J.P.Morgan

ANNUAL REPORT 2019 OF J.P. MORGAN AG

J.P. Morgan

INDICATORS J.P. MORGAN AG

€ M	2019	2018	2017	2016
Net Revenue	276.4	146.8	135.0	128.7
Net interest income	21.8	9.9	7.9	14.9
Net commission income	195.7	90.6	85.6	77.0
Loan loss provision	28.8	–	–	–
Total expenses	196.9	141.0	115.2	107.1
Result from ordinary course of business	79.5	5.8	19.9	21.6
Net income	41.2	−8.8	13.7	15.5
Equity	**5,073**	**2,367**	**659**	**645**
Return on Equity (RoE)	0.8 %	−0.4 %	2.1 %	2.4 %
Return on Investment	0.09 %	−0.04 %	0.09 %	0.07 %
Cost-Income Ratio (before loan loss provision)	71.23 %	96.07 %	85.30 %	83.25 %
Pre-tax profit margin	28.77 %	3.93 %	14.70 %	16.77 %
Tier 1 capital ratio	27.8 %	169.7 %	39.3 %	72.6 %
Total capital ratio	28.8 %	183.1 %	50.5 %	93.3 %

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Business and General Conditions

ORGANIZATION AND LEGAL STRUCTURE

J.P. Morgan AG, 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.

Of the eight branches registered in 2018 in London, Milan, Paris, Amsterdam, Brussels, Copenhagen, Oslo and Stockholm, the branch office in London was opened during the financial year 2019. In the first quarter of 2020, the branch offices in Paris and Copenhagen became active.

Until May 30, 2019, J.P. Morgan AG was managed by a four-member Management Board, for the front- and back-offices, which was extended on May 31, 2019 by a further management board member for the Markets division, and is also monitored by a six-member supervisory board. The Management Board generally meets monthly, while the Supervisory Board meets at least four times a year. In 2019, the Supervisory Board held seven sessions – and in the course of 2020 so far, one meeting has been held. The names of the members of the Management Board and the Supervisory Board are listed in the Notes.

For the meetings of the Management Board, the divisions for Wholesale Payments (formerly Treasury Services and Global Trade), Securities Services, Commercial Bank and Markets prepare a detailed presentation covering all important events in the past month for discussion as well as the trend of Key Performance Indicators (KPIs) and Key Risk Indicators (KRIs) for the business divisions. In addition, the meeting is provided with information on the financial trends, a detailed risk report and a report from the Corporate Functions, especially Compliance and Internal Audit, for discussion, review and decision. In addition, during the meetings for the implementation of the Group-wide Brexit strategy by J.P. Morgan AG, sufficient time was provided for discussion with regard to new products and staff and capital levels in particular. The minutes of the Management Board meetings are kept by an employee from the Legal Department.

For its meetings the Supervisory Board receives an up-to-date summary of the topics discussed in the Management Board meetings, in order to have a detailed overview – for discussion, comments and decision-making – regarding the course of business, newly planned business activities, financial trends, risk capacity, communication with supervisory bodies, the status of current projects, in particular the implementation of the Group-wide Brexit strategy, as well as about the work carried out by the Second and Third Line of Defence functions.

The Supervisory Board's Risk Committee meets at least four times a year and forms an opinion of the risk-bearing capacity of J.P. Morgan AG and of the trends in the risk profiles in the various risk categories. In addition, the Risk Committee is also closely involved in defining the recovery scenarios and the analysis thereof. The Risk Committee of the Supervisory Board met four times during 2019 and, so far, once in 2020. The Internal Auditor also informs the Supervisory Board in writing on a quarterly basis concerning audits that have been conducted and their results.

The Supervisory Board's Audit Committee generally meets together with the auditors twice a year to discuss the audit plan and the annual financial statements and audit opinion. In 2019, the Audit Committee reviewed the consequences of the Annual Audit Reform Act [Abschlussprüfungsreformgesetz, AReG] and its implementation at J.P. Morgan AG. The Supervisory Board's Remuneration Committee and Nomination Committee met as per requirement during 2019. Minutes of the meetings of the Supervisory Board and its committees are taken by an employee from the Legal Department or an external lawyer.

INTERNAL CONTROL SYSTEM

The Wholesale Payments, Securities Services, Commercial Bank and Markets business divisions are managed by two members of the Management Board for Markets – and reviewed by a member of the Management Board – Back Office. As of May 31, 2019, Mr Gunnar Regier took over the Markets division from Mr Stefan Behr, who is now focussing on managing the other business divisions.

In addition to the regular meetings of the Management Board and the Supervisory Board, the Local Operational Risk & Control Committee ("LORCC"), which brings together Operations, all control functions and all Corporate Functions, and which is chaired by the CFO, manages the day-to-day Corporate Governance on behalf of the Management Board. The corporate functions of J.P. Morgan AG also support, in addition to the business areas of the Bank, all other group units at the Frankfurt am Main site and its own branches. In addition, there is an Outsourcing Forum that evaluates planned outsourcing projects for their risk aspects to ensure a proper business organization, monitors compliance with regulatory requirements and serves as an escalation point in case of inadequate performance by the outsourcing companies. During 2019, the Outsourcing Forum focused on implementing the EBA Guidelines on Outsourcing. In addition, there is a regular Regulatory Change Forum which identifies new legal regulations and requirements, chaired by the MaRisk Compliance Officer. The Regulatory Change Forum is also responsible for monitoring their correct implementation. Finally, the Technology Forum, in which compliance with BAIT regulations is monitored, ensures that potential system failures and measures arising from these are assessed, and new technology projects are discussed.

In addition, the Management Board has mandated the Risk Oversight Committee, which is chaired by the CRO and where experts in all significant types of risk are represented.It is responsible for monitoring J.P. Morgan AG's risk policy, developing suitable methods and procedures for assessing risk-bearing capacity, for analyzing individual risk events and regularly informing the Management Board about the risk profile of J.P. Morgan AG. In 2019, the focus was, on the one hand, on the development of new recovery scenarios in view of the expanded business activities, and, on the other hand, on the implementation of the new ECB requirements for the "Internal Capital Adequacy Assessment Process" ("ICAAP"). The risk functions are working closely with the CFO on this.

In addition, the Management Board delegated liquidity management and the compliance with regulatory framework requirements, especially LCR, to the EU Asset & Liability Committee, which is chaired by the Head of Treasury of J.P. Morgan AG. The focus in 2019 was, in particular, on the introduction of the "Internal Liquidity Adequacy Assessment Process" ("ILAAP"). There is also a close coordination with the CRO and CFO with regard to the implementation of J.P. Morgan AG's Brexit strategy, the updating of a recovery plan and the implementation of a new ICAAP approach.

During the monthly meetings of the Business Control forums, which generally cover business activities of one business unit in EMEA and in which Sales, Operations and Control functions participate, the business development, KPIs and KRIs, feedback from customers, strategic projects, industry trends as well as changes in the legal or regulatory environment and their impact on the respective business unit are discussed. The Management Board is thus enabled to identify changes or risks in the business performance in a timely manner and to make appropriate decisions and implement the necessary measures.

SEGMENTS AND ESSENTIAL PRODUCTS AND PROCESSES

J.P. Morgan AG is an integral component of the worldwide J.P. Morgan Group and constitutes the core of group activities in Germany. As a result of the Group-wide Brexit strategy, J.P. Morgan AG is now one of the two strategic group companies for customers in the EU, alongside with J.P. Morgan Bank Luxembourg S.A. For J.P. Morgan AG it is most important that the Bank is fully embedded in the various business areas of the Corporate & Investment Bank of the Group, since it is only thanks to the international network of our customer-oriented services that we are able to live up to the Mission of the J.P. Morgan Group "First class business in a first-class way". In addition to the core business areas of the previous year, as the Group's central bank for Euro payment transactions as well as acting as depositary and global custodian for the German investment market, in 2019 J.P. Morgan AG further expanded its core activities in the Markets business.

In 2019, the main focus was on the controlled expansion of the new business areas, in particular in Markets, as well as the expansion and completion of our product range in Wholesale Payments, without losing our focus on efficient business processes, the quality of outsourced processes, the implementation of effective controls and the interaction with our customers. We will continue to pursue this direction also in 2020.

Wholesale Payments

Wholesale Payments is the new business division within the J.P. Morgan Group, covering Treasury Services and Global Trade. The necessary restructuring activities for this business division was also implemented by J.P. Morgan AG. This allows us to offer our customers solutions for payment services, working capital management and liquidity management across different industry segments and markets. Our goal is to increase the range of the products offered to our customers through better coordination of our sales channels.

Treasury Services

J.P. Morgan AG bears global responsibility within the group for the area of euro-clearing operations. 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. We are continuing to build up our position as the leading Euro-clearer in TARGET2 and EBA with offers to our multi-national corporate customers and financial institutions in Germany and abroad.

On the basis of these infrastructure services, our sales teams offer cash management solutions for corporate clients, insurance companies, asset managers, and financial institutions. Advanced technology and expansion of the Group's locations within the scope of the Global Corporate Banking concept enable our sales teams to offer ever more comprehensive global cash management solutions that provide benefits in liquidity management, particularly for our international clients. Together with our services offering, this has allowed us to continue to grow with selected, international target clients, above all in global cash management and in trade finance management.

In 2019, J.P. Morgan AG successfully expanded its range of products and services in the Treasury Services business. In particular, we should mention the offering of accounts and payment processing in 38 currencies, as well as the introduction of SEPA Instant. In the next few years, J.P. Morgan AG will continue to expand in this area, as existing customers of J.P. Morgan Group move their accounts and related cash management activities from the UK to J.P. Morgan AG, meaning the competitive position of J.P. Morgan AG is strengthened with new and additional mandates in the Corporate Cash Management business.

Global Trade

Global Trade offers corporate customers and financial institutions financing and hedging solutions along the whole value creation chain, to enable the best possible use of their liquidity, as well as services relating to international documentary business. These include, among others, export financing, supply chain financing, but also hedging instruments such as letters of credit, debt collection and guarantees.

In 2019, the product range was expanded as part of the groupwide Brexit strategy and a start was made on centralising business activities involving EEA customers at J.P. Morgan AG. This process is not yet complete, and will continue to be a focus in 2020.

Securities Services

In the global Securities Services business area of the J.P. Morgan Group, J.P. Morgan AG acts as a regulated custodian in Germany and has been providing Global Custody and Custodian Services for institutional customers since 1995. J.P. Morgan AG currently manages a total volume of € 341 billion under this heading for its customer base (direct investors and investment companies managed by wealth management companies), making it once again this year one of the largest custodians in Germany.

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 relevant investment assets and the investor. Within the framework of its control functions, J.P. Morgan AG makes sure in its role of custodian to supervise the capital management company's day-to-day activity in a timely manner with respect to the relevant details and check its compatibility with the statutory provisions, supervisory law standards, and contractual provisions.

In addition to regulatory control tasks and services relating to the custody of securities and settlement of trading transactions, we offer a range of additional services, including the reporting system, as part of the wider services offered to customers.

In addition, the German custodian market is still characterized by further new legal and regulatory requirements and a continuous growth in competition. For custodians, one of the challenges is to find an efficient way to be continuously aware of and comply with the large number of statutory and regulatory requirements for different fund types and investor groups.

In the continuing low interest rate environment, the risk appetite of institutional investors has increased. In their search for returns it can be seen that institutional investors are highly flexible and will examine and implement alternative investment solutions. For a custodian, it is imperative to accept this strategic orientation and apply the resulting product-related and operational adjustments. A balancing act is needed between specialization and the demand for modelling all products.

As a custodian, J.P. Morgan AG has accepted this strategic focus and is implementing the resulting product-related and operational adjustments. For the coming year, the expansion of services in the public funds sector is planned.

Markets
As part of implementing the Group-wide Brexit strategy of establishing J.P. Morgan AG as the future central legal entity for the Banking and especially Markets divisions of the Corporate & Investment Bank within the European Union, J.P. Morgan AG went "live" for selected areas in 2018.

In October 2018, J.P. Morgan AG took over the existing memberships of European exchanges and Central Clearing Counterparty Houses ("CCPs") from J.P. Morgan Securities plc ("JPMs plc") with its headquarters in London, UK, in the area of "Global Clearing", and started the execution and clearing of orders for exchange-traded derivatives (Futures & Options) on behalf of JPMs plc. The transfer of all relevant memberships to J.P. Morgan AG, as well as the subsequent migration of customers was completed – as planned – in the first half of 2019.

In December 2018, the "Cash Equities" area, which includes stock orders on behalf of customers, has started its operations. J.P. Morgan AG also implemented the necessary memberships for European exchanges in this area, and transferred the first customers to J.P. Morgan AG. Business transactions on behalf of JPMs plc are now handled via the newly established stock exchange memberships of J.P. Morgan AG.

Until March 2019, all significant activities in the "Macros", "Spreads" and "Equities" areas, ranging from foreign exchange management and interest rate management up to equity and commodity trading, were also taken over and moved into active operation.

By the end of 2019, J.P. Morgan AG was therefore already able to perform new transactions for EEA customers who had previously worked with JPM entities in the UK in the above-named business areas, via J.P. Morgan AG in the event of Brexit. In line with our risk policy, J.P. Morgan AG transfers a large portion of the resulting market risk directly to the central risk management units of the Group.

Over the course of 2019, more than 2,300 customers in the "Global Clearing" area and another 400 customers for the remaining Markets areas had already been activated. In addition, some customers novated their existing derivative positions to J.P. Morgan AG.

Lending
As an additional step in the implementation of the Group-wide Brexit strategy, parts of the existing loan portfolio, which were previously held by JPM units in the UK, were transferred to J.P. Morgan AG in the 1st quarter of 2019. This made J.P. Morgan AG a strategic unit for the lending business within the Group for corporate customers in the EEA area.

New Product Areas

As part of implementing the Group-wide Brexit strategy to establish J.P. Morgan AG as the future central legal entity for the Banking and Markets businesses of the Corporate & Investment Bank within the European Union, J.P. Morgan AG had started the sales of products in 2019, as described above, for business activities in the Markets and Lending business.

It is also worth to mention that, since April 2019, J.P. Morgan AG has been the first foreign bank in Germany to participate as a Clearing Member in SEPA Instant, and since then we have steadily increased the processing volume.

As of now, a series of new products in the Wholesale Payments and Markets business are already prepared to be launched later in the course of 2020. No new product launches are planned for the Lending business so far.

MARKETS AND COMPETITIVE POSITION

In the Wholesale Payments business, a distinction needs to be made between customer service and the operational hub for euro clearing operations. In its relationship management, J.P. Morgan AG is responsible for institutional clients, banks, corporate clients and public sector clients primarily based in Germany or Austria. This also includes subsidiaries based in Germany or Austria whose parent companies have their headquarters in other countries. With global responsibility for the euro-clearing operations area within the Group, which, in addition to the core team in Frankfurt am Main, also encompasses teams in affiliates of the Group in Mumbai (India) and Manilla (Philippines), J.P. Morgan AG serves clients from different countries in which the J.P. Morgan Group is active. In its function as euro clearer in TARGET2 and EBA, and measured in terms of the amount of the payments executed on a daily basis, J.P. Morgan AG is among the largest providers of payment services in Germany.

In the Securities Services business, mainly domestic special alternative open investment funds (special securities funds), which fall under the Capital Investment Code, as well as direct investments by institutional customers and global custody mandates are currently managed. This places J.P. Morgan AG among the largest custodians in Germany this year.

Target customers in the Markets business, in addition to a specific segment of Special Purpose Vehicles (SPVs) who want to claim relief from US regulations under the EU NCMR, are those with headquarters in the European Union who will likely no longer be able to contract with the J.P. Morgan entities in the UK in future due to the expected consequences of a hard Brexit. While the migration of customers in the Global Clearing division was substantially completed at the end of 2019 after J.P. Morgan AG fully took over the access to continental European trading venues and CCPs from J.P. Morgan Securities plc, the migration of the remaining customers in the Markets business experienced the expected delays due to the ongoing negotiations between the UK and the EU, so that J.P. Morgan AG was not able to gain a clearly defined independent profile by the end of the financial year. In the view of the Management Board, this will change significantly towards the end of financial year 2020.

KEY LEGAL AND ECONOMIC INFLUENCE FACTORS

The central topic in 2019 was once again the political process relating to the planned departure of the United Kingdom from the European Union, and the associated very extensive preparatory measures within the financial sector. Due to the role planned for J.P. Morgan AG within the Group as a central client-facing entity for customers with headquarters in the

European Union, we also initiated an intensive dialogue with our future target customers.

The matters at the top of the agenda for discussions with customers continued to be, on the one hand, the need for effective liquidity management in view of the ongoing negative interest rates from the European Central Bank, and, on the other hand, our customers' expectation that greater internal efficiency would be immediately passed on in price discounts. In turn, Markets customers are concerned about the economic impact of the US political discussions with China and with the EU, but also about the political stability of the Middle East from Turkey to Saudi Arabia.

The legal and supervisory environment was characterized in 2019 by a series of supervisory changes, particularly EU initiatives, whose implementation did not, however, have any substantial influence on the core business or client relationships of J.P. Morgan AG.

Topics with continued focus beyond 2019, over the next few years, are increasing digitalization and its impact on our business processes, IT security with an ever-growing threat from cybercrime, and finally the implementation of the new regulatory requirements.

PERSONNEL DEVELOPMENT

In 2019, the number of employees at J.P. Morgan AG increased compared to the previous year, from 305 to an average of 361[1]. The staff turnover rate was the same as last year at 12 %, but still within our target range of 8 % – 12 %. 22 % of the total number of employees 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").

BUSINESS DEVELOPMENT

For J.P. Morgan AG, 2019 was a year of very good results compared to the previous year.

Our interest income increased by around 121%, primarily thanks to the set-up of a loan portfolio and to the global clearing activities taken over at the end of 2018.

The trend for commission income was also very satisfactory in 2019. After an increase of around 6 % in 2018, commission income grew by 116 % in comparison to the previous year, mainly due to the Markets business in particular. The Wholesale Payments and Securities Services business were also able to produce increased commission income.

However, the net income from the trading portfolio showed a loss in 2020, which is essentially due to the adjusted accounting logic for debit valuation adjustments and funding value adjustments.

Other operating income, which mainly brings together the valuation of our pension liabilities and our pension assets, in turn increased by around 67%.

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

Overall, we regard 2019 as a very satisfactory year.

Allowing for the delays in the implementation of the Brexit strategy due to the postponement of the UK exit date from the European Union, business developments in all our core activities were within the range of our expectations.

For the full 2019 financial year, J.P. Morgan AG made a contribution to the JPM Group-wide "Legal Entity Simplification Strategy", by merging Whiteshire Debt Solutions GmbH (WDS) into J.P. Morgan AG. The merger was registered on December 11, 2019 in the Commercial Register B of the Frankfurt am Main District Court. The purchase price, which was paid to the parent company of WDS, Blackshire Holding Inc., a company incorporated under the law of the Federal State of Delaware, USA, was € 1.6 million. The purchase price was derived using a net asset value calculation. WDS had neither an active business operation nor any active employees. Assets and liabilities were transferred at their book value.

Earnings, Financial and Assets Position

EARNINGS

Thanks to the expansion of business activities, especially in the Markets business, but also in Wholesale Payments, J.P. Morgan AG succeeded in significantly increasing commission income in 2019. For this financial year, commission income was 116 % above the previous year, with a total of € 195.7 million. Compared with the previous year, interest income has also shown a positive trend, and at € 21.8 million is € 12.0 million higher than in the previous year. The new activity in the Lending business and the positive growth in the Global Clearing business can be seen as factors with a significant impact on interest earnings. The budget figures for 2019 were not achieved for both interest and commission income, since these were created based on the assumption of a hard Brexit on March 1, 2019.

The trading portfolio earnings, totalling € –6.6 million in 2019, were significantly below the previous year in the amount of € 13.8 million. The decrease reflects the effect from the change in the accounting logic for the DVA/FVA amounting to € 10.0 million. The trading portfolio result is essentially based on the change in the approach of presenting the debit valuation adjustments (DVAs), funding value adjustments (FVAs) and credit value adjustments (CVAs) also from transactions in the Global Credit Trading division. Our other operating income increased to € 65.5 million, which represents an increase of 67% compared to the previous year. This increase includes the positive pension result amounting to € 21.9 million.

Our total expenses increased in 2019 by around 40%, which is primarily due to the increase in additional resources, the transfer of employees to J.P. Morgan AG, London Branch, and other costs incurred in the implementation of the Brexit strategy.

This increased earnings from normal business activity from € 5.8 million to € 79.5 million. The annual earnings for 2019 are based on earnings after tax totalling € 41.2 million.

This result means a Return on Equity of 0.8 % compared to –0.4 % in the prior year.

FINANCIAL POSITION

Principles and Objectives

The balance sheet at J.P. Morgan AG is shaped by the deposits of its institutional clients and banks as part of the euro-clearing business and the custodian business, and shows a markedly stable financial situation in 2019. We only enable our customers in the two business areas of Securities Services and Wholesale Payments to access credit by granting intraday lines and short-term overnight overdraft lines in case of timing issues. In addition, the business in the Lending business from transferring loan portfolios to J.P. Morgan AG, plus new business in this area, had an impact on the composition of the balance sheet.

Total assets as at December 31, 2019 rose significantly by 115% compared to the balance sheet as of December 31, 2018. The fundamental drivers were the capital increases totalling € 1.8 billion in February 2019 and € 0.9 billion in October 2019. In addition, there were significantly higher positions in the trust sector held by the Global Clearing business and an increase in intercompany liabilities.

J.P. Morgan AG also had sufficient liquidity on hand at all times in 2019. With a liquidity coverage ratio of 222.4% as of December 31, 2019, J.P. Morgan AG was also significantly above the compulsory minimum rate of 100% which has applied since 1 January 2018.

Capital Structure

In comparison to December 31, 2018, the liable equity capital had increased thanks to the profit from the prior year which was transferred to reserves, and above all thanks to the capital increases carried out in February and October 2019 in the form of one simple additional payment by J.P. Morgan International Finance Limited as the sole shareholder totalling € 1.8 billion and € 0.9 billion. In addition, a capital increase from company funds was carried out on the basis of a resolution at the annual general meeting on August 22, 2019 and recorded in the commercial register on September 19, 2019. Capital reserves totalling € 1.7 billion were converted into share capital. On the balance sheet as at December 31, 2019, this results in a Tier 1 capital ratio of 27.8% and a total capital ratio of 28.8%. 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, 2019:

Tier 1:	€ 4,980	million in share capital, reserves and funds for general banking risks
Upper Tier 2:	€ 0	million
Lower Tier 2:	€ 186	million subordinated loan
Total Tier 2:	€ 186	million

Off-Balance Sheet Business

In the Lending business there is an irrevocable loan commitment for € 13.0 billion as result of the transfer of the lending portfolio and growth of the portfolio in this business unit. In addition, in the Wholesale Payments Trade business, J.P. Morgan AG has largely continued to collateralize its own credit risks in the form of contingent liabilities directly within the rest of the Group. For the issuance made by J.P. Morgan AG, we have concluded with JPMorgan Chase Bank, N.A., a total return swap for risk hedging as well as an interest rate swap to hedge the interest rate risks from the securities portfolio.

ASSET SITUATION

Receivables from our customers increased substantially by € 2,516 million to € 2,688 million due to the new activities in the Lending business. Deposits also increased significantly by € 1,926 million to € 8,806 million. Receivables from credit institutions rose due to greater treasury activities by € 14,764 million to € 33,412 million (of which deposits with central banks: € 24,755 million). Liabilities to banks increased at the same time by € 11,246 million to € 20,951 million at the balance sheet date. Other reasons for the growth of the balance sheet were the increase in trust assets and trust liabilities from Global Clearing activities, totalling € 3,220 million. The securities portfolio with first-class bonds remained unchanged at a book value of € 51 million as of December 31, 2019.

These increased the total assets of J.P. Morgan AG by around 115 % compared to the balance sheet date in the previous year, and stood at € 44,156 million as of December 31, 2019. The total capital ratio was 28.8 % as of December 31, 2019 with the average for 2019 being 37.1 %.

€ M	2019	2018
Net revenue	276.4	146.8
Net interest income	21.8	9.9
Net commission income	195.7	90.6
Loan loss provision	28.8	–
Total expenses	196.9	141.0
Result from ordinary course of business	79.5	5.8
Net income	41.2	−8.8
Equity	**5,073**	**2,367**
Return on equity (RoE) (Earnings after tax result/equity)	0.8 %	−0.4 %
Return on Investment (Net income/balance sheet total)	0.09 %	−0.04 %
Cost-Income Ratio[1] (Total expenses/net earnings)	71.23 %	96.07 %
Pre-tax profit margin (Income from normal business activities/ Net revenue)	28.77 %	3.93 %
Tier-1 capital ratio	27.8 %	169.7 %
Total capital ratio	28.8 %	183.1 %

[1] Indicator before loan loss provision

Financial and Non-financial Performance Indicators

FINANCIAL PERFORMANCE INDICATORS

Financial performance indicators, defined for internal control of J.P. Morgan AG, comprise in particular absolute KPIs (Key Performance Indicators) such as the net interest income, net commission income, and Income before Tax and extraordinary items. In addition, return on equity, cost-income ratio, and the pre-tax profit margin are used to measure performance. The KPIs are derived directly from the information in the balance sheet and income statement of the annual financial statement, and are as follows for the current and previous financial years:

The after-tax profit increased from € −0.8 million to € 41.2 million in 2019 despite initial risk provisioning for a total of € 28.8 million for the newly created loan portfolio. Since the equity capital was also increased from € 2,367 million to € 5,085 million in 2019, as part of our Brexit strategy, our return on equity (RoE) improved over the previous year, but only from −0.4 % in the prior year to 0.8 % in 2019. The cost-income ratio fell from 96.1 % in the prior year to 71.2%. Due to the expanded business model as part of the Brexit strategy, our total capital ratio fell from 183.1 % to 28.8 % despite the increase in equity.

NON-FINANCIAL PERFORMANCE INDICATORS

Non-financial performance indicators for 2019 that are comparable with the prior year are largely focused on the role of

J.P. Morgan AG as a transactional bank as clearer of euro payments, and also as custodian. In the Global Clearing and Markets business, no comparative figures are available for 2018 due to fact that these businesses have been newly started. Along with the actual volumes settled by J.P. Morgan AG for its clients, we focus on the degree of automation and the actual losses from operational errors. In addition, we measure the staff turnover rate as an indicator of the stability of our operating platform from the point of view of employees.

	2019	2018
Number of payment instructions – HIGH VALUE (TARGET2 & EBA EURO1)	5.7 million	5.1 million
Number of payment instructions – Low Value (STEP2 only)	99 million	83 million
Straight-through processing rate	99.46 %	98.28 %
Assets under Custody (in € billion)	341	316
Customer satisfaction – Custodian (Internal Score)	100 %	100 %
Global Clearing – Percentage of active customers	90 %	n/a
Markets – Percentage of customer contracts signed	79 %	n/a
Markets – Percentage of active customers	13 %	n/a
Operational losses (in € million)	2.1	0.1
Fluctuation rate	13 %	12 %
Gender Diversity (VP-Level)	38 %	42 %

The non-financial performance indicators, which describe the volume of business at J.P. Morgan AG, show healthy growth again in 2019, for the euro payment processing, and a continued very low level of errors which is the result of a very high degree of automation.

In the area of the custodian bank, we were able to maintain the extremely good result of our internal scoring model from the previous year with respect to client satisfaction thanks to the high level of reliability and quality of our customer service and operations function in the handling of client inquiries and instructions. As a result of our customer focus and operational excellence, we were not able to increase but to maintain the high value of assets that our customers entrusted to us as a custodian.

While we were able to almost conclude the migration of customers in the Global Clearing business with an activation rate of 90%, our preparations for potentially commencing business with individual market customers have also made good progress, which is reflected in a ratio of 79% of the customer contracts that needed to be closed as a prerequisite for starting up the business. However, only 13% of customers were willing to switch over their customer relationship to J.P. Morgan AG in 2019, given the ongoing discussions about a possible transition phase past March 1, 2020. Since the migration of customers is a crucial success factor for the implementation of J.P. Morgan AG's Brexit strategy, the relevant performance indicators were also defined for the first time for 2020.

From an operations perspective, the goal continues to be greater automation, which goes hand-in-hand with efficiency enhancement and cost savings, as well as with the reduction of sources of error.

Due to the expansion in business activities in the Markets and Lending business, the operational losses in 2019 significantly increased compared to the prior year, but were within the range of our expectations. "Operational excellence" remains our guiding principle, and is connected with our efforts to achieve constant improvement in our technology platform, the internal control systems and the ongoing training of our employees. It is important to us that we analyze operational errors in detail and draw the necessary consequences here for the future. It is for this reason that we have a particularly strong commitment to an open "risk and error culture".

The fluctuation rate was slightly higher in 2019 compared to the previous year. In view of the Brexit plans of many of our competitors, who are also expanding their presence in Frankfurt, we are seeing ongoing competition for talent in the financial sector in Frankfurt. Therefore, our goal of continuously improving the work environment and the career potential of our employees remains in place. One of our priorities will continue to be the decisive implementation of a "great team & winning culture". In addition to the Group-wide "Leadership Edge" training programme, the implementation of a revised employee evaluation system, which should significantly improve the feedback culture within the Group, there is a further focus on the subject of "diversity". Our intention here is to make a further effective step within our organization through the active support of the various business resource groups of the firm, in providing a platform to meet the individual needs of our employees and so enable improvements in combining the private and professional environments.

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 in the corporate culture of JPMorgan 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 and JPMorgan Chase Bank, N.A., 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
- Transactions in total return swaps and OTC derivatives
- 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.

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 YEARS

After the outbreak of the COVID-19 pandemic at the beginning of 2020, J.P. Morgan AG and the Group began to closely monitor the spread of the virus and its effects. We will continuously adapt the measures taken to protect our employees and the well-being of our customers in line with the recommendations of the health authorities and government agencies.

At this point, we are not in a position to issue a statement about the medium-term effects of the pandemic over the 2nd half of 2020 and beyond. Essential conditions for a rapid recovery are, however, firstly a quick damping down of the pandemic by consistent actions of each individual country, and on the other hand the effectiveness of the monetary and financial policy measures from each of the central banks and governments to provide financial support to the real economy in this critical phase (see also additional report in the notes to the accounts).

The matters that were in the foreground before the COVID-19 pandemic, such as the as yet unresolved trade disputes with China originating from the USA, the upcoming exit of the UK from the European Union (Brexit) and the political uncertainty in the Middle East, may once again in the 2nd half of 2020 move to centre stage and possibly lead to greater uncertainty in the markets and thus slow down the recovery from the crisis.

In our view, in 2019, the political uncertainties about the UK's exit from the European Union, the investment costs of preparing for Brexit and the extensive associated organizational changes were among the greatest challenges for the banking sector in Europe. In 2020 and 2021, the sustainable implementation of these business strategies will remain in the foreground. We are assuming that the necessary investments in systems and processes for higher capital requirements, a continuing low interest policy and continuing price competition will have a negative effect on the comparatively low profitability of banks in Europe and especially here in Germany. While we as J.P. Morgan AG will also keep a very strong control on our cost-income ratio, it is equally important for us to further intensify the dialogue with our customers and to again look more closely at the changes in customer needs. Investment in technology, adjustments to business processes, and also the retention of experts and talented employees all play an important part in this, if the Bank wishes to retain or even improve the competitive position.

With the exit of the UK from the European Union, a new calibration will begin, because so far all institutions have been able to continue to act on the basis of existing European regulations, as we have known them for years in the internal market. It will be crucial what form the future relationship between the EU and the UK will take. In addition, the work of the new EU Parliament and the new EU Commission in creating a capital market union within the EU, as well as regarding mutual recognition and equivalence of supervisory regimes, will be extremely important.

In this context, the regulatory development in the Sustainable Finance area and its impact on business activities in the banking sector needs to be closely observed. We see, on the one hand, a new business opportunity here to establish ourselves in a new sector for the long term, with genuine financial products and efficient process control, but on the other hand inherent risks in the event of overregulation, which could have a negative influence on future debt financing by banks.

In the Wholesale Payments business, we see a strong basis for successfully acquiring new customers thanks to the extension of our range of services in 2019, and the expansion of existing customer relationships of J.P. Morgan AG, as well as the migration of existing customer relationships from JP Morgan Chase Bank, N.A., London Branch, to J.P. Morgan AG in 2020 and subsequent years.

In the Securities Services business, we believe that price competition will continue and this will increase the necessity to reduce operational costs on the one hand by implementing potential economies of scale leveraging the Group-wide infrastructure, and on the other hand by streamlining the value creation chain. Our task will be to work together with our customers to work on intelligent solutions, on how we can better match our customer needs. In addition, plans to expand our target segments over the next two years remain on the table.

For the Markets and Banking business, in 2020, the main focus is on the complete takeover of the existing business relationships with customers in the European Union, who were previously managed by JPM Group companies in the UK. Our efforts seek to achieve a seamless transition, especially in relation to the provision of financial products and financial services in the Single European Market for our customers. As J.P. Morgan AG, we would like to make a contribution here so that the J.P. Morgan Group can retain or grow its market share in EMEA in the individual business areas within "Markets". We also see issuing loans as an important product to provide sustainable support to business activities in the Wholesale Banking, Banking and Markets business. We therefore assume that our portfolio and its associated interest and commission income will continue to grow in 2020.

The activation of the branch in London was followed in February 2020 by Paris and Copenhagen. Before the end of the first half of 2020, we plan to open the remaining 7 branches in the EEA by transferring employees from other affiliates of J.P. Morgan AG. The number of employees of J.P. Morgan AG will therefore increase in 2020 from an average of 361 to over 1,000 employees.

In parallel, we are continuing to implement capital models in close consultation with the banking supervisors, we are thinking about further strengthening the Management Board and we are planning to continue strengthening the capital basis of J.P. Morgan AG to guarantee the full implementation of our Brexit strategy.

For 2020, we expect – as in previous years – a moderate increase in the number of payment instructions in the high-value area and SEPA payments, and moderate growth in assets under custody. The straight-through processing rate for payment transactions should remain at the very high level of the previous year in 2020, with our goal being to further increase the level of automation in processing customer orders for the custodian activities in 2020. We expect a similar development for the Global Clearing and Cash Equities areas within Markets. For the remaining business areas in the "Markets" and "Banking" areas, we expect all customer relationships to be transferred to J.P. Morgan AG by the end of 2020.

In addition, it is important to continue to sustainably strengthen the quality and efficiency of our customer service. With respect to the fluctuation rate, we expect to be able to maintain the level of the previous year, because we are convinced that we will remain attractive to talented people as a result of the group's strong competitive position, outstanding career and development opportunities, inclusive work environment, and job flexibility.

In addition to the above risks, we see, the "Execution Risk" of the Brexit strategy across the entire European banking sector as one of the core risks that can threaten the stability of the financial markets, even if we classify this risk as significantly lower as compared to the previous year, thanks to the significantly longer preparation period. Another risk continues to be the disproportionate regulation of the financial markets. As in the previous year, we have a special focus on the further burden caused by the intensification of regulatory tasks and reporting obligations – triggered by new regulations, which need to be offset by cost savings in the operational areas if we are to avoid a long-term impact on J.P. Morgan AG's earnings situation.

We see further risks in the political destabilization of individual countries or regions that could lead to a significant worsening of the market situation which would negatively affect the creditworthiness of our customers and so lead to sustainable loss of earnings.

EXPECTATIONS FOR THE BANK'S FUTURE PERFORMANCE

After the outbreak of COVID-19 in early 2020, J.P. Morgan AG and the Group initiated increased measures, based on our assessment, for risk monitoring, including exposure monitoring, adapted reporting and ad hoc reviews. The credit quality of our customers is being closely and continuously monitored, as well as the impact on the financial and capital situation and also the operating result of J.P. Morgan AG. It is possible that the credit quality of some customers will deteriorate, as well as the access to liquidity. In turn, this may lead to an increased percentage of loans that default, in case interest payments and repayments or margin calls are not paid as agreed. Provisions, credit costs and write-downs will increase accordingly. As J.P. Morgan AG is included in the Group-wide risk management, we do not expect there to be significant effects on the income and capital situation of J.P. Morgan AG. We should also mention here that we have already completed a further capital increase of € 932 million at the end of March to signal to our customers that J.P. Morgan AG also has a solid capital base for 2020.

Based on the Brexit strategy that J.P. Morgan AG will take over business relationships with customers in the European Union for the Banking and Markets business in future, we will see significant increases over the previous year above all in interest income, commission income, and also in the trading result for 2020. For the existing Securities Services and Wholesale Payments business units we are assuming stable growth, and we expect a moderate increase in commission income in Wholesale Payments. We also expect, based on the underlying planning, that cost items will also increase in the areas of "Banking" and "Markets", and remain stable in existing areas.

For 2020, we expect a significant increase in our after-tax profit to € 150 million, with a further improvement in the cost-income ratio to 69%. For the full implementation of the Brexit strategy, we plan further capital increases of both € 16.7 billion to the core capital as well as € 10.3 billion to the subordinated capital by the end of 2020, so that the necessary MREL requirements can also be met. We plan to raise the core capital ratio for 2020 to a level of 22%, with an expected increase in the total capital ratio to 38% by the end of the financial year.

Our planning is based on the assumption of completed activation of customers in the Markets business, which was still at just 13% at the end of 2019. We also assume a further increase in our payment volume in TARGET2 and EBA EURO1. Operational losses are anticipated to rise in 2020 due to the expansion of our business activities, and we have set a target of € 5 million as the maximum value here. With regard to the gender diversity indicator, we will try to retain our previous rate of 38 %; however, in 2020 we do not expect any improvement.

One consequence of the COVID-19 pandemic may be a delayed implementation of our Brexit strategy, so that the increase in earnings is lower than originally planned. In accordance with our actual implementation steps, we will be able to increase our equity in parallel to this through further contributions from our wholly owning parent company.

ASSUMPTIONS

These expectations are based on the assumptions of a stable political environment in Germany and Europe, successful crisis management with regard to the containment of the current COVID-19 pandemic as well as a rapid recovery in the Eurozone's economic performance over the next two years. Worldwide, we expect a decline in annual economic growth in 2020, which would be more significant without government support, and then a recovery phase in the following year.

In addition, we assume that the ECB, in addition to the Pandemic Emergency Purchase Program (PEPP) will continue to adhere to its negative interest policy. We have also made the assumption that the euro could lose up to 3.5 % over the US dollar over the next two years.

DEVELOPMENT OF SEGMENTS

In our budgets for 2020 to 2022, we assume that the areas of "Banking" and "Markets" will have the most significant influence on the level of overall income and will contribute a considerable portion to the increase to approx. € 810 million in total. In the areas of Securities Services and Wholesale Payments, we are assuming they will continue to be stable or, in the latter case, show a moderate increase in overall revenues.

FINANCIAL SOLVENCY

According to our plans, J.P. Morgan AG will also have sufficient liquidity available at all times in 2020.

Risk Report

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 employees;
- 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:

- 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.
- 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 associated with an adverse outcome resulting from inadequate or failed internal processes or systems; human factors; or external events impacting processes or systems; it includes compliance, conduct, legal, and estimations and model risk.

Impacts of risks can be both quantitative and qualitative. Impacts of risks manifesting may include a reduction in earnings and capital, liquidity outflows, and fines or penalties, or qualitative impacts such as reputational damage, loss of clients and customers, and regulatory and enforcement actions.

RISK STRATEGY AND MANAGEMENT

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 ("Markt") and second line ("Marktfolge") 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.

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.

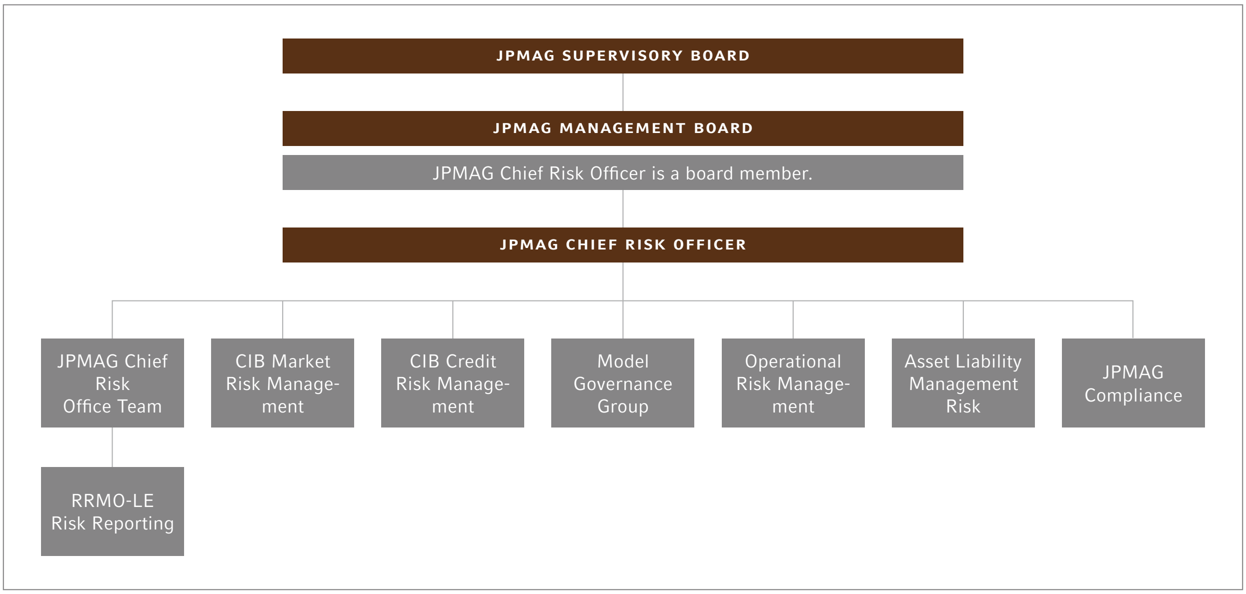
In addition, other functions contribute to the J.P. Morgan AG control environment, including Finance, Human Resources, Legal, and Control Management.

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 senior management, the J.P. Morgan AG Risk Oversight Committee (ROC), or the J.P. Morgan AG Management Board.

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

[1] Europe, Middle East and Africa



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 regular basis.

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, in 2019/2020 the following risk categories are considered material for J.P. Morgan AG:

- Strategic risk including capital risk, business risk, and liquidity risk,
- 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.

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, risk appetite quantitative 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 risk 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.

INTERNAL CAPITAL ADEQUACY ASSESSMENT PROCESS (ICAAP)

The Internal Capital Adequacy Assessment Process (ICAAP) including the risk-bearing capability analysis is a core component of the overall management of J.P. Morgan AG, with the goal of guaranteeing a suitable risk profile and adequate capital at all times.

During the financial year 2019, the Going-Concern and Gone-Concern approaches employed for risk-bearing capacity have been retired, and replaced by a normative and economic perspective adapting the ICAAP and ILAAP guidelines published by the European Central Bank[1] on November 9, 2018. J.P. Morgan AG takes this change as an opportunity to review and adjust the entire ICAAP process in line with the growth of the entity.

[1] The entity has been under the supervision of the European Central Bank since June 2019.

Both perspectives aim to ensure the capital adequacy and continuity of J.P. Morgan AG's business on an ongoing basis.

The normative internal perspective refers to a multi-year assessment of the ability to fulfill all capital-related legal requirements and regulatory demands on an ongoing basis under a baseline and multiple adverse scenarios.

The economic internal perspective aims to maintain capital adequacy using internal economic capital models and an internal capital definition.

J.P. Morgan AG's ICAAP consists of several components which aim to ensure that J.P Morgan AG maintains sufficient capital to cover the risks to which the Bank is exposed on an ongoing basis.

– Risk identification and assessment: The risk identification process forms the basis of the ICAAP and results in an inventory of all material risks for J.P. Morgan AG. Further details can be found in the section "Risk Identification".
– Risk measurement: Risk measurement methodologies and models are applied to quantify the regulatory and economic capital demand which is required to cover all material risks except for those which cannot be adequately mitigated by capital, e.g., liquidity risk.
– Capital resources: Capital resources refer to the capital available to absorb losses. 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.
– Risk appetite: J.P. Morgan AG has established a risk appetite framework expressing the level of risk the entity is willing to assume to achieve its strategic objectives. Threshold breaches are subject to a dedicated governance framework triggering management actions to safeguard capital adequacy. Further details can be found in the section "Risk Appetite".
– Capital planning: Capital planning takes into account the thresholds defined in the Risk Appetite in order to safeguard capital adequacy on an ongoing and forward-looking basis.
– Stress testing: Capital planning considers various stress test scenarios to test the resiliency and overall viability of the Bank. Normative and economic capital adequacy metrics are also subject to regular stress tests throughout the year to detect potential vulnerabilities.
– Capital adequacy assessment: Capital adequacy is constantly monitored and reported via several dedicated reports. The monitoring and assessment involve point-in-time as well as forward looking projections. Appropriate management actions are engaged should any immediate or future shortfall in capital adequacy be identified. A Capital Adequacy Statement (CAS) is produced and signed by the Management Board of J.P. Morgan AG for the first time this year.

Normative Perspective

J.P. Morgan AG can, from a capital adequacy perspective, comfortably execute its business strategy for 2020 – 2022 and even beyond. The injection of up to € 11.8 billion of further Tier 1 capital is planned for 2020. In March 2020, Tier 1 capital was already raised by € 932 million. In addition to that, Tier 2 capital can be increased by € 10.3 billion in 2020 should this become necessary to meet regulatory MREL requirements. These capital actions are meant to accommodate Brexit-related business growth in line with J.P. Morgan AG's business strategy.

J.P. Morgan AG currently plans for a CET 1 Capital ratio that does not fall below 21 % in the next three years, and for a Total Capital ratio of 34 % as of the end of 2022.

Capital methodologies in the normative perspective

– 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.
  - 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 risk (i.e. gamma and vega): J.P. Morgan AG currently doesn't have any non-delta risk due to the current back-to-back booking model. However, it has requested authorization to use both the delta plus methodology and the scenario approach to quantify non-delta risk as soon as it starts risk managing such positions.

– 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.

– Operational Risk: Operational risk capital requirements are currently calculated using the Basic Indicator Approach (BIA).

– Credit Risk and Counterparty Credit Risk: J.P. Morgan AG applies the standardized approaches to calculate its credit risk pillar 1 capital requirements. 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.
  - For securities financing and other collateralized transactions, the financial collateral comprehensive method, including supervisory volatility adjustments, is used to calculate exposure values.

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 shown in the table below. As per December 31, 2019, utilization stood at 23%. The economic capital demand is calculated by the responsible risk functions at least on a quarterly basis and reported in J.P. Morgan AG's risk reporting.

J.P. Morgan AG does not 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 2019
Internal Capital Usage under the Economic Perspective	**28 %**
Total Internal Capital	**5,038**
Total Risk Capital Demand	**1,430.2**
Credit Risk	708.2
Market Risk	8.7
IRRBB	62.3
Operational Risk	310.0
Business Risk	341.0
Pension Risk	0.0

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 derived from the Risk Inventory and therefore are a representation of the most material (partial) risks within J.P. Morgan AG. The lower and upper bound of an 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 results not capitalized elsewhere. The observed average deviation plus three standard deviations is applied on the planned result in the succeeding year.
- Pension Risk: Economic Capital is derived by stressing both assets and liabilities in J.P. Morgan AG's defined benefit pension schemes and capitalizing 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.

Economic 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 items that do not reflect the fair value concept underlying the Economic Perspective.

Furthermore, 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. This results in an internal capital that in our view is of high quality as it mainly consists of CET1 elements.

RISK CATEGORIES

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.

Requirements in %	Total Capital 2018	Total Capital 2019	Total Capital 2020	of which CET 1 Capital 2020	of which CET 1 Capital 2019
Pillar 1 requirement	8.00 %	8.00 %	8.00 %	4.50 %	4.50 %
Pillar 2 requirement	3.25 %	3.25 %	3.25 %	3.25 %	3.25 %
Total SREP Capital Requirement (TSCR)	11.25 %	11.25 %	11.25 %	7.75 %	7.75 %
Capital Conservation Buffer	1.88 %	2.50 %	2.50 %	2.50 %	2.50 %
Countercyclical Buffer	0.01 %	0.36 %	0.36 %	0.36 %	0.36 %
Combined Buffer Requirement	1.89 %	2.86 %	2.86 %	2.86 %	2.86 %
Overall Capital Requirement	13.14 %	14.11 %	14.11 %	10.61 %	10.61 %

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, senior management considers the implications for 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 leverage requirements as quantified by the leverage ratio; and
- Risk appetite as determined by Management and, expressed, for example, through the setting of internal capital target ratios above those prescribed in regulation.

Regulatory minimum capital requirements

The minimum capital requirements that J.P. Morgan AG had to comply with in 2019 consisted of:

- Pillar 1 capital requirements;
- Pillar 2 capital requirements (SREP add-on);
- Combined Buffer Requirements.

The minimum requirements for total capital increased in 2019 compared to 2018 mainly due to the fully phased-in capital conservation buffer requirement (from 1.875 % in 2018 to 2.5 % in 2019). Also, the countercyclical buffer requirement, which is intended to protect banks against risks arising when credit growth is excessive, increased from 0.01 % to 0.36 % mainly driven by increase buffer rates for Norway, Ireland, and France where J.P. Morgan AG's credit exposure to the private sector has increased.

In addition to the mandatory minimum requirements listed above, J.P. Morgan AG is also subject to a recommended own funds amount under Pillar 2 (Pillar 2 Guidance) which relates only to CET1 capital. The Pillar 2 Guidance (P2G) indicates the adequate level of capital to be maintained in order to have sufficient capital as a buffer to withstand stressed situations. Failure to comply with the P2G requirement does not constitute a breach of regulatory capital requirements. Nevertheless, we consider the P2G useful as an early warning indicator for capital planning.

Regulatory Capital and Ratios

The regulatory capital for J.P. Morgan AG increased by € 2,626 million in 2019 compared to 2018. This was driven by two capital injections (CET1 capital) to the amount of € 2,664 million in 2019 to support growth in business activities. During this period, the capital requirements increased significantly with risk weighted assets (RWAs) rising from € 1,387 million to € 17,923 million. The main drivers of the increase were new business activity in wholesale lending, expansion of the Global Clearing business and migration of trades (particularly OTC derivatives) from J.P. Morgan Securities plc into J.P. Morgan AG.

Throughout the year 2019, regulatory capital ratios and leverage ratio were well above minimum requirements and internal targets.

€ M	31/12/2019	31/12/2018
Capital		
Common Equity Tier 1 Capital	4,980	2,354
Additional Tier 1 Capital	–	–
Tier 1 Capital	**4,980**	**2,354**
Tier 2 Capital	186	186
Total Capital	**5,165**	**2,539**
Risk Weighted Assets		
Credit & Counterparty Credit Risk	15,249	1,025
Market Risk	234	84
CVA	913	29
Operational Risk	257	250
Others[1]	1,270	–
Total Risk Weighted Assets	**17,923**	**1,387**
Capital Ratios (%)		
Common Equity Tier 1 ratio (%)	27.8	169.7
Tier 1 Capital ratio (%)	27.8	169.7
Total Capital Ratio (%)	**28.8**	**183.1**
Leverage Ratio (%)	**7.3**	**9.9**

[1] Includes securitizations (€ 0.8 billion) and add-ons (€ 0.4 billion).

Capital Adequacy and 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 as and when required to maintain an appropriate level of capitalization.

Through this process, key capital related metrics such as capital ratios, large exposure constraints and Leverage Ratios are calculated and monitored to ensure that minimum regulatory requirements as well as internally set targets and early warning indicators are met. 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.

Escalation of issues is driven by a framework of specific triggers and early warning indicators set in terms of capital ratios and the Leverage Ratio. 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 ROC and the J.P. Morgan AG Management Board.

An annual 'Reverse stress testing' exercise serves to identify potential extreme scenarios which might threaten the viability of J.P. Morgan AG's business model, so that any required mitigation can be put in place.

Business risk

J.P. Morgan AG defines Business risk as any risk arising from changes in its business, including: the acute risk to earnings posed by falling or volatile income; and the broader risk of a firm's business model or strategy proving inappropriate due to macroeconomic, geopolitical, industry, regulatory or other factors; or its remuneration policy. Regular plan monitoring and, if necessary, appropriate adjustments aim to ensure that such deviations are minimized.

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 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 is integrated into the Firmwide liquidity management framework. The primary objectives of effective liquidity management are to ensure that the core businesses and material legal entities, and hence also J.P Morgan AG, are 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 Firm has a liquidity risk oversight function whose primary objective is to provide independent assessment, measurement, monitoring, and control of liquidity risk across the Firm. 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 an independent review of liquidity risk management processes;
- Monitoring and reporting internal Firmwide and legal entity 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 Head of Treasury 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 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, 2019, 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:

	31/12/2019	31/12/2018	31/12/2017
Liquidity Coverage Ratio	222 %	155 %	155 %

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 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 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 also 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) as part of the Firmwide Limits and indicators policy.

Intraday liquidity alerts 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. Intraday liquidity alert levels are set by assessing intraday cash position changes in a normal operating market environment in order to identify outsized activities. 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. The process defines indicators on different levels.

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.

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. These instruments are secured predominantly by high-quality securities collateral, including government issued debt, U.S. GSE and government agency MBS.

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 behavioural 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.

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 is an independent risk management function that establishes the governance framework for managing reputation risk across the Firm and J.P. Morgan AG. 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 broad 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. 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.

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.

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 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 criticized exposures and delinquent loans;
- 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 the 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 of an obligor or counterparty, the loss severity given a default event and the exposure at default.

These 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"). 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 measurement of ECL also reflects how the Firm manages the financial instruments it uses for credit risk purposes such as Traditional Credit Products ("TCP"), and Non-Traditional Credit Products ("Non-TCP"). TCP are wholesale loans and lending-related commitments from extensions of credit to borrowers; whereas Non-TCP comprise all other debt financial assets measured at amortized cost.

Statistical models are used to estimate ECLs for TCP on a collective basis; however ECL for credit-impaired instruments is estimated on an individual borrower basis. When determining how exposures should be grouped for collective assessment, the Company considers many factors including, but not limited to, internal credit risk ratings, tenor, borrower geography and industry. Internal risk ratings generally correspond to the ratings as defined by Standard & Poor's ("S&P") and Moody's Investors Service. For Non-TCPs, a combination of an established provision matrix, as well as quantitative and qualitative considerations are utilized to estimate ECLs.

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. 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 Credit Officer with the level of credit authority required by the applicable credit authority grid unless qualifying for rules-based policies. 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 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 and requires approval of the payment by a Credit Officer. The Intraday Exposure Transaction Approval Group ("TAG") monitors intraday exposure excesses. TAG can either 1) release items – within a tolerance rule – according to a matrix based on the risk grade of the client and the value of the overall exposure to that client; 2) gain Credit Officer approval to release funds; or 3) contact the client and wait for confirmed receipt of funds. Breach approvals are executed on a time-critical basis.

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 loan sales, 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. This risk is actively monitored as it could result in greater exposure at default.

Risk reporting

To enable monitoring of credit risk and effective decision making by the Company, aggregate credit exposure, concentration levels and risk profile changes are reported regularly to senior members of Credit Risk Management. Detailed portfolio reporting of industry, clients, counterparties and customers, product and geographic concentrations 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 risk committees, senior management and the Management Board of directors as appropriate.

J.P. Morgan AG's credit risk profile evolved significantly in 2019 through the inclusion of new businesses. As at year end 2019, the credit portfolio consists of € 12.4 billion primary exposure which comprises 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 € 8.8 billion of TCP (committed facilities and utilizations under advised lines) and € 3.6 billion of DRE. JPMAG 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, 2019. Consumer and Retail, Asset Managers, Technology, Media and Telecom represent 18.0 %, 13.4 %. 11.8 % of the portfolio respectively.

€ 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 table below. Geographic concentrations of the portfolio is monitored and reported on a monthly basis. The credit portfolio is considered well diversified as at December 31, 2019. France, Germany, and United States represent the largest country concentrations with 20.5%, 12.5% and 11.9% of the credit portfolio respectively.

€ M	2019	
	Exposure	% of portfolio
France	2,531	20.5 %
Funds Global[1]	1,683	13.6 %
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, the portfolio is considered well rated, with 67.7 % of the portfolio considered investment grade and 32.3 % sub-investment grade as at December 31, 2019. Non-performing exposure represents less than 1 % of the credit portfolio and no clients were considered in default as at December 31, 2019.

€ M	2019	
Internal Rating Equivalent	Exposure	% of portfolio
AAA/Aaa to AA–/Aa3	1,169	9.5 %
A+/A1 to A–/A3	2,884	23.3 %
BBB+/Baa1 to BBB-/Baa3	4,307	34.9 %
BB+/Ba1 to B–/B3	3,455	28.0 %
CCC+/Caa1 and below	504	4.1 %
NR[1]	38	0.3 %
Total	**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 of the client's exposure is fully secured by cash or marketable securities (with acceptable margin).

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. The Country Risk Management group actively monitors the various portfolios which may be impacted by these developments and measures the extent to which the entity's exposures are diversified given the strategy and risk tolerance relative to a country.

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.

Country risk management includes the following activities:

– Establishing 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 senior management;
– 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.

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.

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

The pension risks are determined on the basis of a VaR model with a 99.9 % confidence level and a one year holding period, annually evaluated by J.P. Morgan AG's pension administrator and are considered in an additional calculation within the quantification of the risk-bearing capacity. Should the VaR exceed the pension asset surplus, this position would be deducted from internal capital resources.

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.

The following sections detail the market risk management framework of J.P. Morgan AG. 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 senior management, the Management Board and regulators.

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 J.P. Morgan AG Management Board approves substantive changes to the Framework and approves this Framework annually.

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")
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. VaR is calculated

			2019			2018	At December 31	
€ T	Avg.	Min	Max[1]	Avg.	Min	Max[2]	2019	2018
95% VaR	108	1	580	10	1	865	86	2

[1] Maximum VaR (€ 580 thousand) for 2019 was driven by positions in Global Rates and Rates Exotics that were migrated to J.P. Morgan AG balances ahead of 31/03/2019, as preparation for a potential Hard Brexit scenario. These positions were moved back to another J.P. Morgan Chase undertaking in April 2019 following the announcement on Brexit delay.
[2] Maximum VaR (€ 865 thousand) for 2018 was driven by a failed risk transfer process within the Global Equities business which was resolved the next day.

assuming a one-day holding period and an expected tail-loss methodology which approximates a 95 % confidence level. These VaR results are reported to senior management, the Management Board and regulators.

J.P. Morgan AG applies the Firmwide approach for VaR as described above for internal risk management purposes. The table below shows the result of J.P. Morgan AG's VaR.

Currently J.P. Morgan AG's exposure to market risk is not material, given most activity in the entity is offset by back-to-back trades to other Group entities. What limited market risk exposure currently in the entity is mainly driven by a portfolio of loans in EMEA secondary loan trading with EEA borrowers and a small number of cash equity positions.

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 behaviour, 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 the respective LOB, Firm and entity senior management as appropriate, 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 2018 and 2019 year-end. The change in stress loss between year-end 2018 and 2019 was predominantly driven by an increment of trading loan positions within the Corporate & Investment Bank (CIB).

€ T	31/12/2018	31/12/2019
Worst Case Stress Loss	−18	−4,452

As of December 31, 2019, the worst case scenario was Eurozone Crisis with a € 4.5 million stress loss. The Eurozone Crisis scenario models a severe sell-off in all risky assets associated with a number of Eurozone countries (Greece, Ireland, 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 senior management. In the event of a limit breach, Market Risk consults with senior management 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 Firm, LOB or J.P. Morgan AG level limits that have been breached are escalated to senior management, the LOB Risk Committee, Regional Risk Committee and/or the Firmwide Risk Committee, as appropriate.

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.

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 the currency in which Risk Weighted Assets ("RWAs") are denominated and the functional currency (Euro). This means that changes in FX rates can 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 activities. 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

IRR exposures, and significant models and/or assumptions (including changes) are reviewed by the ALCO. The ALCO provides a framework for overseeing the IRR of LOBs, foreign jurisdictions and key legal entities to appropriate LOB, Country, and regional ALCOs and other local governance bodies; the EU ALCO oversees IRR within J.P. Morgan AG.

Governance for Firmwide IRR is defined in the IRR Management Policy which is approved by the Board Risk Committee. The CIO, Treasury and Other Corporate Risk Committee ("CTC RC") is the governing committee with respect to IRRBB, and:

- Reviews the IRR Management policy;
- Reviews the IRR profile and compliance with IRR limits;
- Provides Governance for IRR exposures of J.P. Morgan AG and other group legal entities; and
- Reviews significant changes to IRR models and/or model assumptions including the changes related to IRR management.

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 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

T/CIO manages IRRBB exposure by identifying, measuring, modelling and monitoring IRR across the Firm's and J.P. Morgan AG's balance sheet. T/CIO identifies and understands material balance sheet impacts of new initiatives and products and executes market transactions to manage IRR through T/CIO investment portfolio positions. Execution by T/CIO will be based on parameters established by senior management, per the T/CIO Investment Policy. 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.

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 2019; the results for Economic Value Sensitivity (EVS) and EaR are presented in the table below.

€ M		
Scenario	**EVS**	**EaR**
+200 bps	155	190
−200 bps[1]	−67	−121

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

At December 31, 2019, J.P. Morgan AG was compliant with the supervisory test for EVS/Equity.

Operational risk

Operational risk is the risk associated with an adverse outcome resulting from inadequate or failed internal processes or systems, human factors, or external events impacting the Firm's processes or systems, it 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, cybersecurity attacks, inappropriate employee behavior, failure to comply with applicable laws and regulations 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 can manifest itself in various ways. Operational risk contains subcategories such as Compliance risk, Conduct risk, Legal risk, and Estimations and Model risk as well as other operational risks.

Operational Risk Governance

LOBs and Corporate functions hold ownership, responsibility and accountability for the management of operational risk. The Control Management Organization, which consists of control managers within each LOB and Corporate function, 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.

LOBs and Corporate control committees are responsible for reviewing data that indicates the quality and stability of processes, addressing key operational risk issues, focusing on processes with control concerns, and overseeing control remediation. In J.P. Morgan AG, the Location Operational Risk and Control Committee (LORCC) fulfills this function.

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.

Operational Risk Identification

A structured risk and control self-assessment process is executed by the LOBs and Corporate functions. As part of this process, the LOBs and Corporate functions evaluate the effectiveness of their control environment to assess where controls have failed, and to determine where remediation efforts may be required. CCOR Management 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

CCOR Management performs independent risk assessments of operational risks, which includes assessing the effectiveness of the control environment and reporting the results to senior management. 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 CCOR Management are leveraged as one of the key criteria in the independent monitoring and testing of the LOBs and Corporate functions' compliance with laws and regulation. Through monitoring and testing, CCOR Management independently identifies areas of operational risk and tests the effectiveness of controls within the LOBs and Corporate functions.

J.P. Morgan AG ORM is directly involved as required in monitoring and testing activities impacting J.P. Morgan AG and leverages 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 functions to be remediated through action plans, as needed, to mitigate operational risk.

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. Risks identified by CCOR Management are escalated to the appropriate LOB and Corporate Control Committees, 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 an important, continuous and 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, exchanges, clearing houses, central depositories, and financial intermediaries) are also sources of cybersecurity risk, as are the Bank's clients. As with other aspects of technology, JPM AG outsources day-to-day operation of its Cyber Security 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 devotes significant resources to protecting and continuing to improve the security of its computer systems, software, networks and other technology assets. These resources are utilized by J.P. Morgan AG and are designed to protect against attacks by unauthorized parties attempting to obtain access to confidential information, destroy data, disrupt or degrade service, sabotage systems or cause other damage. Utilizing the full breadth and depth of the Firm's Cybersecurity capabilities provides J.P. Morgan AG with advantages when it comes to managing cybersecurity risk compared to running this capability locally. The Firmwide Cybersecurity and Technology controls (CTC) organization is represented locally through three full time staff members who provide governance, oversight and local coordination of Cyberscurity-related topics for the entity. This includes a dedicated Information Security Officer who provides regular security reporting to the J.P. Morgan AG Management board and other committees and forums throughout the entity's governance structure. 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.

Business and technology resiliency risk

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

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 its supplier relationships including services provided by affiliates. 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. The complexities of these incidents and the strategies used by perpetrators continue to evolve. Under the Payments Control Program, methods are developed for managing the risk, implementing controls, and providing employee and client education and awareness trainings. Monitoring of customer behavior is periodically evaluated and enhanced in an effort to detect and mitigate new strategies implemented by fraud perpetrators.

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 senior management 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 customers, 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

The model risk profile depends on which models are used and their respective purposes such as valuation of derivatives and capital calculations. The model risk will primarily increase according to the tiering of the model: the lower the tier, the higher the model's risk, with Tier 1 posing the highest risk and Tier 4 the lowest. As described below in more detail, this is because tiering attempts to capture the complexity of the models used, the exposure to each model, and the reliance placed on model output. Model risk will also increase as issues are identified regarding the model in use.

Risk management objectives

The model risk management objectives are to identify, monitor, measure (where possible) and manage model risk, as well as defining model risk policies and procedures including the following:

- Robust review of models in order to identify model risks;
- Ensure compensating controls are in place 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

J.P. Morgan AG is subject to the Firm's Estimation and Model Risk Management policy. The Model Risk function, aligning with J.P. Morgan AG, 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. The Model Risk function 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.

Models are tiered based on an internal standard according to their complexity, the exposure associated with the model and the reliance on the model. This tiering is subject to the approval of the Model Risk function. In its review of a model, the Model Risk function considers whether the model is suitable for the specific purposes for which it will be used. When reviewing a model, the Model Risk function analyzes 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 the Model Risk function based on the relevant model tier.

A model review will end up with one of three outcomes: “Approved,” “Allowed with Compensating Controls (AwCC),” or “Disapproved.” An Approved conclusion will be granted to models that are conceptually sound and that, in the opinion of the Model Risk function, do not have critical issues affecting a broad range of products or usage segments. Models with critical issues that relate to a large portion of the model’s intended scope will not be approved. There are two types of Non-Approval outcomes: “AwCC” and “Disapproved.” “AwCC” will be granted to models with critical importance issues that relate to the model as a whole, or to an unacceptably large portion of the products or segments within the model’s intended scope, but which are nevertheless needed for business activities and that, with the appropriate compensating controls, can produce acceptable and (where appropriate) conservative results. “Disapproved” will be assigned to models that are not approvable because the model does not produce acceptable results, and the model is not necessary for ongoing use. If the model is in use, the model user must make immediate plans to cease the use of the model in the near term.

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.

The following key performance and risk indicators essentially represent the risk profile of J.P. Morgan AG as of year end 2019:

€ M	2019	2018	2017
Total RWA	**17,923**	**1,387**	**1,654**
Total Capital	5,165	2,539	835
Tier 1 Capital ratio	28 %	170 %	39 %
Total Capital ratio	29 %	183 %	50 %
Leverage Ratio	7.3 %	9.9 %	4.2 %
Liquidity Coverage Ratio	222 %	155 %	155 %
Risk capital demand Economic Perspective	1,175	n/a	n/a
Risk capital Economic Perspective	5,038	n/a	n/a

After the outbreak of COVID-19 in early 2020, J.P. Morgan AG and the Group initiated increased measures, based on our assessment, for risk monitoring, including exposure monitoring, adapted reporting and ad hoc reviews. The credit quality of our customers is being closely and continuously monitored, as well as the impact on the financial and capital situation and also the operating result of J.P. Morgan AG. It is possible that the credit quality of some customers will deteriorate, as well as the access to liquidity. In turn, this may lead to an increased percentage of loans that default, in case interest payments and repayments or margin calls are not paid as agreed. Provisions, credit costs and write-downs will increase accordingly. As J.P. Morgan AG is included in the Group-wide risk management, we do not expect there to be significant effects on the income and capital situation of J.P. Morgan AG. We should also mention here that we have already completed a further capital increase of € 932 million at the end of March to signal to our customers that J.P. Morgan AG also has a solid capital base for 2020.

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 things, the integrated measures include a monthly control process covering all the 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. Furthermore, 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 involved 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 a view to the 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 orderly functioning of the programs and interfaces utilized is regularly assessed and confirmed. As part of the examination of our IT, the group auditors check the due operation of the accounting-related applications at all computer centre locations. The complete IT system, including that for accounting, is secured against unauthorized access.

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

The regulations and measures of the internal control system are intended 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 in the annual financial statements are properly estimated, valued and reported. The booking documentation provides a reliable information base and a clear paper trail.

The regulations of the Financial Accounting Standards Board are applied within the J.P. Morgan Group as uniform valuation and accounting principles according to US-GAAP, supplemented and commented on by the Group's "Accounting Policies" section. Here, again, stipulations are made with regard to the intra-Group settlement policies. As part of the preparation of the individual financial statements of J.P. Morgan AG, a reconciliation statement is prepared from US-GAAP to the annual financial statements in accordance with the German Commercial Code. Here, local work directives regulate in detail the formal requirements and material information in the annual financial statements.

Regarding the country-specific reporting under § 26a Para. 1 sentence 2 KWG, we refer to the annex to notes to the accounts: Country-by-Country Reporting 2019, in this annual report. The foreign branches registered in 2019 are listed here, of which only the branch in London was activated in 2019. J.P. Morgan AG has no subsidiaries of this respect.

Frankfurt am Main, April 23, 2020

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

DOROTHEE BLESSING

STEFAN BEHR

GUNNAR REGIER

NICHOLAS CONRON

BURKHARD KÜBEL-SORGER

Financial Statements 2019 of J.P. Morgan AG

ANNUAL BALANCE SHEET FOR THE PERIOD ENDED DECEMBER 31, 2019 OF J.P. MORGAN AG, FRANKFURT AM MAIN

ASSETS

€ T				Notes	2019	2018
Cash reserves						
– Cash in hand			0			0
– Credits with central banks			24,755,182			11,766,111
incl.: with Deutsche Bundesbank	24,755,182					11,766,111
				3.1.	**24,755,182**	11,766,111
Receivables from credit institutions						
– due daily			7,642,087			6,864,951
– other receivables			1,014,234			16,769
				3.2.	**8,656,321**	**6,881,719**
Receivables from clients				3.3.	**2,688,352**	**172,363**
Bonds and other fixed-interest securities						
– bonds and debt securities						
from public issuers		50,634				50,636
incl.: eligible as collateral with Deutsche Bundesbank	50,634					50,636
			50,634			50,636
				3.4.	**50,634**	**50,636**
Trading portfolio				3.5.	**3,189,516**	**187,296**
Trust assets				3.6.	**3,220,242**	**607,595**
incl.: trust loans	0					**0**
Intangible assets				3.7.	**9,489**	**0**
Goodwill					9,489	0
Tangible assets				3.7.	**16,616**	**12,725**
Other assets				3.8.	**1,467,975**	**802,633**
Accrued and prepaid expenses				3.9.	**4,098**	**2,580**
Excess of plan assets over pension liabilities				3.10.	**98,143**	**67,074**
Total assets					**44,156,568**	**20,550,733**

LIABILITIES

€ T				Notes	2019	2018
Liabilities to credit institutions						
– due daily			11,910,146			6,081,664
– with agreed maturity or notice period			9,041,275			3,623,596
				3.11.	**20,951,421**	**9,705,260**
Liabilities to clients						
– other liabilities						
due daily			8,588,855			6,869,757
with agreed maturity or termination notice period			217,000			10,000
				3.12.	**8,805,855**	**6,879,757**
Trading portfolio				**3.5.**	**5,693,853**	**680,848**
Trust liabilities				**3.6.**	**3,220,242**	**607,595**
incl.: trust loans		0				**0**
Other liabilities				**3.13.**	**54,578**	**39,227**
Accrued and deferred income				**3.14.**	**24,592**	**986**
Provisions						
– tax provisions			28,856			12,728
– other provisions			61,375			14,265
				3.15.	**90,231**	**26,993**
Subordinated liabilities				**3.16.**	**185,800**	**185,822**
Fund for general banking risks				**3.17.**	**57,064**	**57,064**
incl.: Special items under § 340e Para. 4 HGB [Handelsgesetzbuch (German Commercial Code)]		764				764
Equity						
– Called-in capital						
Subscribed capital			1,867,200	**3.18.**		160,000
– Capital reserves			3,093,029			2,135,714
– Retained earnings						
Legal reserves		6,000				6,000
other revenue reserves		65,465				74,240
			71,465			80,240
– Balance Sheet profit/loss			41,238			–8,775
					5,072,932	**2,367,180**
Total liabilities					**44,156,568**	**20,550,733**
Contingent liabilities						
– Liabilities from guarantees and indemnity agreements					350,820	114,389
				3.21.	**350,820**	114,389
Other commitments					12,979,532	
– Irrevocable loan commitments				**3.22.**	**12,979,532**	**11,979**

INCOME STATEMENT
OF J.P. MORGAN AG, FRANKFURT AM MAIN

FOR THE PERIOD FROM JANUARY 1, 2019 TO DECEMBER 31, 2019

€ T				Notes	2019	2018
Interest income from						
– lending and money-market transactions	139,670					
– less negative interest arising from lending and money-market transactions	−81,704	57,966				−17,446
– fixed-interest securities and debt register claims	763					
– minus negative interest arising from debt register claims	0	763				1,188
– Total interest income			58,729			−16,279
Interest expenses from						
– lending and money-market transactions	73,890					
– less positive interest arising from lending and money-market transactions	−36,986	36,904				−27,233
– fixed-interest securities and debt register claims	0					
– minus positive interest arising from debt register claims	0	0				1,098
– Total interest expenses			36,904			−26,136
				4.2.	**21,825**	**9,857**
Commission income			228,078			119,840
Commission expenses			32,373			29,192
				4.3.	**195,705**	**90,649**
Net income or net loss from trading portfolio				**4.4.**	**−6,641**	**7,121**
incl.: Allocation to the fund for general banking risks § 340g Para. 2 HGB					**0**	**564**
Other operating income				**4.5.**	**65,493**	**39,148**
General administrative expenses						
– Personnel expenses						
Wages and salaries		55,807				32,220
– Social security contributions and expenses for pension provisions and benefits		7,575	63,382			8,343
incl.: for retirement benefits		3,256				4,878
– other administrative expenses			96,338			79,807
				4.6.	**159,721**	**120,370**

FOR THE PERIOD FROM JANUARY 1, 2019 TO DECEMBER 31, 2019 (CONTINUED)

€ T				Notes	2019	2018
Depreciation, amortization and valuation adjustments of intangible and tangible fixed assets				**3.7.**	**6,232**	**2,194**
Other operating expenses				**4.7.**	**2,143**	**18,416**
Depreciation and impairments on receivables and specific securities and allocations to provisions for credit risks					**28,772**	**21**
Result from ordinary course of business					**79,514**	**5,774**
Taxes on income and revenue			38,274			14,549
of which deferred taxes:	0					0
Other taxes, not shown under other operating expenses			2			1
				4.8.	**−38,276**	**−14,550**
Annual net profit/annual net loss					**41,238**	**−8,775**
Profit/loss carried forward from previous year				**4.8.**	**0**	**0**
Balance sheet profit/loss					**41,238**	**−8,775**

J.P. MORGAN AG, FRANKFURT AM MAIN, NOTES TO THE 2019 ANNUAL FINANCIAL STATEMENTS

1. General remarks

1.1. GENERAL PRINCIPLES

J.P. Morgan AG, with a registered office in Frankfurt am Main, is a public limited liability company registered in the commercial register of Frankfurt am Main District Court under HRB 16861, which is active in Germany in the main business areas of transactional banking, securities custody business, depository and lending business, and trading in exchange-traded derivatives as well as OTC derivatives. In 2019, the focus was on the controlled expansion of the new business areas, in particular in Markets, expanding and rounding out the product range in Wholesale Payments as well as the expansion of the lending business.

The annual financial statements of J.P. Morgan AG have been prepared under the rules laid down in the German Commercial Code (HGB), the Companies Act (Aktiengesetz) and the Accounting Regulation for Credit Institutions and Financial Service Institutions (RechKredV).

The structure of the balance sheet and the income statement is unchanged as compared to the prior year. For the first time, a goodwill value is shown.

1.2. ADDENDUM REPORT

Significant changes after the balance sheet date result from the ongoing preparations by J.P. Morgan AG for the exit of the United Kingdom from the European Union (“Brexit”). J.P. Morgan AG plays a major role in implementing the Group’s Brexit strategy. This will result in the relationships with affiliated companies being strengthened in future.

In March 2020, a further capital increase of € 0.9 billion was executed. In addition, the Global Clearing and Cash Equities business which was started up during the previous year was further expanded. Furthermore, a number of loans and irrevocable loan commitments made by JPM affiliates were transferred to J.P. Morgan AG, and in other areas of “Banking” and “Markets” more customers were migrated to J.P. Morgan AG from other JPM affiliates.

Following the outbreak of COVID-19 in early 2020, J.P. Morgan AG and the Group initiated increased risk monitoring measures, including exposure monitoring, adjusted reporting and special review forums. The credit quality of our customers is being closely and continuously monitored, as well as the impact on the financial and capital situation and also the operating result of J.P. Morgan AG. The credit quality of some customers will deteriorate, as well as access to liquidity. In turn, this leads to an increased percentage of loans that default and are written-off, as interest payments and repayments or margin calls remain unpaid. Provisions, credit costs and write-downs will increase accordingly.

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.

2. Accounting and valuation principles

2.1. CHANGED ACCOUNTING AND VALUATION METHODS

The accounting and valuation methods of the annual financial statements in 2019 were maintained unchanged from the previous year, except for the following points.

In the 2019 financial year, transactions from securities repo transactions were carried out by the Fixed Income Finance business. These transactions were essentially allocated to the trading book based on the underlying intention to sell, and are valued at fair values. Only holdings resulting from securities repo transactions in the Fixed Income Finance business, arising in connection with the promissory note loan issued in 2019, have been allocated to the banking book and these are valued at amortized cost.

Following JPM Group-wide instructions, the accounting logic and presentation of debit valuation adjustments (DVAs), funding value adjustments (FVAs) and credit value adjustments (CVAs) was adjusted during financial year 2019. The derivatives transactions concluded with the central Credit Portfolio Group (CPG) unit of JPMCB to manage counterparty and refinancing cost risks are now regarded as derivatives and reported accordingly in the balance sheet and income statement. The conversion effect is commented on and quantified accordingly as part of the net position of the trading portfolio (Section 4.4.).

In addition, during the 2019 financial year, forward currency transactions were concluded for the first time to hedge the banking book, and therefore, also for the first time, a split in the forward exchange rate was applied for forward currency transactions used to hedge interest-bearing balance sheet transactions. The resulting effects were included in the interest earnings. Open forward currency transactions at the balance sheet date are shown under other liabilities.

In financial year 2019, promissory note loans were issued for the first time, which involve various early termination rights. A review of the termination rights according to IDW [Institut der Wirtschaftsprüfer in Deutschland e.V. (Institute of Public Auditors in Germany)] RS [Stellungnahme zur Rechnungslegung (accounting principle)] HFA 22 came to the conclusion that there is no need for a separation of the embedded derivatives from the basic contract. The promissory note loans are therefore valued together with the embedded derivatives at amortised cost and reported as liabilities to customers.

In the course of the expansion of the lending business, the Bank opted for an early application of the IDW accounting principle on “Risk provisioning for foreseeable, but yet not individually defined, counterparty default risks in the lending business of credit institutions (general risk provisions) (IDW RS BFA 7)”, as for the first time, general risk provisions for these were also recorded.

This means that, in line with IDW RS BFA 7, sentence no. 26, the methodology of IFRS 9 is used as a basis for determining the general risk provision. Therefore, for loan arrangements to be generally in-scope and if there is no significant increase in the loan default risk since the time it was originated, the general risk provision is recognized in the amount of the expected loss over a period of the next twelve months (12-month expected credit loss) (Stage 1). Conversely, in the case of a significant increase in the credit default risk, a risk provision is recorded based on the expected loss over the expected remaining term of the loan transactions concerned (lifetime expected credit loss) (Stage 2).

The company records credit risk provisions (expected credit loss, ECL) for receivables from credit institutions and customers, as well as for off-balance sheet loan-related obligations such as loan commitments and financial guarantee contracts.

The ECL is recorded when the receivable/loan commitment is recorded initially on the basis of the credit losses expected at the time. General risk provisions are used to cover deferred credit default risks and include ECLs from IFRS 9 Stages 1 and 2. Collectively assessed risk provisions or specific risk provisions are set up receivables/loan commitments for which there exist objective indications of loan default as at the balance sheet date (Stage 3). When determining the applicable stages for a financial instrument, the company applies the definition of default that aligns with the Basel definition of default in order to maintain a standard definition across the entire company. Specific risk provisions are calculated using discounted cash flow procedures which take into account the returns still expected from the commitment. In individual cases, a collectively assessed risk provision based on the components of the ECL model listed below can also be used for smaller loans/loan commitments.

Determining the stages for credit losses according to the ECL model depends on the measurement of a significant increase in credit risk (SICR). When determining an SICR, the company will have performed quantitative tests in which existing risk management indicators, changes in credit rating, and appropriate and supportive forward-looking information are taken into account, but not exclusively. Forward-looking information reflects a number of scenarios that include macroeconomic factors that are compiled and monitored by the company-wide specialized economic forecasting team.

The most important input used to quantify the expected credit loss by the ECL model include the probability of default (PD), loss given default (LGD), and the exposure at default (EAD). The inputs to the ECL model include historical datasets and an appropriate and justified forecast horizon to estimate the expected credit losses.

In 2019, parts of the existing loan portfolio, which was previously held by J.P. Morgan affiliates in the UK, were transferred to J.P. Morgan AG. The transfer between companies was carried out based on the respective fair values of the positions. Items included were basically booked at nominal value. Differences between acquisition costs and nominal value were transferred to the deferred or accrued income or expenses, and are written off to the income statement pro rata temporis over the respective term of the loan contracts, and shown in interest income. The use was made from the option available under § 340e Para. 2 HGB. Irrevocable loan commitments not yet drawn down are presented at their respective approved amounts minus provisions. If the fair value of a loan commitment was lower than the approved amount, the difference was posted as a provision, while differences from higher fair values were recorded under other assets.

2.2. OTHER ACCOUNTING AND VALUATION METHODS

Cash and cash equivalents (cash reserve) are shown at nominal value. Receivables from banks are recognised at the nominal value plus accrued interest. Receivables from customers are in principle reported at nominal value or if lower, cost of acquisition plus accrued interest. Receivables from customers transferred from J.P. Morgan affiliates to J.P. Morgan AG are generally shown at nominal value. Should the difference in the amount between the nominal value and the acquisition costs of the receivable be related to interests, this is deducted from the acquisition costs and accrued as deferred item. It is amortised to the income statement over the term of the contract. Specific and general loan loss provisions for receivables from banks and customers are determined on the basis of generally accepted calculation methods and shown in the HGB accounts and deducted from the nominal value/cost of acquisition. Bonds and other fixed-interest securities are valued on purchase at acquisition cost and are assigned to the liquidity reserve. Therefore, they are valued using the strict lower-of-cost-or-market value principle (i.e. losses are recognized, gains are ignored) as defined in § 253 Para. 4 HGB. Write-downs and write-ups of securities in the liquidity reserve are reported in the income statement under "Write-downs and write-ups of receivables and specific securities as well as allocations to provisions in the lending business" or in "Income from write-ups to receivables and specific securities and from the reversal of provisions in the lending business".

Interest driven business, in the banking book, was valued using the periodical approach (P&L based method) for loss free valuation. In accordance with this method, it was not required to record a provision for contingent losses.

The financial instruments in the trading portfolio are valued at fair value minus a risk discount under § 340e Para. 3 HGB. In accordance with § 255 Para. 4 HGB, fair value means mark-to-market price. The fair value is defined as the amount for which a financial instrument might be exchanged at the balance sheet date in a transaction between knowledgeable and independent business partners willing to enter into a transaction, or for which a liability might be settled. Where available, fair value is based on observable market prices or derived from observable prices or parameters. The availability of observable data varies according to product and market and may change over time. If no observable stock market prices or information are available, valuation models that correspond to market standards are used. These models include parameters available in the market (e.g. interest curves, volatilities and spreads) that are relevant for the different underlying assets of the derivatives (especially stocks, bonds, currencies, precious metals, commodities, indices – e. g. for inflation rates – and interest rates) and which significantly influence their performance. In addition, the fair value of derivatives is influenced by expected future fluctuations in value of the underlying assets and the remaining term of the derivatives. Fair values for forward transactions and swaps are determined using the cash value method taking into account the interest curve of the respective currency. The valuation of standard options is generally carried out using analytical methods, while exotic options are usually evaluated using numerical methods (e. g. Monte-Carlo simulation). As part of the valuation of financial instruments at fair value, impairments are included for settlement costs, liquidity risks and counterparty risks, as well as the financing costs for unsecured trading derivatives. The value-at-risk is determined for financial instruments in the trading book and deducted in the balance sheet from the trading assets or added to the trading liabilities, depending which side has the higher balance. The calculation of the value-at-risk discount is based on a holding period of ten days and a confidence level of 99 %. The observation period is 264 trading days. An allocation under § 340e Para. 4 HGB is charged against the net income from the trading portfolio, and increases the item for Fund for general banking risks.

Derivatives embedded in structured financial products outside the trading portfolio are separated from the basic business, allocated to the trading portfolio and valued as described above, provided they have a substantially increased or different risk from the underlying business.

Offsetting positive and negative fair values for financial instruments in the trading portfolio for the same counterparty has been applied in this financial year by offsetting the positive and negative fair values and their related compensation payments (cash security deposits) against each other. As a first step, positive fair values from derivative financial instruments are offset against negative fair values. In a second step, the collateral payments recorded as liabilities to banks are offset with the positive fair values from derivative financial instruments. The prerequisite for offsetting is a framework contract with an enforceable collateral appendix and a daily exchange of cash collateral which leaves only an insignificant credit or liquidity risk remaining.

Within the financial year, no changes were made to the criteria laid down by the institution for allocation to the trading portfolio.

Margin securities collected and provided for stock exchange transactions associated with the Global Clearing business are reported as trust assets and liabilities.

Goodwill and tangible fixed assets are valued at acquisition cost and depreciated on a straight-line basis over the estimated useful life. For goodwill, a useful life of three years is applied. This is primarily determined by the expected synergies that are attributable to the employee base of the acquired business. For tangible fixed assets, the useful life is based on the official depreciation tables issued by the tax administration. Low-value assets with acquisition costs of up to € 800 (excluding VAT) are completely depreciated in the year of acquisition.

Other assets are valued at acquisition cost (nominal value) in compliance with the strict lower-of-cost-or-market-value principle.

Deferred taxes are calculated for temporary differences between the commercial valuations of assets, liabilities and deferred income and their taxable value and tax loss. The underlying timing differences are mainly based on different valuation rates for securities (assets), goodwill (assets), pension obligations (liabilities), and the valuation of the covering assets (liabilities) as well as provisions (assets) and overall result in a deferred tax asset (asset). For the calculation of deferred taxes, a corporate income tax rate including solidarity surcharge of 15.825% and a local trade tax rate of 16.10% were assumed. The deferred tax assets amount to € 98.8 million (prior year: € 22.6 million) and deferred tax liabilities total € 76.1 million (prior year: € 8.0 million). The right available under § 274, Para. 1 sentence 2, HGB to capitalize deferred taxes is not applied.

In line with § 246 Para. 2 sentence 2 HGB, assets that serve to cover debts arising from pension commitments and similar long-term obligations were netted off against the liabilities. If the fair value of the assets exceeds the amount of the debts arising from retirement benefit commitments and similar long-term obligations, the excess amount is shown in the item "Excess of plan assets over pension liabilities." The calculation was carried out based on an actuarial report regarding the 2018 G guideline tables of Prof. Dr Klaus Heubeck. The assessment was carried out according to the accepted principles of actuarial calculation using the so-called "Projected Unit Credit Method" (PUC method).

The accounts payable are recognized at their settlement values.

The provisions that are shown cover all identifiable obligations as of the balance sheet closing date that are based on past business transactions or past events and are valued in accordance with § 253 Para. 2 HGB. Provisions were valued at the settlement amount, factoring in expected increases in prices and costs. Provisions with a remaining term of more than one year have been discounted/compounded at the average market interest rates determined and published by the Deutsche Bundesbank (§ 253 Para. 2 HGB). This applies in particular to pension provisions, for which a flat-rate remaining term of 15 years is applied. Income and expenses arising from the discounting or compounding are recorded, with no offsetting, depending on whether provisions were related to the lending business or non-banking business, under the interest income/interest expense (§ 277 Para. 5 HGB) or alternatively in the other operating income/expenditure (§ 340a Para. 2 in conjunction with § 277 Para. 5 HGB). Provisions for work anniversaries contained in the figure were calculated using an actuarial report and on the basis of the 2018 G mortality tables of Prof. Dr Klaus Heubeck, and in line with the valuation method as per § 253 Para. 1 HGB.

Accruals for expenses and income have been created and allocated to the respective balance sheet items. No expenses or income relating to other periods were recorded.

2.3. VALUATION UNITS

A valuation unit was created for an issued promissory note, which is hedged against market price risks using a Total Return Swap (TRS). In addition, a fixed-interest security with an interest-rate swap to hedge it were combined into a hedging transaction to hedge interest change risks to a further valuation unit. The TRS and the interest swap were combined with the underlying transactions as individual transactions with their underlying transactions and tested for their hedge effectiveness. Owing to the clear hedging relationship, the transactions involved are Micro-Hedges that represent an efficient and perfect hedging relationship for the entire term. To calculate the market values, the Total Return Swap was compared to its underlying liability, and the interest-rate swap to the promissory note. In particular, the net hedge presentation is used to show on the balance sheet the effective parts of the valuation units. Effectiveness is measured by using the dollar offset method, or with the use of suitable statistical procedures such as regression analysis.

The fair values of the swaps are calculated based on internal valuation procedures. The Group uses valuation procedures to establish the fair value of financial instruments in cases where no prices are available on active markets. Therefore, where possible, parameter inputs to the valuation procedures are based on observable data derived from prices of relevant financial instruments traded in an active market. The use of these models involves some level of management estimation and judgment, the degree of which will depend on the price transparency for the financial instrument and its market and the instrument's complexity.

Interest income from the fixed-interest securities and interest expense from the interest swap are netted off in the income statement.

2.4. FOREIGN CURRENCY CONVERSION

Foreign currency conversion takes place according to the provisions of § 256a HGB in conjunction with § 340h HGB for positions of the banking book. In the process, the asset and liability values denominated in foreign currency are converted at the European Central Bank reference rates applicable at the reporting date. When valuing forward exchange transactions, which are used to hedge the interest-bearing balance sheet transactions in the banking book, the Bank uses forward rate splitting and separates out the agreed swap rates. The resulting effects are included under interest income. Due to the special cover, profits and losses from the currency translation of transactions of the banking book are shown in the income statement as per § 340h HGB in Other operating result. In 2019, there was a loss of € 971 thousand. In the case of transactions of the trading portfolio denominated in foreign currencies, this is shown in the income statement as per § 340e HGB under the trading result.

3. Notes to individual items of the balance sheet

3.1. CASH RESERVES

€ T	31/12/2019	31/12/2018
Cash reserves	**24,755,182**	**11,766,111**
Credit with central banks	24,755,182	11,766,111
incl.: with Deutsche Bundesbank	24,755,182	11,766,111

3.2. RECEIVABLES FROM CREDIT INSTITUTIONS

€ T	31/12/2019	31/12/2018
Receivables from credit institutions	**8,656,321**	**6,881,719**
incl.: receivables from affiliated companies	5,598,101	6,388,299
Breakdown by remaining maturity:		
a) due daily	7,642,087	6,864,951
b) with agreed maturity or notice period	1,014,234	16,769
1. up to three months,	472,333	16,769
2. more than three months to one year,	0	0
3. more than one year to five years,	541,901	0
4. more than five years	0	0

3.3. RECEIVABLES FROM CLIENTS

€ T	31/12/2019	31/12/2018
Receivables from clients	**2,688,352**	**172,363**
incl.: receivables from affiliated companies	452,052	218
Breakdown by remaining maturity:		
a) due daily	1,617,756	0
b) with agreed maturity or notice period	1,070,596	172,363
1. up to three months,	259	172,363
2. more than three months to one year,	644,886	0
3. more than one year to five years,	301,340	0
4. more than five years	124,111	0

The increase in receivables from clients is essentially the result of the newly expanded lending business.

3.4. BONDS AND OTHER FIXED-INTEREST SECURITIES

€ T	31/12/2019	31/12/2018
Bonds and other fixed-interest securities	**50,634**	**50,636**
Bonds and debt securities		
from public issuers	50,634	50,636
incl.: eligible as collateral with Deutsche Bundesbank	50,634	50,636
including marketable securities	50,634	50,636
listed on the stock exchange	50,634	50,636

This position includes only listed bonds.

To hedge interest rate risks, a security was combined with an interest swap for a nominal value of € 50 million into a micro-valuation unit. The fair value of the interest rate swap was € –5.2 million as of December 31, 2019, while the security showed hidden reserves totalling € 5.8 million. Monthly effectiveness tests show that this is an effective relationship. The valuation unit terminates on the maturity date of the security in 2024.

As of December 31, 2019, the securities in the liquidity reserve, including the existing valuation units, included hidden reserves totalling € 1.2 million, with no hidden losses, due to the allocation of all the securities to the liquidity reserve.

3.5. TRADING PORTFOLIO

Financial instruments of the trading portfolio are broken down as follows:

€ T	31/12/2019	31/12/2018
Trading portfolio assets		
Derivative financial instruments	938,349	187,296
Receivables	2,239,777	0
Bonds and other fixed-interest securities	3,592	0
Equities and other non-fixed-income securities	117	0
Other assets	7,681	0
In total	**3,189,516**	**187,296**
Trading portfolio liabilities		
Derivative financial instruments	3,473,359	680,842
Liabilities	2,220,018	0
Risk discount	476	6
In total	**5,693,853**	**680,848**

The amount, timing and certainty of future cash flows are mainly influenced by the interest rate environment, developments on the equity and bond markets, and developments in spreads, and default probabilities.

The increase in the trading portfolio compared to the previous year mainly results from security repo transactions in the Fixed Income Finance business, which were allocated to the trading portfolio. This relates to trading assets of € 2.2 billion and trading liabilities of € 2.1 billion. In addition, the business activities with OTC derivatives were expanded significantly, which explains the increase in derivative positions on both the asset side and in particular on the liabilities side.

In this financial year, positive and negative market values totalling € 6,345 million were offset. In addition, positive market values and related liabilities from collateral totalling € 1,546 million were offset.

The following table breaks down the nominal amount and the fair value of the derivative financial instruments according to type and scope before risk discount and before credit valuation adjustments (CVAs), funding valuation adjustments (FVAs) and debit valuation adjustments (DVAs).

€ T 31/12/2019	Nominal amount	Positive market values	Negative market values
Products traded over the counter			
Interest-rate related transactions	449,102,937	489,081	780,167
Exchange-rate related transactions	359,102,103	19,718	771,644
Credit derivatives	5,097,671	292,954	1,228,230
Equity-related transactions	48,837,800	122,116	656,201
Commodities	11,696,152	14,132	27,536
In total	**873,836,663**	**938,001**	**3,463,778**

3.6. TRUST BUSINESS

€ T	31/12/2019	31/12/2018
Trust assets	**3,220,242**	**607,595**
Receivables from credit institutions	1,061,298	352,184
Receivables from clients	186,251	0
Other assets	1,972,693	255,411
Trust liabilities	**3,220,242**	**607,595**
Liabilities to credit institutions	373,373	603,956
Liabilities to clients	2,846,558	3,639
Other liabilities	311	0

Securities received and provided for stock exchange transactions related to the Global Clearing business are reported as trust assets and liabilities. The increase compared to the prior year results from a significant expansion of the business volume in the Global Clearing business, which was only included in J.P. Morgan AG's business activities from November 2018.

3.7. CHANGES IN FIXED ASSETS

	Intangible assets			Tangible assets
€ T	Goodwill	Other equipment and office equipment	Hardware	Total
Cumulative acquisition costs as of 01/01/2019	**0**	**20,107**	**2,150**	**22,257**
Additions	12,691	6,698	226	6,924
Disposals	0	−32	−13	−45
Transfers	0	−1,383	1,383	0
Cumulative acquisition costs as of 31/12/2019	**12,691**	**25,390**	**3,746**	**29,136**
Cumulative depreciation as at 01/01/2019	**0**	**7,658**	**1,874**	**9,533**
Scheduled amortization/ depreciation in the current year	3,201	2,738	293	3,031
Additions	0	0	0	0
Disposals	0	−32	−11	−43
Transfers	0	−554	554	0
Cumulative depreciation as at 31/12/2018	3,201	9,811	2,710	12,521
Residual value as at 31/12/2019	**9,489**	**15,579**	**1,036**	**16,616**
Residual value as at 31/12/2018	**0**	**12,449**	**276**	**12,725**

Amounts in the asset overview are not rounded. Therefore, rounding differences can occur.

In 2019, in the course of Brexit preparations, business activities and also employees of J.P. Morgan affiliates in the UK were transferred to J.P. Morgan AG in several tranches. The payment related to the takeover of the employees was capitalized as goodwill and will be amortised on a straight-line basis over the estimated useful life of three years.

Tangible fixed assets include at reporting date leasehold improvements with a residual book value of € 12.4 million as well as plant and equipment with a residual book value of € 4.2 million.

3.8. OTHER ASSETS

€ T	31/12/2019	31/12/2018
Other assets	**1,467,975**	**802,633**

Items included under Other assets are mainly attributable to the Global Clearing business and include margin payments to exchanges and central counterparties. The increase compared to the previous year results from the significant expansion in business volume.

3.9. ACCRUED INCOME AND DEFERRED EXPENSES

€ T	31/12/2019	31/12/2018
Accrued income and deferred expenses	**4,098**	**2,580**

Accrued income and deferred expenses include € 2.68 million for pension payments that were paid out in advance for reasons of timing in 2019. Furthermore, the accrued income and deferred expenses include € 1.41 million related to loans taken over by J.P. Morgan affiliates from the application of nominal value accounting in accordance with § 340e Para. 2 HGB.

3.10. EXCESS OF PLAN ASSETS OVER PENSION LIABILITY

€ T	31/12/2019	31/12/2018
Valuation parameters (BilMoG [Bilanzrechtsmodernisierungsgesetz – German Accounting Law Modernization Act])		
Pension obligations:		
Actuarial interest rate	2.71 %	3.21 %
Future increase of benefits	3.00 %	3.00 %
Increase of pension	1.75 %	1.75 %
In order to account for staff turnover, age-specific and gender-specific turnover probabilities were used.	Mercer Standard	Mercer Standard
Partial retirement[1]:		
Actuarial interest rate	0	2.32 %
Future increase of benefits	0	3.00 %
Increase of pension	0	0.00 %

[1] At the end of 2019, there were no obligations relating to partial retirement.

€		2019
Pension and partial retirement obligations	**01/01/2019**	**142,128,578**
Expenses from the contributions for pension and partial retirement obligations		1,343,901
Interest expense from the discounting of pension and partial retirement obligations		6,203,763
Contribution from effects in actuarial interest rate		5,772,039
Increase due to the merger of Whiteshire Debt Solutions GmbH		757,701
Consumption (pension payments)		−8,837,142
Pension commitments and partial retirement obligations	**31/12/2019**	**147,368,840**
Assets	**01/01/2019**	**209,202,640**
Additions		1,582,316
Disposals		
Reversal of impairment due to rise in fractional values		
Market valuation at acquisition costs (under other operating income)		34,726,448
Assets	**31/12/2019**	**245,511,404**
Excess of plan assets over pension liabilities	**01/01/2019**	**67,074,062**
Excess of plan assets over pension liabilities	**31/12/2019**	**98,142,564**
Acquisition costs of assets	**01/01/2019**	**123,115,579**
Acquisition costs of assets	**21/12/2019**	**251,059,912**
Expenses arising from the contributions to pension and partial retirement obligations	**31/12/2019**	**1,343,901**
Disclosure of contributions to pension and partial retirement obligations under “Social contributions and expenses for pension benefits and for support” (including changes in discount rate and the discounting/compounding)		13,319,703
Disclosure of the change in the discount rate and the compounding/discounting of the pension and partial retirement obligations under other operating result		−11,975,802

	2019
Asset investment measures under HGB § 285 no. 26	
Special Institutional Funds	**JPMC I-UNIVERSAL FUND**
Legal basis:	German Capital Investment Code
Basis of the calculation:	Market values (NAV) of assets
Reinvestment:	Capitalization funds
§ 253 Para. 3 sentence 4:	No depreciation because valued in accordance with § 246 Para. 2 HGB
Term:	No restriction on the daily return
Valuation as per § 168, 278 KAGB [Capital Investment Act] or comparable foreign law as at balance sheet date:	€ 177,830 thousand; 913,768 shares
Capital assets:	not eligible for listing / not listed on a stock exchange
– Mutual funds	**JPMorgan Funds – Global Unconstrained Equity**
Legal basis:	Luxembourg law
Basis of the calculation:	Market values (NAV) of assets
Reinvestment:	Capitalization funds
§ 253 Para. 3 sentence 4:	No depreciation because valued in accordance with § 246 Para. 2 HGB
Term:	No restriction on the daily return
Valuation as per § 168, 278 KAGB [Capital Investment Act] or comparable foreign law as at balance sheet date:	€ 2,071 thousand; 206,888 shares
Capital assets:	not eligible for listing / not listed on a stock exchange

Only investment fund units are held as pension assets and all pension assets are held to hedge pension benefits granted to employees. The primary investment target of the funds is to cover the financial obligations on the long term. The duration of the commitments under all the plans combined is 10.4 years. The fair value of the covering assets is based on the number of shares held and their price at the balance sheet date. As an additional asset, there is still a current account receivable totalling € 3.7 million.

The fund unit prices are calculated as follows: A net asset value (NAV) is allocated to each unit class – this is the value of the assets of a unit class minus the liabilities for that class. The NAV is then divided by the total number of current units belonging to that unit class to arrive at the unit price.

3.11. LIABILITIES TO CREDIT INSTITUTIONS

€ T	31/12/2019	31/12/2018
Liabilities to credit institutions	**20,951,421**	**9,705,260**
incl.: liabilities to affiliated companies	14,889,466	6,799,828
Breakdown by remaining maturity:		
a) due daily	11,910,146	6,081,664
b) with agreed maturity or notice period	9,041,275	3,623,596
1. up to three months,	2,009,696	3,523,596
2. more than three months to one year,	344,937	0
3. more than one year to five years,	6,686,642	0
4. more than five years	0	100,000

The increase in liabilities to banks is primarily attributable to greater treasury activities. The majority of the accounts payable totalling € 14,889 million are due to Group companies. This includes cash collateral from JPMorgan Chase Bank, N.A., London Branch, totalling € 4,000 million as collateral for credit lines granted. The remaining liabilities arise essentially from the Treasury Services business.

3.12. LIABILITIES TO CLIENTS

€ T	31/12/2019	31/12/2018
Liabilities to clients	**8,805,855**	**6,879,757**
incl.: liabilities to affiliated companies	230,761	38,160
Breakdown by remaining maturity:		
a) due daily	8,588,855	6,869,757
b) with agreed maturity or notice period	217,000	10,000
1. up to three months,	0	0
2. more than three months to one year,	0	0
3. more than one year to five years,	217,000	10,000
4. more than five years	0	0

From liabilities to clients, € 4,519 million are attributable to the Securities Services business area, and additional € 2,478 million to Markets, and € 1,181 million to Wholesale Payments.

An issued promissory note forms part of a valuation unit in which a total return swap totalling € 10 million is the hedging element. The fair value of the swap was € 3.7 million as of December 31, 2019. The valuation unit ends with the maturity of the promissory note in 2022.

3.13. OTHER LIABILITIES

€ T	31/12/2019	31/12/2018
Other liabilities	**54,578**	**39,227**
consisting of:		
– Liabilities from deliveries and services	27,601	21,086
– Value added tax	13,102	11,891
– other liabilities	13,875	6,250

Other liabilities include € 5,254 thousand in other taxes and levies to be paid, as well as € 4,975 thousand for non-settled forward exchange transactions which serve to hedge the banking book.

3.14. ACCRUED EXPENSES AND DEFERRED INCOME

€ T	31/12/2019	31/12/2018
Accrued expenses and deferred income	**24,592**	**986**

An amount of € 18,041 thousand results from deferred income from loan origination fees and other fees in connection with the lending business. These are collected over the term of the loan. An additional € 4,968 thousand is attributable to accrued income from the Global Clearing business and relates to existing derivative positions of customers. This income will be collected over the term of the derivative positions. In addition, a cash subsidy from the landlord for the rented office space is included in the deferred income for an amount of totalling € 831 thousand, which will be collected over the rental period. Finally, € 752 thousand results from the application of nominal value accounting to the loans taken over by J.P. Morgan affiliates under Section 340e (2) HGB.

3.15. PROVISIONS

€ T	31/12/2019	31/12/2018
Provisions	**90,231**	**26,993**
incl.:		
– tax provisions	28,856	12,728
– provisions in the lending business	20,402	21
– other provisions	40,973	14,244

The other provisions at € 22.3 million are attributable to personnel-related provisions. A further € 12.0 million are related to loan commitments taken over from J.P. Morgan affiliates, € 3,195 million to legal, consultancy and audit fees, and € 1,266 million are attributable to reinstatement obligations for the rented office building.

3.16. SUBORDINATED LIABILITIES

€ T	31/12/2019	31/12/2018
Subordinated liabilities	**185,800**	**185,822**
incl.: Subordinated liabilities to associated companies	185,800	185,822

The subordinated capital shown for 2019 comprises a subordinated loan of € 150,000,000 taken out on December 21, 2009, as well as another subordinate loan of € 35,790,432, which was transferred to J.P. Morgan AG in the course of the merger between J.P. Morgan Beteiligungs- und Verwaltungsgesellschaft mbH and J.P. Morgan AG.

Interest payments are made quarterly starting on December 21, 2009 for the capital gained within the context of the merger on a semi-annual basis. The interest payable is calculated using the relevant three-month EURIBOR (European Interbank Offered Rate) or six-month LIBOR interest rate (London Interbank Offered Rate). The expenses incurred for subordinated liabilities total € 69 thousand for the financial year.

The subordinated capital totalling € 150,000 thousand is due on December 21, 2039. The subordinated loan totalling € 35,790 thousand has an unlimited term. Both subordinated loans can be terminated by J.P. Morgan AG after prior approval by the competent supervisory authority in whole or in part with one month's notice at the end of any month from March 31, 2020 onwards. In addition, there is a right of termination by J.P. Morgan AG of the entire loan at any time, provided that either its application as equity for the banking supervisor or the tax treatment change.

In the event of insolvency, all other lenders will be serviced with priority. There are no early repayment obligations.

If the competent supervisory authorities so decide ("regulatory bail-in"), both subordinated loans can either be reduced in whole or in part of their nominal value, or converted into core capital instruments of J.P. Morgan AG. In this case, all claims by the Lender and obligations on J.P. Morgan AG arising from the loan contracts expire to the extent of the reduction or conversion.

Subordinated liabilities meet the requirements of Art. 63 CRR.

3.17. FUND FOR GENERAL BANKING RISKS

€ T	2019	2018
Status as at 01/01	**57,064**	**56,500**
Additions	0	564
Disposals	0	0
Status as at 31/12	**57,064**	**57,064**

The additions to the fund for general bank risks were paid in according to § 340e Para. 4 HGB.

3.18. SUBSCRIBED CAPITAL, CAPITAL RESERVE AND RETAINED EARNINGS

The share capital amounts to € 1,867,200,000 as at the balance sheet date and is divided into 160,000,000 shares (€ 11.67 per share). On December 31, 2018, the share capital amounted to € 160,000,000. The number of shares issued has not changed. The share capital was increased as described below by conversion from the capital reserve.

The shares are 100 % paid-up and are held directly by J.P. Morgan International Finance Limited, with headquarters in Newark in the United States of America. In September 2019, € 1,707,200,000 of the capital reserve was converted into subscribed capital. The capital reserve was increased in February 2019 by a payment of € 1.8 billion from J.P. Morgan International Finance Limited and in October 2019 by a further payment of € 895.7 million from J.P. Morgan International Finance Limited. The balance sheet loss of the prior year of totalling € 8.8 million was offset against the other revenue reserve with the resolution of the Annual General Meeting.

3.19. AMOUNTS UNAVAILABLE FOR DISTRIBUTION

The amount that may not be distributed as dividends as at December, 31 2019 under § 268 Para. 8 sentence 3 HGB amounts to € 118.4 million (prior year: € 86.1 million). This is the difference between the fair value and the purchase cost of the plan assets. Another item that is barred from disbursement is a part of the difference in the retirement pension commitments that arises from applying the 7-year average interest rate in accordance with § 253 Para. 6 S. 2 HGB, totalling € 9.6 million (prior year: € 11.3 million). There were free reserves in the meaning of § 268 Para. 8 HGB totalling € 3,019.0 million (prior year: € 2,201.9 million).

3.20. FOREIGN CURRENCY ASSETS AND LIABILITIES

€ T	31/12/2019	31/12/2018
Foreign currency assets and liabilities		
Assets	13,819,580	3,859,500
Liabilities	13,819,760	3,862,308

3.21. CONTINGENT LIABILITIES

€ T	31/12/2019	31/12/2018
Contingent liabilities		
Liabilities from guarantees and indemnity agreements	350,820	114,389

Contingent liabilities are shown at nominal value, less related provisions. In relation to affiliated companies, there are liabilities consisting of guarantees and warranty contracts totalling € 109 million.

The probability of use is assessed as very low, due to the credit ratings of the respective borrowers. Information in accordance with § 35 Para. 5 RechKredV [Kreditinstituts-Rechnungslegungsverordnung (Credit Institution Accounting Regulations)] is not required in this context, since J.P. Morgan AG has not transferred any collateral to others.

3.22. OTHER COMMITMENTS

Other commitments include irrevocable loan commitments for loans to customers for a total of € 9,122 million and € 1,238 million in commitments of letters of credit. In addition, there are irrevocable loan commitments totalling € 2,619 million, primarily for lines of credit approved by J.P. Morgan affiliates, under which the exercise of the loan commitment by customers can occur in various countries. Depending on the country in which the loan is drawn down, J.P. Morgan AG may take on the role of issuing party. Loan commitments and letters of credit are each shown at the nominal value of the commitment, minus the corresponding provisions. In the context of banking business, it can generally be expected that the loan commitments or letters of credit granted to customers will be exercised. In the event of exercise, the loan commitment is cancelled and the loan is reported as a receivable from customers, in each case for the value of the exercised amount, or is reported as a letter of credit as a contingent liability. Any credit risks from drawdowns of irrevocable loan commitments or letters of credit are included in the assessment of credit risks. If a credit risk is identified, then this is taken into account by creating the appropriate provisions. The amount of the provision is determined using generally accepted calculation methods. Taking into account the provisions that already exist, the credit risk is estimated as low as of the reporting date.

4. Explanatory Notes to the Income Statement

4.1. INCOME BY GEOGRAPHICAL MARKETS

The total amount of interest income, current income from shares and other non-fixed-interest securities, holdings and shares in affiliated companies, commission income, net income from the trading portfolio and other operating income are divided across various regions; in accordance with § 34 Para. 2 RechKredV, this results in the following overview:

€ T	1/1–31/12/2019	1/1–31/12/2018
Federal Republic of Germany	**332,807**	**149,830**
Europe other than Germany	**12,852**	**0**
In total	**345,659**	**149,830**

4.2. NET INTEREST INCOME

€ T	1/1–31/12/2019	1/1–31/12/2018
Interest income (net)	**21,825**	**9,857**
Interest income from:	**58,729**	**–16,279**
a) Lending and money-market transactions	139,670	26,148
less negative interest arising from lending and money-market transactions	–81,704	–43,614
b) Fixed-income securities and debt register claims	763	1,188
Interest expenses:	**36,904**	**–26,136**
a) Lending and money-market transactions	73,890	9,877
less negative interest arising from lending and money-market transactions	–36,986	–37,110
b) Fixed-income securities and debt register claims	0	1,098

Interest income has increased by 121 % over the comparison period. The increase is primarily attributable to the new business activities in the lending business, and the positive growth in the Global Clearing business.

The positive balance of interest received and paid on bonds fell by € 1,088 thousand compared to the prior year.

4.3. NET COMMISSION INCOME

€ T	1/1–31/12/2019	1/1–31/12/2018
Commission income (net)	**195,705**	**90,649**

The net commission income increased by 116% in comparison to the previous year. In particular, increasing commission income from the Global Clearing business and the OTC derivative business contributed to this increase.

4.4. NET INCOME OR NET EXPENSE FROM TRADING PORTFOLIO

€ T	1/1–31/12/2019	1/1–31/12/2018
Net income or net expense from trading portfolio	**–6,641**	**7,121**

The net expenses (prior year: net income) from trading portfolio are € −6,641 thousand. This is attributable to the changed accounting logic for debit valuation adjustments and funding value adjustments, which affected the trading result in an amount totalling € −10.0 million.

4.5. OTHER OPERATING INCOME

€ T	1/1 – 31/12/2019	1/1 – 31/12/2018
Other operating income	**65,493**	**39,148**
including:		
– Services rendered for Group entities	35,512	32,797
– Miscellaneous other operating income	29,981	6,350

Other operating income includes the effect of valuations from the fair value changes to the collateral assets, the change in the actuarial interest and the effects of the compounding/discounting of pension obligations totalling € 22.0 million, comprising income totalling € 34.0 million and expenses totalling € 12.0 million.

4.6. GENERAL ADMINISTRATIVE EXPENSES

€ T	1/1 – 31/12/2019	1/1 – 31/12/2018
General administrative expenses	**159,721**	**120,370**
incl.:		
Personnel expenses	63,382	40,563
– Wages and salaries	55,807	32,220
– Social security contributions and expenses for pension provisions and benefits	7,575	8,343
• of which for retirement	3,256	4,878
other administrative expenses	96,338	79,807

The increase in general administrative expenses essentially results from the increase in the number of employees and increased expenditure that relate to Brexit preparations and the extended business activities, including mainly € 6.9 million in higher costs of the annual audit, and € 6.1 million in higher costs in connection with the Global Clearing business.

4.7. OTHER OPERATING EXPENSES

€ T	1/1 – 31/12/2019	1/1 – 31/12/2018
Other operating expenses	**2,143**	**18,416**

The reduction in other operating expenses is essentially attributable to changes in pension obligations. The previous year included € 15,857 thousand of interest expenses from the changes in pension obligations.

4.8. TAX ON INCOME AND REVENUE AND OTHER TAXES

€ T	1/1 – 31/12/2019	1/1 – 31/12/2018
Taxes	**38,276**	**14,549**
Municipal trade tax	17,796	8,698
Corporate tax	20,478	5,851
Other	2	0

4.9. PROPOSED ALLOCATION OF EARNINGS

The Management Board and the Supervisory Board propose to the Annual General Meeting that the balance sheet profit for financial year 2019 totalling € 41,238 thousand be added to other revenue reserves.

5. Other data

5.1. PENDING FORWARD CONTRACTS

Open forward transactions existed on the balance sheet date from currency swaps in the banking book, which are used to hedge foreign currency positions. The positive and negative market values of these swaps amounted to € 2.6 million and € –7.6 million, respectively, and the nominal amount was € 2.3 billion.

5.2. RELATIONS WITH AFFILIATED COMPANIES

The sole shareholder of J.P. Morgan AG is J.P. Morgan International Finance Limited, Newark/Delaware, USA. A dependency report in accordance with § 312 AktG [Aktiengesetz (German Stock Corporations Act)] is issued at the end of each financial year.

J.P. Morgan Chase & Co. and J.P. Morgan Chase Bank, National Association, have informed us by letter dated January 15, 2020 that an indirect equity interest exists totalling 100 %. J.P. Morgan International Finance Limited informed us in writing on January 15, 2020 that a direct holding 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 consolidated annual financial statements can be obtained on request from J.P. Morgan AG, Frankfurt am Main.

The Bank is a member of the Deposit Protection Fund of the Association of German Banks.

5.3. NUMBER OF EMPLOYEES

On average for the year there were 361 employees, broken down as follows:

Number	31/12/2019	31/12/2018
Yearly average	**361**	**305**
Distribution of employees		
Authorised signatories	7	8
Authorised officers	207	146
Commercial employees	147	151

In the reporting year, 13 employees were employed by J.P. Morgan AG, London Branch, (in prior year: none). Employees who are seconded, released from duties and on parental leave are not included in these figures.

5.4. TOTAL REMUNERATION OF THE ACTIVE MEMBERS OF THE BOARDS

The remuneration paid to members of the Management Board totalled € 9,239,000. A portion of this came from 44,903 restricted stock units with a fair value on their grant date of € 5,591 thousand.

The remuneration of the Supervisory Board for 2019 amounted to a total of € 20 thousand.

No loans were granted to Board members during this financial year.

5.5. TOTAL PAYMENTS TO FORMER BOARD MEMBERS AND THEIR DEPENDENTS

Pension provisions for these persons totalled € 14,625 thousand as of December 31, 2019. The total remuneration paid to former members of the Management Board and their dependents amounted to € 3,182 thousand as at December 31, 2019.

5.6. FEE EXPENSES

€ T	1/1 – 31/12/2019	1/1 – 31/12/2018
Total auditors' fees billed for the financial year calculated for	**8,021**	**564**
Financial statements auditing services	**7,489**	**444**
of which, for the previous year	380	10
of which, expenses in the current financial year	4,662	0
of which, expenses for creating provisions	2,447	434
Other confirmation services	**532**	**120**
of which, for the previous year	37	0
of which, expenses in the current financial year	450	0
of which, expenses for creating provisions	45	120
Other services	**0**	**0**
of which, for the previous year	0	0
of which, expenses in the current financial year	0	0
of which, expenses for creating provisions	0	0

The fee for auditing services reflects the annual statements audit services as well as the project advisory audit for the creation of the IFRS annual statement. Other confirmation services essentially include audits under § 89 WpHG [Wertpapierhandelsgesetz (Securities Trading Act)] as well as legally required, contractually agreed and voluntary confirmation services (e.g. deposit protection). Tax consulting services and other services were not provided.

5.7. EXPLANATORY NOTES ON OTHER FINANCIAL COMMITMENTS

The Company utilizes services from various Group member companies as part of its outsourcing functions. 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 € 43 million as at December 31, 2019.

5.8. INFORMATION ON CORPORATE BODIES

Management Board
Dorothee Blessing Chairperson of the Management Board, Managing Director, J.P. Morgan AG
Stefan Behr Director for business divisions Wholesale Payments, Commercial Bank, Securities Services, Corporate Bank and Lending, 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 (since May 31, 2019) 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
Elena Korablina Managing Director, JPMorgan Chase Bank, N.A., London Branch
Olivier Vigneron (until December 31, 2019) Managing Director, JPMorgan Chase Bank, N.A., London Branch
Thomas Freise Employee Representative, J.P. Morgan AG
Christoph Fickel Employee Representative, J.P. Morgan AG
Wanda Eriksen (from January 1, 2020)

Directorships or seats on supervisory boards

Management Board
Dorothee Blessing Management body: J.P. Morgan Securities plc Frankfurt Branch; Supervisory body: A.P. Møller Mærsk Group
Stefan Behr; no further mandates
Nicholas Conron; no further mandates
Burkhard Kübel-Sorger Management body Whiteshire Debt Solutions GmbH (dissolved on 18 November 2019)
Gunnar Regier Management body: J.P. Morgan Securities plc Frankfurt Branch
Supervisory Board
Mark S. Garvin Management body: J.P. Morgan Securities plc (until April 30, 2019); Supervisory body J.P. Morgan Bank Luxembourg S.A. (Chairman of the Board); J.P. Morgan Europe Limited; Euroclear Holding S.A.
Guy America; no further mandates
Elena Korablina (until February 26, 2019) Management Body J.P. Morgan Securities plc
Olivier Vigneron; no further mandates
Thomas Freise; no further mandates
Christoph Fickel; 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)

Frankfurt am Main, April 23, 2020

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

DOROTHEE BLESSING

STEFAN BEHR

GUNNAR REGIER

NICHOLAS CONRON

BURKHARD KÜBEL-SORGER

INDEPENDENT AUDITOR'S REPORT

To J.P. Morgan AG, Frankfurt am Main

Report on the Audit of the Annual Financial Statements and of the Management Report

(Translation of the auditor's report issued in German language on the annual financial statements prepared in German language by the management of J.P. Morgan AG)

AUDIT OPINIONS

We have audited the annual financial statements of J.P. Morgan AG, Frankfurt am Main, which comprise the balance sheet as at December 31, 2019 and the statement of profit and loss for the financial year from January 1 to December 31, 2019 and the notes to the financial statements, including the presentation of the recognition and measurement policies. In addition, we have audited the management report of J.P. Morgan AG for the financial year from January 1 to December 31, 2019. We have not audited the statement on corporate governance pursuant to § 289f Para. 4 HGB (information on percentage of women), as this is not required by German statutory regulations.

In our opinion, on the basis of the knowledge obtained in the audit,

- the accompanying annual financial statements comply, in all material respects, with the requirements of German commercial law and give a true and fair view of the assets, liabilities and financial position of the Company as at December 31, 2019 and of its financial performance for the financial year from January 1 to December 31, 2019 in compliance with German Legally Required Accounting Principles, 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 annual 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 Para. 3 sentence 1 HGB, we declare that our audit has not led to any reservations relating to the compliance of the annual financial statements and of the management report.

BASIS FOR THE AUDIT OPINION

We conducted our audit of the annual 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 Institute of 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 Annual 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 annual financial statements and on the management report.

KEY AUDIT MATTERS IN THE AUDIT OF THE ANNUAL FINANCIAL STATEMENTS

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the annual financial statements for the financial year from January 1 to December 31, 2019. These matters were addressed in the context of our audit of the annual 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 at fair value**

❷ **Accounting treatment of business activities that were transferred to J.P. Morgan AG as a result of Brexit**

Our presentation of these key audit matters has been structured 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 at fair value**

① J.P. Morgan AG holds financial instruments in their portfolio, which are primarily derivatives, and are shown in the financial statements of the company under the balance sheet item "Trading portfolio" and under the statement of profit and loss item "Net income from the trading portfolio". For the purposes of accounting and/or presentation in the notes, the company determines a fair value for these holdings. 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 valuation uncertainties. Within the company's total portfolio of financial instruments, this relates primarily 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 standardised 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-based valuation of financial instruments, there is therefore an increased valuation 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 valuation uncertainties on the financial statements, the valuation of these financial instruments was of particular importance during our audit.

② As part of our audit, we analysed the holdings of financial instruments with model-based valuation, primarily derivatives with increased valuation uncertainties. We have reviewed 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 own internal financial valuation specialists, we have undertaken an assessment of the suitability of the valuation models used and the parameters used for selected securities, derivatives and structured products. We have reviewed the consistency of the application of the valuation models. In addition, we carried out an independent revaluation of selected products as at the balance sheet date. Based on the audit work we carried out, we were able to satisfy ourselves that the methods and assumptions used by the legal representatives are overall suitable for determining the model-based valuation of holdings in financial instruments.

③ The information provided by the company on the valuation of financial instruments, including derivatives at fair value, is included in the notes to the financial statements, in particular in the note on accounting and valuation principles, and in note No. 3.5.

❷ Accounting treatment of business activities that were transferred to J.P. Morgan AG as a result of Brexit

① As part of the implementation of the Group-wide Brexit strategy and the role of J.P. Morgan AG as the central office for the Banking and in particular the Markets business divisions of the Corporate & Investment Bank of the JPMorgan Chase & Co. Group within the European

Union, the company added further business activities during the financial year 2019 within the European Union. The new business activities in equity trading, commodities trading, currency and interest rate management, the lending business and trading in exchange-traded derivatives led to a significant expansion of receivables from banks, receivables from customers, trading portfolio (both assets and liabilities), liabilities to banks and liabilities to customers as well as other assets and other liabilities. In addition, the trust assets and the trust liabilities increased due to segregated customer positions (from initial and variation margin). The interest and commission income was positively influenced once the new business activity started. Due to the special importance of the new business activities, the volume of transactions and the complexity and effects on income, these items were of special importance for our audit.

② As part of our audit, we have evaluated the effects of the new business activities on the annual financial statements and assessed the company's approach to the recording and valuation of the business transactions resulting from this in the annual financial statements. We have assessed the appropriateness and effectiveness of the relevant internal control system at J.P. Morgan AG in relation to the accounting for business transactions in the new business activities. In the process, we have placed our focus on the control activities that relate to the recording of relevant master data and transactions as well as the portfolio reconciliation with the relevant nostro banks, stock exchanges, central counterparties and customers in the lending business and so the validation of the resulting income components. In addition, we have assessed the contractual principles with nostro banks, stock exchanges, central counterparties, custodians and customers and their effects on the business organization and the IT systems of the company as well as the relevant valuation models. Furthermore, we have assessed and evaluated the accounting and valuation of the new business activities taken over, as of the balance sheet date, as well as the effects of transactions on the income components of the statement of profit and loss. On the basis of our audit, we were able to satisfy ourselves that the presentation in the balance sheet and statement of profit and loss was generally carried out in a proper manner and adequately justified and documented in the context of the transfer of business activities as a result of Brexit.

③ The company's information on the accounting treatment of the business activities that were taken over as a result of Brexit are provided in the notes to the financial statements, more specifically in the notes on the accounting and valuation principles and in notes 3.2., 3.3., 3.5., 3.6., 3.7., 3.8., 3.11., 3.12., 3.13., 3.14., 3.15., 4.2., 4.3. and 4.4., as well as in the management report.

OTHER INFORMATION

The executive directors are responsible for the other information. The other information comprises the declaration on senior management in accordance with § 289f Para. 4 HGB (information on the percentage of women).

The other information also comprises the annual report – excluding cross-references to external information – with the exception of the audited annual financial statements, the audited management report and our auditor's report.

Our audit opinions on the annual financial statements and management report do not cover the other information, and consequently we do not express an audit opinion or any form of assurance conclusion thereon.

In connection with our audit, our responsibility is to read the other information and, in doing so, to consider whether the other information

- is materially inconsistent with the annual 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 ANNUAL FINANCIAL STATEMENTS AND THE MANAGEMENT REPORT

The executive directors are responsible for the preparation of the annual financial statements that comply, in all material respects, with the requirements of German commercial law, and that the annual financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Company in compliance with German Legally Required Accounting Principles. In addition, the executive directors are responsible for such internal control as they, in accordance with German Legally Required Accounting Principles, have determined necessary to enable the preparation of annual financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the annual 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, provided no actual or legal circumstances conflict therewith.

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 annual 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 annual financial statements and of the management report.

AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE ANNUAL FINANCIAL STATEMENTS AND OF THE MANAGEMENT REPORT

Our objectives are to obtain reasonable assurance about whether the annual 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 annual 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 annual 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 annual financial statements and this management report.

We exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the annual 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 annual 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 annual 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 annual financial statements, including the disclosures, and whether the annual financial statements present the underlying transactions and events in a manner that the annual financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Company in compliance with German Legally Required Accounting Principles.

- Evaluate the consistency of the management report with the annual 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 annual 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 general meeting on February 28, 2019. We were engaged by the supervisory board on April 17, 2019. 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 23, 2020

sgd. Christoph Lehmann	sgd. Kerstin Voeller
Wirtschaftsprüfer	Wirtschaftsprüfer
(German Public Auditor)	(German Public Auditor)

REPORT OF THE SUPERVISORY BOARD

SUPERVISION AND CONTROL

The Supervisory Board has continuously monitored 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 of business management in regard to the Bank's economic situation, the business policy, liquidity, capital and risk management. In addition, the Supervisory Board was kept informed in detail each quarter about risk management.

PERSONNEL CHANGES IN THE MANAGEMENT BOARD

There was a personnel change in the Management Board during 2019 financial year. Gunnar Regier was appointed to the Management Board as of May 31, 2019.

CHANGES IN MEMBERSHIP OF THE SUPERVISORY BOARD

On December 31, 2019, Olivier Vigneron left the Supervisory Board. As of January 1, 2020, Wanda Erikson will belong to the Supervisory Board as an external supervisory board member.

AUDIT COMMITTEE

The audit committee discussed the annual financial statements and the audit report on April 27, 2020 as well as the audit planning on September 12, 2019.

The Audit Committee is responsible for monitoring the accounting process, the effectiveness of the internal control system, the risk management system and the internal audit system as well as the statutory audit, particularly 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)), at the Extraordinary General Meeting, the audit firm PricewaterhouseCoopers GmbH, Frankfurt am Main, were appointed as auditors for the annual financial statement and management report of the financial year 2020, in line with statutory requirements.

ANNUAL FINANCIAL STATEMENTS

The annual financial statements and management report for the 2019 financial year, including the bookkeeping, were audited by the audit firm PricewaterhouseCoopers GmbH, Frankfurt am Main, who were appointed by the Annual General Meeting. The auditing firm issued an unqualified audit opinion.

The Audit Committee discussed and reviewed the annual financial statements and management report with the auditors during the meeting on April 27, 2020. Based on the final result of the Audit Committee’s investigation, the Supervisory Board did not raise any objections. The annual financial statements and management report prepared by the Management Board for the period ended December 31, 2019 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 dedication and joint hard work.

The Supervisory Board, April 27, 2020

MARK S. GARVIN
Chairman

ANNEX: COUNTRY-BY-COUNTRY REPORTING 2019

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 2019.

On December 31, 2019, J.P. Morgan AG had the branch offices listed in the overview. For these branches, registration was completed at the balance sheet date, but there was an active business operation only at the UK branch.

J.P. Morgan AG and its listed branches have not received any public subsidies during this financial year.

Company name	**Location**
J.P. Morgan AG – Brussels Branch	Brussels
J.P. Morgan AG – Copenhagen Branch	Copenhagen
J.P. Morgan AG – London Branch	London
J.P. Morgan AG – Oslo Branch	Oslo
J.P. Morgan AG – Amsterdam Branch	Amsterdam
J.P. Morgan AG – Milan Branch	Milan
J.P. Morgan AG – Madrid Branch	Madrid
J.P. Morgan AG – Warsaw Branch	Warsaw
J.P. Morgan AG – Paris Branch	Paris
J.P. Morgan AG – Stockholm Branch	Stockholm

Country	Number of employees [1]	Turnover [2] € T	Profit (or loss) before taxes € T	Taxes on profit or loss € T	Activity
Germany	348	199,798	80,882	37,230	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	–	–	–	–	Banking and markets
Denmark	–	–	–	–	Banking and markets
United Kingdom	13	11,454	–1,363	1,043	Banking and markets
Norway	–	–	–	–	Banking and markets
Netherlands	–	–	–	–	Banking and markets
Spain	–	–	–	–	Banking and markets
Poland	–	–	–	–	Banking and markets
Italy	–	–	–	–	Banking and markets
France	–	–	–	–	Banking and markets
Sweden	–	–	–	–	Banking and markets

[1] Number of employees based on the annual average.
[2] Turnover is defined as interest income, commission income, investment and trading income.

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