the amortized cost of financial liabilities.

The effective interest rate is the rate that discounts estimated future cash payments or receipts through the expected life of the financial asset or financial liability or a shorter period when appropriate, to the net carrying amount of the financial asset or financial liability. The calculation includes all fees paid or received between parties to the contract that are an integral part of the effective interest rate transaction costs, and all other premiums or discounts. The effective interest rate is established on initial recognition of the financial asset or financial liability.

Interest income on financial assets and financial liabilities measured at amortized cost and FVOCI are presented separately in interest income calculated using the effective interest method.

Interest generated as a result of negative interest rates is recognized gross, as interest income or interest expense.

5.4.3. Trading profit

Profits and losses resulting from the purchase and sale of securities and the revaluation of financial instruments measured at FVTPL are recognized as trading profit on a trade-date basis, including related transaction costs.

5.4.4. Impairment of financial assets and lending-related commitments

Instruments in scope of TCP include loans, lending-related commitments, and other lending products stemming from extensions of credit to borrowers. The Company establishes an ECL for these instruments to ensure they are reflected in the financial statements at the Company's best estimate of the net amount expected to be collected. The ECL is determined on in-scope financial instruments measured at amortized cost or FVOCI. ECL are measured via a portfolio-based (modeled) approach for Stage 1 and 2 assets but are generally measured individually for Stage 3 assets. ECL are forecasted over the 12-month term (Stage 1) or expected life (Stage 2 or 3) of in-scope financial instruments, where the forecast horizon includes the reasonable and supportable (R&S) forecast period (2 years), the one year reversion period and the residual period and considers the time value of money. In determining the ECL measurement and staging for a financial instrument,

the Company applies the definition of default consistent with the Basel definition of default to maintain uniformity of the definition across the Firm.

Determining the appropriateness of the allowance is complex and requires judgment by the management board about the effect of circumstances that are inherently uncertain. Further, estimating the allowance involves consideration of a range of possible outcomes, which management evaluates to determine its best estimate. Subsequent evaluations of the TCP portfolio, in light of the circumstances then prevailing, may result in significant changes in the ECL in future periods.

The Company must consider the appropriateness of decisions and judgments regarding methodology and inputs utilized in developing estimates of ECL each reporting period and document them appropriately.

Note 35 provides more detail for how the expected credit loss allowance is measured.

5.4.5. Modification of loans

The Company may modify terms with borrowers in individual cases. Such modifications comprise for example changes in contractual interest rates, extensions or cease of repayments and in the majority of cases relate to eased covenants. If the respective borrower is not in financial difficulties, the Company assesses if the modification is substantial or non-substantial based on certain quantitative and qualitative criteria. One major criterion is whether the present value of the agreed cash-flows from the loan before and after the modification has changed by more than 10 %. If the modification is substantial, the existing loan is derecognized, a new financial asset is recognized and all existing deferred income and expenses as well as pre-payment fees are released to income. If the modification is non-substantial, the unamortized net fees are carried forward as part of the recorded carrying value of the modified loan.

If a borrower is in financial difficulties, it might be in the interest of the Company to grant modifications in order to avoid the default of a loan or to maximize cash flows from non-performing loans. In this case, the existing loan remains on the balance sheet and no new loan is recorded.

5.4.6. Derecognition of financial assets and financial liabilities

Financial assets are derecognized when the contractual right to receive cash flows from the asset has expired, or has been transferred with either of the following conditions met:

a) The Company has transferred substantially all the risks and rewards of the ownership of the asset; or
b) The Company has neither retained nor transferred substantially all of the risks and rewards; but it has relinquished control of the asset.

Financial liabilities are derecognized when they are extinguished, that is when the obligation is discharged, cancelled or expires.

The Company enters from time to time also into certain "pass-through" arrangements whereby contractual cash flows on a financial asset are passed to a third party. Such financial assets are derecognized from the balance sheet if the terms of the arrangement oblige the Company to only pass on contractual cash flows to the third party that are actually received without material delay, and where the terms of the arrangement also prohibit the Company from selling or pledging the underlying financial asset.

5.4.7. Write-offs

Wholesale loans recognized as loans and advances on the balance sheet are charged off when it is highly certain that a loss has been realized. The determination of whether to recognize a charge-off includes many factors, including the prioritisation of the Company's claim in bankruptcy, expectations of the workout/restructuring of the loan and valuation of the borrower's equity or the loan collateral.

All other financial assets are written off when there is no reasonable expectation of recovery and the amount of loss can be reasonably estimated or when the asset is past due for a specified period.

5.5. FEE AND COMMISSION INCOME AND EXPENSE

The Company earns fees and commissions from providing investment banking, lending and deposit-related services, brokerage services and other commissions.

Investment banking fees

Investment banking revenue includes debt and equity underwriting and advisory fees. Underwriting fees are recognized as revenue typically upon execution of the client's transaction. Debt underwriting fees also include credit arrangement and syndication fees which are recorded as revenue after satisfying certain retention, timing and yield criteria. Advisory fees are recognized as revenue typically upon execution of the client's transaction.

Lending- and deposit-related fees

Lending-related fees include fees earned from loan commitments, standby letters of credit, financial guarantees, and other loan-servicing activities. Deposit-related fees include fees earned in lieu of compensating balances, and fees earned from performing cash management activities and other deposit account services. Lending- and deposit-related fees in this revenue category are recognized proportionately over the period in which the related service is provided.

Other commissions

The Company acts as a broker, facilitating its clients' purchase and sale of securities and other financial instruments. It collects and recognizes brokerage commissions as revenue upon occurrence of the client transaction. The Company reports certain costs paid to third-party clearing houses and exchanges net against commission revenue.

Fees and commissions obtained through the Bank's attribution agreements are recognized when the underlying contract becomes legally binding or at the agreed due date.

5.6. LEASES

The Company recognizes lease right-of-use ("ROU") assets and lease liabilities at the lease commencement date. Lease ROU assets are included in property and equipment, and lease liabilities are included in other liabilities for operating leases in the Company's balance sheet. The ROU asset is initially measured at cost, which comprises the initial amount of the lease liability adjusted for any lease payments made at or before the lease commencement date plus any initial direct costs incurred and estimated costs for dismantling, removing and restoring as stated and required by the leasing agreement, less any lease incentives received. The ROU asset is subsequently amortized on a straight-line basis of the earliest of the two periods of the end of the useful life of the ROU asset or the lease term. The estimated useful life of the ROU asset is determined on the same basis as those of the property and equipment. In addition, the ROU asset may be reduced by impairment losses, if any, and adjusted for certain remeasurements of the lease liability.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted using the Company's incremental borrowing rate. The lease liability is measured at amortized cost using a constant periodic rate of interest. It is re-measured when there is a change in leasing rates as a result of a change in a consumer price index or reference rate, or if the Company changes its assessment of whether it will exercise an extension or termination option. When the lease liability is re-measured in this way, a corresponding adjustment is made to the carrying amount of the ROU asset, or is recorded in earnings if the carrying amount of the ROU asset has been reduced to zero.

Short-term leases and leases of low-value assets

The Company has elected to not recognize ROU assets and lease liabilities for leases of low-value assets and short-term leases of real estate, including equipment, that have a lease term of 12 months or less. The Company recognizes the lease payments associated with these leases as an expense on a straight-line basis over the lease term.

5.7. FAIR VALUE

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

Fair values are determined by reference to observable market prices where available and reliable. Fair values of financial assets and financial liabilities are based on quoted market prices or dealer price quotations for financial instruments traded in active markets. Where market prices are unavailable, fair value is based on valuation models that consider relevant transaction characteristics. As inputs are used observable or unobservable market parameters, including but not limited to yield curves, interest rates, volatilities, equity prices, foreign exchange rates and credit curves. Valuation adjustments may be done to ensure that financial instruments are recorded at fair value.

For financial assets and liabilities held at fair value, most market parameters in the valuation model are directly observable. When input values do not directly correspond to the actively traded market parameters, the model may perform numerical procedures in the pricing such as interpolation.

The Company classifies its assets and liabilities measured at fair value according to a hierarchy that has been established under IFRS. The fair value hierarchy is based on the transparency of inputs to the valuation of an asset or liability as of the measurement date. The fair value hierarchy gives the highest priority to quoted prices (unadjusted) in active markets for identical assets or liabilities (level 1) and the lowest priority to unobservable inputs (level 3 inputs).

A financial instrument's categorization within the fair value hierarchy is based on the lowest level of input that is significant to the fair value measurement.

Further details on fair value measurements are provided in note 30 to the financial statements.

5.8. RECOGNITION OF DEFERRED DAY ONE PROFIT AND LOSS

The Company enters into transactions where fair value is determined using valuation models for which not all inputs are observable market prices or rates. Such financial instrument is initially recognized at the transaction cost, although the value obtained from the relevant valuation model may differ. The difference between the transaction cost and the model value, commonly referred to as "day one profit and loss", is not recognized immediately in the income statement when based on significant unobservable inputs.

The timing of recognition of deferred day one profit and loss is determined for each class of financial asset and liability. It is either amortized over the life of the transaction, deferred until the instrument's fair value can be determined using market observable inputs, or realized through settlement. The financial instrument is subsequently measured at fair value, adjusted for the deferred day one profit and loss.

5.9. IMPAIRMENT OF NON-FINANCIAL ASSETS

Non-financial assets that are subject to amortization are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognized for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs of disposal and value in use. For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are largely independent cash inflows (cash-generating units). Prior impairments of non-financial assets (other than goodwill) are reviewed for possible reversal at each reporting date.

5.10. SECURITIES PURCHASED UNDER AGREEMENT TO RESELL AND SECURITIES SOLD UNDER AGREEMENT TO REPURCHASE

Securities purchased under agreements to resell, and securities sold under agreements to repurchase, are treated as collateralized lending and borrowing transactions respectively. The consideration for the transaction can be in the form of cash or securities. If the consideration for the purchase or sale of securities is given in cash, the transaction is recorded on the balance sheet within securities purchased/sold under agreement to resell/repurchase. In a repo transaction, the bank retains the risks and rewards of the securities sold under repurchase agreement, these securities are not derecognized from the balance sheet. In a reverse repo transaction, securities purchased under agreement to resell are not recognized on the balance sheet. The difference between the sales and repurchase price is treated as interest and accrued over the life of the agreements.

5.11. SECURITIES BORROWING AND SECURITIES LENDING TRANSACTIONS

Securities borrowing and securities lending transactions require the borrower to deposit cash or other collateral with the lender. Securities borrowing and securities lending are recorded at the amount of cash collateral advanced or received. If the consideration is received or given in the form of securities, the transaction is recorded off balance sheet. Fees received or paid in connection with securities borrowing and lending are treated as interest income or interest expense and accrued over the life of the transaction using the effective interest rate method.

5.12. OFFSETTING FINANCIAL ASSETS AND LIABILITIES

Financial assets and financial liabilities are offset and the net amount reported in the balance sheet when there is currently a legally enforceable right to offset the recognized amounts and there is an intention to settle on a net basis or to realize the asset and settle the liability simultaneously. The legally enforceable right must not be contingent on future events and must be enforceable in the normal course of business and in the event of default, insolvency or bankruptcy of the Company or the counterparty.

The Bank uses master netting agreements to mitigate counterparty credit risk in certain transactions, including derivative and securities financing transactions. A master netting agreement is a single agreement with a counterparty that permits multiple transactions governed by that agreement to be terminated and settled through a single payment in a single currency in the event of a default (e. g., bankruptcy, failure to make a required payment or securities transfer or deliver collateral or margin when due).

Further details on offsetting of financial assets and liabilities are provided in note 31 to the financial statements.

5.13. BUSINESS COMBINATIONS

Predecessor accounting is applied to transfers of businesses between entities under common control, where all combining entities are controlled by the same entity before and after the business acquisition. Assets and liabilities are recognized at their predecessor carrying amounts (i. e. the carrying amounts of assets and liabilities in the books and records of the transferor prior to the transfer) with no fair value adjustments. Any difference between the cost of acquisition and the aggregate book value of the assets and liabilities on the date of transfer of the business is recognized as an adjustment to equity. As a result, no goodwill is recognized from the business combination.

5.14. CASH AND CASH EQUIVALENTS

Cash and cash equivalents include cash and balances at central banks.

5.15. CURRENT AND DEFERRED INCOME TAX

Current income tax payable is recognized as an expense in the period in which the profits arise. Income tax recoverable on tax allowable losses is recognized as a current tax asset only to the extent that it is regarded as recoverable by offset against taxable profits arising in the current or prior period. Current tax is measured using tax rates and tax laws that have been enacted or substantively enacted at the balance sheet date.

Deferred tax is recorded, using the liability method, on temporary differences arising from the differences between the tax bases of assets and liabilities and their carrying amounts in the financial statements when recognition requirements are met. Deferred tax is determined using tax rates and legislation enacted or substantively enacted by the balance sheet date, which are expected to apply when the deferred tax asset is realized or the deferred tax liability is settled. Deferred tax assets and liabilities are only offset when there is both a legal right and an intention to settle on a net basis. Current tax and deferred tax are recognized directly in equity if the tax relates to items that are recognized in the same or a different period in equity. Deferred taxes on unused carried forward losses are not recognized since there are no tax losses carried forward.

5.16. PROVISIONS AND CONTINGENT LIABILITIES

Provisions are recognized when the Company has a present legal or objective obligation as a result of past events, it is probable that an outflow of economic benefits will be required to settle the obligation, and a reliable estimate of the amount of the obligation can be made.

A contingent liability is a possible obligation that arises from past events and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the Company, or a present obligation that arises from past events but is not recognized because either an outflow of economic benefits is not probable or the amount of the obligation cannot be reliably measured. Contingent liabilities are not recognized in the financial statements; however, disclosure is made unless the probability of settlement is remote.

5.17. PENSIONS AND OTHER POST-RETIREMENT BENEFITS

The Company operates both defined benefit and defined contribution schemes for its employees.

I. Defined contribution scheme

A defined contribution plan is a retirement plan in which the company pays fixed contributions to a separate company. The Company is not legally or de facto obliged to pay further contributions if the fund does not have sufficient assets to pay all employees the benefits in connection with the employee service in the current and in previous periods. Obligations for contributions to defined contribution pension plans are recognized as an expense and charged to the income statement on an accrual basis.

II. Defined benefit scheme

For defined benefit pension plans, the service cost for providing retirement benefits to employees during the year is recognized in the income statement in accordance with IAS 19 "Employee Benefits". The pension-related expenses and income are recorded on the basis of expert opinions. The appraisals are prepared by qualified and independent actuaries. This ensures that the full costs of covering the pension obligations of current and former employees are correctly recorded.

The liabilities of the defined benefit systems are valued on an actuarial basis. Assets are valued separately for each plan at their market value, provided that plan assets exist to cover plan liabilities. Any excess of the present value of obligations is capitalized taking into account the so-called asset ceiling. Any shortfall in plan liabilities is netted as a liability. Current service cost and any past service cost, along with the expected rate of return on the plan's assets, less the release of the discounting of the plan's liabilities, is charged to the income statement. Actuarial gains and losses are recognized in full in other comprehensive income in the reporting period in which they occur and shown in equity in the reporting period in which they occur.

5.18. SHARE-BASED PAYMENT AWARDS

Share-based payment awards may be made to employees of the Company under the Bank's incentive awards schemes. The fair value of such shares, rights to shares or stock options is measured during the conditional allocation. This value is recorded as compensation expense for the company over the period of time that the performance criteria are related to along with employer's social security expenses or other payroll taxes. All of the granted awards are equity-settled. The Company estimates the level of forfeitures and applies this forfeiture rate at the granting date.

Additionally, the Bank takes into account the conditions that must be met before an employee is eligible for equity instruments under the Bank's incentive programs. Amortization is accelerated for employees who retire so that the premium is recognized in full as an expense when the pension entitlement takes effect.

6. Interest income and expense and similar income and expense

Details of interest income and interest expense were as follows, including similar income and expenses:

€T	1/1–31/12/2020	1/1–31/12/2019
Interest and similar income		
Loans and advances to banks	15,753	39,011
Loans and advances to customers	56,537	28,707
Securities purchased under agreements to resell	660	0
Positive interest from financial liabilities	189,102	44,002
Other	14,244	33,926
Total interest income calculated using the effective interest method	**276,296**	**145,646**
Loans and advances to banks	487	0
Loans and advances to customers	4,346	0
Securities purchased under agreements to resell	19,357	27,733
Trading assets	22,091	4,556
Investment securities	1,198	1,194
Securities borrowed	0	155
Positive interest from financial liabilities	24,378	10,436
Total interest and similar income	**348,153**	**189,719**
Interest expense and similar charges		
Deposits from banks	60,093	19,214
Deposits from customers	1,259	4,809
Securities sold under repurchase agreements or loaned	10,169	2,754
Securities loaned	194	0
Trading liabilities	19,088	3,761
Subordinated liabilities & LTD	2,533	4,059
Negative interest on financial assets	250,531	95,417
Other interest expense	4,191	24,475
Total interest expense and similar charges	**348,058**	**154,489**
Net interest income	**95**	**35,230**

The amounts reported above include interest income and expense, calculated using the effective interest method. That related to the following financial assets and financial liabilities:

€T	1/1–31/12/2020	1/1–31/12/2019
Interest income from Financial assets measured at amortized cost	225,036	128,183
Interest income from Financial assets measured at FVOCI	51,260	17,463
Interest expense from Financial liabilities measured at amortized cost	−283,562	−136,428

Net interest income has decreased by 99.7 % over the comparison period. The decrease is primarily caused by the increased deposit at Deutsche Bundesbank.

Of the total positive interest from financial liabilities in the amount of € 213,480 thousand, € 98,101 thousand is related to liabilities to banks, € 67,112 thousand is related to liabilities to customers and € 19,492 thousand is related to liabilities from repo transactions.

Of the total negative interest on financial assets in the amount of € 250,531 thousand, € 168,695 thousand is related to deposits at central bank, € 35,262 thousand is related to loans to customers and € 23,765 thousand is related to reverse repo transactions.

7. Net fee and commission income

Fee and commission income consists of investment banking fees, lending and deposit related fees and commissions and other income (Also see note 5.5.). In 2020, the Bank only performed pilot transactions and investment banking fees results from shared deals with JPMs plc. Fees and commissions obtained through the Bank's attribution agreements are recognized when the underlying contract becomes legally binding or at the agreed due date. This is included in "commissions & other fees".

In the following table, fee and commission income from contracts with customers in the scope of IFRS 15 is disaggregated by major type of services:

€T	1/1–31/12/2020	1/1–31/12/2019
Investment banking fee	9,143	0
Lending and deposit related	59,024	12,676
Commissions & other fees	705,672	251,989
Total fee and commission income	**773,839**	**264,664**
Fee and commission expense	66,711	32,412
Net fee and commission income	**707,128**	**232,253**

Net fee and commission income increased by 204 % in comparison to the previous year. The expanded business and increasing commission income from the markets business contributed to this increase. The total of € 705,672 thousand Commission & other fees includes commission fees in the markets business in the amount of € 405,692 thousand.

8. Net income from financial assets and liabilities measured at fair value through profit and loss

This item contains the net gain or loss from financial instruments in the held-for-trading category, the net gain or loss from financial instruments in the mandatorily fair value P&L category, and the net gain or loss from financial instruments in the fair value option category.

The net gain or loss from financial instruments in the held-for-trading category is the net trading profit (see also note 5.4.3.).

The net gain or loss from financial instruments in the mandatorily fair value P&L category and the net gain or loss from financial instruments in the fair value option category contains only net remeasurement gains or losses and realized profit or loss.

€T	1/1–31/12/2020	1/1–31/12/2019
Profit or loss from financial instruments – held for trading	32,963	–7,285
Profit or loss from financial instruments – mandatorily Fair Value P&L	2,573	–5,196
Profit or loss from financial assets – Fair Value option	–393	–94
Profit or loss from financial liabilities – Fair Value option	–1,942	–2,470
Total	**33,201**	**–15,045**

9. Other Revenues

€T	1/1–31/12/2020	1/1–31/12/2019
FX-Effect from loan migration	0	314
Other	404	312
Total	**404**	**626**

10. Administrative & other expenses

€T	1/1–31/12/2020	1/1–31/12/2019
Administrative expenses		
Wages and salaries	145,164	46,737
Social security costs	24,636	5,771
Other pension and benefits costs	8,339	2,955
Share-based awards	38,520	8,488
Other administrative cost	163,323	91,700
Total administrative expenses	**379,982**	**155,650**

The increase in administrative expenses is essentially due to an increase of resources and related wages and salaries, transfer of employees to J.P. Morgan AG's branches and cost incurred related to Brexit strategy. The increase of other administrative cost mainly results from increased intercompany recharge (+€ 36.2 million), increased data processing expense (+€ 8.2 million) and increased occupancy cost (+€ 3.5 million).

The share-based awards are further described in note 22.

11. Income taxes

Current and deferred income taxes

Income taxes on taxable income (current taxes) are recognized as an expense in the period in which the income arises.

Income tax refund claims are only recognized as tax claims to the extent that there is a legal right to offset against current tax liabilities of the period or previous periods and a net settlement is intended. Current tax is valued at the tax rate valid on the balance sheet date.

Deferred taxes are calculated on temporary differences from the difference between the business and tax balance sheets. Deferred taxes are valued at the tax rate valid on the balance sheet date and the tax laws for the date of the expected realization. If there is a legally enforceable right to offset current taxes and the taxes are levied by the same tax authority and are payable by the same taxable entity, deferred taxes are netted. To the extent that the taxes relate to matters that were recognized directly in equity, current and deferred taxes are also recognized in equity. As of the balance sheet date, there were no taxable loss carryforwards.

11.1. AMOUNTS RECOGNIZED IN THE INCOME STATEMENT

€T	1/1–31/12/2020	1/1–31/12/2019
Current tax expense for the year	**52,367**	**36,099**
Current year	54,163	36,099
Adjustments in respect of previous years	−1,796	0
Deferred tax credit for the year	**−16,008**	**−13,624**
Origination and reversal of temporary differences	−16,008	−13,624
Recognition of previously unrecognized tax losses	0	0
Total income tax expense	**36,359**	**22,475**

As at December 31, 2020, the tax rate was 31.9 % (in 2019: 31.9 %).

11.2. AMOUNTS RECOGNIZED IN OCI

The table below shows current and deferred taxes:

			2020			2019
€T	Before tax	Tax	Net of tax	Before tax	Tax	Net of tax
Items that will not be reclassified to income statement	**18,968**	**−6,063**	**12,905**	**18,168**	**−5,794**	**12,374**
Remeasurement gains (+)/losses (–) on defined benefit plans	20,113	−6,429	13,684	17,023	−5,428	11,595
Net credit risk-related gains (+)/losses (–) on financial liabilities designated at FVTPL, before tax	−1,145	366	−779	1,145	−366	779
Items that are or may be reclassified subsequently to income statement						
Change in fair value of financial assets at FVTOCI	83,836	−26,769	57,067	10,564	−3,372	7,192
Unrealized gains (+)/losses (–) recognized in the reporting period, before tax	25,850	−8,254	17,596	6,013	−1,920	4,094
Realized gains (–)/losses (+) reclassified to profit or loss in the reporting period, before tax	57,986	−18,515	39,471	4,550	−1,452	3,098
Total	**102,804**	**−32,832**	**69,972**	**28,732**	**−9,166**	**19,566**

11.3. RECONCILIATION OF EFFECTIVE TAX RATE

€T	2020	2019
Profit before tax	**176,283**	**71,065**
Tax using tax rate of 31.9 %	56,287	22,691
Effect of non-tax-deductible expenses	3,476	2,634
Recognition of taxes from prior periods	−1,796	0
Effect of tax rates in foreign jurisdictions	−19,069	0
Other	−2,539	−2,850
Total income tax expense	**36,359**	**22,475**

11.4. MOVEMENT IN DEFERRED TAX BALANCES

In the reporting period and the comparative period, all deferred tax liabilities and assets were recorded and are split as follows:

2020					Balance at December 31		
€T	Net balance at January 1	Recognized in profit or loss	Recognized in OCI	Recognized in Capital Reserves	Net	Deferred tax assets	Deferred tax liabilities
Intangible assets	3,847	−3,847	0	14,337	14,337	14,337	0
Property and equipment	0	0	0	0	0	0	0
Lease liabilities	−7,069	7,918	0	0	849	849	0
Investment securities at FVOCI	−3,372	28,360	−26,769	0	−1,781	0	−1,781
Debt securities FVOCI – credit risk component	−366	0	366	0	0	0	0
Derivatives	−104,226	−735,105	0	0	−839,331	0	−839,331
Allowance for expected credit losses	10,319	15,919	0	0	26,238	26,238	0
Defined benefit plans	−848	−5,293	−6,429	0	−12,570	0	−12,570
Other	133,396	708,056	0	0	841,452	841,451	0
Total assets (liabilities), before set off	**31,681**	**16,008**	**−32,832**	**14,337**	**29,194**	**882,875**	**−853,682**
Set off of tax						−853,682	853,682
Net tax assets/(liabilities)						**29,194**	**0**

2019					Balance at December 31		
€T	Net balance at January 1	Recognized in profit or loss	Recognized in OCI	Recognized in Capital Reserves	Net	Deferred tax assets	Deferred tax liabilities
Intangible assets	0	3,847	0	0	3,847	3,847	0
Property and equipment	0	0	0	0	0	0	0
Lease liabilities	0	−7,069	0	0	−7,069	0	−7,069
Investment securities at FVOCI	0	0	−3,372	0	−3,372	0	−3,372
Debt securities FVOCI – credit risk component	0	0	−366	0	−366	0	−366
Derivatives	−156,562	52,336	0	0	−104,226	0	−104,226
Allowance for expected credit losses	0	10,319	0	0	10,319	10,319	0
Defined benefit plans	0	4,580	−5,428	0	−848	0	−848
Other	183,785	−50,389	0	0	133,396	133,396	0
Total assets (liabilities), before set off	**27,223**	**13,624**	**−9,166**	**0**	**31,681**	**147,562**	**−115,881**
Set off of tax						−115,881	115,881
Net tax assets/(liabilities)						**31,681**	**0**

12. Classification of financial assets and financial liabilities

The following table provides a reconciliation between line items in the balance sheet and categories of financial instruments:

December 31, 2020 €T	Note	Mandatorily at FVTPL	Designated as at FVTPL	FVOCI	Amortized cost	Total carrying amount
Cash and central bank balances	13	0	0	0	81,131,159	81,131,159
Loans and advances to banks	14	9,841	0	6,898	2,475,735	2,492,473
Loans and advances to customers	15	21,043	0	1,950,564	582,451	2,554,058
Securities purchased under agreements to resell or borrowed	16	14,803,520	0	0	1,140,466	15,943,986
Investment securities	17	0	54,911	0	0	54,911
Trading assets	18	111,243,513	0	0	0	111,243,513
Other assets excluding the net defined benefit plan assets and assets related to early retirement	20	0	0	0	30,867,534	30,867,534
Total financial assets		**126,077,917**	**54,911**	**1,957,462**	**116,197,345**	**244,287,634**
Deposits from banks	23	0	50,739	0	82,931,977	82,982,716
Deposits from customers	24	0	13,003	0	13,849,722	13,862,725
Securities sold under repurchase agreements or loaned	16	0	6,841,193	0	0	6,841,193
Trading liabilities	18	115,254,075	0	0	0	115,254,075
Financial liabilities designated at fair value through profit or loss		0	21,715	0	0	21,715
Other liabilities excluding deferred income	26	0	0	0	11,497,223	11,497,223
Subordinated liabilities	27	0	0	0	1,025,790	1,025,790
Total financial liabilities		**115,254,075**	**6,926,650**	**0**	**109,304,712**	**231,485,437**

In relation to the financial liabilities designated at FVTPL, there is no material difference between the amount accounted on the balance sheet and the amount to be paid on the maturity date.

December 31, 2019 €T	Note	Mandatorily at FVTPL	Designated as at FVTPL	FVOCI	Amortized cost	Total carrying amount
Cash and central bank balances	13	0	0	0	24,755,182	24,755,182
Loans and advances to banks	14	675	0	89,350	2,014,926	2,104,952
Loans and advances to customers	15	261,533	0	1,336,053	118,931	1,716,517
Securities purchased under agreements to resell or borrowed	16	3,906,768	0	0	0	3,906,768
Investment securities	17	0	55,720	0	0	55,720
Trading assets	18	23,958,983	0	0	0	23,958,983
Other assets excluding the net defined benefit plan assets and assets related to early retirement	20	0	0	0	7,803,686	7,803,686
Total financial assets		**28,127,959**	**55,720**	**1,425,403**	**34,692,725**	**64,301,808**
Deposits from banks	23	0	0	0	19,754,575	19,754,575
Deposits from customers	24	0	222,362	0	8,295,564	8,517,926
Debt securities	16	0	1,555,260	0	0	1,555,260
Trading liabilities	18	23,928,212	0	0	0	23,928,212
Other liabilities excluding deferred income	26	0	0	0	5,303,807	5,303,807
Subordinated liabilities	27	0	0	0	185,790	185,790
Total financial liabilities		**23,928,212**	**1,777,622**	**0**	**33,539,736**	**59,245,570**

13. Cash and central bank balances

See accounting policy in note 5.14.

€T	31/12/2020	31/12/2019
Central bank balances	81,131,159	24,755,182

The central bank balances relate exclusively to balances at the Deutsche Bundesbank. The increase in central bank balances compared to the previous year results from the significant expansion of the business volume in J.P. Morgan AG.

14. Loans and advances to banks

See accounting policy in note 5.4. and note 35.

€T	31/12/2020	31/12/2019
Loans and advances to banks at FVOCI	6,898	89,350
Loans and advances to banks at amortized cost	2,475,744	2,014,926
Less impairment loss allowance	−9	0
Loans and advances to banks at FVTPL	9,841	675
Total loans and advances to banks	**2,492,473**	**2,104,952**

The size of the loan portfolio increased by € 387,521 thousand to € 2,492,473 thousand mainly due to the expanded treasury business.

15. Loans and advances to customers

The Bank's loan portfolio is within the lending segment. Wholesale loans include loans made to a variety of customers, such as large corporates and institutional clients.

€T	31/12/2020	31/12/2019
Loans and advances to customers at FVOCI	1,950,564	1,336,053
Loans and advances to customers at amortized cost	595,568	118,954
Less impairment loss allowance	−13,117	−22
Loans and advances to customers at FVTPL	21,043	261,533
Total loans and advances to customers	**2,554,058**	**1,716,517**

The credit quality and analysis of concentration of loans and advances to customers is managed within the Bank's Credit Risk Management function, reference to the risk report and note 35.

The size of the loan portfolio increased by € 837,541 thousand to € 2,554,058 thousand, mainly due to the expanded lending business.

16. Securities financing agreements

€T	31/12/2020	31/12/2019
Securities purchased under agreements to resell	15,392,737	3,865,616
Securities borrowed	551,249	41,152
Securities purchased under agreements to resell or borrowed	**15,943,986**	**3,906,768**
Securities sold under agreements to repurchase	6,673,240	1,555,260
Securities loaned	167,953	0
Securities sold under repurchase agreements or loaned	**6,841,193**	**1,555,260**

J.P. Morgan AG enters into resale agreements, repurchase agreements, securities borrowing and securities lending transactions (collectively, “securities financing agreements”) primarily to facilitate customer’s funding requirements, to finance the company’s inventory positions, acquire securities to cover short positions and settle other securities obligations.

Securities purchased and securities sold under agreements to resell/repurchase and securities borrowing and securities lending transactions are generally carried at the amount of the cash collateral advanced or received.

17. Investment securities

INVESTMENT SECURITIES DESIGNATED AS AT FVTPL

€T	31/12/2020	31/12/2019
Government bonds	54,911	55,720

The Group has recognized the following changes in fair value of investment securities designated as at FVTPL:

€T	1/1–31/12/2020	1/1–31/12/2019
Government bonds: Change in fair value attributable to credit risk	−387	−112

18. Trading assets and liabilities

SUMMARY

	Trading assets		Trading liabilities	
€T	31/12/2020	31/12/2019	31/12/2020	31/12/2019
Non-derivatives	13,630,227	35,394	18,566,283	3,635
Derivatives	97,613,286	23,923,589	96,687,792	23,924,577
Total	**111,243,513**	**23,958,983**	**115,254,075**	**23,928,212**

TRADING ASSETS

€T	31/12/2020	31/12/2019
Equity instruments	42,651	53
Debt instruments	13,576,656	27,193
Derivatives	97,613,286	23,923,589
Others	10,920	8,148
Total trading assets	**111,243,513**	**23,958,983**

TRADING LIABILITIES

€T	31/12/2020	31/12/2019
Equity instruments	208,328	42
Debt instruments	18,357,647	3,082
Derivatives	96,687,792	23,924,577
Others	308	512
Total trading liabilities	**115,254,075**	**23,928,212**

On December 22, 2020, the Bank has acquired 100% Notes from three investment vehicles, the SPIRE SPVs (Single Platform Investment Repackaging Entity SA), with a nominal value of € 115.0 million, consisting of repacks of inflation linked Italian government bonds. The related risk with respect to the SPVs was hedged by a short position in swaps by J.P. Morgan AG. At the balance sheet date, J.P. Morgan AG has recognized the SPV-Notes in the trading assets at the amount of € 140.3 million, as well swaps at the amount of € 56.4 million. Simultaneously, J.P. Morgan AG has recognized the corresponding short position in the trading liabilities, at the amount of € 196.7 million. Given that the SPVs have been liquidated on January 28, 2021, as planned, the Bank has decided not to consolidate the SPVs as of December 31, 2020. In 2021, J.P. Morgan AG has recorded a gain at the amount of € 159 thousand as a result of the liquidation of the SPVs.

19. Property and equipment

Property and equipment, including leasehold improvements, are carried at their cost less accumulated depreciation and amortization.

The Bank calculates the depreciation using the straight-line method over the estimated useful life of an asset.

For leasehold improvements, the Bank uses the straight-line method computed over the lesser of the remaining term of the leased facility or the estimated useful life of the leased asset. Right-of-use assets are amortized using the straight-line-method over the earliest of the two periods of the end of the useful life of the ROU asset or the lease term.

For IT equipment and furniture the useful life is directed by the official depreciation tables of the financial administration. Low-value assets with acquisition costs of € 800 or less (without value-added tax) are fully depreciated in the year of acquisition.

In 2020, land and building was acquired in Paris which will serve the business operations of the branch located in Paris. The purchase price was €121,717 thousand. The building is being depreciated in a straight line basis for 27 years.

The table below provides the details of changes in property and equipment and RoU-assets of the Bank in 2020 and 2019:

	Right-of-use assets		IT equipment		Fixtures and furniture		Land and buildings		Total property and equipment	
€T	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019
Bookvalue 1/1/2020	**22,142**	**24,878**	**1,036**	**276**	**15,579**	**12,449**	**0**	**0**	**38,758**	**37,603**
Acquisition cost 1/1/2020	**28,184**	**27,624**	**3,746**	**2,150**	**25,387**	**20,076**	**0**	**0**	**57,317**	**49,850**
Additions	1,560	742	571	226	5,240	6,695	121,717	0	129,089	7,663
Disposals	−751	−162	−7	−13	−1,924	0	0	0	−2,682	−175
Reclasses	6	−20	−1,307	1,383	1,307	−1,383	0	0	6	−20
Acquisition cost 31/12/2020	**28,999**	**28,184**	**3,004**	**3,746**	**30,010**	**25,387**	**121,717**	**0**	**183,730**	**57,318**
Accumulated depreciation 1/1/2020	**6,042**	**2,746**	**2,710**	**1,874**	**9,808**	**7,627**	**0**	**0**	**18,560**	**12,247**
Depreciation for the year	3,919	3,458	249	293	2,922	2,735	917	0	8,007	6,486
Disposals	−473	−162	−7	−11	−1,423	0	0	0	−1,903	−173
Reclasses	0	0	−720	554	720	−554	0	0	0	0
Accumulated depreciation 31/12/2020	**9,488**	**6,042**	**2,232**	**2,710**	**12,027**	**9,808**	**917**	**0**	**24,664**	**18,560**
Bookvalue 31/12/2020	**19,511**	**22,142**	**772**	**1,036**	**17,983**	**15,579**	**120,800**	**0**	**159,066**	**38,758**

20. Other assets

€T	2020	2019
Trade receivables	7,829,758	3,754,127
Other receivables (Collateral)	22,966,997	4,032,397
Net defined benefit plan assets	95,935	66,416
Prepayments and accrued income	73,644	20,548
Assets – early retirement	3,658	3,658
Total other assets	**30,969,992**	**7,877,146**

Trade receivables mainly consist of unsettled trades.

Other receivables (Collateral) include interest-bearing cash collateral pledged to counterparties and held by other bilateral trading partners. Trading partners may include banks, broker dealers, hedge funds or other financial institutions.

The total amount of non-current assets is € 99,593 thousand, which are related to net defined benefit plan assets and early retirement scheme assets.

21. Pensions

DEFINED BENEFITS PENSION PLANS

The Bank is involved in the following defined benefits plans:

- The Flexible Pension Plan ("FPP") is the principal active plan offered since January 1, 2002. The plan is jointly funded by the staff and the Bank and results in installment payments to participants when they reach retirement age. The plan also provides for payments in the event of disability or death. Plan assets are allocated to mutual funds based on decisions made by employees about what type of investments they prefer. The payouts are largely linked to the performance of the selected funds with a guaranteed minimum interest rate. Employees will only participate in fund performance that is between 70 % and 85 % above the guaranteed minimum interest rate, with a factor called "profit participation" being applied.
- The Heritage pension plans consist of five different legacy plans. Financing is based on the basic monthly salary. The payout is based on the investment returns. The plan also provides for payments in the event of disability or death. The plan assets are held in an investment fund that is mainly invested in bonds with an investment grade rating. Some of the plans include additional insurance coverage.
- The Deferred Incentive Compensation Plans ("DIC") comprise three further legacy plans. The plans are funded through performance-based compensation.
- In addition to the aforementioned plans, there are defined benefit plans in the new branches in Milan, Oslo and Paris. The volume of foreign pension plans is immaterial in an overall comparison.

The changes in the net assets / liabilities of all defined benefit plans are presented in the table below:

€T	2020	2019
Defined benefit plan obligations at the beginning of the year	**193,638**	**184,724**
Service cost	**1,953**	**1,438**
Current service cost	1,953	1,438
Past service cost	0	0
(Gain) / Loss on settlements	0	0
Interest expense	**1,950**	**3,047**
Cash flows	**−10,350**	**−10,119**
Benefit payments from plan assets [1]	−1,097	−1,341
Benefit payments from employer [2]	−9,253	−8,778
Settlement payments from plan assets	0	0
Settlement payments from employer	0	0
Participant contributions	0	0
Administrative expenses and taxes paid	0	0
Other significant events	**14,034**	**1,127**
Increase due to plan combinations	14,034	1,127
Remeasurements	**12,101**	**13,420**
Effect of changes in demographic assumptions	0	0
Effect of changes in financial assumptions	6,056	12,922
Effect of experience adjustments	6,045	498
Defined benefit plan obligations at the end of the year	**213,326**	**193,638**
Defined benefit plan assets at the beginning of the year	**256,645**	**221,268**
Interest income	**2,671**	**3,759**
Cash flows	**530**	**−157**
Employer contributions [3]	10,880	9,962
Benefit payments from plan assets [1]	−1,097	−1,341
Benefit payments from employer [2]	−9,253	−8,778
Settlement payments from plan assets	0	0
Settlement payments from employer	0	0
Participant contributions	0	0
Administrative expenses and taxes paid	0	0
Remeasurements	**27,611**	**30,606**
Actual return on plan assets excluding amounts (excluding interest income)	27,611	30,606
Other significant events	**15,654**	**1,169**
Increase due to business transfers	15,654	1,169
Effect of changes in foreign exchange rates	**0**	**0**
Defined benefit plan assets at the end of the year	**303,111**	**256,645**
Net defined benefit assets at the end of the year	**95,935**	**66,416**
Net defined benefit liabilities at the end of the year	**6,150**	**3,409**

[1] Pension payments out of plan assets, for example payments under eligible insurance contracts
[2] Pension payments made directly by the Bank
[3] Contributions made to the plan assets by the Bank

With the exception of three plans, all defined benefit plans were overfunded at the end of 2020. The assets and liabilities corresponding to these plans are shown net in the balance sheet under other assets. The net defined benefit liabilities related to the underfunded plans are reported in the balance sheet under provisions. The financing status is monitored on a quarterly basis by a special supervisory body, the "Pension Committee". If the funding gap exceeds certain thresholds, measures to close the shortfall are considered.

The table below provides the details of amounts recognized in net profit:

€T	2020	2019
Service cost		
Current service cost	1,953	1,438
Past service cost	0	0
(Gain) / Loss on settlements	0	0
Total service cost	**1,953**	**1,438**
Net interest cost		
Interest expense on deferred benefit plan obligations	1,950	3,047
Interest income on plan assets	−2,671	−3,759
Interest expense on asset ceiling effect	0	0
Total net interest cost	**−721**	**−712**

The table below provides the details of amounts recognized in other comprehensive income:

€T	2020	2019
Remeasurements		
Effect of changes in demographic assumptions	0	0
Effect of changes in financial assumptions	6,056	12,922
Effect of experience adjustments	6,045	498
Return on plan assets excluding amount recognized in interest income	−27,611	−30,606
Total remeasurements	**−15,510**	**−17,186**

Plan assets include shares in investment funds (2020: € 289,117 thousand, 2019: € 241,854 thousand) and qualifying insurance policies (2020: € 13,994 thousand, 2019: € 14,791 thousand).

The Bank estimates the following effect of its defined benefit plans on its future cash flows:

€T	2020	2019
Expected total benefit payments	**100,960**	**96,905**
Year 1	9,084	11,104
Year 2	8,974	8,672
Year 3	9,301	8,804
Year 4	10,089	9,075
Year 5	10,395	9,619
Next 5 years	53,117	49,631

The weighted average duration of the defined benefit obligations was estimated as 10.42 years for 2019 and 10.03 years for 2020.

ACTUARIAL ASSUMPTIONS

The Bank applied actuarial assumptions in measuring the defined benefits obligations. Further, the valuation has taken place at the date of financial statements.

- Discount rate: the discount rate is based on the high-grade corporate bond yields in the currency and timeframe applicable to each plan;
- Salary increase rate: the rate at which the salary of the participants of the defined benefit plans are expected to increase;
- Pensions-in-payment increase rate: the rate at which pensions that are being paid out are expected to increase year-on-year;
- Price inflation rate: expected rate of inflation;
- Post-retirement mortality assumption: assumption of longevity after retirement. Mortality assumptions are based on the tables of Prof. Dr. Klaus Heubeck 2018 G.

In estimating the present value of the defined benefit obligations, the Bank used the following weighted-average assumptions:

%	31/12/2020	31/12/2019
Discount rate	0.70 %	1.00 %
Salary increase rate	3.00 %	3.00 %
Pensions-in-payment increase rate	1.75 %	1.75 %

In assessing the defined benefit cost, the Bank used the following weighted-average assumptions:

%	2020	2019
Discount rate	1.00 %	1.70 %
Salary increase rate	3.00 %	3.00 %
Pensions-in-payment increase rate	1.75 %	1.75 %

Given the uncertainty inherent in these actuarial assumptions and the long-time horizons to which they are applied, the Bank performs the following sensitivity analysis to estimate the potential impact on the defined benefit obligations and defined benefits plan costs resulting from changes in these assumptions:

€T	31/12/2020	31/12/2019
Discount rate: −25 basis points	216,027	198,736
Discount rate: +25 basis points	205,643	188,807
Salary increase rate: −50 basis points	131,872	130,236
Salary increase rate: +50 basis points	132,928	131,311
Pensions-in-payment increase rate: −25 basis points	132,001	130,647
Pensions-in-payment increase rate: +25 basis points	140,307	138,345
Post-retirement mortality assumption and life expectancy: +1 year	143,498	139,629

The sensitivity analysis is performed by varying the value of respective actuarial assumptions while keeping other variables constant and estimating the impact of these variables on the amount of the obligation. Interdependencies between the variables are not being considered in the sensitivity analysis.

The Bank is exposed to the pension risk, which is defined as the risk caused by contractual or other liabilities to or with respect to a pension scheme. Pension risk is driven by market and demographic risks where the pension scheme may be unable to meet future expected benefit payments.

22. Share-based payments

SHARE-BASED PAYMENT ARRANGEMENTS

In 2020, 2019 and 2018, the ultimate parent company of the Bank granted certain employees long-term share-based bonuses as part of the incentive systems.

The recipient does not incur any costs for the granting of restricted stock units (RSUs). As a rule, RSUs are granted annually and 50% vested after two years and the remaining 50% vested after three years. At the time of grant, they will be converted into common stock. In addition, RSUs

usually contain provisions on pension entitlement that enable employees to continue to comply with an exercise period in the event of voluntary, age-related termination. The provisions are subject to possible employment after termination of the employment relationship and other restrictions. All RSU entitlements contain forfeiture conditions and clawback regulations on the part of the Bank.

The Bank records the compensation expense for each tranche of each award, minus the estimated options that expire, separately, as if it were a separate award with its own exercise date. The company estimates the amount of options that will expire and applies that forfeiture rate at the time of grant. In general, the compensation expense for each tranche granted is recognized on a straight-line basis from the grant date to the exercise date of the respective tranche, provided that the employees are not entitled to retirement during the exercise period. For awards with pension eligibility provisions and awards granted without future material performance requirements, the Bank calculates the estimated value of the awards at the time of granting that are likely to be transferred to employees, without taking into account the effects of post-employment restrictions. For each tranche granted to employees who receive pension entitlement during the vesting period, the compensation expense is recorded linearly from the grant date to either the employee's pension entitlement date or the employee's exercise date, whichever is earlier.

The offsetting entry for the reported compensation expense is made in the capital reserve. The RSUs are therefore reported as an addition to capital reserves. Cash reimbursements made by the Bank to its ultimate parent company for these premiums reduce the capital reserves in the equity of the balance sheet. Cash reimbursements are made at the lower of the market value on the grant date or the market value on the exercise date, with the difference remaining in equity.

The following table summarizes the Bank's RSU activity for the business years 2019 and 2020.

		2020		2019
	Number of units	Weighted average fair value, €	Number of units	Weighted average fair value, €
Outstanding at January 1	256,849	78.31	32,378	79.15
Granted	475,120	105.79	132,958	84.16
Vested	−587,716	110.42	−154,567	89.75
Cancelled	−8,686	91.31	−934	90.05
Transferred	792,407	90.63	247,014	85.84
Outstanding at December 31	927,974	90.63	256,849	85.54

The Bank recognized the following non-cash compensation expense related to RSU plans in its statement of comprehensive income:

€T	2020	2019
RSU Expense	38,520	8,848

23. Deposits from banks

€T	31/12/2020	31/12/2019
Investment Banking and Corporate Banking	8,220,164	4,950,017
Commercial Banking	15,770	16,527
Corporate Treasury	53,386,290	13,548,032
Markets	21,323,368	1,203,124
Securities Services	37,124	36,875
Total deposits from banks	**82,982,716**	**19,754,575**

The change in deposits from banks compared to the previous year relates to the increase in treasury-related deposits (+ € 39,838,258 thousand). In addition, deposits from banks increased by € 20,120,244 thousand in the Markets business.

24. Deposits from customers

€T	31/12/2020	31/12/2019
Investment Banking and Corporate Banking	3,124,979	1,291,750
Commercial Banking	594,372	491,330
Corporate Functions	0	1
Markets	3,759,691	2,215,529
Securities Services	6,383,683	4,519,317
Total deposits from customers	**13,862,725**	**8,517,926**

25. Provisions

PROVISIONS

€T	31/12/2020	31/12/2019
Provisions for pensions and similar obligations	6,150	3,409
Provisions for undrawn contractually committed facilities	76,122	15,527
Other provisions	377	350
Total	**82,649**	**19,285**

PROVISIONS FOR PENSIONS AND SIMILAR OBLIGATIONS

We refer to section 21 for further information on pensions.

LENDING-RELATED COMMITMENTS AND GUARANTEES

We refer to section 35 for further information.

The Company provides lending-related financial instruments (e. g., commitments and guarantees) to meet the financing needs of its customers. The contractual amount of these financial instruments represents the maximum possible credit risk to the Company when the counterparty draws upon the commitment or the Company is required to fulfil its obligation under the guarantee in case the counterparty subsequently fails to execute according to the terms of the contract. Most of these commitments and guarantees expire without being drawn or a default occurring. As a result, the total contractual amount of these instruments is not, in the Company's view, representative of its actual future credit exposure or funding requirements.

OTHER PROVISIONS

€T	2020	2019
Balance at January 1	**350**	**0**
Provisions made during the year	27	350
Provisions used during the year	0	0
Provisions reversed during the year	0	0
Unwind of discount	0	0
Balance at December 31	**377**	**350**
Non-current	0	0
Current	377	350

26. Other liabilities

€T	2020	2019
Lease liabilities	22,170	25,032
Trade payables	10,739,406	5,062,712
Amounts owed to JPMorgan Chase undertakings	55,634	129,496
Accruals and deferred income	206,750	37,059
Others	477,271	59,698
Total	**11,501,231**	**5,313,997**

Trade payables predominantly consist of unsettled trades and brokerage fees payables.

Others include accounts payable to external parties for goods or services provided.

There are no liabilities, which are to be settled longer than 12 months.

27. Subordinated liabilities

The Tier-2 Capital qualifying position consists of a € 150,000,000 subordinated liability issued on December 21, 2009, a € 35,790,432 subordinated liability which was transferred to the Company in the course of the merger with J.P. Morgan Beteiligungs- und Verwaltungsgesellschaft mbH as well as a € 840,000,000 subordinated notes, which were issued on December 3, 2020.

28. Capital and reserves

28.1. SUBSCRIBED CAPITAL, CAPITAL RESERVE AND RETAINED EARNINGS

The subscribed capital of J.P. Morgan AG is divided into 160 million ordinary no par value registered shares. The shares can only be transferred with the Company's approval. The shares are fully paid up and are held directly by J.P. Morgan International Finance Limited, Newark/Delaware, USA, and each share has one voting right in the annual general meetings as well as an equal right to dividends.

The subscribed capital has not changed, since the last increase which occurred in September 2019 when it was increased from € 160,000 thousand by € 1,707,200 thousand to € 1,867,200 thousand by reclassification from capital reserves to subscribed capital, while no new shares have been issued. As a result of this change, the calculated nominal value per share has increased from € 1.00 to € 11.67.

The capital reserve amounted to € 3,090,157 thousand as of 1 January 2020 and since then it has been increased through the following capital injections by J.P. Morgan International Finance Limited:

– € 932,053 thousand payment in March 2020;
– € 4,240,486 thousand payment in September 2020;
– € 2,552,616 thousand payment in October 2020.

The remaining changes of the capital reserve were related to the transfer of business activities and employees from other J.P. Morgan Group entities.

As a result, the capital reserve amounted to € 10,748,588 thousand as of December 31, 2020.

Retained earnings consist of net income of prior years as well as the current reporting year that was not distributed as dividends.

The ability to pay-out dividends or to pay back reserves is pursuant to the German commercial and share company law and it is also based on the financial statements according to the local accounting standards applicable in Germany and not on these IFRS financial statements. Under those standards, subscribed capital and part of the capital reserve as well as a part of retained earnings are restricted to be paid out as dividends or to be paid back to the shareholder. Free reserves that could be returned to the shareholder as either dividends or a pay back of capital amounted to € 10,811.7 million as of December 31, 2020 (31/12/2019: € 3,019.0 million).

28.2. ACCUMULATIVE OTHER COMPREHENSIVE INCOME

The position "Other reserves" consists of fair value changes on loans at FVOCI and net actuarial gains/losses for defined benefits plans. In the prior year it also included debit valuation adjustments for long-term debt (FVO). The long-term debt (FVO) was repaid prior to maturity during the reporting year and the debit valuation adjustments as of year-end 2019 were realized and reclassified from Other reserves to Retained earnings.

29. Notes to the cash flow statement

€T	2020	2019
Profit before income tax	**176,283**	**71,066**
Adjustments for:		
Non cash movements (Loan loss provision, write down)	176,556	19,867
Depreciation of tangible fixed assets	8,007	6,481
Share-based payments	38,520	8,488
Interest received	355,422	183,269
Interest paid	−371,255	−132,998
Other non-cash movements	140,395	1,458
Operating cash flows before changes in operating assets and liabilities	**523,928**	**157,631**
Changes in operating assets		
Increase in loans and advances to banks	−387,521	−1,493,567
Increase in loans and advances to customers	−834,717	−1,548,881
Decrease/Increase in securities purchased under agreements to resell or borrowed	−12,037,218	1,355,987
Increase in investment securities	809	−6
Increase/Decrease in trading assets	−87,284,530	−22,261,398
Increase/Decrease in current tax asset	−39,799	0
Increase/Decrease in debtors and other assets, excluding changes in prepayments and accrued income	−23,039,750	−6,361,630
Decrease in prepayments and accrued income	−53,096	258
Total	**−123,675,822**	**−30,309,237**
Changes in operating liabilities		
Increase in deposits from banks	63,228,141	10,734,605
Increase/Decrease in deposits from customers	5,344,799	1,580,510
Increase in securities sold under repurchase agreements	5,117,980	1,555,260
Increase/Decrease in securities loaned	167,953	0
Increase in trade creditors	5,676,694	4,981,684
Increase in trading liabilities	91,325,863	22,227,480
Increase in financial liabilities designated at FVtPL	21,715	0
Decrease/Increase in other liabilities [1]	423,864	−229,123
Total	**171,307,009**	**40,850,416**
Cash generated from/(used in) operating activities	**48,155,115**	**10,698,810**

[1] Changes in other liabilities exclude changes in trade creditors, changes in amounts owed to JPMorgan Chase undertakings, changes in leasing liabilities and changes in accruals and deferred income.

30. Assets and liabilities measured at fair value

VALUATION PROCESS

The Bank carries a portion of its assets and liabilities at fair value on a recurring basis.

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Fair value is based on quoted market prices or inputs, where available. If listed prices or quotes are not available, fair value is based on valuation models and other valuation techniques that consider relevant transaction characteristics and use as inputs observable or unobservable market parameters, including yield curves, interest rates, volatilities, equity prices, foreign exchange rates, and credit curves.

The level of accuracy in estimating unobservable market inputs or other factors can affect the amount of gain or loss reported for a particular position. The Bank believes its valuation methods are appropriate and consistent with those of other market participants. The methods and assumptions used reflect management judgement and may vary across the Bank's businesses and portfolios.

The respective business area is responsible for providing fair value estimates for assets and liabilities carried on the balance sheet at fair value. The independent Valuation Control Group ("VCG") is part of the Bank's Finance function and is responsible for verifying these estimates and determining any fair value adjustments that may be required to ensure that the Bank's positions are reported at fair value. VCG verifies fair value estimates provided by the business areas by leveraging independently derived prices, valuation inputs and other market data, where available.

In determining the fair value of a derivative portfolio, valuation adjustments may be appropriate to reflect the credit quality of the counterparty, the credit quality of the Bank, and the funding risk inherent to certain derivatives. The credit and funding risks of the derivative portfolio are generally mitigated by arrangements provided to the Bank by JPMorgan Chase Bank, N.A., and therefore the Bank takes account of these arrangements in estimating the fair value of its derivative portfolio.

The Bank manages certain portfolios of financial instruments on the basis of net open risk exposure and has elected to estimate the fair value of such portfolios on the basis of a transfer of the entire net open risk position in an orderly transaction. Where this is the case, valuation adjustments may be necessary to reflect the cost of exiting a larger-than-normal market-size net open risk position. Where applied, such adjustments are based on factors that a relevant market participant would consider in the transfer of the net open risk position.

VALUATION MODEL REVIEW AND APPROVAL

If prices or quotes are not available for an instrument or a similar instrument, fair value is generally determined using valuation models. The department responsible for the model monitoring is independent of the model development department and reviews and approves valuation models used by the Bank.

FAIR VALUE HIERARCHY

The Bank classifies its assets and liabilities according to a valuation hierarchy that reflects the observability of significant market inputs. The three levels are defined as follows:

Level 1 – inputs to the valuation methodology are quoted prices (unadjusted) for identical assets or liabilities in active markets.

Level 2 – inputs to the valuation methodology include quoted prices for similar assets and liabilities in active markets, and inputs that are observable for the asset or liability, either directly or indirectly, for substantially the full term of the financial instrument.

Level 3 – one or more inputs to the valuation methodology are unobservable and significant to the fair value measurement.

A financial instrument's categorization within the valuation hierarchy is based on the lowest level of input that is significant to the fair value measurement.

VALUATION METHODOLOGIES

The following table describes the valuation methodologies used by the Bank to measure its more significant products/instruments at fair value, including the general classification of such instruments pursuant to the valuation hierarchy.

Product/ Instrument	Valuation methodology, inputs and assumptions	Classifications in the valuation hierarchy
Equity, debt, and other securities	Quoted market prices are used.	Level 1
	In the absence of quoted market prices, securities are valued based on: – Observable market prices for similar securities – Relevant broker quotes – Discounted cash flows In addition, the following inputs to discounted cash flows are used for the following products: **Mortgage and asset-backed securities specific inputs:** – Collateral characteristics – Deal-specific payment and loss allocations – Current market assumptions related to yield, prepayment speed, conditional default rates and loss severity	Level 2 or 3
Derivatives and fully funded OTC instruments	Exchange-traded derivatives that are actively traded and valued using the exchange price.	Level 1
	Derivatives that are valued using models such as the Black-Scholes option pricing model, simulation models, or a combination of models, that use observable or unobservable valuation inputs as well as considering the contractual terms. The key valuation inputs used will depend on the type of derivative and the nature of the underlying instruments and may include equity prices, commodity prices, interest rate yield curves, foreign exchange rates, volatilities, correlations, credit default swaps ("CDS"), spreads and recovery rates. Additionally, the credit quality of the counterparty and of the Bank as well as market funding levels may also be considered. In addition, the following specific inputs are used for the following derivatives that are valued based on models with significant unobservable inputs: **Structured credit derivatives specific inputs include:** – CDS spreads and recovery rates – Credit correlation between the underlying debt instruments **Equity option specific inputs include:** – Equity volatilities – Equity correlation – Equity – foreign exchange („FX") correlation – Equity – interest rate correlation **Interest rate and FX exotic options specific inputs include:** – Interest rate spread volatility – Interest rate correlation – Foreign exchange correlation – Interest rate – foreign exchange ("FX") correlation **Commodity derivatives specific inputs include:** – Commodity volatility – Forward commodity price	Level 2 or 3

Product/ Instrument (continued)	Valuation methodology, inputs and assumptions	Classifications in the valuation hierarchy
Financial instruments at fair value through profit and loss – loans	Where observable market data is available, valuations are based on: – Observed market prices (circumstances are infrequent) – Relevant broker quotes – Observed market prices for similar instruments Where observable market data is unavailable or limited, valuations are based on discounted cash flows, which consider the following: – Credit spreads derived from the cost of CDS; or benchmark credit curves developed by the Bank, by industry and credit rating – Prepayment speed – Collateral characteristics	Level 2 or 3
Loans and advances to customers and lending-related commitments	Valuations are based on discounted cash flows, which consider: – Credit spreads, derived from the cost of CDS; or benchmark credit curves developed by the Company, by industry and credit rating – Prepayment speed Lending-related commitments are valued similar to loans and reflect the portion of an unused commitment expected, based on the Bank's average portfolio historical experience, to become funded prior to an obligor default.	Predominantly level 3
Loans and advances to customers – at FVOCI	Valuations are based on discounted cash flows, which consider: – Credit spreads – Future interest payments – Repayment of principal Prepayments and defaults are modelled deterministically and discounted to today.	Level 3
Securities financing agreements	Valuations are based on discounted cash flows, which consider: – Derivative features. For further information refer to the discussion of derivatives above – Market rates for the respective maturity – Collateral characteristics	Level 2

ASSETS AND LIABILITIES MEASURED AT FAIR VALUE ON A RECURRING BASIS

The following tables present the assets and liabilities reported at fair value as of December 31, 2020 and 2019, by major product category and fair value hierarchy.

At December 31, 2020 €T	Level 1	Level 2	Level 3	Total
Securities financing agreements				
Securities purchased under agreements to resell	–	14,252,271	–	14,252,271
Securities borrowed	–	551,249	–	551,249
Financial assets at fair value through profit and loss				
Debt and equity instruments	3,570,638	9,837,463	157,689	13,565,790
Derivative receivables	19,027	95,901,034	1,693,225	97,613,286
Loans	–	75,321	20,000	95,321
Financial assets designated at fair value through profit or loss				
Debt and equity instruments	–	54,911	–	54,911
Financial assets held at FVOCI				
Loans	–	–	1,957,462	1,957,462
Total financial assets	**3,589,665**	**120,672,249**	**3,828,376**	**128,090,290**
Securities financing agreements				
Securities sold under agreements to repurchase	–	6,673,240	–	6,673,240
Securities loaned	–	167,953	–	167,953
Financial liabilities at fair value through profit and loss				
Debt and equity instruments	13,512,887	5,053,036	360	18,566,283
Derivative payables	19,628	94,873,713	1,794,452	96,687,793
Financial liabilities designated at fair value through profit or loss				
Debt and equity instruments	–	19,275	2,440	21,715
Long term debt – FVO				
Other financial liabilities	–	50,773	12,968	63,741
Total financial liabilities	**13,532,515**	**106,837,990**	**1,810,220**	**122,180,725**

December 31, 2019 €T	Level 1	Level 2	Level 3	Total
Securities financing agreements				
Securities purchased under agreements to resell	–	3,865,616	–	3,865,616
Securities borrowed	–	41,152	–	41,152
Financial assets at fair value through profit and loss				
Debt and equity instruments	53	10,763	466	11,282
Derivative receivables	715	23,361,402	561,472	23,923,589
Loans	–	209,854	75,790	285,644
Financial assets designated at fair value through profit or loss				
Debt and equity instruments	–	55,720	0	55,720
Financial assets held at FVOCI				
Loans	–	–	1,425,403	1,425,403
Total financial assets	**768**	**27,544,507**	**2,063,131**	**29,608,406**
Securities financing agreements				
Securities sold under agreements to repurchase	–	1,555,260	–	1,555,260
Financial liabilities at fair value through profit and loss				
Debt and equity instruments	41	3,082	512	3,635
Derivative payables	28,705	23,270,965	624,907	23,924,577
Long term debt – FVO				
Other financial liabilities	0	208,643	13,719	222,362
Total financial liabilities	**28,746**	**25,037,950**	**639,138**	**25,705,834**

LEVEL 3 VALUATIONS

The Bank has established structured processes for determining fair value, including for instruments where fair value is estimated using significant unobservable inputs (level 3).

Due to the lack of observability, transaction details of comparable transactions, yield curves, interest rates, prepayment speed, default rates, volatilities, correlations, equity prices, valuations of comparable instruments, foreign exchange rates and credit curves are used.

The table on page 117 presents the Bank's primary level 3 financial instruments, the valuation techniques used to measure the fair value of those financial instruments, the significant unobservable inputs, the range of values for those inputs and, for certain instruments, the weighted averages of such inputs. While the determination to classify an instrument within level 3 is based on the materiality of the unobservable inputs to the overall fair value measurement, level 3 financial instruments typically include observable components (that is, components that are actively quoted and can be validated to external sources) in addition to the unobservable components.

The range of values presented in the table is representative of the confidence interval that resulted from the valuation of the significant groups of instruments within a product/instrument classification. Where provided, the weighted averages of the input values presented in the table are calculated based on the fair value of the instruments that are fair valued based on the input.

The input range and the weighted average value do not reflect the degree of input uncertainty or an assessment of the reasonableness of the Bank's estimates and assumptions. Rather, they reflect the characteristics of the various instruments held by the Bank and the relative distribution of instruments within the range of characteristics.

The input range and weighted average values will therefore vary from period-to-period and parameter-to-parameter based on the characteristics of the instruments held by the Bank at each balance sheet date.

At December 31, 2020:

December 31, 2020

Product/Instrument	Asset, €T	Liability, €T	Net fair value, €T	Principal valuation technique	Unobservable input [1]	Range of input values	Weighted average
Debt and equity instruments and loans	**2,135,151**	**−2,800**	**2,132,351**				
Corporate debt securities and other				Market comparables	Price	87.07 € – 95.73 €	94.05 €
					Yield	1.94 % – 14.91 %	2.81 %
					Prepayment Speed	1.00 % – 12.00 %	6.95 %
					Conditional default rate	0.25 % – 1.00 %	0.43 %
Residential mortgage-backed securities and loans				Discounted cash flows	Loss Severity	30.00 % – 70.00 %	58.85 %
ABS				Market comparables	Price	40.00 € – 41.12 €	41.12 €
Loans at fair value				Market comparables	Price	25.00 € – 75.00 €	67.85 €
					Grid CDS curve spreads	5 bps – 1,443 bps	202 bps
					Utilization given default	9.00 % – 100.00 %	74.00 %
					CDS Recovery Rate	20.00 % – 75.00 %	40.00 %
Loans at FVOCI				Discounted cash flows	Loan Recovery Rate	20.00 % – 90.00 %	52.00 %
Derivatives	**1,693,225**	**−1,794,452**	**−101,227**				

December 31, 2020							
Product/Instrument (continued)	Asset, €T	Liability, €T	Net fair value, €T	Principal valuation technique	Unobservable input[1]	Range of input values	Weighted average
					Interest rate volatility	48 bps – 48 bps	48 bps
					Interest rate correlation	0.10 % – 0.10 %	0.10 %
Net interest rate derivatives				Option pricing	Constant prepayment rate	0.00 % – 25.00 %	2.86 %
					Credit spread	33 bps – 55 bps	45 bps
Net credit derivatives				Discounted cash flows	Recovery rate	35.00 % – 35.00 %	35.00 %
Net foreign exchange derivatives				Option pricing	Interest rate – FX correlation	−0.20 % – 0.20 %	−0.04 %
					Equity volatility	5.00 % – 119.00 %	25.00 %
					Equity correlation	17.00 % – 97.00 %	54.00 %
					Equity – FX correlation	−70.00 % – 59.00 %	−24.00 %
Net equity derivatives				Option pricing	Equity Forward	61.00 % – 102.00 %	91.00 %
					Commodity Forward	113.40 €/LB – 181.75 €/LB	147.60 €/LB
					Commodity volatility	5.99 % – 36.08 %	21.03 %
Net commodity derivatives				Option pricing	Commodity correlation	0.00 % – 95.00 %	47.50 %
					Equity volatility	5.00 % – 119.00 %	25.00 %
					Equity correlation	17.00 % – 97.00 %	54.00 %
					Equity – FX correlation	−70.00 % – 59.00 %	−24.00 %
Other financial liabilities	0	−12,968	−12,968	Option pricing	Equity Forward	61.00 % – 102.00 %	91.00 %
Total	**3,828,376**	**−1,810,220**	**2,018,156**				

[1] Price is a significant unobservable input for certain instruments. When quoted market prices are not readily available, reliance is generally placed on price-based internal valuation techniques. The price input is expressed assuming a par value of € 100.

At December 31, 2019:

December 31, 2019							
Product/Instrument	Asset, €T	Liability, €T	Net fair value, €T	Principal valuation technique	Unobservable input [1]	Range of input values	Weighted average
Debt and equity instruments and loans	**1,501,659**	**−512**	**1,501,147**				
Corporate debt securities and other				Market comparables	Price	4.00 € – 112.00 €	72.00 €
				Discounted cash flows	Yield	5.00 % – 28.00 %	8.00 %
Loans at fair value				Market comparable	Price	2.00 € – 116.00 €	70.00 €
Derivatives	**561,472**	**−624,907**	**−63,435**				
					Interest rate volatility	6.00 % – 44.00 %	
					Interest rate spread volatility	20 bps – 30 bps	
					Interest rate correlation	−65.00 % – 94.00 %	
				Option pricing	Interest rate – FX correlation	−58.00 % – 40.00 %	
Net interest rate derivatives				Discounted cash flows	Prepayment speed	4.00 % – 30.00 %	
					Credit correlation	31.00 % – 59.00 %	
					Credit spread	3 bps – 1,308 bps	
					Recovery rate	15.00 % – 70.00 %	
					Conditional default rate	2.00 % – 18.00 %	
				Discounted cash flows	Loss severity	100.00 %	
Net credit derivatives				Market comparables	Price	1.00 € – 115.00 €	
				Option pricing	Interest rate – FX correlation	−58.00 % – 65.00 %	
Net foreign exchange derivatives				Discounted cash flow	Prepayment speed	9.00 %	

December 31, 2019							
Product/Instrument (continued)	**Asset, €T**	**Liability, €T**	**Net fair value, €T**	**Principal valuation technique**	**Unobservable input [1]**	**Range of input values**	**Weighted average**
					Forward equity price	92.00 % – 105.00 %	
					Equity volatility	9.00 % – 93.00 %	
					Equity correlation	10.00 % – 97.00 %	
					Equity – FX correlation	−81.00 % – 60.00 %	
Net equity derivatives				Option pricing	Equity – interest rate correlation	25.00 % – 35.00 %	
					Forward commodity price	35.00 €/LB – 67.00 €/LB	
					Commodity volatility	5.00 % – 105.00 %	
Net commodity derivatives				Option pricing	Commodity correlation	−48.00 % – 95.00 %	
					Interest rate volatility	6.00 % – 44.00 %	
					Interest rate correlation	−65.00 % – 94.00 %	
					Interest rate – FX correlation	−58.00 % – 40.00 %	
					Equity correlation	10.00 % – 97.00 %	
					Equity – FX correlation	−81.00 % – 60.00 %	
Other financial liabilities	0	−13,719	−13,719	Option pricing	Equity – interest rate correlation	25.00 % – 35.00 %	
Total	**2,063,131**	**−639,138**	**1,423,993**				

[1] Price is a significant unobservable input for certain instruments. When quoted market prices are not readily available, reliance is generally placed on price-based internal valuation techniques. The price input is expressed assuming a par value of € 100.

The categories presented in the table have been aggregated based upon the product type, which may differ from their classification on the balance sheet, and fair values are shown net.

CHANGES IN UNOBSERVABLE INPUTS

The following discussion provides a description of the inter-relationship between unobservable inputs. The impact of changes in inputs may not be independent as a change in one unobservable input may give rise to a change in another unobservable input. Relationships may also exist between observable and unobservable inputs. Such relationships have not been included in the discussion below. In addition, for each of the individual relationships described below, the inverse relationship would also generally apply.

Yield – The yield of an asset is the interest rate used to discount future cash flows in a discounted cash flow calculation. An increase in the yield, in isolation, would result in a decrease in a fair value measurement.

Credit spread – The credit spread is the difference between risky and risk-free returns. The credit spread for an instrument forms part of the discount rate used in a discounted cash flow calculation. Generally, an increase in the credit spread would result in a decrease of the fair value measurement.

Prepayment speed – The prepayment speed is a measure of the voluntary unscheduled principal repayments of a pre-payable obligation in a collateralized pool. Prepayment speeds generally decline as borrower delinquencies rise. An increase in prepayment cycles, in isolation, would result in a decrease in the fair value measurement of assets valued at a premium to par and an increase in the fair value measurement of assets valued at a discount to par.

Conditional default rate – The conditional default rate is a measure of the reduction in the outstanding collateral balance underlying a collateralized obligation as a result of defaults. An increase in conditional default rates would generally be accompanied by an increase in loss severity and an increase in credit spreads. An increase in the conditional default rate, in isolation, would result in a decrease of the fair value measurement.

Loss severity – The loss severity (the contrary is the recovery rate) is the expected amount of future realized losses resulting from the ultimate liquidation of a particular loan, expressed as the net amount of loss relative to the outstanding loan balance. An increase in loss severity is generally accompanied by an increase in conditional default rates. An increase in the loss severity, in isolation, would result in a decrease of the fair value measurement.

Utilization given default ("UGD") – A number between 0 % and 100 % that is the estimated fraction of the current undrawn balance on a revolving credit facility that will be drawn at the

time of the default of the borrower. A higher UGD generally results in a decrease in the fair value of the loan.

Correlation – Correlation is a measure of the relationship between the movements of two variables (e.g., how the change in one variable influences the change in the other). Correlation is a pricing input for a derivative product where the payoff is driven by one or more underlying risks.

Correlation inputs are related to the type of derivative (e.g., interest rate, credit, equity and foreign exchange) due to the nature of the underlying risks. When parameters are positively correlated, an increase in one parameter will result in an increase of the other parameter. When parameters are negatively correlated, an increase in one parameter will result in a decrease of the other parameter. An increase in correlation can result in an increase or a decrease of the fair value measurement. Given a short correlation position, an increase in correlation, in isolation, would generally result in a decrease of the fair value measurement.

Volatility – Volatility is a measure of the variability in possible returns for an instrument, parameter or market index given how much the particular instrument, parameter or index changes in value over time. Volatility is a pricing input for options, including equity options, commodity options, and interest rate options. Generally, the higher the volatility of the underlying, the riskier the instrument. Given a long position in an option, an increase in volatility, in isolation, would generally result in an increase of the fair value measurement.

FAIR VALUE FINANCIAL INSTRUMENTS VALUED USING TECHNIQUES THAT INCORPORATE SIGNIFICANT UNOBSERVABLE INPUTS

The potential impact as at December 31, 2020 of using reasonable possible alternative assumptions for the valuations including significant unobservable inputs have been quantified in the following table:

Sensitivity analysis of valuations using unobservable inputs			**Fair Value**	**Favourable change**	**Unfavourable change**
At 31 December, 2020 **€T**	**Asset**	**Liability**	**Net**	**Statement of comprehensive income**	
Corporate debt securities and other	157,689	−2,800	154,889	914	−914
Loans	20,000	0	20,000	288	−288
Total debt and equity instruments and loans	**177,689**	**−2,800**	**174,889**	**1,202**	**−1,202**
Derivatives [1]	1,693,225	−1,794,452	−101,227	32	−32
Other financial liabilities [1]	0	−12,968	−12,968	0	0
Loans at FVOCI	1,957,462	0	1,957,462	3,351	−3,351
Total	**3,828,376**	**−1,810,220**	**2,018,156**	**4,585**	**−4,585**

[1] Given significant hedging between derivatives and other financial liabilities, the net risk is considered to calculate the favourable/unfavourable changes with the result then allocated to the two lines individually.

Sensitivity analysis of valuations using unobservable inputs			Fair Value	Favourable change	Unfavourable change
At 31 December, 2019 **€T**	**Asset**	**Liability**	**Net**	**Statement of comprehensive income**	
Corporate debt securities and other	466	−512	−46	1	−1
Loans	75,790	0	75,790	1,984	−1,984
Total debt and equity instruments and loans	**76,256**	**−512**	**75,744**	**1,985**	**−1,985**
Derivatives [1]	561,472	−624,907	−63,435	2,248	−2,248
Other financial liabilities [1]	0	−13,719	−13,719	486	−486
Loans at FVOCI	1,425,403	0	1,425,403	5,395	−5,395
Total	**2,063,131**	**−639,138**	**1,423,993**	**10,114**	**−10,114**

[1] Given significant hedging between derivatives and other financial liabilities, the net risk is considered to calculate the favourable/unfavourable changes with the result then allocated to the two lines individually.

CHANGES IN LEVEL 3 RECURRING FAIR VALUE MEASUREMENTS

The following tables include details on the changes of the balance sheets amounts (including changes in fair value) for financial instruments classified by the Company within level 3 of the fair value hierarchy.

Changes in assets and liabilities in level 3 during year ended December 31, 2020:

Financial assets €T	Loans at FVOCI	Debt and equity instruments and loans	Derivative receivables	Total financial assets
At January 1, 2020	**1,425,403**	**76,256**	**561,472**	**2,063,131**
Total gains/(losses) recognized in profit or loss	0	−1,789	799,932	798,143
Total gains/(losses) recognized in other comprehensive income	0	0	0	0
Purchases	0	182,682	614,653	797,335
Sales	0	−3,195	−13,074	−16,269
Issuances	1,230,029	0	0	1,230,029
Settlements	−697,970	−74,258	−486,813	−1,259,041
Transfers into level 3	0	−144	461,231	461,087
Transfers out of level 3	0	−1,863	−244,176	−246,039
At December 31, 2020	**1,957,462**	**177,689**	**1,693,225**	**3,828,376**
Change in unrealized gains related to financial instruments held at December 31, 2020	**0**	**−6,610**	**756,278**	**749,668**

Financial liabilities €T	Debt and equity instruments	Derivative payables	Other financial liabilities	Total financial liabilities
At January 1, 2020	**512**	**624,907**	**13,719**	**639,138**
Total (gains)/losses recognized in profit or loss	−78	815,891	−751	815,062
Total (gains)/losses recognized in other comprehensive income	0	0	0	0
Purchases	0	−12,869	0	−12,869
Sales	51	628,317	0	628,368
Issuances	2,315	0	0	2,315
Settlements	0	−464,673	0	−464,673
Transfers into level 3	0	453,165	0	453,165
Transfers out of level 3	0	−250,286	0	−250,286
At December 31, 2020	**2,800**	**1,794,452**	**12,968**	**1,810,220**
Change in unrealized losses related to financial instruments held at December 31, 2020	**−35**	**712,885**	**932**	**713,782**

Movement in assets and liabilities in level 3 during year ended December 31, 2019:

Financial assets €T	Loans at FVOCI	Debt and equity instruments and loans	Derivative receivables	Total financial assets
At January 1, 2019	**0**	**0**	**57,998**	**57,998**
Total gains/(losses) recognized in profit or loss	0	405	193,660	194,065
Total gains/(losses) recognized in other comprehensive income	0	0	−977	−977
Purchases	0	1,944	283,372	285,316
Sales	0	−351	0	−351
Issuances	1,425,403	0	0	1,425,403
Settlements	0	74,258	16,785	91,043
Transfers into level 3	0	0	13,165	13,165
Transfers out of level 3	0	0	−2,531	−2,531
At December 31, 2019	**1,425,403**	**76,256**	**561,472**	**2,063,131**
Change in unrealized gains related to financial instruments held at December 31, 2019	**0**	**447**	**486,036**	**486,483**

Financial liabilities €T	Debt and equity instruments	Derivative payables	Other financial liabilities	Total financial liabilities
At January 1, 2019	**0**	**55,954**	**12,398**	**68,352**
Total (gains)/losses recognized in profit or loss	512	255,276	233	256,021
Total (gains)/losses recognized in other comprehensive income	0	1,026	1,088	2,114
Purchases	0	270,316	0	270,316
Sales	0	7,550	0	7,550
Issuances	0	0	0	0
Settlements	0	24,569	0	24,569
Transfers into level 3	0	13,114	0	13,114
Transfers out of level 3	0	−2,898	0	−2,898
At December 31, 2019	**512**	**624,907**	**13,719**	**639,138**
Change in unrealized losses related to financial instruments held at December 31, 2019	**0**	**545,948**	**1,600**	**547,548**

TRANSFERS BETWEEN LEVELS FOR INSTRUMENTS CARRIED AT FAIR VALUE ON A RECURRING BASIS

For the years ended December 31, 2020 and December 31, 2019 there were no significant transfers between levels 1 and 2.

During the year ended December 31, 2020, transfers into and out of level 3 included the following:

- € 0.1 billion of assets and € 0.1 billion of liabilities transferred out of level 3 driven by an increase in observability of parameters for swaps;
- € 0.2 billion of assets and € 0.2 billion of liabilities transferred out of level 3 driven by an increase in observability of parameters for equity options;
- € 0.4 billion of assets and € 0.4 billion of liabilities transferred into level 3 driven by decrease in observability of parameters for equity options;

During the year ended December 31, 2019, transfers into and out of level 3 included the following:

- € 2 million of assets and € 3 million of liabilities transferred out of level 3 driven by an increase in observability of parameters for swaps;
- € 13 million of assets and € 13 million of liabilities transferred into level 3 driven by a decrease in observability of parameters for swaps;

All transfers are based on changes in the observability and/or significance of the valuation inputs and are assumed to occur at the beginning of the period in which they occur.

FAIR VALUE OF FINANCIAL INSTRUMENTS NOT CARRIED ON BALANCE SHEET AT FAIR VALUE

Certain financial instruments that are not carried at fair value on the balance sheet are carried at amounts that came close to fair value, due to their short-term nature and generally negligible credit risk. These instruments include loans, securities purchased under agreements to resell, cash and balances at central banks and balances at other credit institutions.

The Bank has € 116.2 billion (2019: € 34.8 billion) of current financial assets and € 109.3 billion (2019: € 33.5 billion) of current financial liabilities that are not measured at fair value, including loans and advances to customers of € 0.6 billion (2019: € 0.1 billion).

In estimating the fair value of these loans and advances to customers, typically a discounted cash flow model is applied with unobservable inputs and therefore would be classified as level 3 instruments.

CREDIT AND FUNDING ADJUSTMENTS

Derivatives are generally valued with models that use observable market parameters. These market parameters generally do not consider factors such as counterparty non-performance risk, the Bank's own credit quality, and funding costs. Therefore, it is generally necessary to make adjustments to the base estimate of fair value to reflect these factors.

CVA represents the valuation adjustment, relative to the relevant benchmark interest rate, necessary to reflect counterparty non-performance risk. The Bank estimates CVA using a scenario analysis to estimate the expected positive credit exposure across all of the Bank's existing positions with each counterparty, and then estimates losses based on the probability of default and estimated recovery rate as a result of a counterparty credit event considering contractual factors designed to mitigate the Bank's credit exposure, such as collateral and legal rights of offset. The key inputs to this methodology are (i) the probability of a default event occurring for each counterparty, as derived from observed or estimated CDS spreads; and (ii) estimated recovery rates implied by CDS spreads.

FVA represents the valuation adjustment to reflect the impact of funding. The Bank's FVA framework, applied to uncollateralized (including partially collateralized) over-the-counter ("OTC") derivatives incorporates key inputs such as: (i) the expected funding requirements arising from the Bank's positions with each counterparty and collateral arrangements; and (ii) the estimated market funding cost in the principal market which, for derivative liabilities, considers the Bank's credit risk (DVA). For collateralized derivatives, the fair value is estimated by discounting expected future cash flows at the relevant overnight indexed swap rate given the underlying collateral agreement with the counterparty, and therefore a separate FVA is not necessary.

The following table provides the impact of credit and funding adjustments on principal transactions revenue in the respective periods, excluding the effect of any associated hedging activities. The FVA presented below includes the impact of the Bank's own credit quality on the inception value of liabilities as well as the impact of changes in the Bank's own credit quality over time.

€T	31/12/2020	31/12/2019
Derivatives CVA	39,252	15,572
Derivatives FVA	15,693	9,282

31. Offsetting financial assets and financial liabilities

The table below presents the balance sheet assets and liabilities offset, where the offsetting criteria under IAS 32 Financial Instruments: Presentation ("IAS 32") have been met, and the related amounts not offset in the balance sheet in respect of cash and security collateral received, and master netting agreements, where such criteria have not been met. Further discussion of offsetting of financial assets and liabilities is provided in note 5.12. to the financial statements.

At December 31, 2020	Effects of offsetting on balance sheet			Related amounts not offset		
€T	Gross amounts	Amounts offset	Net amounts reported on balance sheet	Master netting agreements and other	Cash & security collateral	Net amount
Financial assets	**156,569,358**	**−29,326,948**	**127,242,410**	**−75,873,495**	**−13,432,319**	**37,936,596**
Securities purchased under agreements to resell [1]	31,972,399	−16,579,662	15,392,737	−4,619,106	−7,568,373	3,205,258
Securities borrowing [1]	551,249	–	551,249	−162,715	−385,630	2,905
Financial assets at fair value through profit and loss [2]	124,045,710	−12,747,287	111,298,424	−71,091,674	−5,478,317	34,728,433
Financial liabilities	**152,378,972**	**−30,261,989**	**122,116,983**	**−76,048,200**	**−21,138,650**	**24,930,133**
Securities sold under agreements to repurchase [1]	23,252,902	−16,579,662	6,673,240	−4,806,946	−231,440	1,634,854
Securities lending [1]	167,953	–	167,953	−149,580	−13,039	5,334
Financial liabilities at fair value through profit and loss [2]	128,958,117	−13,682,327	115,275,790	−71,091,674	−20,894,171	23,289,945

[1] The fair value of securities purchased under agreements to resell and securities borrowing accepted as collateral that the Bank is permitted to sell or repledge in the absence of default, prior to the netting adjustments, is € 29,172 million (2019: € 2,365 million). The fair value of securities sold under agreements to repurchase and securities lending pledged to secure liabilities, prior to the netting adjustments, is € 10,255 million (2019: € 1,748 million).

[2] Included within the "amounts offset", there are the respective collateral payable and receivables with specific clearing counterparties.

At December 31, 2019	Effects of offsetting on balance sheet			Related amounts not offset		
€T	Gross amounts	Amounts offset	Net amounts reported on balance sheet	Master netting agreements and other	Cash & security collateral	Net amount
Financial assets	**36,331,077**	**−8,409,607**	**27,921,470**	**−20,492,536**	**−5,990,819**	**1,438,115**
Securities purchased under agreements to resell [1]	4,440,951	−575,335	3,865,616	−127,335	−3,718,446	19,835
Securities borrowing [1]	41,152	–	41,152	–	−39,068	2,083
Financial assets at fair value through profit and loss [2]	31,848,974	−7,834,271	24,014,702	−20,365,201	−2,233,305	1,416,197
Financial liabilities	**33,893,079**	**−8,409,607**	**25,483,472**	**−20,719,104**	**−2,431,938**	**2,332,430**
Securities sold under agreements to repurchase [1]	2,130,595	−575,335	1,555,260	−353,903	−1,199,609	1,747
Securities lending [1]	–	–	–	–	–	0
Financial liabilities at fair value through profit and loss [2]	31,762,484	−7,834,271	23,928,212	−20,365,201	−1,232,328	2,330,683

[1] The fair value of securities purchased under agreements to resell and securities borrowing accepted as collateral that the Bank is permitted to sell or repledge in the absence of default, prior to the netting adjustments, is € 29,172 million (2019: € 2,365 million). The fair value of securities sold under agreements to repurchase and securities lending pledged to secure liabilities, prior to the netting adjustments, is € 10,255 million (2019: € 1,748 million).
[2] Included within the "amounts offset", there are the respective collateral payable and receivables with specific clearing counterparties.

32. Leases

For the years ended December 31, 2020 and December 31, 2019, the Bank was under the contractual obligation for a number of leases in real estate, vehicles and equipment used primarily for the Bank's operations.

The lease of real estate for the main office in Frankfurt am Main relates to the office space and expires in August 2028. It contains renewal and partial cancellation options and/or escalation clauses providing for increased rental payments based on a price index.

Vehicle leases comprise approximately 141 vehicles as of December 31, 2020 that are attributable to employees as part of their compensation package. The leases typically have a maturity of three years.

Other leases consist of a couple of different minor items such as a parking space, IT-related items, printers or kitchen equipment. The leases have maturities of up to five years. The leases of the printers mainly contain variable lease payments which were not included in the measurement of the lease liability. The variable lease payments are based on a "pay per print" agreement. Only a minor portion of the total lease payments for the printers are fixed and were included in the measurement of the related lease liability.

Information about leases for which the Company is a lessee is presented below:

€T	Real Estate	Vehicles	Other
Balance as of January 1, 2019	**23,547**	**1,251**	**80**
Depreciation of ROU assets for the period	2,761	637	60
Balance as of December 31, 2019	**20,786**	**1,000**	**356**
Depreciation of ROU assets for the period	3,043	802	74
Balance as of December 31, 2020	**17,743**	**1,662**	**106**

See the Maturity Analysis of lease liabilities as follows:

€T	31/12/2020	31/12/2019
Lease liabilities – Maturity Analysis – contractual undiscounted cash flows		
Undiscounted lease liabilities at December 31		
Up to three months	1,167	1,016
More than three months up to one year	3,361	2,983
More than one year up to five years	15,499	13,777
More than five years	9,437	11,769
Total undiscounted lease liabilities	**29,464**	**29,545**
Imputed interest discount on leases	7,294	4,513
Lease liabilities included in the statement of financial position at December 31	**22,170**	**25,032**

€T	1/1–31/12/2020	1/1–31/12/2019
Interest expense on lease liabilities	378	379
Variable lease expense (i.e., for variable lease payments not included in lease liability) [1]	20	58
Short-term lease expense [1]	0	0
Low-value lease expense [1]	12	12
Other information		
Total cash outflow for leases	4,482	3,625
Additions to right-of-use assets	1,560	742

[1] Variable, short-term, and low-value lease expenses are recorded in the general and administration expense line item in the Company's statement of income.

33. Transfers of financial assets

In the course of its normal business activities, the Bank makes transfers of financial assets. Depending on the nature of the transaction, this may result in no derecognition at all of the assets

subject to the transfer. A summary of the main transactions, and the assets and liabilities and the financial risks arising from these transactions is set out below.

TRANSFERS OF FINANCIAL ASSETS THAT DO NOT RESULT IN A DERECOGNITION

Assets are transferred under repurchase and securities lending agreements with other banks and financial institutions. In such transactions, not all the risk and rewards of ownership are substantially transferred, therefore the assets are not derecognized from the balance sheet. The recipient is generally able to use, sell or pledge the transferred assets for the duration of the transaction. The Company remains exposed to interest and credit risk on these instruments which it is contractually required to repurchase at a later date. The counterparty's recourse is generally not limited to the transferred assets. The carrying amount of the securities pledged under repo transactions is in the amount of € 13,693,733 thousand.

CONTINUING INVOLVEMENT IN FINANCIAL ASSETS THAT HAVE BEEN DERECOGNIZED

Within the reporting period, the Bank has not transferred any financial assets that it has derecognized entirely even though it may have continuing involvement in them.

34. Pledged assets and Collateral received

The Company pledges assets for various purposes, including to collateralize repurchase and other securities financing agreements, to cover short sales and to collateralize derivative contracts and deposits. Certain of these pledged assets may be sold or repledged or otherwise used by the secured parties.

Secured financing transactions expose the Company to credit and liquidity risk. To manage these risks, the Company monitors the value of the underlying securities (predominantly high-quality securities collateral, including government-issued debt and mortgage-backed securities) that it has received from or provided to its counterparties compared to the value of cash proceeds and exchanged collateral, and either requests additional collateral or returns securities or collateral when appropriate. Margin levels are initially established based upon the counterparty, the type of underlying securities, and the permissible collateral, and are monitored on an ongoing basis.

Additionally, the Company typically enters into master netting agreements and other similar arrangements with its counterparties, which provide for the right to liquidate the underlying securities and any collateral amounts exchanged in the event of a counterparty default. Further details on netting arrangements are provided in note 31 to the financial statements.

The following table presents the carrying amount of trading assets pledged and the carrying amount of securities purchased under agreements to resell at amortized cost.

€T	31/12/2020	31/12/2019
Trading assets pledged	13,693,733	22,897
Securities purchased under agreements to resell at amortized cost	1,140,466	0

The Company receives collateral primarily in reverse repurchase agreements, securities lending agreements, derivatives transactions, customer margin loans and other transactions. These transactions are generally conducted under terms that are usual and customary for standard secured lending activities and the other transactions described. The Company, as the secured party, has the right to sell or re-pledge such collateral, subject to the Company returning equivalent securities upon completion of the transaction. This right is used primarily to cover short sales, securities loaned and securities sold under repurchase agreements.

The following table presents the fair value of collateral accepted.

€T	31/12/2020	31/12/2019
Collateral permitted to be sold or repledged, delivered, or otherwise used	44,052,068	10,627,470
of which: Collateral sold, repledged, delivered or otherwise used	24,271,190	8,057,654

35. Credit risk management

Credit Risk is the risk associated with the default or change in credit profile of a client or a counterparty. J.P. Morgan AG is exposed to credit risk through its underwriting, lending, market-making, capital markets and hedging activities with and for clients and counterparties, as well as through its operating services activities (such as clearing activities), securities financing activities, investment securities portfolio, and cash placed with banks.

Credit Risk Management is an independent risk management function that monitors, measures and manages credit risk in J.P. Morgan AG and defines credit risk policies and procedures. This includes:

- Establishing a credit risk management framework
- Monitoring, measuring and managing credit risk across all portfolio segments, including transaction and exposure approval
- Setting portfolio concentration limits
- Assigning and managing credit authorities in connection with the approval of credit exposure
- Managing distressed exposures and delinquent loans
- Estimating credit losses and ensuring appropriate credit risk-based capital management

J.P. Morgan AG's Credit Risk Management framework supplements the Firmwide risk policy framework and is approved by J.P. Morgan AG's Management Board and Risk Oversight Committee. The J.P. Morgan Credit Risk Framework defines that credit decisions are made on the basis of the clearly defined separate responsibilities for "Front Office" and "Back Office" as well as the process of assigning and managing credit authorities in connection with the approval of all credit exposure.

EXPECTED CREDIT LOSS MEASUREMENT (IFRS 9)

2020 Developments

Impact of COVID-19 pandemic

The COVID-19 pandemic has stressed MEVs to degrees not experienced in recent history, which created additional challenges in the use of modelled credit loss estimates and increases the reliance on the judgement by the Management Board. The estimated impact of COVID-19 is incorporated into ECL through MEVs and forward-looking scenarios, which generally resulted in more loans exhibiting significant increase in credit risk since initial recognition, and as a result were classified as Stage 2. As Stage 2 loans have ECL based on a probability of default (PD) over the lifetime of the loan (as opposed to 12 months in Stage 1), the Company's overall ECL increased. These impacts are illustrated and discussed further within the quantitative disclosures below.

Enhancement in modelling methodology

In 2020, the Company enhanced its statistical model methodology used for collective assessment to better estimate expected credit losses. Key model enhancements included:

– Revision of PD-, LGD- and EAD-model components
– Expansion from using three forward looking scenarios to five forward looking scenarios (central, relative upside, extreme upside, relative adverse and extreme adverse) with a standard weighting of 50 %, 20 %, 5 %, 20 % and 5 %.

Potential deviations from the standard weighting are considered as part of management adjustments.

– The weighted average facility life logic (WAFL) was replaced by the maturity date, which considers repayment schedules and -rules as well as assumptions for voluntary prepayments.
– Introduction of a new component "large loan uncertainty" (LLU). The consideration of the LLU-component captures the variance of losses which are due to the non-homogeneous nature of the portfolio, because actual default rates are statistically made up of "random" defaults. In contrast to this, actual defaults could be based on significantly different loan volumes or losses when compared to the average of the loan portfolio. The LLU is estimated on portfolio level based on PD- and LGD-variance and allocated to individual loans based on a statistical algorithm.

Approach to measuring expected credit losses

The Bank estimates credit impairment through an allowance for expected credit losses ("ECLs"). ECLs are recognized for financial assets that are measured at amortized cost or at fair value through other comprehensive income ("FVOCI") and for specified lending-related commitments, such as loan commitments and financial guarantee contracts. The measurement of ECLs must reflect:

- An unbiased and probability-weighted amount that is determined by evaluating a range of possible outcomes;
- The time value of money; and
- Reasonable and evidence-based information about past events, current (economic) conditions, and forecasts of future economic conditions.

The measurement of ECL also reflects how the Bank manages the financial instruments it uses for credit risk purposes such as Traditional Credit Products ("TCP") and Non-Traditional Credit Products ("Non-TCP"). Instruments in scope of TCP include loans, lending related commitments, and other lending products stemming from extensions of credit to borrowers. Non-TCP include, but are not limited to, other debt instruments such as reverse repurchase agreements, margin loans, or fee receivables. Intercompany exposures could be both TCP or Non-TCP, depending on the type of business.

The following tables set out the gross carrying amount (before ECL) of the Bank's financial assets that are measured at amortized cost or FVOCI by the respective TCP and Non-TCP (and Debt securities) categories as of December 31, 2020 and December 31, 2019, respectively. Balances are provided at amortized cost unless stated otherwise:

December 31, 2020 Gross carrying amount €T	TCP	Non-TCP	Total
Assets			
Cash and balances at central banks	0	81,131,159	81,131,159
Loans and advances to banks – at amortized cost	1,357,231	1,118,513	2,475,744
Loans and advances to banks – at FVOCI	6,898	0	6,898
Loans and advances to customers – at amortized cost	595,568	0	595,568
Loans and advances to customers – at FVOCI	1,950,564	0	1,950,564
Securities purchased under agreements to resell or borrowed	0	1,140,466	1,140,466
Debtors	0	30,796,755	30,796,755
Accrued income	0	70,779	70,779
Total financial assets measured at amortized cost and FVOCI	**3,910,261**	**114,257,673**	**118,167,934**

December 31, 2019 Gross carrying amount €T	TCP	Non-TCP	Total
Assets			
Cash and balances at central banks	0	24,755,182	24,755,182
Loans and advances to banks – at amortized cost	5,572	2,009,354	2,014,926
Loans and advances to banks – at FVOCI	89,350	0	89,350
Loans and advances to customers – at amortized cost	91,318	27,635	118,954
Loans and advances to customers – at FVOCI	1,336,053	0	1,336,053
Debtors	0	7,786,524	7,786,524
Accrued income	0	17,162	17,162
Total financial assets measured at amortized cost and FVOCI	**1,522,293**	**34,595,858**	**36,118,151**

Off-balance sheet lending-related commitments, which are categorized as TCP of € 11,649,801 thousand (2019: € 13,465,142 thousand) are not included in the table above.

Impact of staging on measuring the expected credit losses

ECLs are measured using a three stage model based on changes in credit quality of the financial instrument since it was initially recognized ("initial recognition"):

- Stage 1 – performing financial instruments that have not had a material increase in credit risk since initial recognition;
- Stage 2 – performing financial instruments that have experienced a significant increase in credit risk; and
- Stage 3 – non-performing financial instruments that have been assessed to be credit-impaired.

Default and credit-impairment (Stage 3)

Financial instruments are included in Stage 3 when there is objective evidence of impairment at the reporting date. Generally, the Basel definition of default is applied. Should further requirements result from IFRS 9, these are also considered. For Stage 3 instruments, ECL is calculated considering the probability of default over the remaining life of each instrument ("Lifetime ECL") on an individual asset basis and the interest revenue is calculated on the net carrying amount (that is, net of the allowance for credit losses). All financial assets, regardless of their category as TCP or Non-TCP, are considered to be credit-impaired and included in Stage 3 when one or more of the following events that have a detrimental impact on the estimated future cash flows of that financial asset has occurred:

- Significant financial difficulty of the issuer or the borrower;
- A default or past due event, e.g. payments that are 90 days or more past due, if the event is related to a reduced credit quality (for non-TCP deferred fee income from institutional clients that follow a different billing and collection cycle, 180 days past due are applied);

- The Bank has granted a concession to the borrower for economic or contractual reasons relating to the borrower's financial difficulty;
- It is likely that the borrower will enter bankruptcy or other financial reorganization;
- An active market for that financial asset no longer exists due to the borrower's financial difficulties.

Generally, a Stage 3 financial asset is considered to no longer be impaired when the borrower has made payments for a minimum of six months and there is other objective evidence of credit improvement. However, for assets that were considered to be Stage 3 as a result of a restructuring where the borrower experiencing difficulty was granted a financial concession, there is no cure period and the asset will remain in Stage 3.

Significant increase in credit risk (Stage 2)

Financial instruments that have experienced a significant increase in credit risk ("SICR") since initial recognition for which there is no objective evidence of impairment are included in Stage 2. For Stage 2 instruments, ECL is calculated considering the probability of default over the remaining life of the instrument on a collective basis and the interest revenue is calculated on the gross carrying amount of the asset (that is, without deduction for the credit loss allowance).

The Bank assesses for evidence of a SICR by considering whether there has been a change in the risk of a default occurring since the financial instrument was initially recognized.

For TCP, the Bank considers a financial instrument to have experienced a SICR when any of the following quantitative or qualitative criteria have been met:

- The Bank determines whether the probability of default ("PD") has changed between a financial instruments initial recognition and the reporting date. If the change in PD exceeds certain relative and absolute thresholds, the instrument has experienced a SICR. The assessment of the PD takes into account reasonable and evidence-based information, including information about past events, current and future economic conditions.
- For its credit portfolio that consists of exposures to large international wholesale borrowers, the Bank has made the experience that short-term days past due of more than 30 days but less than 90 days is no reliable criterion for a SICR. In fact, the aforementioned decrease in PD is a much more reliable criterion for the existence of a SICR – long before arrears of payment. As a result, the Bank applies 90 days past due as an additional criterion instead of 30 days past due.
- The Bank monitors borrowers or financial instruments if they experience a significant increase in credit risk.

In total, the Bank has experienced that the above-mentioned quantitative and qualitative criteria are most suitable for the identification of SICR for TCP.

In the following paragraph, the assessment of SICR is described for Non-TCPs:

The method for determining whether there has been a SICR for Non-TCP portfolios depends on the type of instrument. The Bank assumes as Non-TCP financial assets that are 30 days past due, have experienced a SICR and are included in Stage 2 except for certain fee receivables (i.e. fee receivables with institutional clients which follow a different billing and collection cycle) that are classified in Stage 2 at 90 days past due. Inter-company loans and receivables to material legal entities covered by the resolution and recovery plans are assumed not to have had a SICR given the borrower's level of capitalization and access to liquidity. Finally, the remainder of the Bank's Non-TCP are mostly short-term and generally no SICR has arisen prior to the maturity of that instrument.

Without significant increase in credit risk (Stage 1)
Financial instruments that have not experienced a SICR since initial recognition are included in Stage 1. For Stage 1 instruments, ECL is individually calculated by considering the probability of default within 12 months after the reporting date on a collective basis and interest revenue is calculated on the gross carrying amount of the asset (that is, without deduction for the credit loss allowance).

Impact of sensitivities on measuring the credit loss
Sensitivity analysis of weighting
The Bank's allowance for credit losses is subject to numerous factors. Changes in economic conditions or in the Bank's assumptions and judgements could affect its estimate of expected credit losses in the portfolio at the balance sheet date.

The Bank considers a variety of factors and inputs in estimating the allowance for credit losses. It is difficult to estimate how alternative judgements in specific factors might affect the overall allowance for credit losses due to the idiosyncratic nature of the factors and inputs involved.

To illustrate the potential magnitude of an alternative judgement, the Bank estimates that adjusting the extreme downside scenario weighting to 100 % as of December 31, 2020 could imply an increase to modelled ECLs of approximately € 50,322 thousand.

The purpose of this sensitivity analysis is to provide an indication of the isolated impact of a hypothetical alternative judgement on modelled ECLs and is not intended to imply management's expectation of future deterioration of the economy nor any specific risk factors.

Sensitivity analysis of ECL due to staging
The following table shows the impact of staging on the Bank's ECL recognized on balance sheet as at December 31, 2020 and December 31, 2019, respectively, by comparing the allowance if all

performing financial assets, loan commitments and financial guarantee contracts were in Stage 1 or if all such assets were in Stage 2 to the actual ECL recorded on these assets:

TCP financial assets, loan commitments and financial guarantee contracts:

December 31, 2020 €T	Current staging	ECL – All performing loans in Stage 1	Impact of change in staging on the statement of comprehensive income
	130,819	109,203	21,616

December 31, 2020 €T	Current staging	ECL – All performing loans in Stage 2	Impact of change in staging on the statement of comprehensive income
	130,819	158,771	−27,952

December 31, 2019 €T	Current staging	ECL – All performing loans in Stage 1	Impact of change in staging on the statement of comprehensive income
	15,430	7,225	8,205

December 31, 2019 €T	Current staging	ECL – All performing loans in Stage 2	Impact of change in staging on the statement of comprehensive income
	15,430	23,518	−8,088

ECL measurement for TCP portfolios

ECL for Stage 1 and Stage 2 assets is determined individually using a collective assessment model that estimates losses expected on the portfolio from possible defaults in the next 12 months or lifetime depending on whether the instrument is included in Stage 1 or 2. The 12-month ECL is calculated by multiplying the 12-month Probability of Default, Exposure at Default and Loss Given Default. Lifetime ECL is calculated using the lifetime PD instead. These inputs are collectively known as the modelled estimate and are described in further detail below:

Probability of Default ("PD"): The PD model estimates the probability of a borrower defaulting given certain macroeconomic scenarios and the probability of a borrower moving from one risk rating to another during the reasonable and supportable period. The 12-month and lifetime PDs

represent the probability of default occurring over the next 12 months and the remaining maturity of the instrument respectively. The PD is determined at a facility level.

Country-specific information is applied to risk ratings, as appropriate in accordance with internal risk rating guidelines. Beyond the reasonable and supportable period of 2 years, the probability of default and likelihood of downgrade are based on long run historical averages with no macroeconomic forecasting element. Internal historical default data are used for all periods, both during the reasonable and supportable period of 2 years and beyond.

Exposure at Default ("EAD"): Exposure at Default represents the gross exposure of the Firm upon the Obligor's default and is characterized as follows:

– Term Loans – EAD is 100 % of exposure, net of amortization.
– Revolving commitments – EAD is a model-based estimate that considers the expectation of future utilization at the facility level in the case of a default under a given macroeconomic environment. For the reasonable and supportable forecast period, the EAD is determined based on the facility's risk characteristics.
– All other unfunded committed facilities – EAD is determined empirically, based on the type of credit facility, line of business, underlying risk characteristics and utilization.

Loss Given Default ("LGD"): LGD, also known as loss severity, represents the amount of loss, expressed as a percentage, in the event a facility defaults under a given forecasted macroeconomic environment during the reasonable and supportable period of 2 years. Beyond the reasonable and supportable period, long run historical average LGD is used based on the loan's risk characteristics (e. g., secured type, region, line of business). Country-specific considerations are also applied to the LGD inputs, as appropriate. Similar to PD, internal historical default data are used for all periods, both during the reasonable and supportable period of 2 years and beyond.

The modelled estimate is subsequently adjusted for Large Loan Uncertainty (LLU) (as described above in the paragraph "Enhancement in modelling methodology").

Forward-looking information (IFRS 7, Para. 35g (b))
ECL estimates are derived from the Bank's historical experience and future forecasted economic conditions. To incorporate forward-looking information into the ECL calculation, the Company develops forecasted economic scenarios. As mentioned above in the paragraph "Enhancement in modelling methodology", the Company moved from three forward looking scenarios (upside, base and downside) to five forward looking scenarios (base, relative upside, extreme upside, relative downside and extreme downside) during the year. Each of these scenarios contain a set of MEVs that reflect forward-looking economic and financial conditions. MEVs include, but are not limited to, FX rates, inflation and GDP per country or country block (group of countries that have similar economic circumstances). MEVs for each scenario are projected over a reasonable

and supportable forecast period of two years. After the 2 year forecast period, it is supposed that losses revert back to historical averages over a one-year transition period.

On a quarterly basis, the five economic scenarios are updated and the probability-weighting is reviewed. The Bank uses judgement to develop the scenarios and assign probability-weightings. The most likely economic scenario in the management's view is the base case which generally is assigned a higher weighting than the other four scenarios.

The PD-, LGD- and EAD-models are designed to forecast the credit quality and performance of a TCP portfolio based on industry, geography, rating and size of the obligors, among other attributes of the portfolio. PD-, LGD- and EAD-models are calibrated based on historical MEVs and use forecasted macroeconomic scenarios for projecting PD-, LGD- and EAD-values.

ECL calculation

The Bank uses the forward-looking PD-, LGD-, and EAD-values for each of the scenarios to produce the scenario credit losses ("SCLs"). The modelled ECL estimate is a probability-weighted calculation of the five SCLs discounted using the original effective interest rate or an approximation thereof. The weightings are periodically reviewed and approved centrally by a risk governance committee within the Firm.

As part of the normal review process, the ECL calculation, which is provided by a central group-wide unit, is subject to further adjustment to take into consideration the requirements of the Company. As the centrally estimated ECL are not specific to local and regional conditions, the Company completes a local review, which involves conducting individual client reviews and reviewing local MEVs and will adjust the centrally estimated ECL to appropriately reflect the Company's portfolio. For this adjustment, senior management decides to what extent the ECL is appropriate for the Company. For this decision economic and political conditions, quality of underwriting standards, borrower behaviour, deterioration within an industry, product or portfolio, as well as other relevant internal and external factors affecting the credit quality of the portfolio are considered. In certain instances, the interrelationships between these factors create further uncertainties.

Management adjustments

A working group that was newly set up in 2020 and which consists of J.P. Morgan AG Credit Risk Management, J.P. Morgan AG Credit Risk Controlling and the IFRS 9 Reporting Team is responsible for the local review and monitoring of the model-based results of the ECL-results. Additionally, the working group assesses on the appropriateness of the used scenarios including the forecasted macroeconomic variables that are used for the calculation of the ECL. Management adjustments are prepared for potential material risks that are not reflected in the model and are provided to the J.P. Morgan AG CRO and CFO for their approval.

The following management adjustments are included in the ECL as of year-end 2020:

Adjustment of scenario weightings

Given the ongoing macroeconomic uncertainty, it was decided to put more weight on "adverse" scenarios. The existing uncertainty is based on COVID-19 metrics such as diffusion, vaccination progress and lock-down measures, which affect both the European and the US-American area. The following scenario weights were used for the management adjustment (base, relative upward, extreme upward, relative downward and extreme downward scenarios with the weighting 35 %, 5 %, 0 %, 35 %, 25 %).

Adjustment of the modelled Leverage Finance LGDs

While exceptions to defined risk standards with regard to Leveraged Finance-transactions are systematically taken into account in risk management, these were not sufficiently considered in the above mentioned updated IFRS 9-model that was used for the estimate of credit losses. In order to nevertheless consider the likelihood of higher losses related to Leveraged Finance-transactions with relaxed covenants, the modelled LGDs for these transactions receive an absolute LGD surcharge. To calculate the ECL, a minimum value is taken into account for the LGDs in the adverse scenarios. The calibration of the markups and the minimum floors are both supported by internal historical data as well as external benchmark data.

Stage 3 portfolio estimation techniques

In estimating ECL for Stage 3 loans using an individual discounted cash flow assessment, broad economic conditions affecting a borrower are less relevant as they may not have a direct impact on the specific borrower and his ability to service their debts. Consequently, the Company believes that borrower-specific scenarios are the most relevant in estimating expected credit losses in an individual discounted cash flow assessment. When applying the discounted cash flow methodology, the Company projects cash flows under three borrower-specific forecast scenarios that are reviewed, adjusted and ultimately blended into one-probability weighted calculation of ECL.

ECL measurement for Non-TCP portfolios

The Bank's approach to measure ECLs for Non-TCP portfolios depends on the type of instrument.

a) Cash and balances at central banks

Cash and balances with central banks include interest-bearing deposits, and are held with investment-grade institutions.

In evaluating the lifetime ECL related to receivables from a bank, the Bank's determined expected probability of default was extremely remote, and the magnitude of the lifetime ECL related to exposures would be negligible as these are regulated investment-grade institutions that have

significant capital, loss absorbing capacity and liquidity. The majority of the deposits held are short-term in nature and can be withdrawn at short notice (typically overnight).

The Bank includes cash and balances at central banks in Stage 1 as they are short-term and investment-grade and banking institutions are considered to have high quality credit with low risk of default and therefore the Bank has concluded there is no material SICR.

b) Other Non-TCP

The Bank has determined that ECLs on other Non-TCP portfolios are immaterial due to the credit quality of the borrower (e.g. investment-grade) and/or the short-term nature of the instrument. Similarly, the Bank has determined that these Non-TCP portfolios are without SICR (i.e. Stage 1) due to the credit quality of the borrower and/or the short-term nature of the instrument. For non-TCP intercompany transactions, the Company evaluates the counterparty based on the consolidated Firm's resolution and recover plan, tenor of the instrument and any collateral received. The Company has not experienced any losses on Non-TCP intercompany transactions.

The Bank continues to monitor its Non-TCP portfolios to ensure the described framework is appropriate and its exposure to credit risk and ECLs on these portfolios are adequately reflected in the allowance for credit losses.

ECL AND GROSS CARRYING AMOUNT RECONCILIATION

The following tables provide an explanation of the change in the loss allowance during the year ended December 31, 2020 and December 31, 2019, respectively, by respective product classes (TCP and Non-TCP). The tables also set out which effects contributed to the changes in the loss allowance:

1. Traditional credit products

Wholesale loans

a) Loans and advances at amortized cost

2020				ECL				Gross carrying amount
€T	Stage 1 12-month ECL	Stage 2 Lifetime ECL	Stage 3 Lifetime ECL	Total	Stage 1	Stage 2	Stage 3	Total
At January 1, 2020	**22**	**0**	**0**	**22**	**96,890**	**0**	**0**	**96,890**
New loans originated or purchased	535	4,221	0	4,756	488,683	55,548	0	544,232
Loans derecognized or repaid	−3	0	−2	−5	−8,708	−88	−10	−8,806
Existing loans including credit quality changes	1,809	−517	0	1,291	−6,765	0	−3,076	−9,841
Changes in macroeconomic variables ("MEV")	276	0	0	276	0	0	0	0
Stage transfers:	−2,099	560	1,814	276	−27,728	18,330	9,398	0
Other	−2	−2	2	−2	−36,888	88	10	−36,789
Model update	−213	−592	0	−805	237,791	1,129,322	0	1,367,114
Qualitative Management Adjustment	371	6,943	0	7,315	0	0	0	0
Total changes	675	10,613	1,814	13,103	646,387	1,203,200	6,322	1,855,909
At December 31, 2020	**697**	**10,613**	**1,814**	**13,125**	**743,277**	**1,203,200**	**6,322**	**1,952,799**

2019				ECL				Gross carrying amount
€T	Stage 1 12-month ECL	Stage 2 Lifetime ECL	Stage 3 Lifetime ECL	Total	Stage 1	Stage 2	Stage 3	Total
At January 1, 2019	**0**	**0**	**0**	**0**	**176,707**	**0**	**0**	**176,707**
New loans originated or purchased	22	0	0	22	88,257	0	0	88,257
Loans derecognized or repaid	0	0	0	0	−174,812	0	0	−174,812
Existing loans including credit quality changes	0	0	0	0	8,209	0	0	8,209
Changes in macroeconomic variables ("MEV")	0	0	0	0	0	0	0	0
Stage transfers:	0	0	0	0	0	0	0	0
Other	0	0	0	0	−1,471	0	0	−1,471
Total changes	0	0	0	22	−79,817	0	0	−79,817
At December 31, 2019	**22**	**0**	**0**	**22**	**96,890**	**0**	**0**	**96,890**

The loss allowance recognized in the period is impacted by the judgements made by senior management as described below:

- Determining criteria for significant increase in credit risk;
- Choosing appropriate models and assumptions for the measurement of ECL;
- Establishing the number and relative weightings of forward-looking scenarios for each type of product/market and the associated ECL; and
- Establishing groups of similar financial assets for the purposes of measuring ECL.

The changes in the gross book value of the receivables measured at amortized cost, which were related to the changes in the ECL during December 2020, were mainly due to the above-described updates of the IFRS-9 model as well as to newly issued claims. The ECL was also significantly affected by the management adjustments that were also described above.

b) Loans and advances at FVOCI

2020			ECL				Gross carrying amount	
€T	Stage 1 12-month ECL	Stage 2 Lifetime ECL	Stage 3 Lifetime ECL	Total	Stage 1	Stage 2	Stage 3	Total
At January 1, 2020	**934**	**3,615**	**0**	**4,549**	**1,285,916**	**139,487**	**0**	**1,425,403**
New loans originated or purchased	4,272	1,296	8,089	13,657	538,715	248,995	126,561	914,272
Loans derecognized or repaid	−288	−265	0	−552	−687,289	−10,680	0	−697,970
Existing loans (including credit quality changes)	2,365	−641	977	2,701	329,327	43,300	3,066	375,694
Changes in macroeconomic variables ("MEV")	5,239	4,346	0	9,585	0	0	0	0
Stage transfers	−7,393	9,830	5,691	8,127	−237,322	214,108	23,214	0
Other	−277	−306	1,101	518	−75,993	−11,788	6,824	−80,957
Model update	1,312	−952	0	361	154,327	−165,171	0	−10,845
Qualitative Management Adjustment	5,751	17,838	0	23,589	0	0	0	0
Total changes	10,981	31,147	15,858	57,985	21,764	318,765	159,666	500,195
Fair value adjustment	0	0	0	0	31,864	0	0	31,864
Deferred fees adjustment	0	0	0	0	0	0	0	0
At December 31, 2020	**11,915**	**34,762**	**15,858**	**62,534**	**1,339,544**	**458,252**	**159,666**	**1,957,462**

2019			ECL				Gross carrying amount	
€T	Stage 1 12-month ECL	Stage 2 Lifetime ECL	Stage 3 Lifetime ECL	Total	Stage 1	Stage 2	Stage 3	Total
At January 1, 2019	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
New loans originated or purchased	934	3,615		4,549	1,290,108	139,487	0	1,429,595
Loans derecognized or repaid	0	0	0	0	0	0	0	0
Existing loans including credit quality changes	0	0	0	0	0	0	0	0
Changes in macroeconomic variables ("MEV")	0	0	0	0	0	0	0	0
Stage transfers	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0
Total changes	934	3,615	0	4,549	1,290,108	139,487	0	1,429,595
Fair value adjustment	0	0	0	0	6,013	0	0	6,013
Deferred fees adjustment	0	0	0	0	−10,205	0	0	−10,205
At December 31, 2019	**934**	**3,615**	**0**	**4,549**	**1,285,916**	**139,487**	**0**	**1,425,403**

Changes in the gross book value of the receivables on the FVOCI contributed to changes in the ECL in the 2020 financial year as follows:

A positive balance from newly granted and repaid receivables as well as increases in existing receivables led to an increase in the gross book value of the receivables.

About 40 % of the increase in the ECL is due to the management adjustment described above. Other key factors for the increase were the higher gross book values of the receivables as well as the changed MEV and the stage transfers due to deteriorated credit quality in the portfolio.

c) Loan Commitments and Financial Guarantees

2020				ECL				Gross carrying amount
€T	Stage 1 12-month ECL	Stage 2 Lifetime ECL	Stage 3 Lifetime ECL	Total	Stage 1	Stage 2	Stage 3	Total
At January 1, 2020	**6,206**	**4,656**	**4,664**	**15,527**	**13,048,976**	**384,382**	**31,785**	**13,465,142**
New loan commitments and financial guarantees	1,379	1,413	0	2,792	1,389,566	133,440	0	1,523,006
Loan commitments and financial guarantees drawn	−215	−294	0	−509	−1,024,258	−13,712	0	−1,037,970
Existing loan commitments and financial guarantees including credit quality changes	2,477	11,568	−567	13,478	3,607,898	496,950	−4,895	4,099,953
Changes in macroeconomic variables ("MEV")	21,399	3,708	0	25,107	0	0	0	0
Stage transfers	−4,391	6,993	689	3,292	−667,070	664,859	2,211	0
Other	−2,925	−521	−1,495	−4,941	−6,357,646	−160,271	−9,521	−6,527,438
Model update	3,878	17,499	0	21,377	203,495	−76,388	0	127,107
Qualitative Management Adjustment	0	0	0	0	0	0	0	0
Total changes	21,603	40,365	−1,372	60,595	−2,848,016	1,044,877	−12,204	−1,815,342
At December 31, 2020	**27,809**	**45,021**	**3,292**	**76,122**	**10,200,960**	**1,429,259**	**19,581**	**11,649,801**

2019				ECL				Gross carrying amount
€T	Stage 1 12-month ECL	Stage 2 Lifetime ECL	Stage 3 Lifetime ECL	Total	Stage 1	Stage 2	Stage 3	Total
At January 1, 2019	**39**	**0**	**2**	**41**	**126,216**	**164**	**9**	**126,389**
New loan commitments and financial guarantees	6,182	4,656	4,663	15,501	12,925,093	384,224	31,776	13,341,093
Loan commitments and financial guarantees drawn	0	0	0	0	−3,059	0	0	−3,059
Existing loan commitments and financial guarantees including credit quality changes	−7	0	−1	−8	−714	127	0	−587
Changes in macroeconomic variables ("MEV")	−8	0	0	−8	0	0	0	0
Stage transfers	0	0	0	0	136	−136	0	0
Other	0	0	0	0	1,304	3	0	1,307
Total changes	6,167	4,656	4,662	15,485	12,922,760	384,218	31,776	13,338,753
At December 31, 2019	**6,206**	**4,656**	**4,664**	**15,527**	**13,048,976**	**384,382**	**31,785**	**13,465,142**

Changes in the gross book value of loan commitments and financial guarantees contributed to changes to the ECL in FY 2020 as follows:

A positive balance of new and drawn loan commitments and financial guarantees increased the gross book value of the loan commitments and financial guarantees.

About 40 % of the increase in the ECL is due to the revised MEV. Another 35 % of the increase is due to the updates to the IFRS-9 model described above. The remaining change is mainly due to the deterioration in the credit quality of the portfolio and, to a lesser extent, to the resulting stage transfers.

2. Non-traditional credit products

Non-TCPs include all other instruments measured at amortized cost and subject to the impairment provisions of "IFRS 9". The ECL on Non-TCP is immaterial.

CREDIT RISK EXPOSURES

The following tables provide an analysis of the credit risk exposure for both financial instruments for which an ECL allowance is recognized if they are subject to the IFRS 9-rules for impairments. The maximum credit risk of the financial assets in the table shows the maximum loss under the credit risk.

At December 31, 2020			Risk mitigants		
€T	Maximum credit risk exposure	Exposures captured by market risk	Master netting agreements and other	Cash & Security	Net credit exposure
Financial assets:					
Cash and balances at central banks	81,131,159	0	0	0	81,131,159
Loans and advances to banks	2,492,473	0	0	0	2,492,473
Loans and advances to customers	2,554,058	0	0	−682,198	1,871,860
Securities purchased under agreements to resell	15,392,737	0	−4,619,106	−7,568,373	3,205,258
Securities borrowed	551,249	0	−162,715	−385,630	2,905
Financial assets at fair value through profit and loss	111,243,513	−13,619,307	−71,091,674	−5,478,317	21,054,215
Financial assets designated at fair value through profit or loss	54,911	−54,911	0	0	0
Debtors	30,796,755	0	0	0	30,796,755
Accrued income	70,779	0	0	0	70,779
Total	**244,287,635**	**−13,674,219**	**−75,873,495**	**−14,114,517**	**140,625,405**

At December 31, 2019			Risk mitigants		
€T	Maximum credit risk exposure	Exposures captured by market risk	Master netting agreements and other	Cash & Security	Net credit exposure
Financial assets:					
Cash and balances at central banks	24,755,182	0	0	0	24,755,182
Loans and advances to banks	2,104,952	0	0	0	2,104,952
Loans and advances to customers	1,716,517	0	0	−402,831	1,313,686
Securities purchased under agreements to resell	3,865,616	0	−127,335	−3,718,446	19,835
Securities borrowed	41,152	0	0	−39,068	2,083
Financial assets at fair value through profit and loss	23,958,983	−35,394	−20,365,201	−2,233,305	1,325,083
Financial assets designated at fair value through profit or loss	55,720	−55,720	0	0	0
Debtors	7,786,524	0	0	0	7,786,524
Accrued income	17,162	0	0	0	17,162
Total	**64,301,807**	**−91,113**	**−20,492,536**	**−6,393,650**	**37,324,507**

Maximum credit risk exposure

The gross balance sheet exposure represents the Bank's maximum exposure to credit risk from these assets. It is determined separately for each counterparty for derivatives and securities, taking into account enforceable netting agreements in accordance with IAS 32 "Financial Instruments: Presentation" for which there is a legal right and the intention of a net settlement. The net exposure after risk mitigation is presented taking into account for assets that are primarily exposed to market risk, the aforementioned enforceable master netting agreements (where the netting criteria according to IAS 32 are not met) and the value of the collateral received. Cash

and securities collateral is taken into account at their respective fair values, while other collateral received, such as guarantees and sureties, is generally not taken into account.

The collateral is taken into account under conditions that are customary for the relevant securities and financing transactions. J.P. Morgan AG receives securities as collateral for securities repurchase agreements or cash-backed securities lending transactions. These can generally be resold or repledged by J.P. Morgan AG. For the resale or repledging of the collateral provided, the customary contractual terms apply. The quality of the collateral is assured by its ability to be liquidated, used and third party usability, as well as by regular evaluation.

For the loan portfolio, there is, to a lesser extent, physical collateral such as assignment by way of security of inventory or guarantees. The bank essentially relies on the enterprise values of the financed company. These are assessed using DCF models, in order to determine the expected future cash flows from a possible realization. This also takes into account the extent to which other creditors have preferred collateral. The calculation of the enterprise value is based on three various scenarios, from the weighting of which the expected sales proceeds are determined. In the next step, this flows into the determination of the ECL to be taken into account.

The Bank's credit risks are described in more detail below. As the loan loss provision is only considered for receivables recorded at amortized cost and FVOCI, additional anaysis of the exposures is provided.

Loans and advances to customers

The table below shows the Bank's credit exposure and contractual maturity profile for gross loans and advances to customers before any provision for impairment. The credit quality and credit concentration of loans and advances to customers is managed within the Bank's Credit Risk Management function. The ratings scale is based on J.P. Morgan AG's internal risk ratings, which generally correspond to the ratings as defined by S&P and Moody's Investors Service.

Maturity profile of TCP financial assets (IFRS 7, Para. 35m)

Maturity €T	2020	2019
5 years or more	107,785	37,721
5 years or less but over 1 year	2,071,244	1,155,319
1 year or less but over 3 months	1,425,443	186,727
3 months or less	305,789	142,526
Total	**3,910,261**	**1,522,293**

Ratings profile (IFRS 7, Para. 35m)

At December 31, 2020				Stages		
Rating grades €T			Stage 1 12-month ECL	Stage 2 Lifetime ECL	Stage 3 Lifetime ECL	Total
Loans and advances to customers at amortized cost						
Investment-grade						
JPMC – Default grade	S&P Rating	Moody's Rating				
2+	AA+	Aa1	306,051	–	–	306,051
3+	A+	A1	–	1,135,459	–	1,135,459
3	A	A2	237,234	8,744	–	245,978
3–	A–	A3	2,007	6	–	2,013
4+	BBB+	Baa1	125,518	22	–	125,540
4	BBB	Baa2	1,087	–	–	1,087
4–	BBB–	Baa3	17,336	–	–	17,336
Non-investment-grade						
5+	BB+	Ba1	79	–	–	79
5	BB	Ba2	12,164	4	–	12,168
5–	BB–	Ba3	14,085	2	–	14,087
6+	B+	B1	18,173	–	–	18,173
6	B	B2	–	4,872	–	4,872
6–	B–	B3	4,557	–	–	4,557
7	CCC+	Caa1	–	–	–	–
8	CC	Ca	4,986	54,091	–	59,077
9	C/D	C	–	–	6,322	6,322
Gross carrying amount			**743,277**	**1,203,200**	**6,322**	**1,952,799**

At December 31, 2020			Stages			
Rating grades (continued) **€T**			**Stage 1** **12-month ECL**	**Stage 2** **Lifetime ECL**	**Stage 3** **Lifetime ECL**	**Total**
Loans and advances to customers at FVOCI						
Investment-grade						
JPMC – Default Grade	S&P Rating	Moody's Rating				
1+	AAA	Aaa	–	167,047	–	167,047
2	AA	Aa2	136,117	–	–	136,117
2–	AA–	Aa3	10,634	–	–	10,634
3+	A+	A1	150,135	–	–	150,135
3	A	A2	68,021	–	–	68,021
3–	A–	A3	30,616	–	–	30,616
4+	BBB+	Baa1	46,604	(65)	–	46,539
4	BBB	Baa2	67,990	16	–	68,006
4–	BBB–	Baa3	227,826	–	–	227,826
Non-investment-grade						
5+	BB+	Ba1	155,316	–	–	155,316
5	BB	Ba2	194,044	–	–	194,044
5–	BB–	Ba3	114,655	565	–	115,220
6+	B+	B1	29,419	26,666	–	56,085
6	B	B2	1,121	19,943	–	21,064
6–	B–	B3	12,025	61,920	–	73,946
7	CCC+	Caa1	64,000	68,769	–	132,770
8	CC	Ca	(843)	113,390	–	112,547
9	C/D	C	–	–	–	–
10	D	C	–	–	159,666	159,666
Gross carrying amount (interim value)			**1,307,680**	**458,252**	**159,666**	**1,925,598**
Fair value adjustment						**31,864**
Gross carrying amount						**1,957,462**
Total gross carrying amount						**3,910,261**

At December 31, 2019		Stages		
€T	Stage 1 12-month ECL	Stage 2 Lifetime ECL	Stage 3 Lifetime ECL	Total
Loans and advances to customers at amortized cost				
Investment-grade				
AAA/AAA to BBB−Baa3	41,648	97	0	41,744
Non-investment-grade				
BB+/Ba1 to B−/B3	55,135	0	0	55,135
CCC+/Caa1 and below	0	0	11	11
Gross carrying amount	**96,782**	**97**	**11**	**96,890**
Loans and advances to customers at FVOCI				
Investment-grade				
AAA/AAA to BBB−Baa3	476,018	56,629	0	532,647
Non-investment-grade				
BB+/Ba1 to B−/B3	814,090	30,795	0	844,885
CCC+/Caa1 and below	0	52,063	0	52,063
Gross carrying amount (interim value)	**1,290,108**	**139,487**	**0**	**1,429,595**
Fair value adjustment				6,013
Deferred fees adjustment				−10,205
Gross carrying amount				**1,425,403**
Total gross carrying amount				**1,522,293**

Analysis of concentration credit risk

The credit portfolio is decomposed by geographic region and by industry in the table below. According to the Bank's evaluation, as of December 31, 2020, the portfolio is well diversified in relation to geographic region and industry.

Credit risk concentration €T	2020	2019
Geographic region		
Germany	251,863	144,545
Other European	2,305,539	1,185,566
Rest of the world	1,352,858	192,182
Total	**3,910,261**	**1,522,293**
Industry		
Commercial and industrial	908,199	575,483
Real estate	316,831	469,807
Energy	543,074	383,794
Financial services	1,523,881	25,899
Other	618,276	67,309
Total	**3,910,261**	**1,522,293**

Loan commitments and financial guarantees (IFRS 7, Para 35M)

At December 31, 2020				Stages		
Rating grades €T			Stage 1 12-month ECL	Stage 2 Lifetime ECL	Stage 3 Lifetime ECL	Total
Investment grade						
Default Grade	S&P Rating	Moody's Rating				
1+	AAA	Aaa	699	–	–	699
1	AAA	Aaa	9,477	–	–	9,477
2	AA	Aa2	646,511	–	–	646,511
2–	AA–	Aa3	24,448	–	–	24,448
3+	A+	A1	128,233	–	–	128,233
3	A	A2	2,739,781	4,300	–	2,744,082
3–	A–	A3	216,446	18	–	216,464
4+	BBB+	Baa1	911,884	217,169	–	1,129,053
4	BBB	Baa2	1,340,398	481,773	–	1,822,171
4–	BBB–	Baa3	1,065,853	–	–	1,065,853
Non-investment-grade						
5+	BB+	Ba1	1,047,693	–	–	1,047,693
5	BB	Ba2	544,034	57,998	–	602,032
5–	BB–	Ba3	188,828	–	–	188,828
6+	B+	B1	65,425	1,490	–	66,915
6	B	B2	31,325	1,812	–	33,138
6–	B–	B3	139,844	195,472	–	335,316
7	CCC+	Caa1	981,223	254,565	–	1,235,788
8	CC	Ca	118,858	214,660	–	333,518
9	C/D	C	–	–	19,545	19,545
10	D	C	–	–	36	36
Gross carrying amount			**10,200,960**	**1,429,259**	**19,581**	**11,649,801**
Loss allowance						76,122
Carrying amount						**11,573,679**

December 31, 2019			Stages	
Rating grades €T	Stage 1 12-month ECL	Stage 2 Lifetime ECL	Stage 3 Lifetime ECL	Total
Investment grade				
AAA/AAA to BBB – Baa3	8,119,121	0	0	8,119,121
Non-investment-grade				
BB+/Ba1 to B–/B3	4,720,558	150,484	0	4,871,041
CCC+/Caa1 and below	209,298	233,898	31,785	474,980
Gross carrying amount	**13,048,976**	**384,382**	**31,785**	**13,465,142**
Loss allowance	6,206	4,656	4,664	15,527
Carrying amount	**13,042,770**	**379,726**	**27,120**	**13,449,616**

Market risk, liquidity risk and operational risk disclosures are incorporated in the risk report as part of the management report.

36. Related party transactions

Parties are considered to be related if one party has the ability to directly or indirectly control the other party or exercise significant influence over the other party in making financial or operational decisions. J.P. Morgan AG's related parties include:

- key management personnel, close family members of key management personnel and entities which are controlled, significantly influenced by, or for which significant voting power is held by key management personnel or their close family members;
- J.P. Morgan group entities; and
- post-employment benefit plans for the benefit of J.P. Morgan AG employees.

Relationship to parent
The sole shareholder of J.P. Morgan AG is J.P. Morgan International Finance Limited, Newark/Delaware, USA. It has informed us in writing on January 13, 2021 that a direct holding exists totalling 100 %. In addition, J.P. Morgan Chase & Co. and J.P. Morgan Chase Bank, National Association, have informed us in writing on the same day that an indirect equity interest exists, totalling 100 %.

The group financial statements for the smallest and the largest scope of included companies are prepared by JPMorgan Chase & Co., New York, whose shares are quoted on the New York Stock Exchange as well as on certain European and Asian stock markets. The financial statements can be obtained on request from J.P. Morgan AG, Frankfurt am Main.

Key management personnel
Key management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of J.P. Morgan AG, directly or indirectly. The Company considers the members of both of its Management and Supervisory Boards to constitute key management personnel for the purposes of IAS 24.

Management board compensation:

€T	1/1/ – 31/12/2020	1/1/ – 31/12/2019
Short-term employee benefits	5,176	4,984
Post-employment benefits	0	0
Other long-term benefits	166	162
Termination benefits	0	0
Share-based payment	4,871	4,093
Total key management personnel compensation	**10,213**	**9,239**

As in the prior year, the Supervisory Board consists of six members, of which two still are representatives of the employees, three are representatives of the shareholder of J.P. Morgan AG that are employed by other J.P. Morgan entities as well as one group external member (2019: four representatives of the shareholder that were employed by other J.P. Morgan entities). In the reporting year, the total compensation of the Supervisory Board amounted to € 110 thousand (2019: € 20 thousand). The total compensation was attributable to the two employee representatives and to the group external member. In the prior year, the compensation was fully related to the two representatives of the employees. The compensation they receive for their services as employees is in conformity with the market payment practices. The three representatives of the shareholder that are employed by other J.P. Morgan entities do not receive a compensation for their board membership from J.P. Morgan AG. Their service as a board member to J.P. Morgan AG is covered by the compensation they receive from the employing J.P. Morgan group entity and is neither separated as part of their payment nor is any partly recharging to J.P. Morgan AG in place.

Transactions with related parties

The table below provides an overview of transactions with related parties as per the Balance Sheet and the Income Statement of J.P. Morgan AG:

	J.P. Morgan group entity		Thereof: Parent entity		Key personnel of J.P. Morgan AG or its parent entity		Other related parties		Total	
€T	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019
Receivables from banks	1,999,508	2,021,310	0	0	0	0	0	0	1,999,508	2,021,310
Receivables from customers	42,309	27,635	0	0	0	0	0	0	42,309	27,635
Receivables from reverse repo transactions	10,775,110	2,331,083	0	0	0	0	0	0	10,775,110	2,331,083
Trading assets	53,089,474	6,555,476	0	0	0	0	0	0	53,089,474	6,555,476
Remaining assets	7,816,615	2,384,560	0	0	0	0	0	0	7,816,615	2,384,560
Total assets	**73,723,016**	**13,320,065**	**0**	**0**	**0**	**0**	**0**	**0**	**73,723,016**	**13,320,065**
Liabilities to banks	75,888,701	14,512,784	0	0	0	0	0	0	75,888,701	14,512,784
Liabilities to customers	362,978	51,671	0	0	0	0	0	0	362,978	51,671
Liabilities from repo transactions	6,319,015	1,533,581	0	0	0	0	0	0	6,319,015	1,533,581
Trading liabilities	34,298,374	7,628	0	0	0	0	0	0	34,298,374	7,628
Provisions	2,009	18	0	0	0	0	0	0	2,009	18
Remaining liabilities	5,559,732	1,085,092	200	10	0	0	0	0	5,559,732	1,085,092
Subordinated liabilities	1,025,790	185,790	1,025,790	185,790	0	0	0	0	1,025,790	185,790
Total liabilities	**123,456,599**	**17,376,564**	**1,025,990**	**185,800**	**0**	**0**	**0**	**0**	**123,456,599**	**17,376,564**
Total equity	**12,924,721**	**5,099,795**	**12,798,295**	**5,101,734**	**0**	**0**	**0**	**0**	**12,924,721**	**5,099,795**
Guarantees received	119,334	108,673	0	0	0	0	0	0	119,334	108,673
Guarantees given	249,641	80,596	0	0	0	0	0	0	249,641	80,596
Net interest income	−22,223	15,857	−229	−69	0	0	0	0	−22,223	15,857
Net fee and commission income	466,026	43,869	0	0	0	0	0	0	466,026	43,869

€T	J.P. Morgan group entity 2020	J.P. Morgan group entity 2019	Thereof: Parent entity 2020	Thereof: Parent entity 2019	Key personnel of J.P. Morgan AG or its parent entity 2020	Key personnel of J.P. Morgan AG or its parent entity 2019	Other related parties 2020	Other related parties 2019	Total 2020	Total 2019
Net income from financial assets and liabilities measured at fair value through profit and loss	−3,917	9,188	0	0	0	0	0	0	−3,917	9,188
Other revenues	0	−53	0	0	0	0	0	0	0	−53
Loan loss provision	1,782	234	0	0	0	0	0	0	1,782	234
Administration and other expense	4,052	1,094	0	0	0	0	0	0	4,052	1,094
Profit before tax	434,052	67,533	−229	−69	0	0	0	0	434,052	67,533

Provisions for credit losses in the Income Statement related to receivables from and loan commitments or guarantees to J.P. Morgan Group entities amounted to € 2,018 thousand for the year 2020 (2019: € 234 thousand). The amount of credit loss allowances on the Balance Sheet amounted to € 2,016 thousand as of December 31, 2020 (31/12/2019: € 234 thousand).

Transactions with J.P. Morgan Group entities are mainly related to liquidity management, covering funding requirements, risk management activities (e.g. when risk is managed centrally in the Group) or related to J.P. Morgan AG being the Group's point of contact to the European Central Bank, acting as the Euro-clearer of the Group and to provide access to continental-European exchanges to facilitate clearing activities of client trades. Related to these activities, there are regularly back-to-back trades with J.P. Morgan Group entities as well. Transactions with J.P. Morgan Group entities are performed on arm's length principle.

J.P. Morgan AG has issued a guarantee for notes, warrants and certificates issued by J.P. Morgan Structured Products B.V. (JPMSP) that are held by third parties in the maximum nominal amount of USD 1 billion. In the event of non-performance on payments due on the securities issued by JPMSP, J.P. Morgan AG has the obligation to perform payments to holders of the securities. Thereby, the fair value of the securities – and hence the payments due – can exceed the maximum nominal value. For the guarantee, J.P. Morgan AG does not receive a separate compensation. Providing the guarantee is however to be viewed in the overall context of enlarging the business activities as part of the implementation of the J.P. Morgan group-wide Brexit strategy.

As of December 31, 2020, the fair value of issued securities amounted to € 626.3 million (31/12/2019: € 339.0 million), of which J.P. Morgan AG held € 504.5 million (31/12/2019: no holdings), leading to a guaranteed amount of € 121.8 million as of the reporting date (31/12/2019: € 339.0 million).

For this guarantee, a credit loss provision of € 1,274 thousand was set up as of the reporting date, which is already included in the total provided above for J.P. Morgan group entities.

As part of the preparation for the Brexit, trading and banking book activities were transferred from other J.P. Morgan group entities in the UK to J.P. Morgan AG during the reporting year. In this context, assets and liabilities were taken over from other J.P. Morgan group entities at existing carrying values. In addition, employees were transferred as well. The difference between the acquisition cost of the assets minus liabilities and the higher total acquisition cost was recorded in Equity and amounted to € 89.0 million in the reporting year (31/12/2019: € 12.7 million).

Post-employment benefit plans

The Bank has a number of post-employment benefit plans and the services are provided to these plans by either itself, other J.P. Morgan group entities or third party asset managers or insurances. No fees were paid from the plan assets to asset managers of J.P. Morgan group entities.

37. Other information

37.1. NUMBER OF EMPLOYEES

On average, for the year 2020 there were 626 employees, broken down as follows:

Number	2020	2019
Yearly average	**626**	**361**
Distribution of employees		
Authorized signatories	7	7
Authorized officers	211	207
Commercial employees	408	147

In the reporting year, these employees were employed by the main office and the branches of J.P. Morgan AG, as follows:

Number	2020	2019
Yearly average	**626**	**361**
Branch		
Main Office Frankfurt	393	348
Paris	78	0
London	64	13
Madrid	31	0
Other	60	0

Employees who are seconded, released from duties and on parental leave are not included in these figures.

37.2. TOTAL REMUNERATION OF THE ACTIVE MEMBERS OF THE BOARDS

The remuneration paid to members of the Management Board totalled € 10,213 thousand. A portion of this (i. e. the remuneration of the active Board Members) came from 36,384 restricted stock units with a fair value on their grant date of € 4,056 thousand.

The remuneration of the Supervisory Board for 2020 amounted to a total of € 110 thousand.

No loans were granted to Board members during this financial year.

37.3. TOTAL PAYMENTS TO FORMER BOARD MEMBERS AND THEIR DEPENDENTS

Pension provisions for the former members of the Management Board totalled € 12,473 thousand as of December 31, 2020. The total remuneration paid to former members of the Management Board and their dependents amounted to € 3,162 thousand as of December 31, 2020.

37.4. FEE EXPENSES

€T	1/1 – 31/12/2020	1/1 – 31/12/2019
Total auditors' fees billed for the financial year calculated for	**7,035**	**8,021**
Financial statements auditing services	**6,507**	**7,489**
of which, for the previous year	542	380
of which, expenses in the current financial year	2,500	4,662
of which, expenses for creating provisions	3,465	2,447
Other confirmation services	**528**	**532**
of which, for the previous year	15	37
of which, expenses in the current financial year	450	450
of which, expenses for creating provisions	63	45

The fee for auditing services reflects the annual financial statements audit services as well as the project advisory audit for the creation of the IFRS annual financial statements. Other confirmation services include audits under § 89 WpHG (Wertpapierhandelsgesetz – Securities Trading Act). Tax consulting services and other services were not provided by the auditor.

37.5. EXPLANATORY NOTES ON OTHER FINANCIAL COMMITMENTS

The Company utilizes services from various Group member companies as part of its outsourcing functions. Group internal services amounted to € 83.8 million in the year 2020. The business procurement contracts have a notice period of three months.

The lease agreement for the business premises has a term until August 1, 2028. The future rent payments amount to € 27.7 million as at December 31, 2020.

37.6. INFORMATION ON CORPORATE BODIES

Management Board
Stefan Behr Chairperson of the Management Board (since November 1, 2020), Managing Director, J.P. Morgan AG
Dorothee Blessing (until October 31, 2020) Chairperson of the Management Board, Managing Director, J.P. Morgan AG
Cindyrella Amistadi (since April 1, 2021) Outsourcing, Operations, Technology Director, Managing Director, J.P. Morgan AG
Nicholas Conron CRO, Managing Director, J.P. Morgan AG
Burkhard Kübel-Sorger CFO, Managing Director, J.P. Morgan AG
Gunnar Regier Markets Business Area Director, Managing Director, J.P. Morgan AG
Supervisory Board
Mark S. Garvin Chairperson, Managing Director, J.P. Morgan Europe Limited
Guy America Deputy Chairperson, Managing Director, J.P. Morgan Securities plc
Wanda Eriksen Auditor
Marco Kistner, (since February 1, 2021) Qualified Banker
Elena Korablina (until January 31, 2021) Managing Director, JPMorgan Chase Bank, N.A., London Branch
Christoph Fickel Information Security Manager, J.P. Morgan AG, Employee Representative, J.P. Morgan AG
Thomas Freise Head of Works Council, J.P. Morgan AG, Employee Representative, J.P. Morgan AG

Directorships or seats on supervisory boards

Management Board
Stefan Behr; no further mandates
Dorothee Blessing (until October 31, 2020) Management body: J.P. Morgan Securities plc Frankfurt Branch; Supervisory body: A.P. Møller Mærsk Group
Cindyrella Amistadi (since April 1, 2021); no further mandates
Nicholas Conron; no further mandates
Burkhard Kübel-Sorger; no further mandates
Gunnar Regier Management body: J.P. Morgan Securities plc Frankfurt Branch
Supervisory Board
Mark S. Garvin Supervisory body J.P. Morgan Bank Luxembourg S.A. (Chairperson of the Board); J.P. Morgan Europe Limited (until June 23, 2020); Euroclear Holding S.A. (until June 12, 2020)
Guy America; no further mandates
Wanda Eriksen Supervisory body: AXA Switzerland; AXA-ARAG Legal Protection Ltd (subsidiary of AXA); Catlin Re Switzerland Ltd (subsidiary of AXA); Aquila AG; Arnold AG (Vice Chair)
Marco Kistner (since February 1, 2021); no further mandates
Elena Korablina (until January 31, 2021); no further mandates
Christoph Fickel; no further mandates
Thomas Freise; no further mandates

38. Proposed allocation of earnings

Management Board and Supervisory Board propose to the annual general meeting to carry forward the balance sheet profit of € 67,529 thousand for the financial year 2020 as based on local German accounting regulation (HGB) to other revenue reserves.

39. Addendum report

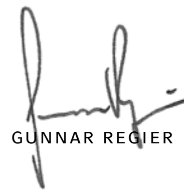
In January 2021, subordinated notes amounting to € 1,630 million were issued. The notes were acquired by a J.P. Morgan group entity. They fulfil the requirements of article 63 CRR. Also, in the first quarter 2021, J.P. Morgan AG has taken over further trading positions from J.P. Morgan Securities plc, London, in implementing the Group's Brexit strategy.

In addition, no events have occurred after the end of the financial year which have a significant effect on the asset, financial and earnings situation.

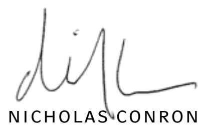
Frankfurt am Main, April 12, 2021

J.P. Morgan AG
Frankfurt am Main
The Management Board

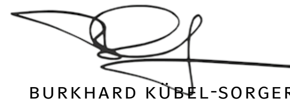
STEFAN BEHR



GUNNAR REGIER



NICHOLAS CONRON



BURKHARD KÜBEL-SORGER

CINDYRELLA AMISTADI

INDEPENDENT AUDITOR'S REPORT[1]

To J.P. Morgan AG, Frankfurt am Main

Report on the audit of the separate financial statements and of the management report

AUDIT OPINIONS

We have audited the separate financial statements of J.P. Morgan AG, Frankfurt am Main, which comprise the statement of financial position as at December 31, 2020 and the statement of profit and loss and other comprehensive income, the statement of changes in equity and the statement of cash flows for the financial year from 1 January 1 to December 31, 2020 and the notes to the financial statements, including a summary of significant accounting policies. In addition, we have audited the management report of J.P. Morgan AG for the financial year from January 1 to December 31, 2020. In accordance with the German legal requirements, we have not audited the content of the statement on corporate governance pursuant to § [Article] 289f Abs. [paragraph] 4 HGB [Handelsgesetzbuch: German Commercial Code] (disclosures on the quota for women on executive boards).

In our opinion, on the basis of the knowledge obtained in the audit,

- the accompanying separate financial statements comply, in all material respects, with the IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to § 325 Abs. 2a HGB and, in compliance with these requirements, give a true and fair view of the assets, liabilities, and financial position of the Company as at December 31, 2020, and of its financial performance for the financial year from January 1 to December 31, 2020, and

- the accompanying management report as a whole provides an appropriate view of the Company's position. In all material respects, this management report is consistent with the separate financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development. Our audit opinion on the management report does not cover the content of the statement on corporate governance referred to above.

Pursuant to § 322 Abs. 3 Satz [sentence] 1 HGB, we declare that our audit has not led to any reservations relating to the legal compliance of the separate financial statements and of the management report.

BASIS FOR THE AUDIT OPINIONS

We conducted our audit of the separate financial statements and of the management report in accordance with § 317 HGB and the EU Audit Regulation (No. 537/2014, referred to subsequently as "EU Audit Regulation") in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer [Institute of

[1] Translation of the auditor's report issued in German language on the separate financial statements prepared in German language by the management of J.P. Morgan AG

Public Auditors in Germany] (IDW). Our responsibilities under those requirements and principles are further described in the "Auditor's Responsibilities for the Audit of the Separate Financial Statements and of the Management Report" section of our auditor's report. We are independent of the Company in accordance with the requirements of European law and German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. In addition, in accordance with Article 10 (2) point (f) of the EU Audit Regulation, we declare that we have not provided non-audit services prohibited under Article 5 (1) of the EU Audit Regulation. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions on the separate financial statements and on the management report.

KEY AUDIT MATTERS IN THE AUDIT OF THE SEPARATE FINANCIAL STATEMENTS

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the separate financial statements for the financial year from January 1 to December 31, 2020. These matters were addressed in the context of our audit of the separate financial statements as a whole, and in forming our audit opinion thereon; we do not provide a separate audit opinion on these matters.

In our view, the matters of most significance in our audit were as follows:

❶ **Valuation of complex financial instruments of "trading assets" and "trading liabilities" at fair value**

❷ **Risk provisions in the customer lending business**

Our presentation of these key audit matters has been structured in each case as follows:

① Matter and issue

② Audit approach and findings

③ Reference to further information

Hereinafter, we present the key audit matters:

❶ **Valuation of complex financial instruments of "trading assets" and "trading liabilities" at fair value**

① J.P. Morgan AG enters into transactions in derivatives and structured products, which it reports in the separate financial statements of the Company under the balance sheet items "trading assets" and "trading liabilities". The income and expenses from these transactions are recognized in the item "Net result on financial assets and liabilities at fair value" in the

statement of profit and loss. For the purposes of valuation, the Company determines the fair value of these holdings in accordance with IFRS 13. Due to the lack of an active market, the fair value of certain financial instruments is not determined on the basis of stock exchange prices or other market prices, but by using valuation models. The valuation of these financial instruments can therefore have greater estimation uncertainties, especially also considering increased market volatility due to the COVID-19 pandemic. Within the Company's total portfolio of financial instruments, these estimation uncertainties relate specifically to the valuation of certain structured products, as well as the valuation of commodity, interest rate, foreign exchange and equity derivatives, including those which refer to specific indices across multiple asset classes. These products are not standardized and often require the fair value to be determined using market standard and industry standard valuation models, taking into account parameters specific to the financial instruments and market-related input factors. If such parameters cannot be observed on an active market, the fair value is determined based on estimated values and/or internal indicators of the Bank. In the case of model-valued financial instruments, there is therefore an increased estimation uncertainty and/or a greater bandwidth of justifiable ranges of fair values. This applies in particular to complex financial instruments and when using non-observable parameters. In the light of the potential effects of these estimation uncertainties on the separate financial statements, the valuation of these products was of particular significance during our audit.

② As part of our audit, we analyzed the model-valued holdings of financial instruments with increased estimation uncertainties. We evaluated the appropriateness and effectiveness of the relevant controls within the Company's internal control system for the valuation of these financial instruments, in particular in terms of the independency of the price validation from the trading division, and the model validation. Using our internal specialists in financial mathematics, we undertook an assessment of the suitability of the valuation models used and the parameters used for selected securities, derivatives, and structured products. We examined the consistency of the application of the valuation models. In addition, we carried out an independent revaluation of selected products on a sample basis as at the balance sheet date. Based on the audit procedures performed, we were able to satisfy ourselves that the methods and assumptions used by the executive directors are overall suitable for determining the model-valued holdings of financial instruments.

③ The information provided by the Company on the valuation of financial instruments at fair value is included in the notes to the financial statements, in particular in the notes No. 8., No. 12. and No. 30.

❷ **Risk provisions in the customer lending business**

① One focus of the business activities of J.P. Morgan AG is the lending business, which is reported in the Company's separate financial statements under the balance sheet line items "Loans and advances to customers" and "Loans and advances to banks". The measurement

of the risk provision in lending business is affected in particular by the structure and quality of the loan portfolios, macroeconomic factors and the estimates of the executive directors on future loan defaults, also with regards to the expected impact of the ongoing Corona crisis on the lending business. The amount of the individual valuation allowance for loans and advances corresponds to the difference between the outstanding loan amount and the recoveries expected from the exposure. The Bank uses a discounted cash flow method to determine the expected credit loss by forming three scenarios in accordance with IFRS 9. Existing collateral is taken into account. To determine the general loan loss allowance, the Bank uses statistical models to estimate the expected credit loss in accordance with IFRS 9. The Bank has made management adjustments on the risk provision. These comprise a stronger weighting of adverse macroeconomic scenarios to take into account the existing uncertainties resulting from the COVID-19 pandemic in order to determine a best estimate of the expected losses. In addition, the Bank has made adjustments regarding the estimation of LGD parameters for the leveraged finance business in order to sufficiently reflect the expectations of the executive directors regarding the specific risks of leveraged finance, which have not yet been taken into account in the models. The allowances and provisions in the credit business are, on the one hand, highly significant for the Bank's assets, liabilities and financial performance and, on the other hand, involve considerable estimations of the executive directors with regard to forecasts of macroeconomic variables and scenarios as well as the cash flows still expected from a credit exposure. In addition, the valuation parameters applied, which are also subject to significant uncertainties due to the effects of the COVID-19 pandemic, have a significant influence on the recognition or amount of any necessary valuation allowances. Against this background, this matter was of particular significance in the context of our audit.

② As part of our audit, we first assessed the adequacy of the IT systems and the design of the controls in the relevant internal control system of the Company and tested the functionality of the controls, in particular with regard to the recording of loan data, the risk classification of borrowers, the determination of the risk provision, and the validation of the valuation models. In addition, we assessed the valuation of loans, including the appropriate application of valuation methods and reasonableness of estimated values, based on samples of loan engagements. In doing so, we evaluated, among other things, the available documentation of the Company with regard to the economic circumstances and the recoverability of the corresponding collateral. Furthermore, in order to assess the valuation adjustments made, we evaluated the valuation methods applied by the Company, the underlying input data, macroeconomic assumptions and parameters as well as the results of the validation actions. In evaluating the valuation methods, we involved our internal specialists in financial mathematics. We assessed the executive directors' assessment of the impact of the Corona crisis on the economic circumstances of the borrowers and the appropriateness of the model parameters and assumptions. We questioned the necessity of the creation of management adjustments and assessed their quantification. On the basis of the audit procedures we per-

formed, we were able to satisfy ourselves overall of the reasonableness of the assumptions made by the executive directors when assessing the recoverability of the credit portfolio, and of the appropriateness and effectiveness of the controls implemented by the Company.

③ The information provided by the Company on the risk provision in the credit business are included in the note No. 5.4. and No. 35. of the notes to the financial statements.

OTHER INFORMATION

The executive directors are responsible for the other information. The other information comprises the statement on corporate governance pursuant § 289f Abs. 4 HGB (disclosures on the quota for women on executive boards).

The other information also comprises the annual report – excluding cross-references to external information – with the exception of the audited separate financial statements, the audited management report and our auditor's report.

Our audit opinions on the separate financial statements and on the management report do not cover the other information, and consequently we do not express an audit opinion or any other form of assurance conclusion thereon.

In connection with our audit, our responsibility is to read the other information and, in so doing, to consider whether the other information

- is materially inconsistent with the separate financial statements, with the management report or our knowledge obtained in the audit, or

- otherwise appears to be materially misstated.

RESPONSIBILITIES OF THE EXECUTIVE DIRECTORS AND THE SUPERVISORY BOARD FOR THE SEPARATE FINANCIAL STATEMENTS AND THE MANAGEMENT REPORT

The executive directors are responsible for the preparation of the separate financial statements that comply, in all material respects, with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to § 325 Abs. 2a HGB and that the separate financial statements, in compliance with these requirements, give a true and fair view of the assets, liabilities, financial position, and financial performance of the Company. In addition, the executive directors are responsible for such internal control as they have determined necessary to enable the preparation of separate financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the separate financial statements, the executive directors are responsible for assessing the Company's ability to continue as a going concern. They also have the responsibility for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting unless there is an intention to liquidate the Company or to cease operations, or there is no realistic alternative but to do so.

Furthermore, the executive directors are responsible for the preparation of the management report that, as a whole, provides an appropriate view of the Company's position and is, in all material respects, consistent with the separate financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. In addition, the executive directors are responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of a management report that is in accordance with the applicable German legal requirements, and to be able to provide sufficient appropriate evidence for the assertions in the management report.

The supervisory board is responsible for overseeing the Company's financial reporting process for the preparation of the separate financial statements and of the management report.

AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE SEPARATE FINANCIAL STATEMENTS AND OF THE MANAGEMENT REPORT

Our objectives are to obtain reasonable assurance about whether the separate financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the management report as a whole provides an appropriate view of the Company's position and, in all material respects, is consistent with the separate financial statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor's report that includes our audit opinions on the separate financial statements and on the management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with § 317 HGB and the EU Audit Regulation and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW) will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these separate financial statements and this management report.

We exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the separate financial statements and of the management report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our audit opinions. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal controls.

- Obtain an understanding of internal control relevant to the audit of the separate financial statements and of arrangements and measures (systems) relevant to the audit of the management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an audit opinion on the effectiveness of these systems of the Company.

- Evaluate the appropriateness of accounting policies used by the executive directors and the reasonableness of estimates made by the executive directors and related disclosures.

- Conclude on the appropriateness of the executive directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor's report to the related disclosures in the separate financial statements and in the management report or, if such disclosures are inadequate, to modify our respective audit opinions. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to be able to continue as a going concern.

- Evaluate the overall presentation, structure and content of the separate financial statements, including the disclosures, and whether the separate financial statements present the underlying transactions and events in a manner that the separate financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Company in compliance with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to § 325 Abs. 2a HGB.

- Evaluate the consistency of the management report with the separate financial statements, its conformity with German law, and the view of the Company's position it provides.

- Perform audit procedures on the prospective information presented by the executive directors in the management report. On the basis of sufficient appropriate audit evidence, we evaluate, in particular, the significant assumptions used by the executive directors as a basis for the

prospective information and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate audit opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with the relevant independence requirements, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence and where applicable, the related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the separate financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter.

Other legal and regulatory Requirements

FURTHER INFORMATION PURSUANT TO ARTICLE 10 OF THE EU AUDIT REGULATION

We were elected as auditor by the annual general meeting on the April 30, 2020. We were engaged by the supervisory board on the May 4, 2020. We have been the auditor of the J.P. Morgan AG, Frankfurt am Main, without interruption since the financial year 1983.

We declare that the audit opinions expressed in this auditor's report are consistent with the additional report to the audit committee pursuant to Article 11 of the EU Audit Regulation (long-form audit report).

German Public Auditor Responsible for the Engagement

The German Public Auditor responsible for the engagement is Christoph Lehmann.

Frankfurt am Main, April 14, 2021

PricewaterhouseCoopers GmbH
Wirtschaftsprüfungsgesellschaft

sgd. Christoph Lehmann
Wirtschaftsprüfer
(German Public Auditor)

sgd. ppa. Kerstin Voeller
Wirtschaftsprüfer
(German Public Auditor)

REPORT OF THE SUPERVISORY BOARD

SUPERVISION AND CONTROL

The Supervisory Board continuously has continuosly monitored the management on the basis of written and verbal reporting and performed the duties for which it is responsible in accordance with the applicable statutes. The Supervisory Board was informed of important matters about the economic situation of the Bank, the business policy, the liquidity and capital as well as the risk management. This has been done within and outside of the meetings of the Supervisory Board and its committees by means of written and oral reporting, for example on the development of the relevant economic performance indicators and on fundamental questions relating to further business development. In addition, the Supervisory Board was kept informed in detail about risk management on a quarterly basis.

PERSONNEL CHANGES IN THE MANAGEMENT BOARD

There was a personnel change in the Management Board during the financial year 2020. Dorothee Blessing left the Management Board on October 31, 2020. In addition, Cindyrella Amistadi has been appointed to Management Board on April 1, 2021.

PERSONNEL CHANGES IN THE SUPERVISORY BOARD

Wanda Eriksen has been appointed to the Supervisory Board as an external member of the Supervisory Board on January 1, 2020. In addition, Marko Kistner was chosen for Elena Korablina as a further external member of the Supervisory Board on February 1, 2021.

AUDIT COMMITTEE

For the financial year 2020, the Audit Committee discussed the annual financial statements and the audit report on April 20, 2021 and they discussed the audit planning on September 8, 2020.

The Audit Committee is responsible for monitoring the accounting process, the effectiveness of the internal control system, the risk management system and the internal auditing system as well as the statutory audit, in particular the independence of the auditor and any additional services performed by the auditor.

Based on the recommendations of the Audit Committee (see § 124 Para. 3 sentence 2 Companies act (AktG)) in the annual general meeting held on April 26, 2021 and in accordance with the statutory requirements, the auditor BDO AG Wirtschaftsprüfungsgesellschaft, Frankfurt am Main, will be appointed for the audit of the annual financial statements, individual financial statements in accordance with IFRS and the management report for the financial year 2021.

ANNUAL FINANCIAL STATEMENTS AND INDIVIDUAL IFRS FINANCIAL STATEMENTS

The annual financial statements, the individual financial statements according to IFRS and the management report of the Management Board for the 2020 financial year, including the bookkeeping, have been audited by the auditing company PricewaterhouseCoopers GmbH, Frankfurt am Main, selected as the auditor by the Annual General Meeting. The auditor raised no objections

and issued an unqualified audit opinion. The Management Board has also prepared a report on affiliated companies (dependent company report) for the 2020 financial year in accordance with Section 312 of the German Stock Corporation Act. The audit of the report by the Supervisory Board did not reveal any objections. The auditor conducted its work on the Management Board's report on relationships with affiliated companies and issued the following auditor's report:

"In accordance with our engagement, we have audited the report of the Management Board pursuant to Section 312 of the German Stock Corporation Act on relationships with affiliated companies in accordance with Section 313 of the German Stock Corporation Act for the financial year 2020. As the final outcome of our audit did not give rise to any objections, we issue the following auditor's report in accordance with Section 313 (3) sentence 1 of the German Stock Corporation Act:

After our dutiful examination and assessment, we confirm that:

1. The factual information in the report is correct,
2. In the legal transactions listed in the report, the performance of the company was not inappropriately overstated,
3. In the case of the measures listed in the report, there are no circumstances in favor of a material assessment other than that by the Management Board."

The Audit Committee discussed and reviewed the annual financial statements, the individual financial statements in accordance with IFRS and the management report with the auditors during the meeting on April 21, 2021. Based on the final result of the investigation carried out by the Audit Committee, the Supervisory Board did not raise any objections. The annual financial statements, individual financial statements according to IFRS and the management report prepared by the Management Board for the period ended December 31, 2020 were approved by the Supervisory Board today. The annual financial statements, as submitted by the Management Board, are hereby approved and established.

The Supervisory Board would like to express its sincere gratitude to the Management Board and all employees of the Bank for their commitment and the work they have done together.

April 26, 2021
The Supervisory Board

MARK S. GARVIN
Chairperson of the Supervisory Board

ANNEX: COUNTRY-BY-COUNTRY REPORTING 2020

The requirements in Article 89 of EU Directive 2013/36/EU (Capital Requirements Directive, CRD IV) for country-by-country reporting were implemented into German law by the Banking Act (KWG). The information below is shown before the elimination of transactions between J.P. Morgan AG and its branches.

CRR institutions have to publish information about branches and subsidiaries broken down by member states of the EU and third countries.

The following information refers to J.P. Morgan AG and its registered branches in 2020. The amounts included in the table below are based on local German accounting regulations (HGB).

On December 31, 2020, J.P. Morgan AG had the branch offices listed in the overview.

J.P. Morgan AG and its listed branches have not received any public subsidies during this financial year.

Company name	Location	Country
J.P. Morgan AG – Brussels Branch	Brussels	Belgium
J.P. Morgan AG – Copenhagen Branch	Copenhagen	Denmark
J.P. Morgan AG – Paris Branch	Paris	France
J.P. Morgan AG – Milan Branch	Milan	Italy
J.P. Morgan AG – Amsterdam Branch	Amsterdam	Netherlands
J.P. Morgan AG – Oslo Branch	Oslo	Norway
J.P. Morgan AG – Warsaw Branch	Warsaw	Poland
J.P. Morgan AG – Madrid Branch	Madrid	Spain
J.P. Morgan AG – Stockholm Branch	Stockholm	Sweden
J.P. Morgan AG – London Branch	London	United Kingdom

Country	Number of employees[1]	Turnover[2] €T	Profit (or loss) before taxes €T	Taxes on profit or loss €T	Activity
Germany	393	277,313	−71,793	5,463	The company operates business activities in the areas of Treasury Services (including Euro Clearing), Securities Services (as a custodian bank and custodian) and Markets (acting as an accounting unit for specific customer segments in the OTC derivative business).
Belgium	4	8,177	4,655	502	Banking and markets
Denmark	3	3,652	899	417	Banking and markets
France	78	113,119	54,135	6,991	Banking and markets
Italy	19	22,273	12,055	2,189	Banking and markets
Netherlands	19	3,646	−905	–	Banking and markets
Norway	3	801	2	–	Banking and markets
Poland	4	2,831	1,675	–	Banking and markets
Sweden	8	5,075	1,584	199	Banking and markets
Spain	31	31,032	18,371	6,171	Banking and markets
United Kingdom	64	147,197	95,285	26,484	Banking and markets

[1] Number of employees based on the annual average.
[2] Turnover is defined as total of interest income, commission income, investment and trading income.

ANNEX: EQUAL PAY REPORTING 2020 (UNAUDITED)

INTRODUCTION:

Pursuant to §§ 21, 22 Entgelttransparenzgesetz, J.P. Morgan AG is required to report every three years on measures taken to promote equality between women and men, and their effects, and to establish equal pay for women and men, and to provide this report as an annex to the Management Report. This is the first report published by J.P. Morgan AG in relation to such measures (the number of employees of J.P. Morgan AG reached 500 during 2020 and therefore met the requirement for providing this report for the first time).

MEASURES TO PROMOTE GENDER EQUALITY

At J.P. Morgan AG, we believe that a diverse workforce and an inclusive work environment are critical to the success of our business, and that continues to include a commitment to gender diversity. In 2017, the Supervisory Board has set a target of 30 % females for both the Supervisory Board and the Management Board. J.P. Morgan AG is striving to achieve these targets by June 2022. At the same time, the Management Board has set a 30 % female gender target for both management levels below the Management Board. In addition, globally, at JPMorgan Chase & Co. ("the Firm"), women represent nearly half of the Operating Committee of and nearly 50 % of its global workforce, and we are committed to supporting the advancement of women at all stages of their careers.

While we have made progress in increasing women's representation at all levels, there is still more work to do. Working with our managers and leaders, we will continue to engage, develop and empower women, and expand opportunities for growth.

ADVANCING WOMEN IS A KEY PRIORITY

As part of JPMorgan Chase & Co, J.P. Morgan AG is committed to strengthening our diverse and inclusive culture and providing easily accessible resources to employees at all levels. Throughout 2019 and 2020, the Firm has had programmes at the regional and global level designed to assist our employees in their professional and personal development and to help attract, develop and retain top talent:

Women on the Move Interactive Network (WOTM): One of the many Business Resources Groups (BRGS) within the Firm, WOTM collaborates with lines of business, locations and human resources to provide members with access to tools that enable the successful retention, development and advancement of women at all levels at the Firm. Key achievements in the last year within J.P. Morgan AG have included the promotion of the "Men as Allies" initiative, Wellness events, Mentoring Circles and country-specific initiatives such as mentoring programmes.

Journey to Inclusive Teams: J.P. Morgan AG is helping managers and employees mitigate bias and make better decisions every day through new digital learning experiences, interactive virtual webinars and in-person sessions focused on driving inclusion. The course content is based on neuroscience and is developed in partnership with industry experts.

parents@jpmc: A web page that promotes parental programs and provides practical support and tools to help working parents. Resources provided include information about benefits, time away from work policies, feeding support, adoption assistance, child care options, mentor programs and education.

Board Readiness: We have partnered with an external organization to deliver bespoke board readiness workshops. The sessions are designed for women considering their first board role or seeking to add a new non-executive director or trustee role to their portfolio. This is open to Vice Presidents and above across the region.

Skills Building Workshops: We work with external organizations to host skills-building workshops to help our women prepare for a range of difficult conversations in the modern work environment. These workshops are currently offered across the region and focus on topics such as impact, influence, brand, emotional intelligence, leadership, presenting.

Leadership Edge: Leadership Edge is our firmwide set of in-class programmes and resources to develop great managers and leaders, and build one strong leadership culture. Aspiring managers can take the self-guided learning program, EXPLORE, and all employees have access to the leadership center, iLead, a curated selection of leadership and management insights, tools and activities.

30–5–1 Campaign: The 30–5–1 global campaign is a framework designed to support women's career advancement. The message is simple: a senior leader should spend 30 minutes a week having coffee with a talented woman; spend 5 minutes a week congratulating a female colleague on a win or success; and spend 1 minute a week celebrating their successes with other colleagues.

As a major employer across Europe, J.P. Morgan AG is committed to diversity in its workforce and we are taking a disciplined and regionally tailored approach to help us make further progress.

MEASURES TO CREATE EQUAL PAY FOR WOMEN AND MEN

Our commitment to diversity and inclusion at all levels of the firm extends to our governance mechanisms, systems and controls which are designed to pay employees fairly for the work they do, regardless of who they are. We believe our compensation philosophy promotes an equitable and well governed approach to compensation including pay-for-performance practices that attract and retain top talent, are responsive to and aligned with shareholders, and encourage a shared success culture in support of our business principles and strategic framework.

The Firm's most recent internal review concluded that, globally, women are paid 99 % of what men are paid, taking into account several factors that potentially impact pay. The Firm has made a commitment to annually disclose this measure. These measures are designed to provide insight into the Firm's efforts to provide fair compensation and opportunity.

These measures reflect that pay decisions are based on many non-discriminatory factors, such as an employee's role, tenure, seniority and geography. If we identify individuals with compensation that is less than expected, we conduct further review and, where appropriate, proactively address it. The Firm recognizes that analyses such as pay equity reviews are only a starting point.

We believe that a more impactful way to further our commitment to fair compensation and opportunity is to continue to focus on expanding advancement opportunities at more senior levels across J.P. Morgan AG for diverse employees, building diversity into performance development, and cultivating a diverse and inclusive environment at all stages of the employee life cycle.

STATISTICAL DATA

J.P. Morgan AG employed an average of 256 female and 348 male employees in 2020. Of these, an average of 189 women and 338 men worked full-time and 67 women and 10 men worked part-time.

PUBLISHER
J.P. Morgan AG, Frankfurt am Main
Taunustor 1
60310 Frankfurt am Main

LAYOUT/DESIGN
HEISTERS & PARTNER, Corporate & Brand Communication,
Mainz, Germany

J.P.Morgan

J.P. Morgan AG, Frankfurt am Main
Taunustor 1
60310 Frankfurt am Main