SECOND SUPPLEMENT DATED 23 SEPTEMBER 2022

**TO THE REGISTRATION DOCUMENT
FOR SECONDARY ISSUANCES OF NON-EQUITY SECURITIES
DATED 4 MAY 2022, AS SUPPLEMENTED BY
THE FIRST SUPPLEMENT DATED 3 AUGUST 2022**

Deutsche Bank Aktiengesellschaft

(Frankfurt am Main, Federal Republic of Germany)

This document constitutes the second supplement (the "**Supplement**") to the registration document for secondary issuances of non-equity securities dated 4 May 2022, as supplemented by the first supplement dated 3 August 2022 (the "**First Supplement**") (the "**Registration Document**") which has been prepared by Deutsche Bank Aktiengesellschaft ("**Deutsche Bank AG**" or "**Deutsche Bank**" or the "**Bank**" or the "**Issuer**" or "**we**" or "**our**") pursuant to Art. 10 (1), Art. 23 (1) and Art. 23 (5) of Regulation (EU) 2017/1129 (as amended from time to time, the "**Prospectus Regulation**"). Deutsche Bank and its consolidated subsidiaries are hereinafter referred to as "**Deutsche Bank Group**" or the "**Group**".

This Supplement should be read in conjunction with the Registration Document, including the documents incorporated by reference therein. The terms used in this Supplement have the same meaning as the terms used in the Registration Document.

The purpose of this Supplement is to amend the disclosure on the Issuer contained in the Registration Document as detailed on pages 4 and 5 of this Supplement.

The Issuer accepts responsibility for the information contained in this Supplement. To the best of the knowledge of the Issuer (which has taken all reasonable care to ensure that such is the case) the information contained in this Supplement is in accordance with the facts and does not omit anything likely to affect the import of such information.

This Supplement will be published in electronic form on the website of the Luxembourg Stock Exchange (www.bourse.lu) and on the website of the Issuer (www.db.com under "Investor Relations").

This Supplement relates to the prospectuses constituted from the Registration Document, as supplemented from time to time, and the following securities notes:

Wertpapierbeschreibung für Endlos-Zertifikate vom 24. Mai 2022 (Securities Note for Perpetual Certificates dated 24 May 2022)

Securities Note for the Euro 80,000,000,000 Debt Issuance Programme dated 17 June 2022

Any investor who had already agreed to purchase or subscribe for any securities to be issued pursuant to one of the above prospectuses before this Supplement was published may, if the securities have not yet been delivered to the investor at the time when the significant new factor, material mistake or material inaccuracy referred to in Art. 23 (1) of the Prospectus Regulation arose or was noted, withdraw from its purchase or subscription pursuant to Art. 23 (2a) of the Prospectus Regulation as a result of the publication of this Supplement on or before 29 September 2022. Any investor who wishes to exercise its right of withdrawal may contact Deutsche Bank AG, Taunusanlage 12, 60325 Frankfurt am Main, Germany.

The Issuer has requested the *Commission de Surveillance du Secteur Financier* (the "**CSSF**") to provide the competent authority in Germany with a certificate of approval (a "**Notification**") attesting that this Supplement has been drawn up in accordance with the Prospectus Regulation. The Issuer may request the CSSF to provide competent authorities in additional Member States within the European Economic Area (the "**EEA**") with a Notification.

The Issuer provides as Annex 1 to this Supplement a consolidated version of the Registration Document, as supplemented by the First Supplement and this Supplement, in accordance with Art. 23 (6) of the Prospectus Regulation.

Table of Contents

The disclosure on the Issuer contained in the Registration Document shall be amended as follows:

FINANCIAL INFORMATION CONCERNING DEUTSCHE BANK'S ASSETS AND LIABILITIES, FINANCIAL POSITION AND PROFITS AND LOSSES

The text of the subsection "Legal and Arbitration Proceedings – Postbank Voluntary Public Takeover Offer" commencing on page 68 of the Registration Document (as replaced by the First Supplement) is replaced by the following text:

"On 12 September 2010, Deutsche Bank announced the decision to make a voluntary takeover offer for the acquisition of all shares in Deutsche Postbank AG ("**Postbank**"). On 7 October 2010, the Bank published its official takeover offer and offered Postbank shareholders a consideration of € 25 for each Postbank share. This offer was accepted for a total of approximately 48.2 million Postbank shares.

In November 2010, a former shareholder of Postbank, Effecten-Spiegel AG, which had accepted the takeover offer, brought a claim against Deutsche Bank alleging that the offer price was too low and was not determined in accordance with the applicable German laws. The plaintiff alleges that Deutsche Bank had been obliged to make a mandatory takeover offer for all shares in Postbank, at the latest, in 2009 as the voting rights of Deutsche Post AG in Postbank had to be attributed to Deutsche Bank pursuant to Sec. 30 of the German Takeover Act. Based thereon, the plaintiff alleges that the consideration offered by Deutsche Bank for the shares in Postbank in the 2010 voluntary takeover offer needed to be raised to € 57.25 per share.

The Regional Court Cologne (*Landgericht*) dismissed the claim in 2011 and the Cologne appellate court dismissed the appeal in 2012. The Federal Court set this judgment aside and referred the case back to the Higher Regional Court Cologne to take evidence on certain allegations of the plaintiff.

Starting in 2014, additional former shareholders of Postbank, who accepted the 2010 tender offer, brought similar claims as Effecten-Spiegel AG against Deutsche Bank which are pending with the Regional Court Cologne and the Higher Regional Court of Cologne, respectively. On 20 October 2017, the Regional Court Cologne handed down a decision granting the claims in a total of 14 cases which were combined in one proceeding. The Regional Court Cologne took the view that Deutsche Bank was obliged to make a mandatory takeover offer already in 2008 so that the appropriate consideration to be offered in the takeover offer should have been € 57.25 per Postbank share (instead of € 25). The additional consideration per share owed to shareholders which have accepted the takeover offer would thus amount to € 32.25. Deutsche Bank appealed this decision and the appeal was assigned to the 13th Senate of the Higher Regional Court of Cologne, which also heard the appeal of Effecten-Spiegel AG.

In 2019 and 2020 the Higher Regional Court Cologne called a number of witnesses in both cases. The individuals heard included current and former board members of Deutsche Bank, Deutsche Post AG and Postbank as well as other persons involved in the Postbank transaction. In addition, the Higher Regional Court Cologne issued orders for the production of relevant transaction documents entered into between Deutsche Bank and Deutsche Post AG in 2008 and 2009. Deutsche Bank had therefore deposited the originals of these documents with the court in 2019.

On 16 December 2020, the Higher Regional Court Cologne handed down a decision and fully dismissed the claims of Effecten-Spiegel AG. Further, in a second decision handed down on 16 December 2020, the Higher Regional Court Cologne allowed the appeal of Deutsche Bank against the decision of the Regional Court Cologne dated 20 October 2017 and dismissed all related claims of the relevant plaintiffs. The Higher Regional Court Cologne has granted leave to appeal to the German Federal Court of Justice ("**BGH**") as regards both decisions and all relevant plaintiffs have lodged their respective appeals with the BGH end of January and beginning of February 2021, respectively. The BGH held an oral hearing on 13 September 2022. According to its preliminary oral assessment, the BGH tends to again remand both cases back to the lower court (i.e. the Higher Regional Court Cologne) for a further clarification and assessment of relevant facts. It scheduled a separate date for the announcement of a decision on 13 December 2022.

Deutsche Bank has been served with a large number of additional lawsuits filed against Deutsche Bank shortly before the end of 2017, almost all of which are now pending with the Regional Court Cologne. Some of the new plaintiffs allege that the consideration offered by Deutsche Bank AG for the shares in Postbank in the 2010 voluntary takeover should be raised to € 64.25 per share.

The claims for payment against Deutsche Bank in relation to these matters total almost € 700 million (excluding interest).

The Group has established a contingent liability with respect to these matters but the Group has not disclosed the amount of this contingent liability because it has concluded that such disclosure can be expected to seriously prejudice the outcome of these matters."

TO THE EXTENT THAT THERE IS ANY INCONSISTENCY BETWEEN (A) ANY STATEMENT IN THIS SUPPLEMENT AND (B) ANY STATEMENT IN, OR INCORPORATED BY REFERENCE IN, THE REGISTRATION DOCUMENT, THE STATEMENTS IN (A) ABOVE SHALL PREVAIL.

Annex 1

Consolidated version of the Registration Document dated 4 May 2022 as supplemented by the First Supplement dated 3 August 2022 and the Second Supplement dated 23 September 2022

Registration Document
for Secondary Issuances of Non-Equity Securities

4 May 2022

Deutsche Bank Aktiengesellschaft

(Frankfurt am Main, Federal Republic of Germany)

This document constitutes a registration document for secondary issuances of non-equity securities (the "**Registration Document**"), which has been prepared by Deutsche Bank Aktiengesellschaft ("**Deutsche Bank AG**" or "**Deutsche Bank**" or the "**Bank**" or the "**Issuer**" or "**we**" or "**our**") pursuant to Art. 6 (3) and Art. 14 of Regulation (EU) 2017/1129 as amended from time to time (the "**Prospectus Regulation**") and Art. 9 of Commission Delegated Regulation (EU) 2019/980. Deutsche Bank and its consolidated subsidiaries are hereinafter referred to as "**Deutsche Bank Group**" or the "**Group**".

This Registration Document has been approved by the *Commission de Surveillance du Secteur Financier* (the "**CSSF**") of the Grand Duchy of Luxembourg as competent authority under the Prospectus Regulation in line with the provisions of Art. 6 (4) of the Luxembourg Law on Prospectuses for securities. In accordance with Art. 25 (1) of the Prospectus Regulation, the Issuer has requested the CSSF to provide the competent authority in Germany with a certificate of approval attesting that this Registration Document has been drawn up in accordance with the Prospectus Regulation (a "**Notification**"). The Issuer may request the CSSF to provide competent authorities in additional member states within the European Economic Area (the "**EEA**") with further Notifications.

This Registration Document will be valid for a period of twelve months following the date of its approval and will expire on 4 May 2023. It reflects the status as of its date of approval. The obligation to supplement this Registration Document pursuant to Art. 23 of the Prospectus Regulation in the event of a significant new factor, material mistake or material inaccuracy shall not apply once this Registration Document is no longer valid.

This Registration Document and all documents incorporated by reference in this Registration Document will be published in electronic form on the website of the Luxembourg Stock Exchange (www.bourse.lu) and on the website of the Issuer (www.db.com under "Investor Relations").

This Registration Document does not constitute an offer of or an invitation by or on behalf of Deutsche Bank to subscribe for or purchase any securities and should not be considered as a recommendation by Deutsche Bank that any recipient of this Registration Document should subscribe for or purchase any securities Deutsche Bank may issue. No person has been authorized by Deutsche Bank to give any information or to make any representation other than those contained in this Registration Document or consistent with this Registration Document. If given or made, any such information or representation should not be relied upon as having been authorized by Deutsche Bank.

TABLE OF CONTENTS

RISK FACTORS

This section describes the specific risks with regard to Deutsche Bank that affect its ability to meet its obligations as issuer of debt securities.

The risk factors are divided into six categories, each indicated in this section by a title (in ***bold italic font***), according to their nature. Within the different categories, each individual risk factor is indicated by a heading (in **bold regular font**) with the most significant risks being listed first in each category. The assessment of materiality was made based on the probability of their occurrence and the expected extent of their negative impact on the ability to meet the obligations as issuer of debt securities. Subsequent risk factors in the same category are not necessarily ranked in order of materiality of occurrence.

Investors should consider the following specific and material risk factors, in addition to the other information and risk factors contained in the relevant simplified prospectus, when deciding to purchase securities of Deutsche Bank.

The occurrence of the following risks may have a material adverse effect on the net assets, financial position, and results of operations of Deutsche Bank and thus impair its ability to fulfil its obligations under debt securities to investors.

Risks Relating to the Macroeconomic, Geopolitical and Market Environment

Macroeconomic and financial market conditions: As a corporate and investment bank with a large private client franchise, our businesses are materially affected by global macroeconomic and financial market conditions. Significant challenges may arise from economic growth prospects, the interest rate environment, inflationary pressure, supply chain disruptions, geopolitical risks as well as higher market volatility, potential deterioration of international trade relations, and weakness of global, regional and national economic conditions. Such risks exist in particular from the COVID-19 pandemic and its ongoing impacts, and the large-scale Russian military action against Ukraine. Other risks exist with respect to China and from political and economic instability in key markets.

Deutsche Bank's macroeconomic, business and operating environment improved over the course of 2021 as the global economy experienced a strong recovery from the pandemic recession. However, the near-term outlook has deteriorated, and downside risks have increased as inflationary pressure has intensified further, supply-side disruptions have become more entrenched, and the new, highly infectious Omicron variant of COVID-19 spread rapidly across the globe.

The COVID-19 pandemic continues to present tangible downside risk to our business. The global surge in COVID-19 cases related to the highly transmissible Omicron variant has negatively impacted economic activity due to increased restrictions imposed by governments across many countries, despite indications that it causes less severe disease than previous variants. Impacts are expected to subside as vaccination rates continue to increase globally and new antiviral drugs become available which should limit the number of severe illnesses and deaths, although vaccination rates in many emerging markets continue to lag behind and developed markets continue to face vaccine hesitancy in significant parts of their population. As a result, the timing and strength of economic recoveries will continue to vary from country to country. The emergence of new variants of concern may require further social distancing requirements or lockdowns and the effects of these are not fully predictable as they will vary depending on the nature of the variant, country-specific pandemic conditions and policy preferences. Countries which have pursued a zero COVID-19 policy, including China, might struggle to contain Omicron as successfully as other variants due to its more infectious nature. Although some incipient changes in policy have started to occur, strict lockdowns may be required which could impact China's economy and global supply chains.

On 24 February 2022, Russia commenced large-scale military action against Ukraine. This followed weeks of tensions between Russia and Ukraine, as well as the West, and the recognition by Russia of two separatist-held areas in Eastern Ukraine as independent states. News of the Russian military action negatively impacted stock prices and caused many commodities to rally, with the Brent crude oil price exceeding U.S.$ 100 a barrel and natural gas prices also increasing sharply. The conflict could lead to a further rise in energy prices (particularly natural gas) if supplies are disrupted and presents a key downside risk for corporates and households in Europe and may further exacerbate supply chain risks of clients with higher sensitivities to rising energy costs. Ensuing turbulence in global financial markets could impact risky assets and countries. Taken together, the conflict and its ancillary effects could lead to a substantial slowdown in the global economy and diminish our ability to generate revenues and the profitability on specific portfolios as well as result in higher-than-expected loan losses. Depending on how this crisis develops further and its impact on financial markets and the economy generally it may also impact our ability to meet stated financial and non-financial targets.

Supply chain pressures in global production, trade and logistics resulting from the pandemic and subsequent strong pick-up in demand will likely persist through 2022, constraining output and fueling price inflation of manufactured and intermediate goods as well as energy and other commodities. Consumer price inflation rates have hit multi-decade highs in Europe and the U.S. and soaring energy prices are driving cost pressures for corporates and households which may impact the quality of our portfolios in particular in directly impacted industries such as utilities. As a result, we may observe higher than expected defaults in selected industries or regions, higher drawdowns of credit facilities and generally higher market volatility.

The inflation outlook remains uncertain. Consensus and market-implied projections point to continuously elevated inflationary pressure as supply bottlenecks and other temporary factors fade only slowly. Although major central banks are expected to gradually remove extraordinary monetary policy stimulus by phasing out emergency bond purchases and lifting key policy rates, there remains a risk that consumer and asset price inflation in major advanced economies will continue to accelerate faster than anticipated, requiring more aggressive monetary policy tightening. While this could create some upside potential for our business activity levels and net interest income, a disorderly sharp increase in bond yields could trigger a downward correction to equities and the widening of credit spreads, which could adversely impact trading results. In addition, we could see increased counterparty credit exposure on derivatives, increased credit risks on highly leveraged clients and emerging markets with external imbalances as well as risks to our pension fund assets. More broadly, this could impact the valuation of our assets and liabilities and drive changes in the composition of our balance sheet.

Despite elevated inflationary pressures, interest rates remain extremely low currently with the European Central Bank ("**ECB**") deposit facility rate still set at -0.50 %, German nominal Bund yields, until recently, trading at / close to negative territory and real rates deeply negative. The low interest rate environment has supported elevated market valuations across risk assets, particularly in U.S. equities including the technology sector. Most recently, macroeconomic and geopolitical concerns have sent U.S. equities into correction territory, with significant price declines among technology companies, and the risk of a significant and sustained equity price decline may be heightened further if policy rates rise more rapidly and to a higher level than currently anticipated. Delayed tightening would likely further exacerbate stretched market valuations and drive renewed pressure on bank interest margins. More importantly, a further prolonged period of low interest rates in the Eurozone could materially affect our profitability and balance sheet deployment. While our revenues are particularly sensitive to interest rates, given the size of our loan and deposit books denominated in Euros, the low interest rate environment can also impact other balance sheet positions, which are accounted at fair value.

Compared to the low level of credit loss provisions observed in 2021, we expect the level to increase in 2022. This reflects our expectation of a slowdown of macroeconomic growth from the exceptionally strong levels in 2021 and the existence of various risk drivers such as lagging COVID-19 pandemic effects for certain asset classes like commercial real estate, persistent supply chain disruptions, inflation and geopolitical risks. Additionally, the possibility of new COVID-19 variants continues to pose the risk of triggering new, severe responses by governments as well as adverse market and client reactions. These could lead to increasing loan losses as well as potential client drawdowns of credit facilities (as observed in 2020) which in turn would lead to an increase in capital requirements and liquidity demands. Higher volatility in financial markets could lead to increased margin calls both inbound and outbound. Policy measures taken by central banks and governments such as debt moratoria have helped to mitigate some of the short-term impacts in 2020 and 2021. The withdrawal of support measures coupled with a significant increase in corporate and sovereign debt levels as a result of the pandemic (including second-round effects, e.g., on supply-chains) could also cause defaults and credit losses to increase. We regularly utilize collateralized loan obligations ("**CLO**") and credit default swaps ("**CDS**") to manage concentration risk. However, this may not be sufficient to fully offset potential credit losses.

China-related risks are elevated with ongoing concerns over the potential for a broad and persistent deterioration of China's highly leveraged property sector and property developers. We have seen numerous rating actions by external agencies, noting that some of the names which have seen significant rating deterioration were up until recently investment-grade rated, and widespread liquidity shortages for the sector. Stabilizing the economy has become a key priority for the Chinese government in 2022, but risks of ongoing liquidity constraints and selected defaults in the property sector remain elevated. In a severe downside this may lead to broader contagion across weaker state- and privately owned enterprises which could drive increased losses, including higher credit provisions, in our portfolio.

If these risks materialize, or current negative conditions persist or worsen, our business, results of operations or strategic plans could be adversely affected.

Russian military action against Ukraine: In addition to its broader macroeconomic impacts, the large-scale Russian military action against Ukraine may adversely affect our business and operations.

In response to the large-scale Russian military action against Ukraine, Western countries and the EU have moved to impose broad-based sanctions (including asset-freeze / blocking sanctions) targeting Russia, including but not limited to major Russian banks, the Russian Central Bank, certain other companies, Russian parliament members and certain members of the Russian elite and their families as well as announced the disconnection of select Russian banks from the Society for Worldwide Interbank Financial Telecommunication ("**SWIFT**"). The sanctions have also banned primary and/or secondary trading of sovereign debt and other select securities. It is possible that additional sanctions may be imposed, including additional or new asset-freezing / blocking sanctions of individuals ("**SDNs**") or companies (including further systemically important corporates and banks), a prohibition on the conversion of RUB into USD, EUR or GBP, and the disconnection of additional Russian banks from the SWIFT financial transfers system. Sanctions are subject to rapid change and it is also possible that new direct or indirect secondary sanctions could be imposed by the United States or other jurisdictions without warning as a result of developments. Considering the sanctions announced in the wake of the Russian military action, we are facing an unprecedented amount of sanctions measures, not all of which are fully aligned across jurisdictions and therefore further increase operational complexity and risk of making errors in managing day-to-day business activities within the rapidly evolving sanctions environment.

Generally, enhanced Russia sanctions results in increased complexity of our control environment and, the more clients are impacted, the more challenging it could be to completely wind-down cases within the timeframe provided by licenses or authorizations. New sanctions as well as countermeasures by the Russian government could also result in differences between the local application and/or implementation of relevant requirements by DB Moscow and the DB Group (as DB Moscow would have to adhere to local law). Subsequently, this would create conflict of law situations and certain exemptions would have to be applied. Furthermore, Deutsche Bank is utilizing inhouse technology resources in Russia, which contribute to the development of a number of the Bank's critical applications. We are subject to the risk that our ability to utilize these technology resources could be impaired or lost, for instance due to sanctions from the West, Russian state-initiated actions or management actions.

We are monitoring closely the developments relating to heightened sanctions, including Russian countermeasures, and utilizing dedicated governance structures including Global and Regional Crisis Management as and when required. We have also seen increased cyber-attacks, which may pose direct and indirect risks to us. The downside impact of the ongoing situation concerning Ukraine, from both a financial and non-financial risk perspective will depend on how the current crisis will unfold further. Russia's large-scale military action against Ukraine and the West's severe sanctions response against Russia may have significant negative economic consequences not only for the Russian economy but for Europe too. The crisis has the potential to worsen the already stressed energy price situation in Europe which could lead to an economic slowdown driving increased losses, including higher credit provisions, in our portfolio. The regulatory environment or other restrictions including sanctions imposed may result in our business activities related to Russia becoming unviable or that we lose control over our assets.

Despite the business continuity and crisis management policies currently in place, the conflict also poses challenges related to personnel as well as loss of business continuity, which may disrupt our business and lead to material losses.

COVID-19 pandemic: In addition to its broader macroeconomic impacts, the COVID-19 pandemic has and may continue to adversely affect our business and operations in other ways, including with respect to our operating environment and personnel.

From an operational perspective, and despite the business continuity and crisis management policies currently in place, the COVID-19 pandemic, the emergence of new variants of the virus and resulting rapid changes in government responses may continue to have an adverse impact on our business activities and control environment. The continuing move across global industries to conduct business from home and away from primary office locations is driving a more accelerated evolution of business practices compared to historic trends. The demand on our technology infrastructure and the risk of cyber-attacks could lead to technology failures, security breaches, unauthorized access, loss or destruction of data or unavailability of services, as well as increase the likelihood of conduct breaches. Any of these events could potentially result in litigation, a financial loss, disruption of our business activities and liability to our customers, regulatory scrutiny, government intervention or damage to our reputation. At the same time the cost to us of managing these cyber, information security and other risks remains high. Delays in the implementation of regulatory requirements, including consumer protection measures and of our strategic projects, could also have a negative impact on our revenues and costs, while a return of higher market volatility has led, and could continue to lead, to increased demand on markets surveillance monitoring and processing. Our vendors and service providers are facing similar challenges with the risk that these counterparties could be unable to fulfil their contractual obligations, putting the benefits we seek to obtain from such contracts at risk.

The COVID-19 pandemic temporarily reduced the rate of regular employee attrition versus historical levels, creating a more challenging context to our cost targets and increasing the cost of involuntary severance arrangements. This also limited the opportunity to redeploy talented employees within Deutsche Bank whose roles were made redundant. Requests from regulators to demonstrate moderation in the levels of compensation that we can offer may have put the Group at a disadvantage in attracting and retaining talented employees. However, in 2021, staff attrition levels have reverted to pre-pandemic levels and we are particularly focused on developments in the Asia-Pacific region. If the attrition rate increases versus historical levels, this may adversely affect our ability to attract and retain talented personnel, particularly in front-office positions that are key to revenue generation and in positions key to improving our control environment. Globally, we observe extremely competitive markets for employees, particularly in the United States and India.

If any of these risks materialize, they may adversely affect our results of operations, strategic plans and targets, and the prices of our securities.

Other macroeconomic and geopolitical risks: We are subject to other macroeconomic and geopolitical risks, including with respect to China, which could negatively affect the business environment, leading to weaker economic activity and a broader correction in the financial markets.

Tensions between the U.S. and China remain elevated across a wide range of areas, including trade and technology-related issues, Hong Kong, Taiwan, human rights, and cybersecurity. The U.S. has imposed selected sanctions as well as export and investment restrictions on Chinese companies and officials, and China has imposed sanctions on certain U.S. companies and officials and introduced a framework for blocking regulations aimed at the extraterritorial application of sanctions against China. Likewise, the EU has imposed sanctions on China in relation to human rights issues, which were reciprocated by China. While we cannot predict the impacts of sanctions on our business or our financial targets, such measures raise potential regulatory compliance and conflicts of laws challenges and the impacts could be material and adverse.

Other geopolitical risks, which could negatively impact our business environment and our financial targets include the potential for escalation in the Middle East over Iran's nuclear program, should the United States and Iran fail to reach agreement over a return to or implementation of a new Joint Comprehensive Plan of Action (Iran nuclear deal; "**JCPOA**").

If any of these risks materialize, they may adversely affect our results of operations, strategic plans and targets, and the prices of our securities.

European Union: In the European Union, potential political shocks and uncertainties could have unpredictable consequences for the financial system and the wider economy, and could contribute to European de-integration in certain areas, potentially leading to declines in business levels, write-downs of assets and losses across our businesses. Our ability to protect ourselves against these risks is limited.

Since the global financial crisis and subsequent European sovereign debt crisis between 2009 and 2012, political uncertainty in Europe has been elevated. The withdrawal of the UK from the European Union ("**Brexit**") in particular, but also the increasing attractiveness to voters of populist political movements in other member states has raised concerns about a potential unwinding of aspects of European integration that have benefitted our businesses. While the European financial architecture and crisis response capabilities were strengthened substantially over the past decade, since 2020, the crisis caused by the pandemic has led to a massive deterioration of the fiscal situation for many European Union ("**EU**") and Economic and Monetary Union ("**EMU**") countries again. To support the economic recovery and modernization, the EU has launched the unprecedented, multi-year Next Generation EU program, comprising grants and loans of more than € 800 billion (at current prices) and committing the member states to pursue ambitious national structural reform and investment plans to receive the funds. This has improved the prospects for growth-enhancing structural reforms and further integration among EU member states, both viewed as important tools to reduce the Eurozone's vulnerabilities to future crises. However, given the political uncertainties, e.g. stemming from coming parliamentary and presidential elections in several countries, there remain downside risks to the future economic performance and political cohesion in Europe. If these risks materialize, they may ultimately result in material reductions in our business levels as our customers rein in activity levels in light of decreased economic output and increased uncertainty, which would materially adversely affect our operating results and financial condition. An escalation of political risks could have consequences for the financial system, public debt sustainability, the value of the euro and the greater economy as a whole, potentially leading to declines in business levels, write-downs of assets and losses across our businesses.

If, in an extreme tail risk scenario, one or more members of the Eurozone defaults on their debt obligations or decides to leave the common currency, this would result in the reintroduction of one or more national currencies. Should a Eurozone country conclude it must exit the common currency, the resulting need to reintroduce a national currency and restate existing contractual obligations could have unpredictable financial, legal, political and social consequences, leading not only to significant losses on sovereign debt but also on private debt in that country. Given the highly interconnected nature of the financial system within the Eurozone, and the high levels of exposure we have to public and private counterparties around Europe, our ability to plan for such a contingency in a manner that would reduce our exposure to non-material levels is likely to be limited. If the overall economic climate deteriorates as a result of Brexit or further departures from the Eurozone, our businesses could be adversely affected, and, if overall business levels decline or we are forced to write down significant exposures among our various businesses, we could incur substantial losses.

Brexit: The withdrawal of the United Kingdom from the European Union – Brexit – may have adverse effects on our business, results of operations or strategic plans.

The UK Government concluded a Trade Cooperation Agreement ("**TCA**") with the European Union which came into effect on 1 January 2021. Uncertainty remains, however, as negotiations between the UK and the EU have continued through 2021, especially with regard to financial services not extensively covered by the existing deal. Discussions on the nature of this extension and the final outcome will continue in 2022.

Given the ongoing uncertainty over the medium- and long-term effects UK's withdrawal from the European Union, it is difficult to determine the exact impact on Deutsche Bank AG over the long term. However, the UK's economy and those of the Eurozone countries are very tightly linked as a result of EU integration projects other than the Euro, and the scale of our businesses in the UK – especially those dependent on activity levels in the City of London, to which we are heavily exposed and which may deteriorate as a result of Brexit – means that even modest effects in percentage terms can have a very substantial adverse effect on our businesses. Brexit has, unfortunately, resulted in a disruption of the provision of cross-border financial services. Also, if there is to be further delay or possibly a failure to reach agreement on matters determining mutual 'equivalence' under respective legislation, this will lead to greater costs to reorganize parts of our business and will restrict our ability to provide financial services to and from the UK in the seamless manner that was done previously. The currently unsettled future relationship between the EU and the UK is also likely to lead to further uncertainty in relation to the regulation of cross-border business activities. Recent announcements from the European Commission confirming an extension to the current temporary equivalence arrangements for UK central clearing counterparties ("**CCPs**") has removed the risk that access to UK clearing would be withheld from EU firms from June 2022 (when the previous extension expired). Without equivalence between EU and UK regimes for financial services we will be restricted in our ability to provide financial services to and from the UK.

We have applied for authorization from the Prudential Regulation Authority and the Financial Conduct Authority, our UK regulators, to continue to undertake regulated activity in the UK (previously undertaken pursuant to the European Passport provisions). Failure to gain authorization as a Third Country Branch could adversely affect our business, results of operations or strategic plans.

More broadly, some economic downside risks remain in case the UK were to invoke Article 16 of the Northern Ireland protocol which, in a worst-case outcome, could lead to the EU suspending the Brexit trade deal. In the absence of a negotiated solution, World Trade Organization ("**WTO**") rules could eventually apply which could mean higher tariffs which would further negatively impact trade and economic activity.

Despite our extensive preparations, as a result of Brexit, our business and strategic plans could be adversely affected. It is difficult to assess any adverse consequences with any quantitative certainty at this time, particularly since they will depend on future political and market developments.

European sovereign debt crisis: We may be required to take impairments on our exposures to the sovereign debt of European or other countries if the European sovereign debt crisis reignites. The credit default swaps into which we have entered to manage sovereign credit risk may not be available to offset these losses.

A large portion of the sovereign debt of Eurozone countries is held by European financial institutions, including Deutsche Bank. Despite the apparent abatement of the European sovereign debt crisis in recent years, it remains uncertain whether, in light of the current political environment, Greece or other Eurozone sovereigns, such as Spain, Italy, Portugal and Cyprus, will be able to manage their debt levels in the future and whether Greece will attempt to renegotiate its past international debt restructuring. The rise of anti-austerity parties and populist sentiment in many of these countries poses a threat to the medium- to long-term measures recommended for these countries to alleviate the tensions in the Eurozone caused by drastically differing economic situations among the Eurozone states. In the future, negotiations or exchanges similar to the Greek debt restructuring in 2012 could take place with respect to the sovereign debt of these or other affected countries. The outcome of any negotiations regarding changed terms (including reduced principal amounts or extended maturities) of sovereign debt may result in additional impairments of assets on our balance sheet. Any negotiations are highly likely to be subject to political and economic pressures that we cannot control, and we are unable to predict their effects on the financial markets, on the greater economy or on ourselves.

In addition, any restructuring of outstanding sovereign debt may result in potential losses for us and other market participants that are not covered by payouts on hedging instruments that we have entered into to protect against the risk of default. These instruments largely consist of credit default swaps, generally referred to as CDSs, pursuant to which one party agrees to make a payment to another party if a credit event (such as a default) occurs on the identified underlying debt obligation. A sovereign restructuring that avoids a credit event through voluntary write-downs of value may not trigger the provisions in CDSs we have entered into, meaning that our exposures in the event of a write-down could exceed the exposures we previously viewed as our net exposure after hedging. Additionally, even if the CDS provisions are triggered, the amounts ultimately paid under the CDSs may not correspond to the full amount of any loss we incur. We also face the risk that our hedging counterparties have not effectively hedged their own exposures and may be unable to provide the necessary liquidity if payments under the instruments they have written are triggered. This may result in systemic risk for the European banking sector as a whole and may negatively affect our business and financial position.

Risks Relating to Our Business and Strategy

Business environment and strategic decisions: Our results of operation and financial condition have in the past been negatively impacted by the challenging market environment, uncertain macroeconomic and geopolitical conditions, lower levels of client activity, increased competition and regulation, and the immediate impact of our strategic decisions. If we are unable to improve our profitability, we may be unable to meet our strategic aspirations, and may have difficulty maintaining capital, liquidity and leverage at levels expected by market participants and our regulators.

The Bank experienced an increase in net revenues in 2021 compared to 2020, which in turn was higher than 2019. The revenue increase was driven by benefits of underlying market activity, which offset the impact of interest rate headwinds, negative impacts from the COVID-19 pandemic and industry-wide margin compression.

The ability of our Investment Bank to continue its performance of 2021 is dependent on the continuation of high levels of market activity in investment banking as an industry. This will likely be impacted by the development of the COVID-19 pandemic, which continues to pose significant downside risks, and by geopolitical events and pressures such as the large-scale Russian military action against Ukraine and tensions with China. The COVID-19 pandemic also has intensified the "lower for longer" interest rate environment, which has impacted the results of several of our divisions. The low-rate environment has also supported elevated market valuations across risk assets as investors search for yield. These trends raise the risk of a significant and sustained asset price correction following from an increase in interest rates. Risks are amplified by high debt levels, a lack of liquidity in some areas of the market and an easing of global underwriting standards. Adverse market conditions, unfavorable prices and volatility including material movements in foreign exchange rates (and resulting translation effects) as well as cautious investor and client sentiment may in the future materially and adversely affect our revenues and profits as well as the timely and complete achievement of our strategic aspirations and targets.

Changes in our business mix towards lower-margin, lower-risk products can limit our opportunities to profit from volatility. Regulators have generally encouraged the banking sector to focus more on the facilitation of client flow and less on risk taking. This has been effected in part by increasing capital requirements for higher-risk activities. In addition, some of our regulators have encouraged or welcomed changes to our business perimeter, consistent with their emphasis on lower-risk activities for banks. In recent years, we have reduced our exposure to a number of businesses that focused on riskier but more capital-intensive products (but that in earlier periods also had the potential to be more highly profitable). Further pressure on our revenues and profitability has resulted from long-term structural trends driven by regulation (especially increased regulatory capital, leverage and liquidity requirements and increased compliance costs) and competition that have further compressed our margins in many of our businesses. Should a combination of these factors continue to lead to reduced margins and subdued activity levels in our trading and markets business over the longer term, this could impair our ability to reach our financial targets.

Although we have in current years made considerable progress resolving litigation, enforcement and similar matters broadly within our established reserves, this pattern may not continue. In particular, these costs could substantially exceed the level of provisions that we established for our litigation, enforcement and similar matters, which can contribute to negative market perceptions about our financial health, costing us business. This, combined with the actual costs of litigation, enforcement and other matters, could in turn adversely affect our ability to maintain capital, liquidity and leverage at levels expected by market participants and our regulators.

Market conditions: Adverse market conditions, asset price deteriorations, volatility and cautious investor sentiment have affected and may in the future materially and adversely affect our revenues and profits, particularly in our investment banking, brokerage and other commission- and fee-based businesses. As a result, we have in the past incurred and may in the future incur significant losses from our trading and investment activities.

As a global investment bank, we have significant exposure to the financial markets and are more at risk from adverse developments in the financial markets than are institutions engaged predominantly in traditional banking activities. Sustained market declines have in the past caused and can in the future cause our revenues to decline, and, if we are unable to reduce our expenses at the same pace, can cause our profitability to erode or cause us to show material losses. Volatility can also adversely affect us, by causing the value of financial assets we hold to decline or the expense of hedging our risks to rise. Reduced customer activity can also lead to lower revenues in our "flow" business.

Specifically, our investment banking revenues, in the form of financial advisory and underwriting fees, directly relate to the number and size of the transactions in which we participate and are susceptible to adverse effects from sustained market downturns. These fees and other income are generally linked to the value of the underlying transactions and therefore can decline with asset values. In addition, periods of market decline and uncertainty tend to dampen client appetite for market and credit risk, a critical driver of transaction volumes and investment banking revenues, especially transactions with higher margins. In recent and other times in the past, decreased client appetite for risk has led to lower levels of activity and lower levels of profitability in our Investment Bank corporate division. Our revenues and profitability could sustain material adverse effects from a significant reduction in the number or size of debt and equity offerings and merger and acquisition transactions.

Market downturns also have led and may in the future lead to declines in the volume of transactions that we execute for our clients and, therefore, to declines in our noninterest income. In addition, because the fees that we charge for managing our clients' portfolios are in many cases based on the value or performance of those portfolios, a market downturn that reduces the value of our clients' portfolios or increases the amount of withdrawals reduces the revenues we receive from our asset management and private banking businesses. Even in the absence of a market downturn, below-market or negative performance by our investment funds may result in increased withdrawals and reduced inflows, which would reduce the revenue we receive. While our clients would be responsible for losses we incur in taking positions for their accounts, we may be exposed to additional credit risk as a result of their need to cover the losses where we do not hold adequate collateral or cannot realize it. Our business may also suffer if our clients lose money and we lose the confidence of clients in our products and services.

In addition, the revenues and profits we derive from many of our trading and investment positions and our transactions in connection with them can be directly and negatively impacted by market prices. In each of the product and business lines in which we enter into these trading and investment positions, part of our business entails making assessments about the financial markets and trends in them. When we own assets, market price declines can expose us to losses. Many of the more sophisticated transactions of our Investment Bank corporate division are influenced by price movements and differences among prices. If prices move in a way we have not anticipated, we may experience losses. Also, when markets are volatile, the assessments we have made may prove to lead to lower revenues or profits, or may lead to losses, on the related transactions and positions. In addition, we commit capital and take market risk to facilitate certain capital markets transactions; doing so can result in losses as well as income volatility. Such losses may especially occur on assets we hold for which there are not very liquid markets to begin with. Assets that are not traded on stock exchanges or other public trading markets, such as derivatives contracts between banks, may have values that we calculate using models other than publicly-quoted prices. Monitoring the deterioration of prices of assets like these is difficult and could lead to losses we did not anticipate. We can also be adversely affected if general perceptions of risk cause uncertain investors to remain on the sidelines of the market, curtailing their activity and in turn reducing the levels of activity in those of our businesses dependent on transaction flow.

Additionally, the current market environment is characterized by very low interest rates, particularly in the Eurozone, including negative interest yields on German government bonds. A prolonged period of low interest rates in the Eurozone or elsewhere could materially impact our net interest margin, profitability and balance sheet deployment. While our revenues are particularly sensitive to interest rates, given the size of our loan and deposit books denominated in Euros, the low interest rates environment can also impact other balance sheet positions which are accounted at fair value. These conditions could result in a significant impact on revenues relative to our current expectations. Actions to offset this rate impact, such as pricing changes or the introduction of additional fees, may not be sufficient to offset this impact.

Conversely, there have been recently increases in market interest rates and there are expectations that monetary authorities will increase interest rates over the course of 2022. If such increases take place to a greater extent or rate than we or the market anticipate, this may have negative effects on the economy, markets and our businesses.

Credit ratings and access to funding: Our liquidity, business activities and profitability may be adversely affected by an inability to access the debt capital markets or to sell assets during periods of market-wide or firm-specific liquidity constraints. Credit rating downgrades have contributed to an increase in our funding costs in the past. Though we have recently seen upgrades of our credit ratings, any future downgrade could materially adversely affect our funding costs, the willingness of counterparties to continue to do business with us and significant aspects of our business model.

We have a continuous demand for liquidity to fund our business activities. Our liquidity may be impaired by an inability to access secured and/or unsecured debt markets, an inability to access funds from our subsidiaries or otherwise allocate liquidity optimally across our businesses, an inability to sell assets or redeem our investments, or unforeseen outflows of cash or collateral. This situation may arise due to circumstances unrelated to our businesses and outside our control, such as disruptions in the financial markets, or circumstances specific to us, such as reluctance of our counterparties or the market to finance our operations due to perceptions about potential outflows (including deposit outflows) resulting from litigation, regulatory and similar matters, actual or perceived weaknesses in our businesses, our business model or our strategy, as well as in our resilience to counter negative economic and market conditions. Reflecting these conditions, our internal estimates of our available liquidity over the duration of a stressed scenario could at times be negatively impacted.

In addition, negative developments concerning other financial institutions perceived to be comparable to us and negative views about the financial services industry in general can also affect us. These perceptions could affect the prices at which we could access the capital markets to obtain the necessary funding to support our business activities; should these perceptions exist, continue or worsen, our ability to obtain this financing on acceptable terms may be adversely affected. Among other things, an inability to refinance assets on our balance sheet or maintain appropriate levels of capital to protect against deteriorations in their value could force us to liquidate assets we hold at depressed prices or on unfavorable terms, and could also force us to curtail business, such as the extension of new credit. This could have an adverse effect on our business, financial condition and results of operations. Additionally, we need to ensure ongoing ability to refinance our business activities in the respective currencies.

In addition, we have benefited in recent years from a number of incremental measures by the ECB and other central banks to provide additional liquidity to financial institutions and the financial markets, particularly in the Eurozone. To the extent these actions are curtailed or halted, our funding costs could increase, or our funding supply could decrease, which could in turn result in a reduction in our business activities. In particular, any decision by the ECB to discontinue or reduce quantitative easing or steps by the Federal Reserve to tighten its monetary policy or actions by central banks more generally to tighten their monetary policy will likely cause long-term interest rates to increase and supply of central bank funding to be reduced which could impact the costs of our funding.

Our credit ratings have been upgraded in 2021 by all three leading rating agencies. Despite the recent upgrades, rating agencies regularly review our credit ratings, and such reviews could be negatively affected by a number of factors that can change over time, including the credit rating agency's assessment of: our strategy and management's capability; our financial condition including in respect of profitability, asset quality, capital, funding and liquidity; the level of political support for the industries in which we operate; the implementation of structural reform; the legal and regulatory frameworks applicable to our legal structure; business activities and the rights of our creditors; changes in rating methodologies; changes in the relative size of the loss-absorbing buffers protecting bondholders and depositors; the competitive environment, political and economic conditions in our key markets (including the impact of the COVID-19 pandemic and Brexit); and market uncertainty. In addition, credit ratings agencies are increasingly taking into account environmental, social and governance factors, including climate risk, as part of the credit ratings analysis, as are investors in their investment decisions.

Any reductions in our credit ratings, including, in particular, downgrades below investment grade, or a deterioration in the capital markets' perception of our financial resilience could significantly affect our access to money markets, reduce the size of our deposit base and trigger additional collateral or other requirements in derivatives contracts and other secured funding arrangements or the need to amend such arrangements, which could adversely affect our cost of funding and our access to capital markets and could limit the range of counterparties willing to enter into transactions with us. This could in turn adversely impact our competitive position and threaten our prospects in the short to medium-term.

After the start of the global financial crisis, the major credit rating agencies have lowered our credit ratings or placed them on review or negative watch on multiple occasions. These credit rating downgrades have contributed to an increase in our funding costs. Despite the recent upgrades, our credit spread levels (meaning the difference between the yields on our securities as compared to benchmark government bonds) are sensitive to further adverse developments and severe future downgrades could bring our credit rating into the non-investment grade category. This could materially and adversely affect our funding costs and significant aspects of our business model. The effect would depend on a number of factors including whether a downgrade affects financial institutions across the industry or on a regional basis, or is intended to reflect circumstances specific to us, such as our potential settlement of regulatory, litigation and similar matters; any actions our senior management may take in advance of or in response to the downgrade; the willingness of counterparties to continue to do business with us; any impact of other market events and the state of the macroeconomic environment more generally.

Additionally, under many of the contracts governing derivative instruments to which we are a party, a downgrade could require us to post additional collateral, lead to terminations of contracts with accompanying payment obligations for us or give counterparties additional remedies.

Implementation of strategic plans: If we are unable to implement our strategic plans successfully, we may be unable to achieve our financial objectives, or we may incur losses, including further impairments and provisions, or low profitability, and our financial condition, results of operations and share price may be materially and adversely affected.

In July 2019, we announced a strategic transformation of the Bank, designed to significantly improve sustainable returns to shareholders by refocusing our Core Bank – which comprises our four core operating divisions, namely the Corporate Bank, the Investment Bank, the Private Bank, and Asset Management, together with the segment Corporate & Other – around market leading businesses, which typically operate in growing markets with attractive return potential. We also created the Capital Release Unit ("**CRU**"), with the principal objective to liberate capital consumed by low return assets and businesses that earn insufficient returns or activities that are no longer core to our strategy. Since then, we have redrawn our business perimeter and selectively exited businesses in which we were not able to compete profitably. The next phase of our transformation will focus on seeking to ensure sustainable profitability by growing our businesses, while remaining disciplined on costs, risk and balance sheet management and control.

Our key financial targets for 2022 are:

- Post-tax Return on Average Tangible Equity of 8 % for the Group
- Post-tax Return on Average Tangible Equity of more than 9 % for the Core Bank
- Cost income ratio of 70 %
- Common Equity Tier 1 capital ratio of above 12.5 %
- Leverage ratio (fully loaded) of ~4.5 %

We have now set additional key financial targets for 2025:

- Post-tax Return on Average Tangible Equity of above 10 % for the Group
- Compounded annual growth rate of revenues from 2021 to 2025 of 3.5 to 4.5 %
- Cost income ratio of less than 62.5 %

We are committed to delivering sustainably growing cash dividends and returning excess capital to shareholders through share buybacks that is over and above what is required to support profitable growth and upcoming regulatory changes over time, subject to regulatory approval and shareholder authorization and meeting German corporate law requirements. To that end, subject to meeting our strategic targets, the Management Board intends to grow the cash dividend per share by 50 % p.a. in the next 3 years, starting from € 0.20 per share for the financial year 2021, which would translate into approximately € 3.3 billion of cumulative dividend payments by 2025 with respect to financial years 2021-2024. In relation to the financial year 2024, we intend to achieve a total payout ratio of 50 % from a combination of dividends paid and share buybacks executed in 2025; and we intend to maintain a 50% total payout ratio in subsequent years. In addition to the already announced share buyback in 2022 of € 0.3 billion, meeting our current financial aspirations would therefore support the previously announced cumulative distributions to shareholders in the form of dividends paid or share buybacks executed in the total amount of € 5 billion in respect of financial years 2021-2024. In addition, should we successfully execute our financial and strategic plans through 2025, total implied cumulative distributions of approximately € 8 billion in respect of financial years 2021-2025 would be achievable. Our ambition to return capital to shareholders is further underpinned by our aim to maintain a robust Common Equity Tier 1 ("**CET 1**") capital ratio of approximately 13 %, i.e. a CET 1 ratio of no less than 200 basis points above our Maximum Distributable Amount ("**MDA**") threshold we currently assume to prevail over time.

Our strategic goals are subject to various internal and external factors and to market, regulatory, economic and political uncertainties, and to limitations relating to our operating model. These could negatively impact the implementation of our strategic goals, the realization of their anticipated benefits or our ability to achieve our financial targets for 2022 or our additional financial targets for 2025. In particular, our strategic objectives are subject to the following assumptions and risks:

- Geopolitical developments, in particular with respect to the large-scale Russian military action against Ukraine, also may impact global and regional economies and markets other than in short-term ways and may result in adverse effects on our business, results of operations or strategic plans and targets, and the prices of our securities. Other geopolitical risks exist with respect to China and from political and economic instability in key markets.

- The current COVID-19 pandemic and its potential impact on the global economy may affect our ability to meet our financial targets. A protracted downturn in local, regional or global economic conditions may result in adverse effects on our business, results of operations or strategic plans and targets, and the prices of our securities.

- The base case scenario for our financial and capital plan includes revenue growth estimates which are dependent on positive macroeconomic developments. Stagnation or a downturn in the macroeconomic environment could significantly impact our ability to generate the revenue growth necessary to achieve these strategic financial and capital targets. This base case scenario also includes assumptions regarding our ability to reduce costs in future periods.

- In addition, our base case scenario includes an expectation of low but rising interest rates, in accordance with our assessment of the forward interest rate curve. If interest rates do not rise as we have expected, our revenues may not develop as we expect.

- Our strategic objectives are also based on assumptions regarding inflation levels, which have risen over the past year and the outlook for which remains uncertain. If inflation does not develop as we expect, or if our commercial leverage in relations with suppliers and third parties does not enable us to resist inflationary pressures, our businesses may be adversely impacted and our costs may increase.

- Our plans are based upon 31 January 2022 foreign exchange rates, particularly with respect to the euro and U.S. dollar. In the event that exchange rates change from these levels, our ability to achieve our goals may be adversely affected.

- Results for the Investment Bank in 2021 were supported by high levels of market activity in investment banking as an industry. The ability of the Investment Bank to continue its performance is dependent on the continuation of high levels of market activity.

- For 2022, we expect provisions for credit losses of around 20 basis points as a percentage of average loans. Should higher levels of provisions for credit losses be required, our results of operations and our ability to meet our strategic financial and capital targets may be adversely affected.

- We expect that we will be able to overcome significant challenges arising from our business model. We continue to rely on our trading and markets businesses as a significant source of profit. Depending on how economic and market conditions evolve, such businesses may be adversely impacted or be unable to achieve the profitability we seek from them.

- Asset and client levels have been impacted by the negative market perceptions of Deutsche Bank from time to time. A continued or renewed negative market focus on Deutsche Bank could result in new client and asset outflows.

- We expect that de-leveraging of CRU will continue, while reducing cost. In the event that the CRU is not able to de-leverage or reduce costs as planned, our objectives could be jeopardized.

- In 2020, the COVID-19 pandemic temporarily reduced the rate of regular employee attrition versus historical levels, though in 2021 staff attrition levels reverted back closer to pre-pandemic trends. In the event that attrition levels again decrease, this can create a more challenging context to our cost targets. Conversely, if the attrition rate increases versus historical levels, this may adversely affect our ability to attract and retain talented personnel, particularly in front-office positions that are key to revenue generation and in positions key to improving our control environment.

- Regulatory changes could also adversely impact our ability to achieve our strategic aims. In particular, regulators could demand changes to our business model or organization that could reduce our profitability, or we may be forced to make changes that reduce our profitability in an effort to remain compliant with laws and regulations.

- We are involved in numerous litigation, arbitration and regulatory proceedings and investigations in Germany and in a number of jurisdictions outside of Germany, especially in the United States. Such matters are subject to many uncertainties. We expect the litigation environment to continue to be challenging. If litigation and regulatory matters occur at the same or higher rate and magnitude than they have in some recent years or if we are subject to sustained market speculation about our potential exposure to such matters, we may not be able to achieve our strategic aspirations.

- We currently operate a highly complex infrastructure, which can compromise the quality of the overall control environment. Establishing a more efficient bank with a strong control environment depends on successfully streamlining and simplifying our IT landscape as well as cultural change.

- A robust and effective internal control environment is necessary to ensure that we conduct our business in compliance with the laws and regulations applicable to us. We may be unable to complete our initiatives to enhance the efficacy of our internal control environment as quickly as we intend or as our regulators demand, and our efforts may be insufficient to prevent all future deficiencies in our control environment or to result in fewer litigations or regulatory and enforcement investigations and proceedings in the future. Furthermore, implementation of enhanced controls may result in higher-than-expected costs of regulatory compliance that could offset efficiency gains.

- In particular, if some of the above risks were to materialize in the short-term such that our revenues would be negatively impacted or our cost base would significantly increase, we may not be able to achieve our cost-income ratio target of 70 % for 2022. For example, revenues could fall short of our expectations or expenses such as bank levies, litigation expenses, or staff costs may be higher than expected.

If we fail to implement our strategic initiatives in whole or in part or should the initiatives that are implemented fail to produce the anticipated benefits, or should the costs we incur to implement our initiatives exceed the amounts anticipated, or should we fail to achieve the publicly communicated targets we have set for implementation of these initiatives, we may fail to achieve our financial objectives, or incur losses or low profitability or erosions of our capital base, and our financial condition, results of operations and share price may be materially and adversely affected.

Sale of assets: We may have difficulties selling companies, businesses or assets at favorable prices or at all and may experience material losses from these assets and other investments irrespective of market developments.

We seek to sell or otherwise reduce our exposure to assets that are not part of our core business or as part of our strategy to simplify and focus our business and to meet or exceed capital and leverage requirements, as well as to help us meet our return on tangible equity targets. We have already sold a substantial portion of our non-core assets, and our remaining non-core assets may be particularly difficult for us to sell as quickly as we have expected at prices we deem acceptable. Where we sell companies or businesses, we may remain exposed to certain of their losses or risks under the terms of the sale contracts, and the process of separating and selling such companies or businesses may give rise to operating risks or other losses. Unfavorable business or market conditions may make it difficult for us to sell companies, businesses or assets at favorable prices, or may preclude a sale altogether. If we cannot reduce our assets according to plan, we may not be able to achieve the capital targets set out under our strategy.

Business combinations: We may have difficulty in identifying and executing business combinations, and both engaging in combinations and avoiding them could materially harm our results of operations and our share price.

We consider business combinations from time to time. Were we to announce or complete a significant business combination transaction, our share price or the share price of the combined entity could decline significantly if investors viewed the transaction as too costly, dilutive to existing shareholders or unlikely to improve our competitive position. It is generally not feasible for our reviews of any business with which we might engage in a combination to be complete in all respects. As a result, a combination may not perform as well as expected. In addition, we may fail to integrate our operations successfully with any entity with which we participate in a business combination. Failure to complete announced business combinations or failure to achieve the expected benefits of any such combination could materially and adversely affect our profitability. Such failures could also affect investors' perception of our business prospects and management, and thus cause our share price to fall. They could also lead to departures of key employees, or lead to increased costs and reduced profitability if we felt compelled to offer them financial incentives to remain.

If we avoid entering into business combination transactions or if announced or expected transactions fail to materialize, market participants may perceive us negatively. We may also be unable to expand our businesses, especially into new business areas, as quickly or successfully as our competitors if we do so through organic growth alone. These perceptions and limitations could cost us business and harm our reputation, which could have material adverse effects on our financial condition, results of operations and liquidity.

Competitive environment: Intense competition, in our home market of Germany as well as in international markets, has and could continue to materially adversely impact our revenues and profitability.

Competition is intense in all of our primary business areas, in Germany as well as in international markets. If we are unable to respond to the competitive environment in these markets with attractive product and service offerings that are profitable for us, we may lose market share in important areas of our business or incur losses on some or all of our activities. In addition, downturns in the economies of these markets could add to the competitive pressure, for example, through increased price pressure and lower business volumes for us.

There has been substantial consolidation and convergence among financial services companies. This trend has significantly increased the capital base and geographic reach of some of our competitors and has hastened the globalization of the securities and other financial services markets. As a result, we must compete with financial institutions that may be larger and better capitalized than we are and that may have a stronger position in local markets.

In addition to our traditional competitors such as other universal banks and financial services firms, an emerging group of future competitors in the form of start-ups and technology firms, including those providing "fintech" services, are showing an increasing interest in banking services and products. These new competitors could increase competition in both core products, e.g., payments, basic accounts and loans and investment advisory, as well as in new products, e.g., peer to peer lending and equity crowd funding. Such firms are also potential competitors of ours in attracting and retaining talented personnel.

Risks Relating to Regulation and Supervision

Regulatory reforms: Regulatory reforms enacted and proposed in response to weaknesses in the financial sector, together with increased regulatory scrutiny more generally, have had and continue to have a significant impact on us and may adversely affect our business and ability to execute our strategic plans. Competent regulators may prohibit us from making dividend payments or payments on our regulatory capital instruments or take other actions if we fail to comply with regulatory requirements.

In response to the global financial crisis and the European sovereign debt crisis, governments and regulatory authorities have worked to enhance the resilience of the financial services industry against future crises through changes to the regulatory framework. The pace of change of new proposals has slowed as the focus turns more to implementation of the various elements of the regulatory reform agenda outlined by the Basel Committee on Banking Supervision ("**Basel Committee**") and other standard-setting bodies. As a result, there continues to be uncertainty for us and the financial industry in general, though the level of uncertainty is reduced from prior periods. The range of new (or revised) laws and regulations or current proposals includes, among other things:

- provisions for more stringent regulatory capital, leverage and liquidity standards,
- restrictions on compensation practices,
- restrictions on proprietary trading and other investment services,
- special bank levies,
- recovery and resolution powers to intervene in a crisis including the "bail-in" of creditors,
- tightened large exposure limits,
- the creation of a single supervisory authority and a single resolution authority within the Eurozone and any other participating member states,
- contributions to the Single Resolution Fund and prefunding of deposit guarantee schemes,
- separation of certain businesses from deposit taking,
- stress testing and capital planning regimes,
- heightened reporting requirements, and
- reforms of derivatives, other financial instruments, investment products and market infrastructures.

As a core element of the reform of the regulatory framework, the Basel Committee developed and continuously refined and supplemented a comprehensive set of rules of minimum capital adequacy and liquidity standards as well as other rules, known as Basel 3. The initial set of rules was implemented into European and national (in our case, German) law beginning in 2014, with the European legislative package also referred to as "**CRR/CRD IV**" and the Bank Recovery and Resolution Directive (or "**BRRD**"), which provides for a resolution framework for banks. The set of rules was further strengthened with a comprehensive package of reforms in 2019 also referred to as "**CRR II/CRD V**" and "**BRRD II**". The reform package also implemented certain regulatory proposals of the Financial Stability Board ("**FSB**") regarding a requirement for global systemically important institutions ("**G-SIIs**"), such as Deutsche Bank, to hold certain minimum levels of capital and other instruments which are capable of bearing losses in resolution ("**Total Loss-Absorbing Capacity**" or "**TLAC**").

On 27 October 2021, the European Commission published a comprehensive package of reforms with respect to the European Union banking rules (referred to as the "**Banking Package 2021**") to ensure that banks become more resilient to potential future economic shocks while contributing to the EU's recovery from the COVID-19 pandemic and its transition to climate neutrality. The proposals aim to amend the Capital Requirements Regulation ("**CRR**"), the Capital Requirements Directive ("**CRD**") and the BRRD. If adopted, the proposals to amendment the CRR and CRD (commonly referred to as "**CRR III**" and "**CRD VI**") will, in particular, finalize the implementation of the Basel 3 framework in the European Union and also fully implement the market risk capital changes in the Fundamental Review of the Trading Book ("**FRTB**"). Another separate proposal entails combined amendments to the CRR and the BRRD with respect to the resolution regime.

CRR III and CRD VI include, inter alia, a gradually introduced output floor establishing minimum risk-weighted assets that will ultimately be set at 72.5 % of the risk-weighted assets calculated under the standardized approach, changes to standardized and internal ratings-based approaches for determining credit risk, changes to the credit valuation adjustment, a revision of the approaches for operational risks and reforms to the market risk framework as set out in the FRTB, adjustments to the Pillar 2 requirements ("**P2R**") and the systemic risk buffer and a "fit-and-proper" set of rules for senior staff managing banks. Other proposed measures are aimed to address sustainability risks by requiring banks to identify, disclose and manage environmental, social and governance risks as part of their risk management which includes regular climate stress testing by the banks' supervisors. The proposal does not entail any adjustments to the capital requirements for green or brown assets. However, the European Commission stated that it is exploring this idea and has asked the European Banking Authority ("**EBA**") to assess possible adjustments. It is expected that the EBA will provide its report in 2023.

The proposals regarding the resolution regime include clarifications with respect to some aspects of the TLAC / minimum requirement for own funds and eligible liabilities ("**MREL**") regime in relation to single point of entry and multiple point of entry resolution strategies and, in particular, a deduction regime requiring intermediate parents to deduct from their own internal MREL capacity the amount of their holdings of internal MREL eligible instruments, including own funds, issued by their subsidiaries belonging to the same resolution group.

The Banking Package 2021 will now be negotiated with EU lawmakers, i.e. the European Parliament and Member States. It is expected that CRR III and CRD VI will start entering into force in 2023 at the earliest with the new rules implementing Basel 3 to apply from 1 January 2025. The European Commission expects that the final implementation of the Basel 3 framework will lead to an increase in the capital requirements of European banks of less than 3 % on average at the beginning of the transitional period in 2025 and of less than 9 % at the end of such period in 2030.

The implementation of the remaining outstanding proposals under Basel 3 as contained in the Banking Package 2021 has the potential to increase our risk-weighted assets and will likely affect our business by raising our regulatory capital and liquidity requirements and by leading to increased costs. Such requirements may be in addition to regulatory capital buffers that may also be increased or be in addition to those already imposed on us and could themselves materially increase our capital requirements.

In addition, regulatory scrutiny of compliance with existing laws and regulations has become more intense and supervisory expectations remain significant. The specific effects of a number of new (or revised) laws and regulations remain uncertain because the drafting and implementation of these laws and regulations are still on-going and supervisory expectations continue to develop.

Regulatory authorities have substantial discretion in how to regulate banks, and this discretion, and the means available to the regulators, have been steadily increasing during recent years. Regulation may be imposed on an ad hoc basis by governments and regulators in response to ongoing or future crises (such as the COVID-19 pandemic), and may especially affect financial institutions such as Deutsche Bank that are deemed to be systemically important.

In particular, the regulators with jurisdiction over us, including the ECB under the Single Supervisory Mechanism (also referred to as the "**SSM**"), may, in connection with the supervisory review and evaluation process ("**SREP**"), SSM-wide reviews of asset quality or internal risk models or otherwise, conduct stress tests. They have discretion to impose capital surcharges on financial institutions for risks, including for litigation, regulatory and similar matters, that are not otherwise recognized in risk-weighted assets or other surcharges depending on the individual situation of the bank. Such adjustments may, for example, reflect additional risks posed by deficiencies in our control environment, or come as a result of supervisory inspections concerning the treatment of specific products or transactions. One of these areas in focus of the ECB with regard to risk taking is leveraged lending, for which the ECB has announced its intent to clarify their expectations for all banks under the SSM and to consider quantitative measures in future SREP decisions for institutions which the ECB assesses as non-compliant with these expectations. The ECB may take or require other measures, such as restrictions on or changes to our business. In this context, the ECB may impose, and has imposed, on us individual capital requirements resulting from the SREP which are referred to as P2R. Institutions must meet their P2R with at least 75 % of Tier 1 capital and at least 56.25 % of Common Equity Tier 1 capital. P2R must be fulfilled in addition to the statutory minimum capital and buffer requirements and any non-compliance may have immediate legal consequences such as restrictions on dividend payments.

Also following the SREP, the ECB may communicate to individual banks, and has communicated to us, an expectation to hold a further Pillar 2 Common Equity Tier 1 capital add-on, the so-called Pillar 2 guidance ("**P2G**"). Although the P2G is not legally binding and failure to meet the P2G does not automatically trigger legal action, the ECB has stated that it generally expects banks to meet the P2G. In light of the COVID-19 pandemic, the ECB currently allows banks to operate temporarily below the level of capital defined by the P2G, but expects banks to operate above P2G again from 1 January 2023.

Further, effective as of 1 February 2022, BaFin set the amount of the countercyclical capital buffer ("**CCyB**") for banks in Germany at 0.75 % of their total risk exposure amount. Banks have to comply with the new CCyB requirement from 1 February 2023.

Also, more generally, competent regulators may, if we fail to comply with regulatory requirements, in particular with statutory minimum capital requirements or P2R, or if there are shortcomings in our governance and risk management processes, prohibit us from making dividend payments to shareholders or distributions to holders of our other regulatory capital instruments. This could occur, for example, if we fail to make sufficient profits due to declining revenues, or as a result of substantial outflows due to litigation, regulatory and similar matters. Generally, a failure to comply with the quantitative and qualitative regulatory requirements could have a material adverse effect on our business, financial condition and results of operations, including our ability to pay out dividends to shareholders or distributions on our other regulatory capital instruments or, in certain circumstances, conduct business which we currently conduct or plan to conduct in the future.

Capital requirements: Regulatory and legislative changes require us to maintain increased capital and bail-inable debt (debt that can be bailed in in resolution) and abide by tightened liquidity requirements. These requirements may significantly affect our business model, financial condition and results of operations, as well as the competitive environment generally. Any perceptions in the market that we may be unable to meet our capital or liquidity requirements with an adequate buffer, or that we should maintain capital or liquidity in excess of these requirements, or any other failure to meet these requirements, could intensify the effect of these factors on our business and results.

The implementation of the CRR/CRD IV legislative package resulted, among other things, in increased capital and tightened liquidity requirements, including additional capital buffer requirements which were gradually phased in through 1 January 2019. Further revisions, such as stricter rules on the measurement of risks and the changes introduced by the CRR II/CRD V/BRRD II reform package increased risk-weighted assets and the corresponding capital demand for banks, as well as tightened liquidity requirements (such as the introduction of a binding Net Stable Funding Ratio - "**NSFR**"). In addition, the introduction of a binding leverage ratio (including the leverage ratio buffer) affected our business model, financial conditions and results of operations.

Furthermore, under the SRM Regulation, the BRRD and the German Recovery and Resolution Act (*Sanierungs- und Abwicklungsgesetz*), we are required to meet at all times a robust MREL which is determined on a case-by-case basis by the competent resolution authority. In addition, the CRR II/CRD V/BRRD II reform package implemented the FSB's TLAC standard for global systemically important banks ("**G-SIBs**", such as us) by introducing a Pillar 1 MREL requirement for G-SIIs (the European equivalent term for G-SIBs). This requirement is based on both risk-based and non-risk-based denominators and will be set at the higher of 18 % of total risk exposure and 6.75 % of the leverage ratio exposure measure. It can be met with Tier 1 or Tier 2 capital instruments or debt that meets specific eligibility criteria. Deduction rules apply for holdings by G-SIIs of TLAC instruments of other G-SIIs. In addition, the competent authorities have the ability to impose on G-SIIs individual MREL requirements that exceed the statutory minimum requirements. As described above, the European Commission included clarifications with respect to the TLAC / MREL regime in its legislative proposals of 27 October 2021.

Both the TLAC (or Pillar 1 MREL) and MREL requirements are specifically designed to require banks to maintain a sufficient amount of instruments which are eligible to absorb losses in resolution with the aim of ensuring that failing banks can be resolved without recourse to taxpayers' money. To that end, in order to facilitate the meeting of TLAC requirements by German banks, obligations of German banks under certain, specifically defined senior unsecured debt instruments issued by them (such as bonds that are not structured debt instruments) rank, since 2017, junior to all other outstanding unsecured unsubordinated obligations of such bank (such as deposits, derivatives, money market instruments and certain structured debt instruments), but continue to rank in priority to contractually subordinated debt instruments (such as Tier 2 instruments).

As part of the harmonization of national rules on the priority of claims of banks' creditors in the European Union, the BRRD allows banks to issue "senior non-preferred" debt instruments ranking according to their terms (and not only statutorily) junior to the bank's other unsubordinated debt instruments (including bonds that are not treated as "senior non-preferred" debt instruments), but in priority to the bank's contractually subordinated liabilities (such as Tier 2 instruments). Any such "senior non-preferred" debt instruments issued by Deutsche Bank AG under such rules rank on parity with its then outstanding "senior non-preferred" debt instruments under the prior rules. This BRRD amendment was finalized and implemented into German law as of 21 July 2018.

The need to comply with these requirements may affect our business, financial condition and results of operation and in particular may increase our financing costs.

We may not have sufficient capital or other loss-absorbing liabilities to meet these increasing regulatory requirements. This could occur due to regulatory changes and other factors, such as our inability to issue new securities which are recognized as regulatory capital or loss-absorbing liabilities under the new standards, due to an increase of risk-weighted assets based on more stringent rules for the measurement of risks or as a result of a future decline in the value of the euro as compared to other currencies, due to stricter requirements for the compliance with the non-risk based leverage ratio, due to any substantial losses we may incur, which would reduce our retained earnings, a component of Common Equity Tier 1 capital, or due to a combination of these or other factors.

If we are unable to maintain sufficient capital to meet the applicable minimum capital ratios, the buffer requirements, any specific Pillar 2 capital requirements, leverage ratio requirements, or TLAC or MREL requirements, we may become subject to enforcement actions and/or restrictions on the pay-out of dividends, share buybacks, payments on our other regulatory capital instruments, and discretionary compensation payments. In addition, any requirement to increase risk-based capital ratios or the leverage ratio could lead us to adopt a strategy focusing on capital preservation and creation over revenue generation and profit growth, including the reduction of higher margin risk-weighted assets. If we are unable to increase our capital ratios to the regulatory minimum in such a case or by raising new capital through the capital markets, through the reduction of risk-weighted assets or through other means, we may be required to activate our group recovery plan. If these actions or other private or supervisory actions do not restore capital ratios to the required levels, and we are deemed to be failing or likely to fail, competent authorities may apply resolution powers under the Single Resolution Mechanism ("**SRM**") and applicable rules and regulations, which could lead to a significant dilution of our shareholders' or even the total loss of our shareholders' or creditors' investment.

The CRR introduced a liquidity coverage requirement intended to ensure that banks have an adequate stock of unencumbered high quality liquid assets that can be easily and quickly converted into cash to meet their liquidity needs for a 30 calendar day liquidity stress scenario. The required liquidity coverage ratio ("**LCR**") is calculated as the ratio of a bank's liquidity buffer to its net liquidity outflows. Also, banks must regularly report the composition of the liquid assets in their liquidity buffer to their competent authorities. Due to the COVID-19 pandemic, the ECB temporarily allowed banks to operate below the minimum LCR. On 17 December 2021, the ECB announced that it expects banks to operate again with a LCR of above 100 % as from 1 January 2022.

In addition, the CRR II/CRD V/BRRD II reform package introduced the net stable funding ratio ("**NSFR**") to reduce medium- to long-term funding risks by requiring banks to fund their activities with sufficiently stable sources of funding over a one-year period. The NSFR, which applies since 28 June 2021, is defined as the ratio of a bank's available stable funding relative to the amount of required stable funding over a one-year period. Banks must maintain an NSFR of at least 100 %. The ECB may impose on individual banks liquidity requirements which are more stringent than the general statutory requirements if the bank's continuous liquidity would otherwise not be ensured. The NSFR applies to both the Group as a whole and to individual SSM regulated entities, including the parent entity Deutsche Bank AG.

If we fail to meet liquidity requirements, we may become subject to enforcement actions. In addition, any requirement to maintain or increase liquidity could lead us to reduce activities that pursue revenue generation and profit growth.

Due to the COVID-19 pandemic, the 2020 EU-wide stress test by the EBA and the ECB took place in 2021. This test was designed to provide supervisors, banks and other market participants with a common analytical framework to compare and assess, the resilience of EU banks over a three-year horizon under both a baseline and an adverse scenario, which is characterized by severe shocks taking into account the impact of the pandemic. The stress test was conducted on a sample of 50 EU banks, including Deutsche Bank and the results were published on 30 July 2021. By its standard procedures, the ECB considers our quantitative performance in the adverse scenario as an input when reconsidering the level of the Pillar 2 guidance in its 2021 SREP assessment and our qualitative performance as one aspect when holistically reviewing the P2R. Following the 2021 SREP, Deutsche Bank has been informed by the ECB that, from 1 March 2022 onwards, we are required, on a consolidated basis, to maintain an unchanged P2R of 2.50 %. The next EU-wide stress test will be carried out in 2023.

Local capital requirements: In some cases, we are required to hold and calculate capital and to comply with rules on liquidity and risk management separately for our local operations in different jurisdictions, in particular in the United States.

We are required to hold and calculate capital and to comply with rules on liquidity and risk management separately for our local operations in different jurisdictions. In February 2014, the Federal Reserve Board adopted rules that set forth how the U.S. operations of certain foreign banking organizations ("**FBOs**"), such as Deutsche Bank, are required to be structured in the United States, as well as the enhanced prudential standards that apply to our U.S. operations. Under these rules, a large FBO with U.S.$ 50 billion or more in U.S. non-branch assets, such as Deutsche Bank, was required to establish or designate a separately capitalized top-tier U.S. intermediate holding company (an "**IHC**") that would hold substantially all of the FBO's ownership interests in its U.S. subsidiaries. On 1 July 2016, we designated DB USA Corporation as our IHC. In March 2018, we completed the partial initial public offering of our Asset Management division, to form DWS Group GmbH & Co. KGaA ("**DWS**"), in which we retain approximately 80 % of the shares. In April 2018, DWS USA Corporation was formed as a subsidiary of DWS, and, following receipt of Federal Reserve Board approval, we designated it as our second IHC, through which our U.S. asset management subsidiaries are held. Each of these IHCs is subject, on a consolidated basis, to the risk-based and leverage capital requirements under the U.S. Basel 3 capital framework, capital planning and stress testing requirements, U.S. liquidity buffer requirements and other enhanced prudential standards comparable to those applicable to large U.S. banking organizations. They are also subject to supplementary leverage ratio ("**SLR**") requirements. The Federal Reserve Board has the authority to examine an IHC, such as DB USA Corporation and DWS USA Corporation, and its subsidiaries, as well as U.S. branches and agencies of FBOs, such as our New York branch.

On 10 October 2019, the Federal Reserve Board finalized rules to categorize the U.S. operations of large FBOs based on size, complexity and risk for purposes of tailoring the application of the U.S. enhanced prudential standards (the "**Tailoring Rules**"). The Tailoring Rules do not significantly change the capital requirements that apply to DB USA Corporation or DWS USA Corporation although they provide the option to comply with certain simplifications to the capital requirements. However, the Tailoring Rules provide modest relief for our U.S. IHCs with respect to applicable liquidity requirements so long as our IHCs' combined weighted short term wholesale funding remains below U.S.$ 75 billion.

As a bank holding company with assets of U.S.$ 250 billion or more, Deutsche Bank AG is required under Title I of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, as amended (the "**Dodd-Frank Act**"), and the implementing regulations thereunder to prepare and submit to the Federal Reserve Board and the Federal Deposit Insurance Corporation ("**FDIC**") either a full or targeted resolution plan (the "**U.S. Resolution Plan**") on a timeline prescribed by such agencies. The U.S. Resolution Plan must demonstrate that Deutsche Bank AG has the ability to execute a strategy for the orderly resolution of its designated U.S. material entities and operations. For foreign-based companies subject to these resolution planning requirements such as Deutsche Bank AG, the U.S. Resolution Plan relates only to subsidiaries, branches, agencies and businesses that are domiciled in or whose activities are carried out in whole or in material part in the United States. Deutsche Bank's U.S. Resolution Plan describes the single point of entry strategy for

Deutsche Bank's U.S. material entities and operations and prescribes that DB USA Corporation, our U.S. IHC, would provide liquidity and capital support to its U.S. material entity subsidiaries and ensure their solvent wind-down outside of applicable resolution proceedings.

On 9 December 2020, the Federal Reserve Board and FDIC finalized guidance for the resolution plans of certain large foreign banks, including Deutsche Bank AG. In that guidance, the agencies tailored their expectations around resolution capital and liquidity, derivatives and trading activity, as well as payment, clearing, and settlement activities. The agencies also provided information to large banks, including Deutsche Bank AG, regarding additional content to be included in the 2021 U.S. resolution plans, which were required to be filed by 17 December 2021. Deutsche Bank's 'targeted' 2021 U.S. Resolution Plan, the firm's first 'targeted plan', includes core elements of the U.S. resolution strategy – such as capital, liquidity, and recapitalization strategies – as well as how Deutsche Bank has integrated lessons learned from its response to the COVID-19 pandemic into its resolution planning process. Deutsche Bank AG submitted its targeted 2021 U.S. Resolution Plan on 13 December 2021. If the Federal Reserve Board and the FDIC were to jointly deem Deutsche Bank's U.S. Resolution Plan not credible and Deutsche Bank failed to remediate any deficiencies in the required timeframe prescribed by the Federal Reserve Board and FDIC, these agencies could impose restrictions on Deutsche Bank or require the restructuring or reorganization of businesses, legal entities, operational systems and/or intra-company transactions which could negatively impact our operations and/or strategy. Additionally, the Federal Reserve Board and FDIC could also subject Deutsche Bank to more stringent capital, leverage or liquidity requirements, or require Deutsche Bank to divest certain assets or operations.

DB USA Corporation and DWS USA Corporation are each subject, on an annual basis, to the Federal Reserve Board's supervisory stress testing and capital requirements. DB USA Corporation and DWS USA Corporation are also subject to the Federal Reserve's Comprehensive Capital Analysis and Review ("**CCAR**"), which is an annual supervisory exercise that assesses the capital positions and planning practices of large bank holding companies and IHCs. On 24 June 2021, the Federal Reserve Board publicly released the results of its annual supervisory stress test, which showed that DB USA Corporation and DWS USA Corporation would continue to have capital levels above minimum requirements even under the stress test's severely adverse scenario. DB USA Corporation and DWS USA Corporation submitted their annual capital plans in April 2021 and will make their next capital plan submissions to the Federal Reserve Board in April 2022. If the Federal Reserve Board were to object to these capital plans we could be required to increase capital or restructure businesses in ways that may negatively impact our operations and strategy or could be subject to restrictions on growth in the United States.

On 4 March 2020, the Federal Reserve Board issued a rule to amend its CCAR process to combine the CCAR quantitative assessment and the buffer requirements in the Federal Reserve Board's capital rules to create an integrated capital buffer requirement. This final rule has eliminated the quantitative and qualitative 'pass/fail' assessments from CCAR and modified the static capital conservation buffer to incorporate an institution-specific stress capital buffer ("**SCB**"), which is floored at 2.5 %. The stress capital buffer equals (i) a bank holding company's projected peak-to-trough decline in common equity tier 1 capital under the annual CCAR supervisory severely adverse stress testing scenario prior to any planned capital actions, plus (ii) one year of planned common stock dividends. The stress capital buffer will be reset each year. On 5 August 2021, the Federal Reserve Board announced an SCB for each CCAR firm based on 2021 supervisory stress testing results, which for DB USA Corporation was 4.5 % and for DWS USA Corporation was 7.2 %. This SCB became effective 1 October 2021 and would generally remain in effect until 30 September 2022, at which point the size of the SCB for each of our IHCs will be recalibrated based on the results of the 2022 stress tests, which are expected to be released in June 2022. In response to the COVID-19 pandemic, during the first six months of 2021, the Federal Reserve Board imposed additional restrictions on certain capital distributions for CCAR firms, separate from the SCB. These additional capital restrictions were lifted on 1 July 2021. The U.S. federal bank regulators in 2013 issued final rules implementing elements of the Basel 3 capital adequacy framework that are applicable to U.S. banking organizations.

In September 2014, the Federal Reserve Board and other U.S. regulators approved a final rule implementing liquidity coverage ratio ("**LCR**") requirements for large U.S. bank holding companies and certain of their subsidiary depositary institutions that are generally consistent with the Basel Committee's revised Basel 3 liquidity standards. DB USA Corporation, DWS USA Corporation and our principal U.S. bank subsidiary, Deutsche Bank Trust Company Americas ("**DBTCA**"), are subject to the LCR requirements. The Tailoring

Rules reduced the LCR requirements applicable to these institutions from 100 to 85 per cent. coverage of net outflows over a projected 30-day period.

On 20 October 2020, the Federal Reserve Board and other U.S. regulators finalized rules implementing the second element of the Basel 3 liquidity framework, the net stable funding ratio ("**NSFR**"). Under the Tailoring Rules, DB USA Corporation, DWS USA Corporation and DBTCA would be subject to an 85 per cent. NSFR so long as our IHCs' combined weighted short term wholesale funding remains below U.S.$ 75 billion. Effective 1 July 2021, these firms are required to calculate the NSFR and meet the minimum required ratios on a daily basis. Beginning in 2023, these firms will be required to publicly report NSFR information on a periodic basis.

On 15 December 2016, the Federal Reserve Board adopted final rules that implement the FSB's TLAC standard in the United States. The final rules require, among other things, U.S. IHCs of non-U.S. G-SIBs, including our IHCs, DB USA Corporation and DWS USA Corporation, to maintain a minimum amount of TLAC, and separately require them to maintain a minimum amount of long-term debt meeting certain requirements.

U.S. rules and interpretations, including those described above, could cause us to reduce assets held in the United States, or to inject capital and/or liquidity into or otherwise change the structure of our U.S. operations, and could also restrict the ability of our U.S. subsidiaries to pay dividends to us or the amount of such dividends. To the extent that we are required to reduce operations in the United States or deploy capital or liquidity in the United States that could be deployed more profitably elsewhere, these requirements could have an adverse effect on our business, financial condition and results of operations.

Any increased capital or liquidity requirements, including those described above, could have adverse effects on our business, financial condition and results of operations, as well as on perceptions in the market of our stability, particularly if any such requirement results in us having to raise capital at a time when we or the financial markets are distressed, or take other measures to increase liquidity in certain jurisdictions due to local requirements. The measures we might be required or find necessary to take in response to these shifting local requirements may be inconsistent with, and hinder the achievement of, our strategic goals. In addition, if these regulatory requirements must be implemented more quickly than currently foreseen, we may decide that the quickest and most reliable path to compliance is to reduce the level of assets on our balance sheet, dispose of assets or otherwise segregate certain activities or reduce or close down certain business lines. The effects on our capital raising efforts in such a case could be amplified due to the expectation that our competitors, at least those subject to the same or similar capital requirements, would likely also be required to raise capital at the same time. Moreover, some of our competitors, particularly those outside the European Union, may not face the same or similar regulations, which could put us at a competitive disadvantage.

In addition to these regulatory initiatives, market sentiment may encourage financial institutions such as Deutsche Bank to maintain significantly more capital, liquidity and loss-absorbing capital instruments than the regulatory-mandated minima, which could exacerbate the effects on us described above or, if we do not increase our capital to the encouraged levels, could lead to the perception in the market that we are undercapitalized relative to our peers generally.

It is unclear whether the U.S. capital and other requirements described above, as well as similar developments in other jurisdictions, could lead to a fragmentation of supervision of global banks that could adversely affect our reliance on regulatory waivers allowing us to meet capital adequacy requirements, large exposure limits and certain organizational requirements on a consolidated basis only rather than on both a consolidated and non-consolidated basis. Should we no longer be entitled to rely on these waivers, we would have to adapt and take the steps necessary in order to meet regulatory capital requirements and other requirements on a consolidated as well as a non-consolidated basis, which could result also in significantly higher costs and potential adverse effects on our profitability and dividend paying ability.

Regulatory capital and liquidity ratios: Our regulatory capital and liquidity ratios and our funds available for distributions on our shares or regulatory capital instruments will be affected by our business decisions and, in making such decisions, our interests and those of the holders of such instruments may not be aligned, and we may make decisions in accordance with applicable law and the terms of the relevant instruments that result in no or lower payments being made on our shares or regulatory capital instruments.

Our regulatory capital and liquidity ratios are affected by a number of factors, including decisions we make relating to our businesses and operations as well as the management of our capital position, of our risk-weighted assets and of our balance sheet in general, and external factors, such as regulations regarding the risk weightings we are permitted to allocate to our assets, commercial and market risks or the costs of our legal or regulatory proceedings. While we and our management are required to take into account a broad range of considerations in our and their managerial decisions, including the interests of the Bank as a regulated institution and those of our shareholders and creditors, particularly in times of weak earnings and increasing capital requirements, the regulatory requirements to build capital and liquidity may become paramount. Accordingly, in making decisions in respect of our capital and liquidity management, we are not required to adhere to the interests of the holders of instruments we have issued that qualify for inclusion in our regulatory capital, such as our shares or Additional Tier 1 capital instruments. We may decide to refrain from taking certain actions, including increasing our capital at a time when it is feasible to do so (through securities issuances or otherwise), even if our failure to take such actions would result in a non-payment or a write-down or other recovery- or resolution-related measure in respect of any of our regulatory capital instruments. Our decisions could cause the holders of such regulatory capital instruments to lose all or part of the value of their investments in these instruments due to their effect on our regulatory capital ratios, and such holders will not have any claim against us relating to such decisions, even if they result in a non-payment or a write-down or other recovery- or resolution-related measure in respect of such instruments they hold.

In addition, our annual profit and distributable reserves form an important part of the funds available for us to pay dividends on our shares and make payments on our other regulatory capital instruments, as determined in the case of each such instrument by its terms or by operation of law, are calculated on an unconsolidated basis generally in accordance with German accounting rules set forth in the Commercial Code (*Handelsgesetzbuch*). Any adverse change in our financial prospects, financial position or profitability, or our distributable reserves, each as calculated on an unconsolidated basis, may have a material adverse effect on our ability to make dividend or other payments on these instruments. In addition, as part of the implementation of our strategy, we may record impairments that reduce the carrying value of subsidiaries on our unconsolidated balance sheet and reduce profits and distributable reserves. Future impairments or other events that reduce our profit or distributable reserves on an unconsolidated basis could lead us to be unable to make such payments in respect of future years in part or at all. In particular, the direct costs of our potential settlements of litigation, enforcement and similar matters, especially to the extent in excess of provisions we have established for them, and their related business impacts, if they occur, could impact such distributable amounts.

In addition, German law places limits on the extent to which annual profits and otherwise-distributable reserves, as calculated on an unconsolidated basis, may be distributed to our shareholders or the holders of our other regulatory capital instruments, such as our Additional Tier 1 capital instruments. Our management also has, subject to applicable law, broad discretion under the applicable accounting principles to influence all amounts relevant for calculating funds available for distribution. Such decisions may impact our ability to make dividend or other payments under the terms of our regulatory capital instruments.

Resolution legislation: European and German legislation regarding the recovery and resolution of banks and investment firms could, if steps were taken to ensure our resolvability or resolution measures were imposed on us, significantly affect our business operations, and lead to losses for our shareholders and creditors.

Germany participates in the SRM, which centralizes at a European level the key competences and resources for managing the failure of any bank in member states of the European Union participating in the banking union. The SRM is based on the SRM Regulation and the BRRD, which was implemented in Germany through the German Recovery and Resolution Act. In addition, the German Resolution Mechanism Act (*Abwicklungsmechanismusgesetz*) adapted German bank resolution laws to the SRM.

The SRM Regulation and the German Recovery and Resolution Act require the preparation of recovery and resolution plans for banks and grant broad powers to public authorities to intervene in a bank which is failing or likely to fail. For a bank directly supervised by the ECB, such as Deutsche Bank, the Single Resolution Board (referred to as the "**SRB**") assesses its resolvability and may require legal and operational changes to the bank's structure to ensure its resolvability. In the event that such bank is deemed by the ECB or the SRB as failing or likely to fail and certain other conditions are met, the SRB is responsible for adopting a resolution scheme for resolving the bank pursuant to the SRM Regulation. The European Commission and, to a lesser extent, the Council of the European Union, have a role in endorsing or objecting to the resolution scheme proposed by the SRB. The resolution scheme would be addressed to and implemented by the competent national resolution authorities (in Germany, the German Federal Financial Supervisory Authority (*Bundesanstalt für Finanzdienstleistungsaufsicht*, "**BaFin**")) in line with the national laws implementing the BRRD. Resolution measures that could be imposed upon a bank in resolution may include the transfer of shares, assets or liabilities of the bank to another legal entity, the reduction, including to zero, of the nominal value of shares, the dilution of shareholders or the cancellation of shares outright, or the amendment, modification or variation of the terms of the bank's outstanding debt instruments, for example by way of a deferral of payments or a reduction of the applicable interest rate. Furthermore, certain eligible unsecured liabilities, in particular certain senior "non-preferred" debt instruments specified by the German Banking Act, may be written down, including to zero, or converted into equity (commonly referred to as "**bail-in**") if the bank becomes subject to resolution.

The SRM is intended to eliminate, or reduce, the need for public support of troubled banks. Therefore, financial public support for such banks, if any, would be used only as a last resort after having assessed and exploited, to the maximum extent practicable, the resolution powers, including a bail-in. The taking of actions to ensure our resolvability or the exercise of resolution powers by the competent resolution authority could materially affect our business operations and lead to a significant dilution of our shareholders or even the total loss of our shareholders' or creditors' investment.

Other regulatory reforms: Other regulatory reforms adopted or proposed in the wake of the financial crisis – for example, extensive new regulations governing our derivatives activities, compensation, bank levies, deposit protection, or data protection – may materially increase our operating costs and negatively impact our business model.

Beyond capital requirements and the other requirements discussed above, we are affected, or expect to be affected, by various additional regulatory reforms, including, among other things, regulations governing our derivatives activities, compensation, bank levies, deposit protection or data protection.

On 16 August 2012, the EU Regulation on over-the-counter ("**OTC**") derivatives, central counterparties and trade repositories, referred to as European Market Infrastructure Regulation ("**EMIR**"), entered into force. EMIR introduced a number of requirements, including clearing obligations for certain classes of OTC derivatives and various reporting and disclosure obligations. EMIR implementation has led and may lead to changes that may negatively impact our profit margins. The revised Markets in Financial Instruments Directive ("**MiFID II**") and the corresponding Regulation ("**MiFIR**") became applicable to us on 3 January 2018 and provide for, among other things, a trading obligation for those OTC derivatives which are subject to mandatory clearing and which are sufficiently standardized. On 25 November 2021, the European Commission published a proposal for a review of MiFIR (referred to as the "**MiFIR Review**") that entails amendments to MiFIR and MiFID II. The proposals in the MiFIR Review, among other things, introduce an EU-wide consolidated tape for each asset class, enhanced transparency requirements for small trades in equities (such as shares) and for non-equities (such as derivatives and bonds), and adjust the scope of the EU share trading obligation and derivatives trading obligation.

In the United States, the Dodd-Frank Act has numerous provisions that affect or may affect our operations. Pursuant to regulations implementing provisions of the Dodd-Frank Act, we provisionally registered as a swap dealer with the U.S. Commodity Futures Trading Commission ("**CFTC**") and became subject to the CFTC's extensive oversight. Regulation of swap dealers by the CFTC imposes numerous corporate governance, business conduct, capital, margin, reporting, clearing, execution and other regulatory requirements on us. It also requires us to comply with certain U.S. rules in some circumstances with respect to transactions conducted outside of the United States or with non-U.S. persons. Although the coverage of EMIR and CFTC regulations implementing the Dodd-Frank Act is in many ways similar, certain swaps may be subject to both regulatory regimes to a significant extent.

Additionally, under the Dodd-Frank Act, security-based swaps are subject to a standalone regulatory regime under the jurisdiction of the U.S. Securities and Exchange Commission ("**SEC**"). The SEC has implemented rules regarding registration, capital, risk-mitigation techniques, reporting, business conduct standards, trade acknowledgement and verification requirements, and cross-border requirements for security-based swap dealers that are generally similar to the CFTC's rules for swap dealers. These rules generally came into effect in November 2021, the first compliance date for registration of security-based swap dealers. Pursuant to these rules, we are conditionally registered as a security-based swap dealer and are now subject to further regulation of our derivatives business.

Pursuant to these CFTC and SEC regulations, there may be instances where we can comply with European and/or German requirements in lieu of complying with the U.S. regulatory requirements. These requirements under the Dodd-Frank Act may adversely affect our derivatives business and make us less competitive, especially as compared to competitors not subject to such regulation.

In addition, the CRR/CRD IV legislative package provided for executive compensation reforms including caps on bonuses that may be awarded to "material risk takers" and other employees as defined therein and in the German Banking Act and other applicable rules and regulations such as the Remuneration Regulation for Institutions (*Institutsvergütungsverordnung*). Such restrictions on compensation, including the amendments introduced by the CRR II/CRD V/BRRD II reform package and any guidelines issued by the EBA to further implement them, could put us at a disadvantage to our competitors in attracting and retaining talented employees, especially compared to those outside the European Union that are not subject to these caps and other constraints.

Following the financial crisis, bank levies have been introduced in some countries including, among others, Germany and the United Kingdom. We paid € 553 million for bank levies in 2021, € 633 million in 2020 and € 622 million in 2019. Also, we are required to contribute substantially to the Single Resolution Fund under the SRM (which is intended to reach by the end of 2023 a target level of 1 % of insured deposits of all banks in member states participating in the SRM) and the statutory deposit guarantee and investor compensation schemes under the recast European Union directive on deposit guarantee schemes ("**DGS Directive**") and the European Union directive on investor compensation schemes. The DGS Directive defines a 0.8 % target level of prefunding by 3 July 2024 (similar to resolution funds), which has significantly increased the costs of the statutory deposit protection scheme. We also participate in the voluntary deposit protection provided by the private banks in Germany through the Deposit Protection Fund (*Einlagensicherungsfonds*) which is funded through contributions by its members. While the total impact of future levies cannot currently be quantified, they may have a material adverse effect on our business, financial condition and results of operations in future periods. Failure of banks, resolution measures and a decline of the value of the assets held by the SRM by the relevant DGS can cause an increase of contributions in order to replenish the shortfall.

We are subject to the General Data Protection Regulation ("**GDPR**") which has increased our regulatory obligations in connection with the processing of personal data, including requiring compliance with the GDPR's data protection principles, the increased number of data subject rights and strict data breach notification requirements. The GDPR grants broad enforcement powers to supervisory authorities, including the potential to levy significant fines for non-compliance, and provides for a private right of action for individuals who are affected by a violation of the GDPR. Compliance with the GDPR requires investment in appropriate technical and organizational measures and we may be required to devote significant resources to data protection on an ongoing basis. In the event that we are found to have not met the standards required by the GDPR we may incur damage to our reputation, the imposition by data protection supervisory authorities of significant fines or restrictions on our ability to process personal data, and we may be required to defend claims for compensation brought by affected individuals, all of which could have a material adverse effect on us.

On 27 November 2019, the European Parliament and the Council adopted the Investment Firm Regulation and the Investment Firm Directive, which introduced substantive regulatory changes (including to the calculation of capital requirements) in respect of investment firms, such as our subsidiary DWS. The Investment Firm Regulation and the Investment Firm Directive (as implemented into German law) are in full force since 26 June 2021.

A number of jurisdictions where the Bank is active are starting to discuss rules related to Environmental, Social and Governance ("**ESG**") aspects of our business and exposure. It is currently difficult to estimate how these rules could impact us.

Protection of retail customers: Scrutiny of regulators and courts in respect of the protection of retail customers has increased in particular with respect to the enforceability and transparency of standard business terms and compensation for alleged damages.

In the recent past, regulators and courts have put further emphasis on the protection of retail customers. Examples of this are (i) BaFin's general order of 21 June 2021, pursuant to which credit institutions must inform customers of certain invalid interest rate adjustment clauses in their standard business terms; (ii) the German Federal Court of Justice's ("**BGH**") decision of 27 April 2021, according to which typical clauses in the standard business terms of banks providing for deemed consent to proposed amendments if the customer does not object within a certain period are unenforceable; and (iii) the FX mortgages loan cases in Poland, which constitute an industry-wide and highly disputed and litigated issue, where courts have found that certain mortgage loan agreements in foreign currencies include unfair conditions and are therefore unenforceable. Customer restitution practices in respect of such matters have varied significantly across the industry, and it our practices differ from accepted norms, we may be subject to civil or regulatory claims. These matters may result in the imposition of additional costs to us or require us to reimburse or pay damages to clients.

Risks Relating to Our Internal Control Environment

Internal control environment: A robust and effective internal control environment and adequate infrastructure (comprising people, policies and procedures, controls testing and IT systems) are necessary to ensure that we conduct our business in compliance with the laws, regulations and associated supervisory expectations applicable to us. We have identified the need to strengthen our internal control environment and infrastructure and have embarked on initiatives to accomplish this. If these initiatives are not successful or proceed too slowly, our reputation, regulatory position and financial condition may be materially adversely affected, and our ability to achieve our strategic ambitions may be impaired.

Our businesses are highly dependent on our ability to maintain a robust and effective internal control environment. This is needed for the Bank to process and monitor, on a daily basis, a wide variety of transactions, many of which are highly complex and occur at high speeds, volumes and frequencies, and across numerous and diverse markets and currencies. Such a robust and effective control environment is in turn dependent on the sufficiency of our infrastructure to support that environment. This infrastructure consists broadly of internal policies and procedures, testing protocols, and the IT systems and employees needed to enforce and enable them. An effective control environment is dependent on infrastructure systems and procedures that cover the processing and settling of transactions; the valuation of assets; the identification, monitoring, aggregation, measurement and reporting of risks and positions against various metrics; the evaluation of counterparties and customers for legal, regulatory and compliance purposes; the escalation of reviews; and the taking of mitigating and remedial actions where necessary. They are also critical for regulatory reporting and other data processing and compliance activities.

Both our internal control environment and the infrastructure that underlies it fall short in a number of areas of our standards for completeness and comprehensiveness and are not well integrated across the Bank. Our IT infrastructure, in particular, is fragmented, with numerous distinct platforms, many of which need significant upgrades, in operation across the Bank. Our business processes and the related control systems often require manual procedures and actions that increase the risks of human error and other operational problems that can lead to delays in reporting information to management and to the need for more adjustments and revisions than would be the case with more seamlessly integrated and automated systems and processes. As a result, it is often difficult and labor-intensive for us to obtain or provide information of a consistently high quality and on a timely basis to comply with regulatory reporting and other compliance requirements or to meet regulatory expectations on a consistent basis and, in certain cases, to manage our risk comprehensively. Furthermore, it often takes intensive efforts to identify, when possible, inappropriate behavior by our staff and attempts by third parties to misuse our services as a conduit for prohibited activities, including those relating to anti-financial crime laws and regulation.

In addition, we may not always have the personnel with the appropriate experience, seniority and skill levels to compensate for shortcomings in our processes and infrastructure, or to identify, manage or control risks, and it often has been difficult to attract and retain the requisite talent. This has impacted our ability to remediate existing weaknesses and manage the risks inherent in our activity. Additionally, despite the lower overall rate of attrition we have experienced during the COVID-19 pandemic, attrition in positions key to improving our control environment remains a risk.

Against this backdrop, our regulators, our Management Board and our Group Audit function have increasingly and more intensively focused on our internal controls and infrastructure through numerous formal reviews and audits of our operations. These reviews and audits have identified various areas for improvement relating to a number of elements of our control environment and infrastructure. These include the infrastructure relating to transaction capturing and recognition, classification of assets, asset valuation frameworks, models, data and process consistency, information security, software license management, payment services, risk identification, measurement and management and other processes required by laws, regulations, and supervisory expectations. They also include regulatory reporting, anti-money laundering ("**AML**"), transaction monitoring, "know your customer" ("**KYC**"), sanctions and embargoes, market conduct and other internal processes that are aimed at preventing use of our products and services for the purpose of committing or concealing financial crime.

Our principal regulators, including BaFin, the ECB and the Federal Reserve Board, have also conducted numerous reviews focused on our internal controls and the related infrastructure. These regulators have required us formally to commit to remediate our AML and other weaknesses, including the fragmented and manual nature of our infrastructure. For example, on 21 September 2018, BaFin issued an order requiring us to implement measures on specified timelines over the coming months and years to improve our control and compliance infrastructure relating to AML and, in particular, the KYC processes in certain of our businesses. Local regulators in other countries in which we do business also review the sufficiency of our control environment and infrastructure with respect to their jurisdictions. While the overall goals of the various prudential regulators having authority over us in the many places in which we do business are broadly consistent, and the general themes of our deficiencies in internal controls and the supporting infrastructure are similar, the regulatory frameworks applicable to us in the area of internal controls are generally applicable at a national or EU-wide level and are not always consistent across the jurisdictions in which we operate around the world. This adds complexity and cost to our efforts to reduce fragmentation and put in place automated systems that communicate seamlessly and quickly with one another.

In order to improve in the areas discussed above, we are undertaking several major initiatives to enhance the efficacy of the transaction processing environment, strengthen our controls and infrastructure, manage non-financial risks and enhance the skill set of our personnel. We believe that these initiatives will better enable us to avoid the circumstances that have resulted in many of the litigations and regulatory and enforcement investigations and proceedings to which we have been subject, and will improve our ability to comply with laws and regulations and meet supervisory expectations. In particular, we are making efforts to reduce the complexity of our business and to integrate and automate processes and business and second-line controls. We have also exited certain businesses and high-risk countries, selectively off-boarded a number of clients, worked to strengthen our compliance culture and control functions. However, we may be unable to complete these initiatives as quickly as we intend or as our regulators demand, and our efforts may be insufficient to remediate existing deficiencies and prevent future deficiencies or to result in fewer litigations or regulatory and enforcement investigations, proceedings and criticism in the future. We may also, when faced with the considerable expense of these initiatives, fail to provide sufficient resources for them quickly enough or at all or underestimate the extent of resource requirements. The slow pace of our remediation efforts and progress on achieving significant and durable improvements in the areas discussed above may result in regulatory action of the type that has been taken against other financial institutions whose progress regulators have deemed insufficient or too slow. If we are unable to significantly improve our infrastructure and control environment in a timely manner, we may be subject to fines or penalties, as well as to regulatory intervention in aspects of our businesses. For example, we might feel pressure or be required by our regulators to reduce our exposure to or terminate certain kinds of products or businesses, counterparties or regions, which could, depending on the extent of such requirement, significantly challenge our ability to operate profitably under our current business model.

Regulators can also impose capital surcharges, requiring capital buffers in addition to those directly required under the regulatory capital rules applicable to us, to reflect the additional risks posed by deficiencies in our control environment. In extreme cases, regulators can suspend our permission to operate in the businesses and regions within their jurisdictions or require extensive and costly remedial actions. Furthermore, implementation of enhanced infrastructure and controls may result in higher-than-expected costs of regulatory compliance that could offset or exceed efficiency gains or significantly affect our profitability. Any of these factors could affect our ability to implement our strategy in a timely manner or at all.

Anti-money laundering and know-your-client processes: BaFin has ordered us to improve our control and compliance infrastructure relating to our AML and KYC processes, and appointed a special representative to monitor these measures' implementation. Our results of operations, financial condition and reputation could be materially and adversely affected if we are unable to significantly improve our infrastructure and control environment by the set deadline.

On 21 September 2018, BaFin issued an order requiring us to take appropriate internal safeguards and comply with general due diligence obligations in order to prevent money laundering and terrorist financing. BaFin has appointed a special representative to monitor the implementation of the ordered measures, assessing and reporting the progress to BaFin. In February 2019, BaFin extended the order and the mandate of the special representative to review its group-wide risk management processes in the area of correspondence banking and adjust them where necessary. BaFin further expanded the order and the mandate on 29 April 2021, ordering Deutsche Bank to adopt further appropriate internal safeguards and comply with due diligence obligations, in particular with regard to regular reviews. This expansion also applies to correspondent relationships and transaction monitoring. Our AML and KYC processes, as well as our other internal processes that are aimed at preventing use of our products and services for the purpose of committing or concealing financial crime and our personnel responsible for our efforts in these areas, continue to be the subject of regulatory scrutiny in a number of jurisdictions, including in the U.S., and other regulators could take actions against us similar to those of BaFin. If we are unable to significantly improve our infrastructure and control environment by the set deadlines, our results of operations, financial condition and reputation could be materially and adversely affected. Regulators can impose fines or require us to reduce our exposure to or terminate certain kinds of products or businesses or relationships with counterparties or regions. We may also face additional legal proceedings, investigations or regulatory actions in the future, including in other jurisdictions with material impact on the Bank's business and profitability. These could, depending on the extent of any resulting requirements, significantly challenge our reputation and our ability to operate profitably under our current business model.

Risks Relating to Litigation, Regulatory Enforcement Matters and Investigations

Litigation environment: We operate in a highly and increasingly regulated and litigious environment, potentially exposing us to liability and other costs, the amounts of which may be substantial and difficult to estimate, as well as to legal and regulatory sanctions and reputational harm.

The financial services industry is among the most highly regulated industries. Our operations throughout the world are regulated and supervised by the central banks and regulatory authorities in the jurisdictions in which we operate. In recent years, regulation and supervision in a number of areas has increased, and regulators, law enforcement authorities, governmental bodies and others have sought to subject financial services providers to increasing oversight and scrutiny, which in turn has led to additional regulatory investigations or enforcement actions which are often followed by civil litigation. There has been a steep escalation in the severity of the terms which regulatory and law enforcement authorities have required to settle legal and regulatory proceedings against financial institutions, with settlements in recent years including unprecedented monetary penalties as well as criminal sanctions. As a result, we may continue to be subject to increasing levels of liability and regulatory sanctions, and may be required to make greater expenditures and devote additional resources to addressing these liabilities and sanctions. Regulatory sanctions may include status changes to local licenses or orders to discontinue certain business practices.

We and our subsidiaries are involved in various litigation proceedings, including civil class action lawsuits, arbitration proceedings and other disputes with third parties, as well as regulatory proceedings and investigations by both civil and criminal authorities in jurisdictions around the world. We expect that the costs to us arising from the resolution of litigation, enforcement and similar matters pending against us to continue to be significant in the near to medium term and to adversely affect our business, financial condition and results of operations. Litigation and regulatory matters are subject to many uncertainties, and the outcome of individual matters is not predictable with assurance. We may settle litigation or regulatory proceedings prior to a final judgment or determination of liability. We may do so for a number of reasons, including to avoid the cost, management efforts or negative business, regulatory or reputational consequences of continuing to contest liability, even when we believe we have valid defenses to liability. We may also do so when the potential consequences of failing to prevail would be disproportionate to the costs of settlement. Furthermore, we may, for similar reasons, reimburse counterparties for their losses even in situations where we do not believe that we are legally compelled to do so. The financial impact of legal risks might be considerable but may be difficult or impossible to estimate and to quantify, so that amounts eventually paid may exceed the amount of provisions made or contingent liabilities assessed for such risks.

Actions currently pending against us or our current or former employees may not only result in judgments, settlements, fines or penalties, but may also cause substantial reputational harm to us. The risk of damage to our reputation arising from such proceedings is also difficult or impossible to quantify.

Regulators have increasingly sought admissions of wrongdoing in connection with settlement of matters brought by them. This could lead to increased exposure in subsequent civil litigation or in consequences under so-called "bad actor" laws, in which persons or entities determined to have committed offenses under some laws can be subject to limitations on business activities under other laws, as well as adverse reputational consequences. In addition, the U.S. Department of Justice ("**DOJ**") conditions the granting of cooperation credit in civil and criminal investigations of corporate wrongdoing on the company involved having provided to investigators all relevant facts relating to the individuals responsible for the alleged misconduct. This policy may result in increased fines and penalties if the DOJ determines that we have not provided sufficient information about applicable individuals in connection with an investigation. Other governmental authorities could adopt similar policies.

In addition, the financial impact of legal risks arising out of matters similar to some of those we face have been very large for a number of participants in the financial services industry, with fines and settlement payments greatly exceeding what market participants may have expected and, as noted above, escalating steeply in recent years to unprecedented levels. The experience of others, including settlement terms, in similar cases is among the factors we take into consideration in determining the level of provisions we maintain in respect of these legal risks. Developments in cases involving other financial institutions in recent years have led to greater uncertainty as to the predictability of outcomes and could lead us to add to our provisions. Moreover, the costs of our investigations and defenses relating to these matters are themselves substantial. Further uncertainty may arise as a result of a lack of coordination among regulators from different jurisdictions or among regulators with varying competencies in a single jurisdiction, which may make it difficult for us to reach concurrent settlements with each regulator. Should we be subject to financial impacts arising out of litigation and regulatory matters to which we are subject in excess of those we have calculated in accordance with our expectations and the relevant accounting rules, our provisions in respect of such risks may prove to be materially insufficient to cover these impacts. This could have a material adverse effect on our results of operations, financial condition or reputation as well as on our ability to maintain capital, leverage and liquidity ratios at levels expected by market participants and our regulators. In such an event, we could find it necessary to reduce our risk-weighted assets (including on terms disadvantageous to us) or substantially cut costs to improve these ratios, in an amount corresponding to the adverse effects of the provisioning shortfall.

Examination by tax authorities: We are under continuous examination by tax authorities in the jurisdictions in which we operate. Tax laws are increasingly complex and are evolving. The cost to us arising from the resolution of routine tax examinations, tax litigation and other forms of tax proceedings or tax disputes may increase and may adversely affect our business, financial condition and results of operation.

We are under continuous examination by tax authorities in the jurisdictions in which we operate. Tax laws are increasingly complex. In the current political and regulatory environment, tax administrations' and courts' interpretation of tax laws and regulations and their application are evolving, and scrutiny by tax authorities has become increasingly intense. Wide ranging and continuous changes in the principles of international taxation emanating from the OECD's Base Erosion and Profit Shifting agenda are generating significant uncertainties for us and our subsidiaries and may result in an increase in instances of tax disputes or instances of double taxation going forward, as member states may take different approaches in transposing these requirements into national law or may choose to implement unilateral measures. Examples are the EU directive requiring disclosure of arrangements with specific tax features that took effect in 2020, or the recent draft EU directive to implement the OECD global minimum taxation rules (Pillar 2) that could take effect as early as 2023. Tax administrations have also been focusing on the eligibility of taxpayers for reduced withholding taxes on dividends in connection with certain cross-border lending or derivative transactions with the German Federal Ministry of Finance having issued additional administrative guidance in this area during 2021. In addition, while a significant amount of guidance has been issued since the enactment of the U.S. tax reform at the end of 2017 which included the Base Erosion Anti-Abuse Tax provisions, uncertainties remain and further interpretative guidance may be necessary over the coming years. As a result, the cost to us arising from the resolution of routine tax examinations, tax litigation and other forms of tax proceedings or tax disputes, as well as from rapidly changing and increasingly complex and uncertain tax laws and principles, may increase and may adversely affect our business, financial condition and results of operation.

Potential dealings with certain former members of the U.S. government: U.S. Congressional committees and other U.S. governmental entities have sought and may seek information from us concerning, among other topics, potential dealings between us and certain former members of the U.S. executive branch, including former President Trump, his family and other close associates, exposing us in particular to risk to our reputation and potential loss of business as a result of extensive media attention.

A number of media entities have reported that U.S. Congressional committees and other U.S. governmental entities are seeking or may seek information from us concerning, among other topics, potential dealings between the Bank and certain former members of the executive branch of the U.S. government, including former President Trump, his family, and other close associates. Attention surrounding such actual or potential requests and inquiries and our responses can create reputational and other risks that could have a material adverse effect on us. Our policy is to cooperate with all authorized government inquiries.

Risks Relating to Environmental, Social and Governance (ESG)-related changes, Nontraditional Credit Business, Accounting, Risk Management and Operations, Benchmark Reforms

Environmental, social and governance (ESG)-related changes: The impacts of rising global temperatures, and the enhanced focus on climate change and the transition to a "net-zero" economy from society, our regulators and the banking sector, have led to the emergence of new and increasing sources of financial and non-financial risks. These include the physical risks arising from extreme weather events which are growing in frequency and severity, transition risks as carbon-intensive sectors are faced with higher taxation, reduced demand and potentially restricted access to financing, and risks relating to the portrayal of ESG aspect of activities. These risks can impact Deutsche Bank across a broad range of financial and non-financial risk types.

Financial institutions are facing increased scrutiny on climate and broader environmental, social and governance ("**ESG**")-related issues from governments, regulators, shareholders and other bodies, leading to reputational risks if we are not seen to support the transition to a lower carbon economy, and to protect biodiversity and human rights. We are also required to review and enhance our ESG risk management frameworks in alignment with emerging regulatory guidance and to ensure that we accurately portray the ESG aspects of our activities. There is a lack of consistent and comprehensive ESG data and methodologies available today which means that we are heavily reliant on proxy estimates and qualitative approaches when assessing the risks to our balance sheet, which introduces a high degree of uncertainty into our climate-related disclosures. In 2022, the ECB will conduct its first climate stress test, an exercise which contains a number of novel and complex elements which require the development of new methodologies and data sources.

Deutsche Bank is committed to managing our business activities and operations in a sustainable manner, including aligning our portfolios with net zero emissions by 2050. We are continuing to develop and implement our approach to environmental risk assessments and management in order to promote the integration of environmental-related factors across our business activities. This includes the ability to identify, monitor and manage risks and to conduct regular scenario analysis and stress testing. Both rapidly changing regulatory as well as stakeholder demands, combined with significant focus by stakeholders, may materially affect our businesses if we fail to adopt such demands or appropriately implement our strategic plans.

Nontraditional credit business: In addition to our traditional banking businesses of deposit-taking and lending, we also engage in nontraditional credit businesses in which credit is extended in transactions that include, for example, our holding of securities of third parties or our engaging in complex derivative transactions. These nontraditional credit businesses materially increase our exposure to credit risk.

As a bank and provider of financial services, we are exposed to the risk that third parties who owe us money, securities or other assets will not perform their obligations. Many of the businesses we engage in beyond the traditional banking businesses of deposit-taking and lending also expose us to credit risk.

In particular, much of the business we conduct through our Investment Bank corporate division entails credit transactions, frequently ancillary to other transactions. Nontraditional sources of credit risk can arise, for example, from holding securities of third parties; entering into swap or other derivative contracts under which counterparties have obligations to make payments to us; executing securities, futures, currency or commodity trades that fail to settle at the required time due to nondelivery by the counterparty or systems failure by clearing agents, exchanges, clearing houses or other financial intermediaries; and extending credit through other arrangements. Parties to these transactions, such as trading counterparties, may default on their obligations to us due to bankruptcy, political and economic events, lack of liquidity, operational failure or other reasons.

Many of our derivative transactions are individually negotiated and non-standardized, which can make exiting, transferring or settling the position difficult. Certain credit derivatives require that we deliver to the counterparty the underlying security, loan or other obligation in order to receive payment. In a number of cases, we do not hold, and may not be able to obtain, the underlying security, loan or other obligation. This could cause us to forfeit the payments otherwise due to us or result in settlement delays, which could damage our reputation and ability to transact future business, as well as impose increased costs on us. Legislation in the European Union ("**EMIR**") and the United States (the "**Dodd-Frank Act**") has introduced requirements for the standardization, margining, central clearing and transaction reporting of certain over-the-counter derivatives. While such requirements are aimed at reducing the risk posed to counterparties and the financial system by such derivatives, they may reduce the volume and profitability of the transactions in which we engage, and compliance with such provisions may impose substantial costs on us.

The exceptionally difficult market conditions experienced during the global financial crisis severely adversely affected certain areas in which we do business that entail nontraditional credit risks, including the leveraged finance and structured credit markets, and similar market conditions, should they occur, may do so in the future.

Fair value accounting: A substantial proportion of our assets and liabilities comprise financial instruments that we carry at fair value, with changes in fair value recognized in our income statement. As a result of such changes, we have incurred losses in the past, and may incur further losses in the future.

A substantial proportion of the assets and liabilities on our balance sheet comprise financial instruments that we carry at fair value, with changes in fair value recognized in the income statement. Fair value is defined as the price at which an asset or liability could be exchanged in an arm's length transaction between knowledgeable, willing parties, other than in a forced or liquidation sale. If the value of an asset carried at fair value declines (or the value of a liability carried at fair value increases) a corresponding unfavorable change in fair value is recognized in the income statement. These changes have been and could in the future be significant.

Observable prices or inputs are not available for certain classes of financial instruments. Fair value is determined in these cases using valuation techniques we believe to be appropriate for the particular instrument. The application of valuation techniques to determine fair value involves estimation and management judgment, the extent of which will vary with the degree of complexity of the instrument and liquidity in the market. Management judgment is required in the selection and application of the appropriate parameters, assumptions and modeling techniques. If any of the assumptions change due to negative market conditions or for other reasons, subsequent valuations may result in significant changes in the fair values of our financial instruments, requiring us to record losses.

Our exposure and related changes in fair value are reported net of any fair value gains we may record in connection with hedging transactions related to the underlying assets. However, we may never realize these gains, and the fair value of the hedges may change in future periods for a number of reasons, including as a result of deterioration in the credit of our hedging counterparties. Such declines may be independent of the fair values of the underlying hedged assets or liabilities and may result in future losses.

Goodwill accounting: Pursuant to accounting rules, we must periodically test the value of the goodwill of our businesses and the value of our other intangible assets for impairment. In the event such test determines that criteria for impairment exists, we are required under accounting rules to write down the value of such asset. Impairments of goodwill and other intangible assets have had and may have a material adverse effect on our profitability results of operations.

Goodwill arises on the acquisition of subsidiaries and associates and represents the excess of the aggregate of the cost of an acquisition and any non-controlling interests in the acquiree over the fair value of the identifiable net assets acquired at the date of the acquisition. As of 31 December 2021 and 31 December 2020, we recognized goodwill in the amount of € 2.8 billion and € 2.7 billion, respectively. Goodwill on the acquisition of subsidiaries is capitalized and reviewed for impairment annually or more frequently if there are indications that impairment may have occurred. Intangible assets are recognized separately from goodwill when they are separable or arise from contractual or other legal rights and their fair value can be measured reliably. These assets are tested for impairment and their useful lives reaffirmed at least annually. The determination of the recoverable amount in the impairment assessment of non-financial assets requires estimates based on quoted market prices, prices of comparable businesses, present value or other valuation techniques, or a combination thereof, necessitating management to make subjective judgments and assumptions. These estimates and assumptions could result in significant differences to the amounts reported if underlying circumstances were to change.

Impairments of goodwill and other intangible assets have had and may have a material adverse effect on our profitability and results of operations. Since 2019, we have recorded impairments of goodwill of € 1.0 billion in connection with our strategic transformation.

Deferred tax assets: Pursuant to accounting rules, we must review our deferred tax assets at the end of each reporting period. To the extent that it is no longer probable that sufficient taxable income will be available to allow all or a portion of our deferred tax assets to be utilized, we have to reduce the carrying amounts. These reductions have had and may in the future have material adverse effects on our profitability, equity and financial condition.

We recognize deferred tax assets for future tax consequences attributable to temporary differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases, unused tax losses and unused tax credits. Deferred tax assets are recognized only to the extent that it is probable that sufficient taxable profit will be available against which those unused tax losses, unused tax credits and deductible temporary differences can be utilized. As of 31 December 2021 and 31 December 2020, we recognized deferred tax assets of € 6.2 billion and € 6.1 billion, respectively.

In determining the amount of deferred tax assets, we use historical tax capacity and profitability information and, if relevant, forecasted operating results based upon approved business plans, including a review of the eligible carry-forward periods, available tax planning opportunities and other relevant considerations. The analysis of historical tax capacity includes the determination as to whether a history of recent losses exists at the reporting date, and is generally based on the pre-tax results adjusted for permanent differences for the current and the two preceding financial years. Each quarter, we re-evaluate our estimate related to deferred tax assets, including our assumptions about future profitability. The accounting estimate related to the deferred tax assets depends upon underlying assumptions about the historical tax capacity and profitability information, as well as forecasted operating results based upon approved business plans, which can change from period to period and requires significant management judgment. For example, tax law changes or variances in future projected operating performance could result in an adjustment to the deferred tax assets that would be charged to income tax expense or directly to equity in the period such determination was made.

These adjustments have had and may in the future have material adverse effects on our profitability or equity. In connection with the transformation, the Group adjusted the estimate related to deferred tax assets in affected jurisdictions, such as the UK and the United States, and recognized € 2.8 billion of valuation adjustments since 2019.

Pension risks: We are exposed to pension risks which can materially impact the measurement of our pension obligations, including interest rate, inflation and longevity risks that can materially impact our earnings.

We sponsor a number of post-employment benefit plans on behalf of our employees, including defined benefit plans. Our plans are accounted for based on the nature and substance of the plan. Generally, for defined benefit plans the value of a participant's accrued benefit is based on each employee's remuneration and length of service. We maintain various external pension trusts to fund the majority of our defined benefit plan obligations. Our funding principle is to maintain funding of the defined benefit obligation by plan assets within a range of 90 % to 100 % of the obligation, subject to meeting any local statutory requirements. We have also determined that certain plans should remain unfunded, although their funding approach is subject to periodic review, e.g. when local regulations or practices change. Obligations for our unfunded plans are accrued on the balance sheet. For most of the externally funded defined benefit plans there are local minimum funding requirements. We can decide on any additional plan contributions, with reference to our funding principle. There are some locations, e.g. the United Kingdom, where the trustees and the Bank jointly agree contribution levels. We also sponsor retirement and termination indemnity plans in several countries, as well as some post-employment medical plans for a number of current and retired employees, mainly in the United States. The post-employment medical plans typically pay fixed percentages of medical expenses of eligible retirees after a set deductible has been met.

We develop and maintain guidelines for governance and risk management, including funding, asset allocation and actuarial assumption setting. In this regard, risk management means the management and control of risks for us related to market developments (e.g., interest rate, credit spread, price inflation), asset investment, regulatory or legislative requirements, as well as monitoring demographic changes (e.g., longevity). To the extent that pension plans are funded, the assets held mitigate some of the liability risks, but introduce investment risk. In our key pension countries, our largest post-employment benefit plan risk exposures relate to potential changes in credit spreads, interest rates, price inflation and longevity, although these have been partially mitigated through the investment strategy adopted. Overall, we seek to minimize the impact of pensions on our financial position from market movements, subject to balancing the trade-offs involved in financing post-employment benefits, regulatory capital and constraints from local funding or accounting requirements.

All plans are valued annually by independent qualified actuaries using the projected unit credit method, with inputs including the discount rate, inflation rate, rate of increase in future compensation and for pensions in payment and longevity expectations. For the Group's most significant pension plans in the key countries, the discount rate used at each measurement date is set based on a high quality corporate bond yield curve, which is derived using a bond universe sourced from reputable third-party index data providers and rating agencies, and reflects the timing, amount and currency of the future expected benefit payments for the respective plan.

Our investment objective in funding the plans and our obligations in respect of them is to protect ourselves from adverse impacts of our defined benefit pension plans on key financial metrics. We seek to allocate plan assets closely to the market risk factor exposures of the pension liability to interest rates, credit spreads and inflation and, thereby, plan assets broadly reflect the underlying risk profile and currency of the pension obligations.

To the extent that the factors that drive our pension liabilities move in a manner adverse to us, or that our assumptions regarding key variables prove incorrect, or that our funding of our pension liabilities does not sufficiently hedge those liabilities, we could be required to make additional contributions or be exposed to actuarial or accounting losses in respect of our pension plans.

Risk management: Our risk management policies, procedures and methods leave us exposed to unidentified or unanticipated risks, which could lead to material losses.

We have devoted significant resources to developing our risk management policies, procedures and assessment methods and intend to continue to do so in the future. Nonetheless, the risk management techniques and strategies have not been and may in the future not be fully effective in mitigating our risk exposure in all economic market environments or against all types of risk, including risks that we fail to identify or anticipate. Some of our quantitative tools and metrics for managing risk are based upon our use of observed historical market behavior. We apply statistical and other tools to these observations to arrive at quantifications of our risk exposures. During the financial crisis, the financial markets experienced unprecedented levels of volatility (rapid changes in price direction) and the breakdown of historically observed correlations (the extent to which prices move in tandem) across asset classes, compounded by extremely limited liquidity. In this volatile market environment, our risk management tools and metrics failed to predict some of the losses we have experienced, and they may in the future fail to predict important risk exposures. In addition, our quantitative modeling does not take all risks into account and makes numerous assumptions regarding the overall environment, which may not be borne out by events. As a result, risk exposures have arisen and could continue to arise from factors we did not anticipate or correctly evaluate in our statistical models. This has limited and could continue to limit our ability to manage our risks especially in light of geopolitical developments, many of the outcomes of which are currently unforeseeable. Our losses thus have been and may in the future be significantly greater than the historical measures indicate.

In addition, our more qualitative approach to managing those risks not taken into account by our quantitative methods could also prove insufficient, exposing us to material unanticipated losses. Also, if existing or potential customers or counterparties believe our risk management is inadequate, they could take their business elsewhere or seek to limit their transactions with us. This could harm our reputation as well as our revenues and profits.

Operational risks: Operational risks, which may arise from errors in the performance of our processes, the conduct of our employees, instability, malfunction or outage of our IT system and infrastructure, or loss of business continuity, or comparable issues with respect to our vendors, may disrupt our businesses and lead to material losses.

We face operational risk arising from errors, inadvertent or intentional, made in the execution, confirmation or settlement of transactions or from transactions not being properly recorded, evaluated or accounted for. An example of this risk concerns our derivative contracts, which are not always confirmed with the counterparties on a timely basis. For so long as the transaction remains unconfirmed, we are subject to heightened credit and operational risk and in the event of a default may find it more difficult to enforce the contract.

In addition, our businesses are highly dependent on our ability to process manually or through our systems a large number of transactions on a daily basis, across numerous and diverse markets in many currencies. Some of the transactions have become increasingly complex. Moreover, management relies heavily on its financial, accounting and other data processing systems that include manual processing components. If any of these processes or systems do not operate properly, or are disabled, or subject to intentional or inadvertent human error, we could suffer financial loss, a disruption of our businesses, liability to clients, regulatory intervention or reputational damage.

We are also dependent on our employees to conduct our business in accordance with applicable laws, regulations and generally accepted business standards. If our employees do not conduct our business in this manner, we may be exposed to material losses. Furthermore, if an employee's misconduct reflects fraudulent intent, we could also be exposed to reputational damage. We categorize these risks as conduct risk, a term used to describe the risks associated with behavior by employees and agents, including third parties, that could harm clients, customers or the integrity of the markets, such as selling products that are not suitable for a particular customer, fraud, unauthorized trading and failure to comply with applicable regulations, laws and internal policies. U.S. regulators in particular have been increasingly focused on conduct risk, and such heightened regulatory scrutiny and expectations could lead to investigations and other inquiries, as well as remediation requirements, more regulatory or other enforcement proceedings, civil litigation and higher compliance and other risks and costs.

We in particular face the risk of loss events due to the instability, malfunction or outage of our IT system and IT infrastructure, as well as breaches in IT system and infrastructure (including cyber-attacks). Such losses could materially affect our ability to perform business processes and may, for example, arise from the erroneous or delayed execution of processes as a result of system outages, degraded services in systems and IT applications or the inaccessibility of our IT systems. A delay in processing a transaction, for example, could result in an operational loss if market conditions worsen during the period after the error. IT-related errors may also result in the mishandling of confidential information, damage to our computer systems, financial losses, additional costs for repairing systems, reputational damage, customer dissatisfaction or potential regulatory or litigation exposure (including under data protection laws such as the GDPR).

The move across global industries to conduct business from home and away from primary office locations in response to the COVID-19 pandemic continues to put pressure on business practices, and the demand on our technology infrastructure. Additionally, the current situation also exposes us to a greater risk of cyber-attacks, which could lead to technology failures, security breaches, unauthorized access, loss or destruction of data or unavailability of services, as well as increase the likelihood of conduct breaches.

Business continuity risk is the risk of incurring losses resulting from the interruption of normal business activities. We operate in many geographic locations and are frequently subject to the occurrence of events outside of our control. Despite the contingency plans we have in place, our ability to conduct business in any of these locations may be adversely impacted by a disruption to the infrastructure that supports our business, whether as a result of, for example, events that affect our third party vendors or the community or public infrastructure in which we operate. Any number of events could cause such a disruption including deliberate acts such as sabotage, terrorist activities, bomb threats, strikes, riots and assaults on the Bank's staff; natural calamities such as hurricanes, snow storms, floods, disease pandemics (such as the current COVID-19 pandemic) and earthquakes; or other unforeseen incidents such as accidents, fires, explosions, utility outages and political unrest. Any such disruption could have a material adverse effect on our business and financial position.

As a global bank, Deutsche Bank is often the subject of news reports. Deutsche Bank conducts its media dialogue through official teams. However, members of the media sometimes approach Deutsche Bank staff outside of these channels and Deutsche Bank-internal information, including confidential matters, have been subject to external news media coverage, which may result in publication of confidential information. Leaks to the media can have severe consequences for Deutsche Bank, particularly when they involve inaccurate statements, rumors, speculation or unsanctioned opinions. This can result in financial consequences such as the loss of confidence or business with clients and may impact the Bank's share price or our capital instruments by undermining investor confidence. Our ability to protect ourselves against these risks is limited.

Services by third parties: We utilize a variety of third parties in support of our business and operations. Services provided by third parties pose risks to us comparable to those we bear when we perform the services ourselves, and we remain ultimately responsible for the services such third parties provide. Furthermore, if a third party does not conduct business in accordance with applicable standards or our expectations, we could be exposed to material losses or regulatory action or litigation or fail to achieve the benefits we sought from the relationship.

We utilize a variety of third parties in support of our business and operations. We do so in order to focus on our core competencies and to seek improvements in costs, efficiency and effectiveness in our operations, for instance in connection with our IT modernization efforts. The nature of what we use third parties for has evolved and now includes more fundamental aspects of services and infrastructure such as "Cloud" computing. This represents different risks and requires more robust risk assessments, appropriate contracting and ongoing oversight commensurate with relevant risks. It has also led to an increase in regulation and regulatory scrutiny over how we manage third parties on a day-to-day basis and also assessments of the levels of resiliency needed in relation to the importance of the business services supported by the third party.

Services provided by third parties pose risks to us comparable to those we bear when we perform the services ourselves, and we remain ultimately responsible for the services the third parties provide. We depend on such third parties to conduct their delivery of services in compliance with applicable laws, regulations and generally accepted business standards and in accordance with the contractual terms and service levels they have agreed with us. If the third parties do not conduct business in accordance with these standards, we may be exposed to material losses and could be subject to regulatory action or litigation as well as be exposed to reputational damage. More generally, if a third party relationship does not meet our expectations, we could be exposed to financial risks, such as the costs and expenses associated with migration of the services to another third party and business and operational risks related to the transition, and we could fail to achieve the benefits we sought from the relationship.

Cyber-attacks: Our operational systems are subject to an increasing risk of cyber-attacks and other internet crime, which could result in material losses of client or customer information, damage our reputation and lead to regulatory penalties and financial losses.

Among the operational risks we face is the risk of breaches of the security of our or our vendors' computer systems due to unauthorized access to networks or resources, the introduction of computer viruses or malware, or other forms of cybersecurity attacks or incidents. Such breaches could threaten the confidentiality of our or our clients' data and the integrity of our systems. We continue to invest toward the protection of our computer systems against such breaches and toward ensuring that our vendors employ appropriate cybersecurity safeguards. To address the evolving cyber threat risk, we continue to modify and enhance our protective measures and to investigate and remediate information security vulnerabilities. These measures, however, may not be effective against the many security threats we face.

The increasing frequency and sophistication of recent cyber-attacks has resulted in an elevated risk profile for many organizations around the world including Deutsche Bank, and significant attention by our management has been paid to the overall level of preparedness against such attacks. Cybersecurity is growing in importance due to factors such as the continued and increasing reliance on our technology environment. We and other financial institutions have experienced attacks on computer systems, including attacks aimed at obtaining unauthorized access to confidential company or customer information or damaging or interfering with company data, resources or business activities, or otherwise exploiting vulnerabilities in our infrastructure. We expect to continue to be the target of such attacks in the future. Although we have to date not experienced any material business impact from these attacks, we may not be able to effectively anticipate and prevent more material attacks from occurring in the future. The move across global industries to conduct business from home and away from primary office locations in response to the COVID-19 pandemic also exposes us to a greater risk of cyber-attacks, which could lead to technology failures, security breaches, unauthorized access, loss or destruction of data or unavailability of services. A successful attack could have a significant negative impact on us, including as a result of disclosure or misappropriation of client or proprietary information, damage to computer systems, an inability to access information technology ("**IT**") systems, financial losses, remediation costs (such as for investigation and re-establishing services), increased cybersecurity costs (such as for additional personnel, technology, or third-party vendors), personal data breach notification obligations, reputational damage, customer dissatisfaction and potential regulatory or litigation exposure.

Clearing operations: The size of our clearing operations exposes us to a heightened risk of material losses should these operations fail to function properly.

We have large clearing and settlement businesses and an increasingly complex and interconnected IT landscape. These give rise to the risk that we, our customers or other third parties could lose substantial sums if our systems fail to operate properly for even short periods. This will be the case even where the reason for the interruption is external to us. In such a case, we might suffer harm to our reputation even if no material amounts of money are lost. This could cause customers to take their business elsewhere, which could materially harm our revenues and profits.

Benchmark reforms: Ongoing global benchmark reform efforts, specifically the transition from interbank offered rates to alternative reference rates, including "risk-free-rates" introduce a number of inherent risks to our business and the financial industry. These risks, should they materialize, may have adverse effects on our business, results of operations and profitability.

Regulators and central banks have set the goal of improving the robustness of financial benchmarks, especially interest rate benchmarks. As a result of this initiative, as of the end of 2021, CHF LIBOR, EUR LIBOR, EONIA and certain other LIBOR currency tenors have ceased to be published. GBP LIBOR and JPY LIBOR have ceased to be available in representative form. Certain tenors of GBP LIBOR and JPY LIBOR remain available in synthetic form for a limited time period, only to enable so called 'tough legacy' transactions to transition to suitable Risk-Free Rate ("**RFR**") alternatives. A reduced number of USD LIBOR tenors is expected to be published until the end of June 2023, however the new use of USD LIBOR is subject to significant limitations. The transition away from the LIBORs and EONIA (together "**IBORs**") to RFRs may cause portfolios to perform differently than in the past, or have other consequences, which cannot be fully anticipated. Regulators such as the FCA and FRB have strongly urged market participants to transition to alternative RFRs.

A material portion of our assets and liabilities, including financial instruments we trade and other transactions and services we are involved in, have interest rates that are linked to IBORs and other financial benchmarks that have already ceased or that may be subject to potential unavailability or future discontinuation. Transition of legacy transactions will depend, in some cases on client engagement and agreement to spread adjustments, which may not be forthcoming. In some cases, transition of legacy products may be hampered by structural factors, such as technical inability to contact numerous bondholders. To help address risks with tough legacy products, legislation has been passed in UK and New York, and implementing powers have been used by the European Commission. None of those legislative steps has provided a panacea to transition of "tough legacy" products, however, and therefore risks remain in respect of our products and holdings which reference IBORs. Uncertainties around the timing and method of transition to RFRs continues to present a number of risks for us, our customers and the financial services industry more widely. The unavailability and discontinuation of IBORs and other financial benchmarks continues to pose a variety of risks to us. Those risks include the following:

- Legal and compliance risk (including conduct risk) may arise due to possible disputes regarding either the terms of financial contracts with counterparties, or the manner of transition to replacement rates. Many financial instruments linked to financial benchmarks contain provisions, known as fallbacks, for the use of a successor interest rate in the event of the discontinuation of the benchmark, while others do not. The quality of fallbacks in contracts has improved in respect of a number of products in very recent times, but risks remain that some fallbacks may not perform well. In connection with discontinuation and transition, the counterparty to the financial instrument may challenge the rate determined by a fallback for such an instrument, particularly if we are involved in the determination or setting of the successor rate. Such disputes could result in litigation or regulatory action founded in claims of breach of contract, anti-trust violations, market abuse, and/or other mistreatment of customers.

- Legal and compliance risk may derive from any failure to comply with regulators' expectations that new use of financial benchmarks will cease.

- Liquidity risk may arise due to slow acceptance, take-up, and development of liquidity in RFR-related products, particularly SOFR, leading to market dislocation or fragmentation. Additionally, bid/offer spreads may widen impacting funding and collateral postings. Similar risks may apply to exposures toward the date of discontinuation, or in relation to tough-legacy products which use synthetic LIBOR, which may perform differently than historic LIBOR.

- Also, the replacement of financial benchmarks, or use of synthetic LIBOR, could adversely impact the value of and return on existing instruments and contracts and the market for securities and other instruments whose returns are linked to such benchmarks.

- Market risk may arise due to interest rate "basis" risks – the risks posed by different interest rate provisions applying to assets than to liabilities – across tenors and currencies, driven by differing fallback methodologies and timings. Different timings of adoption of fallback protocols will create new basis and potentially make hedging more costly or less effective, and losses may result from value transfer in the fallback methodology adopted. Due to the unavailability and discontinuation of financial benchmarks that have already happened, and that are yet to come, we may incur losses in respect of our assets and liabilities if the successor interest rate is not economically equivalent to the discontinued benchmarks.

- Introduction of new RFRs has required us to develop new pricing and risk models related to new RFR-linked products. Regulatory risk and capital models developed to support RFR-linked products have been submitted for approval by competent authorities, with further model changes expected to be submitted in 2022. The scale of model changes still to be implemented presents continued project and operational risk and continues to be a key focus of senior management.

- Finance and tax risk may arise due to the discontinuation of financial benchmarks and transition to RFRs, which could cause hedge accounting items to be derecognized, adversely impacting our profitability or causing us to incur losses. Discontinuation and transition could also pose difficulties for the independent price verification of financial instruments, where market data is unavailable for the new or modified financial instrument. Tax uncertainties could arise, for example, if a discontinuation or transition is viewed as a significant modification of a financial instrument that results in a profit or loss recognition event for tax purposes.

- Technology and operational risk may arise as a result of the complexity of transition processes, which will require collaboration with our regulators and central banks as well as a wide range of market participants. Also, significant change efforts – relating to RFR product development, re-documentation of client contracts and infrastructure change, including to systems, processes and models across the business and our Finance, Risk and Treasury functions –, has been required. There is a risk that not all systems and process dependencies on financial benchmark availability have been identified and remediated. Successful transition processes are, to some extent, dependent on achieving industry and client consensus on standards and conventions, timing and sequencing of transition steps, creation of forward-looking term versions of the RFRs and the timely re-documenting of client contracts.

It is currently difficult to determine to what extent the transition to alternative reference rates will adversely affect us, or the costs of implementing any relevant remedial action. Uncertainty as to the nature and extent to such potential changes, alternative reference rates or other reforms including the potential continuation beyond the initial first year of the publication of synthetic GBP LIBOR may adversely affect financial instruments using financial benchmarks. The implementation of any alternative RFRs may be impossible or impracticable under the existing terms of such financial instruments and could have an adverse effect on the value of certain financial instruments and on our profitability. There is also the risk of an adverse effect to reported performance arising from the transition rules established by accounting bodies.

More broadly, initiatives to reform existing benchmarks and our participation in them, including as benchmark submitter, could potentially expose us to legal, reputational or other risks. In particular, legal and compliance risk (including conduct risk) may arise due to the operational risks of participating in benchmark submissions, either as part of a panel with the requirement to use models and potentially exercise expert judgment or as provider of transactions data to a benchmark administrator.

The continued reduction in availability and ultimate discontinuation of further financial benchmarks including USD LIBOR, and transition to RFRs could have adverse effects on our business, results of operations, and profitability.

Sanctions and embargoes: We are subject to laws and other requirements relating to financial and trade sanctions and embargoes. If we breach such laws and requirements, we can be subject, and have in the past been subject, to material regulatory enforcement actions and penalties.

We are required to monitor, evaluate, and observe laws and other requirements relating to financial and trade sanctions and embargoes set by the EU, the Deutsche Bundesbank, Germany's Federal Office for Economic Affairs and Export Control, and other authorities, such as the U.S. Treasury Department's Office of Foreign Assets Control ("**OFAC**") and the UK Treasury Department's Office of Financial Sanctions Implementation ("**OFSI**"). Sanctions are subject to rapid change and it is also possible that new direct or indirect secondary sanctions could be imposed by the United States or other jurisdictions without warning as a result of geopolitical developments. New and far-reaching sanctions against Russian entities and individuals have been imposed by the United States, the EU, the United Kingdom and other individual countries very rapidly following the commencement by Russia of hostilities against the Ukraine, and many of these sanctions require very rapid implementation. Should we fail to comply timely and in all respects with these new sanctions, we could be exposed to legal penalties and our reputation could suffer. New sanctions may also be imposed on other entities and individuals beyond the Ukrainian conflict at any time. If we breach any such new or preexisting laws and requirements, we can be subject, and have in the past been subject, to material regulatory enforcement actions and penalties.

U.S. economic sanctions: Transactions with counterparties in countries designated by the U.S. State Department as state sponsors of terrorism or persons targeted by U.S. economic sanctions may lead potential customers and investors to avoid doing business with us or investing in our securities, harm our reputation or result in regulatory or enforcement action which could materially and adversely affect our business.

We engage or have engaged in a limited amount of business with counterparties, including government-owned or -controlled counterparties, in certain countries or territories that are subject to comprehensive U.S. sanctions, including Iran and Cuba (referred to as "**Sanctioned Countries**"), or with persons targeted by U.S. economic sanctions (referred to as "**Sanctioned Persons**"). U.S. law generally prohibits U.S. persons or any other persons acting within U.S. jurisdiction (which includes business with a U.S. nexus) from dealings with or relating to Sanctioned Countries or Sanctioned Persons. Additionally, U.S. indirect or "secondary" sanctions threaten the imposition of sanctions against non-U.S. persons entirely outside of U.S. jurisdiction for engaging in certain activities, including categories of transactions with certain entities and countries. Thus, U.S. sanctions may implicate activities in other geographic areas and by non-U.S. persons depending on the circumstances. Our U.S. subsidiaries, branch offices, and employees are, and, in some cases, our non-U.S. subsidiaries, branch offices, and employees are or become, subject to such prohibitions and other regulations.

We are a German bank and our activities with respect to Sanctioned Countries and Sanctioned Persons have been subject to policies and procedures designed to avoid the involvement of U.S. jurisdiction, including U.S. persons acting in any managerial or operational role and to ensure compliance with United Nations, European

Union and German sanctions and embargoes; in reflection of legal developments in recent years, we have further developed our policies and procedures with the aim of promoting – to the extent legally permitted – compliance with regulatory requirements extending to other geographic areas regardless of jurisdiction. However, should our policies prove to be, or have been, ineffective, we may be subject to regulatory or enforcement action that could materially and adversely affect our reputation, financial condition, or business. We have also taken other action to reduce the risk of compliance violations. In 2007, our Management Board decided that we will not engage in new business with counterparties in countries such as Iran, Syria, Sudan and North Korea and to exit existing business to the extent legally possible. In 2014, we added the Crimea Region, and in 2021 Afghanistan to this list of countries, whilst de-listing Sudan. We also decided to limit our business with counterparties in Cuba. Iran, North Korea, Syria and Cuba are currently designated as state sponsors of terrorism by the U.S. State Department.

We had a representative office in Tehran, Iran, which we discontinued on 31 December 2007. Our remaining business with Iranian counterparties consisted mostly of participations as lender and/or agent in a few large trade finance facilities arranged before 2007 to finance the export contracts of exporters in Europe and Asia. As of 31 December 2018, those loans were fully paid back, subsequently the majority of the remaining Iranian business consists of legacy contractual obligations related to guarantees. We do not believe our business activities with Iranian counterparties are or had been material to our overall business, with the aforementioned guarantees having notional amounts of substantially less than 0.01 % of our total assets over recent years. As of 31 December 2020, the revenues from such activities represented substantially less than 0.01 % of our total revenues for the year ended 31 December 2020.

As required by Section 219 of the Iran Threat Reduction and Syria Human Rights Act of 2012 (Section 13(r) of the Securities Exchange Act of 1934, as amended) we have disclosed certain information regarding our activities or transactions with persons subject to U.S. sanctions against Iran and other persons subject to such provision.

We are also engaged in a limited amount of business with counterparties domiciled in Cuba, which is not subject to any United Nations, European Union or German embargoes. The business consists of a limited number of letters of credit and of cash payments, each without a U.S. nexus, and it represented substantially less than 0.01 % of our assets as of 31 December 2020. The letters of credit served to finance commercial products such as machinery as well as medical products.

We have set up processes and procedures aimed at complying with other substantial changes in U.S. economic sanctions that have occurred since 2017. In August 2017, the United States enacted the "Countering America's Adversaries Through Sanctions Act" (referred to as "**CAATSA**"), which codifies existing U.S. sanctions against Russia (including designation of Russian entities under U.S. sanctions), expands U.S. secondary sanctions against Russia, tightens existing sectoral sanctions (targeting specific sectors of the Russian economy), and permits the imposition of sectoral sanctions against additional sectors of the Russian economy. In particular, expanded U.S. secondary sanctions under CAATSA allow for the imposition of U.S. sanctions on on, among others, non-U.S. entities who engage in, among other activities, "significant" transactions with persons targeted under Russia-related sanctions or specific entities in the Russian defense and intelligence sectors, as well as certain energy projects relating to Russia. We do not believe we have engaged or are currently engaged in any transactions with Russian entities that violate, or are sanctionable under, U.S. sanctions. However, given the broad discretion U.S. authorities have in interpreting and enforcing U.S. sanctions, there can be no assurances that U.S. authorities will not bring enforcement actions against us, or impose secondary sanctions on us for our ongoing activities. Any such actions could have a material impact on our business and harm our reputation. Further, as noted earlier in this section "Risk Factors", in response to the recent large-scale Russian military action against Ukraine, the United States, as well as other nations and the EU, have expanded sanctions on Russia and Russian entities; such sanctions could have a material impact on our business activities.

Additionally, since 2017, the U.S. Administration has imposed a number of sanctions against the Government of Venezuela and Venezuelan officials. These sanctions prohibit (beginning on 5 August 2019) virtually all unlicensed transactions involving the Government of Venezuela, including state-owned or state-controlled companies, and also threaten to impose sanctions on (non-U.S.) persons having materially assisted such transactions or dealings. We have taken steps and established processes and procedures aimed at complying with these U.S. sanctions against the Government of Venezuela. In response to these U.S. sanctions, we have wound down several client relationships. With respect to entities of the Government of Venezuela, we are currently only engaged in legacy transactions. We do not believe that any of our remaining activities related to the Government of Venezuela violate U.S. sanctions. However, given the broad discretion U.S. authorities have in interpreting and enforcing U.S. sanctions, there can be no assurances that U.S. authorities will not allege that our ongoing activities violate U.S. sanctions.

Political and trade tensions between the United States and China led to a series of sanctions and countermeasures in 2020 and 2021, some of which were particularly relevant to financial institutions. In June 2021, the United States adopted Executive Order 14032, which amended an existing restriction and restricts purchases and sales by U.S. persons of certain publicly traded securities linked to companies the United States determines are affiliated with the Chinese military-industrial complex, as well as publicly traded securities that are derivative of or designed to provide investment exposure to such securities. Executive Order 14032 amended and clarified similar restrictions that had been imposed under a previous executive order. While we have implemented changes in our control processes to promote compliance with these requirements, such measures raise potential regulatory compliance and conflicts of laws challenges and the impacts of such measures could be material and adverse.

We are aware, through press reports and other means, of initiatives by governmental and non-governmental entities in the United States and elsewhere to adopt laws, regulations or policies prohibiting transactions with or investment in, or requiring divestment from, entities doing business with Sanctioned Countries, particularly China, Iran and Russia. Such initiatives may result in our being unable to gain or retain entities subject to such prohibitions as customers or as investors in our securities. In addition, our reputation may suffer due to our association with such countries. Such a result could have significant adverse effects on our business or the price of our securities. Sanctions are subject to rapid change and it is also possible that new direct or indirect secondary sanctions could be imposed by the United States or other jurisdictions without warning as a result of geopolitical developments.

PERSONS RESPONSIBLE, THIRD PARTY INFORMATION AND COMPETENT AUTHORITY APPROVAL

Persons Responsible

Deutsche Bank Aktiengesellschaft accepts responsibility for the information contained in this Registration Document. To the best knowledge of Deutsche Bank the information contained in this Registration Document is in accordance with the facts and the Registration Document makes no omission likely to affect its import.

Third Party Information

Where information has been sourced from a third party, Deutsche Bank confirms that this information has been accurately reproduced and that so far as Deutsche Bank is aware and able to ascertain from information published by such third party no facts have been omitted which would render the reproduced information inaccurate or misleading.

Competent Authority Approval

This Registration Document has been approved by the CSSF as competent authority under the Prospectus Regulation. The CSSF only approves this Registration Document as meeting the standards of completeness, comprehensibility and consistency imposed by the Prospectus Regulation. Such approval shall not be considered as an endorsement of Deutsche Bank that is the subject of this Registration Document. This Registration Document has been drawn up as part of a simplified prospectus in accordance with Art. 14 of the Prospectus Regulation.

STATUTORY AUDITORS

With effect as of 1 January 2020, Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft ("**EY**") has been appointed as independent auditor. EY is a member of the chamber of public accountants (*Wirtschaftsprüfer-kammer*).

INFORMATION ABOUT DEUTSCHE BANK

Deutsche Bank Aktiengesellschaft (commercial name: Deutsche Bank) is a credit institution and a stock corporation incorporated in Germany and accordingly operates under the laws of Germany. The Legal Entity Identifier (LEI) of Deutsche Bank is 7LTWFZYICNSX8D621K86. The Bank has its registered office in Frankfurt am Main, Germany. It maintains its head office at Taunusanlage 12, 60325 Frankfurt am Main, Germany, telephone: +49-69-910-00, www.db.com (information shown on the Bank's website does not form part of this Registration Document, unless that information is incorporated by reference into this Registration Document).

BUSINESS OVERVIEW

Principal activities

The objects of Deutsche Bank, as laid down in its Articles of Association, include the transaction of all kinds of banking business, the provision of financial and other services and the promotion of international economic relations. The Bank may realise these objectives itself or through subsidiaries and affiliated companies. To the extent permitted by law, the Bank is entitled to transact all business and to take all steps which appear likely to promote the objectives of the Bank, in particular to acquire and dispose of real estate, to establish branches at home and abroad, to acquire, administer and dispose of participations in other enterprises, and to conclude enterprise agreements.

Deutsche Bank maintains its head office in Frankfurt am Main and branch offices in Germany and abroad including in London, New York, Sydney, Tokyo, Hong Kong and an Asia-Pacific Head Office in Singapore which serve as hubs for its operations in the respective regions.

Deutsche Bank is organized into the following segments:

- Corporate Bank (CB);
- Investment Bank (IB);
- Private Bank (PB);
- Asset Management (AM);
- Capital Release Unit (CRU); and
- Corporate & Other (C&O).

In addition, Deutsche Bank has a country and regional organizational layer to facilitate a consistent implementation of global strategies.

The Bank has operations or dealings with existing and potential customers in most countries in the world. These operations and dealings include working through:

(a) subsidiaries and branches in many countries;

(b) representative offices in many other countries; and

(c) one or more representatives assigned to serve customers in a large number of additional countries.

The following paragraphs describe the business operations in the different segments:

Corporate Bank

The Corporate Bank (CB) comprises Global Transaction Banking as well as Commercial Banking in Germany. The segment is primarily focused on serving corporate clients, including the German "Mittelstand", larger and smaller sized commercial clients in Germany as well as multinational companies. It is also a partner to financial institutions with regards to certain Transaction Banking services. Global Transaction Banking consists of the four businesses Cash Management, Trade Finance & Lending, Trust & Agency Services and Securities Services. Commercial Banking provides integrated expertise and a holistic product offering across the Deutsche Bank and Postbank brands in Germany.

Investment Bank

The Investment Bank (IB) combines Deutsche Bank's Fixed Income, Currency (FIC) Sales & Trading and Origination & Advisory as well as Deutsche Bank Research. It focuses on its traditional strengths in financing, advisory, fixed income and currencies, bringing together wholesale banking expertise across coverage, risk management, sales and trading, investment banking and infrastructure.

FIC Sales & Trading combines an institutional sales force and research with trading and structuring expertise across Foreign Exchange, Rates, Credit and Emerging Markets. The FIC Sales & Trading business are positioned strategically to respond to increasing automation, regulatory expectations and client demand for standardization and transparency in execution across credit, fixed income and currency products in industrialized countries and emerging markets.

Origination & Advisory is responsible for Deutsche Bank's debt origination business, mergers and acquisitions (M&A), and a focused equity advisory and origination platform. It is comprised of regional and industry-focused coverage teams, co-led from the bank's hubs in Europe, the U.S. and Asia Pacific that facilitate the delivery of a range of financial products and services to the bank's corporate clients.

Private Bank

The Private Bank (PB) comprises three business units. The Private Bank Germany serves private customers in Germany. The Private and Commercial Business International serves private and small business clients, as well as commercial and corporate clients in Italy, Spain, Belgium and India. In addition, Private Bank covers Wealth Management clients globally.

With its "Deutsche Bank" brand Private Bank Germany focusses on providing its private customers with banking and financial products and services that include sophisticated and individual advisory solutions. The focus of its "Postbank" brand remains on providing Deutsche Bank's retail customers with standard products and daily retail banking services. In cooperation with Deutsche Post DHL AG, Deutsche Bank also offers postal and parcel services in the Postbank brand branches.

Private & Commercial Business International ("**PCBI**") provides banking and other financial services to private and commercial clients in Italy, Spain, Belgium and India with some variations in the product offering among countries that are driven by local market, regulatory and customer requirements.

Wealth Management ("**WM**") serves wealthy individuals and families as well as entrepreneurs and foundations. It supports clients in planning, managing and investing their wealth, financing their personal and business interests and servicing their institutional and corporate needs. The unit also provides institutional-type services for sophisticated clients and complements its offerings by closely collaborating with the Investment Bank, the Corporate Bank and Asset Management.

As announced in June 2020, Deutsche Bank has decided to combine WM and PCBI into one unit, the International Private Bank ("**IPB**"). This will allow Deutsche Bank to centralize its product and infrastructure activities to maximize economies of scale and scope.

Asset Management

Asset Management (AM) operates under the DWS brand. AM provides investment solutions to individual investors and institutions with a diversified range of Active, Passive and Alternative Asset Management products and services.

AM's investment offerings span all major asset classes including equity, fixed income, cash and multi asset as well as alternative investments. Deutsche Bank's alternative investments include real estate, infrastructure, private equity, liquid real assets and sustainable investments. Deutsche Banks also offers a range of passive investments. In addition, AM's solution strategies are targeted to client needs that may not be addressed by traditional asset classes alone. Such services include insurance and pension solutions, asset-liability management, portfolio management solutions, asset allocation advisory, structuring and overlay.

Capital Release Unit (CRU)

By establishing the new Capital Release Unit (CRU), Deutsche Bank plans to liberate capital currently consumed by low return assets, businesses with low profitability and businesses no longer deemed strategic. This includes substantially all of Deutsche Bank's Equities Sales & Trading business, lower yielding fixed income positions, particularly in Rates, the former CIB Non-Strategic portfolio as well as the exited businesses from the Private & Commercial Bank which include Deutsche Bank's retail operations in Portugal and Poland.

Corporate & Other (C&O)

Corporate & Other includes revenues, costs and resources held centrally that are not allocated to the individual business segments.

TREND INFORMATION

Statement of no Material Adverse Change

There has been no material adverse change in the prospects of Deutsche Bank since 31 December 2021.

Statement of no Significant Change in Financial Performance

There has been no significant change in the financial performance of Deutsche Bank Group since 30 June 2022.

Recent Developments

On 9 March 2022, Deutsche Bank provided details of its limited and substantially mitigated risk exposures to Russia and Ukraine, including risks arising from its local operations.

Deutsche Bank has reduced its Russian exposure and local footprint significantly since 2014, with further reductions in the two weeks prior to 9 March 2022. Credit exposures to Russia and Ukraine account for a very small portion of Deutsche Bank's overall loan portfolio and are protected by a number of risk mitigants. These include offshore collateral and financial guarantees, while market risk exposures have been significantly reduced prior and subsequent to Russia's invasion of Ukraine.

As of 31 December 2021, Deutsche Bank's credit exposure to Russia and Ukraine was as follows:

- Net loan exposure to Russia of € 0.6 billion after taking account of guarantees and asset collateral. Gross loan exposure was € 1.4 billion, around 0.3 % of the overall loan book. Deutsche Bank's net exposure comprises:

  - € 0.5 billion to large Russian companies with material operations and cashflow outside Russia (€ 1.1 billion gross), booked offshore and with de minimis onshore exposure;

  - € 0.1 billion from loans to subsidiaries of large multinational companies (€ 0.3 billion gross), predominantly guaranteed by parent companies, of which around 50 % booked offshore.

- Net loan exposure to Ukraine of € 42 million (€ 0.6 billion gross)

- The vast majority of Deutsche Bank's derivative exposure to Russia has been unwound. The remaining exposure presents no material credit risk as the bank has a net liability position.

- Offshore loans to counterparties with a Russian connection by the wealth management business were adequately collateralised, and the collateral is not linked to Russia.

In respect of market risk exposure, at the time of Russia's invasion of Ukraine, Deutsche Bank's Russia/Ukraine market risk exposure was well contained and the bank had a modest defensive position.

The operational risk arising from a potential closure of Deutsche Bank's Russian Technology Centre is also well contained. Deutsche Bank's technology service centre in Russia is one of several technology centres around the world and presents no significant business continuity risk to the functioning of Deutsche Bank's global operations. The Centre has some 1,500 employees (as at 31 January 2022), approximately 5 % of the Group's internal and external technology workforce. Deutsche Bank sees production risk as manageable and has stress-tested the ability of its other technology centres around the world, including in Asia, to cover the Russian service centre's development capabilities.

On 11 March 2022, Deutsche Bank confirmed that it condemns the Russian invasion of Ukraine in the strongest possible terms and supports the German government and its allies in defending democracy and freedom.

Deutsche Bank has substantially reduced its Russian exposure since 2014. Like some international peers and in line with its legal and regulatory obligations, Deutsche Bank is in the process of winding down its remaining business in Russia while it helps its non-Russian multinational clients in reducing their operations. Deutsche Bank will not enter into any new business in Russia.

Other than the developments mentioned above and elsewhere in this Registration Document, there have been no recent developments since 31 December 2021.

Outlook

In July 2019, Deutsche Bank announced a strategic transformation to re-focus on delivering sustainable profitability and improved returns for its shareholders. In March 2022, the Group further outlined its strategic and financial road map and communicated its financial targets through 2025. The statements included in this section cover management's view on the expected performance against the Group's key performance indicators for the financial year 2022 including the updates of the Group's 2022 targets.

Despite the uncertainties associated with the war in Ukraine and the remaining challenges associated with the COVID-19 pandemic, Deutsche Bank intends to continue executing its strategy in a disciplined manner focusing on improving sustainable profitability by growing revenues in its Core Bank while remaining disciplined on costs and capital; however, the current environment is increasingly challenging, and cost pressures have intensified.

Deutsche Bank's key performance indicators including its financial targets are shown in the table below:

Key Performance Indicators	**30 June 2022* (unaudited)**	**Target Key Performance Indicators 2022**	**Target Key Performance Indicators 2025**
Group Post-tax Return on Average Tangible Equity[1]	8.0%	8.0 %	Above 10.0 %
Core Bank Post-tax Return on Average Tangible Equity[2]	10.1%	Above 9.0 %	N/A
Compound annual growth rate of revenues from 2021 to 2025[3]	N/A	N/A	3.5 to 4.5 %
Cost/income ratio[4]	73.3 %	N/A	Less than 62.5 %
Common Equity Tier 1 capital ratio	13.0%	Above 12.5 %	~13.0 %
Leverage ratio	4.3 %	~4.5 %	Above 4.5 %

* Extracted from the Interim Report as of 30 June 2022.

1 Based on Net Income attributable to Deutsche Bank shareholders.

2 Based on Core Bank Net Income attributable to Deutsche Bank shareholders.

3 Based on net revenues.

4 Noninterest expenses as a percentage of total net revenues, which are defined as net interest income before provision for credit losses plus noninterest income.

Deutsche Bank reaffirms its 2022 revenue guidance of € 26 to 27 billion for the Group despite the deterioration in the macro-economic environment seen in the second quarter of 2022 and expectations for a more challenging second half of the year and continues to target a post-tax return on average tangible equity of 8% for the Group and above 9% for the Core Bank for the year 2022.

Deutsche Bank remains committed to continuing its cost reduction efforts and expects to continue to execute on its 2022 strategic ambitions. However, Deutsche Bank also recognizes increasing cost pressures from factors outside its control including higher-than-expected bank levies, inflation, unforeseen costs related to the war in Ukraine, and litigation matters. Deutsche Bank also made the decision not to cap strategic investments in its control environment, staff, and technology to drive growth and efficiency, which are important for its long-term strategic direction. In the light of both revenue and cost developments, Deutsche Bank has updated its 2022 cost/income target. Deutsche Bank's guidance for the cost/income ratio is now in the mid- to low-70s percent for 2022. Noninterest expenses in 2022 are expected to be lower than in 2021, largely driven by significantly lower transformation related effects. Adjusted costs excluding transformation charges are expected to be essentially flat in 2022, driven by benefits from IT efficiencies resulting from the execution of IT strategies, run-rate benefits of headcount reductions in the previous year and front-to-back alignment as well as savings in Infrastructure functions from process optimization and automation. These effects are expected to be largely offset by continued investments in controls, the anticipated impact of foreign exchange rate changes and higher bank levies. In addition, higher compensation costs from retaining and attracting talent as well as higher-than-anticipated control function and financial crime remediation costs continue to put upward pressure on expenses.

Amid the slowdown of macro-economic growth mainly driven by the war in Ukraine, elevated inflationary trends globally and recent geopolitical developments in 2022 from the strong levels in the previous year, the Group expects provisions for credit losses to be significantly higher in 2022 compared to the previous year. Provisions for credit losses for the full year 2022 should be around 25 basis points as a percentage of its anticipated average loans as the impact of the war in Ukraine is expected to add to its previous guidance of around 20 basis points. Deutsche Bank's credit portfolio quality remains strong, and Deutsche Bank is well positioned to manage emerging risks including geopolitical uncertainties, supply chain disruptions and expected policy tightening.

The Group expects its Common Equity Tier 1 ratio ("**CET 1 ratio**") to remain essentially flat and to remain above 12.5 % in 2022. It expects higher risk-weighted assets ("**RWA**") from growth in the Core Bank as well as supervisory decisions offset by continued reductions in the Capital Release Unit ("**CRU**") and lower Operational Risk RWA. For 2022, the Group expects to end the year with a CET 1 ratio of approximately 13 %, reflecting organic capital generation offsetting the impact of RWA increases and distributions.

Deutsche Bank expects its Leverage exposure in 2022 to be higher than at year-end 2021. Leverage exposure is expected to increase as a result of the removal of the ECB's temporary exclusion of certain central bank balances by the second quarter of 2022, with a further increase expected from loan growth in the Core Bank. Consequently, it expects its leverage ratio to be lower at year end 2022. Based on this, Deutsche Bank confirms its targets for the CET1 ratio of above 12.5% and leverage ratio of around 4.5% for 2022.

By the nature of its business, it is involved in litigation, arbitration and regulatory proceedings and investigations in Germany and in a number of jurisdictions outside Germany, especially in the U.S. Such matters are subject to many uncertainties. While Deutsche Bank has resolved a number of important legal matters and made progress on others, it expects the litigation and enforcement environment to remain challenging. For 2022, and with a caveat that forecasting litigation charges is subject to many uncertainties, it expects litigation charges, net, to be lower than the levels experienced in the previous year.

Deutsche Bank reaffirms the goals of its strategy of sustainable growth through 2025. For 2025, Deutsche Bank aims to achieve a compounded annual growth rate of revenues from 2021 to 2025 of 3.5 to 4.5%, post-tax RoTE of greater than 10%, and a cost/income ratio of below 62.5%. Deutsche Bank also reaffirms its aim for cumulative capital distributions of around € 8 billion in respect of the years 2021-2025.

On 24 February 2022, Russia commenced large-scale military action against Ukraine. This war in Ukraine has led countries to impose broad-based sanctions on Russia, including but not limited to major Russian banks, the Russian Central Bank, key corporates, Russian parliament members and members of the Russian elite (oligarchs, diplomats) and their families. The sanctions have also banned primary and / or secondary trading of sovereign debt and other selected securities as well as disconnection of certain Russian banks from the Society for Worldwide Interbank Financial Telecommunication ("**SWIFT**"). The U.S. has imposed sanctions on imports of Russian-origin oil, gas and coal (including related products) and also banned new investments by U.S. persons into Russia. Trading in Russian securities has been also limited by the EU sanctions against the Russian National Securities Depositary. The EU also announced a ban on Russian oil, coal and other solid fuel imports, restricting access to EU ports for Russia registered vessels and further export and import bans. The sanctions' environment remains uncertain, subject to rapid change and it is possible that new direct or indirect secondary sanctions could be imposed at short notice as a result of ongoing developments. Considering the sanctions announced in the wake of 24 February 2022, Deutsche Bank is looking at an unprecedented amount of sanctions measures, not all of which are fully aligned across jurisdictions and therefore further increase operational complexity and risk of making errors in managing day-to-day business activities within the rapidly evolving sanctions environment. Generally, enhanced Russia sanctions result in further increased complexity of Deutsche Bank's control environment and, the more clients are impacted, the more challenging it could be to completely wind-down cases within the timeframe provided by licenses or authorizations. New sanctions as well as countermeasures by the Russian government could also result in differences between the local application / implementation of relevant requirements by Deutsche Bank Moscow and the Deutsche Bank Group (as Deutsche Bank Moscow would have to adhere to local law). Subsequently, this would create conflict of law situations and certain exemptions would have to be applied. Furthermore, Deutsche Bank is utilizing inhouse technology resources in Russia, which contribute to the development of a number of Deutsche Bank's critical applications. Deutsche Bank is subject to the risk that its ability to utilize these technology resources could be impaired or lost, for instance due to sanctions from the West, Russian state-initiated actions or management actions. The heightened risk of sanctions, including Russian countermeasures, has been considered in Deutsche Bank's portfolio strategy. Deutsche Bank is monitoring the developments closely and utilising dedicated governance structures including global and regional crisis management as and when required. Deutsche Bank has also seen increased cyber-attacks, which may pose direct and indirect risks to it. The downside impact of the ongoing situation concerning Ukraine, from both a financial and non-financial risk perspective will depend on how the current crisis will unfold further and may impact Deutsche Bank's ability to meet its stated targets. The regulatory environment or other restrictions including sanctions imposed may result in Deutsche Bank's business activities related to Russia becoming unviable or that Deutsche Bank loses control over its assets. Despite the business continuity and crisis management policies currently in place, the conflict also poses challenges related to personnel as well as loss of business continuity, which may disrupt Deutsche Bank's business and lead to material losses.

Adjusted costs, Adjusted costs excluding transformation charges, Post-tax Return on Average Tangible Equity as well as Leverage ratio are non-GAAP financial measures.

Corporate Bank

The Group expects Corporate Bank revenues to be higher in 2022 compared to the prior year, supported by interest rate tailwinds and Deutsche Bank's growth initiatives. The Group expects Corporate Treasury Services revenues to be higher supported by improvements in the interest rate environment, strong momentum in Corporate Cash Management and extension of lending. For Institutional Client Services, revenues are also expected to be higher supported by the favorable interest rate outlook and business growth. Business Banking revenues are expected to be higher compared to the prior year, primarily reflecting expected improvements in the interest rate environment and repricing actions.

Deutsche Bank expects provision for credit losses for the Corporate Bank in 2022 to be significantly higher, reflecting more normalized levels of provisioning, compared to a net release in 2021, due to lagging effects of COVID-19 pandemic and roll-off of specific support programs.

Noninterest expenses for 2022 are expected to be lower. Adjusted costs excluding transformation charges are expected to be slightly lower across both internal service cost allocations and direct expenses. Deutsche Bank expects to benefit from its strict cost discipline in general and administrative expenses as well as lower compensation and benefits supported by its headcount actions in prior periods. Regulatory compliance, know-your-client ("**KYC**") and client on-boarding process enhancements, system stability and control and conduct continue to remain an area of strong focus.

Deutsche Bank expects RWA in the Corporate Bank to remain essentially flat in 2022 as increases from its lending activities are expected to be offset by favorable model changes.

Risks to the outlook include potential impacts on the business model from macroeconomic and global geopolitical uncertainty, including uncertainties around the duration of and recovery from the COVID-19 pandemic and associated with the Russian military action against the Ukraine. In addition, uncertainty around central bank policies (e.g., the interest rate environment), ongoing regulatory developments (e.g., the finalization of the Basel III framework), geopolitical event risks and levels of client activity may also have an adverse impact.

Investment Bank

Deutsche Bank expects Investment Bank revenues to be essentially flat in 2022 compared to the prior year with strong performance in its Sales and Trading ("**FIC**") business offset by reduced revenues in Origination & Advisory.

FIC revenues are expected to be significantly higher than 2021, driven by the performance of Deutsche Bank's FX, Rates, Emerging Markets and Financing businesses in the year to date. In the second half of the year, the Group expects some normalization in the elevated levels of market activity. For the remainder of the year, the Rates business plans to strengthen certain business areas and maintain the focus on developing the overall client franchise. Foreign Exchange intends to build on the momentum the business saw in the first half, including being ranked overall FX Market leader by market share in the 2022 Euromoney FX Survey. The Global Emerging Markets business intends to develop its onshore capability and client workflow solutions further. The Financing business plans to continue to take a disciplined and selective approach to the deployment of resources. In Credit Trading, conditions have been challenging for the flow business and this may well continue in the second half of the year. Additionally, it is not expected that the distressed business will repeat the very strong performance seen in 2021.

Origination & Advisory revenues are expected to be significantly lower in 2022 compared to 2021, driven by the decline in the industry fee pool, which was approximately 33% lower year-on-year for the first six months of the year and 45% lower in the second quarter. In Debt Origination, Leveraged Debt Capital Markets are expected to be challenged in the short-term following a material decline in issuance levels in 2022, combined with the net impact of commitment markdowns and hedges. Equity Origination remain impacted by the reduced issuance levels, which are approximately 70% lower year-on-year. In Advisory, it is planned to build on the momentum of the first half of the year and further invest in targeted coverage areas where growth potential is seen.

Deutsche Bank expects provision for credit losses for the Investment Bank in 2022 to be significantly higher than in the prior year, reflecting more normalized levels of provisioning. 2021 benefitted from significant releases following COVID-19-related provisions taken in 2020. Deutsche Bank does not expect these to re-occur this year.

Noninterest expenses in the Investment Bank in 2022 are expected to be essentially flat compared to the previous year. Cost reductions from continued front-to-back alignment, process optimization and decommissioning of applications are expected to be offset by foreign exchange headwinds, higher bank levy costs and investments into its people. Adjusted costs excluding transformation charges are also expected to be essentially flat.

For 2022, Deutsche Bank expects RWA in the Investment Bank to be higher, driven by Credit Risk RWA resulting from regulatory inflation. The underlying business growth is expected to be broadly flat for the year.

There are several risks to the outlook in 2022. The ongoing COVID-19 pandemic has the potential to create further disruption to the economic recovery. The relative success of the vaccination roll outs to the developing world and any potential new variants could have positive or adverse impacts. The impact of the current Russian military action against the Ukraine on financial markets is highly uncertain. Central bank policies, specifically around tapering of asset purchases and interest rates create risks, as does the potential for a period of higher inflation along with ongoing regulatory developments. More broadly, geopolitical event risks may also have an adverse impact.

Private Bank

For the Private Bank, Deutsche Bank expects net revenues in 2022 to be higher compared to 2021. Revenue growth is expected to be supported by a gain from the closing of the sale of the financial advisors' network in Italy. Excluding this impact, Private Bank anticipates revenues to be slightly higher compared to 2021 driven by continued business growth and net positive impacts from the rising interest rate environment. Private Bank observed significantly lower adverse impacts from the April 2021 ruling of the German Federal Court of Justice ("**BGH**") on pricing agreements as it has largely completed the process of entering into new contracts with customers affected by the ruling.

Revenues in Private Bank Germany are expected to be slightly higher compared to 2021 supported by substantially lower negative revenue impacts from the BGH ruling and by valuation impacts. Excluding these impacts, the Group expects revenues in the Private Bank Germany to remain essentially flat year-on-year. In the current market environment, the Group expects higher net interest income as well as a slowdown in the growth dynamics of the fee income.

In the International Private Bank, revenues are expected to be higher year on year supported by the anticipated gain from the sale of the Italian financial advisors' network. Excluding this impact, revenues should be higher compared to 2021 as continued growth in investment, deposit and loan products will only be partially offset by reduced benefits from ECB's targeted longer-term refinancing operations ("**TLTRO**") program.

Private Bank expects Assets under Management ("**AuM**") volumes to be slightly lower compared to 2021 reflecting the disposal impact after the closing of the financial advisor transaction in Italy as well as market depreciation impacts, which amounted to € 51 billion in the first half of 2022. Recovery will depend on a stabilization of the current market situation. Nevertheless, Private Bank expects continued net inflows.

Provision for credit losses in the Private Bank is expected to be higher in 2022 reflecting low levels in 2021 as well as Deutsche Bank's expectation for macroeconomic developments and the impact of continued selected loan growth.

RWA are expected to be slightly higher in 2022 as the growth in Deutsche Bank's loan book will be in part compensated by positive impacts from the completion of risk model updates.

Noninterest expenses in the Private Bank are expected to be lower in 2022 reflecting lower costs and increased savings associated with Deutsche Bank's transformation initiatives. The latter impact will also lead to slightly lower adjusted costs (excluding transformation charges) compared to 2021. In addition, Deutsche Bank expects positive impacts from lower litigation provisions and continued cost discipline as well as negative impacts from inflation and regulation.

Risks to the outlook include potential impacts on the business model from macroeconomic uncertainties, including uncertainties around the duration of and recovery from COVID-19 pandemic and associated with the Russian military action against the Ukraine, uncertainty on interest rates in the Eurozone, slower economic growth in its major operating countries and lower client activity. Client activity could be impacted by market uncertainties including higher than expected volatility in equity and credit markets. The implementation of regulatory requirements including consumer protection measures and delays in the implementation of its strategic projects could also have a negative impact on the revenues, capital consumption and costs.

Asset Management

The Asset Management segment principally consists of the consolidated financial results of DWS Group GmbH & Co. KGaA ("**DWS**"), of which Deutsche Bank AG owns a controlling interest of approximately 80 %.

In Asset Management, heightened levels of market volatility have featured in the first half of 2022 and are expected to continue near term; assuming geopolitical uncertainty and economic conditions normalize then revenues are expected to be essentially flat compared to 2021. Management fees are assumed to be flat year-on-year. Performance and transaction fees are expected to be significantly lower compared to 2021, due to an exceptional Multi Asset performance fee included in the prior year. Other revenues excluding specific items are expected to be significantly lower compared to the prior year. In the medium term Deutsche Bank targets annual net inflows of above 4% on average to 2024; drivers will remain Deutsche Bank's targeted growth areas of passive and alternative investments, further enhanced by strategic alliances and product innovations, including further ESG offerings.

The recent military action Russia commenced against Ukraine has increased the political and economic uncertainty, which may have an impact on the forward-looking assumptions and impact on the growth assumptions.

Capital Release Unit

The CRU has materially delivered on the strategic transformation path established in 2019, with the transition of the Prime Finance and Electronic Equities platform complete and significant de-risking already achieved.

For the remainder of 2022, the Group expects the Capital Release Unit to focus on three key areas. Firstly, further reducing the costs including internal service allocations. In line with its previous communication, the Capital Release Unit targets an adjusted cost base excluding transformation charges of € 0.8 billion for the full year. Secondly, continuing to risk manage the portfolio whilst de-risking opportunistically. In aggregate, it expects to report negative revenues for the year 2022 driven by funding costs, hedging costs, mark-to-market impacts and losses from portfolio exits, which will be partially offset by income from loan portfolios. Thirdly, simplifying the division's infrastructure through decommissioning of applications, closing trading books and exiting locations and legal entities.

The Group continues to carefully monitor the legal and regulatory environment as it relates to the Capital Release Unit, including with respect to the foreign currency denominated mortgage portfolio in Poland. Judicial or regulatory developments with respect to FX mortgage loans in Poland may impact the financial risk assessment for the portfolio.

Corporate & Other

For 2022, the Group expects Corporate and Other ("**C&O**") to generate a pre-tax loss. Results in C&O will continue to be impacted by valuation and timing differences on positions that are economically hedged but do not meet the accounting requirements for hedge accounting. C&O is expected to be impacted by certain transitional costs relating to Deutsche Bank's internal funds transfer pricing framework as well as costs linked to legacy activities relating to the merger of the DB Privat- und Firmenkundenbank AG into Deutsche Bank AG which are expected to be around € 300 million for the full year, as previously guided. Shareholder expenses are expected to be around € 450 million for the full year, an increase to previous estimates primarily from the incremental classification of costs as shareholder activities and certain incremental regulatory expenses.

ADMINISTRATIVE, MANAGEMENT AND SUPERVISORY BODIES AND SENIOR MANAGEMENT

In accordance with German law, Deutsche Bank has both a **Management Board** (*Vorstand*) and a **Supervisory Board** (*Aufsichtsrat*). These Boards are separate; no individual may be a member of both. The Supervisory Board appoints the members of the Management Board and supervises the activities of this Board. The Management Board represents Deutsche Bank and is responsible for the management of its affairs.

The **Management Board** consists of the following members:

Christian Sewing	Chairman of the Management Board (Chief Executive Officer) Communications and Corporate Social Responsibility (CSR); Group Sustainability; Research; Group Audit (administratively only, in all other aspects collective responsibility of the Management Board); Political Affairs; Human Resources (incl. Corporate Executive Matters); Global Real Estate
James von Moltke	Deputy Chairman of the Management Board (President); Chief Financial Officer (CFO); Group Finance; Chief Accounting Officer; Regional Finance; Business and Infrastructure Finance (CFOs); Group Tax; Treasury; Investor Relations; Planning and Performance Management
Karl von Rohr	Deputy Chairman of the Management Board (President); Head of Private Bank (PB); Head of Asset Management (AM); Head (CEO) of Region Germany; Head of Region EMEA
Fabrizio Campelli	Head of Investment Bank (IB); Head of Corporate Bank (CB); Head of Region UKI (UK & Ireland)
Bernd Leukert	Chief Technology, Data and Innovation Officer; Chief Information Office; Chief Technology Office; Data Governance and Oversight; Cloud and Innovation; Chief Security Office
Alexander von zur Mühlen	Head (CEO) of Region APAC
Christiana Riley	Head (CEO) of Region Americas
Rebecca Short	Head of Capital Release Unit (CRU); Chief Transformation Officer (CTO) and Management Board Member for Global Procurement; Transformation Governance and Oversight Office; Transformation Execution Office; US Transformation and Remediation; Growth Catalyst Office; Deutsche Bank

	Management Consulting; Strategic and Competitive Analysis; Global Procurement
Prof. Dr. Stefan Simon	Chief Administrative Officer (CAO); Legal and Group Governance (incl. Data Privacy); Regulatory Affairs; Chief Remediation Office; Compliance; Anti-Financial Crime (AFC); Controls Testing & Assurance; Business Selection and Conflicts Office
Olivier Vigneron	Chief Risk Officer (CRO); Business Aligned Risk Management (Divisional CROs); Regional Risk Management (Regional CROs); Enterprise Risk Management (ERM); Model Risk Management (MoRM); Credit Risk Management (CRM); Market & Valuation Risk Management (MVRM); Non-Financial Risk Management (NFRM); Treasury & Liquidity Risk Management (TLRM); Group Strategic Analytics (incl. Risk Methodology)

The **Supervisory Board** consists of the following members:

Alexander Wynaendts	Chairman of the Supervisory Board of Deutsche Bank AG; Member of the Board of Directors at Air France-KLM Group S.A., Paris, France; Member of the Board of Directors at Uber Technologies, Inc., San Francisco, USA; Non-Executive Director, Chairman, at Puissance Holding B.V., Rotterdam, Netherlands
Detlef Polaschek*	Deputy Chairman of the Supervisory Board of Deutsche Bank AG; Member of the General Staff Council of Deutsche Bank AG
Prof. Dr. Norbert Winkeljohann	Deputy Chairman of the Supervisory Board of Deutsche Bank AG; Self-employed corporate consultant, Norbert Winkeljohann Advisory & Investments; Chairman of the Supervisory Board of Bayer AG; Member of the Supervisory Board of Georgsmarienhütte Holding GmbH; Chairman of the Supervisory Board of Sievert AG; Chairman of the Supervisory Board of Bohnenkamp AG
Ludwig Blomeyer-Bartenstein*	Spokesperson of the Management Bremen of Deutsche Bank AG; Member of the Supervisory Board of Frowein & Co. Beteiligungs AG; Member of the Board of Directors of Bürgschaftsbank Bremen GmbH
Mayree Clark	Member of the Board of Directors of Ally Financial, Inc., Detroit, USA; Member of the Board of Directors of Allvue Systems Holdings, Inc., Florida, USA
Jan Duscheck*	Head of national working group Banking of trade union ver.di

Manja Eifert*	Chairperson of the Staff Council, Deutsche Bank AG, Berlin
Sigmar Gabriel	Former German Federal Government Minister; Chairman of the Supervisory Board of Thyssenkrupp Steel Europe AG; Member of the Supervisory Board of Siemens Energy AG
Timo Heider*	Chairman of the General Staff Council of PCC Services GmbH der Deutschen Bank; Chairman of the General Staff Council of BHW Bausparkasse AG / Postbank Finanzberatung AG; Chairman of the Staff Council of BHW Bausparkasse AG, PCC Services GmbH der Deutschen Bank, Postbank Finanzberatung AG and BHW Holding GmbH; Deputy Chairman of the Supervisory Board of BHW Bausparkasse AG; Deputy Chairman of the Supervisory Board of PCC Services GmbH der Deutschen Bank; Deputy Chairman of the Board of Pensionskasse der BHW Bausparkasse AG VVaG
Martina Klee*	Deputy Chairperson of the Staff Council PWCC Center Frankfurt of Deutsche Bank; General Staff Council member, Group Staff Council member, European Staff Council member and Chairperson of the Economic Committee, Deutsche Bank; Member of the Supervisory Board of Sterbekasse für die Angestellten der Deutschen Bank Gruppe VVa.G.
Gabriele Platscher*	Bank Employee
Bernd Rose*	Chairman of the General Staff Council of Postbank Filialvertrieb AG; Member of the General Staff Council of DP Retail/Postbank Filialvertrieb AG and member of the Committee for Economic Matters; Member of the Supervisory Board of Postbank Filialvertrieb AG; Deputy Chairman of the Supervisory Board of ver.di Vermögens-verwaltungsgesellschaft
Yngve Slyngstad	Chief Executive Officer of Aker Asset Management AS, Oslo, Norway
John Alexander Thain	Member of the Board of Directors, Aperture Investors LLC, New York, USA; Member of the Board of Directors, Uber Technologies, Inc., San Francisco, USA; Chairman of the Board of Directors, Pine Island Acquisition Corp., Fort Lauderdale, USA; Chairman of the Board of Directors, Pine Island Capital Partners LLC, Fort Lauderdale, USA
Michele Trogni	Operating Partner of Eldridge Industries LLC, Greenwich, Connecticut, USA; Chairperson of the Board of Directors of SE2 LLC, Kansas, USA

Dr. Dagmar Valcárcel	Member of the Supervisory Board of amedes Holding GmbH; Member of the Board of Directors, Antin Infrastructure Partners S.A., Paris, France
Stefan Viertel*	Member of the General Staff Council of Deutsche Bank AG; Staff Council Corporate & Investment Bank, Deutsche Bank AG
Dr. Theodor Weimer	Chief Executive Officer of Deutsche Börse AG; Member of the Supervisory Board of Knorr Bremse AG
Frank Werneke*	Chairman of the trade union ver.di, Berlin; Member of the Supervisory Board of ZDF Enterprises GmbH; Member of the Television Council of the Zweites Deutsches Fernsehen (ZDF); Member of the Supervisory Board of the ver.di Vermögensverwaltungsgesellschaft m.b.H
Frank Witter	Member of the Supervisory Board of Traton SE; Chairman of the Supervisory Board, VfL Wolfsburg-Fußball GmbH Member of the Board of Directors of CGI Inc., Montreal, Canada

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* Elected by the employees in Germany.

The members of the Management Board accept membership on the Supervisory Boards of other corporations within the limits prescribed by law.

The business address of each member of the Management Board and of the Supervisory Board of Deutsche Bank is Taunusanlage 12, 60325 Frankfurt am Main, Germany.

There are no conflicts of interest between any duties carried out on behalf of Deutsche Bank and the private interests or other duties of the members of the Supervisory Board and the Management Board.

Deutsche Bank has issued and made available to its shareholders the declaration prescribed by Sec. 161 of the German Stock Corporation Act (AktG).

MAJOR SHAREHOLDERS

Deutsche Bank is neither directly nor indirectly majority-owned or controlled by any other corporation, by any government or by any other natural or legal person severally or jointly.

Pursuant to German law and Deutsche Bank's Articles of Association, to the extent that the Bank may have major shareholders at any time, it may not give them different voting rights from any of the other shareholders.

Deutsche Bank is not aware of arrangements which may at a subsequent date result in a change of control of the company.

The German Securities Trading Act (*Wertpapierhandelsgesetz*) requires investors in publicly-traded corporations whose investments reach certain thresholds to notify both the corporation and the German Federal Financial Supervisory Authority (*Bundesanstalt für Finanzdienstleistungsaufsicht*) of such change within four trading days. The minimum disclosure threshold is 3 per cent. of the corporation's issued voting share capital. To the Bank's knowledge, there are only five shareholders holding more than 3 per cent. of Deutsche Bank shares or to whom more than 3 per cent. of voting rights are attributed, and none of these shareholders holds more than 10 per cent. of Deutsche Bank shares or voting rights.

FINANCIAL INFORMATION CONCERNING DEUTSCHE BANK'S ASSETS AND LIABILITIES, FINANCIAL POSITION AND PROFITS AND LOSSES

Financial Statements

Deutsche Bank's consolidated financial statements for the financial year 2021 (as included in the Annual Report 2021 of the Issuer as of 31 December 2021) are incorporated by reference in, and form part of, this Registration Document (see section "Information Incorporated by Reference").

Auditing of Annual Financial Information

Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft audited Deutsche Bank's unconsolidated annual and consolidated financial statements for the financial year 2021 in accordance with Directive 2014/56/EU and Regulation (EU) No. 537/2014, Sec. 317 of the German Commercial Code (*Handelsgesetzbuch*, "**HGB**") and German generally accepted standards for financial statements audit promulgated by the Institute of Public Auditors in Germany (*Institut der Wirtschaftsprüfer*, "**IDW**") and issued an unqualified independent auditor's report thereon.

Interim Financial Information

The unaudited consolidated interim financial information for the three months ended 31 March 2022 (as included in the Earnings Report of the Issuer as of 31 March 2022) is incorporated by reference in, and forms part of, this Registration Document (see section "Information Incorporated by Reference").

The unaudited consolidated interim financial information for the six months ended 30 June 2022 (as included in the Interim Report of the Issuer as of 30 June 2022) is incorporated by reference in, and forms part of, this Registration Document (see section "Information incorporated by reference").

Legal and Arbitration Proceedings

Deutsche Bank Group operates in a legal and regulatory environment that exposes it to significant litigation risks. As a result, Deutsche Bank Group is involved in litigation, arbitration and regulatory proceedings and investigations in Germany and in a number of jurisdictions outside Germany, including the United States, arising in the ordinary course of business.

Other than set out herein, Deutsche Bank Group is not involved (whether as defendant or otherwise) in, nor does it have knowledge of, any governmental, legal or arbitration proceedings (including any such proceedings which are pending or threatened of which Deutsche Bank is aware), during a period covering the previous 12 months that may have, or have had in the recent past, a significant effect on the financial position or profitability of the Bank or Deutsche Bank Group.

Anti-Money Laundering Matters Involving Former Correspondent Banking Relationships

Deutsche Bank has received requests for information from government authorities concerning certain former correspondent banking relationships, including Danske Bank. Deutsche Bank is providing information to and otherwise cooperating with the investigating authorities. Deutsche Bank also completed an internal investigation focused on its historical processing of correspondent banking transactions on behalf of customers of Danske Bank's Estonia branch prior to cessation of the correspondent banking relationship with that branch in 2015, including of whether any violations of law, regulation or Deutsche Bank policy occurred and the effectiveness of the related internal control environment.

Additionally, on 24 and 25 September 2019, based on a search warrant issued by the Local Court (*Amtsgericht*) in Frankfurt, the Frankfurt Public Prosecutor's ("**FPP**") office conducted investigations into Deutsche Bank in connection with suspicious activity reports relating to potential money laundering at Danske Bank. On 13 October 2020, the FPP closed its criminal investigation because the FPP did not find sufficient evidence to substantiate the money laundering suspicion. However, Deutsche Bank agreed to pay an administrative fine of € 13.5 million to the FPP for failing to submit suspicious activity reports ("**SARs**") in Germany in a timely fashion, which Deutsche Bank paid in the fourth quarter of 2020.

On 7 July 2020, the New York State Department of Financial Services ("**DFS**") issued a Consent Order, finding that Deutsche Bank violated New York State banking laws in connection with its relationships with three former Deutsche Bank clients – Danske Bank's Estonia branch, Jeffrey Epstein and FBME Bank – and imposing a U.S.$ 150 million civil penalty in connection with these three former relationships, which Deutsche Bank paid in the third quarter of 2020.

The remaining investigations are understood to be ongoing.

On 15 July 2020, Deutsche Bank was named as a defendant in a securities class action filed in the U.S. District Court for the District of New Jersey, alleging that Deutsche Bank made material misrepresentations regarding the effectiveness of its anti-money laundering ("**AML**") controls and related remediation. The complaint cites allegations regarding control deficiencies raised in the DFS Consent Order related to Deutsche Bank's relationships with Danske Bank's Estonia branch, Jeffrey Epstein and FBME Bank. On 30 September 2020, the plaintiff filed an amended complaint that included additional allegations regarding the effectiveness of Deutsche Bank's AML controls. On 28 December 2020, the court appointed lead plaintiff and lead counsel. Lead plaintiff filed a second amended complaint on 1 March 2021. On 23 April 2021, Deutsche Bank filed a motion to transfer the action, or in the alternative, to dismiss the second amended complaint. Briefing on the motion concluded on 1 July 2021. On 31 March 2022, the court granted the motion to transfer the action to the U.S. District Court for the Southern District of New York ("**SDNY**"). On 18 May 2022, the SDNY court granted in part and denied in part the motion to dismiss. On 30 June 2022, lead plaintiff filed a third amended complaint. Discovery is ongoing.

The Group has not disclosed whether it has established a provision or contingent liability with respect to this matter because it has concluded that such disclosure can be expected to seriously prejudice its outcome.

<u>BGH</u>

On 27 April 2021 the German Federal Court of Justice ("**BGH**") issued a ruling that certain clauses used in Deutsche Bank's General Terms and Conditions, which assume the customer consents following a notice and non-objection period, are void in relation to consumers (*Verbraucher*). The group received the written reasoning for this judgment on 27 May 2021. The relevant clauses were widely used in the German banking industry. The BGH overturned the prior decisions of both the Regional Court and Higher Regional Court of Cologne, which had dismissed the claim brought forward by a consumer protection association. As a result of this ruling, fees introduced or increased since 2018 on the basis of this modification mechanism are potentially ineffective and consumers (*Verbraucher*) can claim repayment of respective banking fees. The Group has established a civil litigation class provision of € 24 million as of 30 June 2022 with respect to this matter.

<u>Cum-ex Investigations and Litigations</u>

Deutsche Bank has received inquiries from law enforcement authorities, including requests for information and documents, in relation to cum-ex transactions of clients. "**Cum-ex**" refers to trading activities in German shares around dividend record dates (trade date before and settlement date after dividend record date) for the purpose of obtaining German tax credits or refunds in relation to withholding tax levied on dividend payments including, in particular, transaction structures that have resulted in more than one market participant claiming such credit or refund with respect to the same dividend payment. Deutsche Bank is cooperating with the law enforcement authorities in these matters.

The Public Prosecutor in Cologne (*Staatsanwaltschaft Köln*, "**CPP**") has been conducting a criminal investigation since August 2017 concerning two former employees of Deutsche Bank in relation to cum-ex transactions of certain former clients of the Bank. Deutsche Bank is a potential secondary participant pursuant to Sec. 30 of the German Law on Administrative Offences in this proceeding. This proceeding could result in a disgorgement of profits and fines. Deutsche Bank is cooperating with the CPP. At the end of May and beginning of June 2019, the CPP initiated criminal investigations against further current and former employees of Deutsche Bank and five former Management Board members. In July 2020, in the course of inspecting the CPP's investigation file, Deutsche Bank learned that the CPP had further extended its investigation in June 2019 to include further current and former DB personnel, including one former

Management Board member and one current Management Board member. Very limited information on the individuals was recorded in the file. The investigation is still at an early stage and the scope of the investigation may be further broadened.

In May 2021, Deutsche Bank learned through an information request received by Deutsche Oppenheim Family Office AG ("**DOAG**") as legal successor of Sal. Oppenheim jr. & Cie. AG & Co. KGaA ("**Sal. Oppenheim**") that the CPP in 2021 opened a criminal investigation proceeding in relation to cum-ex transactions against unknown former personnel of Sal. Oppenheim. DOAG provided the requested information on 13 September and 15 October 2021.

Deutsche Bank acted as participant in and filed withholding tax refund claims through the electronic refund procedure (*elektronisches Datenträgerverfahren*) on behalf of, inter alia, two former custody clients in connection with their cum-ex transactions. In February 2018, Deutsche Bank received from the German Federal Tax Office (*Bundeszentralamt für Steuern*, "**FTO**") a demand of approximately € 49 million for tax refunds paid to a former custody client. Deutsche Bank expects to receive a formal notice for the same amount. On 20 December 2019, Deutsche Bank received a liability notice from the FTO requesting payment of € 2.1 million by 20 January 2020 in connection with tax refund claims Deutsche Bank had submitted on behalf of another former custody client. In 2020, Deutsche Bank made the requested payment and filed an objection against the liability notice. On 28 July 2021, Deutsche Bank received a letter from the FTO stating that the revised tax assessment notice dated December 2019 was not a valid administrative act as it could not be served to Deutsche Bank's client due to its liquidation already in 2016. On the same day, the FTO issued another liability notice to Deutsche Bank arguing that it issued incorrect tax certificates. On 30 May 2022, Deutsche Bank's objections against the liability notices were rejected. On 1 July 2022, Deutsche Bank filed a claim against this rejection with the Fiscal Court of Cologne (*Finanzgericht Köln*).

By letter dated 26 February 2018, The Bank of New York Mellon SA/NV ("**BNY**") informed Deutsche Bank of its intention to seek indemnification for potential cum-ex related tax liabilities incurred by BHF Asset Servicing GmbH ("**BAS**") and/or Frankfurter Service Kapitalanlage-GmbH ("**Service KAG**", now named BNY Mellon Service Kapitalanlage-Gesellschaft mbH). Deutsche Bank had acquired BAS and Service KAG as part of the acquisition of Sal. Oppenheim in 2010 and sold them to BNY in the same year. BNY estimates the potential tax liability to amount to up to € 120 million (excluding interest of 6 per cent p.a.). In November and December 2020 counsel to BNY informed Deutsche Bank that BNY and / or Service KAG (among others) have received notices from tax authorities in the estimated amount with respect to cum-ex related trades by certain investment funds in 2009 and 2010. BNY has filed objections against the notices.

On 6 February 2019, the Regional Court (*Landgericht*) Frankfurt am Main served Deutsche Bank with a claim by M.M.Warburg & CO Gruppe GmbH and M.M.Warburg & CO (AG & Co.) KGaA (together "**Warburg**") in connection with cum-ex transactions of Warburg with a custody client of Deutsche Bank during 2007 to 2011. Warburg claimed from Deutsche Bank indemnification against German taxes in relation to transactions conducted in the years 2007 to 2011. Further, Warburg claimed compensation of unspecified damages relating to these transactions. Based on the tax assessment notices received for 2007 to 2011, Warburg claimed a total of € 250 million (of which € 166 million is in relation to taxes and € 84 million is in relation to interest). On 20 March 2020, Warburg extended its claim against Deutsche Bank to indemnify Warburg in relation to the € 176 million (thereof € 166 million in relation to taxes and € 10 million in relation to interest) criminal confiscation order issued by the Regional Court Bonn in the criminal cum-ex trial on 18 March 2020 regarding the same transactions. On 28 July 2021 the German Federal Court of Justice ("**BGH**") confirmed the criminal confiscation. On 23 September 2020, the Frankfurt Regional Court fully dismissed Warburg's claim against Deutsche Bank on the grounds that Warburg as the tax debtor (*Steuerschuldner*) is primarily liable and cannot request payment from Deutsche Bank. The court further held that any claims are time-barred. On 29 October 2020, Warburg appealed the decision with the Higher Regional Court (*Oberlandesgericht*) Frankfurt am Main. Following appellate briefs by Warburg and Deutsche Bank, the hearing of the appeal proceeding took place on 3 November 2021. On 1 December 2021, Warburg reduced its claim from the first instance proceeding. Warburg now claims € 86 million (thereof € 63 million in relation to taxes and € 23 million in relation to interest). Further, Warburg claims an amount of € 54 million in relation to the criminal confiscation. A further hearing took place on 26 January 2022. In a judgment dated 2 March 2022, the Higher Regional Court (*Oberlandesgericht*) Frankfurt am Main fully dismissed Warburg's appeal. The court did not admit an appeal of its decision to the BGH. Warburg filed an appeal against this non-admission (*Nichtzulassungsbeschwerde*).

On 25 January 2021, the Regional Court (*Landgericht*) Hamburg served Deutsche Bank with a claim by Warburg Invest Kapitalanlagegesellschaft mbH ("**Warburg Invest**") in relation to transactions of two investment funds in 2009 and 2010, respectively. Warburg Invest was fund manager for both funds. Warburg Invest claims, from Deutsche Bank together with several other parties as joint and several debtors (*Gesamt-schuldner*), indemnification against German taxes in relation to cum-ex transactions conducted by the two funds. Further, Warburg Invest claims compensation of unspecified damages relating to these transactions. In November 2020, Warburg Invest received a tax liability notice from tax authorities for one of the funds in the amount of € 61 million. Based on publicly available information Deutsche Bank estimates the tax amount for the second fund to be approximately € 49 million. Warburg Invest filed its claim against several parties including Deutsche Bank *inter alia* based on an allegation of intentional damage contrary to public policy (Sec. 826 German Civil Code) and the accusation that Deutsche Bank participated in a business model that was contrary to public policy (*sittenwidriges Geschäftsmodell*). On 5 July 2021, Deutsche Bank submitted its defense statement to the court. On 31 December 2021, two other defendants of the proceeding served a notice of dispute (*Streitverkündung*) to several parties including Deutsche Bank.

On 26 February 2021, the Regional Court (*Landgericht*) Frankfurt am Main served Deutsche Bank with a claim by Seriva Vermögensverwaltungs GmbH ("**Seriva**"). Seriva is requesting that Deutsche Bank reissue certain tax certificates (*Steuerbescheinigungen*) that Deutsche Bank withdrew in April 2017 in light of Seriva's cum-ex transactions. Deutsche Bank responded to Seriva's statement of claim on 6 April 2021. On 5 July 2021, Deutsche Bank received a reply brief from Seriva. Deutsche Bank responded on 17 August 2021. The hearing took place on 7 February 2022. In a judgment dated 28 February 2022, the court dismissed Seriva's claim. Seriva did not appeal the decision thus the dismissal is final and binding.

The Group has not disclosed whether it has established a provision or contingent liability with respect to these matters because it has concluded that such disclosure can be expected to seriously prejudice their outcome.

<u>FX Derivatives Products Investigations and Litigation</u>

Deutsche Bank has received requests for information from certain regulators in connection with its internal investigation into the historical sales of certain FX derivatives products with a limited number of clients. Deutsche Bank is providing information to and otherwise cooperating with its regulators. Separately, on 30 September 2021, Deutsche Bank was served with a claim that was filed in the High Courts of England and Wales by four companies within the Palladium Hotels Group ("**PHG**"). PHG are claiming restitution or damages for alleged losses estimated at € 500 million in respect of FX derivatives trades entered into with Deutsche Bank between 2014 and 2019. They allege that Deutsche Bank made negligent misrepresentations, misstatements and/or breached a duty of care to PHG in relation to the trades. It is also alleged that one of the four PHG claimants lacked legal capacity to enter into some of the trades. On 17 December 2021, Deutsche Bank filed a defense disputing the claim on the following grounds: that PHG is a sophisticated investor with extensive experience of using derivatives, that Deutsche Bank did not act as either an advisor or fiduciary to PHG, that the trades reflected PHG's own trading strategy and commercial objectives and were carried out with PHG's full authorization, that there were no misrepresentations, that the relevant PHG claimant had capacity to enter into these trades, and that PHG well understood both the potential benefits and risks involved. On 1 April 2022, PHG filed their reply to Deutsche Bank's defense.

<u>FX Investigations and Litigations</u>

Deutsche Bank has received requests for information from certain regulatory and law enforcement agencies globally who investigated trading in, and various other aspects of, the foreign exchange market. Deutsche Bank cooperated with these investigations. Relatedly, Deutsche Bank has conducted its own internal global review of foreign exchange trading and other aspects of its foreign exchange business.

On 19 October 2016, the U.S. Commodity Futures Trading Commission ("**CFTC**"), Division of Enforcement, issued a letter ("**CFTC Letter**") notifying Deutsche Bank that the CFTC Division of Enforcement "is not taking any further action at this time and has closed the investigation of Deutsche Bank" regarding foreign exchange. As is customary, the CFTC Letter states that the CFTC Division of Enforcement "maintains the discretion to decide to reopen the investigation at any time in the future." The CFTC Letter has no binding impact on other regulatory and law enforcement agency investigations regarding Deutsche Bank's foreign exchange trading and practices.

On 7 December 2016, it was announced that Deutsche Bank reached an agreement with the Brazilian antitrust enforcement agency ("**CADE**") to settle an investigation into conduct by a former Brazil-based Deutsche Bank trader. As part of that settlement, Deutsche Bank paid a fine of BRL 51 million and agreed to continue to comply with the CADE's administrative process until it is concluded. This resolves CADE's administrative process as it relates to Deutsche Bank, subject to Deutsche Bank's continued compliance with the settlement terms.

On 13 February 2017, the U.S. Department of Justice ("**DOJ**"), Criminal Division, Fraud Section, issued a letter ("**DOJ Letter**") notifying Deutsche Bank that the DOJ has closed its criminal inquiry "concerning possible violations of federal criminal law in connection with the foreign exchange markets." As is customary, the DOJ Letter states that the DOJ may reopen its inquiry if it obtains additional information or evidence regarding the inquiry. The DOJ Letter has no binding impact on other regulatory and law enforcement agency investigations regarding Deutsche Bank's foreign exchange trading and practices.

On 20 April 2017, it was announced that Deutsche Bank AG, DB USA Corporation and Deutsche Bank AG New York Branch reached an agreement with the Board of Governors of the Federal Reserve System to settle an investigation into Deutsche Bank's foreign exchange trading and practices. Under the terms of the settlement, Deutsche Bank entered into a cease-and-desist order, and agreed to pay a civil monetary penalty of U.S.$ 137 million. In addition, the Federal Reserve ordered Deutsche Bank to "continue to implement additional improvements in its oversight, internal controls, compliance, risk management and audit programs" for its foreign exchange business and other similar products, and to periodically report to the Federal Reserve on its progress.

On 20 June 2018, it was announced that Deutsche Bank AG and Deutsche Bank AG New York Branch reached an agreement with the New York State Department of Financial Services ("**DFS**") to settle an investigation into Deutsche Bank's foreign exchange trading and sales practices. Under the terms of the settlement, Deutsche Bank entered into a consent order, and agreed to pay a civil monetary penalty of U.S.$ 205 million. In addition, the DFS ordered Deutsche Bank to continue to implement improvements in its oversight, internal controls, compliance, risk management and audit programs for its foreign exchange business, and to periodically report to the DFS on its progress.

On 25 February 2020, plaintiffs in the "Indirect Purchasers" action pending in the U.S. District Court for the Southern District of New York (*Contant, et al. v. Bank of America Corp., et al.*) informed the court of a global settlement with all eleven defendants remaining in that action, including Deutsche Bank, collectively for U.S.$ 10 million. Each individual defendant's contribution, including Deutsche Bank's, remains confidential. The court approved the settlement and dismissed with prejudice all claims alleged against Deutsche Bank in that action on 19 November 2020. Filed on 7 November 2018, *Allianz, et al. v. Bank of America Corporation, et al.*, was brought on an individual basis by a group of asset managers who opted out of the settlement in a consolidated action (*In re Foreign Exchange Benchmark Rates Antitrust Litigation*). Defendants' motion to dismiss was granted and denied in part on 28 May 2020. Plaintiffs filed a third amended complaint on 28 July 2020. Discovery is ongoing.

Deutsche Bank also has been named as a defendant in two Canadian class proceedings brought in the provinces of Ontario and Quebec. Filed on 10 September 2015, these class actions assert factual allegations similar to those made in the consolidated action in the United States and seek damages pursuant to the Canadian Competition Act as well as other causes of action. Plaintiffs' motion for class certification in the Ontario action was granted on 14 April 2020. On 2 July 2021, Deutsche Bank entered into an agreement to settle the Canadian class proceedings. The settlement agreement was approved by the Ontario Superior Court of Justice on 23 September 2021 and the Quebec Superior Court of Justice on 20 October 2021.

Deutsche Bank has also been named as a defendant in an amended and consolidated class action filed in Israel. This action asserts factual allegations similar to those made in the consolidated action in the United States and seeks damages pursuant to Israeli antitrust law as well as other causes of action. This action is in preliminary stages.

On 10 November 2020, Deutsche Bank was named in an action issued in the UK High Court of Justice (Commercial Court) brought by The ECU Group PLC. The proceedings have now settled on confidential terms.

On 11 November 2020, Deutsche Bank was named in an action issued in the UK High Court of Justice (Commercial Court) brought by many of the same plaintiffs who brought *Allianz, et al. v. Bank of America Corporation, et al.* referred to above. The claim is based upon factual allegations similar to those made in *Allianz, et al. v. Bank of America Corporation, et al.* On 4 March 2022, the High Court ordered that the proceedings be transferred to the UK Competition Appeal Tribunal. The proceedings are at the pleadings stage.

On 4 May 2021, Deutsche Bank S.A. – Banco Alemao was named in a civil antitrust action brought in the São Paulo Civil Court of Central Jurisdiction by the Association of Brazilian Exporters ("**AEB**") against certain FX dealers and affiliated financial institutions in Brazil. This action asserts factual allegations based on conduct investigated by CADE and seeks damages pursuant to Brazilian antitrust law. On 22 February 2022, the presiding judge dismissed the action on the basis that the action was not appropriate for a class proceeding. AEB has appealed the decision. Deutsche Bank has not yet been served.

The Group has not disclosed whether it has established a provision or contingent liability with respect to these matters because it has concluded that such disclosure can be expected to seriously prejudice their outcome.

Interbank and Dealer Offered Rates Matters

Regulatory and Law Enforcement Matters

Deutsche Bank has responded to requests for information from, and cooperated with, various regulatory and law enforcement agencies, in connection with industry-wide investigations concerning the setting of the London Interbank Offered Rate ("**LIBOR**"), Euro Interbank Offered Rate ("**EURIBOR**"), Tokyo Interbank Offered Rate ("**TIBOR**") and other interbank and/or dealer offered rates.

As previously reported, Deutsche Bank paid € 725 million to the European Commission pursuant to a settlement agreement dated 4 December 2013 in relation to anticompetitive conduct in the trading of interest rate derivatives.

Also as previously reported, on 23 April 2015, Deutsche Bank entered into separate settlements with the DOJ, the CFTC, the UK Financial Conduct Authority ("**FCA**"), and the New York State Department of Financial Services ("**DFS**") to resolve investigations into misconduct concerning the setting of LIBOR, EURIBOR, and TIBOR. Under the terms of these agreements, Deutsche Bank paid penalties of U.S.$ 2.175 billion to the DOJ, CFTC and DFS and GBP 226.8 million to the FCA. As part of the resolution with the DOJ, DB Group Services (UK) Limited (an indirectly-held, wholly-owned subsidiary of Deutsche Bank) pled guilty to one count of wire fraud in the U.S. District Court for the District of Connecticut and Deutsche Bank entered into a Deferred Prosecution Agreement with a three year term pursuant to which it agreed (among other things) to the filing of an Information in the U.S. District Court for the District of Connecticut charging Deutsche Bank with one count of wire fraud and one count of price fixing in violation of the Sherman Act. On 23 April 2018, the Deferred Prosecution Agreement expired, and the U.S. District Court for the District of Connecticut subsequently dismissed the criminal Information against Deutsche Bank.

Also, as previously reported, on 20 March 2017, Deutsche Bank paid CHF 5.4 million to the Swiss Competition Commission ("**WEKO**") pursuant to a settlement agreement in relation to Yen LIBOR.

On 25 October 2017, Deutsche Bank entered into a settlement with a working group of U.S. state attorneys general resolving their interbank offered rate investigation. Among other conditions, Deutsche Bank made a settlement payment of U.S.$ 220 million.

Other investigations of Deutsche Bank concerning the setting of various interbank and/or dealer offered rates remain ongoing.

The Group has not disclosed whether it has established a provision or contingent liability with respect to the remaining investigations because it has concluded that such disclosure can be expected to seriously prejudice their outcome.

Overview of Civil Litigations

Deutsche Bank is party to 26 U.S. civil actions concerning alleged manipulation relating to the setting of various interbank and/or dealer offered rates which are described in the following paragraphs, as well as actions pending in each of the UK, Argentina and Spain. Most of the civil actions, including putative class actions, are pending in the U.S. District Court for the Southern District of New York ("**SDNY**"), against Deutsche Bank and numerous other defendants. All but three of the U.S. civil actions were filed on behalf of parties who allege losses as a result of manipulation relating to the setting of U.S. dollar LIBOR. The three U.S. civil actions pending against Deutsche Bank that do not relate to U.S. dollar LIBOR were also filed in the SDNY, and include one consolidated action concerning Pound Sterling ("**GBP**") LIBOR, one action concerning Swiss franc ("**CHF**") LIBOR, and one action concerning two Singapore Dollar ("**SGD**") benchmark rates, the Singapore Interbank Offered Rate ("**SIBOR**") and the Swap Offer Rate ("**SOR**").

Claims for damages for all 26 of the U.S. civil actions discussed have been asserted under various legal theories, including violations of the U.S. Commodity Exchange Act, federal and state antitrust laws, the U.S. Racketeer Influenced and Corrupt Organizations Act, and other federal and state laws. The Group has not disclosed whether it has established a provision or contingent liability with respect to these matters because it has concluded that such disclosure can be expected to seriously prejudice their outcome.

U.S. dollar LIBOR

With two exceptions, all of the U.S. civil actions concerning U.S. dollar LIBOR are being coordinated as part of a multidistrict litigation (the "**U.S. dollar LIBOR MDL**") in the SDNY. In light of the large number of individual cases pending against Deutsche Bank and their similarity, the civil actions included in the U.S. dollar LIBOR MDL are now subsumed under the following general description of the litigation pertaining to all such actions, without disclosure of individual actions except when the circumstances or the resolution of an individual case is material to Deutsche Bank.

Following a series of decisions in the U.S. dollar LIBOR MDL between March 2013 and March 2019 narrowing their claims, plaintiffs are currently asserting antitrust claims, claims under the U.S. Commodity Exchange Act and U.S. Securities Exchange Act and state law fraud, contract, unjust enrichment and other tort claims. The court has also issued decisions dismissing certain plaintiffs' claims for lack of personal jurisdiction and on statute of limitations grounds.

On 20 December 2016, the district court issued a ruling dismissing certain antitrust claims while allowing others to proceed. Multiple plaintiffs have filed appeals of the district court's 20 December 2016 ruling to the U.S. Court of Appeals for the Second Circuit, and those appeals proceeded in parallel with the ongoing proceedings in the district court. On 30 December 2021, the Second Circuit affirmed the district court's decision on antitrust standing grounds but reversed the court's decision on personal jurisdiction grounds, and it remanded the cases to the district court for further proceedings. On 9 March 2022, defendants (including Deutsche Bank) filed a petition for a writ of certiorari to the U.S. Supreme Court to review the Court of Appeals' 30 December 2021 decision. The U.S. Supreme Court denied defendants' petition on 21 June 2022.

In January and March 2019, plaintiffs filed three putative class action complaints in the SDNY against several financial institutions, alleging that the defendants, members of the panel of banks that provided U.S. dollar LIBOR submissions, the organization that administers LIBOR, and their affiliates, conspired to suppress U.S. dollar LIBOR submissions from 1 February 2014 through the present. These actions were subsequently consolidated under In re ICE LIBOR Antitrust Litigation, and on 1 July 2019, the plaintiffs filed a consolidated amended complaint. On 26 March 2020, the court granted the defendants' motion to dismiss the action, dismissing all claims against Deutsche Bank. Plaintiffs have appealed that decision to the U.S. Court of Appeals for the Second Circuit. On 28 December 2020, DYJ Holdings, LLC filed a motion to intervene in the appeal as named plaintiff and proposed class representative, as one of the original named plaintiffs has withdrawn and dismissed its claims and the other two named plaintiffs have expressed a desire to withdraw from the case. On 7 January 2021, defendants filed a motion to dismiss the appeal for lack of subject matter jurisdiction. On 6 April 2021, the court granted the motion to intervene and denied defendants' motion to dismiss. Oral argument was heard on 29 November 2021. On 14 February 2022, the Second Circuit dismissed the appeal.This action is not part of the U.S. dollar LIBOR MDL.

In August 2020, plaintiffs filed a non-class action in the U.S. District Court for the Northern District of California against several financial institutions, alleging that U.S. dollar LIBOR has been suppressed through the present. On 10 November 2020, plaintiffs moved the court for a preliminary and permanent injunction; briefing of that motion is complete. On 11 November 2020, certain defendants moved to transfer the action to the SDNY; briefing of that motion is complete. On 24 May 2021, plaintiffs filed a motion for an order to show cause why the court should not order plaintiffs' previously requested injunction. Defendants moved to strike the motion. On 3 June 2021, the court issued an order (i) denying defendants' motion to transfer the action to the SDNY, (ii) denying defendants' motion to strike plaintiffs' 24 May 2021 motion and (iii) setting a hearing for the injunction motions for 9 September 2021. On 23 December 2021, the court issued a written decision denying the injunction motions. On 9 September 2021, the court held a hearing on the injunction motions and tentatively denied the motions. On 30 September 2021, defendants moved to dismiss the complaint. The motions to dismiss are now fully briefed. This action is not part of the U.S. dollar LIBOR MDL.

There is a further UK civil action regarding U.S. dollar LIBOR brought by the U.S. Federal Deposit Insurance Corporation ("**FDIC**"), in which a claim for damages has been asserted pursuant to Art. 101 of the Treaty on the Functioning of the European Union, Sec. 2 of Chapter 1 of the UK Competition Act 1998 and U.S. state laws. In February 2022, following a ruling issued by the U.S. Court of Appeals for the Second Circuit in relation to USD LIBOR antitrust claims, the UK LIBOR proceedings have been stayed until 31 July 2022, pending resolution of an application to reinstate these either in part or full in the U.S.

A further class action regarding LIBOR has been filed in Argentina seeking damages for losses allegedly suffered by holders of Argentine bonds with interest rates based on LIBOR. Deutsche Bank is defending this action.

SIBOR and SOR

A putative class action alleging manipulation of the Singapore Interbank Offered Rate (SIBOR) and Swap Offer Rate (SOR) remains pending. On 26 July 2019, the SDNY granted defendants' motion to dismiss the action, dismissing all claims against Deutsche Bank, and denied plaintiff's motion for leave to file a fourth amended complaint. Plaintiff appealed that decision to the U.S. Court of Appeals for the Second Circuit. On 17 March 2021, the court reversed the SDNY's decision and remanded the case to the district court. On 1 October 2021, defendants (including Deutsche Bank) filed a petition for a writ of certiorari to the U.S. Supreme Court to review the Court of Appeals' 17 March 2021 decision. The petition was denied on 10 January 2022. On 25 October 2021, plaintiffs filed their fourth amended complaint, which defendants moved to dismiss on 24 November 2021. On 17 March 2022, Deutsche Bank executed a settlement agreement with plaintiffs in the amount of U.S.$ 11 million to resolve this action. On 9 June 2022, the court granted preliminary approval of the settlement. The settlement remains subject to final approval.

GBP LIBOR

A putative class action alleging manipulation of the Pound Sterling (GBP) LIBOR remains pending. On 21 December 2018, the SDNY partially granted defendants' motions to dismiss the action, dismissing all claims against Deutsche Bank. Plaintiffs filed a notice of appeal; the U.S. Court of Appeals for the Second Circuit ordered that the appeal be held in abeyance pending that court's decision in the appeal of the SIBOR and SOR class action. Following that court's decision in the SIBOR and SOR class action on 17 March 2021, the appeal is moving forward. Plaintiffs filed their opening brief on 21 October 2021, and all defendants-appellees' except Deutsche Bank filed their briefs on 20 January 2022. Also on 20 January 2022, plaintiffs filed a motion for (1) severance of their appeal with respect to Deutsche Bank, (2) stay of the severed appeal as to Deutsche Bank, and (3) limited remand of that portion of the matter concerning Deutsche Bank to the district court to consider the approval of a proposed settlement between plaintiffs and Deutsche Bank. The Second Circuit granted plaintiffs' motion on 26 January 2022.

CHF LIBOR

A putative class action alleging manipulation of the Swiss Franc (CHF) LIBOR remains pending. On 16 September 2019, the SDNY granted defendants' motion to dismiss the action, dismissing all claims against Deutsche Bank. Plaintiffs filed a notice of appeal; the U.S. Court of Appeals for the Second Circuit ordered that the appeal be held in abeyance pending that court's decision in the appeal of the SIBOR and SOR class action. Following that court's decision in the SIBOR and SOR class action on 17 March 2021, the CHF LIBOR action was remanded to the district court for further proceedings. On 18 April 2022, Deutsche Bank executed a settlement agreement with plaintiffs in the amount of U.S.$ 13 million to resolve this action. Plaintiffs filed a motion for preliminary approval of the settlement on 29 June 2022.

Bank Bill Swap Rate Claims

On 16 August 2016, a putative class action was filed in the U.S. District Court for the Southern District of New York against Deutsche Bank and other defendants, bringing claims based on alleged collusion and manipulation in connection with the Australian Bank Bill Swap Rate ("**BBSW**") on behalf of persons and entities that engaged in U.S.-based transactions in BBSW-linked financial instruments from 2003 through the date on which the effects of the alleged unlawful conduct ceased. The complaint alleged that the defendants, among other things, engaged in money market transactions intended to influence the BBSW fixing, made false BBSW submissions, and used their control over BBSW rules to further the alleged misconduct. An amended complaint was filed on 16 December 2016. On 26 November 2018, the court partially granted defendants' motions to dismiss the amended complaint, dismissing all claims against Deutsche Bank. On 3 April 2019, the plaintiffs filed a second amended complaint, which the defendants moved to dismiss. On 13 February 2020, the court partially granted the motion to dismiss the second amended complaint, with certain claims against Deutsche Bank remaining. On 16 June 2020, Deutsche Bank served an answer denying all allegations of misconduct. On 29 April 2022, Deutsche Bank and four other defendant banks entered into a settlement agreement with plaintiffs to resolve the dispute. The court issued an order conditionally approving the settlement class on 11 May 2022 and scheduled a fairness hearing for 1 November 2022 to consider final approval of the settlement.

Spanish EURIBOR Claims

75 claims in Spain (incorporating at least 258 claimants) have been notified or issued in court against Deutsche Bank by claimants with mortgage loans held by banks and other financial institutions for damages resulting from alleged collusive behavior by Deutsche Bank following the European Commission decision of 4 December 2013. Of those 75 claims, 69 have quantified their alleged losses with a total value of € 1 million and 6 (one of which includes 184 potential claimants) are yet to do so. Accordingly, the total value of the claims is expected to rise. Of the 75 claims, 51 claims have commenced in court and are at varying stages of maturity, with a number of first instance decisions pending appeal and some claims stayed pending the outcome of the Trucks Cartel decision by the European Court of Justice ("**ECJ**") and/or further referrals to the ECJ. The ECJ's Trucks Cartel decision of 22 June 2022 confirmed that the limitation period for claimants to notify/issue claims in Spanish EURIBOR would expire on 30 June 2022. Accordingly, the final date for claimants to notify/issue claims has passed.

Investigations into Referral Hiring Practices and Certain Business Relationships and Precious Metals

On 22 August 2019, Deutsche Bank reached a settlement with the U.S. Securities and Exchange Commission ("**SEC**") to resolve its investigation into the Bank's hiring practices related to candidates referred by clients, potential clients and government officials. The Bank agreed to pay U.S.$ 16 million as part of the settlement. The U.S. Department of Justice ("**DOJ**") closed its investigation of the Bank regarding its hiring practices. Deutsche Bank has also reached settlements with the DOJ and the SEC, respectively, regarding their investigations of the Bank's compliance with the U.S. Foreign Corrupt Practices Act ("**FCPA**") and other laws with respect to the Bank's engagement of finders and consultants. On 8 January 2021, Deutsche Bank entered into a deferred prosecution agreement ("**DPA**") with the DOJ concerning its historical engagements of finders and consultants and, as part of its obligations in the DPA, agreed to pay approximately U.S.$ 80 million in connection with this conduct. The DPA with the DOJ also involved a resolution involving spoofing in precious metals. As part of its obligations in the DPA relating to precious metals, Deutsche Bank agreed to pay approximately U.S.$ 8 million, of which approximately U.S.$ 6 million would be credited by virtue of

Deutsche Bank's 2018 resolution with the CFTC. On the same day, Deutsche Bank also reached a settlement with the SEC to resolve its investigation into conduct regarding the Bank's compliance with the FCPA with respect to the Bank's engagement of finders and consultants. The Bank agreed to pay approximately U.S.$ 43 million in this SEC settlement. On 28 February 2022, following a finding by the DOJ that the Bank had violated the 2021 DPA based on untimely reporting by the Bank of certain allegations relating to environmental, social and governance ("**ESG**")-related information at the Bank's subsidiary DWS Group GmbH & Co. KGaA, the Bank agreed with the DOJ to extend an existing monitorship and abide by the terms of a prior deferred prosecution agreement until February 2023 to allow the monitor to certify to the Bank's implementation of the related internal controls. The DOJ has reserved all rights to take further action regarding the 2021 DPA if it deems necessary.

<u>Jeffrey Epstein Investigations</u>

Deutsche Bank has received requests for information from regulatory and law enforcement agencies concerning the Bank's former client relationship with Jeffrey Epstein (individually, and through related parties and entities). In December 2018, Deutsche Bank began the process to terminate its relationship with Epstein, which began in August 2013. Deutsche Bank has provided information to and otherwise cooperated with the investigating agencies. The Bank has also completed an internal investigation into the Epstein relationship.

On 7 July 2020, the New York State Department of Financial Services ("**DFS**") issued a Consent Order, finding that Deutsche Bank violated New York State banking laws in connection with its relationships with three former Deutsche Bank clients, Danske Bank's Estonia branch, Jeffrey Epstein and FBME Bank, and imposing a U.S.$ 150 million civil penalty in connection with these three former relationships, which Deutsche Bank paid in the third quarter of 2020. As noted above, Deutsche Bank is also named as a defendant in a securities class action pending in the U.S. District Court for the Southern District of New York ("**SDNY**") that includes allegations relating to the Bank's relationship with Jeffrey Epstein and other entities.

The Group has not established a provision or contingent liability with respect to the Jeffrey Epstein investigations. The remaining investigations relating to Jeffrey Epstein are understood to be ongoing.

<u>KOSPI Index Unwind Matters</u>

Following the decline of the Korea Composite Stock Price Index 200 (the "**KOSPI 200**") in the closing auction on 11 November 2010 by approximately 2.7 %, the Korean Financial Supervisory Service ("**FSS**") commenced an investigation and expressed concerns that the fall in the KOSPI 200 was attributable to a sale by Deutsche Bank of a basket of stocks, worth approximately € 1.6 billion, that was held as part of an index arbitrage position on the KOSPI 200. On 23 February 2011, the Korean Financial Services Commission, which oversees the work of the FSS, reviewed the FSS' findings and recommendations and resolved to take the following actions: (i) to file a criminal complaint to the Korean Prosecutor's Office for alleged market manipulation against five employees of Deutsche Bank group and Deutsche Bank's subsidiary Deutsche Securities Korea Co. ("**DSK**") for vicarious corporate criminal liability; and (ii) to impose a suspension of six months, commencing 1 April 2011 and ending 30 September 2011, of DSK's business for proprietary trading of cash equities and listed derivatives and DMA (direct market access) cash equities trading, and the requirement that DSK suspend the employment of one named employee for six months. On 19 August 2011, the Korean Prosecutor's Office announced its decision to indict DSK and four employees of Deutsche Bank group on charges of spot/futures-linked market manipulation. The criminal trial commenced in January 2012. On 25 January 2016, the Seoul Central District Court rendered guilty verdicts against a DSK trader and DSK. A criminal fine of KRW 1.5 billion (less than € 2.0 million) was imposed on DSK. The Court also ordered forfeiture of the profits generated on the underlying trading activity. The Group disgorged the profits on the underlying trading activity in 2011. The criminal trial verdicts against both the DSK trader and against DSK were overturned on appeal in a decision rendered by the Seoul High Court on 12 December 2018. The Korean Prosecutor's Office has appealed the Seoul High Court decision.

In addition, a number of civil actions have been filed in Korean courts against Deutsche Bank and DSK by certain parties who allege they incurred losses as a consequence of the fall in the KOSPI 200 on 11 November 2010. First instance court decisions were rendered against the Bank and DSK in some of these cases starting in the fourth quarter of 2015. The one outstanding claim known to Deutsche Bank is for an amount of approximately € 55 million (at present exchange rates).

Monte Dei Paschi

In March 2013, Banca Monte dei Paschi di Siena ("**MPS**") initiated civil proceedings in Italy against Deutsche Bank alleging that Deutsche Bank assisted former MPS senior management in an accounting fraud on MPS, by undertaking repo transactions with MPS and "Santorini", a wholly owned special-purpose vehicle of MPS, which helped MPS defer losses on a previous transaction undertaken with Deutsche Bank. Subsequently, in July 2013, the Fondazione Monte dei Paschi di Siena ("**FMPS**"), MPS' largest shareholder, also commenced civil proceedings in Italy for damages based on substantially the same facts. In December 2013, Deutsche Bank reached an agreement with MPS to settle the civil proceedings and the transactions were unwound. The civil proceedings initiated by FMPS, in which damages of between € 220 million and € 381 million were claimed, were also settled in December 2018 upon payment by Deutsche Bank of € 17.5 million. FMPS's separate claim filed in July 2014 against FMPS's former administrators and a syndicate of 12 banks including Deutsche Bank S.p.A. for € 286 million continues to be pending before the first instance Florence courts.

A criminal investigation was launched by the Siena Public Prosecutor into the transactions entered into by MPS with Deutsche Bank and certain unrelated transactions entered into by MPS with other parties. Such investigation was moved in summer 2014 from Siena to the Milan Public Prosecutors as a result of a change in the alleged charges being investigated. On 16 February 2016, the Milan Public Prosecutors issued a request of committal to trial against Deutsche Bank and six current and former employees. The committal process concluded with a hearing on 1 October 2016, during which the Milan court committed all defendants in the criminal proceedings to trial. Deutsche Bank's potential exposure was for administrative liability under Italian Legislative Decree n. 231/2001 and for civil vicarious liability as an employer of current and former Deutsche Bank employees who are being criminally prosecuted.

On 8 November 2019, the Milan court issued its verdicts, finding five former employees and one current employee of Deutsche Bank guilty and sentencing them to either 3 years and 6 months or 4 years and 8 months. Deutsche Bank was found liable under Italian Legislative Decree n. 231/2001 and the court ordered the seizure of alleged profits of € 64.9 million and a fine of € 3 million. The Court also found Deutsche Bank has civil vicarious liability for damages (to be quantified by the civil court) as an employer of the current and former employees who were convicted. The sentences and fines are not due until the conclusion of any appeal process. The final judgment was issued by the Court on 13 May 2020. Deutsche Bank and the six former or current employees filed an appeal to the Milan Court of Appeal on 22 September 2020. The Milan Court of Appeal heard the appeal between 2 December 2021 and 31 March 2022. On 6 May 2022, the Milan Court of Appeal delivered the second instance verdict by which they acquitted all the Deutsche Bank defendants from all the charges, found Deutsche bank not liable under Italian Legislative Decree n. 231/2001, revoked the confiscation of € 64.9 million and the fine of € 3 million ordered against Deutsche Bank, and revoked the finding of civil vicarious liability for damages.

On 22 May 2018, CONSOB, the authority responsible for regulating the Italian financial markets, issued fines of € 100,000 each against the six current and former employees of Deutsche Bank who are defendants in the criminal proceedings. The six individuals were also banned from performing management functions in Italy and for Italian based institutions for three to six months each. No separate fine or sanction was imposed on Deutsche Bank but it is jointly and severally liable for the six current/former Deutsche Bank employees' fines. On 14 June 2018, Deutsche Bank and the six individuals filed an appeal in the Milan Court of Appeal challenging CONSOB's decision and one of the individuals sought a stay of enforcement of the fine against that individual. On 17 December 2020, the Milan Court of Appeal allowed the appeals filed by Deutsche Bank and the six current and former employees and annulled the resolution sanctioning them. CONSOB filed an appeal to the Supreme Court against the decision on 17 June 2021. Deutsche Bank and the six individuals have opposed the appeal.

Mortgage-Related and Asset-Backed Securities Matters and Investigation

Regulatory and Governmental Matters

Deutsche Bank, along with certain affiliates (collectively referred in these paragraphs to as "**Deutsche Bank**"), received subpoenas and requests for information from certain regulators and government entities, including members of the Residential Mortgage-Backed Securities Working Group of the U.S. Financial

Fraud Enforcement Task Force, concerning its activities regarding the origination, purchase, securitization, sale, valuation and/or trading of mortgage loans, residential mortgage-backed securities ("**RMBS**"), commercial mortgage-backed securities ("**CMBS**"), collateralised debt obligations ("**CDOs**"), other asset-backed securities and credit derivatives. Deutsche Bank fully cooperated in response to those subpoenas and requests for information.

On 23 December 2016, Deutsche Bank announced that it reached a settlement-in-principle with the DOJ to resolve potential claims related to its RMBS business conducted from 2005 to 2007. The settlement became final and was announced by the DOJ on 17 January 2017. Under the settlement, Deutsche Bank paid a civil monetary penalty of U.S.$ 3.1 billion and provided U.S.$ 4.1 billion in consumer relief. The DOJ appointed an independent monitor to oversee and validate the provision of consumer relief.

In September 2016, Deutsche Bank received administrative subpoenas from the Maryland Attorney General seeking information concerning Deutsche Bank's RMBS and CDO businesses from 2002 to 2009. On 1 June 2017, Deutsche Bank and the Maryland Attorney General reached a settlement to resolve the matter for U.S.$ 15 million in cash and U.S.$ 80 million in consumer relief (to be allocated from the overall U.S.$ 4.1 billion consumer relief obligation agreed to as part of Deutsche Bank's settlement with the DOJ).

On 8 July 2020, the DOJ-appointed monitor released his final report, validating that Deutsche Bank has fulfilled its U.S.$ 4.1 billion consumer relief obligations in its entirety, inclusive of the U.S.$ 80 million commitment to the State of Maryland.

The Group has recorded provisions with respect to some of the outstanding regulatory investigations but not others. The Group has not disclosed the amount of these provisions because it has concluded that such disclosure can be expected to seriously prejudice the resolution of these matters.

Issuer and Underwriter Civil Litigation

Deutsche Bank has been named as defendant in numerous civil litigations brought by private parties in connection with its various roles, including issuer or underwriter, in offerings of RMBS and other asset-backed securities. These cases, described below, allege that the offering documents contained material misrepresentations and omissions, including with regard to the underwriting standards pursuant to which the underlying mortgage loans were issued, or assert that various representations or warranties relating to the loans were breached at the time of origination. The Group has recorded provisions with respect to several of these civil cases, but has not recorded provisions with respect to all of these matters. The Group has not disclosed the amount of these provisions because it has concluded that such disclosure can be expected to seriously prejudice the resolution of these matters.

Deutsche Bank is a defendant in a class action relating to its role as one of the underwriters of six RMBS offerings issued by Novastar Mortgage Corporation. No specific damages are alleged in the complaint. The lawsuit was brought by plaintiffs representing a class of investors who purchased certificates in those offerings. The parties reached a settlement to resolve the matter for a total of U.S.$ 165 million, a portion of which was paid by the Bank. On 30 August 2017, FHFA/Freddie Mac filed an objection to the settlement and shortly thereafter appealed the district court's denial of their request to stay settlement approval proceedings, which appeal was resolved against FHFA/Freddie Mac. The court approved the settlement on 7 March 2019 over FHFA/Freddie Mac's objections. FHFA filed its appeal on 28 June 2019, which was denied on 14 March 2022 and a subsequent petition for rehearing was denied on 2 June 2022.

Deutsche Bank is a defendant in an action related to two RMBS offerings brought by the U.S. Federal Deposit Insurance Corporation ("**FDIC**") as receiver for Citizens National Bank and Strategic Capital Bank (alleging an unspecified amount in damages against all defendants). In this action, the appellate court reinstated claims previously dismissed on statute of limitations grounds and petitions for rehearing and certiorari to the U.S. Supreme Court were denied. On 31 July 2017, the FDIC filed a second amended complaint, which defendants moved to dismiss on 14 September 2017. On 18 October 2019, defendants' motion to dismiss was denied. On 13 May 2022, the FDIC voluntarily dismissed its claim with respect to one of the RMBS offerings and Deutsche Bank filed a motion for summary judgment seeking dismissal of the remaining claim. Deutsche Bank's motion has been fully briefed as of 8 July 2022. Discovery is stayed pending resolution of Deutsche Bank's motion.

In June 2014, HSBC, as trustee, brought an action in New York state court against Deutsche Bank to revive a prior action, alleging that Deutsche Bank failed to repurchase mortgage loans in the ACE Securities Corp. 2006-SL2 RMBS offering. The revival action was stayed during the pendency of an appeal of the dismissal of a separate action wherein HSBC, as trustee, brought an action against Deutsche Bank alleging breaches of representations and warranties made by Deutsche Bank concerning the mortgage loans in the same offering. On 29 March 2016, the court dismissed the revival action. Plaintiff appealed and on 19 November 2019, the appellate court affirmed the dismissal. On 19 December 2019, plaintiff filed a motion to appeal to the New York Court of Appeals in the appeals court, which was denied on 13 February 2020. On 16 March 2020, plaintiff petitioned the New York Court of Appeals for leave to appeal, which was granted on 1 September 2020. The Court of Appeals heard argument on 19 May 2022 and affirmed the dismissal of the action on 16 June 2022.

Deutsche Bank is a defendant in cases concerning two RMBS trusts that were brought initially by RMBS investors and subsequently by HSBC, as trustee, in New York state court. The cases allege breaches of loan-level representations and warranties in the ACE Securities Corp. 2006-FM1 and ACE Securities Corp. 2007-ASAP1 RMBS offerings, respectively. Both cases were dismissed on statute of limitations grounds by the trial court on 28 March 2018. Plaintiff appealed the dismissals. On 25 April 2019, the First Department affirmed the dismissals on claims for breach of representations and warranties and for breach of the implied covenant of good faith and fair dealing, but reversed the denial of the motions for leave to file amended complaints alleging failure to notify the trustee of alleged representations and warranty breaches. HSBC filed amended complaints on 30 April 2019, and Deutsche Bank filed its answers on 3 June 2019. Discovery is ongoing. On 25 October 2019, plaintiffs filed two complaints seeking to revive, under Sec. 205(a) of the New York Civil Practice Law and Rules, the breach of representations and warranties claims as to which dismissal was affirmed in the case concerning ACE 2006-FM1. On 16 December 2019, Deutsche Bank moved to dismiss these actions. The Court granted the motion to dismiss one of the actions on 2 July 2022. The other action was stayed pending the decision of the New York Court of Appeals in the SL2 case described above, but Deutsche is seeking to lift the stay and renew its motion to dismiss in light of the Court of Appeals' recent ruling in the SL2 case.

In the actions against Deutsche Bank solely as an underwriter of other issuers' RMBS offerings, Deutsche Bank has contractual rights to indemnification from the issuers, but those indemnity rights may in whole or in part prove effectively unenforceable where the issuers are now or may in the future be in bankruptcy or otherwise defunct.

Trustee Civil Litigation

Deutsche Bank National Trust Company ("**DBNTC**") and Deutsche Bank Trust Company Americas ("**DBTCA**") (collectively, the "**Trustees**") are defendants in three separate civil lawsuits, and DBNTC is a defendant in a fourth civil lawsuit, brought by investors concerning the Trustees' role as trustees of certain RMBS trusts. The actions generally allege claims for breach of contract, breach of fiduciary duty, breach of the duty to avoid conflicts of interest, negligence and/or violations of the U.S. Trust Indenture Act of 1939, based on the Trustees' alleged failure to perform adequately certain obligations and/or duties as trustee for the trusts.

The four lawsuits include actions by (a) the National Credit Union Administration Board ("**NCUA**"), as an investor in 18 trusts that allegedly suffered total realised collateral losses of more than U.S.$ 3.7 billion; (b) certain CDOs (collectively, "**Phoenix Light**") as an investor in 43 RMBS trusts, and seeking "hundreds of millions of dollars in damages"; (c) Commerzbank AG, as an investor in 50 RMBS trusts, seeking "hundreds of millions of dollars in losses"; and (d) IKB International, S.A. in Liquidation and IKB Deutsche Industriebank A.G. (collectively, "**IKB**"), as an investor in 17 RMBS trusts, originally seeking more than U.S.$ 268 million of damages before IKB voluntarily discontinued its claims as to certain RMBS certificates. In the NCUA case, DBNTC's motion to dismiss the amended complaint was granted in part and denied in part, dismissing NCUA's tort claims but preserving its breach-of-contract claims. Both parties filed motions for partial summary judgment and those motions are fully briefed and pending before the court. On 8 February 2022, the court in the Phoenix Light case granted DBNTC's and DBTCA's motion for summary judgment, denied Phoenix Light's motion for summary judgment, and dismissed the action. On 10 March 2022, Phoenix Light filed a notice of appeal with respect to the court's orders on the motions to dismiss and for summary judgment. That appeal is currently being briefed. On 8 February 2022, the court in the

Commerzbank case granted in part and denied in part DBNTC's and DBTCA's motion for summary judgment, dismissing all of the tort claims and dismissing the breach of contract claim relating to certain of the trusts, and denied Commerzbank's motion for summary judgment in its entirety. Discovery is ongoing. On 27 January 2021, the court in the IKB case granted in part and denied in part the Trustees' motion to dismiss, dismissing certain of IKB's claims but allowing certain of its breach of contract and tort claims to go forward; on 10 May 2021, the Trustees filed a notice of appeal regarding certain aspects of that order and, on 20 May 2021, IKB filed a notice of cross-appeal with respect to other aspects of that order. Those appeals are fully briefed and pending before the court. Discovery is ongoing.

The Group has established contingent liabilities with respect to certain of these matters, but the Group has not disclosed the amounts because it has concluded that such disclosure can be expected to seriously prejudice the outcome of these matters.

Polish Mortgage Matters

Starting in 2016, certain clients of Deutsche Bank Polska S.A. have reached out to Deutsche Bank Polska S.A. alleging that their mortgage loan agreements in foreign currency include unfair clauses and are invalid. These clients have demanded reimbursement of the alleged overpayments under such agreements totaling over € 328 million with more than 2,600 civil claims having been commenced in Polish courts. This type of cases is an industry wide issue in Poland and other banks are facing similar claims. Deutsche Bank Polska S.A. has and will take necessary legal actions to defend itself and challenge such claims in courts.

The Group has established a portfolio provision to cover potential losses from the existing and potential litigation related to mortgage loans in foreign currency. The amount of the portfolio provision is approximately € 222 million and may be subject to future changes in estimate depending in particular on the jurisprudence of local courts as well as the Court of Justice of European Union.

Postbank Voluntary Public Takeover Offer

On 12 September 2010, Deutsche Bank announced the decision to make a voluntary takeover offer for the acquisition of all shares in Deutsche Postbank AG ("**Postbank**"). On 7 October 2010, the Bank published its official takeover offer and offered Postbank shareholders a consideration of € 25 for each Postbank share. This offer was accepted for a total of approximately 48.2 million Postbank shares.

In November 2010, a former shareholder of Postbank, Effecten-Spiegel AG, which had accepted the takeover offer, brought a claim against Deutsche Bank alleging that the offer price was too low and was not determined in accordance with the applicable German laws. The plaintiff alleges that Deutsche Bank had been obliged to make a mandatory takeover offer for all shares in Postbank, at the latest, in 2009 as the voting rights of Deutsche Post AG in Postbank had to be attributed to Deutsche Bank pursuant to Sec. 30 of the German Takeover Act. Based thereon, the plaintiff alleges that the consideration offered by Deutsche Bank for the shares in Postbank in the 2010 voluntary takeover offer needed to be raised to € 57.25 per share.

The Regional Court Cologne (*Landgericht*) dismissed the claim in 2011 and the Cologne appellate court dismissed the appeal in 2012. The Federal Court set this judgment aside and referred the case back to the Higher Regional Court Cologne to take evidence on certain allegations of the plaintiff.

Starting in 2014, additional former shareholders of Postbank, who accepted the 2010 tender offer, brought similar claims as Effecten-Spiegel AG against Deutsche Bank which are pending with the Regional Court Cologne and the Higher Regional Court of Cologne, respectively. On 20 October 2017, the Regional Court Cologne handed down a decision granting the claims in a total of 14 cases which were combined in one proceeding. The Regional Court Cologne took the view that Deutsche Bank was obliged to make a mandatory takeover offer already in 2008 so that the appropriate consideration to be offered in the takeover offer should have been € 57.25 per Postbank share (instead of € 25). The additional consideration per share owed to shareholders which have accepted the takeover offer would thus amount to € 32.25. Deutsche Bank appealed this decision and the appeal was assigned to the 13th Senate of the Higher Regional Court of Cologne, which also heard the appeal of Effecten-Spiegel AG.

In 2019 and 2020 the Higher Regional Court Cologne called a number of witnesses in both cases. The individuals heard included current and former board members of Deutsche Bank, Deutsche Post AG and Postbank as well as other persons involved in the Postbank transaction. In addition, the Higher Regional Court Cologne issued orders for the production of relevant transaction documents entered into between Deutsche Bank and Deutsche Post AG in 2008 and 2009. Deutsche Bank had therefore deposited the originals of these documents with the court in 2019.

On 16 December 2020, the Higher Regional Court Cologne handed down a decision and fully dismissed the claims of Effecten-Spiegel AG. Further, in a second decision handed down on 16 December 2020, the Higher Regional Court Cologne allowed the appeal of Deutsche Bank against the decision of the Regional Court Cologne dated 20 October 2017 and dismissed all related claims of the relevant plaintiffs. The Higher Regional Court Cologne has granted leave to appeal to the German Federal Court of Justice ("**BGH**") as regards both decisions and all relevant plaintiffs have lodged their respective appeals with the BGH end of January and beginning of February 2021, respectively. The BGH held an oral hearing on 13 September 2022. According to its preliminary oral assessment, the BGH tends to again remand both cases back to the lower court (i.e. the Higher Regional Court Cologne) for a further clarification and assessment of relevant facts. It scheduled a separate date for the announcement of a decision on 13 December 2022.

Deutsche Bank has been served with a large number of additional lawsuits filed against Deutsche Bank shortly before the end of 2017, almost all of which are now pending with the Regional Court Cologne. Some of the new plaintiffs allege that the consideration offered by Deutsche Bank AG for the shares in Postbank in the 2010 voluntary takeover should be raised to € 64.25 per share.

The claims for payment against Deutsche Bank in relation to these matters total almost € 700 million (excluding interest).

The Group has established a contingent liability with respect to these matters but the Group has not disclosed the amount of this contingent liability because it has concluded that such disclosure can be expected to seriously prejudice the outcome of these matters.

Further Proceedings Relating to the Postbank Takeover

In September 2015, former shareholders of Postbank filed in the Regional Court Cologne shareholder actions against Postbank to set aside the squeeze-out resolution taken in the shareholders meeting of Postbank in August 2015 (actions for voidance). Among other things, the plaintiffs alleged that Deutsche Bank was subject to a suspension of voting rights with respect to its shares in Postbank based on the allegation that Deutsche Bank failed to make a mandatory takeover offer. The squeeze out is final and the proceeding itself has no reversal effect, but may result in damage payments. The claimants refer to legal arguments similar to those asserted in the Effecten-Spiegel proceeding described above. In a decision on 20 October 2017, the Regional Court Cologne declared the squeeze-out resolution to be void. The court, however, did not rely on a suspension of voting rights due to an alleged failure of Deutsche Bank to make a mandatory takeover offer, but argued that Postbank violated information rights of Postbank shareholders in Postbank's shareholders meeting in August 2015. Postbank has appealed this decision. On 15 May 2020 DB Privat- und Firmenkundenbank AG (legal successor of Postbank due to a merger in 2018) was merged into Deutsche Bank AG. On 3 July 2020 Deutsche Bank AG withdrew the appeal as regards the actions for voidance because efforts and costs to pursue this appeal became disproportionate to the minor remaining economic importance of the case considering that the 2015 squeeze-out cannot be reversed. As a consequence, the first instance judgment which found that Postbank violated the information rights of its shareholders in the shareholders' meeting has now become final.

The legal question of whether Deutsche Bank had been obliged to make a mandatory takeover offer for all Postbank shares prior to its 2010 voluntary takeover may also impact two pending appraisal proceedings (*Spruchverfahren*). These proceedings were initiated by former Postbank shareholders with the aim to increase the cash compensation offered in connection with the squeeze-out of Postbank shareholders in 2015 and the cash compensation offered and annual compensation paid in connection with the execution of a domination and profit and loss transfer agreement (*Beherrschungs- und Gewinnabführungsvertrag*) between DB Finanz-Holding AG (now DB Beteiligungs-Holding GmbH) and Postbank in 2012.

The applicants in the appraisal proceedings claim that a potential obligation of Deutsche Bank to make a mandatory takeover offer for Postbank at an offer price of € 57.25 should be decisive when determining the adequate cash compensation in the appraisal proceedings. The Regional Court Cologne had originally followed this legal view of the applicants in two resolutions. In a decision dated June 2019, the Regional Court Cologne expressly gave up this legal view in the appraisal proceedings in connection with execution of a domination and profit and loss transfer agreement. According to this decision, the question whether Deutsche Bank was obliged to make a mandatory offer for all Postbank shares prior to its voluntary takeover offer in 2010 shall not be relevant for determining the appropriate cash compensation. It is likely that the Regional Court Cologne will take the same legal position in the appraisal proceedings in connection with the squeeze-out. On 1 October 2020, the Regional Court Cologne handed down a decision in the appraisal proceeding concerning the domination and profit and loss transfer agreement (dated 5 December 2012) according to which the annual compensation pursuant to Sec. 304 of the German Stock Corporation Act (*jährliche Ausgleichszahlung*) shall be increased by € 0.12 to € 1.78 per Postbank share and the settlement amount pursuant to Sec. 305 of the German Stock Corporation Act (*Abfindungsbetrag*) shall be increased by € 4.56 to € 29.74 per Postbank share. The increase of the settlement amount is of relevance for approximately 492,000 former Postbank shares whereas the increase of the annual compensation is of relevance for approximately 7 million former Postbank shares. Deutsche Bank as well as the applicants have lodged an appeal against this decision.

The Group has not disclosed whether it has established a provision or contingent liability with respect to this matter because it has concluded that such disclosure can be expected to seriously prejudice its outcome.

Precious Metals Investigations and Litigations

Deutsche Bank received inquiries from certain regulatory and law enforcement authorities, including requests for information and documents, pertaining to investigations of precious metals trading and related conduct. Deutsche Bank has cooperated with these investigations. On 29 January 2018, Deutsche Bank entered into a U.S.$ 30 million settlement with the U.S. Commodity Futures Trading Commission ("**CFTC**") concerning spoofing, and manipulation and attempted manipulation in precious metals futures and of stop loss orders. On 8 January 2021, Deutsche Bank entered into a deferred prosecution agreement with the U.S. Department of Justice concerning spoofing and the Foreign Corrupt Practices Act conduct. As part of its obligations in the deferred prosecution agreement, Deutsche Bank agreed to pay approximately U.S.$ 8 million, of which approximately U.S.$ 6 million would be credited by virtue of the aforementioned CFTC resolution.

Deutsche Bank is a defendant in two consolidated class action lawsuits pending in the U.S. District Court for the Southern District of New York. The suits allege violations of U.S. antitrust law, the U.S. Commodity Exchange Act and related state law arising out of the alleged manipulation of gold and silver prices through participation in the Gold and Silver Fixes. Deutsche Bank has reached agreements to settle the Gold action for U.S.$ 60 million and the Silver action for U.S.$ 38 million. The court granted final approval to the settlement in the silver action on 15 June 2021 granted final approval to the Gold action on 4 May 2022.

Pre-Release ADRs

Deutsche Bank and certain affiliates have received inquiries from certain European regulatory, tax and law enforcement authorities, including requests for documents and information, with respect to American Depositary Receipts (ADRs), including ADRs that have been issued on a "pre-release" basis ("**pre-release ADRs**"). Deutsche Bank is cooperating with these inquiries.

Russia/UK Equities Trading Investigation

Deutsche Bank has investigated the circumstances around equity trades entered into by certain clients with Deutsche Bank in Moscow and London. The total volume of transactions reviewed is significant. Deutsche Bank's internal investigation of potential violations of law, regulation and policy and into the related internal control environment has concluded, and Deutsche Bank has assessed the findings identified during the investigation; to date it has identified certain violations of Deutsche Bank's policies and deficiencies in Deutsche Bank's control environment. Deutsche Bank has advised regulators and law enforcement authorities in several jurisdictions (including Germany, Russia, the UK and the United States) of this investigation. Deutsche Bank has taken disciplinary measures with regards to certain individuals in this matter.

On 30 January 2017, the DFS and the FCA announced settlements with the Bank related to their investigations into this matter. The settlements conclude the DFS's and the FCA's investigations into the Bank's AML control function in its investment banking division, including in relation to the equity trading described above. Under the terms of the settlement agreement the DFS issued a Consent Order pursuant to which Deutsche Bank agreed to pay a civil monetary penalty of U.S.$ 425 million and to engage an independent monitor for a term of up to two years. Under the terms of the settlement agreement with the FCA, Deutsche Bank agreed to pay a civil monetary penalty of approximately GBP 163 million. On 30 May 2017, the Federal Reserve announced its settlement with the Bank resolving this matter as well as additional AML issues identified by the Federal Reserve. Deutsche Bank paid a penalty of U.S.$ 41 million. Deutsche Bank also agreed to retain independent third parties to assess its Bank Secrecy Act/AML program and review certain foreign correspondent banking activity of its subsidiary Deutsche Bank Trust Company Americas. The Bank was required to submit written remediation plans and programs.

Deutsche Bank continues to cooperate with regulators and law enforcement authorities, including the DOJ which has its own investigation into these securities trades that is understood to be ongoing. The Group has recorded a provision with respect to the remaining investigation. The Group has not disclosed the amount of this provision because it has concluded that such disclosure can be expected to seriously prejudice the outcome of this matter.

Sovereign, Supranational and Agency Bonds (SSA) Investigations and Litigations

Deutsche Bank has received inquiries from certain regulatory and law enforcement authorities, including requests for information and documents, pertaining to SSA bond trading. Deutsche Bank is cooperating with these investigations.

On 20 December 2018, the European Commission sent a Statement of Objections to Deutsche Bank regarding a potential breach of EU antitrust rules in relation to secondary market trading of SSA bonds denominated in U.S. dollars. Deutsche Bank proactively cooperated with the European Commission in this matter and as a result was granted immunity. On 28 April 2020, the European Commission issued its decision, finding that Deutsche Bank and three other banks breached EU antitrust rules. However, in accordance with the European Commission's guidelines, no fine was imposed on Deutsche Bank given its immunity status.

Deutsche Bank is a defendant in several putative class action complaints filed in the U.S. District Court for the Southern District of New York by alleged direct and indirect market participants claiming violations of antitrust law and common law related to alleged manipulation of the secondary trading market for SSA bonds. Deutsche Bank reached an agreement to settle the actions by direct market participants for the amount of U.S.$ 48.5 million and recorded a provision in the same amount. The settlement received final court approval on 2 April 2021. The action filed on behalf of alleged indirect market participants was voluntarily dismissed by the plaintiffs.

Deutsche Bank is also a defendant in putative class actions filed on 7 November 2017 and 5 December 2017 in the Ontario Superior Court of Justice and Federal Court of Canada, respectively, claiming violations of antitrust law and the common law relating to alleged manipulation of secondary trading of SSA bonds. The complaints rely on allegations similar to those in the U.S. class actions involving SSA bond trading, and seek compensatory and punitive damages. The cases are in their early stages.

Deutsche Bank was named as a defendant in a consolidated putative class action filed in the U.S. District Court for the Southern District of New York alleging violations of U.S. antitrust law and a claim for unjust enrichment relating to Mexican government bond trading. In October 2019, the court granted defendants' motion to dismiss plaintiffs' consolidated amended complaint without prejudice. In December 2019, plaintiffs filed a Second Amended Complaint, which the court dismissed without prejudice on 30 November 2020. On 20 May 2021, plaintiffs filed a motion for reconsideration, which was denied on 30 March 2022. On 22 January 2021, Deutsche Bank was notified that the Mexican competition authority, COFECE, reached a resolution that imposes fines against DB Mexico and two of its former traders, as well as six other financial institutions and nine other traders, for engaging in alleged monopolistic practices in the Mexican government bond secondary market. DB Mexico has appealed. The fine against DB Mexico was approximately U.S.$ 427,000.

Deutsche Bank was also named as a defendant in several putative class action complaints filed in the U.S. District Court for the Southern District of New York alleging violations of antitrust law and common law related to alleged manipulation of the secondary trading market for U.S. Agency bonds; on 3 September 2019, the court denied a motion to dismiss the complaint. Deutsche Bank has reached an agreement to settle the class actions for the amount of U.S.$ 15 million, which amount was already fully reflected in existing litigation reserves and no additional provision was taken for this settlement amount. The court granted preliminary approval over the settlement on 29 October 2019, supported by an opinion issued 8 November 2019. The court held a final fairness hearing on 9 June 2020. On 18 June 2020, the court entered final judgment approving the class action settlement with Deutsche Bank and separately as to the class action settlements with the other defendants which will result in a total of U.S.$ 386.5 million paid to the settlement class. A separate action was filed in the U.S. District Court for the Middle District of Louisiana on 23 September 2019, which was dismissed with prejudice as to Deutsche Bank by stipulation of the parties on 30 October 2019.

Other than as noted above, the Group has not disclosed whether it has established provisions or contingent liabilities with respect to the matters referred to above because it has concluded that such disclosure can be expected to seriously prejudice their outcome.

Transfer of Lease Assets

In December 2017, a claim for damages was filed with the Regional Court Frankfurt am Main against Deutsche Bank AG in the amount of approximately € 155 million (excluding interest). In 2006, Deutsche Bank AG (indirectly, through a special-purpose vehicle) entered into transactions according to which the plaintiff transferred certain lease assets to the special-purpose vehicle against, among other things, receipt of a preference dividend. The plaintiff alleges that Deutsche Bank had entered into an agreement with it under which Deutsche Bank provided flawed contractual documentation as a result of which the German tax authorities have disallowed the plaintiff's expected tax savings. The Regional Court Frankfurt am Main fully dismissed the claim on 26 July 2019. The plaintiff has appealed this decision to the Higher Regional Court Frankfurt am Main. After its hearing on 15 July 2021, the Higher Regional Court Frankfurt am Main decided to reject the plaintiff's appeal in full. Leave to a further appeal has not been granted, however, the plaintiff has filed a non-admission complaint with the German Federal Court of Justice which is still pending.

U.S. Treasury Securities Investigations

Deutsche Bank has received inquiries from certain regulatory and law enforcement authorities, including requests for information and documents, pertaining to U.S. Treasuries auctions, trading, and related market activity. Deutsche Bank has cooperated with these investigations.

Deutsche Bank's subsidiary Deutsche Bank Securities Inc. ("**DBSI**") was a defendant in several putative class actions alleging violations of U.S. antitrust law, the U.S. Commodity Exchange Act and common law related to the alleged manipulation of the U.S. Treasury securities market. These cases have been consolidated in the Southern District of New York. On 16 November 2017, plaintiffs filed a consolidated amended complaint, which did not name DBSI as a defendant. On 11 December 2017, the court dismissed DBSI from the class action without prejudice. On 31 March 2021, the court granted the defendants' motion to dismiss. On 14 May 2021, the plaintiffs filed a second amended complaint, which also did not name DBSI as a defendant. Defendants filed a motion to dismiss this second amended complaint, which was granted on 31 March 2022. The plaintiffs filed a notice of appeal on 28 April 2022.

On 18 June 2020, the CFTC entered an order pursuant to settlement with DBSI for alleged spoofing by two Tokyo-based traders between January and December 2013. Without admitting or denying the findings or conclusions therein, Deutsche Bank consented to the entry of the order, including a civil monetary fine of U.S.$ 1.25 million.

U.S. Treasury Spoofing Litigation

Following the Bank's settlement with the CFTC, five separate putative class actions were filed in the Northern District of Illinois against Deutsche Bank AG and DBSI. The cases allege that Deutsche Bank and other unnamed entities participated in a scheme from January to December 2013 to spoof the market for Treasuries futures and options contracts and Eurodollar futures and options contracts. Plaintiffs filed a consolidated complaint on 13 November 2020. Deutsche Bank AG and DBSI filed a motion to dismiss on 15 January 2021; briefing on the motion to dismiss concluded on 16 April 2021. On 20 September 2021, the judge ordered supplemental briefing on the issues of Article III standing and jurisdictional discovery. Plaintiffs filed their opening brief on 11 October 2021 with briefing complete on 1 November 2021.

The Group has not disclosed whether it has established a provision or contingent liability with respect to these matters because it has concluded that such disclosure can be expected to seriously prejudice their outcome.

Statement of no Significant Change in Financial Position

There has been no significant change in the financial position of Deutsche Bank Group since 30 June 2022.

REGULATORY DISCLOSURES

The following table provides a summary of the information disclosed under Regulation (EU) No. 596/2014 over the last 12 months and which is relevant as at the date of the most recent supplement to this Registration Document:

Date of disclosure	Type of information	Topic
15 November 2021	Ad-hoc Release	Deutsche Bank to issue Additional Tier 1 capital instruments
19 November 2021	Ad-hoc Release	Alexander Wynaendts nominated for election as next Chairman of Deutsche Bank's Supervisory Board
26 January 2022	Ad-hoc Release	Deutsche Bank announcement on capital distributions
28 March 2022	Ad-hoc Release	Deutsche Bank to issue Additional Tier 1 capital instruments

MATERIAL CONTRACTS

In the usual course of its business, Deutsche Bank Group enters into numerous contracts with various other entities. Deutsche Bank Group has not, however, entered into any material contracts outside the ordinary course of its business within the past two years.

DOCUMENTS AVAILABLE

As long as this Registration Document is valid, the following documents will be available in the Investor Relations section of Deutsche Bank's website (https://www.db.com/ir/index_en.htm):

(a) the current Articles of Association (with an English translation where applicable) of the Issuer;

(b) the Annual Report of the Issuer as of 31 December 2021 (English language version);

(c) the Earnings Report of the Issuer as of 31 March 2022 (English language version); and

(d) the Interim Report of the Issuer as of 30 June 2022 (English language version).

INFORMATION INCORPORATED BY REFERENCE

The following documents which have previously been published and have been filed with the CSSF shall be incorporated by reference in, and form part of, this Registration Document (the "**Documents Incorporated by Reference**") to the extent set out in the paragraph entitled "Cross-Reference List of Documents Incorporated by Reference" below:

- the English language version of the Annual Report of the Issuer as of 31 December 2021 (http://dl.bourse.lu/dlp/10151dd6f605e647d1a95c20ad2550a7e3);

- the English language version of the Earnings Report of the Issuer as of 31 March 2022 (http://dl.bourse.lu/dlp/10b28cad8d3e8a4d71b4351eb869b812fb); and

- the English language version of the Interim Report of the Issuer as of 30 June 2022 (https://dl.bourse.lu/dlp/10c0558e1270854a3190687a8e8251008f).

save that any statement contained herein or in a document which is incorporated by reference herein shall be deemed to be modified or superseded for the purpose of this Registration Document to the extent that a statement contained in any such subsequent document which is incorporated by reference herein modifies or supersedes such earlier statement (whether expressly, by implication or otherwise). Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Document. For the avoidance of doubt, the content of any website referred to in this Registration Document does not form part of this Registration Document. The documents listed above will remain publicly available in electronic form for at least ten years after their publication on the websites referred to above. Copies of all documents incorporated by reference in this Registration Document will also be available in electronic form on the Luxembourg Stock Exchange's website (www.bourse.lu) and on the website of the Issuer (www.db.com under "Investor Relations").

Cross-Reference List of Documents Incorporated by Reference

In the subsection "Financial Information concerning Deutsche Bank's Assets and Liabilities, Financial Position and Profits and Losses – Financial Statements" reference is made to Deutsche Bank's consolidated financial statements for the financial year 2021 (as included in the Annual Report 2021 of the Issuer as of 31 December 2021), the unaudited consolidated interim financial information of the Issuer for the three months ended 31 March 2022 (as included in the Earnings Report of the Issuer as of 31 March 2022) and the unaudited consolidated interim financial information of the Issuer for the six months ended 30 June 2022 (as included in the Interim Report of the Issuer as of 30 June 2022).

(1) The following information is set forth in the Annual Report of the Issuer as of 31 December 2021:

	Page(s)
Audited Consolidated Financial Statements 2021	
Consolidated Statement of Income	**190**
Consolidated Statement of Comprehensive Income	**191**
Consolidated Balance Sheet	**192**
Consolidated Statement of Changes in Equity	**193 - 194**
Consolidated Statement of Cash Flows	**195 - 196**
Notes to the Consolidated Financial Statements	**197 - 232**

(2) The following information is set forth in the Earnings Report of the Issuer as of 31 March 2022:

(3) The following information is set forth in the Interim Report of the Issuer as of 30 June 2022:

Any other information referred to in the Documents Incorporated by Reference that is not included in the cross-reference list above is either not relevant for an investor or is covered elsewhere in this Registration Document and shall therefore not be deemed to be included in this Registration Document.

APPENDIX 1 – INFORMATION FOR THE PURPOSES OF ART. 26 (4) OF REGULATION (EU) 2017/1129

Key information on the Issuer
Who is the Issuer of the Securities?
Domicile and legal form, law under which the Issuer operates and country of incorporation Deutsche Bank Aktiengesellschaft (commercial name: Deutsche Bank) is a credit institution and a stock corporation incorporated in Germany and accordingly operates under the laws of Germany. The Legal Entity Identifier (LEI) of Deutsche Bank is 7LTWFZYICNSX8D621K86. The Bank has its registered office in Frankfurt am Main, Germany. It maintains its head office at Taunusanlage 12, 60325 Frankfurt am Main, Germany.
Issuer's principal activities The objects of Deutsche Bank, as laid down in its Articles of Association, include the transaction of all kinds of banking business, the provision of financial and other services and the promotion of international economic relations. The Bank may realise these objectives itself or through subsidiaries and affiliated companies. To the extent permitted by law, the Bank is entitled to transact all business and to take all steps which appear likely to promote the objectives of the Bank, in particular to acquire and dispose of real estate, to establish branches at home and abroad, to acquire, administer and dispose of participations in other enterprises, and to conclude enterprise agreements. Deutsche Bank is organized into the following segments: — Corporate Bank (CB); — Investment Bank (IB); — Private Bank (PB); — Asset Management (AM); — Capital Release Unit (CRU); and — Corporate & Other (C&O). In addition, Deutsche Bank has a country and regional organizational layer to facilitate a consistent implementation of global strategies. The Bank has operations or dealings with existing and potential customers in most countries in the world. These operations and dealings include working through: — subsidiaries and branches in many countries; — representative offices in many other countries; and — one or more representatives assigned to serve customers in a large number of additional countries.

Major shareholders, including whether it is directly or indirectly owned or controlled and by whom

Deutsche Bank is neither directly nor indirectly majority-owned or controlled by any other corporation, by any government or by any other natural or legal person severally or jointly.

Pursuant to German law and Deutsche Bank's Articles of Association, to the extent that the Bank may have major shareholders at any time, it may not give them different voting rights from any of the other shareholders.

Deutsche Bank is not aware of arrangements which may at a subsequent date result in a change of control of the company.

The German Securities Trading Act (*Wertpapierhandelsgesetz*) requires investors in publicly-traded corporations whose investments reach certain thresholds to notify both the corporation and the German Federal Financial Supervisory Authority (*Bundesanstalt für Finanzdienstleistungsaufsicht*) of such change within four trading days. The minimum disclosure threshold is 3 per cent. of the corporation's issued voting share capital. To the Bank's knowledge, there are only five shareholders holding more than 3 per cent. of Deutsche Bank shares or to whom more than 3 per cent. of voting rights are attributed, and none of these shareholders holds more than 10 per cent. of Deutsche Bank shares or voting rights.

Key managing directors

The key managing directors of the issuer are members of the issuer's Executive Board. These are: Christian Sewing, James von Moltke, Karl von Rohr, Fabrizio Campelli, Bernd Leukert, Alexander von zur Mühlen, Christiana Riley, Rebecca Short, Prof. Dr. Stefan Simon and Olivier Vigneron.

Statutory auditors

With effect as of 1 January 2020, Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft ("**EY**") has been appointed as independent auditor. EY is a member of the chamber of public accountants (*Wirtschaftsprüfer-kammer*).

What is the key financial information regarding the Issuer?

The key financial information included in the tables below as of and for the financial years ended 31 December 2020 and 31 December 2021 has been extracted from the audited consolidated financial statements prepared in accordance with IFRS as issued by the International Accounting Standards Board (IASB) and endorsed by the European Union as of 31 December 2021. The key financial information included in the tables below as of 30 June 2022 and for the six months ended 30 June 2021 and 30 June 2022 has been extracted from the unaudited consolidated interim financial information prepared as of 30 June 2022.

Statement of income (in million Euro)	**Six months ended 30 June 2022 (unaudited)**	**Year ended 31 December 2021**	**Six months ended 30 June 2021 (unaudited)**	**Year ended 31 December 2020**
Net interest income	6,248	11,155	5,459	11,526
Commissions and fee income	5,257	10,934	5,313	9,424

Provision for credit losses	525	515	144	1,792
Net gains (losses) on financial assets/liabilities at fair value through profit or loss	2,070	3,045	2,320	2,465
Profit (loss) before income taxes	3,205	3,390	2,754	1,021
Profit (loss)	2,438	2,510	1,865	624

Balance sheet (amounts in million Euro)	**30 June 2022 (unaudited)**	**31 December 2021**	**31 December 2020**
Total assets	1,386,660	1,323,993	1,325,259
Senior debt	78,583	81,629	93,391
Subordinated debt	11,365	8,603	7,352
Loans at amortized cost	488,430	471,319	426,995
Deposits	612,583	603,750	568,031
Total equity	68,885	68,030	62,196
Common Equity Tier 1 capital ratio	13.0 %	13.2 %	13.6 %
Total capital ratio (reported / phase-in)	17.6 %	17.8 %	17.8 %
Leverage ratio (reported / phase-in)	4.3 %	4.9 %	4.8 %

What are the key risks that are specific to the Issuer?

The Issuer is subject to the following key risks:

Macroeconomic, Geopolitical and Market Environment: As a corporate and investment bank with a large private client franchise, our businesses are materially affected by global macroeconomic and financial market conditions. Significant challenges may arise from economic growth prospects, the interest rate environment, inflationary pressure, supply chain disruptions, geopolitical risks as well as higher market volatility, potential deterioration of international trade relations, and weakness of global, regional and national economic conditions. Such risks exist in particular from the COVID-19 pandemic and its ongoing impacts, and the large-scale Russian military action against Ukraine. Other risks exist with respect to China and from political and economic instability in key markets.

Business and Strategy: Our results of operation and financial condition have in the past been negatively impacted by the challenging market environment, uncertain macroeconomic and geopolitical conditions, lower levels of client activity, increased competition and regulation, and the immediate impact of our strategic decisions. If we are unable to improve our profitability, we may be unable to meet our strategic aspirations, and may have difficulty maintaining capital, liquidity and leverage at levels expected by market participants and our regulators.

Regulation and Supervision: Regulatory reforms enacted and proposed in response to weaknesses in the financial sector, together with increased regulatory scrutiny more generally, have had and continue to have a significant impact on us and may adversely affect our business and ability to execute our strategic plans. Competent regulators may prohibit us from making dividend payments or payments on our regulatory capital instruments or take other actions if we fail to comply with regulatory requirements.

Internal Control Environment: A robust and effective internal control environment and adequate infrastructure (comprising people, policies and procedures, controls testing and IT systems) are necessary to ensure that we conduct our business in compliance with the laws, regulations and associated supervisory expectations applicable to us. We have identified the need to strengthen our internal control environment and infrastructure and have embarked on initiatives to accomplish this. If these initiatives are not successful or proceed too slowly, our reputation, regulatory position and financial condition may be materially adversely affected, and our ability to achieve our strategic ambitions may be impaired.

Litigation, Regulatory Enforcement Matters and Investigations: We operate in a highly and increasingly regulated and litigious environment, potentially exposing us to liability and other costs, the amounts of which may be substantial and difficult to estimate, as well as to legal and regulatory sanctions and reputational harm.

Environmental, Social and Governance (ESG)-Related Changes: The impacts of rising global temperatures, and the enhanced focus on climate change and the transition to a "net-zero" economy from society, our regulators and the banking sector, have led to the emergence of new and increasing sources of financial and non-financial risks. These include the physical risks arising from extreme weather events which are growing in frequency and severity, transition risks as carbon-intensive sectors are faced with higher taxation, reduced demand and potentially restricted access to financing, and risks relating to the portrayal of ESG aspect of activities. These risks can impact Deutsche Bank across a broad range of financial and non-financial risk types.