



Interim Report as of June 30, 2020

Financial summary

	Three months ended			Six months ended	
	Jun 30, 2020	Jun 30, 2019	Dec 31, 2019	Jun 30, 2020	Jun 30, 2019
Group financial targets					
Post-tax return on average tangible shareholders' equity ¹	(0.6) %	(24.3) %	(12.6) %	(0.5) %	(11.8) %
Adjusted costs ex. transformation charges, in € bn. ²	4.9	5.3	5.1	10.4	11.3
Cost/income ratio ³	85.4 %	112.6 %	119.6 %	87.1 %	102.8 %
Common Equity Tier 1 capital ratio	13.3 %	13.4 %	13.6 %	13.3 %	13.4 %
Leverage ratio (fully loaded)	4.2 %	3.9 %	4.2 %	4.2 %	3.9 %
Statement of Income					
Total net revenues, in € bn.	6.3	6.2	5.3	12.6	12.6
Provision for credit losses, in € bn.	0.8	0.2	0.2	1.3	0.3
Total noninterest expenses, in € bn.	5.4	7.0	6.4	11.0	12.9
Profit (loss) before tax, in € bn.	0.2	(0.9)	(1.3)	0.4	(0.7)
Profit (loss), in € bn.	0.1	(3.1)	(1.5)	0.1	(2.9)
Profit (loss) attributable to Deutsche Bank shareholders, in € bn.	(0.1)	(3.3)	(1.6)	(0.1)	(3.2)
Balance Sheet⁴					
Total assets, in € bn.	1,407	1,436	1,298	1,407	1,436
Net assets (adjusted), in € bn.	986	1,022	946	986	1,022
Loans (gross of allowance for loan losses), in € bn.	442	419	434	442	419
Deposits, in € bn.	573	577	572	573	577
Allowance for loan losses, in € bn.	5	4	4	5	4
Shareholders' equity, in € bn.	55	59	56	55	59
Resources⁴					
Risk-weighted assets, in € bn.	331	347	324	331	347
Thereof: Operational Risk RWA, in € bn.	71	84	73	71	84
Leverage exposure, in € bn.	1,192	1,304	1,168	1,192	1,304
Tangible shareholders' equity (Tangible book value), in € bn.	49	52	50	49	52
Liquidity reserves in € bn.	232	246	222	232	246
Employees (full-time equivalent)	86,824	90,866	87,597	86,824	90,866
Branches	1,920	1,994	1,931	1,920	1,994
Ratios					
Post-tax return on average shareholders' equity	(0.6) %	(21.2) %	(11.1) %	(0.4) %	(10.2) %
Provision for credit losses as % of loans, in bps	69	15	23	57	14
Loan-to-deposit ratio	77.1 %	72.7 %	75.8 %	77.1 %	72.7 %
Leverage ratio (phase-in)	4.3 %	4.2 %	4.3 %	4.3 %	4.2 %
Liquidity coverage ratio	144 %	147 %	141 %	144 %	147 %
Per Share information					
Basic earnings per share	€(0.15)	€(1.66)	€(0.72)	€(0.13)	€(1.59)
Diluted earnings per share	€(0.15)	€(1.66)	€(0.72)	€(0.13)	€(1.59)
Book value per basic share outstanding	€26.22	€27.77	€26.37	€26.22	€27.77
Tangible book value per basic share outstanding	€23.31	€24.49	€23.41	€23.31	€24.49

¹ Based on profit (loss) attributable to Deutsche Bank shareholders after AT1 coupon assumed accruals. For further information, please refer to "Supplementary Information: Non-GAAP Financial Measures" of this report.

² The reconciliation of adjusted costs is provided in section "Supplementary Information: Non-GAAP Financial Measures/ Adjusted costs" of this document.

³ Total noninterest expenses as a percentage of net interest income before provision for credit losses, plus noninterest income.

⁴ At period end.

Due to rounding, numbers presented throughout this document may not sum precisely to the totals provided and percentages may not precisely reflect the absolute figures.

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Management report

Global economy

Economic growth (in %) ¹	Jun 30, 2020 ²	Mar 31, 2020	Main driver
Global Economy	(4.8)³	3.1	The COVID-19 pandemic and the measures implemented to contain the spread of the virus led to the sharpest decline in global economic activities in post-war history. As of the end of the first half of 2020 economic activity has recovered to some extent following the substantial and unprecedented response by policymakers as well as the lifting of some regional lockdowns
Of which:			
Industrialized countries	(8.3)	1.7	A number of industrialized countries were affected relatively early by the COVID-19 pandemic and responded with strict containment and extensive policy measures to counteract the economic downturn. By the end of the first half of 2020 some industrialized countries have made progress towards successfully containing the spread of the coronavirus
Emerging markets	(2.6)	4.0	Emerging market economies were affected by the spread and intensity of the COVID-19 pandemic at different paces and at varying degrees. Latin America in particular has been hit rather late by the COVID-19 pandemic. Policy responses varied in this group of countries. In addition, the oil price war impacted economic activities
Eurozone Economy⁴	(20.8)	(2.9)	The COVID-19 pandemic significantly impacted the Eurozone economies. Member states provided substantial fiscal stimulus packages while the European Central Bank (ECB) responded with further monetary easing, particularly with the Pandemic Emergency Purchase Programme (PEPP) and its extension of € 1.35 trillion. With the easing of local lockdown measures, economic activity has begun to recover to some extent, but was still far below pre-crisis levels. European Union (EU) leaders agreed on a massive stimulus plan to support the recovery from the recession following the COVID-19 pandemic
Of which: Germany Economy	(15.3)	(2.6)	The COVID-19 pandemic drove the German economy into a deep recession, with the trough presumably reached in the second quarter of 2020. The German government responded with a broad range of measures and instruments, most notably with the € 130 billion stimulus package and extensive loan-guarantees through the Kreditanstalt für Wiederaufbau (KfW). The massive use of short-time work (Kurzarbeit) helped to limit increases in unemployment. By the end of the first half of 2020 economic activity was still below pre-crisis levels
U.S. Economy⁴	(11.6)	1.0	The U.S. economy was negatively impacted by the Covid-19 pandemic and infections continued to spread towards the end of the first half of 2020. The labor market has been heavily impacted, with jobless claims rising at a record rate. The U.S. government responded with several fiscal packages and the Federal Reserve acted quickly and massively with the aim of keeping liquidity in money and credit markets
Japanese Economy⁴	(9.0)	(2.5)	Japan has been relatively successful in combating the COVID-19 pandemic but has been impacted by slump in export markets. The government delivered two large stimulus packages to counter the negative economic impact of the pandemic
Asia Economy^{4,5}	(3.4)	(3.4)	Asian economies are mostly ahead of the curve in economic recovery as they had to cope with COVID-19 pandemic comparatively early in 2020 and managed to contain the spread of the infection
Of which: Chinese Economy	3.2	(7.5)	China had to cope with COVID-19 pandemic since the first months of 2020 and imposed very extensive quarantine measures in some areas. As the number of infections decreased, these measures were eased. By the end of the first half of 2020 the industrial sector showed strong signs of recovery while the rebound in retail is ongoing

¹ Sources: National Authorities unless stated otherwise.

² Sources: Deutsche Bank Research.

³ Only forecasts on annual basis available.

⁴ Quarterly growth rates in % year over year.

⁵ Including China, India, Indonesia, Republic of Korea, ex Japan.

Banking industry

Jun 30, 2020

Growth year-over-year (in %)	Corporate Lending	Retail Lending	Corporate Deposits	Retail Deposits	Main driver
Eurozone¹	5.8	3.0	16.4	6.4	Corporate loans sharply increased due to drawdown of credit lines during the COVID-19 pandemic while retail lending slightly lost momentum. Significant acceleration in corporate deposit growth (strongest since the start of the monetary union), household deposits expanded at fastest pace since the financial crisis. Private sector was a net saver for the first time ever as deposit volumes exceeded loan volumes
Of which: Germany ¹	6.6	4.4	8.7	5.1	Corporate lending and deposit-taking accelerated substantially due to the COVID-19 pandemic. Mortgage lending maintained its previous momentum while consumer lending slowed down
US	14.6	(0.1)	21.6 ²	21.6 ²	Exceptional growth in corporate loans and total deposits due to precautionary buildup of liquidity (but slowing more recently); significant slowdown in retail lending
China¹	11.8	13.8	11.4	13.1	Moderate acceleration in corporate lending while household lending cooled down moderately. Steady expansion of retail deposits, but surge in corporate deposits

¹ As of May 31, 2020

² Total U.S. deposits as sector breakdown is not available

Investment banking activity levels were very strong in the first half of the year. Debt issuance volumes broke all-time records and surged across issuer types, regions and industries. Equity issuance rose to a multi-year high, driven by secondary offerings, while the IPO market was subdued. Announced M&A transactions, however, fell to the lowest level since 2013. Total investment banking fees reached a new record, led by strong growth in North America. Trading volumes across the board (primarily equities, but also fixed income and derivatives) were much higher than a year ago.

Group results

Profit growth driven by core businesses and lower transformation-related effects

Pre-tax profit was €158 million in the quarter, after transformation-related effects of €280 million and €124 million of bank levy charges. This compares with a pre-tax loss of €946 million in the second quarter of 2019 which included goodwill impairments and other transformation-related effects.

Net profit was €61 million in the quarter. This contrasted to a net loss of €3.1 billion in the prior year quarter which included transformation-related effects of €3.4 billion, predominantly comprising Deferred Tax Asset (DTA) valuation adjustments, goodwill impairments and software impairments. Current quarter results include transformation related effects of €310 million.

For the first six months of 2020, pre-tax profit was €364 million, versus a pre-tax loss of €654 million in the prior year period. Net profit was €126 million, versus a net loss of €2.9 billion in the prior year which was primarily due to the aforementioned transformation-related effects.

Provision for credit losses was €761 million in the quarter, 69 basis points (annualized) of loans, up from €506 million and 44 basis points (annualized) of loans in the first quarter of 2020. This was in line with management expectations and reflects the weaker macro-economic outlook relative to March 31st, a management overlay to account for uncertainties in the outlook as well as downgrades to client credit ratings.

Deutsche Bank reaffirms its guidance for full year 2020 provision for credit losses of between 35-45 basis points of loans.

The **Core Bank**, which excludes the Capital Release Unit, reported second-quarter profit before tax of €753 million, versus pre-tax loss of €180 million in the prior year quarter. This was driven by revenue growth of 6 % and a 19 % reduction in noninterest expenses.

Core Bank adjusted profit before taxes¹ rose 11 % to €935 million. This excludes specific revenue items with a net positive impact of €41 million, transformation charges of €41 million and restructuring and severance charges of €182 million in the quarter. On this basis, the Core Bank generated a post-tax return on tangible equity¹ of 4.3 % in the quarter.

For the first six months, Core Bank profit before tax more than doubled to €1.7 billion. Adjusted profit before tax¹ rose 21 % to €2.0 billion, and post-tax return on tangible equity¹ on this basis was 5.1 %.

The **Capital Release Unit** reported a loss before tax of €595 million, down by 22 % versus the prior year quarter. Revenues were down from €221 million to negative €70 million, reflecting businesses exited or discontinued and the impact of de-risking costs. Noninterest expenses were down by 50 % to €496 million, and adjusted costs ex- transformation charges were 30 % lower at €430 million. This was due to lower internal service cost allocations and lower compensation costs, reflecting headcount reductions, and lower non-compensation costs.

The Capital Release Unit further reduced leverage exposure to €102 billion in the quarter, down by €16 billion. Risk weighted assets (RWAs) were €43 billion, down 4 % in the quarter and down 34 % since the second quarter of 2019. Progress on de-risking in the quarter was partly offset by a rise in Market Risk RWAs driven by volatile financial market conditions.

For the first six months, the Capital Release Unit reported a loss before taxes of €1.4 billion, 4 % higher year-on-year, and reduced leverage exposure by €25 billion. The Unit remains on track to meet its 2022 de-risking targets.

Capital and balance sheet strength

The **CET1 ratio** was 13.3 % at the end of the quarter, up from 12.8 % in the first quarter of 2020. The quarter-on-quarter increase of 42 basis points was driven by several positive factors. These included: the net positive impact of COVID-19 related effects, including the repayment of credit facilities by customers; the benefit of the accelerated implementation of the EU's 'Quick Fix' to Capital Requirement Regulation 2 (CRR2); and further de-risking by the Capital Release Unit during the quarter.

The **leverage ratio** rose by 20 basis points to 4.2 % (fully loaded) in the quarter, primarily reflecting changes to the treatment of pending settlement balances following implementation of the aforementioned 'Quick Fix' to CRR2. On a pro forma basis, excluding cash deposits with the European Central Bank, the fully-loaded leverage ratio rose to 4.4 % at the quarter-end. On a phase-in basis, the leverage ratio rose from 4.1 % to 4.3 % in the quarter.

Liquidity reserves rose by €28 billion to €232 billion in the quarter, driven by the aforementioned reversal of client drawdowns and higher Core Bank deposits. The Liquidity Coverage Ratio rose to 144 % in the quarter, a surplus to regulatory requirements of €64 billion.

Sustainable Finance: new targets and progress on policies

Deutsche Bank published quantifiable targets for sustainability metrics on May 12, 2020, for the first time. By the end of 2025, it aims to increase its volume of ESG financing plus its portfolio of sustainable investments under management to at least €200 billion in total.

The bank strengthened its policy framework in key areas: Fossil Fuels and Equator Principles. As part of its new Fossil Fuels Policy, Deutsche Bank this week announced its commitment to end its business activities in coal mining worldwide by 2025 at the latest. It will also stop financing, with immediate effect, oil and gas projects in the Arctic region or oil sand projects and will review all its existing activities in the oil and gas sector by the end of 2020.

Deutsche Bank also signed the collective commitment on Climate Action of the German financial sector, pledging to align its credit portfolios with the goals of the Paris Agreement. This includes a commitment to introduce methods of measuring their climate impact by the end of 2022 and then regulate them in accordance with national and international climate targets.

¹ For a description of this and other non-GAAP financial measures, see 'Non-GAAP financial measures'

Core Bank revenue growth

In the second quarter, **Core Bank net revenues** were up 6 % year-on-year to €6.4 billion, or 8 % excluding specific items. These items included debt valuation adjustments, a change in the valuation of an investment in the Investment Bank, and Sal. Oppenheim workout activities in the Private Bank.

Corporate Bank net revenues were €1.3 billion, up 3 % year-on-year. Global Transaction Banking revenues rose 4 % to €965 million, while Commercial Banking revenues of €363 million were essentially flat. Excluding credit loss recoveries and the impact of portfolio re-balancing actions, Corporate Bank revenues were slightly lower year-on-year as interest rate headwinds were partly offset by progress in deposit repricing, loan volume growth and balance sheet management.

Investment Bank net revenues were up 46 % year-on-year to €2.7 billion, or up 52 % ex-specific items. Revenues in Fixed Income & Currencies (FIC) Sales & Trading were €2.1 billion, up 39 %, or 46 % ex-specific items. Revenues in the FIC Sales & Trading business, excluding Financing and specific items increased by more than 75 %. Rates recorded its best second-quarter revenues for a decade, while both Foreign Exchange and Emerging Market revenues also saw significant year-on-year growth, while Financing was broadly flat versus the prior year. Origination & Advisory revenues were up 73 % to €639 million due to strong growth in Debt and Equity Origination. Advisory revenues were down significantly reflecting lower levels of market activity.

Private Bank net revenues were €2.0 billion, down 5 % year-on-year. The decline reflected certain items related to the execution of strategic objectives. Revenues were also impacted by COVID-19 and ongoing deposit margin compression which offset the positive impact of continued growth in volumes. Revenues in the Private Bank Germany were €1.2 billion, down 5 %, in part reflecting impacts from the German legal entity merger. Revenues in the Private and Commercial Business International were down 12 % to €324 million, partly reflecting the impact of COVID-19 in Italy and Spain. Wealth Management revenues declined 1 % to €424 million, with business growth largely offsetting headwinds from COVID-19 and interest rates.

As economies re-opened after the initial impact of COVID-19, business volumes in some key areas recovered. The Private Bank made net new client loans of €3 billion and attracted net inflows from investment products of €5 billion, versus €1 billion in the prior year quarter.

Asset Management net revenues were down 8 % to €549 million, primarily due to the non-recurrence of periodic performance fees relating to an infrastructure fund in the prior year quarter.

Assets under Management rose by €45 billion to €745 billion in the quarter, including net inflows of €9 billion which more than reversed outflows of €2 billion in the previous quarter and were more than double the net inflows of the prior year quarter.

For the first six months, Core Bank net revenues grew by 7 % to €12.8 billion, and by 7 % to €12.7 billion excluding specific items.

Further progress on cost reduction

Noninterest expenses were €5.4 billion in the quarter, down 23 % year on year. This reduction was partly driven by the non-recurrence of €1.0 billion of impairments of goodwill in the prior year quarter and a decline in transformation charges to €95 million, versus €351 million in impairments on software and provision for existing service contracts in the prior year quarter.

Adjusted costs ex-transformation charges were down 8 % year-on-year to €4.9 billion in the quarter, and down 10 % to €4.8 billion if adjusted for €92 million in expenses eligible for reimbursement related to Prime Finance. This represents the tenth successive quarter of year-on-year reductions in adjusted costs excluding bank levies and transformation charges. Deutsche Bank re-affirmed its full-year 2020 target of €19.5 billion of adjusted costs ex-transformation charges and the aforementioned expenses eligible for reimbursement, down from €21.5 billion in 2019.

Compensation and benefits expenses excluding transformation charges were down €192 million year-on-year. This was due to headcount reductions of over 4,000 full-time equivalents (FTEs) since the second quarter of 2019, and a net positive impact of changes to deferred compensation expense including the effect of a change in estimate related to service periods. IT costs were reduced by €146 million, mainly due to lower software amortization; spending on IT was broadly stable and in line with target range as the bank continued its investment programme. Professional service fees were cut by €41 million, reflecting disciplined external spend management.

These reductions were partly offset by bank levies of €124 million, including €118 million not included in the first quarter and arising from changes in input assumptions made by the Single Resolution Board.

For the first six months, noninterest expenses were € 11.0 billion, down 15 %. Adjusted costs ex-transformation charges and expenses eligible for reimbursement relating to Prime Finance, were € 10.2 billion, down 10 %, and included bank levies of € 627 million not expected to recur in the second half of 2020.

Group results at a glance

in € m. (unless stated otherwise)	Three months ended				Six months ended			
	Jun 30, 2020	Jun 30, 2019	Absolute Change	Change in %	Jun 30, 2020	Jun 30, 2019	Absolute Change	Change in %
Net revenues:								
Of which:								
Corporate Bank (CB)	1,328	1,294	34	3	2,653	2,636	18	1
Investment Bank (IB)	2,654	1,823	831	46	4,993	3,811	1,182	31
Private Bank (PB)	1,981	2,087	(106)	(5)	4,142	4,212	(70)	(2)
Asset Management (AM)	549	594	(45)	(8)	1,068	1,119	(51)	(5)
Capital Release Unit (CRU)	(70)	221	(291)	N/M	(129)	608	(737)	N/M
Corporate & Other (C&O)	(154)	184	(338)	N/M	(91)	168	(259)	N/M
Total net revenues	6,287	6,203	84	1	12,637	12,554	84	1
Provision for credit losses	761	161	600	N/M	1,267	301	966	N/M
Noninterest expenses:								
Compensation and benefits	2,645	2,813	(168)	(6)	5,334	5,679	(345)	(6)
General and administrative expenses	2,599	3,089	(490)	(16)	5,474	6,159	(685)	(11)
Impairment of goodwill and other intangible assets	0	1,035	(1,035)	N/M	0	1,035	(1,035)	(100)
Restructuring activities	123	50	74	148	197	33	164	N/M
Total noninterest expenses	5,367	6,987	(1,620)	(23)	11,006	12,906	(1,901)	(15)
Profit (loss) before tax	158	(946)	1,104	N/M	364	(654)	1,018	N/M
Income tax expense (benefit)	97	2,204	(2,107)	(96)	238	2,295	(2,057)	(90)
Profit (loss)	61	(3,150)	3,210	N/M	126	(2,949)	3,075	N/M
Profit (loss) attributable to noncontrolling interests	32	40	(8)	(20)	56	63	(7)	(12)
Profit (loss) attributable to Deutsche Bank shareholders and additional equity components	28	(3,190)	3,218	N/M	71	(3,012)	3,083	N/M
Profit (loss) attributable to additional equity components	105	82	23	28	190	162	28	17
Profit (loss) attributable to Deutsche Bank shareholders	(77)	(3,272)	3,195	(98)	(120)	(3,174)	3,055	(96)
Common Equity Tier 1 capital ratio	13.3 %	13.4 %	(0.2) ppt	N/M	13.3 %	13.4 %	(0.2) ppt	N/M
Leverage ratio (fully loaded)	4.2 %	3.9 %	0.2 ppt	N/M	4.2 %	3.9 %	0.2 ppt	N/M
Loans (gross of allowance for loan losses, in € bn) ¹	442	419	23	5	442	419	23	5
Deposits (in € bn) ¹	573	577	(4)	(1)	573	577	(4)	(1)
Employees (full-time equivalent) ¹	86,824	90,866	(4,042)	(4)	86,824	90,866	(4,042)	(4)

N/M – Not meaningful

Prior year segmental information have been restated to the current structure

¹ As of quarter-end.

Segment results

Corporate Bank (CB)

Second-quarter net revenues of €1.3 billion increased by 3 % year-on-year. Revenues benefited from higher credit loss recoveries and the impact of portfolio re-balancing actions. Revenues excluding these effects declined slightly as deposit repricing efforts, year-on-year growth in loan volumes and balance sheet management initiatives were more than offset by ongoing interest rate headwinds.

Global Transaction Banking revenues of €965 million increased by 4 %, principally reflecting higher credit loss recoveries and the impact from portfolio rebalancing actions. Cash Management revenues declined excluding credit loss recoveries as interest headwinds in the U.S. were only partly offset by deposit repricing and balance sheet management initiatives. Trade Finance and Lending revenues were slightly higher, mainly reflecting credit loss recoveries. Securities Services and Trust and Agency Services revenues declined principally reflecting the interest rate headwinds in the U.S.

Reported **Commercial Banking** revenues were flat, supported by the impact of portfolio re-balancing actions. Excluding these actions, revenues declined slightly as interest rate headwinds offset the effects of volume and fee income growth.

Noninterest expenses in the second quarter of €1.1 billion decreased by 27 %, reflecting the absence of a goodwill impairment of €491 million in the prior year period. **Adjusted costs excluding transformation charges** were essentially flat year-on-year as the impact of cost reduction initiatives was offset by higher internal service charge allocations. The second quarter included €81 million of litigation charges.

Provision for credit losses was €145 million compared to €61 million in the prior period. The increase was mainly driven by a worsening macro-economic outlook relative to March 31st and a small number of single names, partly offset by a one-time benefit of a change in accounting for guarantees.

Profit before tax was €77 million. Excluding transformation charges and restructuring and severance expenses, the Corporate Bank generated an adjusted profit before tax of €91 million.

For the **first six months of 2020**, the Corporate Bank reported a **profit before tax** of €208 million. Adjusted for restructuring and severance expenses as well as transformation charges and goodwill impairments, **adjusted profit before tax¹** was €259 million compared to an adjusted profit before tax of €520 million in the first six months of 2019. The decrease was primarily driven by higher provision for credit losses principally reflecting worsening macro-economic outlook and higher litigation charges in 2020.

Corporate Bank results at a glance

in € m. (unless stated otherwise)	Three months ended				Six months ended			
	Jun 30, 2020	Jun 30, 2019	Absolute Change	Change in %	Jun 30, 2020	Jun 30, 2019	Absolute Change	Change in %
Net revenues:								
Global Transaction Banking	965	932	33	4	1,933	1,916	16	1
Commercial Banking	363	362	1	0	721	720	1	0
Total net revenues	1,328	1,294	34	3	2,653	2,636	18	1
Provision for credit losses	145	61	84	136	251	106	145	137
Noninterest expenses:								
Compensation and benefits	254	261	(7)	(3)	527	531	(4)	(1)
General and administrative expenses	852	745	107	14	1,662	1,486	176	12
Impairment of goodwill and other intangible assets	0	491	(491)	N/M	0	491	(491)	N/M
Restructuring activities	0	13	(13)	(99)	5	13	(8)	(60)
Total noninterest expenses	1,106	1,509	(403)	(27)	2,194	2,521	(327)	(13)
Noncontrolling interests	0	0	0	N/M	0	0	0	N/M
Profit (loss) before tax	77	(277)	354	N/M	208	9	199	N/M
Total assets (in € bn) ¹	241	232	9	4	241	232	9	4
Loans (gross of allowance for loan losses, in € bn) ¹	120	118	2	1	120	118	2	1
Employees (front office full-time equivalent) ¹	7,549	7,689	(139)	(2)	7,549	7,689	(139)	(2)

N/M – Not meaningful

Prior year segmental information have been restated to the current structure

¹ As of quarter-end.

Investment Bank (IB)

Second-quarter net revenues were €2.7 billion, a 46 % increase from the prior year period. Excluding specific revenue items, revenues increased by 52 %. Growth in revenues was driven by strong client flows and market conditions, supported by ongoing client re-engagement around our refocused strategy.

Fixed Income & Currency (FIC) Sales & Trading revenues of €2.1 billion increased by 39 % on a reported basis, and by 46 % excluding specific revenue items. Revenues across Rates, Foreign Exchange and Emerging Markets grew significantly benefitting from increased client activity and higher volatility. Credit trading revenues increased on significantly improved performance in Flow Credit across all markets. Financing revenues were broadly flat versus the prior year period but have recovered strongly from the challenging market conditions in the first quarter of 2020.

Origination & Advisory revenues of €639 million increased by 73 % driven by significantly higher Debt Origination revenues, which were up 92 % reflecting record industry volumes and market share gains in Investment Grade debt (Source: Dealogic). Equity Origination revenues were also significantly higher reflecting increased market volumes, these were partially offset by lower Advisory revenues on lower market volumes.

Noninterest expenses declined by 14 % compared to the prior year period to €1.3 billion in part reflecting lower litigation charges. Adjusted costs, excluding transformation charges declined by 7 % versus the prior year quarter principally driven by headcount reductions in 2019 and lower internal service cost allocations.

Provision for credit losses was €363 million or 182 basis points of loans. Provisions for credit losses increased significantly reflecting the impact from COVID-19.

Profit before tax was €956 million in the quarter with a post-tax return on tangible equity of 11.5 %. In the previous year period profit before tax was €218 million with a post-tax return on tangible equity of 2.3 %.

For the first six months of 2020, the Investment Bank reported **profit before tax** of €1.6 billion compared to €470 million in the prior year period. Adjusted for specific revenue items, restructuring and severance as well as transformation charges, **adjusted profit before tax¹** was €1.6 billion compared to an adjusted profit before tax of €440 million in the first six months of 2019. The increase was driven by significantly higher revenues, lower adjusted costs as well as lower litigation charges than in the prior year period partly offset by higher provision for credit losses resulting from COVID-19.

Investment Bank results at a glance

in € m. (unless stated otherwise)	Three months ended				Six months ended			
	Jun 30, 2020	Jun 30, 2019	Absolute Change	Change in %	Jun 30, 2020	Jun 30, 2019	Absolute Change	Change in %
Net revenues:								
Fixed Income, Currency (FIC) Sales & Trading	2,050	1,475	576	39	3,904	3,116	788	25
Equity Origination	120	42	78	184	140	65	75	115
Debt Origination	470	244	226	92	838	536	302	56
Advisory	48	82	(34)	(42)	118	193	(75)	(39)
Origination & Advisory	639	369	269	73	1,096	794	302	38
Other	(35)	(21)	(14)	67	(8)	(99)	91	(92)
Total net revenues	2,654	1,823	831	46	4,993	3,811	1,182	31
Provision for credit losses	363	44	319	N/M	606	51	555	N/M
Noninterest expenses:								
Compensation and benefits	463	482	(18)	(4)	958	984	(26)	(3)
General and administrative expenses	855	1,048	(193)	(18)	1,832	2,267	(435)	(19)
Impairment of goodwill and other intangible assets	0	0	0	N/M	0	0	0	N/M
Restructuring activities	11	15	(4)	(26)	15	21	(6)	(29)
Total noninterest expenses	1,329	1,544	(215)	(14)	2,804	3,272	(467)	(14)
Noncontrolling interests	6	18	(11)	(64)	5	18	(14)	(73)
Profit (loss) before tax	956	218	739	N/M	1,578	470	1,108	N/M
Total assets (in € bn) ¹	594	521	74	14	594	521	74	14
Loans (gross of allowance for loan losses, in € bn) ¹	80	69	10	15	80	69	10	15
Employees (front office full-time equivalent) ¹	4,182	4,604	(422)	(9)	4,182	4,604	(422)	(9)

N/M – Not meaningful

Prior year segmental information have been restated to the current structure

¹ As of quarter-end.

Private Bank (PB)

Second-quarter net revenues of €2.0 billion declined by 5 % versus the prior year period. The decline reflected certain items related to the execution of strategic objectives, including the completion of the German legal entity merger, the alignment of Digital Venture activities and the implementation of a new core banking platform in Italy. Private Bank announced the creation of the International Private Bank in the quarter. Negative impacts on revenues from COVID-19 and the ongoing deposit margin compression were partly offset by growth in business volumes.

Revenues in the **Private Bank Germany** decreased by 5 % to €1.2 billion reflecting certain items related to the execution of strategic objectives, including the completion of the German legal entity merger, and a valuation adjustment on a Digital Venture investment. Impacts from COVID-19 and ongoing deposit margin compression were in part offset by growth in loan volumes and fee income from investment products. The Private Bank Germany generated €2 billion in net new client loans, principally in mortgages and attracted net inflows of €2 billion in investment products.

Private and Commercial Business International revenues of €324 million decreased by 12 %. The decline in revenues was driven by the COVID-19 lockdown, a one-off re-hedging charge in Italy and ongoing deposit margin compression. During the quarter, the business achieved net inflows in investment products of €1 billion.

Wealth Management revenues declined by 1 % to €424 million. The business continued to benefit from its growth investments including continued hiring of relationship managers. Business growth mitigated the revenue decline from ongoing interest rate headwinds as well as impacts from COVID-19 on client activity and lower average assets under management following the decline in market values in the first quarter. Net inflows in investment products were €3 billion in the quarter, across Emerging Markets, Germany and the Americas. Wealth Management also grew lending volumes, with net new client loans of €1 billion in the quarter.

Assets under Management in the Private Bank increased by €30 billion in the quarter reflecting a partial recovery in major equity markets and net asset inflows of €6 billion.

Noninterest expenses of €2.0 billion, decreased by 15 % principally reflecting the absence of a €545 million goodwill impairment recorded in the prior year period. Noninterest expenses in the second quarter of 2020 included €144 million of higher restructuring and severance costs as well as €39 million higher transformation charges as the Private Bank makes progress on the transformation objectives. The quarter included €75 million of litigation charges.

Adjusted costs excluding transformation charges were €1.7 billion, down 4 % despite higher internal service cost allocations. The decline mainly reflected benefits from workforce reductions and reorganization measures. The Private Bank Germany achieved approximately €75 million of merger-related cost synergies in the quarter.

Provision for credit losses increased to €225 million or 39 basis points of loans reflecting the weaker macro-economic outlook relative to March 31st. Provision for credit losses of €62 million in the prior year period benefited from higher gains on portfolio sales.

Loss before tax was €241 million, down 22 % versus the second quarter of last year. Adjusted for specific revenue items, restructuring and severance expenses as well as transformation charges, loss before tax was €80 million.

For the **first six months of 2020**, the Private Bank reported a **loss before tax** of €108 million compared to a loss before tax of €98 million in the prior year period. Adjusted for specific revenue items, restructuring and severance as well as transformation charges and goodwill and impairments **adjusted profit before tax**¹ was €118 million compared to an adjusted profit before tax of €367 million in the first six months of 2019. Compared to the prior year period the decline in adjusted profit before tax was primarily driven by higher provision for credit losses, principally from changes in macro-economic assumptions resulting from COVID-19 and lower gains from portfolio sales.

Private Bank results at a glance

in € m. (unless stated otherwise)	Three months ended				Six months ended			
	Jun 30, 2020	Jun 30, 2019	Absolute Change	Change in %	Jun 30, 2020	Jun 30, 2019	Absolute Change	Change in %
Net revenues:								
Private Bank Germany	1,233	1,291	(59)	(5)	2,559	2,630	(71)	(3)
Private and Commercial Business International ¹	324	366	(42)	(12)	694	725	(32)	(4)
Wealth Management	424	429	(5)	(1)	890	857	33	4
Total net revenues	1,981	2,087	(106)	(5)	4,142	4,212	(70)	(2)
Of which:								
Net interest income	1,253	1,276	(23)	(2)	2,546	2,579	(32)	(1)
Commissions and fee income	674	701	(27)	(4)	1,523	1,444	80	6
Remaining income	54	111	(57)	(51)	73	190	(117)	(62)
Provision for credit losses	225	62	163	N/M	364	169	195	115
Noninterest expenses:								
Compensation and benefits	736	750	(14)	(2)	1,482	1,507	(24)	(2)
General and administrative expenses	1,157	1,054	103	10	2,238	2,128	110	5
Impairment of goodwill and other intangible assets	0	545	(545)	N/M	0	545	(545)	N/M
Restructuring activities	104	(12)	117	N/M	166	(39)	205	N/M
Total noninterest expenses	1,997	2,336	(339)	(15)	3,887	4,141	(254)	(6)
Noncontrolling interests	(0)	(0)	0	(97)	(0)	(0)	0	(86)
Profit (loss) before tax	(241)	(311)	70	(22)	(108)	(98)	(11)	11
Total assets (in € bn)²	290	289	1	0	290	289	1	0
Loans (gross of allowance for loan losses, in € bn) ²	232	222	9	4	232	222	9	4
Assets under Management (in € bn) ²	471	478	(6)	(1)	471	478	(6)	(1)
Net flows (in € bn)	6	4	2	35	7	11	(4)	(39)
Employees (front office full-time equivalent) ²	31,328	32,431	(1,103)	(3)	31,328	32,431	(1,103)	(3)

N/M – Not meaningful

Prior year segmental information have been restated to the current structure

¹ Covers operations in Italy, Spain, Belgium and India

² As of quarter-end

Asset Management (AM)

Second-quarter net revenues of €549 million were 8 % lower, principally due to the non-repetition of periodic performance fees recorded in the prior year period. Management fees of €508 million declined by 6 % reflecting an industry-wide decline in margins, offset by higher other revenues which reflected a favorable change in fair value of guarantees.

Second-quarter net inflows were €9 billion demonstrating the benefits of a diversified business model in a difficult market environment. Net inflows were driven by Passive, Cash and Active Equity which more than offset outflows in fixed income.

Assets under Management of €745 billion increased by €45 billion compared to the prior quarter, mainly driven by positive market performance and net inflows, partly offset by the impact of foreign exchange translation.

Noninterest expenses of €400 million declined by 15 % compared to the prior year period. Adjusted costs excluding transformation charges declined by 13 % reflecting the absence of carried interest related to performance fees recorded in the prior year period as well as successful implementation of cost efficiency initiatives.

Profit before tax was €114 million in the second quarter, an increase of 27 % from the prior year period. Adjusted profit before tax rose 13 % to €132 million.

For the first six months of 2020, Asset Management reported a profit before tax of €224 million versus €186 million for the first six months in 2019.

Asset Management results at a glance

in € m. (unless stated otherwise)	Three months ended				Six months ended			
	Jun 30, 2020	Jun 30, 2019	Absolute Change	Change in %	Jun 30, 2020	Jun 30, 2019	Absolute Change	Change in %
Net revenues:								
Management Fees	508	539	(31)	(6)	1,061	1,048	13	1
Performance and transaction fees	20	66	(46)	(70)	37	77	(39)	(51)
Other	21	(11)	32	N/M	(30)	(6)	(24)	N/M
Total net revenues	549	594	(45)	(8)	1,068	1,119	(51)	(5)
Provision for credit losses	(1)	0	(1)	N/M	(0)	0	(0)	N/M
Noninterest expenses:								
Compensation and benefits	204	228	(24)	(11)	376	427	(51)	(12)
General and administrative expenses	189	217	(28)	(13)	386	413	(26)	(6)
Impairment of goodwill and other intangible assets	0	0	0	N/M	0	0	0	N/M
Restructuring activities	7	27	(19)	(73)	10	29	(18)	(64)
Total noninterest expenses	400	471	(71)	(15)	774	869	(95)	(11)
Noncontrolling interests	36	33	3	9	70	64	7	11
Profit (loss) before tax	114	89	24	27	224	186	38	20
Total assets (in € bn) ¹	10	10	0	3	10	10	0	3
Assets under Management (in € bn) ¹	745	721	24	3	745	721	24	3
Net flows (in € bn)	9	4	5	109	6	7	(0)	(6)
Employees (front office full-time equivalent) ¹	3,901	3,998	(97)	(2)	3,901	3,998	(97)	(2)

N/M – Not meaningful

Prior year segmental information have been restated to the current structure

¹ As of quarter-end.

Capital Release Unit (CRU)

Net revenues in the second quarter of 2020 were negative € 70 million. Revenues were impacted by de-risking costs which were partly offset by the reversal of previously incurred funding valuation adjustments and expenses eligible for reimbursement related to Prime Finance. Net revenues in the second quarter of 2019 were positive € 221 million. The decline versus the prior year period reflected the exit from Equities Sales & Trading business and efforts to resize the Fixed Income operations as part of the creation of the Capital Release Unit in the third quarter of 2019.

Noninterest expenses were € 496 million in the second quarter of 2020 including bank levy contributions of € 54 million. Noninterest expenses in the second quarter of 2019 were € 995 million. The decline in noninterest expenses was principally due to the absence of transformation charges recorded in the prior year period.

Adjusted costs excluding transformation charges were € 430 million in the second quarter of 2020 and declined by 30 % from the prior year quarter. The reductions were driven by lower internal service cost allocations and lower compensation costs, reflecting headcount reductions, and lower non-compensation costs excluding bank levies.

Loss before tax was € 595 million in the quarter compared to a € 766 million loss in the prior year period.

Risk weighted assets were € 43 billion at the end of the second quarter of 2020, slightly lower than in the prior quarter. De-risking benefits of € 3 billion were partly offset by COVID-19 related market driven increases, largely higher market risk RWA. **Leverage exposure** of € 102 billion declined from € 118 billion in the prior quarter driven by de-risking, balance sheet optimization and market movements. Compared to the prior year period, the Capital Release Unit has reduced risk weighted assets by € 22 billion and leverage exposure by € 147 billion.

For the first six months of 2020, the Capital Release Unit reported a **loss before tax** of € 1.4 billion on revenues of negative € 129 million and noninterest expenses of € 1.2 billion. This compares to a loss before tax of € 1.3 billion in the first six months of 2019.

Capital Release Unit results at a glance

in € m. (unless stated otherwise)	Three months ended				Six months ended			
	Jun 30, 2020	Jun 30, 2019	Absolute Change	Change in %	Jun 30, 2020	Jun 30, 2019	Absolute Change	Change in %
Net revenues	(70)	221	(291)	N/M	(129)	608	(737)	N/M
Provision for credit losses	29	(8)	37	N/M	43	(27)	69	N/M
Noninterest expenses:								
Compensation and benefits	45	92	(47)	(51)	97	221	(124)	(56)
General and administrative expenses	451	895	(443)	(50)	1,093	1,711	(619)	(36)
Impairment of goodwill and other intangible assets	0	(0)	0	N/M	0	(0)	0	N/M
Restructuring activities	(0)	8	(9)	N/M	1	10	(9)	(93)
Total noninterest expenses	496	995	(499)	(50)	1,191	1,942	(751)	(39)
Noncontrolling interests	(0)	0	(0)	N/M	(0)	0	(0)	N/M
Profit (loss) before tax	(595)	(766)	171	(22)	(1,362)	(1,307)	(55)	4
Total assets (in € bn)¹	265	380	(114)	(30)	265	380	(114)	(30)
Employees (front office full-time equivalent)¹	536	1,230	(694)	(56)	536	1,230	(694)	(56)

N/M – Not meaningful

Prior year segmental information have been restated to the current structure

¹ As of quarter-end.

Corporate & Other (C&O)

Corporate & Other reported a pre-tax loss of €152 million in the second quarter 2020, compared to a profit before tax of €101 million in the prior year period.

Net revenues were negative €154 million compared to €184 million in the second quarter 2019 principally driven by the non-recurrence of Valuation and Timing gains in the prior year quarter. Funding and liquidity charges also increased compared to the prior year quarter, consistent with the changes in funds transfer pricing.

Noninterest expenses were €40 million, compared to €131 million in the second quarter 2019. This development was due primarily to lower Shareholder Expenses and lower than planned infrastructure expenses where the benefit is retained in Corporate & Other.

For the first six months of 2020 Corporate & Other recorded a loss before tax of €176 million compared to a profit before tax of €86 million in the prior year period. The decline was principally driven by negative movements in Valuation and Timing differences as well as higher funding and liquidity charges.

Corporate & Other results at a glance

in € m. (unless stated otherwise)	Three months ended				Six months ended			
	Jun 30, 2020	Jun 30, 2019	Absolute Change	Change in %	Jun 30, 2020	Jun 30, 2019	Absolute Change	Change in %
Net revenues	(154)	184	(338)	N/M	(91)	168	(259)	N/M
Provision for credit losses	1	2	(2)	(78)	5	2	2	98
Noninterest expenses:								
Compensation and benefits	943	1,001	(58)	(6)	1,893	2,009	(115)	(6)
General and administrative expenses	(905)	(870)	(35)	4	(1,737)	(1,847)	109	(6)
Impairment of goodwill and other intangible assets	0	0	0	N/M	0	0	0	N/M
Restructuring activities	1	(0)	2	N/M	0	(0)	0	N/M
Total noninterest expenses	40	131	(91)	(70)	156	162	(6)	(4)
Noncontrolling interests	(42)	(51)	8	(17)	(75)	(82)	7	(8)
Profit (loss) before tax	(152)	101	(254)	N/M	(176)	86	(262)	N/M
Employees (front office full-time equivalent) ¹	39,327	40,914	(1,587)	(4)	39,327	40,914	(1,587)	(4)

N/M – Not meaningful

Prior year segmental information have been restated to the current structure

¹ As of quarter-end.

Financial position

Assets

in € m. (unless stated otherwise)	Jun 30, 2020	Dec 31, 2019	Absolute Change	Change in %
Cash, central bank and interbank balances	176,391	147,228	29,163	20
Central bank funds sold, securities purchased under resale agreements and securities borrowed	7,517	14,229	(6,712)	(47)
Financial assets at fair value through profit or loss	571,970	530,713	41,257	8
Of which: Trading assets	116,959	110,875	6,084	5
Of which: Positive market values from derivative financial instruments	372,811	332,931	39,880	12
Of which: Non-trading financial assets mandatory at fair value through profit and loss	81,816	86,901	(5,085)	(6)
Financial assets at fair value through other comprehensive income	46,233	45,503	730	2
Loans at amortized cost	437,014	429,841	7,173	2
Remaining assets	168,171	130,160	38,011	29
Of which: Brokerage and securities related receivables	104,036	63,401	40,635	64
Total assets	1,407,296	1,297,674	109,622	8

Liabilities and equity

in € m. (unless stated otherwise)	Jun 30, 2020	Dec 31, 2019	Absolute Change	Change in %
Deposits	572,963	572,208	755	0
Central bank funds purchased, securities sold under repurchase agreements and securities loaned	8,115	3,374	4,741	141
Financial liabilities at fair value through profit or loss	453,736	404,448	49,288	12
Of which: Trading liabilities	43,503	37,065	6,438	17
Of which: Negative market values from derivative financial instruments	355,666	316,506	39,160	12
Of which: Financial liabilities designated at fair value through profit or loss	54,060	50,332	3,728	7
Other short-term borrowings	4,116	5,218	(1,102)	(21)
Long-term debt	153,080	136,473	16,607	12
Remaining liabilities	152,469	113,794	38,675	34
Of which: Brokerage and securities related payables	108,905	71,287	37,618	53
Total liabilities	1,344,479	1,235,515	108,964	9
Total equity	62,817	62,160	657	1
Total liabilities and equity	1,407,296	1,297,674	109,622	8

Movements in assets and liabilities

As of June 30, 2020, the total balance sheet of € 1.4 trillion increased by € 109.6 billion (or 8 %) compared to year-end 2019.

Key drivers for the overall movement were increases in positive and negative market values of derivative financial instruments by € 39.9 billion and € 39.2 billion, respectively, due mainly to moves in interest rates and higher market volatility in the wake of the COVID-19 pandemic.

Brokerage and securities related receivables, which were the main driver for the € 38.0 billion increase in other assets, were up by € 40.6 billion, including a € 22.0 billion increase in pending settlements balances. This was mainly attributable to a seasonal increase in activity levels compared to low year-end levels. This seasonality pattern was also reflected in an increase in brokerage and securities related payables, which contributed € 37.6 billion to the € 38.7 billion increase in other liabilities.

Cash, central bank and interbank balances increased by € 29.2 billion, primarily driven by funds received from the third TLTRO refinancing program of the ECB recognized in long-term debt and from the sale of selected held-to-collect assets.

Central bank funds purchased, securities sold under repurchase agreements and securities loaned, across all applicable balance sheet categories, increased by € 9.8 billion, primarily in the US due to higher client activity under current market conditions. Corresponding assets decreased by € 10.6 billion, mainly attributable to lowered market demands and maturities in the wake of the COVID-19 pandemic.

Loans at amortized cost grew by € 7.2 billion, driven by increased drawdowns towards the end of the first quarter as a repercussion of the increased financing demand from clients due to COVID-19 pandemic. These increases were partially offset by repayments in the course of the second quarter, lower volumes in trade finance and repayments in asset backed securities.

The overall movement of the balance sheet included a decrease of € 11.8 billion due to foreign exchange rate movements. The effects from foreign exchange rate movements are embedded in the movement of the balance sheet line items discussed in this section.

Liquidity

Total Liquidity Reserves were € 232.5 billion as of June 30, 2020, increasing from € 222.3 billion as of December 31, 2019. The increase in Liquidity Reserves was predominantly driven by € 8 billion of methodology changes related to subsidiary liquidity and € 4 billion net benefit from participation in the ECB's TLTRO III.

During Q2, the Bank accessed €30 billion of the ECB's TLTRO III facility. €16 billion of the total funding was used to refinance other maturing central bank facilities and an additional €10 billion of high quality liquid assets (HQLA) were pledged. The residual €4 billion represents the net benefit to the Group's total Liquidity Reserves. Despite elevated liquidity levels, the Bank opted to raise the additional €10 billion of cash as an economically efficient means of pre-positioning liquidity to support client demand and future funding requirements.

Equity

Total equity as of June 30, 2020 increased by € 658 million compared to December 31, 2019. The main factor contributing to this development was an issuance of new additional equity components (Additional Tier 1 securities, treated as equity according to IFRS) of € 1.2 billion on Feb 11, 2020.

Total equity was also impacted by unrealized net gains of financial assets at fair value through other comprehensive income of € 113 million, net of tax as well as rereasurement gains related to defined benefit plans of € 107 million, net of tax and net income attributable to Deutsche Bank shareholders of € 71 million. The increase in equity was partly offset by losses from foreign currency translation of € 460 million, net of tax, mainly resulting from the weakening of the US dollar against the euro and coupons paid on additional equity components of € 349 million.

Strategy

Progress on strategy implementation

In July 2019, we announced a far-reaching transformation strategy to refocus on core strengths vital to our bank's long-term competitiveness, relevance and profitability and to deliver improved returns for our shareholders.

In the second quarter of 2020, we continued to execute on our strategy and made further tangible progress against our objectives despite the challenges associated with the COVID-19 pandemic. We made significant progress in simplifying our structure. We completed the legal entity merger of DB Privat- und Firmenkundenbank AG onto Deutsche Bank AG and launched the International Private Bank (IPB) by combining Wealth Management and Private & Commercial Business International into one unit. In addition, we have announced a strategic partnership with Google Cloud in July 2020. The multi-year partnership is expected to be an important driver of our strategic transformation to create next generation of technology-based financial products for our clients while at the same time generating cost savings and efficiencies. In addition, we made further progress with our Sustainability strategy, including introducing new targets for environmentally sustainable financing and investment.

Managing a robust balance sheet

We remain committed to managing our balance sheet conservatively as we execute on our strategic transformation and navigate through the COVID-19 pandemic. At the end of the second quarter of 2020, the CET1 ratio was 13.3 %, a 42 basis points increase versus the prior quarter and approximately 283 basis points above the regulatory CET1 requirements, principally driven by lower than anticipated credit risk weighted assets (RWAs) and benefits from the EU's 'Quick Fix' to Capital Requirement Regulation (CRR Quick fix). The Total Capital Ratio distance to the maximum distributable amount (MDA) was approximately 245 basis points. We have strengthened the distance to MDA by issuing additional Tier 2 instruments in the second quarter of 2020 adding 37 basis points to the distance to MDA. Our Leverage ratio (fully loaded) benefitted from the revised treatment of pending settlement balances due to the regulatory changes (CRR Quick fix) and improved to 4.2 % in the second quarter of 2020.

Liquidity reserves increased by € 27 billion to € 232 billion in the quarter, a significant recovery compared to the prior quarter driven by reduction in loans, including repayment of committed credit facilities, deposit growth and net benefit from secured financing via Central Bank liquidity facilities, and was partially offset by maturing Capital Markets issuance. The Liquidity Coverage Ratio rose to 144 % in the quarter, a surplus to regulatory requirements of € 64 billion.

Provisions for credit losses increased significantly by € 761 million compared to the prior year quarter, mainly reflecting the impact of the worsened macroeconomic outlook related to the COVID-19 pandemic on the estimation of expected credit losses. For the second quarter of 2020, provision for credit losses included a negative impact from an additional management overlay arising from an update in macro-economic variables but remained comparatively low at 69 basis points (annualized) of loans, partially driven by the relative strength of our loan portfolio and the response to COVID-19 by the German government. For the full year 2020, we reaffirm our guidance that expected credit losses on loans to be between 35 to 45 basis points. Further detail on the calculation of expected credit losses (ECL) is provided in the Management Report section 'Risk Information' in this report.

Sustaining revenue growth in our Core Bank

Our strategic transformation is designed to refocus our Core Bank around our core, market-leading businesses which typically operate in growing markets with attractive return potential. Our Core Bank 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. Revenues in our Core Bank in the second quarter of 2020 increased by 6 % compared to the prior year quarter.

We made progress on our strategic revenue initiatives in the second quarter of 2020. In the Corporate Bank, revenues increased driven by favorable non-recurring items, continued progress in deposit repricing and balance sheet management which more than offset interest rate headwinds and the impact of COVID-19 on client activity. In the Investment Bank, revenues grew as a result of strong market conditions in the quarter as well as from continued client re-engagement, in part thanks to the partnership with the Corporate Bank. In the Private Bank, we continued to grow our businesses and benefitted from pricing efforts to at least partly offset the impact of deposit margin compression and higher funding costs. In Asset Management, DWS continued to see strong inflows in its core focus fund areas, including through its strategic partners and into its Environmental, Social and Governance (ESG) funds.

Delivering further reductions in adjusted costs

An essential element of our transformation strategy is to reduce our cost base while investing in our technology and controls. In the second quarter of 2020, noninterest expenses were €5.4 billion, a reduction year over year of approximately €1.6 billion. Adjusted costs excluding transformation charges and expenses eligible for reimbursement related to Prime Finance were €4.8 billion, a year-over-year reduction of €514 million. We reaffirm our target of adjusted costs excluding transformation charges and expenses eligible for reimbursement related to Prime Finance of €19.5 billion in 2020.

Further de-risking in the Capital Release Unit

The Capital Release Unit (CRU) continued to execute its asset reduction program and to work towards the migration of Deutsche Bank's Prime Finance and Electronic Equities clients, while continuing to reduce cost. So far in 2020, over €5 billion of RWA reductions from de-risking were partly offset by approximately €2 billion of COVID-19 related RWA increases, mostly in market risk RWA. Risk weighted assets were €43 billion at the end of the second quarter of 2020.

Leverage exposure in the CRU declined to €102 billion at the end of the second quarter versus €118 billion at the end of the first quarter of 2020, driven by de-risking, optimization and market movements.

In the second quarter of 2020, CRU continued to de-risk across the portfolio through multiple auctions, whilst also progressing novations from auctions executed in the prior quarter. The division also executed steps that enable the migration of the Prime Finance and Electronic Equities platform.

Noninterest expenses declined by €499 million or 50 % versus the prior year quarter. Adjusted costs excluding Bank Levies and Transformation charges in the CRU declined by €235 million or 38 % versus the prior year quarter. The reduction in adjusted costs was driven by lower internal service cost allocations and lower compensation costs reflecting headcount reductions as well as lower non-compensation direct costs.

CRU remained resilient through the quarter and successfully managed the impacts of COVID-19 on staff, risk management and clients.

Our Sustainability strategy

Since we presented our new strategy in mid-2019, sustainability has become a central component of the bank's "Compete to win" programme. During the past 12 months, we have been working on the dimensions of our sustainability approach. To underline the importance of sustainability, in May 2020 the bank committed itself to the following targets:

- We aim to generate at least €200 billion of sustainable financing and investments cumulatively by 2025. Our footprint in sustainable finance has been continuously growing. Since the beginning of the year to May 31, 2020, we have advised clients on more than twenty transactions, placing sustainable bonds with an underwriting volume of nearly €3.5 billion. We will report against the progress of the €200 billion target annually.
- We have established the Green Bond Framework and issued the first Deutsche Bank green bond in early June.
- In June 2020, we signed the collective commitment on Climate Action of the German financial sector: an initiative aiming to measure and steer the carbon intensity of portfolios. These commitments align with the targets of the Paris Agreement and are designed to contribute to climate protection and development of sustainable, future-oriented economy.
- We have made significant progress with our rules and policies; we have signed the Equator Principles and amended our Fossil Fuel Policies to introduce new commitments.
- We committed to expanding use of electricity from renewable sources for our own operations from ca. 80 % today to 100 % by 2025 globally.

In the future, we will continue working on all dimensions and increasing our sustainable product and services offering.

Impact of COVID-19 on our financial targets

The COVID-19 pandemic has led to changes in the macro-economic and fiscal environment. These impacts have made the implementation of our strategic transformation more difficult. Despite these challenges, we have made progress against our key transformation objectives. While the whole organization was quick to respond to the crisis, the changed environment had affected Deutsche Bank's results of operations, capital ratios and the capital plan that underlies our targets.

The current economic environment could result in both upward and downward pressure on the bank's capital ratios and financial performance, which at this stage are difficult to predict with any certainty. Downward impacts could include increases in credit and market risk RWA from growth in assets as we support our clients, ratings migration on existing credit and higher Value-at-Risk measures in the current volatile market environment as well as higher levels of credit loss provisions. Upward movements in the ratios and improvements in excess capital relative to regulatory minima may result from reversals of COVID-19 related RWA increases, capital deductions from previous quarters or changes to regulation.

For 2020, we reaffirm our near-term objective of adjusted costs excluding transformation charges and expenses eligible for reimbursement related to Prime Finance of € 19.5 billion. For 2022, we reaffirm our CET1 ratio and Leverage ratio targets of at least 12.5 % and approximately 5 %, respectively. Our 2022 CET1 ratio and Leverage ratio targets reflect our belief that the impacts on the ratios resulting from the COVID-19 pandemic will be temporary, together with further mitigation actions, which have been identified and announced, and potential future regulatory action to relieve pressure on bank capital ratios. We are also working towards our targets for Post-tax Return on Average Tangible Equity of 8 % for the Group and of above 9 % for the Core Bank in 2022.

Our Financial Targets

Our key financial targets are:

Near-term objective for 2020

- Adjusted costs excluding transformation charges and expenses eligible for reimbursement related to Prime Finance of € 19.5 billion

Financial Targets for 2022

- Adjusted costs of € 17 billion
- Common Equity Tier 1 capital ratio of at least 12.5 %
- Leverage ratio of ~5 %
- 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 %

Adjusted costs, Adjusted costs excluding transformation charges, Adjusted costs excluding transformation charges and expenses eligible for reimbursement related to Prime Finance as well as Post-tax Return on Average Tangible Equity are non-GAAP financial measures. Please refer to "Non-GAAP Financial Measures" in this report for the definitions of such measures and reconciliations to the IFRS measures on which they are based.

Our Businesses

This section should be read in conjunction with the section Deutsche Bank: Our Organization in the Operating and Financial Review in the Annual Report 2019.

Corporate Bank

In the second quarter of 2020, Corporate Bank continued to make progress on its strategic priorities despite the COVID-19 pandemic. We made further progress on the initiatives to offset the impact of the challenging interest rate environment, including implementation of deposit repricing measures. Growth in volumes and fee income continued with our platform, FinTech and ecommerce payment clients. In Germany, our strategic transformation has progressed, enabling further efficiencies and complexity reduction. In the second quarter of 2020, we have completed the legal entity merger of DB Privat- und Firmenkundenbank AG onto Deutsche Bank AG and signed the Balance of Interest with the workers council. In Asia, we have launched cross product initiatives across our strategic focus areas and made strong progress in technology delivery both for internal platform stability and in client solution development. Finally, to support the newly announced Group-wide sustainable finance targets for 2025, we have defined an ESG strategy for CB, aiming to become a leading sustainable finance provider, supporting the economies' and our clients' transformation towards SDG and climate targets. We established ESG champions in our businesses as well as a dedicated ESG competence team which serves as a specialist partner, driving the implementation of the ESG strategy and empowering product development and client coverage with ESG content.

Investment Bank

The Investment Bank continued to demonstrate tangible progress against our strategic priorities and path to improve profitability. In Rates, Foreign Currency (FX) and Global Emerging Markets (GEM) we continued to benefit from our refocused strategy and saw continued positive momentum across both Institutional and Corporate clients. Our client strategy is benefitting from greater collaboration with the Corporate Bank as well as ongoing focus on deepening relationships with priority clients across both Sales and Trading (FIC) and Origination and Advisory. We have grown revenues across EMEA FIC and GEM as a result of new leadership, risk management and investment in our flow businesses and will continue to deploy our strategy. In Origination and Advisory, we have increased market share in Investment Grade Debt during both the quarter and first half of 2020. Delivery of liquidity models, which integrate with front office trading systems, has enabled reduction in funding costs for the division. The Investment Bank continues to focus on reducing costs and made progress on expense management, migration to single platforms and decommissioning applications within our infrastructure, whilst continuing to invest in technology and automating front to back processes. Finally, we contributed to the ESG group-wide initiative. In the second quarter of 2020 the Investment Bank launched the first ESG-linked foreign exchange transaction in APAC and successfully advised on and placed DB's first Green Bond.

Private Bank

In the Private Bank (PB), we reached important milestones of the strategic agenda in the second quarter of 2020. We decided to combine our Wealth Management (WM) and Private & Commercial Business International (PCBI) into one unit, the International Private Bank (IPB). Altogether, IPB will serve 3.4 million private, wealth and commercial clients with around € 250 billion of assets under management and combined revenues of approximately €3 billion. IPB will have a strong competitive advantage as one of the Eurozone's largest international private banks and the only bank in the Eurozone with a global reach for wealth, high net worth and ultra-high net worth individuals. This will also allow us to centralize our product and infrastructure activities to maximize economies of scale and scope. We completed the merger of DB Privat- und Firmenkundenbank AG onto Deutsche Bank AG, one of the largest bank mergers in the history of the Federal Republic of Germany. This marks an important step in the integration of private client business, which is part of our bank's overall strategy. In Italy, we finalized the implementation of our new core banking platform and successfully concluded a project involving over 4,000 people in the migration. The platform will enable us to realize the cost savings and to grow our business efficiently in attractive growth segments. The Private Bank set itself ambitious targets for ESG, primarily for investment advisory products, which are contributing to the overall ESG targets communicated by the Group.

Asset Management

The asset management industry continues to evolve, with greater competition, persistent margin pressure, and technological disruption, and in response to global events such as the COVID-19 pandemic. In response, Asset Management (AM) has implemented a number of strategic initiatives to support our medium-term targets by 2021 and continue delivering shareholder value through net flows, cost discipline and dividend distributions. The continuing COVID-19 pandemic and its impact on the global economy presents challenges and some opportunities to the asset management industry and to DWS. We responded rapidly to the pandemic by preparing and implementing robust business continuity management to ensure that all employees could remain operational in these unprecedented circumstances. However, we do believe that these are temporary effects and that the core pillars of our medium-term strategy remain intact. In the second quarter of 2020, we have announced a number of organizational changes to help us achieve our strategic ambitions. Our investment platform will operate as one global group with market-leading investment performance and expertise in every region, bringing together our rich and diverse heritage under one umbrella. Our Coverage teams will work globally aligned yet regionally suited, and more focused along client segments. DWS will also create a new product organization with responsibility for the entire product life cycle. Organic growth remains a top priority at DWS. In the first half of 2020, we maintained our strict cost discipline reflecting lower volume related costs as well as COVID-19 related savings. We have further built on our history as an ESG provider as part of ongoing efforts to become a leading ESG-integrated asset manager. We believe our diverse range of well-performing products and investment solutions give us a strong basis for growing assets and profitability in the markets in which we operate.

Outlook

The following section provides an overview of updates to our outlook for the Group and our business divisions for the financial year 2020 and should be read in conjunction with the Outlook section in the Management Report provided in the Annual Report 2019. The statements in our Outlook including the potential impact related to COVID-19 reflect the status as of July 24, 2020.

The Global Economy

The Global Economy Outlook

Economic growth (in %) ¹	2020 ²	2019	Main driver
Global Economy			Global economy is expected to sharply contract in 2020 with only a gradual recovery expected in the second half of 2020. The impact of the COVID-19 pandemic is likely to further severely restrict global trade in goods and services in the second half of 2020. Consumer behavior and spending patterns are not expected to fully normalize before a vaccine is developed and widely available.
GDP	(4.8)	3.1	
Inflation	2.5	3.0	
Of which:			
Industrialized countries			Industrialized countries were severely hit by the COVID-19 pandemic. The service sector in particular almost came to a halt due to the lockdowns introduced. Economic decline even worsened since private households limited their purchases to an absolute minimum. The recovery in the second half of the year will be largely dependent on a normalization of private consumption patterns, the resurgence of global value chains and trade activity overall
GDP	(8.3)	1.7	
Inflation	0.5	1.4	
Emerging markets			Asian emerging market economies should recover relatively well from the COVID-19 pandemic, mainly driven by an expected growth in China while other Emerging markets economies still struggle to contain the spread of the virus, which should affect the pace of the recovery of their economic activities.
GDP	(2.6)	4.0	
Inflation	3.8	4.0	
Eurozone Economy			Economic activities in the Eurozone should recover following the easing of lockdown measures. However, recovery to normalization is expected to take time with a different intensity across countries. Overall, activity levels are expected to remain below pre-crisis levels in the second half of 2020. The ECB (European Central Bank) will continue to support the recovery with policy and easing measures.
GDP	(12.0)	1.2	
Inflation	0.3	1.2	
Of which: German economy			The German economy is expected to gain further momentum in the second half of 2020 following the sharp decline in the first half of 2020 due to the COVID-19 pandemic, supported by the easing of lockdown measures and fiscal responses. The short-term work scheme (Kurzarbeit) should further support dampening the rise in unemployment.
GDP	(9.0)	0.6	
Inflation	0.4	1.3	
US Economy			The U.S. economy faced the worst contraction in the first half of 2020 since the Great Depression and a recovery in the second half of 2020 is only expected to be gradual and uneven as many small businesses have been hit hard by the COVID-19 pandemic. Consumer spending patterns are expected to only normalize when a vaccine will be available. The Federal Reserve confirmed it will continue to support the recovery with all its tools.
GDP	(7.1)	2.3	
Inflation	0.7	1.8	
Japanese Economy			The Japanese economy initially saw a moderate decline, reflecting success as it acted relatively quickly and effectively to contain the spread of the coronavirus. Although Japanese domestic demand is picking up, the weakness of global trade is expected to further dampen the economic recovery for the export-oriented Japanese economy in the second half of 2020.
GDP	(5.9)	0.7	
Inflation	(0.2)	0.5	
Asian Economy³			In the Asian economies, recovery already started in the first half of the year as the COVID-19 pandemic could be brought under control relatively early. Trade between the economies of this region is already picking up. An asynchronous recovery of global trading partners is expected to impact the catch-up process.
GDP	(1.1)	5.2	
Inflation	3.0	2.8	
Of which: Chinese Economy			The Chinese economy should continue its V-shaped recovery from the COVID-19 pandemic. In the second half of 2020 domestic demand is expected to catch up further, while industrial production already mostly recovered in first half of 2020. Fiscal policy is set to support the economy with a further fiscal package, while there is less room for additional monetary easing. However, economic momentum will also depend in particular on the recovery in global trade.
GDP	1.6	6.1	
Inflation	3.0	2.9	

¹ Annual Real GDP Growth (% YoY). Sources: National Authorities unless stated otherwise

² Sources: Deutsche Bank Research

³ Including China, India, Indonesia, Republic of Korea and ex Japan

Our forecasts could be affected by a number of risks. While we expect the global economy to regain momentum in the second half of 2020, resurgence of infections could lead to regional lockdowns again and thus affect economic activities. In addition, the search for effective vaccines could take longer than expected or even be unsuccessful. The disruption of global value chains could threaten the business models of companies and prolong the recession.

Banking Industry

In the second half of 2020, the global banking industry is expected to be further impacted by the recession induced by the COVID-19 pandemic. While equity markets have recovered and made up for most of the losses in the first quarter of 2020, they mostly remain below the pre-crisis peaks as volatility has also receded. With the pandemic unlikely to be over this year due to the absence of a vaccine, setbacks may occur which limit markets' further upward potential, continued quantitative easing by major central banks notwithstanding. Asset and wealth management as well as investment banks' sales & trading revenues may benefit from elevated transaction levels, which may partly be compensated by lower valuations. In corporate finance, the elevated level of capital raises in debt and equity capital markets may slowdown as most larger firms are flush with liquidity. Increasing government bond issuance, on the other hand, may provide for a positive impulse. M&A activity will probably remain subdued.

Like corporate bond issuance, corporate lending in the U.S. and Europe may also slow down significantly and potentially even turn negative over the remainder of the year as companies gradually make use of their liquidity. Household lending is expected to maintain its currently moderate momentum in Europe and to stay flat in the U.S., as uncertainty about the medium-term labor market impact of the crisis is likely to persist for some time. Deposit growth in both regions should slow down, particularly with companies. Loan loss provisions are expected to remain high in the second half of the year, however, they could decrease somewhat compared to the second quarter of 2020. Pressure on capital ratios may continue in both U.S. and Europe.

On Brexit, negotiations between the EU and the U.K. on the withdrawal agreement concluded in 2019 and are now in the phase to determine final future trade arrangements. Against this background, uncertainty regarding the regulation of cross-border activities is likely to continue through 2020. In addition, regulators in Europe are working to finalize their draft proposals on the implementation of the final Basel package, expected to be published by end of 2020.

The Deutsche Bank Group

In July 2019, we announced a far-reaching transformation strategy to refocus on core strengths vital to our bank's long-term competitiveness, relevance and profitability and to deliver significant returns for our shareholders. The macroeconomic, fiscal and regulatory environment has however changed as a result of the COVID-19 pandemic in 2020. This changed environment impacted and will continue to impact our results of operations, capital ratios and the capital plan that underlies our targets.

Despite the challenges associated with the COVID-19 pandemic, we intend to continue executing on our strategy in a disciplined manner in the second half of 2020, by further reducing costs and reducing the size of our balance sheet through continued disposal of assets in the Capital Release Unit. At the same time, we are focused on stabilizing and growing revenues in our Core Bank.

Our most important key performance indicators are shown in the table below:

Key performance indicators

Key performance indicators	Jun 30, 2020	Near-term objectives 2020	Target KPI
Group post-tax return on tangible shareholders equity ¹	(0.5) %	-	8.0 %
Core bank post-tax return on average tangible equity ²	4.1 %	-	above 9 %
Adjusted costs ³	€ 10.2 bn ⁴	€ 19.5 bn ⁴	€ 17 bn
Common Equity Tier 1 capital ratio ⁵	13.3 %	-	at least 12.5 %
Leverage ratio (fully loaded) ⁶	4.2 %	-	~ 5 %
Cost income ratio ⁷	87.1 %	-	70 %

¹ Based on Net Income attributable to Deutsche Bank shareholders. For further information, please refer to "Supplementary Information (Unaudited): Non-GAAP Financial Measures" of this report.

² Based on Core Bank Net Income attributable to Deutsche Bank shareholders. For further information, please refer to "Supplementary Information (Unaudited): Non-GAAP Financial Measures" of this report.

³ Adjusted costs defined as noninterest expenses excluding impairment of goodwill and other intangible assets, litigation charges net and restructuring and severance.

⁴ Adjusted costs excluding transformation charges and expenses eligible for reimbursement related to Prime Finance.

⁵ Further detail on the calculation of this ratio is provided in the Risk Report.

⁶ Further detail on the calculation of this ratio is provided in the Risk Report.

⁷ Noninterest expenses as a percentage of total net revenues, which are defined as net interest income before provision for credit losses plus noninterest income.

For the Group, we expect our Post-tax Return on Average Tangible Shareholders' Equity in 2020 to be negatively affected by costs to execute our strategy as well as the impact of COVID-19 on the broader economic environment. For 2022, we remain committed to work towards our targets for the Post-tax Return on Average Tangible Shareholders' Equity of 8 % for the Group and above 9 % for our Core Bank.

Revenues for the Group are expected to be essentially flat in 2020, mainly as a result of our continued de-risking activities in the Capital Release Unit. Core Bank revenues are expected to be slightly higher in 2020 compared to the previous year based on the strong revenue performance in the first half of the year combined with our expectation of a gradual recovery of the global economy in the second half of 2020. The recovery to normalization however will take time with a different intensity across countries. In addition, we expect our revenues to continue to be impacted from the ongoing low interest rate environment. Although volatility has receded, macroeconomic and market conditions are expected to remain volatile for the remainder of 2020 with substantial uncertainty as to the short and longer term impacts of the COVID-19 pandemic. We may be able to offset some of these negative impacts through our ongoing investment into growth areas.

Provision for credit losses is expected to significantly increase in 2020 due to a continued normalization of provisioning levels, lower recoveries and the impact of COVID-19 to our Expected Credit Loss (ECL) estimates. The majority of these provisions was already taken in the first half of 2020 and we do expect a normalization later in the year. We reaffirm our guidance for the full year 2020 for provision for credit losses of between 35 to 45 basis points of loans. This reflects our expectations of the macroeconomic impact from COVID-19 including the effect of the Government support programs. Further detail on the calculation of expected credit losses (ECL) is provided in the Management Report section 'Risk Information' in this report.

The short-term implications of the COVID-19 pandemic make it difficult for us to accurately reflect the timing and the magnitude of changes to our previous CET1 capital ratio target for 2020. Management believes that significant opportunities exist to support clients which may lead to a temporary increase in risk-weighted assets (RWA). As a result, we currently expect RWA to be slightly higher in 2020 compared to the prior year. Management had taken the deliberate decision early in the second quarter to allow our CET1 ratio to potentially fall modestly and temporarily below our target of at least 12.5 % in order to support clients. The decision to suspend this target in the short-term did not consider the potential for further regulatory changes that could and did benefit our ratio. We remain committed to maintaining a significant buffer above our regulatory requirements at all times. At the end of the second quarter of 2020, our CET1 ratio was 13.3 %, mainly due to lower loan balances driven by higher than expected repayments of credit facilities by clients, initially drawn in reaction to COVID-19. We are therefore cautiously optimistic that the likelihood of falling modestly and temporarily below 12.5% is now significantly lower than was anticipated earlier in the second quarter 2020. However, significant uncertainty remains regarding the economic environment, client behavior and regulatory actions. We also remain committed to supporting clients through this challenging environment. As a result we reaffirm our target for 2022 of a CET1 ratio of at least 12.5 %.

Reflecting the growth in assets from the anticipated increase in client demand described above, we now expect Leverage exposure to be slightly higher compared to year-end 2019 and it is therefore unlikely to reach our original target of a Leverage ratio of 4.5 % for 2020 despite recent legislative changes in the definition of leverage exposure. Over time, as client demand normalizes and we execute on the deleveraging program in the Capital Release Unit, we believe that we will restore our glide path to a Leverage ratio of around 5 %. As a result, we reaffirm our 2022 target of ~5 % for our Leverage ratio.

We remain committed to our target of Adjusted costs excluding transformation charges and expenses eligible for reimbursement related to Prime Finance of € 19.5 billion in 2020. The decline should result from cost reductions already achieved in the first half of 2020, the run-rate impact of measures executed in 2019 as well as from the incremental impact from the legal entity merger of DB Privat- und Firmenkundenbank AG onto Deutsche Bank AG, business exits as highlighted in our strategic announcement and further optimization of our workforce. We expect transformation-related effects of approximately € 1.4 billion for the full year 2020.

Our dividend payments are subject to our ability to report sufficient levels of distributable profits under our standalone financial statements in accordance with German accounting rules (HGB) for the respective fiscal year. Following a net loss in our HGB standalone financial statements for the financial year 2019 prior to utilization of capital reserves in accordance with § 150 section 4 AktG and the corresponding dividend payment restriction we announced that no dividend payment would be proposed for the financial year 2019. For the financial year 2020, we also do not expect to distribute a dividend. We view this to be supportive also in complying with the ECB's guidance for banks to maintain a sound capital base whilst providing the needed support for the economy during the COVID-19 pandemic. We aim to free up capital for distribution from 2022 onwards targeting a competitive dividend payout ratio.

By the nature of our business, we are 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 we have resolved a number of important legal matters and made progress on others, we expect the litigation and enforcement environment to remain challenging in the short term. For 2020, and with a caveat that forecasting litigation charges is subject to many uncertainties, we expect litigation charges, net, to exceed the levels experienced in 2019.

Adjusted costs, Adjusted costs excluding transformation charges, and Adjusted costs excluding transformation charges and expenses eligible for reimbursement related to Prime Finance as well as Post-tax Return on Average Tangible Equity are non-GAAP financial measures. Please refer to "Supplementary Information (Unaudited): Non-GAAP Financial Measures" of the Annual Report 2019 for the definitions of such measures and reconciliations to the IFRS measures on which they are based.

Our Business Segments

Corporate Bank

For Corporate Bank (CB), we expect the macro environment to remain challenging as a result of the COVID-19 pandemic and a further deterioration of the interest rate environment in the first quarter of 2020. However, this should also provide the Corporate Bank with opportunities to further support its corporate and commercial clients, including through the facilitation of government sponsored lending programs, the provision of financing as well as payments solutions.

In 2020, we expect Corporate Bank revenues to be essentially flat compared to the prior year as the COVID-19 pandemic impacts and macroeconomic headwinds are likely to be offset by our strategic growth initiatives, favorable nonrecurring items recorded in the second quarter of the first six months of 2020, fees from additional lending, and the benefit from the ECB's decision in September 2019 to introduce deposit tiering. For Global Transaction Banking, we expect revenues in 2020 to stay essentially flat compared to the prior year, including the aforementioned benefits of nonrecurring items. Cash Management revenues are expected to be essentially flat, with negative effects of interest rate reductions in the U.S. and Asia-Pacific in the first quarter 2020 partially mitigated by ongoing efforts of on deposit repricing and increasing fee income from payments-related projects. Trade revenues are expected to remain essentially flat as additional revenues from new lending may offset the slowdown of global business activity especially on structured products. Securities Services revenues are expected to be lower in 2020 mainly driven by the absence of episodic items recorded in the prior year. Trust and Agency Services revenues should be slightly lower compared to the prior year reflecting interest rate cuts in the U.S. and Asia-Pacific in the first quarter of 2020. Commercial Banking revenues are expected to stay essentially flat as repricing actions, and lending initiatives and the widening of non-banking offering should offset the effects of a negative interest rate environment and economic slowdown as a result of the COVID-19 pandemic.

We expect provision for credit losses for the Corporate Bank in the full year to be significantly higher than in the prior year, mainly as a result of the worsening outlook macroeconomic conditions due to the COVID-19 pandemic.

Noninterest expenses for 2020 are expected to be lower primarily reflecting the absence of a goodwill impairment and lower restructuring charges recorded in 2019. Adjusted costs excluding transformation charges should stay essentially flat as lower noncompensation costs are likely to be offset by higher internal service cost allocations. We plan to continue to focus on regulatory compliance, know-your-client (KYC) and client on-boarding process enhancement, system stability and control and conduct.

For 2020, we expect risk-weighted assets in the Corporate Bank to be higher driven by the balance sheet extension from additional lending activities in response to the COVID-19 pandemic.

Risks to our outlook include potential impacts on our business model from macroeconomic and global geopolitical uncertainty including COVID-19 and a potential deterioration of international trade relations. In addition, uncertainty around central bank policies, ongoing regulatory developments (e.g., the finalization of the Basel III framework), event risks and levels of client activity may also have an adverse impact.

Investment Bank

Macroeconomic and market conditions for the Investment Bank (IB) are expected to be highly uncertain in the remainder of the year. The medium and long term impact of the COVID-19 pandemic is unknown, yet it has been a factor in our performance in the year-to-date. IB revenues in the first half of 2020 were strong across both Sales & Trading (FIC) and Origination & Advisory. We expect IB revenues in the second half of the year to continue to perform well and consequently be higher for the full year 2020 compared to the prior year.

We expect revenues in Sales & Trading (FIC) to be higher in 2020 compared to 2019. Our Credit Trading and Financing business was impacted by the adverse credit markets in the first quarter of 2020, but has recovered well during the second quarter. Rates, Foreign Exchange and Global Emerging Markets have all performed strongly in the first half of the year. They benefited from higher levels of client activity, strong risk management and change in leadership. The positive impact from our refocused strategy that we laid out in December should continue to deliver benefits across Sales & Trading FIC. In Origination & Advisory, we expect revenues to be higher in 2020 compared to 2019. Our Debt Origination business had a strong first half of the year, with market share gains in a higher industry fee pool in Investment Grade debt. However, IG issuances in the remainder of the year are expected to slow compared to the elevated levels seen in the second quarter, while the timing of recovery in the advisory and leveraged debt markets remains uncertain.

We expect provision for credit losses for the Investment Bank for the full year to be significantly higher than in the prior year due to the COVID-19 pandemic.

Noninterest expenses in the Investment Bank in 2020 are expected to be lower compared to the previous year driven by a number of factors, including lower transformation costs, and reduced severance and restructuring charges. Adjusted costs excluding transformation charges are also expected to be lower, driven by the full-year run-rate impact of the headcount reductions in 2019, lower noncompensation costs including bank levies and a decrease in service cost allocations from Infrastructure.

For 2020, we expect risk-weighted assets in the IB to be higher, driven by Credit Risk RWA inflation from the new regulatory securitization framework introduced in the first quarter of 2020, combined with higher Market Risk RWA as a result of market volatility caused by the COVID-19 pandemic. The underlying business growth is expected to be broadly flat for the year.

The major risk to our outlook is the uncertainty around the impact of the COVID-19 pandemic on the macro economic environment. Should a second wave occur and cause a number of further lockdowns across the globe the outcome will likely differ significantly to the above. Additional potential risks are the trade negotiations relating to Brexit and other macro and global geopolitical uncertainty. Central bank policies and ongoing regulatory developments also pose risks, while challenges such as event risks and levels of client activity may also have an adverse impact.

Private Bank

In the Private Bank (PB), the COVID-19 pandemic had negative impacts on revenues in the second quarter of 2020. Client activity slowed down and market values of assets under management did not fully recover to the levels before the outbreak of the pandemic. However, we also saw signs of normalization during the quarter and based on the assumption of a continued normalization in the second half of 2020, we expect PB's net revenues in the full year 2020 to remain essentially flat compared to 2019.

For the Private Bank in Germany, we expect revenues to remain essentially flat compared to 2019. The planned growth in investment and loan revenues is expected to be offset by the negative impacts from the low interest rate environment, the COVID-19 pandemic as well as higher funding cost allocations. In the investment businesses, we plan to continue the launch of focused sales initiatives. In the loan businesses, we expect to benefit from the growth achieved in 2019 and will continue to selectively grow the loan book in 2020. In addition, we plan to leverage pricing opportunities.

In Private & Commercial Business International (PCBI), we expect revenues to be slightly lower compared to 2019. Negative impacts from the COVID-19 pandemic across countries, combined with the low interest rate environment are not expected to be fully recovered by operating growth in credit and investment product revenues and selected repricing measures.

In our Wealth Management businesses, we expect net revenues to be essentially flat year-on-year reflecting lower contributions from the workout of legacy positions in Sal. Oppenheim and headwinds from the low interest rate environment and from the declines in financial markets, which we expect to partially mitigate with continued business growth and targeted pricing opportunities.

As announced in June 2020, we decided to combine our Wealth Management (WM) and PCBI into one unit, the International Private Bank (IPB). This will allow us to centralize our product and infrastructure activities to maximize economies of scale and scope.

The COVID-19 pandemic had also an impact on provision for credit losses in the second quarter of 2020. While it is too early to predict these impacts for the second half of the year in detail, we observe effects by a protracted downturn in local, regional and global economic conditions. Given the uncertainty around extent, duration and market spillover of COVID-19, we expect provision for credit losses to be significantly higher in 2020 within PB. Further details are outlined in the chapter on risks and opportunities related to COVID-19.

Noninterest expenses in the Private Bank are expected to be lower in 2020 than in 2019, reflecting the absence of impairment of goodwill recorded in the prior year. In 2020, we expect restructuring expenses to increase significantly as we execute on our transformation objectives to support our mid-term cost reduction plans. Adjusted costs excluding transformation charges are expected to be slightly lower in 2020, driven by incremental savings from reorganization measures, in part offset by inflationary effects and by selected investments in growth initiatives as well as by negative impacts from changes in internal service cost allocations.

Risk-weighted assets are expected to be higher in 2020 as a result of the aforementioned growth, the implementation of regulatory changes to improve consistency of internal risk models in the industry, and the reflection of continued COVID-19 impacts on credit ratings.

Assets under management are expected to remain essentially flat in 2020, assuming a normalizing market environment after the significant market turmoil in March combined with a continuation of our growth path.

Risks to our outlook include pressure on interest rates, slower economic growth in our major operating countries and lower client activity. Our clients' investment activity could be affected 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 our strategic projects could also have a negative impact on our revenues and costs. All these risks could become more pronounced dependent on the further development of the COVID-19 pandemic.

Asset Management

We believe that due to its diverse range of investments and solutions, Asset Management (AM) is well positioned to grow market share amid the industry growth trends, further supported by our broad distribution reach, global footprint and competitive investment performance. However, wider industry challenges such as margin compression, rising costs of regulation, competitive dynamics and the economic impact of the COVID-19 pandemic are likely to impact the full year results. In the face of this challenge, we intend to focus on innovative and sustainable products and services where we can differentiate and best serve clients in a late cycle market environment, while also maintaining a disciplined cost base.

Given the current economic climate and more recently the impact of COVID-19 on global markets, we expect the revenue environment to remain challenging in 2020 amid ongoing market volatility, margin pressure and the low interest rate environment.

As a result, full year 2020 revenues in AM are expected to be lower compared to 2019. Management fees are assumed essentially flat year-over-year as we expect that positive effects resulting from both net inflows and favorable market recovery to more than offset the market decline observed earlier this year due to COVID-19. Performance and transaction fees are expected to normalize in 2020 at between 3 to 5% of total revenues, significantly lower than 2019 due to the absence of large fees recognized in the second and fourth quarter last year. Other revenues are assumed to be significantly lower, mainly impacted by the unfavorable change in the fair value of guarantees and significantly lower investment income and gains compared to 2019.

To ensure our business is well protected against potential revenue headwinds, we remain committed to further reducing our costs in 2020. We have identified further cost savings as well as additional efficiency measures, which we expect to result in lower noninterest expenses and adjusted costs excluding transformation charges.

We expect assets under management at the end of 2020 to be essentially flat compared to the end of 2019, assuming market stability and net inflows in the second half of the year. In 2020, we expect net inflows into targeted growth areas of passive and alternative investments, further enhanced by strategic alliances and product innovations.

Risks to our outlook include the longevity of the economic impact of COVID-19, continued low interest rates in industrialized countries' markets, the pace of growth in emerging economies and increase in wealth, as well as the demand for retirement products in industrialized countries for aging populations. Continued elevated levels of economic and political uncertainty worldwide, and protectionist and anti-trade policies, could have unpredictable consequences in the economy, market volatility and investors' confidence, which may lead to declines in business and could affect our revenues and profits as well as the execution of our strategic plans. In addition, the evolving regulatory framework could lead to unforeseen regulatory compliance costs and possible delays in the implementation of our efficiency measures due to jurisdictional restrictions, which could have an adverse impact on our cost base.

Capital Release Unit

In 2020, Capital Release Unit (CRU) intends to continue to execute its asset reduction program and the transition of Deutsche Bank's Prime Finance and Electronic Equities clients, while continuing to reduce cost.

We expect significant negative revenues for 2020. Revenues are expected to be driven by de-risking impacts, hedging costs and funding costs, partly offset by reimbursement from the Prime Finance platform.

Noninterest expenses for 2020 are expected to be significantly lower than in 2019. Adjusted costs excluding transformation charges are expected to be significantly lower, driven by lower compensation, lower noncompensation costs and reduced infrastructure related costs. In 2020, we expect CRU to benefit from the full-year run-rate impact of headcount reductions in 2019.

We continue to target € 38 billion of RWA for year-end 2020 although this is dependent on constructive market conditions. As we have taken the decision to primarily target RWA reduction in our de-risking, we expect a slower reduction in CRU leverage than previously anticipated for 2020. We expect a reduction in leverage in the range of € 10 to 15 billion a quarter for the remainder of the year, subject to market movements.

Risks to our outlook include the impact of the COVID-19 pandemic. The speed and cost of our asset reductions could be affected by counterparties' return expectations and credit risk appetite. Effective asset disposal relies upon functioning capital markets and the active participation of clients and counterparties. In addition, delays to the implementation of expense management initiatives could have an adverse impact on our cost base.

Corporate & Other

In 2020, Corporate & Other will continue to be impacted by valuation and timing differences from different accounting methods used for management reporting and IFRS, plus unallocated items including one-offs which are not business specific, infrastructure expenses associated with shareholder activities as defined in the OECD Transfer Pricing Guidelines and costs held centrally as part of our new funds transfer pricing framework. We expect to retain around € 200 million related to these funding costs in Corporate & Other.

Additionally, Corporate & Other will continue to be impacted by any difference between planned and actual allocations as Infrastructure expenses are allocated to the corporate divisions based on the planned allocations as well as the reversal of noncontrolling interests, mainly related to DWS, which are deducted from profit or loss before tax of the divisions.

Risks and opportunities

The developments noted in the six months ended June 30, 2020, with the exception of impacts from COVID-19, did not materially alter our assessment of the risks and opportunities that our businesses are exposed to as laid out in our Annual Report 2019.

COVID-19

With regard to the rapidly unfolding COVID-19 pandemic, downside risks have materially increased year-to-date. These risks could materialize individually as well as simultaneously and potentially affect a number of themes highlighted in our Annual Report 2019. Therefore the negative impact on our business environment could fluctuate significantly and adversely affect our business, results of operations or strategic plans and targets, as well as our share price.

The largely unprecedented economic disruption caused by the COVID-19 pandemic has resulted, at least temporarily, in an extremely severe GDP contraction in all major economies. While our baseline expectation is for an economic recovery starting in the second half of 2020, if the pandemic is protracted or re-emerges, including by way of a second wave, this could amplify the current negative demand and supply chain effects as well as the negative impact on global growth and global financial markets. In addition, a further extension of the prolonged low interest rate period in the Eurozone has become more likely.

To alleviate the high level of uncertainty, numerous states have introduced moratoria for private clients and small businesses, as well as supporting measures such as state-backed credit programs for corporates. In light of the expiry of these moratoria, which is expected in the second half of 2020, the bank will continue to monitor relevant portfolios. It is currently unclear how expected changes to moratoria may impact our revenue generating capabilities from these loans going forward.

So far, we have observed a worsening of the creditworthiness of certain individual portfolios due to the deterioration of the economic situation, and this is reflected in our increased level of loan loss provisions. If the situation continues to worsen, it may lead to additional rating declines among our clients, further increasing loan losses as well as increased numbers of clients drawing down on (currently existing, but unused) credit facilities which would lead to an additional 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 are helping to mitigate some of the short-term impacts.

The aforementioned external developments can impact our revenue generating capabilities, while market declines and volatility could also negatively impact the value of financial instruments and cause us to incur losses.

From an operational perspective, and despite the business continuity and crisis management policies currently in place, the COVID-19 crisis may adversely impact our business activities. The unprecedented move across global industries to conduct business from home and away from primary office locations increases the pressure on business practices, the demand on our technology infrastructure and also the risk of cyber-attacks which could lead to technology failures, security breaches, unauthorized access, loss or destruction of data or unavailability of services. Any of these events could result in litigation or result in a financial loss, disruption of our business activities and liability to our customers, 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 could lead to increased demand on surveillance monitoring and processing.

All of the above could have a material impact on our CET 1 ratio. As previously announced, it is therefore possible that we will fall below our CET 1 target of at least 12.5 % in upcoming periods. Whilst the Liquidity Coverage Ratio remained above the regulatory minimum during the second quarter of 2020, the risk of a second wave of COVID-19 and a deeper and more protracted economic recession may put pressure on liquidity metrics during the remainder of the year and lead to liquidity and funding outflows. At the same time, this might temporarily impact our cost of funding and therefore adversely affect our profitability. Action has been taken by regulators in Europe and in other regions to provide targeted and temporary flexibility from elements of the prudential framework to avoid unintended pro-cyclical effects. For instance at the European level, changes made to the Leverage Ratio, allowing the netting of pending settlements and exceptional changes to the market risk RWA framework, where excesses relative to modelled outcomes would previously have given rise to increased capital requirements, were relaxed.

In addition, the disruption caused by the COVID-19 pandemic could also adversely impact the review, testing and measurement of impairment of goodwill and intangible assets. The valuation of our deferred tax assets may also be affected.

In order to manage financial and non-financial risk impacts of COVID-19, Deutsche Bank is utilizing dedicated governance structures including Global and Regional Crisis Management. More broadly and where relevant, additional controls and processes have been established including additional reporting to ensure relevant senior stakeholders including the Management Board are up-to-date.

Besides posing significant risks, the COVID-19 pandemic also presents potential opportunities. The COVID-19 crisis has uncovered the need and driven the push for digitalization across various industries, with digitalization projects and strategies being prioritized in the current environment. This is giving us the opportunity to service our customers faster through newly emerging digital touchpoints as well as the opportunity to co-innovate jointly, which could have a positive impact on our revenues.

The COVID-19 crisis also impacted the bank's cost structure. Whilst in the short term it was required to equip branches & office buildings with anti-infection supplies, we are now assessing options to sustainably reduce e.g. real estate cost through continued higher levels of working from home. Certain cost categories have been positively impacted by COVID-19 temporarily, such as Travel & Entertainment and Marketing & Events.

In addition, existing contracts with vendors and service providers pose the risk, particularly given conditions resulting from the COVID-19 pandemic, that these counterparties could be unable to fulfil their contractual obligations, putting the benefits we seek to obtain from such contracts at risk.

Among the risks arising from the COVID-19 pandemic is the potential for adverse impact on our ability to retain and attract employees and on employee attrition. Due to the lockdowns and generally positive reception of work-from-home programs, employees may decide in the future that returning to an office environment is no longer desirable. In addition, further pressure on our financial performance as a result of the COVID-19 pandemic could impact the levels of compensation we can offer, which could put the Group at a disadvantage to our competitors in attracting and retaining talented employees. The COVID-19 pandemic may also significantly delay or reduce the rate of regular employee attrition, putting pressure on the Group meeting its headcount and cost targets.

Political risks

Significant uncertainty remains over the future relationship between the European Union and the UK following the UK's withdrawal from the European Union. Therefore it is difficult to determine the full impact on us in the long term. Brexit has already impacted the structure and business model of our UK operations and we have applied for authorization from the Prudential Regulation Authority and Financial Conduct Authority, our UK regulators, to continue to undertake regulated activity in the UK (previously undertaken pursuant to the European Passport provisions). Despite our Brexit preparations, failure to win authorization as a Third Country Branch in 2021 could adversely affect our business, results of operations or strategic plans.

The passing of a national security law for Hong Kong by mainland China has increased tensions between the U.S. and China. The U.S. sees Hong Kong's autonomy as being compromised and has therefore revoked Hong Kong's special trade status and sanctioned Chinese officials. There remains a risk of social unrest in Hong Kong but we expect that Hong Kong's role as an offshore financial hub and currency peg will be minimally impacted as for now. While it is too early for us to predict the medium to long term impacts on our business or our financial targets, these could be material and adverse.

Although it is difficult to predict the potential impact, uncertainty related to the U.S. elections in November 2020 could adversely impact financial markets as well as our performance.

Regulatory reforms, assessments and proceedings

Regulators can also impose capital surcharges or regulatory adjustments, for example, as a result of the annual Supervisory Review and Evaluation Process (SREP), to reflect additional risks posed by deficiencies in our control environment, or as a result of supervisory inspections concerning the treatment of specific products or transactions. The ECB has already used these powers in its SREP Decisions and may continue to do so to address findings from onsite inspections. In extreme cases, they can even suspend certain activities or our permission to operate within their jurisdictions and impose monetary fines for failures to comply with rules applicable to us.

Regulators and central banks have set the goal of improving the robustness of financial benchmarks, especially interest rate benchmarks. As a result, the ongoing availability of, among other benchmarks, the London Interbank Offered Rate ("LIBOR"), and the Euro Overnight Index Average rate ("EONIA" and, together, "IBORs") and potential timing of discontinuation remain uncertain. Some reforms are already effective while others are still to be implemented or are under consideration. These reforms may cause IBORs to perform differently than in the past, or to disappear entirely, or have other consequences, which cannot be fully anticipated.

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 linked to IBORs that may be subject to potential reform or discontinuation, requiring us to prepare for such change and for a potential transition to "risk-free-rates" ("RFRs") where relevant. The discontinuation of these IBORs and the transition to RFRs pose a variety of risks to us, including risks of market disruption with associated market and liquidity risks, litigation risk, accounting and tax risks and operational risks. Depending on how these matters and the related risks develop, and the adequacy of the response of the industry, the market, regulators and us to them, the reform and discontinuation of IBORs and transition to RFRs could have adverse effects on our business, results of operations, capital requirements and profitability.

Strategy

The operating environment could worsen significantly or our assumptions and controls over any of the aforementioned items could vary significantly from our current expectations. The current COVID-19 pandemic and its potential impact on the global economy may affect our ability to meet our financial targets. While it is too early for us to predict the long term impacts that the expanding pandemic and the governmental responses to it may have, we may be materially adversely affected by a protracted downturn in local, regional or global economic conditions that impacts our core businesses. In that situation, we would need to take action to ensure we meet our minimum capital objectives. These actions or measures may result in adverse effects on our business, results of operations or strategic plans and targets.

The Group enters into contracts and letters of intent in connection with its transformation strategy as well as in the ordinary course of business. When these are preliminary in nature or conditional, the Group is exposed to the risk that they do not result in execution of the final agreement or consummation of the proposed arrangement, putting associated benefits with such agreements at risk.

At the same time, we may benefit from opportunities to grow our market share and client base in the core bank, especially in Europe and in our German home market, supporting clients where peers have retreated and supporting the economy by ensuring corporates have the necessary working capital to manage through the crisis. New modes of working which have emerged during the COVID-19 pandemic can help accelerate our cost saving initiatives.

Risk information

The following section provides qualitative and quantitative disclosures about credit, market, liquidity and other risk metrics and their developments within the second quarter of 2020. Disclosures according to Pillar 3 of the Basel 3 Capital Framework, which are implemented in the European Union by the CRR and supported by EBA Implementing Technical Standards or the EBA Guideline, are published in our additional Pillar 3 report which can be found on our website.

As a reaction to the COVID-19 outbreak, certain legislative changes to the prudential framework have been made and are now applicable for the second quarter reporting. Regulation (EU) 2020/866 increases the diversification benefit applicable to aggregate additional value adjustments from 50 % to 66 % until year end 2020. Regulation (EU) 2020/873 introduces various changes to the determination of risk weighted assets and the leverage exposure. For example the risk weights applicable to certain small or medium-sized enterprise (SME) is reduced by applying scaling factors depending on the exposure value. With respect to the leverage exposure, for example cash receivables and cash payables are offset where the related regular-way sales and purchases are both settled on a delivery-versus-payment basis.

For all of our CET 1 measures we also apply for the first time for June 30, 2020, the transitional arrangements in relation to IFRS 9 as provided in the current CRR/CRD.

We present in this report certain figures based on the CRR definition of own fund instruments (applicable for AT1 capital and T2 capital and figures based thereon, including Tier 1, Total Capital and Leverage Ratio) on a “fully loaded” basis. We calculate such “fully loaded” figures excluding the transitional arrangements for own fund instruments as provided in the currently applicable CRR/CRD. Note that for CET1 instruments we do not make use of transitional provisions such that the fully loaded definition only impacts AT1 capital and T2 capital and figures based thereon, including Tier 1, Total Capital and Leverage Ratio.

For the comparative numbers as per yearend 2019 we still applied our earlier concept of fully loaded, defined as excluding the transitional arrangements for own funds instruments introduced by the CRR/CRD applicable until June 26, 2019, but reflecting the transitional arrangements introduced by the amendments to the CRR/CRD applicable from June 27, 2019, and further amendments thereafter.

Please refer to our Annual Report 2019 under the chapter “Risk report” for further information on key risk categories and on the management of our material risks.

Overall risk assessment

The COVID-19 outbreak significantly impacted our operating environment during the six months ended June 30, 2020. We expect the stringent lockdown and other containment measures used to combat COVID-19 to result in a very severe recession in Europe, the U.S. and most other major economies in the first half of 2020. With lockdown measures gradually being lifted in the course of the second quarter of 2020, most economies should experience a partial rebound in activity in the third quarter of 2020. This partial rebound is likely to be boosted by the timely and substantial easing of monetary and fiscal policy. However, given the persistently high uncertainty about the nature of the coronavirus and the effectiveness of the containment measures and policy responses, there is a significant downside risk of a more protracted pandemic with a potential second wave of infections, resumed lockdowns, deeper risk aversion and a delayed recovery, and / or a more permanent damage to potential growth than expected in a baseline scenario.

As the COVID-19 global recession has unfolded, other macroeconomic downside risks remain elevated, most notably a potential re-escalation of the global trade and technology conflict particularly between the U.S. and China. An unwinding of the existing trade deal or an escalating trade conflict with Europe including higher U.S. import tariffs on automobiles later this year would add to the negative impact on global trade and economic growth.

The COVID-19 pandemic could also increase political risks, especially in Europe where North-South differences within the Eurozone may widen further. This risk may be mitigated by ample central bank liquidity provisions and the availability of EU financial support (e.g. ESM loans), including the new €750 billion Recovery Fund which has recently been agreed. Whilst supporting the medium-term economic outlook of the EU countries hit hardest by the pandemic through the disbursement of grants and loans, the EU Recovery Fund also helps to mitigate against the risk of upward pressure on government bond yields in those countries.

Brexit uncertainty remains significant as the UK government has ruled out the possibility of prolonging the transition beyond the 2020 year-end deadline, which the UK would have had to have applied for by June 30, 2020. Without sufficient time to negotiate a comprehensive trade deal, the future UK-EU relationship may still yield a “no-deal” Brexit, weighing on the economic and trade outlook for Europe overall.

Political uncertainty remains elevated in a number of other countries, for instance in the run-up to the November 2020 presidential elections in the U.S., or in Italy where the incumbent coalition government faces persistent pressure from opposition parties. Risks also remain elevated in the Middle East/Iran and in various parts of Asia including Hong Kong following the passing of a national security law for Hong Kong by mainland China. Negative geopolitical events could amplify the adverse impact of the COVID-19 pandemic on equity, credit and other risk asset markets. The recent decline in oil prices, which has only partly reversed, could also lead to further strain on the financial profile of oil-exporting countries and the oil industry, including the U.S..

The COVID-19 pandemic has intensified the “lower for longer” interest rate environment, as key central banks cut policy rates and / or provided significant liquidity in support of the economy. Longer-term sovereign benchmark yields remained near record lows, as central bank support, investment flows into safe assets and low inflation expectations dominated any market concerns about higher issuance volumes and weaker credit quality due to the COVID-19 pandemic.

Since major central bank policy rates are currently seen as remaining low and long-term yields will be continuously supported by central banks’ quantitative easing measures (like the ECB’s € 1,350 billion PEPP / Pandemic Emergency Purchase Programme), the risk of an upside shock to interest rates (e.g. if inflationary pressure increased substantially and/or faster than expected) is unlikely to materialize in the near term.

In addition to the risks mentioned above, we are exposed to a variety of financial risks, including but not limited to counterparty default risks or sudden market shocks impacting our credit and market risk profiles and non-financial risks including but not limited to operational and IT infrastructure, transaction processing and third party vendor risks.

The potential impacts of these risks on our balance sheet and profitability are assessed through portfolio reviews and stress tests. Stress tests are also used to test the resilience of Deutsche Bank’s strategic plans. The results of these tests indicate that the currently available capital and liquidity reserves, in combination with available mitigation measures, would allow us to absorb the impact of these risks if they were to materialize as envisaged.

Key risk metrics

The following selected key risk ratios and corresponding metrics form part of our holistic risk management across individual risk types. The Common Equity Tier 1 ratio (CET 1), Economic Capital Adequacy (ECA) Ratio, Leverage ratio (LR), Total Loss Absorbing Capacity (TLAC), Minimum Requirement for Own Funds and Eligible Liabilities (MREL), Liquidity Coverage Ratio (LCR) and Stressed Net Liquidity Position (sNLP) serve as high-level metrics and are fully integrated across strategic planning, risk appetite framework, stress testing (except LCR, TLAC and MREL) and recovery and resolution planning practices, which are reviewed and approved by our Management Board at least annually.

Common Equity Tier 1 ratio		Total risk-weighted assets	
30.6.2020	13.3 %	30.6.2020	€ 330.9 bn
31.12.2019	13.6 %	31.12.2019	€ 324.0 bn
Economic capital adequacy ratio		Total economic capital	
30.6.2020	166 %	30.6.2020	€ 29.0 bn
31.12.2019	163 %	31.12.2019	€ 29.2 bn
Leverage ratio (fully loaded)		Leverage exposure	
30.6.2020	4.2 %	30.6.2020	€ 1,192 bn
31.12.2019	4.2 %	31.12.2019	€ 1,168 bn
Total loss absorbing capacity (TLAC)		Minimum requirement for own funds and eligible liabilities (MREL)	
30.6.2020 (Risk Weighted Asset based)	32.57 %	30.6.2020	10.40 %
30.6.2020 (Leverage Exposure based)	9.04 %	31.12.2019	11.57 %
31.12.2019 (Risk Weighted Asset based)	34.67 %		
31.12.2019 (Leverage Exposure based)	9.62 %		
Liquidity coverage ratio (LCR)		Stressed net liquidity position (sNLP)	
30.6.2020	144 %	30.6.2020	€ 34.9 bn
31.12.2019	141 %	31.12.2019	€ 24.3 bn

Risk-weighted assets

Risk-weighted assets by risk type and business division

	Jun 30, 2020						
in € m.	Corporate Bank	Investment Bank	Private Bank	Asset Management	Capital Release Unit	Corporate & Other	Total
Credit risk	49,370	74,217	68,225	5,184	9,682	17,965	224,644
Settlement risk	0	11	0	0	29	182	222
Credit valuation adjustment (CVA)	26	3,642	99	62	1,368	38	5,235
Market risk	464	23,376	0	28	5,543	57	29,468
Operational risk	6,497	27,278	7,677	3,925	25,932	0	71,310
Total	56,357	128,524	76,002	9,199	42,555	18,242	330,879

	Dec 31, 2019						
in € m.	Corporate Bank	Investment Bank	Private Bank	Asset Management	Capital Release Unit	Corporate & Other	Total
Credit risk	48,810	69,507	66,747	4,873	13,155	17,967	221,060
Settlement risk	0	192	0	0	6	44	242
Credit valuation adjustment (CVA)	48	2,009	103	56	2,450	17	4,683
Market risk	530	20,390	89	28	4,331	0	25,368
Operational risk	7,333	26,525	8,304	4,570	25,931	0	72,662
Total	56,721	118,622	75,243	9,527	45,874	18,029	324,015

Our RWA were €330.9 billion as of June 30, 2020, compared to €324.0 billion at the end of 2019. The increase of €6.9 billion was primarily driven by credit risk RWA and market Risk RWA, which were partly offset by operational risk RWA. Credit risk RWA increased by €3.6 billion mainly due to the introduction of the new framework for securitization positions, impacts on rating migrations on the back of the repercussion of the prevailing coronavirus situation and exposure increases across all businesses. This is partly offset by a reduction of €1.4 billion driven by positive impacts due to application of the "quick fix" amendment of the CRR (Regulation (EU) 2020/873) in relation to certain small or medium-sized enterprise (SME) exposures, where risk weight reducing scaling factors were applied, as well as de-risking initiatives. The increase in market risk RWA of €4.1 billion was primarily driven by the Value-at-Risk component due to the higher levels of market volatility experienced in March 2020 rolling into the 60 days average used in the calculation. The operational risk RWA reduction of €1.4 billion was primarily driven by a more favorable internal loss data profile feeding into our capital model as well as a model change roll out of our external loss data classification in alignment with recent regulatory requirements. This was partially offset by the reduction of the Expected Loss deductible.

We are currently in transition of our internally developed VAR model for managing market risk to move to a calculation using a historical simulation approach predominantly based on full revaluation. The historical simulation approach generally reacts more sensitively to extreme tail events such as COVID-19 and thus is expected to result in higher 1day VAR levels. However, we do not expect this to have a material impact on our Market Risk RWA.

CET 1 capital reconciliation to shareholders equity

in € m.	Jun 30, 2020	Dec 31, 2019
Total shareholders' equity per accounting balance sheet	55,343	55,857
Deconsolidation/Consolidation of entities	(88)	(116)
Of which:		
Additional paid-in capital	(10)	(12)
Retained earnings	(176)	(220)
Accumulated other comprehensive income (loss), net of tax	98	116
Total shareholders' equity per regulatory balance sheet	55,255	55,741
Minority Interests (amount allowed in consolidated CET 1)	838	837
Accrual for dividend and AT1 coupons ¹	(69)	0
Reversal of deconsolidation/consolidation of the position accumulated other comprehensive income (loss), net of tax, during transitional period	0	0
Common Equity Tier 1 (CET 1) capital before regulatory adjustments	56,024	56,579
Prudential filters	(2,112)	(1,888)
Of which:		
Additional value adjustments	(1,836)	(1,738)
Any increase in equity that results from securitized assets	(1)	(2)
Fair value reserves related to gains or losses on cash flow hedges and gains or losses on liabilities designated at fair value resulting from changes in own credit standing	(275)	(148)
Regulatory adjustments relating to unrealized gains and losses pursuant to Art. 467 and 468 CRR	0	0
Regulatory adjustments	(10,049)	(10,543)
Of which:		
Goodwill and other intangible assets (net of related tax liabilities) (negative amount)	(6,348)	(6,515)
Deferred tax assets that rely on future profitability	(1,498)	(1,445)
Negative amounts resulting from the calculation of expected loss amounts ²	(81)	(259)
Defined benefit pension fund assets (net of related tax liabilities) (negative amount)	(810)	(892)
Direct, indirect and synthetic holdings by the institution of the CET 1 instruments of financial sector entities where the institution has a significant investment in those entities	0	0
Securitization positions not included in risk-weighted assets	0	0
Other ³	(1,311)	(1,433)
Common Equity Tier 1 capital	43,863	44,148

¹ Interim profits are recognized subject to approval as per ECB Decision (EU) 2015/656 in accordance with the Article 26(2) of Regulation (EU) No 575/2013 (ECB/2015/4).

² Expected loss shortfall calculation considers 2020 increases in Allowance for Credit Losses which is subject to approval by ECB in context of Article 26(2) of Regulation (EU) No 575/2013 (ECB/2015/4).

³ Includes €0.4 billion capital deduction effective from April 2019 and €0.3 billion effective from October 2016 based on regular ECB review, €0.9 billion capital deduction based on ECB guidance on irrevocable payment commitments related to the Single Resolution Fund and the Deposit Guarantee Scheme effective from January 2018 onwards. Effective 30 June 2020, we make use of the IFRS 9 transitional provision as per Article 473a of the CRR resulting in a CET 1 increase of €0.2 billion.

As of June 30, 2020, our CET 1 capital ratio decreased to 13.3 % compared to 13.6 % as of December 31, 2019. The decrease is due to the above-mentioned increase in RWA and €0.3 billion decrease in our CET 1 capital compared to year end 2019. The decrease of €0.3 billion in CET 1 capital was the result of payment of our yearly AT1 coupon of €0.3 billion in the second quarter of 2020 which was not accrued in CET 1 capital as a consequence of the negative net income in financial year 2019 following Article 26(2) of Regulation (EU) No 575/2013 (ECB/2015/4). Additionally COVID-19 pandemic impact and market volatility reduced our CET 1 capital by €0.2 billion due to higher prudential filters. This was offset by an increase in CET 1 capital of €0.2 billion in the second quarter as we make use of the IFRS 9 transitional provision effective June 30, 2020 as per Article 473a of the CRR.

Economic capital adequacy ratio and total economic capital

The economic capital adequacy ratio was 166 % as of June 30, 2020, compared to 163 % as of December 31, 2019. The increase in the ratio was due to a decrease in capital demand and an increase in capital supply.

The total economic capital demand amounted to € 29.0 billion, which was € 0.2 billion or 0.5 % lower compared to € 29.2 billion as of December 31, 2019. The economic capital demand for credit risk increased by € 0.9 billion primarily due to rating migrations related to the COVID-19 pandemic, with associated exposure increases largely reversed by the end of the second quarter. The increase in credit risk was more than offset by reductions in economic capital demand for market risk, business risk and operational risk. The economic capital demand for market risk reduced by € 0.5 billion due to lower inventory in the Investment Bank, which was partially offset by additional interest rate hedging to reduce net interest income volatility. The economic capital demand for business risk decreased by € 0.5 billion due to a lower strategic risk component reflecting improved earnings outlook for the next twelve months. The economic capital demand for operational risk reduced by € 0.1 billion mainly driven by a slightly lighter loss profile. The inter risk diversification benefit of the economic capital demand remained stable.

The economic capital supply increased by € 0.7 billion mainly driven by the recognition of newly issued Additional Tier 1 capital instruments of € 0.9 billion during the first quarter of 2020 partially offset by increased capital deduction from prudential filters of € 0.2 billion due to COVID-19 pandemic impact and other market fluctuations. In the second quarter of 2020, the yearly AT1 coupon was paid out which was partly offset by corresponding accruals.

Leverage ratio and leverage exposure

As of June 30, 2020, our fully loaded Leverage ratio was 4.2 % compared to 4.2 % as of December 31, 2019. This takes into account a fully loaded Tier 1 capital of € 49.6 billion over an applicable exposure measure of € 1,192 billion as of June 30, 2020 (€ 48.7 billion and € 1,168 billion as of December 31, 2019, respectively). In the first half of 2020, our Leverage exposure increased by € 24 billion to € 1,192 billion. This primarily reflected the development of our balance sheet (for additional information please refer to section "Movements in assets and liabilities" in this report): cash and central bank/interbank balances which increased by € 29 billion, loans grew by € 7 billion and non-derivative trading assets increased by € 7 billion. This was partly offset by pending settlements which - despite being higher on a gross basis from seasonally low year-end levels - decreased by € 5 billion due to application of the "quick fix" amendment of the CRR (Regulation (EU) 2020/873), allowing the netting of cash receivables and cash payables where the related regular-way sales and purchases are both settled on a delivery-versus-payment basis. SFT related items (securities purchased under resale agreements, securities borrowed and receivables from prime brokerage) decreased by € 9 billion. Remaining asset items increased by € 13 billion, largely related to cash margin receivables. Furthermore, there was a decrease of the Leverage exposure related to derivatives by € 12 billion (€ 2 billion excluding deductions of receivables assets for cash variation margin provided in derivatives transactions) mainly driven by lower add-ons for potential future exposure. Off-balance sheet exposures decreased by € 6 billion corresponding to lower notional amounts for irrevocable lending commitments.

The increase in Leverage exposure in the first half of 2020 included a negative foreign exchange impact of € 9 billion mainly due to the strengthening of the Euro against the Pound Sterling and the U.S. dollar. The effects from foreign exchange rate movements are embedded in the movement of the Leverage exposure items discussed in this section.

On a phase-in basis, our Leverage ratio was 4.3 % compared to 4.3 % as of December 31, 2019. This takes into account as of June 30, 2020 a phase-in Tier 1 capital of € 50.7 billion over an applicable exposure measure of € 1,192 billion (€ 50.5 billion and € 1,168 billion as of December 31, 2019, respectively).

Total loss absorbing capacity and minimum requirement for own funds and eligible liabilities

TLAC and MREL

in € m.

(unless stated otherwise)

	Jun 30, 2020	Dec 31, 2019
Regulatory capital elements of TLAC/MREL		
Common Equity Tier 1 capital (CET 1)	43,863	44,148
Additional Tier 1 (AT1) capital instruments eligible under TLAC/MREL	6,849	6,397
Tier 2 (T2) capital instruments eligible under TLAC/MREL		
Tier 2 (T2) capital instruments before TLAC/MREL adjustments	7,095	5,957
Tier 2 (T2) capital instruments adjustments for TLAC/MREL	255	16
Tier 2 (T2) capital instruments eligible under TLAC/MREL	7,350	5,973
Total regulatory capital elements of TLAC/MREL	58,062	56,519
Other elements of TLAC/MREL		
Senior non-preferred plain vanilla	49,711	55,803
Holdings of eligible liabilities instruments of other G-SIIs (TLAC only)	0	–
Total Loss Absorbing Capacity (TLAC)	107,773	112,322
Add back of holdings of eligible liabilities instruments of other G-SIIs (TLAC only)	0	0
Available Own Funds and subordinated Eligible Liabilities (subordinated MREL)	107,773	112,322
Senior preferred plain vanilla	3,586	2,856
Available Minimum Own Funds and Eligible Liabilities (MREL)	111,359	115,178
Risk Weighted Assets (RWA)	330,879	324,015
Leverage Ratio Exposure (LRE)	1,192,408	1,168,040
Total liabilities and own funds after prudential netting (TLOF)	1,070,843	995,513
TLAC ratio		
TLAC ratio (as percentage of RWA)	32.57	34.67
TLAC requirement (as percentage of RWA)	20.52	20.58
TLAC ratio (as percentage of Leverage Exposure)	9.04	9.62
TLAC requirement (as percentage of Leverage Exposure)	6.00	6.00
TLAC surplus over RWA requirement	39,881	45,640
TLAC surplus over LRE requirement	36,228	42,240
MREL subordination		
MREL subordination ratio (as percentage of TLOF)	10.06	11.28
MREL subordination requirement (as percentage of TLOF)	6.11	6.11
Surplus over MREL subordination requirement	42,344	51,496
MREL ratio		
MREL ratio (as percentage of TLOF)	10.40	11.57
MREL requirement (as percentage of TLOF)	8.58	8.58
MREL surplus over requirement	19,480	29,763

TLAC

As of June 30, 2020, total loss absorbing capacity (TLAC) was €108 billion and the corresponding TLAC ratios were 32.6 % (RWA based) and 9.0 % (Leverage exposure based). This means that Deutsche Bank has a comfortable buffer of €36 billion over its total loss absorbing capacity minimum requirement of €72 billion (higher of 20.5 % RWA based and 6 % Leverage exposure based).

MREL

As of June 30, 2020, total liabilities and own funds (TLOF) were €1,071 billion and available MREL were €111 billion, corresponding to a ratio of 10.4 %, compared to €996 billion TLOF and €115 billion MREL and a ratio of 11.6 % as of December 31, 2019. This means that Deutsche Bank has a comfortable buffer of own funds and eligible liabilities which is €19 billion above our MREL.

Liquidity coverage ratio

The Group's Liquidity Coverage Ratio (LCR) was 144 % as of June 30, 2020, or € 64 billion of excess over the regulatory minimum of 100 %. This compares to 141 %, or € 55 billion of excess liquidity at December 31, 2019. The increase was predominately driven by the movement in high quality liquid assets given liquidity sourced from the ECB's Targeted Longer-Term Financing Operations (TLTRO III) and reduction in net cash outflows due to deposit optimization initiatives. The COVID-19 pandemic created inter quarter volatility in the LCR on account of client drawdowns on committed facilities in the first quarter 2020 and repayments of those drawdowns in the second quarter 2020.

Given the Group's excess liquidity levels and the tools available to steer liquidity, we look to support our customers through the uncertain period ahead. We are committed to providing additional liquidity to support our customers. Therefore, we are prepared to operate below our liquidity reserves target at € 170 billion to € 200 billion during this period. This translates into a liquidity coverage ratio of approximately 110 % to 130 %, a level still prudently above the regulatory threshold. As the market environment normalizes, we expect to see liquidity reserves and liquidity coverage ratio return closer to target levels.

Stressed net liquidity position

The Group's internal 8 week stressed Net Liquidity Position (sNLP) increased € 10.6 billion through the first half of 2020, from € 24.3 billion as of December 31, 2019 to € 34.9 billion as of June 30, 2020. Following the period of turmoil caused by the COVID-19 outbreak, the sNLP metric has returned well above risk appetite, indicating a normalization of the economic environment and the effectiveness of countermeasures deployed throughout. The net increase in sNLP was primarily driven by the increase in liquidity reserves and initiatives to optimize deposits, partially offset by methodology enhancements.

Measures in context of Covid-19 pandemic

IFRS 9 - Application of Forward Looking Information

Deutsche Bank incorporated consensus forecasts on macroeconomic variables as of June 30, 2020 into its second quarter of 2020 Expected Credit Loss "ECL" estimate. The bank's standard approach to the incorporation of these variables into the calculation of the ECL estimate is to incorporate forecasts for the next two years, using eight discrete quarterly observations. This methodology was derived during the implementation of IFRS 9 from observation of the historical relationship between movements in those macroeconomic variables and default rates.

In management's opinion this methodology does not provide a reliable indicator for future credit losses in the context of the COVID-19 crisis, as it takes too short a view of the development of those variables and hence overstates the impact of short term movements in them on estimated future credit losses. In particular, the current methodology does not factor in the beneficial impact of government support and assistance in response to the crisis, in particular for corporate obligors.

On April 1, 2020, ECB submitted a letter to banks with regard to the use of Forward Looking Information in the context of IFRS 9 that stated, amongst other things, that banks should "use the long-term forecast (e.g. the long-term GDP growth rate) whenever the specific forecast has lost relevance".

Based on Deutsche Bank's assessment and the regulatory guidance provided, the most representative approach in the current quarter to estimating future credit losses is to reduce the weight of some of the short-term data and derive adjusted inputs based on longer term averages.

The Bank has therefore performed an overlay calculation based on averaging forecasts for GDP and unemployment rates over the next three years in its ECL estimation which is the basis for the bank's second quarter of 2020 Credit Loss Allowance.

Management is closely monitoring the development of consensus forecast data and will reassess the need for continuing with the application of this management overlay also in the third quarter of 2020.

In addition, management decided to record a further management overlay to increase its ECL estimate to address the uncertainty on certain economic developments due to COVID-19 at the end of June 2020.

For further details, please refer to Chapter "IFRS 9 impairment approach" in the interim financial statements.

IFRS 9 - Application of EBA guidance regarding Default, Forbearance and IFRS 9 in light of COVID-19 measures

EBA's "Statement on the application of the prudential framework regarding Default, Forbearance and IFRS 9 in light of COVID-19 measures" published on March 25, 2020 states that "institutions are expected to use a degree of judgement and distinguish between borrowers whose credit standing would not be significantly affected by the current situation in the long term, and those who would be unlikely to restore their creditworthiness." The Bank performed portfolio reviews and applied this regulatory guidance to a number of clients mainly in the Investment Bank and Corporate Bank.

EBA is further of the view that "the public and private moratoria, as a response to COVID-19 epidemic, do not have to be automatically classified as forbearance if the moratoria is not borrower specific, based on the applicable national law or on an industry or sector-wide private initiative agreed and applied broadly by relevant credit institutions". Deutsche Bank has introduced this guidance into its internal risk management processes.

For further details with regards to Deutsche Bank's determination of Expected Credit Losses following IFRS 9 accounting rules please refer to Deutsche Bank's Annual Report as of December 31, 2019.

Legislative and non-legislative moratoria and public guarantee schemes in light of COVID-19 pandemic

After the breakout of the COVID-19 pandemic, a number of governments issued programs offering legislative moratoria and guarantee schemes. Non-legislative moratoria programs have been developed to support our clients as well as individual measures have been agreed with our clients.

On April 2, 2020 and June 25, 2020 EBA published its Guidelines on legislative and non-legislative moratoria on loan repayments applied in light of the COVID-19 crisis. These guidelines provide clarity on the treatment of legislative and non-legislative moratoria applied before September 30, 2020 and supplement the EBA Guidelines on the application of the definition of default as regards the treatment of distressed restructuring. Definitions and guidance provided in these guidelines have been considered for accounting and reporting purposes.

The following table provides an overview of newly originated loans and advances subject to a public guarantee scheme in the context of the COVID-19 pandemic, loans and advances subject to COVID-19 related forbearance measures and loans and advances subject to EBA-compliant moratoria as of June 30, 2020. The definition provided in the aforementioned EBA Guidelines have been applied.

Overview of moratoria and guarantee schemes in light of COVID 19 pandemic

	Jun 30, 2020			
in € m.	Newly originated loans and advances subject to public guarantee schemes in the context of the COVID-19 crisis ¹	Loans and advances subject to COVID-19-related forbearance measures	Loans and advances subject to EBA-compliant moratoria	Total
Corporate Bank	842	2,115	758	3,715
Investment Bank	10	3,682	222	3,914
Private Bank	319	1,195	7,348	8,861
Capital Release Unit	0	0	427	427
Total	1,171	6,992	8,754	16,917

¹ Excluding €0.2 billion which qualify for derecognition as these loans meet the pass-through criteria for financial instruments under IFRS 9

Newly originated loans and advances subject to a public guarantee scheme include loans and advances mainly guaranteed by KfW (Kreditanstalt für Wiederaufbau), a government-owned promotional. These loans were granted by the bank mainly to European clients in the Corporate Business across all industries. Similar Guarantees were also offered by the Luxembourg Public Investment Bank and by the Ministry of Economic Affairs and Digital Transformation (MINECO) of Spain. Less than 1% of the loan population has an EBA forborne or non-performing status.

The Group has originated approximately €1.4 billion of loans under the public guarantee scheme and in most cases the terms of the new originated loans and advances are between two and five years. These loans have been primarily offered to corporate and retail customers in Europe. Approximately € 0.8 billion of loans were granted in Germany via programs sponsored by KfW, of which, € 0.2 billion were derecognized as the terms of the loan and guarantee met the criteria for derecognition under IFRS 9, €0.3 billion in Spain and €0.2 billion in Luxembourg.

COVID-19 related forbearance measures were granted to clients which did not fulfill the EBA compliant moratoria criteria, but the Bank decided on an individual customer basis to amend the conditions of the loan. Individual COVID-19 forbearance measures were granted for borrowers in several business lines and portfolios. For the Investment Bank a significant amount of modifications were granted to Commercial Real Estate Clients, in the Private Bank to the Lending business and in the Corporate Banking to Trade Finance. Upon granting the modifications to the borrowers, the carrying value of the loan was amended by scheduling out the new expected cash flows and discounting at the original effective interest rate. The difference in carrying value was taken as a loss to interest income in the P&L. The amount was not material to the Group.

EBA-compliant moratoria can be divided into legislative moratoria, which are instituted by the Government and non-legislative moratoria granted by financial institutions. The loans and advances subject to EBA-compliant moratoria shown are mainly legislative moratoria instituted by the German, Italian and Indian governments. Under these moratoria, the bank has granted a postponement of interest and/or principal payments depending on the requirements defined by each individual government. The postponement of principal payments led to an extension of the loan maturity date.

The German moratoria was granted to consumer loan agreements and mortgages and only postponed principal payments with interest being waived during the holiday period. Whereas the Italian and Indian moratorias deferred both principal and interest payments to households and financial intermediaries in Italy and to standard term and working capital loans in India. The ability to utilize the German moratoria ended for all borrowers at the end of June 2020, while the Indian moratoria ends at the end of August 2020 and the Italian moratoria ends at the end of September 2020. Overall the majority of loans affected relate to the Private Bank, mainly consumer loans and mortgages. Upon granting the moratoria the carrying value of the loan was amended by scheduling out the new expected cash flows and discounting at the original effective interest rate. The difference in carrying value was taken as a loss to interest income in the P&L. The amount was not material to the Group.

Focus Industries in light of COVID-19 pandemic

To manage industry-specific risks, we group our corporate and financial institutions counterparties into various industry sub-portfolios. Risk appetite thresholds are set for aggregate credit limits to counterparties and net market values of Traded Credit Positions within each industry sub-portfolio.

Portfolios are regularly reviewed with the frequency of review according to our industry risk assessment and portfolio risk profile. Industry portfolio reviews highlight industry developments and risks to our credit portfolio, review cross-risk concentration risks, analyze the risk/reward profile of the portfolio and incorporate the results of an economic downside stress test. These analyses are used to define risk strategies and risk appetite thresholds for the portfolio in question. In addition, regular cross-industry portfolio overviews are prepared for the Enterprise Risk Committee to discuss recent developments, review adherence to industry thresholds set and to agree on actions where necessary.

We assess industry risk using a range of economic indicators, specific industry performance indicators, related market indicators, as well as expert views on longer term emerging risk topics. Based on these we assign risk flags to each subsector.

While the negative implications of the COVID-19 crisis are materializing across economies and sectors globally, certain industries are seeing particularly severe direct or indirect impacts. These sectors accounted for approximately 30 % of group CLPs in the first half of 2020.

- Commercial Real Estate (€ 30 billion loan exposure): Commercial Real Estate (CRE) is facing a severe impact across a number of segments, with Hotels and non-Food Retail most affected due to closures, tenant rent deferral requests or tenant defaults. Multifamily, Office, Industrial & Logistics sectors are seeing a more contained impact. CRE exposure (comprises Commercial Real Estate Group, APAC CRE exposures in the Investment Bank and non-recourse CRE business in the Corporate Bank) accounts for 7 % of the loan book with quarter-on-quarter reduction mainly reflecting lower non-recourse balances in CB following reassessment of recourse status. Portfolios are managed to tight underwriting standards with regular stress tests under conservative assumptions. Going into the crisis average LTVs across the portfolio were low (< 60 %) providing a substantial buffer to absorb potential declines in collateral prices. Our exposures to non-Food Retail is contained. Hotel exposures are concentrated in the U.S. and benefit from significant sponsor equity in the assets and demonstrated support in most cases.
- Oil & Gas (€ 8 billion loan exposure): Significant fall in travel and trade volumes, as well as the wider economic downturn, have led to a meaningful contraction of demand for oil and a significant fall in prices (now partly recovered). There have been a number of bankruptcies among smaller / weaker companies – especially in North America - in recent months. Our loan exposure to the sector accounts for less than 2 % of our total loan book, and while we are seeing a downward migration of credit ratings among our clients, the portfolio risk is mitigated by its focus on the more resilient Oil & Gas Majors and National Oil & Gas companies. More than 80 % of net credit limits are to investment grade rated clients. Our exposure to the higher risk “shale” companies in North America is small since we have realigned our portfolio in recent years.
- Retail (excluding Food/Staples) (€ 4 billion loan exposure): The impact of lockdowns and a drop in consumer confidence have added to the structural challenges the retail industry is facing – including digitalization and shifting consumer preferences. Consequently, we are seeing a downward migration of credit ratings within our portfolio. Loan exposure has fallen by ~ € 1 billion in the second quarter of 2020 and accounts for ~1 % of the total loan book. Portfolio risks are mitigated by a focus on strong global brands with approximately two thirds of net credit limits to investment grade rated clients.
- Aviation (€ 4 billion loan exposure): The industry is going through its deepest crisis in history. The International Air Transport Association expects substantial losses across the sector, and bankruptcies have been observed among weaker airlines. Our loan exposure accounts for ~1 % of total and portfolio risks are mitigated by a significant share of secured aircraft financing which is biased towards newer / liquid aircraft. The unsecured portfolio is focused on developed market flag carriers, many of which benefit from robust government support packages.
- Leisure (€ 2 billion loan exposure): The industry has been hit by a very sharp decline in both business and private travel during lockdowns and it is unlikely that volumes will recover to pre-crisis levels in the near-term. Loan exposure is contained at well under 1 % of the total loan book, with a focus on industry leaders in the Hotels and Casinos segment, mostly domiciled in the US market. We have very limited exposure to Tour Operators and Cruise Lines.

Asset quality

This section describes the quality of debt instruments subject to impairment, which under IFRS 9 consist of debt instruments measured at amortized cost (AC), financial instruments at fair value through other comprehensive income (FVOCI) as well as off balance sheet lending commitments such as loan commitments and financial guarantees (hereafter collectively referred to as ‘Financial Assets’).

The following table provides an overview of the exposure amount and allowance for credit losses by financial asset class broken down into stages as per IFRS 9 requirements.

Overview of financial assets subject to impairment

in € m.	Jun 30, 2020					Dec 31, 2019				
	Stage 1	Stage 2	Stage 3	Stage 3 POCI	Total	Stage 1	Stage 2	Stage 3	Stage 3 POCI	Total
Amortized cost¹										
Gross carrying amount	661,175	51,795	10,419	1,981	725,369	645,967	24,680	7,531	2,150	680,328
Allowance for credit losses ²	683	796	3,438	121	5,037	549	492	3,015	36	4,093
Fair value through OCI										
Fair value	44,832	1,309	92	0	46,233	45,083	397	23	0	45,503
Allowance for credit losses	9	12	6	0	27	16	9	10	0	35
Off-balance sheet										
Notional amount	236,658	12,889	1,470	0	251,018	251,930	5,864	1,424	0	259,218
Allowance for credit losses ³	134	89	180	0	403	128	48	166	0	342

¹ Financial assets at amortized cost consist of: Loans at amortized cost, Cash and central bank balances, Interbank balances (w/o central banks), Central bank funds sold and securities purchased under resale agreements, Securities borrowed and certain subcategories of Other assets.

² Allowance for credit losses do not include allowance for country risk amounting to € 5 million as of June 30, 2020 and € 3 million as of December 31, 2019.

³ Allowance for credit losses do not include allowance for country risk amounting to € 4 million as of June 30, 2020 and € 4 million as of December 31, 2019.

Additional information

Management and Supervisory Board

Management Board

The Supervisory Board of Deutsche Bank has appointed Alexander von zur Mühlen as a member of the Management Board of Deutsche Bank AG effective August 1, 2020. He will take charge of the bank's Asia Pacific business when Werner Steinmüller retires from the Management Board on July 31, 2020. Werner Steinmüller will continue to serve the bank in an advisory role until year-end.

Supervisory Board

The Annual General Meeting on May 20, 2020 elected Dagmar Valcárcel, Sigmar Gabriel and Theodor Weimer as members of the Supervisory Board of Deutsche Bank AG. Katherine Garrett-Cox left the Supervisory Board at the end of the Annual General Meeting.

Consolidated statement of income

Income statement

in € m.	Three months ended		Six months ended	
	Jun 30, 2020	Jun 30, 2019	Jun 30, 2020	Jun 30, 2019
Interest and similar income ¹	4,490	6,863	9,958	13,365
Interest expense	1,397	3,190	3,613	6,337
Net interest income	3,093	3,673	6,345	7,028
Provision for credit losses	761	161	1,267	301
Net interest income after provision for credit losses	2,332	3,512	5,077	6,727
Commissions and fee income	2,227	2,484	4,666	4,865
Net gains (losses) on financial assets/liabilities at fair value through profit or loss	702	171	1,097	887
Net gains (losses) on financial assets at amortized cost	171	1	232	1
Net gains (losses) on financial assets at fair value through other comprehensive income	62	24	187	70
Net income (loss) from equity method investments	45	45	60	79
Other income (loss)	(13)	(195)	51	(377)
Total noninterest income	3,193	2,530	6,293	5,525
Compensation and benefits	2,645	2,813	5,334	5,679
General and administrative expenses	2,599	3,089	5,474	6,159
Impairment of goodwill and other intangible assets	0	1,035	0	1,035
Restructuring activities	123	50	197	33
Total noninterest expenses	5,367	6,987	11,006	12,906
Profit (loss) before tax	158	(946)	364	(654)
Income tax expense (benefit)	97	2,204	238	2,295
Profit (loss)	61	(3,150)	126	(2,949)
Profit (loss) attributable to noncontrolling interests	32	40	56	63
Profit (loss) attributable to Deutsche Bank shareholders and additional equity components	28	(3,190)	71	(3,012)

¹ Interest and similar income include € 3.5 billion for the three months ended June 30, 2020 and € 4.6 billion for the three months ended June 30, 2019 and € 7.7 billion for the six months ended June 30, 2020 and € 9.1 billion for the six months ended June 30, 2019, were calculated based on the effective interest method.

Earnings per common share

	Three months ended		Six months ended	
	Jun 30, 2020	Jun 30, 2019	Jun 30, 2020	Jun 30, 2019
Earnings per common share:^{1,2}				
Basic	€ (0.15)	€ (1.66)	€ (0.13)	€ (1.59)
Diluted	€ (0.15)	€ (1.66)	€ (0.13)	€ (1.59)
Number of shares in million:				
Denominator for basic earnings per share – weighted-average shares outstanding	2,111.0	2,114.0	2,112.9	2,105.5
Denominator for diluted earnings per share – adjusted weighted-average shares after assumed conversions	2,111.0	2,114.0	2,112.9	2,105.5

¹ Earnings were adjusted by € 349 million and € 330 million before tax for the coupons paid on Additional Tier 1 Notes in April 2020 and April 2019, respectively. The coupons paid on Additional Tier 1 Notes are not attributable to Deutsche Bank shareholders and therefore need to be deducted in the calculation in accordance with IAS 33. This adjustment created a net loss situation for Earnings per Common Share for the three and six months ended June 30, 2020.

² Due to the net loss situation for the three and six months ended June 30, 2020 and June 30, 2019 potentially dilutive shares are generally not considered for the EPS calculation, because to do so would decrease the net loss per share. Under a net income situation however, the number of adjusted weighted average shares after assumed conversion would have been increased by 68.4 million shares and 73.7 million shares for the three and six months ended June 30, 2020 and by 49.0 million shares and 51.5 million shares for the three and six months ended June 30, 2019, respectively.

Consolidated statement of comprehensive income

in € m.	Three months ended		Six months ended	
	Jun 30, 2020	Jun 30, 2019	Jun 30, 2020	Jun 30, 2019
Profit (loss) recognized in the income statement	61	(3,150)	126	(2,949)
Other comprehensive income				
Items that will not be reclassified to profit or loss				
Remeasurement gains (losses) related to defined benefit plans, before tax	(207)	(314)	159	(568)
Net fair value gains (losses) attributable to credit risk related to financial liabilities designated as at fair value through profit or loss, before tax	93	(15)	124	(11)
Total of income tax related to items that will not be reclassified to profit or loss	186	100	(86)	181
Items that are or may be reclassified to profit or loss				
Financial assets at fair value through other comprehensive income				
Unrealized net gains (losses) arising during the period, before tax	217	214	391	440
Realized net (gains) losses arising during the period (reclassified to profit or loss), before tax	(62)	(24)	(187)	(70)
Derivatives hedging variability of cash flows				
Unrealized net gains (losses) arising during the period, before tax	(14)	8	(17)	10
Realized net (gains) losses arising during the period (reclassified to profit or loss), before tax	(1)	1	(1)	(1)
Assets classified as held for sale				
Unrealized net gains (losses) arising during the period, before tax	0	0	0	0
Realized net (gains) losses arising during the period (reclassified to profit or loss), before tax	0	0	0	0
Foreign currency translation				
Unrealized net gains (losses) arising during the period, before tax	(436)	(483)	(449)	(92)
Realized net (gains) losses arising during the period (reclassified to profit or loss), before tax	0	0	0	0
Equity Method Investments				
Net gains (losses) arising during the period	1	(21)	1	(25)
Total of income tax related to items that are or may be reclassified to profit or loss	(47)	20	(106)	15
Other comprehensive income (loss), net of tax	(269)	(514)	(171)	(121)
Total comprehensive income (loss), net of tax	(209)	(3,664)	(45)	(3,070)
Attributable to:				
Noncontrolling interests	13	13	47	59
Deutsche Bank shareholders and additional equity components	(221)	(3,677)	(92)	(3,128)

Consolidated balance sheet

Assets

in € m.	Jun 30, 2020	Dec 31, 2019
Cash and central bank balances	166,232	137,592
Interbank balances (w/o central banks)	10,159	9,636
Central bank funds sold and securities purchased under resale agreements	7,504	13,801
Securities borrowed	13	428
Financial assets at fair value through profit or loss		
Trading assets	116,959	110,875
Positive market values from derivative financial instruments	372,811	332,931
Non-trading financial assets mandatory at fair value through profit and loss	81,816	86,901
Financial assets designated at fair value through profit or loss	384	7
Total financial assets at fair value through profit or loss	571,970	530,713
Financial assets at fair value through other comprehensive income	46,233	45,503
Equity method investments	949	929
Loans at amortized cost	437,014	429,841
Property and equipment	4,816	4,930
Goodwill and other intangible assets	6,900	7,029
Other assets	148,465	110,359
Assets for current tax	1,075	926
Deferred tax assets	5,966	5,986
Total assets	1,407,296	1,297,674

Liabilities and equity

in € m.	Jun 30, 2020	Dec 31, 2019
Deposits	572,963	572,208
Central bank funds purchased and securities sold under repurchase agreements	6,959	3,115
Securities loaned	1,156	259
Financial liabilities at fair value through profit or loss		
Trading liabilities	43,503	37,065
Negative market values from derivative financial instruments	355,666	316,506
Financial liabilities designated at fair value through profit or loss	54,060	50,332
Investment contract liabilities	506	544
Total financial liabilities at fair value through profit or loss	453,736	404,448
Other short-term borrowings	4,116	5,218
Other liabilities	147,148	107,964
Provisions	2,552	2,622
Liabilities for current tax	767	651
Deferred tax liabilities	654	545
Long-term debt	153,080	136,473
Trust preferred securities	1,348	2,013
Total liabilities	1,344,479	1,235,515
Common shares, no par value, nominal value of €2.56	5,291	5,291
Additional paid-in capital	40,484	40,505
Retained earnings	9,474	9,644
Common shares in treasury, at cost	(56)	(4)
Accumulated other comprehensive income (loss), net of tax	151	421
Total shareholders' equity	55,343	55,857
Additional equity components	5,826	4,665
Noncontrolling interests	1,648	1,638
Total equity	62,817	62,160
Total liabilities and equity	1,407,296	1,297,674

Consolidated statement of changes in equity

in € m.	Common shares (no par value)	Additional paid-in capital	Retained earnings	Common shares in treasury, at cost
Balance as of December 31, 2018	5,291	40,252	16,714	(15)
IFRS 16 transition impact	0	0	(136)	0
Balance as of January 1, 2019 (IFRS 16)	5,291	40,252	16,578	(15)
Total comprehensive income (loss), net of tax ¹	0	0	(3,012)	0
Gains (losses) attributable to equity instruments designated as at fair value through other comprehensive income, net of tax	0	0	0	0
Gains (losses) upon early extinguishment attributable to change in own credit risk of financial liabilities designated as at fair value through profit and loss, net of tax	0	0	0	0
Common shares issued	0	0	0	0
Cash dividends paid	0	0	(227)	0
Coupon on additional equity components, before tax	0	0	(330)	0
Remeasurement gains (losses) related to defined benefit plans, net of tax	0	0	(385)	0
Net change in share awards in the reporting period	0	(23)	0	0
Treasury shares distributed under share-based compensation plans	0	0	0	121
Tax benefits related to share-based compensation plans	0	0	0	0
Option premiums and other effects from options on common shares	0	0	0	0
Purchases of treasury shares	0	0	0	(934)
Sale of treasury shares	0	0	0	816
Net gains (losses) on treasury shares sold	0	2	0	0
Other	0	88	0	0
Balance as of June 30, 2019	5,291	40,318	12,624	(12)
Balance as of December 31, 2019	5,291	40,505	9,644	(4)
Total comprehensive income (loss), net of tax ¹	0	0	71	0
Gains (losses) attributable to equity instruments designated as at fair value through other comprehensive income, net of tax	0	0	0	0
Gains (losses) upon early extinguishment attributable to change in own credit risk of financial liabilities designated as at fair value through profit and loss, net of tax	0	0	0	0
Common shares issued	0	0	0	0
Cash dividends paid	0	0	0	0
Coupon on additional equity components, before tax	0	0	(349)	0
Remeasurement gains (losses) related to defined benefit plans, net of tax	0	0	107	0
Net change in share awards in the reporting period	0	(141)	0	0
Treasury shares distributed under share-based compensation plans	0	0	0	139
Tax benefits related to share-based compensation plans	0	0	0	0
Option premiums and other effects from options on common shares	0	0	0	0
Purchases of treasury shares	0	0	0	(255)
Sale of treasury shares	0	0	0	64
Net gains (losses) on treasury shares sold	0	0	0	0
Other	0	120	0	0
Balance as of June 30, 2020	5,291	40,484	9,474	(56)

¹ Excluding remeasurement gains (losses) related to defined benefit plans, net of tax.

in € m.	Unrealized net gains (losses)							
	On financial assets available for sale, net of tax ²	On financial assets at fair value through other comprehensive income, net of tax ²	Attributable to change in own credit risk of financial liabilities designated as at fair value through profit and loss, net of tax ²	On derivatives hedging variability of cash flows, net of tax ²	On assets classified as held for sale, net of tax ²	Foreign currency translation, net of tax ²	Unrealized net gains (losses) from equity method investments	Accumulated other comprehensive income, net of tax ¹
Balance as of December 31, 2018	0	(34)	28	17	0	228	15	253
IFRS 16 transition impact	0	0	0	0	0	0	0	0
Balance as of January 1, 2019 (IFRS 16)	0	(34)	28	17	0	228	15	253
Total comprehensive income (loss), net of tax ¹	0	313	(8)	6	0	(24)	(18)	269
Gains (losses) attributable to equity instruments designated as at fair value through other comprehensive income, net of tax	0	0	0	0	0	0	0	0
Gains (losses) upon early extinguishment attributable to change in own credit risk of financial liabilities designated as at fair value through profit and loss, net of tax	0	0	0	0	0	0	0	0
Common shares issued	0	0	0	0	0	0	0	0
Cash dividends paid	0	0	0	0	0	0	0	0
Coupon on additional equity components, before tax	0	0	0	0	0	0	0	0
Remeasurement gains (losses) related to defined benefit plans, net of tax	0	0	0	0	0	0	0	0
Net change in share awards in the reporting period	0	0	0	0	0	0	0	0
Treasury shares distributed under share-based compensation plans	0	0	0	0	0	0	0	0
Tax benefits related to share-based compensation plans	0	0	0	0	0	0	0	0
Option premiums and other effects from options on common shares	0	0	0	0	0	0	0	0
Purchases of treasury shares	0	0	0	0	0	0	0	0
Sale of treasury shares	0	0	0	0	0	0	0	0
Net gains (losses) on treasury shares sold	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0
Balance as of June 30, 2019	0	279	19	23	0	204	(4)	521

in € m.	Unrealized net gains (losses)							
	On financial assets available for sale, net of tax ²	On financial assets at fair value through other comprehensive income, net of tax ²	Attributable to change in own credit risk of financial liabilities designated as at fair value through profit and loss, net of tax ²	On derivatives hedging variability of cash flows, net of tax ²	On assets classified as held for sale, net of tax ²	Foreign currency translation, net of tax ²	Unrealized net gains (losses) from equity method investments	Accumulated other comprehensive income, net of tax ¹
Balance as of December 31, 2019	0	45	25	14	0	336	0	421
Total comprehensive income (loss), net of tax ¹	0	113	91	(13)	0	(460)	(1)	(270)
Gains (losses) attributable to equity instruments designated as at fair value through other comprehensive income, net of tax	0	0	0	0	0	0	0	0
Gains (losses) upon early extinguishment attributable to change in own credit risk of financial liabilities designated as at fair value through profit and loss, net of tax	0	0	0	0	0	0	0	0
Common shares issued	0	0	0	0	0	0	0	0
Cash dividends paid	0	0	0	0	0	0	0	0
Coupon on additional equity components, before tax	0	0	0	0	0	0	0	0
Remeasurement gains (losses) related to defined benefit plans, net of tax	0	0	0	0	0	0	0	0
Net change in share awards in the reporting period	0	0	0	0	0	0	0	0
Treasury shares distributed under share-based compensation plans	0	0	0	0	0	0	0	0
Tax benefits related to share-based compensation plans	0	0	0	0	0	0	0	0
Option premiums and other effects from options on common shares	0	0	0	0	0	0	0	0
Purchases of treasury shares	0	0	0	0	0	0	0	0
Sale of treasury shares	0	0	0	0	0	0	0	0
Net gains (losses) on treasury shares sold	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0
Balance as of June 30, 2020	0	158	116	1	0	(123)	(1)	151

¹ Excluding remeasurement gains (losses) related to defined benefit plans, net of tax.

² Excluding unrealized net gains (losses) from equity method investments.

in € m.	Total shareholders' equity	Additional equity components ²	Noncontrolling interests	Total equity
Balance as of December 31, 2018	62,495	4,675	1,568	68,737
IFRS 16 transition impact	(136)	0	0	(137)
Balance as of January 1, 2019 (IFRS 16)	62,358	4,675	1,568	68,601
Total comprehensive income (loss), net of tax ¹	(2,744)	0	63	(2,681)
Gains (losses) attributable to equity instruments designated as at fair value through other comprehensive income, net of tax	0	0	0	0
Gains (losses) upon early extinguishment attributable to change in own credit risk of financial liabilities designated as at fair value through profit and loss, net of tax	0	0	0	0
Common shares issued	0	0	0	0
Cash dividends paid	(227)	0	(56)	(283)
Coupon on additional equity components, before tax	(330)	0	0	(330)
Remeasurement gains (losses) related to defined benefit plans, net of tax	(385)	0	(4)	(389)
Net change in share awards in the reporting period	(23)	0	(1)	(25)
Treasury shares distributed under share-based compensation plans	121	0	0	121
Tax benefits related to share-based compensation plans	0	0	0	0
Option premiums and other effects from options on common shares	0	0	0	0
Purchases of treasury shares	(934)	0	0	(934)
Sale of treasury shares	816	0	0	816
Net gains (losses) on treasury shares sold	2	0	0	2
Other	88	0	(5)	83
Balance as of June 30, 2019	58,742	4,675	1,565	64,982
Balance as of December 31, 2019	55,857	4,665	1,638	62,160
Total comprehensive income (loss), net of tax ¹	(199)	0	47	(152)
Gains (losses) attributable to equity instruments designated as at fair value through other comprehensive income, net of tax	0	0	0	0
Gains (losses) upon early extinguishment attributable to change in own credit risk of financial liabilities designated as at fair value through profit and loss, net of tax	0	0	0	0
Common shares issued	0	0	0	0
Cash dividends paid	0	0	0	0
Coupon on additional equity components, before tax	(349)	0	0	(349)
Remeasurement gains (losses) related to defined benefit plans, net of tax	107	0	(1)	107
Net change in share awards in the reporting period	(141)	0	(3)	(143)
Treasury shares distributed under share-based compensation plans	139	0	0	139
Tax benefits related to share-based compensation plans	0	0	0	0
Option premiums and other effects from options on common shares	0	0	0	0
Purchases of treasury shares	(255)	0	0	(255)
Sale of treasury shares	64	0	0	64
Net gains (losses) on treasury shares sold	0	0	0	0
Other	120	1,161 ³	(34)	1,248
Balance as of June 30, 2020	55,343	5,826	1,648	62,817

¹ Excluding remeasurement gains (losses) related to defined benefit plans, net of tax.

² Includes Additional Tier 1 Notes, which constitute unsecured and subordinated notes of Deutsche Bank and are classified as equity in accordance with IFRS.

³ Includes net proceeds from issuance, purchase and sale of Additional Equity Components.

Consolidated statement of cash flows

in € m.	Six months ended	
	Jun 30, 2020	Jun 30, 2019
Profit (loss)	126	(2,949)
Cash flows from operating activities:		
Adjustments to reconcile profit (loss) to net cash provided by (used in) operating activities:		
Provision for credit losses	1,267	301
Restructuring activities	197	33
Gain on sale of financial assets at fair value through other comprehensive income, equity method investments and other	(411)	(78)
Deferred income taxes, net	(89)	2,015
Impairment, depreciation and other amortization, and accretion	1,048	2,446
Share of net income (loss) from equity method investments	(60)	(74)
Profit (loss) adjusted for noncash charges, credits and other items	2,078	1,694
Adjustments for net change in operating assets and liabilities:		
Interest-earning time deposits with central banks and banks	(632)	(949)
Central bank funds sold, securities purchased under resale agreements, securities borrowed	7,374	1,873
Non-Trading financial assets mandatory at fair value through profit and loss	3,506	(380)
Financial assets designated at fair value through profit or loss	(377)	72
Loans at amortized cost	(7,771)	(13,258)
Other assets	(43,489)	(56,909)
Deposits	849	11,502
Financial liabilities designated at fair value through profit or loss and investment contract liabilities ¹	3,483	(2,184)
Central bank funds purchased, securities sold under repurchase agreements and securities loaned	4,141	2,285
Other short-term borrowings	(1,229)	(1,749)
Other liabilities	40,054	37,805
Senior long-term debt ²	17,332	(4,907)
Trading assets and liabilities, positive and negative market values from derivative financial instruments, net	(958)	(11,380)
Other, net	(146)	16,220
Net cash provided by (used in) operating activities	24,215	(20,260)
Cash flows from investing activities:		
Proceeds from:		
Sale of financial assets at fair value through other comprehensive income	21,931	10,378
Maturities of financial assets at fair value through other comprehensive income	19,190	18,503
Sale of debt securities held to collect at amortized cost	6,663	21
Maturities of debt securities held to collect at amortized cost	2,106	605
Sale of equity method investments	29	5
Sale of property and equipment	4	11
Purchase of:		
Financial assets at fair value through other comprehensive income	(41,614)	(26,520)
Debt Securities held to collect at amortized cost	(2,098)	(11,550)
Equity method investments	(3)	(5)
Property and equipment	(181)	(313)
Net cash received in (paid for) business combinations/divestitures	2	1,622
Other, net	(436)	(541)
Net cash provided by (used in) investing activities	5,593	(7,784)
Cash flows from financing activities:		
Issuances of subordinated long-term debt	22 ³	19
Repayments and extinguishments of subordinated long-term debt	(1,131) ³	(84)
Issuances of trust preferred securities	0 ⁴	0
Repayments and extinguishments of trust preferred securities	(711) ⁴	0
Principal portion of lease payments	(311)	387
Common shares issued	0	0
Purchases of treasury shares	(255)	(934)
Sale of treasury shares	52	822
Additional Equity Components (AT1) issued	1,153	0
Purchases of Additional Equity Components (AT1)	(731)	(61)
Sale of Additional Equity Components (AT1)	723	63
Coupon on additional equity components, pre tax	(349)	(330)
Dividends paid to noncontrolling interests	0	(56)
Net change in noncontrolling interests	(34)	(5)
Cash dividends paid to Deutsche Bank shareholders	0	(227)
Other, net	0	0
Net cash provided by (used in) financing activities	(1,572)	(406)

in € m.	Six months ended	
	Jun 30, 2020	Jun 30, 2019
Net effect of exchange rate changes on cash and cash equivalents	472	793
Net increase (decrease) in cash and cash equivalents	28,709	(27,657)
Cash and cash equivalents at beginning of period	128,869	180,822
Cash and cash equivalents at end of period	157,578	153,165
Net cash provided by (used in) operating activities including		
Income taxes paid (received), net	363	521
Interest paid	4,360	6,505
Interest received	10,435	11,913
Dividends received	245	1,063
Cash and cash equivalents comprise		
Cash and central bank balances (not included Interest-earning time deposits with central banks)	149,447	145,703
Interbank balances (w/o central banks) (not included: time deposits of € 18.8 billion as of June 30, 2020, and € 18.0 billion as of June 30, 2019)	8,131	7,462
Total	157,578	153,165

¹ Included are senior long-term debt issuances of € 1.0 billion and € 2.0 billion and repayments and extinguishments of € 1.3 billion and € 2.3 billion through June 30, 2020 and June 30, 2019, respectively.

² Included are issuances of € 37.0 billion and € 15.4 billion and repayments and extinguishments of € 20.1 billion and € 23.3 billion through June 30, 2020 and June 30, 2019, respectively.

³ Non-cash changes for Subordinated Long-Term Debt are € 226 million in total and mainly driven by Fair Value changes of € 237 million and Foreign Exchange movements of € (12) million.

⁴ Non-cash changes for Trust Preferred Securities are € 46 million in total and mainly driven by Fair Value changes of € 44 million and Foreign Exchange movements of € (2) million.

Basis of preparation/impact of changes in accounting principles

The consolidated interim financial statements of Deutsche Bank Aktiengesellschaft, Frankfurt am Main and its subsidiaries (collectively the “Group”, “Deutsche Bank” or “DB”) for the six-month period ended June 30, 2020 are stated in euros, the presentation currency of the Group. It has been prepared based on the International Financial Reporting Standards (“IFRS”) as issued by the International Accounting Standards Board (“IASB”) and endorsed by the European Union (“EU”). The consolidated interim financial statements take particular account of the requirements of IAS 34 relating to interim financial reporting.

The Group’s consolidated interim financial statements are unaudited and include the consolidated balance sheet as of June 30, 2020, the related consolidated statements of income, comprehensive income, changes in equity and cash flows for the three-and-six-month period ended June 30, 2020 as well as other information (e.g. Basis of preparation/impact of changes in accounting principles).

The Group’s consolidated interim financial statements should be read in conjunction with the audited consolidated financial statements of Deutsche Bank for 2019, for which the same accounting policies, critical accounting estimates and changes in accounting estimates have been applied with the exception of the newly adopted accounting pronouncements outlined in section “Recently adopted accounting pronouncements”, the application of fair value hedge accounting for portfolio hedges of interest rate risk (macro hedging) under the EU carve out version of IAS 39 and the accounting policy changes for purchased contracts that meet the definition of a financial guarantee under IFRS 9.

Beginning with the first half of 2020, the Group applies fair value hedge accounting for portfolio hedges of interest rate risk (fair value macro hedges) in accordance with the EU carve out version of IAS 39. The purpose of applying the EU carve out version of IAS 39 is to align the Group’s hedge accounting approach with its risk management practice and the accounting practice of its major European Union peers. Under the EU IAS 39 carve-out, fair value macro hedge accounting may be applied to core deposits and hedge ineffectiveness for all fair value macro hedge accounting applications is only recognized when the revised estimate of the amount of cash flows in scheduled time buckets falls below the original designated amount of that bucket and is not recognized when the revised amount of cash flows in scheduled time buckets is more than the original designated amount. Under IFRS as issued by the IASB, hedge accounting for fair value macro hedges cannot be applied to core deposits. In addition, hedge ineffectiveness arises for all fair value macro hedge accounting relationships whenever the revised estimate of the amount of cash flows in scheduled time buckets is either more or less than the original designated amount of that bucket.

For the six-month period ended June 30, 2020, application of the EU carve out had a positive impact of € 77 million on net revenues and profit before taxes and of € 47 million on profit post taxes. The Group’s regulatory capital and ratios thereof are also reported on the basis of the EU carve out version of IAS 39. The impact on profit after taxes also impacts the calculation of the CET 1 capital ratio and had a positive impact of about 1 basis point as of June 30, 2020.

The Group has also changed its accounting policies for purchased contracts that meet the definition of a financial guarantee under IFRS 9. Previously, the Group accounted for purchased financial guarantees as contingent assets and did not recognize the reimbursement gain as Other Income (loss) in the Group’s Consolidated Statement of Income until the Group received payment from the guarantor. Under the Group’s new accounting policy, purchased financial guarantees are deemed to result in reimbursements under IAS 37 to the extent that the financial guarantee is entered into to mitigate the credit exposure from debt instruments with Hold to Collect (HTC) or Hold to Collect and Sell (HTC&S) business models. The new accounting policy results in recognition of a reimbursement asset for subsequent increases in the expected credit losses, to the extent it is virtually certain that the purchased financial guarantee will reimburse the Group for the loss incurred. Accordingly, when the credit risk of the borrower significantly deteriorates a reimbursement asset is recognized equal to the life-time expected credit losses and is presented as Other Assets in the Group’s Consolidated Balance Sheet. The corresponding reimbursement gain is recognized as a reduction in the Provision for credit losses in the Group’s Consolidated Statement of Income. Purchased financial guarantees entered into to mitigate credit exposure from debt instruments included in the Other business model are accounted for at fair value through profit or loss. The new accounting policy more appropriately aligns the measurement basis and income statement presentation of the debt instruments and associated purchased financial guarantees. It therefore more accurately presents the credit exposure and provision for credit losses in the financial statements resulting in the presentation of more relevant information. The adoption of the changes in the first half of 2020 did not have a material impact to the Group’s Consolidated Statement of Income.

The preparation of financial information under IFRS requires management to make estimates and assumptions for certain categories of assets and liabilities. These estimates and assumptions affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the balance sheet date and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from management's estimates, especially in relation to the COVID-19 crisis, and the results reported should not be regarded as necessarily indicative of results that may be expected for the entire year.

The Group has refined its estimation of contractual cash flows from Collateralized Loan Obligations (CLO's) issued that mitigate credit exposure from debt instruments with HTC or HTC&S business models. Under this refinement, the Group revises its estimated contractual redemption payment from the CLO when the credit risk of a borrower covered by the embedded financial guarantee in the CLO significantly deteriorates. The Group revises its estimated contractual redemption payment under the CLO based on the life-time expected credit losses of the debt instrument (to the extent covered by the CLO). The refinement in the estimate of contractual cashflows reduced the Group's interest expense for the three-and-six-month period ended June 30, 2020, by €60 million.

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 – derived based on bond universe information sourced from reputable third-party index data providers and rating agencies – reflecting the timing, amount and currency of the future expected benefit payments for the respective plan. Unprecedented market turmoil in March 2020 has led to general credit spread widening and increased dispersion of bond yields. Given the Group's approach for determining the discount rate, this dispersion has resulted in discount rates that are not representative of the broader development in high grade corporate bonds. To mitigate this effect, an adjustment has been made to the liquidity weighting applied to the underlying bonds used to determine the discount rate applied to the larger German pension plans. As the markets have returned to a more normal state, the divergence between the discount rate approach previously employed and the new approach has considerably reduced. Due to this as well as other effects, the Group's net pension liability for the German pension plans reduced by €272 million from €1,355 million as of December 31, 2019 to €1,083 million as of June 30, 2020.

As a result of recent developments and historical experience, the Group has in the second quarter of 2020 changed its estimate of the service period for certain compensation awards granted to employees to recognize compensation expense over the respective vesting periods in which the related employee services are rendered. As a result of the change in estimate, the Group reported a benefit of approximately €110 million in "Compensation and benefits" in the Group's Consolidated Statement of Income.

Recently adopted accounting pronouncements

The following are those accounting pronouncements which are relevant to the Group and which have been applied newly in the first half of 2020.

IFRS 3 Business Combinations

On January 1, 2020, the Group adopted amendments to IFRS 3, "Business Combinations". These amendments clarify the determination of whether an acquisition made is of a business or a group of assets. The amended definition of a business emphasizes that the output of a business is to provide goods and services to customers, whereas the previous definition focused on returns in the form of dividends, lower costs or other economic benefits to investors and others. Distinguishing between a business and a group of assets is important because an acquirer recognizes goodwill only when acquiring a business. The adoption of the amendments did not have an impact on the Group's consolidated financial statements.

In addition, the Group adopted on January 1, 2020 "Amendments to IAS 1 and IAS 8: Definition of Material" and "Amendments to References to the Conceptual Framework in IFRS Standards". The adoption of the amendments did not have an impact on the Group's consolidated financial statements.

New accounting pronouncements

The following accounting pronouncements were not effective as of June 30, 2020 and therefore have not been applied in the first half of 2020.

IFRS 17 Insurance Contracts

In May 2017, the IASB issued IFRS 17, "Insurance Contracts", which establishes the principles for the recognition, measurement, presentation and disclosure of insurance contracts within the scope of the standard. IFRS 17 replaces IFRS 4 which has given companies dispensation to carry on accounting for insurance contracts using national accounting standards, resulting in a multitude of different approaches. IFRS 17 solves the comparison problems created by IFRS 4 by requiring all insurance contracts to be accounted for in a consistent manner, benefiting both investors and insurance companies. Insurance obligations will be accounted for using current values – instead of historical cost. The information will be updated regularly, providing more useful information to users of financial statements. IFRS 17 is effective for annual periods beginning on or after January 1, 2021. Based on the Group's current business activities it is expected that IFRS 17 will not have a material impact on the Group's consolidated financial statements. These amendments have yet to be endorsed by the EU.

In June 2020, the IASB issued amendments to IFRS 17 "Insurance Contracts" that address concerns and implementation challenges that were identified after IFRS 17 was published in 2017. The amendments are effective for annual periods beginning on or after January 1, 2023 with early adoption permitted. The IASB has also issued an amendment to IFRS 4 "Insurance Contracts" which extends the temporary exemption to apply IFRS 9 to annual periods beginning on or after 1 January 2023. The amendments will not have a material impact on the Group's consolidated financial statements. These amendments have yet to be endorsed by the EU.

IFRS 16 "Leases"

In May 2020, the IASB issued amendments to IFRS 16 "Leases" that include Covid-19-Related Rent Concessions to provide lessees with an exemption from assessing whether a COVID-19-related rent concession is a lease modification. The amendments are effective for annual periods beginning on or after June 1, 2020 with early adoption permitted including financial statements not yet authorized for issue at 28 May 2020. The amendment is also available for interim reports. The amendments will not have a material impact on the Group's consolidated financial statements. These amendments have yet to be endorsed by the EU.

IFRS 3 "Business Combinations"

In May 2020, the IASB issued amendments to IFRS 3 "Business Combinations". The amendments update an outdated reference in IFRS 3 without significantly changing its requirements. The amendments are effective for annual periods beginning on or after January 1, 2022 with early adoption permitted. The amendments will not have a material impact on the Group's consolidated financial statements. These amendments have yet to be endorsed by the EU.

IAS 37 Provisions, Contingent Liabilities and Contingent Assets

In May 2020, the IASB issued amendments to IAS 37, "Provisions, Contingent Liabilities and Contingent Assets" to clarify what costs an entity considers in assessing whether a contract is onerous. The amendments specify that the 'cost of fulfilling' a contract comprises the 'costs that relate directly to the contract'. Costs that relate directly to a contract can either be incremental costs of fulfilling that contract or an allocation of other costs that relate directly to fulfilling contracts. The amendments are effective for annual periods beginning on or after January 1, 2022 with early adoption permitted. The amendments will not have a material impact on the Group's consolidated financial statements. These amendments have yet to be endorsed by the EU.

IAS 16 Property, Plant and Equipment

In May 2020, the IASB issued amendments to IAS 16 "Property, Plant and Equipment". The amendments prohibit deducting from the cost of an item of property, plant and equipment any proceeds from selling items produced while bringing that asset to the location and condition necessary for it to be capable of operating in the manner intended by management. Instead, an entity recognizes the proceeds from selling such items, and the cost of producing those items, in profit or loss. The amendments are effective for annual periods beginning on or after January 1, 2022 with early adoption permitted. The amendments will not have a material impact on the Group's consolidated financial statements. These amendments have yet to be endorsed by the EU.

IAS 1 Presentation of Financial Statements

In January 2020, the IASB issued amendments to IAS 1 "Presentation of Financial Statements: Classification of Liabilities as Current or Non-Current". They clarify that the classification of liabilities as current or non-current should be based on rights that are in existence at the end of the reporting period. The amendments also clarify that classification is unaffected by expectations about whether an entity will exercise its right to defer settlement of a liability and make clear that settlement refers to the transfer to the counterparty of cash, equity instruments, other assets or services. The amendments will be effective for annual periods beginning on or after January 1, 2022 with early adoption permitted. The amendments will not have a material impact on the Group's consolidated financial statements. These amendments have yet to be endorsed by the EU.

Improvements to IFRS 2018-2020 Cycles

In May 2020, the IASB issued amendments to multiple IFRS standards, which resulted from the IASB's annual improvement project for the 2018-2020 cycles. This comprises amendments that result in accounting changes for presentation, recognition or measurement purposes as well as terminology or editorial amendments related to IFRS 1 "First-time Adoption of International Financial Reporting Standards", IFRS 9 "Financial Instruments", IFRS 16 "Leases" and IAS 41 "Agriculture". The amendments to IFRS 9 clarify which fees an entity includes when assessing whether to derecognize a financial liability. The amendments will be effective for annual periods beginning on or after January 1, 2022 with early adoption permitted. The amendments will not have a material impact on the Group's consolidated financial statements. These amendments have yet to be endorsed by the EU.

IBOR-Reform

On July 27, 2020 the discounting methodology of Euro denominated interest rate swap derivatives centrally cleared through LCH, EUREX and CME changed from EONIA to €STR. This will change the fair value of the derivatives with a compensating cash payment or receipt so there is no value transfer. The change is not expected to have an impact to the Group's consolidated income statement. A similar change for USD denominated centrally cleared interest rate swap derivatives to change discounting from Federal Funds Rate to SOFR is expected to occur in October 2020.

Funds transfer pricing

In the third quarter 2019, we implemented certain changes to our internal funds transfer pricing ("FTP") framework in order to enhance its effectiveness as a management tool, as well as to better support funding cost optimization.

The new FTP framework aims to more accurately allocate funding costs and benefits to the firm's business divisions. The methodology changes did not impact overall group funding costs for 2019, however, the framework did result in a re-allocation of costs and benefits between segments. This re-allocation resulted in a benefit to the trading businesses, partially offset by a reduction in funding benefits to the Private Bank and Corporate Bank versus the prior methodology.

As part of the introduction of the new framework, a decision was made to hold certain transitional costs in Corporate and Other (C&O). These costs, which are subject to potential refinements, will amortize through time reflecting the long dated nature of our liabilities.

Had the new framework been in place in the second quarter 2019, in that period it would have had a positive impact on the results of the Investment Bank and the Capital Release Unit of approximately €90 million and €20 million respectively, while the respective results of the Corporate Bank, Private Bank and Corporate and Other (C&O) would have been lower by €10 million, €10 million and €90 million respectively.

Had the new framework been in place for the first half of 2019, in that period it would have had a positive impact on the results of the Investment Bank and the Capital Release Unit of approximately €140 million and €30 million respectively, while the respective results of the Corporate Bank, Private Bank and Corporate and Other (C&O) would have been lower by €20 million, €30 million and €120 million respectively.

Business segments

During the first half of 2020 Infrastructure functions that were embedded within the operating business segments were realigned to the business segment Corporate and Other (C&O). Accordingly, approximately 11,600 full time equivalent employees (FTEs) moved from the Investment Bank, Private Bank and Capital Release Unit to the business segment Corporate and Other (C&O). This change did not result in a material financial impact at a segment level, as costs are allocated from Corporate and Other (C&O) to the operating business segments that are using the service of the respective infrastructure functions in accordance with plan. Comparative financial information has been restated accordingly.

Impact of COVID-19

In this section we provide information on COVID-19 related topics.

Moratoria, Government Assistance and Grants

The following summarizes the impact on the Group of its participation in Moratoria, Government Assistance Programmes as well as ECB Targeted Longer-term Refinancing Operations related to COVID-19.

Government and Private Sector Debt Moratoria

During the half year, the Group participated in both legislative and non-legislative moratoria schemes primarily in relation to its retail and commercial loan portfolios. Upon granting the moratoria the carrying value of the loan was amended by scheduling out the new expected cash flows and discounting at the original effective interest rate. The difference in the carrying value was taken as a loss to Interest income in Profit and loss. The amount was not material to the Group.

Government Assistance via Guarantees and Sponsored Lending for COVID-19 Impacted Borrowers

After the outbreak of the COVID-19 pandemic, a number of states issued programs offering guarantee schemes for borrowers impacted by COVID-19. The Group has provided approximately € 1.4 billion of loans of which € 0.2 billion qualify for derecognition as these loans meet the pass-through criteria for financial instruments under IFRS 9. These newly originated loans and advances subject to a public guarantee scheme are mainly guaranteed by KfW, a government-owned promotional bank and also via similar loan guarantees offered by the Luxembourg Public Investment Bank and by the Ministry of Economic Affairs and Digital Transformation (MINECO) of Spain.

Impact of ECB Targeted Longer-term Refinancing Operations (TLTRO III)

The Governing Council of the European Central Bank (ECB) decided on a number of modifications to the terms and conditions of its TLTRO III in order to support further the provision of credit to households and firms in the face of the current economic disruption and heightened uncertainty caused by the COVID-19 pandemic. Banks whose eligible net lending exceeds 0 % between March 1, 2020 and March 31, 2021 pay a rate 0.5 % lower than the average deposit facility rate for borrowings between June 24, 2020 and June 23, 2021. This would currently equate to an all-in rate of (1) %. The interest rate outside of this period will be the average interest rate on the deposit facility (currently (0.5) %). The Group has borrowed €30 billion under the TLTRO III program during June. The Group accounts for the potential reduction in the borrowing rate as government grant under IAS 20. The income from the government grant is presented in net interest income and is recognized when there is reasonable assurance that the Group will receive the grant and will comply with the conditions attached to the grants. No government grant was recorded for amounts borrowed by the Group under the TLTRO III program as of June 30, 2020. Please refer to section "Net interest income and net gains (losses) on financial assets/liabilities at fair value through profit or loss" for Government grants recognized for amounts borrowed by the Group under the TLTRO II program.

Goodwill and Other Intangible Assets

Goodwill, indefinite and definite life intangible assets are tested for impairment annually in the fourth quarter or more frequently if there are indications that the carrying value may be impaired. Goodwill is tested for impairment purposes on cash-generating unit (CGU) level. Definite life intangible assets are also tested on CGU level as they typically do not generate cash inflows that are largely independent of those from other assets. Indefinite life intangible assets are tested at the individual asset level.

As of June 30, 2020, an assessment was performed to evaluate if there is an indication that impairment existed at that date. This assessment did not result in any indication of impairment of the Group's goodwill and the retail investment management agreements shown under unamortized intangible assets of the Asset Management CGU.

As part of the assessment, the assumptions and their sensitivities of the annual goodwill impairment test were reviewed and did not indicate an impairment. The assessment of the main input parameters and their sensitivities of the retail investment management agreements indicated that the recoverable amount approximates the carrying amount. Accordingly, management will continue to monitor key assumptions (e.g., assets under management) and their sensitivities on a frequent basis as changes could cause an impairment loss in the future.

Impact of Deutsche Bank's transformation

On July 7, 2019, Deutsche Bank announced a number of transformational measures relating to the Group's businesses and its organization. The immediate and secondary impacts that these measures had on the Group's operating results and financial position are disclosed below.

Impairment and amortization of self-developed software

In line with the transformation announcement, the Group reviewed current platform software and software under construction assigned to businesses subject to the transformation strategy. Accordingly, the reassessment of the respective recoverable amounts led to an impairment of self-developed software of € 16 million and € 33 million for the three and six months ended June 30, 2020, respectively.

In addition, the Group recorded amortization on Equities software subject to the transformation strategy of € 47 million and € 94 million for the three and six months ended June 30, 2020, respectively. The impairment write-down as well as the software amortization are included within the general and administrative expenses of the Group's results in 2020.

Impairment of Right-of-Use assets and other related impacts

As part of the strategy announcement on July 7, 2019, to further reduce costs, the Group recognized impairments, accelerated or higher depreciation of Right-of-Use (RoU) assets, asset write downs and accelerated depreciation on leasehold improvements and furniture, onerous contracts provisions for non-lease costs, depreciation of capitalized reinstatement costs and other one-time relocation costs of € 11 million and € 18 million for the three and six months ended June 30, 2020, respectively.

Deferred tax asset valuation adjustments

Each quarter, the Group re-evaluates its estimate related to deferred tax assets, including its assumptions about future profitability. In connection with the transformation the Group adjusted the estimate related to deferred tax assets in affected jurisdictions, such as the UK and the U.S. Consistent with this estimate, € 30 million and € 35 million of additional valuation adjustments were recognized in the three and six months ended June 30, 2020, respectively.

Restructuring charges

Starting with the announcement of the transformation of Deutsche Bank on July 7, 2019, we designated all restructuring expenses as related to the transformation announcement and the subsequent business re-organization and perimeter changes resulting in € 123 million and € 197 million restructuring expenses for the Group for the three and six months ended June 30, 2020, respectively. These charges are comprised of termination benefits, additional expenses covering the acceleration of deferred compensation awards not yet amortized due to the discontinuation of employment and contract termination costs related to real estate. 149 and 401 full-time equivalent employees (FTE) were impacted by the re-organization and changes during the three and six months ended June 30, 2020, respectively.

In addition to these restructuring expenses, € 62 million and € 76 million of severance related to the transformation announcement were recorded for the three and six months ended June 30, 2020, respectively.

Other transformation related expenses

As a result of the strategic transformation the Group recognized other transformation related expenses including expenses for Audit, Accounting & Tax, consulting fees and IT consulting fees of € 22 million and € 34 million for the three and six months ended June 30, 2020, respectively.

Segment results

	Three months ended Jun 30, 2020						
in € m. (unless stated otherwise)	Corporate Bank	Investment Bank	Private Bank	Asset Management	Capital Release Unit	Corporate & Other	Total Consolidated
Net revenues	1,328	2,654	1,981	549	(70)	(154)	6,287
Provision for credit losses	145	363	225	(1)	29	1	761
Noninterest expenses:							
Compensation and benefits	254	463	736	204	45	943	2,645
General and administrative expenses	852	855	1,157	189	451	(905)	2,599
Impairment of goodwill and other intangible assets	0	0	0	0	0	0	0
Restructuring activities	0	11	104	7	(0)	1	123
Total noninterest expenses	1,106	1,329	1,997	400	496	40	5,367
Noncontrolling interests	0	6	(0)	36	(0)	(42)	0
Profit (loss) before tax	77	956	(241)	114	(595)	(152)	158

N/M – Not meaningful

	Three months ended Jun 30, 2019						
in € m. (unless stated otherwise)	Corporate Bank	Investment Bank	Private Bank	Asset Management	Capital Release Unit	Corporate & Other	Total Consolidated
Net revenues	1,294	1,823	2,087	594	221	184	6,203
Provision for credit losses	61	44	62	0	(8)	2	161
Noninterest expenses:							
Compensation and benefits	261	482	750	228	92	1,001	2,813
General and administrative expenses	745	1,048	1,054	217	895	(870)	3,089
Impairment of goodwill and other intangible assets	491	0	545	0	(0)	0	1,035
Restructuring activities	13	15	(12)	27	8	(0)	50
Total noninterest expenses	1,509	1,544	2,336	471	995	131	6,987
Noncontrolling interests	0	18	(0)	33	0	(51)	0
Profit (loss) before tax	(277)	218	(311)	89	(766)	101	(946)

N/M – Not meaningful

Prior year segmental information have been restated to the current structure

	Six months ended Jun 30, 2020						
in € m. (unless stated otherwise)	Corporate Bank	Investment Bank	Private Bank	Asset Management	Capital Release Unit	Corporate & Other	Total Consolidated
Net revenues	2,653	4,993	4,142	1,068	(129)	(91)	12,637
Provision for credit losses	251	606	364	(0)	43	5	1,267
Noninterest expenses:							
Compensation and benefits	527	958	1,482	376	97	1,893	5,334
General and administrative expenses	1,662	1,832	2,238	386	1,093	(1,737)	5,474
Impairment of goodwill and other intangible assets	0	0	0	0	0	0	0
Restructuring activities	5	15	166	10	1	0	197
Total noninterest expenses	2,194	2,804	3,887	774	1,191	156	11,006
Noncontrolling interests	0	5	(0)	70	(0)	(75)	0
Profit (loss) before tax	208	1,578	(108)	224	(1,362)	(176)	364

N/M – Not meaningful

	Six months ended Jun 30, 2019						
in € m. (unless stated otherwise)	Corporate Bank	Investment Bank	Private Bank	Asset Management	Capital Release Unit	Corporate & Other	Total Consolidated
Net revenues	2,636	3,811	4,212	1,119	608	168	12,554
Provision for credit losses	106	51	169	0	(27)	2	301
Noninterest expenses:							
Compensation and benefits	531	984	1,507	427	221	2,009	5,679
General and administrative expenses	1,486	2,267	2,128	413	1,711	(1,847)	6,159
Impairment of goodwill and other intangible assets	491	0	545	0	(0)	0	1,035
Restructuring activities	13	21	(39)	29	10	(0)	33
Total noninterest expenses	2,521	3,272	4,141	869	1,942	162	12,906
Noncontrolling interests	0	18	(0)	64	0	(82)	0
Profit (loss) before tax	9	470	(98)	186	(1,307)	86	(654)

N/M – Not meaningful

Prior year segmental information have been restated to the current structure

Corporate Bank (CB)

in € m. (unless stated otherwise)	Three months ended				Six months ended			
	Jun 30, 2020	Jun 30, 2019	Absolute Change	Change in %	Jun 30, 2020	Jun 30, 2019	Absolute Change	Change in %
Net revenues:								
Global Transaction Banking	965	932	33	4	1,933	1,916	16	1
Commercial Banking	363	362	1	0	721	720	1	0
Total net revenues	1,328	1,294	34	3	2,653	2,636	18	1
Provision for credit losses	145	61	84	136	251	106	145	137
Noninterest expenses:								
Compensation and benefits	254	261	(7)	(3)	527	531	(4)	(1)
General and administrative expenses	852	745	107	14	1,662	1,486	176	12
Impairment of goodwill and other intangible assets	0	491	(491)	N/M	0	491	(491)	N/M
Restructuring activities	0	13	(13)	(99)	5	13	(8)	(60)
Total noninterest expenses	1,106	1,509	(403)	(27)	2,194	2,521	(327)	(13)
Noncontrolling interests	0	0	0	N/M	0	0	0	N/M
Profit (loss) before tax	77	(277)	354	N/M	208	9	199	N/M
Total assets (in € bn) ¹	241	232	9	4	241	232	9	4
Loans (gross of allowance for loan losses, in € bn) ¹	120	118	2	1	120	118	2	1
Employees (front office full-time equivalent) ¹	7,549	7,689	(139)	(2)	7,549	7,689	(139)	(2)

N/M – Not meaningful

Prior year segmental information have been restated to the current structure

¹ As of quarter-end.

Investment Bank (IB)

in € m. (unless stated otherwise)	Three months ended				Six months ended			
	Jun 30, 2020	Jun 30, 2019	Absolute Change	Change in %	Jun 30, 2020	Jun 30, 2019	Absolute Change	Change in %
Net revenues:								
Fixed Income, Currency (FIC) Sales & Trading	2,050	1,475	576	39	3,904	3,116	788	25
Equity Origination	120	42	78	184	140	65	75	115
Debt Origination	470	244	226	92	838	536	302	56
Advisory	48	82	(34)	(42)	118	193	(75)	(39)
Origination & Advisory	639	369	269	73	1,096	794	302	38
Other	(35)	(21)	(14)	67	(8)	(99)	91	(92)
Total net revenues	2,654	1,823	831	46	4,993	3,811	1,182	31
Provision for credit losses	363	44	319	N/M	606	51	555	N/M
Noninterest expenses:								
Compensation and benefits	463	482	(18)	(4)	958	984	(26)	(3)
General and administrative expenses	855	1,048	(193)	(18)	1,832	2,267	(435)	(19)
Impairment of goodwill and other intangible assets	0	0	0	N/M	0	0	0	N/M
Restructuring activities	11	15	(4)	(26)	15	21	(6)	(29)
Total noninterest expenses	1,329	1,544	(215)	(14)	2,804	3,272	(467)	(14)
Noncontrolling interests	6	18	(11)	(64)	5	18	(14)	(73)
Profit (loss) before tax	956	218	739	N/M	1,578	470	1,108	N/M
Total assets (in € bn) ¹	594	521	74	14	594	521	74	14
Loans (gross of allowance for loan losses, in € bn) ¹	80	69	10	15	80	69	10	15
Employees (front office full-time equivalent) ¹	4,182	4,604	(422)	(9)	4,182	4,604	(422)	(9)

N/M – Not meaningful

Prior year segmental information have been restated to the current structure

¹ As of quarter-end.

Private Bank (PB)

in € m. (unless stated otherwise)	Three months ended				Six months ended			
	Jun 30, 2020	Jun 30, 2019	Absolute Change	Change in %	Jun 30, 2020	Jun 30, 2019	Absolute Change	Change in %
Net revenues:								
Private Bank Germany	1,233	1,291	(59)	(5)	2,559	2,630	(71)	(3)
Private and Commercial Business International ¹	324	366	(42)	(12)	694	725	(32)	(4)
Wealth Management	424	429	(5)	(1)	890	857	33	4
Total net revenues	1,981	2,087	(106)	(5)	4,142	4,212	(70)	(2)
Of which:								
Net interest income	1,253	1,276	(23)	(2)	2,546	2,579	(32)	(1)
Commissions and fee income	674	701	(27)	(4)	1,523	1,444	80	6
Remaining income	54	111	(57)	(51)	73	190	(117)	(62)
Provision for credit losses	225	62	163	N/M	364	169	195	115
Noninterest expenses:								
Compensation and benefits	736	750	(14)	(2)	1,482	1,507	(24)	(2)
General and administrative expenses	1,157	1,054	103	10	2,238	2,128	110	5
Impairment of goodwill and other intangible assets	0	545	(545)	N/M	0	545	(545)	N/M
Restructuring activities	104	(12)	117	N/M	166	(39)	205	N/M
Total noninterest expenses	1,997	2,336	(339)	(15)	3,887	4,141	(254)	(6)
Noncontrolling interests	(0)	(0)	0	(97)	(0)	(0)	0	(86)
Profit (loss) before tax	(241)	(311)	70	(22)	(108)	(98)	(11)	11
Total assets (in € bn)²	290	289	1	0	290	289	1	0
Loans (gross of allowance for loan losses, in € bn) ²	232	222	9	4	232	222	9	4
Assets under Management (in € bn) ²	471	478	(6)	(1)	471	478	(6)	(1)
Net flows (in € bn)	6	4	2	35	7	11	(4)	(39)
Employees (front office full-time equivalent) ²	31,328	32,431	(1,103)	(3)	31,328	32,431	(1,103)	(3)

N/M – Not meaningful

Prior year segmental information have been restated to the current structure

¹ Covers operations in Belgium, India, Italy and Spain.

² As of quarter-end.

Asset Management (AM)

in € m. (unless stated otherwise)	Three months ended				Six months ended			
	Jun 30, 2020	Jun 30, 2019	Absolute Change	Change in %	Jun 30, 2020	Jun 30, 2019	Absolute Change	Change in %
Net revenues:								
Management Fees	508	539	(31)	(6)	1,061	1,048	13	1
Performance and transaction fees	20	66	(46)	(70)	37	77	(39)	(51)
Other	21	(11)	32	N/M	(30)	(6)	(24)	N/M
Total net revenues	549	594	(45)	(8)	1,068	1,119	(51)	(5)
Provision for credit losses	(1)	0	(1)	N/M	(0)	0	(0)	N/M
Noninterest expenses:								
Compensation and benefits	204	228	(24)	(11)	376	427	(51)	(12)
General and administrative expenses	189	217	(28)	(13)	386	413	(26)	(6)
Impairment of goodwill and other intangible assets	0	0	0	N/M	0	0	0	N/M
Restructuring activities	7	27	(19)	(73)	10	29	(18)	(64)
Total noninterest expenses	400	471	(71)	(15)	774	869	(95)	(11)
Noncontrolling interests	36	33	3	9	70	64	7	11
Profit (loss) before tax	114	89	24	27	224	186	38	20
Total assets (in € bn)¹	10	10	0	3	10	10	0	3
Assets under Management (in € bn) ¹	745	721	24	3	745	721	24	3
Net flows (in € bn)	9	4	5	109	6	7	(0)	(6)
Employees (front office full-time equivalent) ¹	3,901	3,998	(97)	(2)	3,901	3,998	(97)	(2)

N/M – Not meaningful

Prior year segmental information have been restated to the current structure

¹ As of quarter-end.

Capital Release Unit (CRU)

in € m. (unless stated otherwise)	Three months ended				Six months ended			
	Jun 30, 2020	Jun 30, 2019	Absolute Change	Change in %	Jun 30, 2020	Jun 30, 2019	Absolute Change	Change in %
Net revenues	(70)	221	(291)	N/M	(129)	608	(737)	N/M
Provision for credit losses	29	(8)	37	N/M	43	(27)	69	N/M
Noninterest expenses:								
Compensation and benefits	45	92	(47)	(51)	97	221	(124)	(56)
General and administrative expenses	451	895	(443)	(50)	1,093	1,711	(619)	(36)
Impairment of goodwill and other intangible assets	0	(0)	0	N/M	0	(0)	0	N/M
Restructuring activities	(0)	8	(9)	N/M	1	10	(9)	(93)
Total noninterest expenses	496	995	(499)	(50)	1,191	1,942	(751)	(39)
Noncontrolling interests	(0)	0	(0)	N/M	(0)	0	(0)	N/M
Profit (loss) before tax	(595)	(766)	171	(22)	(1,362)	(1,307)	(55)	4
Total assets (in € bn) ¹	265	380	(114)	(30)	265	380	(114)	(30)
Employees (front office full-time equivalent) ¹	536	1,230	(694)	(56)	536	1,230	(694)	(56)

N/M – Not meaningful

Prior year segmental information have been restated to the current structure

¹ As of quarter-end.

Corporate & Other (C&O)

in € m. (unless stated otherwise)	Three months ended				Six months ended			
	Jun 30, 2020	Jun 30, 2019	Absolute Change	Change in %	Jun 30, 2020	Jun 30, 2019	Absolute Change	Change in %
Net revenues	(154)	184	(338)	N/M	(91)	168	(259)	N/M
Provision for credit losses	1	2	(2)	(78)	5	2	2	98
Noninterest expenses:								
Compensation and benefits	943	1,001	(58)	(6)	1,893	2,009	(115)	(6)
General and administrative expenses	(905)	(870)	(35)	4	(1,737)	(1,847)	109	(6)
Impairment of goodwill and other intangible assets	0	0	0	N/M	0	0	0	N/M
Restructuring activities	1	(0)	2	N/M	0	(0)	0	N/M
Total noninterest expenses	40	131	(91)	(70)	156	162	(6)	(4)
Noncontrolling interests	(42)	(51)	8	(17)	(75)	(82)	7	(8)
Profit (loss) before tax	(152)	101	(254)	N/M	(176)	86	(262)	N/M
Employees (front office full-time equivalent) ¹	39,327	40,914	(1,587)	(4)	39,327	40,914	(1,587)	(4)

N/M – Not meaningful

Prior year segmental information have been restated to the current structure

¹ As of quarter-end.

Information on the consolidated income statement

Net interest income and net gains (losses) on financial assets/liabilities at fair value through profit or loss

in € m.	Three months ended		Six months ended	
	Jun 30, 2020	Jun 30, 2019	Jun 30, 2020	Jun 30, 2019
Net interest income ¹	3,093	3,673	6,345	7,028
Trading income ^{1,2}	1,024	106	951	890
Net gains (losses) on non-trading financial assets mandatory at fair value through profit or loss	143	189	64	319
Net gains (losses) on financial assets/liabilities designated at fair value through profit or loss	(466)	(124)	83	(322)
Total net gains (losses) on financial assets/liabilities at fair value through profit or loss	702	171	1,097	887
Total net interest income and net gains (losses) on financial assets/liabilities at fair value through profit or loss	3,795	3,844	7,442	7,916
Commercial Banking	280	276	538	545
Global Transaction Banking	524	370	1,012	772
Corporate Bank	804	646	1,550	1,317
FIC Sales & Trading	2,392	1,462	3,769	3,261
Remaining Products	42	(44)	100	(124)
Investment Bank	2,434	1,418	3,869	3,137
Private Bank	882	739	1,607	1,432
Asset Management	25	(1)	(160)	39
Capital Release Unit	(158)	126	36	392
Corporate & Other	(192)	916	540	1,598
Total net interest income and net gains (losses) on financial assets/liabilities at fair value through profit or loss	3,795	3,844	7,442	7,916

¹ Prior period comparatives have been restated. € 42 million and € 95 million were reclassified from Net interest income to Trading Income for the three months and six months ended June 30, 2019, respectively.

² Trading income includes gains and losses from derivatives not qualifying for hedge accounting.

Net interest income for the three months ended June 30, 2020 and June 30, 2019 included € 16 million and € 23 million, respectively and for six months ended June 30, 2020 and June 30, 2019 included € 32 million and € 46 million, respectively, which were related to government grants under the Targeted Longer-Term Refinancing Operations II (TLTRO II)-program.

Commissions and fee income

Disaggregation of revenues by product type and business segment

in € m. (unless stated otherwise)	Three months ended Jun 30, 2020						
	Corporate Bank	Investment Bank	Private Bank	Asset Management	Capital Release Unit	Corporate & Other	Total Consolidated
Major type of services:							
Commissions for administration	63	4	57	6	0	(1)	129
Commissions for assets under management	5	0	79	734	0	0	818
Commissions for other securities	110	(0)	8	0	0	0	117
Underwriting and advisory fees	5	418	3	0	0	(14)	413
Brokerage fees	2	60	256	20	31	5	375
Commissions for local payments	105	(2)	220	(0)	0	(1)	322
Commissions for foreign commercial business	99	6	26	0	0	(1)	130
Commissions for foreign currency/exchange business	1	0	2	0	0	(0)	2
Commissions for loan processing and guarantees	126	43	71	0	3	1	244
Intermediary fees	2	0	188	0	0	2	193
Fees for sundry other customer services	62	69	12	29	1	0	173
Total fee and commissions income	580	598	922	788	36	(6)	2,917
Gross expense							(690)
Net fees and commissions							2,227

in € m. (unless stated otherwise)	Three months ended Jun 30, 2019						
	Corporate Bank	Investment Bank	Private Bank	Asset Management	Capital Release Unit	Corporate & Other	Total Consolidated
Major type of services:							
Commissions for administration	66	2	61	6	2	0	136
Commissions for assets under management	5	0	72	824	0	1	903
Commissions for other securities	88	(0)	7	1	0	0	96
Underwriting and advisory fees	6	379	4	0	39	(1)	426
Brokerage fees	3	80	230	20	200	1	535
Commissions for local payments	120	(0)	242	(0)	0	(0)	362
Commissions for foreign commercial business	114	5	27	0	0	(0)	145
Commissions for foreign currency/exchange business	2	0	2	0	0	(0)	3
Commissions for loan processing and guarantees	125	39	64	0	3	1	232
Intermediary fees	8	0	117	0	0	2	128
Fees for sundry other customer services	76	105	12	30	6	0	228
Total fee and commissions income	613	609	837	881	250	4	3,195
Gross expense							(711)
Net fees and commissions							2,484

in € m. (unless stated otherwise)	Six months ended Jun 30, 2020						
	Corporate Bank	Investment Bank	Private Bank	Asset Management	Capital Release Unit	Corporate & Other	Total Consolidated
Major type of services:							
Commissions for administration	124	6	116	12	0	(1)	257
Commissions for assets under management	10	1	159	1,518	(0)	0	1,688
Commissions for other securities	185	0	16	0	0	0	202
Underwriting and advisory fees	15	859	8	0	(0)	(15)	866
Brokerage fees	8	143	615	38	70	2	876
Commissions for local payments	227	0	475	(0)	0	(0)	701
Commissions for foreign commercial business	203	13	52	0	0	(1)	267
Commissions for foreign currency/exchange business	2	0	4	0	0	(0)	6
Commissions for loan processing and guarantees	247	94	153	0	5	3	501
Intermediary fees	7	1	313	0	0	7	328
Fees for sundry other customer services	138	131	21	61	3	0	353
Total fee and commissions income	1,166	1,247	1,932	1,629	78	(5)	6,046
Gross expense							(1,380)
Net fees and commissions							4,666

in € m. (unless stated otherwise)	Six months ended Jun 30, 2019						
	Corporate Bank	Investment Bank ¹	Private Bank	Asset Management	Capital Release Unit	Corporate & Other	Total Consolidated
Major type of services:							
Commissions for administration	128	4	118	11	4	(0)	264
Commissions for assets under management	11	1	139	1,563	0	1	1,715
Commissions for other securities	158	(0)	15	1	0	0	173
Underwriting and advisory fees	12	780	8	0	56	(9)	847
Brokerage fees	6	139	478	33	396	2	1,055
Commissions for local payments	242	(0)	484	(0)	1	(1)	726
Commissions for foreign commercial business	227	13	53	0	0	(0)	293
Commissions for foreign currency/exchange business	3	0	4	0	0	(0)	7
Commissions for loan processing and guarantees	260	86	128	0	7	2	484
Intermediary fees	16	1	235	0	1	6	260
Fees for sundry other customer services	150	197	23	62	18	0	449
Total fee and commissions income	1,214	1,220	1,684	1,669	483	2	6,272
Gross expense							(1,407)
Net fees and commissions							4,865

As of June 30, 2020 and June 30, 2019 the Group's balance of receivables from commission and fee income was € 926 million and € 846 million, respectively. As of June 30, 2020 and June 30, 2019 the Group's balance of contract liabilities associated to commission and fee income was € 69 million and € 171 million, respectively. Contract liabilities arise from the Group's obligation to provide future services to a customer for which it has received consideration from the customer prior to completion of the services. The balances of receivables and contract liabilities do not vary significantly from period to period reflecting the fact that they predominately relate to recurring service contracts with service periods of less than one year such as monthly current account services and quarterly asset management services. Customer payment in exchange for services provided are generally subject to performance by the Group over the specific service period such that the Group's right to payment arises at the end of the service period when its performance obligations are fully completed. Therefore, no material balance of contract asset is reported.

Gains and Losses on derecognition of financial assets measured at amortized cost

As of June 30, 2020, the Group sold financial assets measured at amortized cost of € 6,432 million (June 30, 2019: € 21 million) primarily from a Hold to Collect portfolio in Treasury. These sales were made as part of realigning our strategy for managing the interest rate risk in the Banking Book as a result of these sales, the Hold to Collect business model is no longer valid for future acquisitions of assets in this portfolio.

The table below presents the gains and (losses) arising from derecognition of these securities.

in € m.	Three months ended		Six months ended	
	Jun 30, 2020	Jun 30, 2019	Jun 30, 2020	Jun 30, 2019
Gains	174	0	235	0
Losses	(3)	0	(3)	0
Net gains (losses) from derecognition of securities measured at amortized cost	171	0	232	0

Restructuring

Restructuring is primarily driven by the implementation of the Group's strategic changes as announced in the third quarter 2019. We have defined measures that aim to strengthen the bank, position it for growth and simplify its organizational set-up. The measures also aim to reduce adjusted costs through higher efficiency, by optimizing and streamlining processes, and by exploiting synergies.

Restructuring expense is comprised of termination benefits, additional expenses covering the acceleration of deferred compensation awards not yet amortized due to the discontinuation of employment and contract termination costs related to real estate.

Net restructuring expense by division

in € m.	Three months ended		Six months ended	
	Jun 30, 2020	Jun 30, 2019	Jun 30, 2020	Jun 30, 2019
Corporate Bank	0	13	5	13
Investment Bank	11	15	15	21
Private Bank	104	(12)	166	(39)
Asset Management	7	27	10	29
Capital Release Unit	(0)	8	1	10
Corporate & Other	1	(0)	0	(0)
Total Net Restructuring Charges	123	50	197	33

Net restructuring expense by type

in € m.	Three months ended		Six months ended	
	Jun 30, 2020	Jun 30, 2019	Jun 30, 2020	Jun 30, 2019
Restructuring – Staff related	127	50	201	34
Of which:				
Termination Payments	106	42	180	23
Retention Acceleration	20	8	20	11
Social Security	1	0	1	0
Restructuring – Non Staff related ¹	(4)	(0)	(4)	(1)
Total net restructuring Charges	123	50	197	33

¹ Contract costs, mainly related to real estate and technology.

Provisions for restructuring amounted to €601 million and €684 million as of June 30, 2020 and December 31, 2019, respectively. The majority of the current provisions for restructuring should be utilized in the next two years.

During the six months ended June 30, 2020, 401 full-time equivalent staff were reduced as part of our restructuring program. These reductions were identified within:

Organizational changes

Full-time equivalent staff	Three months	Six months
	ended Jun 30, 2020	ended Jun 30, 2020
Corporate Bank	38	59
Investment Bank	7	37
Private Bank	28	125
Asset Management	15	22
Capital Release Unit	18	47
Infrastructure	44	112
Total full-time equivalent staff	149	401

Effective tax rate

2020 to 2019 three months comparison

Income tax expense in the current quarter was €97 million (second quarter of 2019: €2.2 billion). The effective tax rate of 62 % in the second quarter 2020 was mainly impacted by the geographic mix of profit before tax and corresponding transformation-related deferred tax asset valuation adjustments. The prior year's quarter income tax expense was mainly impacted by transformation-related deferred tax asset valuation adjustments and non-deductible goodwill impairments.

2020 to 2019 six months comparison

Income tax expense in the first six months of 2020 was €238 million (first six months of 2019: €2.3 billion). The effective tax rate of 65 % in the first half of 2020 was mainly impacted by the geographic mix of profit before tax and corresponding transformation-related deferred tax asset valuation adjustments. The income tax expense in the first six months of 2019 was mainly impacted by transformation-related deferred tax asset valuation adjustments and non-deductible goodwill impairments.

Information on the Consolidated Balance Sheet

Financial instruments carried at fair value

Fair value hierarchy

The financial instruments carried at fair value have been categorized under the three levels of the IFRS fair value hierarchy as follows:

Level 1 – Instruments valued using quoted prices in active markets are instruments where the fair value can be determined directly from prices which are quoted in active, liquid markets and where the instrument observed in the market is representative of that being priced in the Group's inventory.

These include: government bonds, exchange-traded derivatives and equity securities traded on active, liquid exchanges.

Level 2 – Instruments valued with valuation techniques using observable market data are instruments where the fair value can be determined by reference to similar instruments trading in active markets, or where a technique is used to derive the valuation but where all inputs to that technique are observable.

These include: many OTC derivatives; many investment-grade listed credit bonds; some CDS; many collateralized debt obligations (CDO); and many less-liquid equities.

Level 3 – Instruments valued using valuation techniques using market data which is not directly observable are instruments where the fair value cannot be determined directly by reference to market-observable information, and some other pricing technique must be employed. Instruments classified in this category have an element which is unobservable and which has a significant impact on the fair value.

These include: more-complex OTC derivatives; distressed debt; highly-structured bonds; illiquid asset-backed securities (ABS); illiquid CDO's (cash and synthetic); monoline exposures; some private equity placements; many commercial real estate (CRE) loans; illiquid loans; and some municipal bonds.

Carrying value of the financial instruments held at fair value¹

in € m.	Jun 30, 2020			Dec 31, 2019		
	Quoted prices in active market (Level 1)	Valuation technique observable parameters (Level 2)	Valuation technique unobservable parameters (Level 3)	Quoted prices in active market (Level 1)	Valuation technique observable parameters (Level 2)	Valuation technique unobservable parameters (Level 3)
Financial assets held at fair value:						
Trading assets	47,300	60,619	9,039	44,595	56,713	9,567
Trading securities	47,102	54,704	3,035	44,427	50,128	3,430
Other trading assets	198	5,915	6,004	168	6,584	6,137
Positive market values from derivative financial instruments	5,944	356,952	9,915	2,682	322,082	8,167
Non-trading financial assets mandatory at fair value through profit or loss	3,151	73,792	4,872	3,806	77,818	5,278
Financial assets designated at fair value through profit or loss	0	383	1	0	0	7
Financial assets at fair value through other comprehensive income	29,543	15,379	1,311	30,924	13,529	1,050
Other financial assets at fair value	24	9,675 ²	249	2	7,366 ²	363
Total financial assets held at fair value	85,962	516,801	25,387	82,009	477,507	24,431
Financial liabilities held at fair value:						
Trading liabilities	28,459	15,044	0	23,873	13,152	41
Trading securities	28,458	14,560	0	23,862	12,828	2
Other trading liabilities	1	484	0	11	324	38
Negative market values from derivative financial instruments	5,816	341,719	8,131	2,841	307,013	6,652
Financial liabilities designated at fair value through profit or loss	0	52,538	1,522	0	48,378	1,954
Investment contract liabilities	0	506	0	0	544	0
Other financial liabilities at fair value	911	3,768 ²	(292) ³	527	4,609 ²	(34) ³
Total financial liabilities held at fair value	35,186	413,575	9,361	27,241	373,697	8,612

¹ Amounts in this table are generally presented on a gross basis, in line with the Group's accounting policy regarding offsetting of financial instruments, as described in Note 1 "Significant Accounting Policies and Critical Accounting Estimates" of the Annual Report 2019.

² Predominantly relates to derivatives qualifying for hedge accounting.

³ Relates to derivatives, which are embedded in contracts where the host contract is held at amortized cost but for which the embedded derivative is separated. The separated embedded derivatives may have a positive or a negative fair value but have been presented in this table to be consistent with the classification of the host contract. The separated embedded derivatives are held at fair value on a recurring basis and have been split between the fair value hierarchy classifications.

In 2020, there were no material transfers between Level 1 and Level 2. The assessment of level 1 versus level 2 is based on liquidity testing procedures.

Valuation techniques

The Group has an established a valuation control framework which governs internal control standards, methodologies, valuation techniques and procedures over the valuation process and fair value measurement. During the first half of 2020, the outbreak of the COVID-19 pandemic broadly impacted the financial markets, notably in March 2020 and April 2020, causing market dislocations and increased market volatility. This resulted an increase in Group's level 3 balances by € 2.0 billion mainly relating to interest rate derivatives. Sensitivity related to the level 3 assets and liabilities increased due to increased dispersion in market data.

The market conditions necessitated additional focus and review in certain areas, including assessment of bid-offer spreads to ensure they were representative of fair value. However, standard procedures and controls were followed, and we continued to adhere to strict internal governance for fair value measurement changes and movements.

The following is an explanation of the valuation techniques used in establishing the fair value of the different types of financial instruments that the Group trades.

Sovereign, Quasi-sovereign and Corporate Debt and Equity Securities – Where there are no recent transactions then fair value may be determined from the last market price adjusted for all changes in risks and information since that date. Where a close proxy instrument is quoted in an active market then fair value is determined by adjusting the proxy value for differences in the risk profile of the instruments. Where close proxies are not available then fair value is estimated using more complex modeling techniques. These techniques include discounted cash flow models using current market rates for credit, interest, liquidity and other risks. For equity securities modeling techniques may also include those based on earnings multiples.

Mortgage- and Other Asset-Backed Securities (MBS/ABS) include residential and commercial MBS and other ABS including CDOs. ABS have specific characteristics as they have different underlying assets and the issuing entities have different capital structures. The complexity increases further where the underlying assets are themselves ABS, as is the case with many of the CDO instruments.

Where no reliable external pricing is available, ABS are valued, where applicable, using either relative value analysis which is performed based on similar transactions observable in the market, or industry standard valuation models incorporating available observable inputs. The industry standard external models calculate principal and interest payments for a given deal based on assumptions that can be independently price tested. The inputs include prepayment speeds, loss assumptions (timing and severity) and a discount rate (spread, yield or discount margin). These inputs/assumptions are derived from actual transactions, external market research and market indices where appropriate.

Loans – For certain loans fair value may be determined from the market price on a recently occurring transaction adjusted for all changes in risks and information since that transaction date. Where there are no recent market transactions then broker quotes, consensus pricing, proxy instruments or discounted cash flow models are used to determine fair value. Discounted cash flow models incorporate parameter inputs for credit risk, interest rate risk, foreign exchange risk, loss given default estimates and amounts utilized given default, as appropriate. Credit risk, loss given default and utilization given default parameters are determined using information from the loan or CDS markets, where available and appropriate.

Leveraged loans can have transaction-specific characteristics which can limit the relevance of market-observed transactions. Where similar transactions exist for which observable quotes are available from external pricing services then this information is used with appropriate adjustments to reflect the transaction differences. When no similar transactions exist, a discounted cash flow valuation technique is used with credit spreads derived from the appropriate leveraged loan index, incorporating the industry classification, subordination of the loan, and any other relevant information on the loan and loan counterparty.

Over-The-Counter Derivative Financial Instruments – Market standard transactions in liquid trading markets, such as interest rate swaps, foreign exchange forward and option contracts in G7 currencies, and equity swap and option contracts on listed securities or indices are valued using market standard models and quoted parameter inputs. Parameter inputs are obtained from pricing services, consensus pricing services and recently occurring transactions in active markets wherever possible.

More complex instruments are modeled using more sophisticated modeling techniques specific for the instrument and are calibrated to available market prices. Where the model output value does not calibrate to a relevant market reference then valuation adjustments are made to the model output value to adjust for any difference. In less active markets, data is obtained from less frequent market transactions, broker quotes and through extrapolation and interpolation techniques. Where observable prices or inputs are not available, management judgment is required to determine fair values by assessing other relevant sources of information such as historical data, fundamental analysis of the economics of the transaction and proxy information from similar transactions.

Financial Liabilities Designated at Fair Value through Profit or Loss under the Fair Value Option – The fair value of financial liabilities designated at fair value through profit or loss under the fair value option incorporates all market risk factors including a measure of the Group's credit risk relevant for that financial liability. The financial liabilities include structured note issuances, structured deposits, and other structured securities issued by consolidated vehicles, which may not be quoted in an active market. The fair value of these financial liabilities is determined by discounting the contractual cash flows using the relevant credit-adjusted yield curve. The market risk parameters are valued consistently to similar instruments held as assets, for example, any derivatives embedded within the structured notes are valued using the same methodology discussed in the "Over-The-Counter Derivative Financial Instruments" section above.

Where the financial liabilities designated at fair value through profit or loss under the fair value option are collateralized, such as securities loaned and securities sold under repurchase agreements, the credit enhancement is factored into the fair valuation of the liability.

Investment Contract Liabilities – Assets which are linked to the investment contract liabilities are owned by the Group. The investment contract obliges the Group to use these assets to settle these liabilities. Therefore, the fair value of investment contract liabilities is determined by the fair value of the underlying assets (i.e. amount payable on surrender of the policies).

Analysis of financial instruments with fair value derived from valuation techniques containing significant unobservable parameters (level 3)

Some of the instruments in level 3 of the fair value hierarchy have identical or similar offsetting exposures to the unobservable input. However, according to IFRS they are required to be presented as gross assets and liabilities.

Trading securities – Certain illiquid emerging market corporate bonds and illiquid highly structured corporate bonds are included in this level of the hierarchy. In addition, some of the holdings of notes issued by securitization entities, commercial and residential MBS, collateralized debt obligation securities and other ABS are reported here. The decrease in the period was mainly due to by sales, settlements and losses partially offset by purchase and transfers between Level 2 and Level 3 due to changes in the observability of input parameters used to value these instruments.

Positive and negative market values from derivative instruments categorized in this level of the fair value hierarchy are valued based on one or more significant unobservable parameters. The unobservable parameters may include certain correlations, certain longer-term volatilities, certain prepayment rates, credit spreads and other transaction-specific parameters.

Level 3 derivatives include certain options where the volatility is unobservable; certain basket options in which the correlations between the referenced underlying assets are unobservable; longer-term interest rate option derivatives; multi-currency foreign exchange derivatives; and certain credit default swaps for which the credit spread is not observable. The increase in assets and liabilities during the period are driven by gains and transfers between Level 2 and Level 3 due to changes in the observability of input parameters used to value these instruments partially offset by settlements.

Other trading instruments classified in level 3 of the fair value hierarchy mainly consist of traded loans valued using valuation models based on one or more significant unobservable parameters. Level 3 loans comprise illiquid leveraged loans and illiquid residential and commercial mortgage loans. The decrease in the period refers to sales, settlements and losses partially offset by purchases, issuances and transfers between Level 2 and Level 3 due to changes in the observability of input parameters used to value these instruments.

Non trading financial assets mandatory at fair value through profit or loss classified in level 3 of fair value hierarchy consist of financial instruments included in other business model originated, acquired principally for the purpose of selling or repurchasing them in near future and unlisted equity instruments where there is no close proxy and the market is very illiquid. Additionally this classification includes any instrument for which the contractual cash flow characteristics are not SPPI. The decrease in the period is driven by sales, settlements, losses and transfers between Level 2 and Level 3 due to changes in the observability of input parameters used to value these instruments partially offset by purchases, issuances.

Financial assets/liabilities designated at fair value through profit or loss – Certain corporate loans and structured liabilities which were designated at fair value through profit or loss under the fair value option are categorized in this level of the fair value hierarchy. The corporate loans are valued using valuation techniques which incorporate observable credit spreads, recovery rates and unobservable utilization parameters. Revolving loan facilities are reported in the third level of the hierarchy because the utilization in the event of the default parameter is significant and unobservable.

In addition, certain hybrid debt issuances designated at fair value through profit or loss containing embedded derivatives are valued based on significant unobservable parameters. These unobservable parameters include single stock volatility correlations. The decrease in assets during the period is driven by transfers between Level 2 and Level 3 due to changes in the observability of input parameters used to value these instruments. The decrease in liabilities during the period is driven by settlements, transfers between Level 2 and Level 3 due to changes in the observability of input parameters used to value these instruments and gains partially offset by issuances.

Financial assets at fair value through other comprehensive income include non-performing loan portfolios where there is no trading intent and the market is very illiquid. The increase in the period is driven by purchases and transfers between Level 2 and Level 3 due to changes in the observability of input parameters used to value these instruments partially offset by settlements and losses.

Reconciliation of financial instruments classified in level 3

Jun 30, 2020

in € m.	Balance, beginning of year	Changes in the group of consoli- dated com- panies	Total gains/ losses ¹	Purchases	Sales	Issu- ances ²	Settle- ments ³	Transfers into Level 3 ⁴	Transfers out of Level 3 ⁴	Balance, end of period
Financial assets										
held at fair value:										
Trading securities	3,430	0	(72)	1,101	(1,477)	0	(135)	610	(421)	3,035
Positive market values from derivative finan- cial instruments	8,167	0	1,965	0	0	0	(307)	1,651	(1,560)	9,915
Other trading assets	6,137	0	(312)	490	(1,143)	919	(515)	660	(232)	6,004
Non-trading financial assets mandatory at fair value through profit or loss	5,278	0	(38)	161	(181)	199	(426)	667	(787)	4,872
Financial assets designated at fair value through profit or loss	7	0	0	0	0	0	0	0	(6)	1
Financial assets at fair value through other comprehensive income	1,050	0	(19) ⁵	292	0	0	(99)	333	(246)	1,311
Other financial assets at fair value	363	0	1	0	0	0	(1)	79	(194)	249
Total financial assets										
held at fair value	24,431	0	1,525^{6,7}	2,044	(2,801)	1,118	(1,483)	4,000	(3,447)	25,387
Financial liabilities										
held at fair value:										
Trading securities	2	0	(0)	0	0	0	(0)	0	(2)	0
Negative market values from derivative financial instruments	6,652	0	1,521	0	0	0	3	1,273	(1,318)	8,131
Other trading liabilities	38	0	(1)	0	0	0	(9)	0	(28)	0
Financial liabilities designated at fair value through profit or loss	1,954	0	(40)	0	0	146	(509)	180	(208)	1,522
Other financial liabilities at fair value	(34)	0	(221)	0	0	0	(1)	8	(44)	(292)
Total financial										
liabilities held at										
fair value	8,612	0	1,259^{6,7}	0	0	146	(516)	1,462	(1,601)	9,361

¹ Total gains and losses predominantly relate to net gains (losses) on financial assets/liabilities at fair value through profit or loss reported in the consolidated statement of income. The balance also includes net gains (losses) on financial assets at fair value through other comprehensive income reported in the consolidated statement of income and unrealized net gains (losses) on financial assets at fair value through other comprehensive income and exchange rate changes reported in other comprehensive income, net of tax. Further, certain instruments are hedged with instruments in level 1 or level 2 but the table above does not include the gains and losses on these hedging instruments. Additionally, both observable and unobservable parameters may be used to determine the fair value of an instrument classified within level 3 of the fair value hierarchy; the gains and losses presented below are attributable to movements in both the observable and unobservable parameters.

² Issuances relate to the cash amount received on the issuance of a liability and the cash amount paid on the primary issuance of a loan to a borrower.

³ Settlements represent cash flows to settle the asset or liability. For debt and loan instruments this includes principal on maturity, principal amortizations and principal repayments. For derivatives all cash flows are presented in settlements.

⁴ Transfers in and transfers out of level 3 are related to changes in observability of input parameters. During the period they are recorded at their fair value at the beginning of year. For instruments transferred into level 3 the table shows the gains and losses and cash flows on the instruments as if they had been transferred at the beginning of the year. Similarly for instruments transferred out of level 3 the table does not show any gains or losses or cash flows on the instruments during the period since the table is presented as if they have been transferred out at the beginning of the year.

⁵ Total gains and losses on financial assets mandatory at fair value through OCI include a loss of €(14) million recognized in other comprehensive income, net of tax.

⁶ This amount includes the effect of exchange rate changes. For total financial assets held at fair value this effect is a loss of €(119) million and for total financial liabilities held at fair value this is a gain of €12 million. The effect of exchange rate changes is reported in accumulated other comprehensive income, net of tax.

⁷ For assets, positive balances represent gains, negative balances represent losses. For liabilities, positive balances represent losses, negative balances represent gains.

Jun 30, 2019

in € m.	Balance, beginning of year	Changes in the group of consoli- dated com- panies	Total gains/ losses ¹	Purchases	Sales	Issu- ances ²	Settle- ments ³	Transfers into Level 3 ⁴	Transfers out of Level 3 ⁴	Balance, end of period
Financial assets										
held at fair value:										
Trading securities	4,086	0	127	1,168	(1,157)	0	(240)	964	(946)	4,002
Positive market values from derivative finan- cial instruments	8,309	20	1,228	0	0	0	(191)	1,910	(2,321)	8,955
Other trading assets	5,676	(75)	126	292	(782)	924	(649)	428	(579)	5,363
Non-trading financial assets mandatory at fair value through profit or loss	6,066	(0)	101	1,071	(201)	348	(1,202)	735	(1,816)	5,101
Financial assets designated at fair value through profit or loss	0	0	0	34	0	0	0	0	0	35
Financial assets at fair value through other comprehensive income	268	0	8 ⁵	210	(0)	0	(0)	99	(142)	444
Other financial assets at fair value	207	0	0	0	0	0	0	0	47	254
Total financial assets held at fair value	24,614	(55)	1,590^{6,7}	2,776	(2,140)	1,272	(2,282)	4,135	(5,757)	24,153
Financial liabilities										
held at fair value:										
Trading securities	0	0	0	0	0	0	0	0	0	0
Negative market values from derivative financial instruments	6,289	0	1,322	0	0	0	(156)	1,961	(1,457)	7,960
Other trading liabilities	15	0	(1)	0	0	0	0	2	0	16
Financial liabilities designated at fair value through profit or loss	2,021	(77)	108	0	0	271	(319)	571	(60)	2,514
Other financial liabilities at fair value	(611)	0	222	0	0	0	23	(8)	(3)	(378)
Total financial liabilities held at fair value	7,714	(77)	1,652^{6,7}	0	0	271	(453)	2,525	(1,519)	10,113

¹ Total gains and losses predominantly relate to net gains (losses) on financial assets/liabilities at fair value through profit or loss reported in the consolidated statement of income. The balance also includes net gains (losses) on financial assets available for sale reported in the consolidated statement of income and unrealized net gains (losses) on financial assets available for sale and exchange rate changes reported in other comprehensive income, net of tax. Further, certain instruments are hedged with instruments in level 1 or level 2 but the table above does not include the gains and losses on these hedging instruments. Additionally, both observable and unobservable parameters may be used to determine the fair value of an instrument classified within level 3 of the fair value hierarchy; the gains and losses presented below are attributable to movements in both the observable and unobservable parameters.

² Issuances relate to the cash amount received on the issuance of a liability and the cash amount paid on the primary issuance of a loan to a borrower.

³ Settlements represent cash flows to settle the asset or liability. For debt and loan instruments this includes principal on maturity, principal amortizations and principal repayments. For derivatives all cash flows are presented in settlements.

⁴ Transfers in and transfers out of level 3 are related to changes in observability of input parameters. During the period they are recorded at their fair value at the beginning of year. For instruments transferred into level 3 the table shows the gains and losses and cash flows on the instruments as if they had been transferred at the beginning of the year. Similarly for instruments transferred out of level 3 the table does not show any gains or losses or cash flows on the instruments during the period since the table is presented as if they have been transferred out at the beginning of the year.

⁵ Total gains and losses on financial assets mandatory at fair value through OCI include a gain of €6 million recognized in other comprehensive income, net of tax.

⁶ This amount includes the effect of exchange rate changes. For total financial assets held at fair value this effect is a gain of €42 million and for total financial liabilities held at fair value this is a loss of €(6) million. The effect of exchange rate changes is reported in accumulated other comprehensive income, net of tax.

⁷ For assets, positive balances represent gains, negative balances represent losses. For liabilities, positive balances represent losses, negative balances represent gains.

Sensitivity analysis of unobservable parameters

Where the value of financial instruments is dependent on unobservable parameter inputs, the precise level for these parameters at the balance sheet date might be drawn from a range of reasonably possible alternatives. In preparing the financial statements, appropriate levels for these unobservable input parameters are chosen so that they are consistent with prevailing market evidence and in line with the Group's approach to valuation control detailed above. Were the Group to have marked the financial instruments concerned using parameter values drawn from the extremes of the ranges of reasonably possible alternatives, then as of June 30, 2020 it could have increased fair value by as much as € 1.9 billion or decreased fair value by as much as € 1.5 billion. As of December 31, 2019 it could have increased fair value by as much as € 1.7 billion or decreased fair value by as much as € 1.2 billion.

The changes in sensitive amounts from December 31, 2019 to June 30, 2020 were an increase in positive fair value movement of €263 million, and an increase in negative fair value movement of €392 million. In the same period there was a €956 million increase in Group level 3 assets and a € 749 million increase in Group level 3 liabilities. During the first half of 2020, the outbreak of the COVID-19 pandemic broadly impacted the financial markets, notably in March 2020 and April 2020, causing market dislocations and increased market volatility. Sensitivity related to the level 3 assets and liabilities increased due to significantly increased dispersion in market data.

Our sensitivity calculation of unobservable parameters for level 3 aligns to the approach used to assess valuation uncertainty for Prudent Valuation purposes. Prudent Valuation is a capital requirement for assets held at fair value. It provides a mechanism for quantifying and capitalizing valuation uncertainty in accordance with the European Commission Delegated Regulation (EU) 2016/101, which supplements Article 34 of Regulation (EU) No. 2019/876 (CRR), requiring institutions to apply a deduction from CET 1 the amount of any additional value adjustments on all assets measured at fair value calculated in accordance with Article 105(14). This utilizes exit price analysis performed for the relevant assets and liabilities in the Prudent Valuation assessment. The downside sensitivity may be limited in some cases where the fair value is already demonstrably prudent.

This disclosure is intended to illustrate the potential impact of the relative uncertainty in the fair value of financial instruments for which valuation is dependent on unobservable input parameters. However, it is unlikely in practice that all unobservable parameters would be simultaneously at the extremes of their ranges of reasonably possible alternatives. Hence, the estimates disclosed above are likely to be greater than the true uncertainty in fair value at the balance sheet date. Furthermore, the disclosure is neither predictive nor indicative of future movements in fair value.

For many of the financial instruments considered here, in particular derivatives, unobservable input parameters represent only a subset of the parameters required to price the financial instrument, the remainder being observable. Hence for these instruments the overall impact of moving the unobservable input parameters to the extremes of their ranges might be relatively small compared with the total fair value of the financial instrument. For other instruments, fair value is determined based on the price of the entire instrument, for example, by adjusting the fair value of a reasonable proxy instrument. In addition, all financial instruments are already carried at fair values which are inclusive of valuation adjustments for the cost to close out that instrument and hence already factor in uncertainty as it reflects itself in market pricing. Any negative impact of uncertainty calculated within this disclosure, then, will be over and above that already included in the fair value contained in the financial statements.

Breakdown of the sensitivity analysis by type of instrument¹

	Jun 30, 2020		Dec 31, 2019	
	Positive fair value movement from using reasonable possible alternatives	Negative fair value movement from using reasonable possible alternatives	Positive fair value movement from using reasonable possible alternatives	Negative fair value movement from using reasonable possible alternatives
in € m.				
Securities:				
Debt securities	248	136	256	108
Commercial mortgage-backed securities	5	2	4	1
Mortgage and other asset-backed securities	21	24	37	20
Corporate, sovereign and other debt securities	222	111	215	86
Equity securities	62	92	62	85
Derivatives:				
Credit	261	167	189	123
Equity	299	275	168	128
Interest related	378	359	312	303
Foreign exchange	34	29	44	39
Other	93	80	116	101
Loans:				
Loans	561	406	525	264
Other	0	0	0	0
Total	1,936	1,544	1,673	1,151

¹ Where the exposure to an unobservable parameter is offset across different instruments then only the net impact is disclosed in the table.

Quantitative information about the sensitivity of significant unobservable inputs

The behavior of the unobservable parameters on level 3 fair value measurement is not necessarily independent, and dynamic relationships often exist between the other unobservable parameters and the observable parameters. Such relationships, where material to the fair value of a given instrument, are explicitly captured via correlation parameters, or are otherwise controlled via pricing models or valuation techniques. Frequently, where a valuation technique utilizes more than one input, the choice of a certain input will bound the range of possible values for other inputs. In addition, broader market factors (such as interest rates, equity, credit or commodity indices or foreign exchange rates) can also have effects.

The range of values shown below represents the highest and lowest inputs used to value the significant exposures within level 3. The diversity of financial instruments that make up the disclosure is significant and therefore the ranges of certain parameters can be large. For example, the range of credit spreads on mortgage backed securities represents performing, more liquid positions with lower spreads than the less liquid, non-performing positions which will have higher credit spreads. As level 3 contains the less liquid fair value instruments, the wide ranges of parameters seen is to be expected, as there is a high degree of pricing differentiation within each exposure type to capture the relevant market dynamics. There follows a brief description of each of the principle parameter types, along with a commentary on significant interrelationships between them.

Credit Parameters are used to assess the creditworthiness of an exposure, by enabling the probability of default and resulting losses of a default to be represented. The credit spread is the primary reflection of creditworthiness and represents the premium or yield return above the benchmark reference instrument (typically LIBOR, or relevant Treasury Instrument, depending upon the asset being assessed), that a bond holder would require to allow for the credit quality difference between that entity and the reference benchmark. Higher credit spreads will indicate lower credit quality, and lead to a lower value for a given bond, or other loan-asset that is to be repaid to the Bank by the borrower. Recovery Rates represent an estimate of the amount a lender would receive in the case of a default of a loan, or a bond holder would receive in the case of default of the bond. Higher recovery rates will give a higher valuation for a given bond position, if other parameters are held constant. Constant Default Rate (CDR) and Constant Prepayment Rate (CPR) allow more complex loan and debt assets to be assessed, as these parameters estimate the ongoing defaults arising on scheduled repayments and coupons, or whether the borrower is making additional (usually voluntary) prepayments. These parameters are particularly relevant when forming a fair value opinion for mortgage or other types of lending, where repayments are delivered by the borrower through time, or where the borrower may pre-pay the loan (seen for example in some residential mortgages). Higher CDR will lead to lower valuation of a given loan or mortgage as the lender will ultimately receive less cash.

Interest rates, credit spreads, inflation rates, foreign exchange rates and equity prices are referenced in some option instruments, or other complex derivatives, where the payoff a holder of the derivative will receive is dependent upon the behavior of these underlying references through time. Volatility parameters describe key attributes of option behavior by enabling the variability of returns of the underlying instrument to be assessed. This volatility is a measure of probability, with higher volatilities denoting higher probabilities of a particular outcome occurring. The underlying references (interest rates, credit spreads etc.) have an effect on the valuation of options, by describing the size of the return that can be expected from the option. Therefore the value of a given option is dependent upon the value of the underlying instrument, and the volatility of that instrument, representing the size of the payoff, and the probability of that payoff occurring. Where volatilities are high, the option holder will see a higher option value as there is greater probability of positive returns. A higher option value will also occur where the payoff described by the option is significant.

Correlations are used to describe influential relationships between underlying references where a derivative or other instrument has more than one underlying reference. Behind some of these relationships, for example commodity correlation and interest rate-foreign exchange correlations, typically lie macroeconomic factors such as the impact of global demand on groups of commodities, or the pricing parity effect of interest rates on foreign exchange rates. More specific relationships can exist between credit references or equity stocks in the case of credit derivatives and equity basket derivatives, for example. Credit correlations are used to estimate the relationship between the credit performance of a range of credit names, and stock correlations are used to estimate the relationship between the returns of a range of equities. A derivative with a correlation exposure will be either long- or short-correlation. A high correlation suggests a strong relationship between the underlying references is in force, and this will lead to an increase in value of a long-correlation derivative. Negative correlations suggest that the relationship between underlying references is opposing, i.e., an increase in price of one underlying reference will lead to a reduction in the price of the other.

An EBITDA ('earnings before interest, tax, depreciation and amortization') multiple approach can be used in the valuation of less liquid securities. Under this approach the enterprise value ('EV') of an entity can be estimated via identifying the ratio of the EV to EBITDA of a comparable observable entity and applying this ratio to the EBITDA of the entity for which a valuation is being estimated. Under this approach a liquidity adjustment is often applied due to the difference in liquidity between the generally listed comparable used and the company under valuation. A higher EV/EBITDA multiple will result in a higher fair value.

Financial instruments classified in level 3 and quantitative information about unobservable inputs

Jun 30, 2020

in € m. (unless stated otherwise)	Fair value		Valuation technique(s) ¹	Significant unobservable input(s) (Level 3)	Range
	Assets	Liabilities			
Financial instruments held at fair value – Non-Derivative financial instruments held at fair value					
Mortgage- and other asset-backed securities held for trading:					
Commercial mortgage-backed securities	20	0	Price based Discounted cash flow	Price Credit spread (bps)	0 % 182 1,470
Mortgage- and other asset-backed securities	176	0	Price based Discounted cash flow	Price Credit spread (bps) Recovery rate Constant default rate Constant prepayment rate	0 % 137 25 % 1 % 3 % 24 %
Total mortgage- and other asset-backed securities	196	0			
Debt securities and other debt obligations	3,773	1,263	Price based Discounted cash flow	Price Credit spread (bps)	0 % 285 614
Held for trading	2,768	0			
Corporate, sovereign and other debt securities	2,768				
Non-trading financial assets mandatory at fair value through profit or loss	976				
Designated at fair value through profit or loss	0	1,263			
Financial assets at fair value through other comprehensive income	29				
Equity securities	976	0	Market approach	Price per net asset value Enterprise value/EBITDA (multiple) Weighted average cost capital	0 % 5 8 % 20 %
Held for trading	71	0			16
Non-trading financial assets mandatory at fair value through profit or loss	905		Discounted cash flow		
Loans	8,454	0	Price based Discounted cash flow	Price Credit spread (bps) Constant default rate Recovery rate	0 % 110 0 % 35 % 85 %
Held for trading	5,988	0			5,519
Non-trading financial assets mandatory at fair value through profit or loss	1,184				
Designated at fair value through profit or loss	0	0			
Financial assets at fair value through other comprehensive income	1,282				
Loan commitments	0	4	Discounted cash flow	Credit spread (bps) Recovery rate	6 25 % 85 %
			Loan pricing model	Utilization	0 % 75 %
Other financial instruments	1,838 ²	257 ³	Discounted cash flow	IRR Repo rate (bps.)	7 % 1 66
Total non-derivative financial instruments held at fair value	15,237	1,524			

¹ Valuation technique(s) and subsequently the significant unobservable input(s) relate to the respective total position.

² Other financial assets include €16 million of other trading assets, €1.8 billion of other financial assets mandatory at fair value and €1 million of other financial assets designated at fair value.

³ Other financial liabilities include €199 million of securities sold under repurchase agreements designated at fair value and €58 million of other financial liabilities designated at fair value.

Dec 31, 2019

in € m. (unless stated otherwise)	Fair value		Valuation technique(s) ¹	Significant unobservable input(s) (Level 3)	Range
	Assets	Liabilities			
Financial instruments held at fair value – Non-Derivative financial instruments held at fair value					
Mortgage- and other asset-backed securities held for trading:					
Commercial mortgage-backed securities	33	0	Price based Discounted cash flow	Price Credit spread (bps)	0 % 102 3623 % 1,899
Mortgage- and other asset-backed securities	225	0	Price based Discounted cash flow	Price Credit spread (bps) Recovery rate Constant default rate Constant prepayment rate	0 % 54 25 % 1 % 3 % 101 % 2,460 75 % 4 % 24 %
Total mortgage- and other asset-backed securities	258	0			
Debt securities and other debt obligations	4,698	1,679	Price based Discounted cash flow	Price Credit spread (bps)	0 % 203 %
Held for trading	3,090	2			15 460
Corporate, sovereign and other debt securities	3,090				
Non-trading financial assets mandatory at fair value through profit or loss	1,552				
Designated at fair value through profit or loss	0	1,676			
Financial assets at fair value through other comprehensive income	56				
Equity securities	996	0	Market approach	Price per net asset value Enterprise value/EBITDA (multiple) Weighted average cost capital	0 % 101 %
Held for trading	82	0			5 17
Non-trading financial assets mandatory at fair value through profit or loss	914		Discounted cash flow		0 % 20 %
Loans	8,302	38	Price based Discounted cash flow	Price Credit spread (bps)	0 % 341 %
Held for trading	6,110	38			11 1,209
Non-trading financial assets mandatory at fair value through profit or loss	1,193				
Designated at fair value through profit or loss	6	0		Constant default rate	0 % 0 %
Financial assets at fair value through other comprehensive income	993			Recovery rate Credit spread (bps) Recovery rate	35 % 90 %
Loan commitments	0	1	Discounted cash flow Loan pricing model	Utilization	8 25 % 979 95 % 0 % 84 %
Other financial instruments	1,654 ²	278 ³	Discounted cash flow	IRR Repo rate (bps.)	7 % 5 46 % 271
Total non-derivative financial instruments held at fair value	15,908	1,996			

¹ Valuation technique(s) and subsequently the significant unobservable input(s) relate to the respective total position.

² Other financial assets include € 28 million of other trading assets, € 1.6 billion of other financial assets mandatory at fair value.

³ Other financial liabilities include € 186 million of securities sold under repurchase agreements designated at fair value and € 92 million of other financial liabilities designated at fair value.

Jun 30, 2020

in € m. (unless stated otherwise)	Fair value		Valuation technique(s)	Significant unobservable input(s) (Level 3)	Range
	Assets	Liabilities			
Financial instruments held at fair value:					
Market values from derivative financial instruments:					
Interest rate derivatives	5,581	3,849	Discounted cash flow	Swap rate (bps)	(71) 803
				Inflation swap rate	(1) % 3 %
				Constant default rate	0 % 10 %
				Constant prepayment rate	3 % 41 %
			Option pricing model	Inflation volatility	0 % 8 %
				Interest rate volatility	0 % 156 %
				IR - IR correlation	(25) % 99 %
				Hybrid correlation	(70) % 100 %
Credit derivatives	648	800	Discounted cash flow	Credit spread (bps)	0 31,205
				Recovery rate	0 % 75 %
			Correlation pricing model	Credit correlation	15 % 68 %
Equity derivatives	1,148	1,645	Option pricing model	Stock volatility	4 % 100 %
				Index volatility	15 % 100 %
				Index - index correlation	1 1
				Stock - stock correlation	0 % 97 %
				Stock Forwards	0 % 8 %
				Index Forwards	0 % 6 %
FX derivatives	2,002	1,585	Option pricing model	Volatility	(18) % 64 %
Other derivatives	772	(43) ¹	Discounted cash flow	Credit spread (bps)	– –
			Option pricing model	Index volatility	12 % 136 %
				Commodity correlation	16 % 86 %
Total market values from derivative financial instruments	10,150	7,837			

¹ Includes derivatives which are embedded in contracts where the host contract is held at amortized cost but for which the embedded derivative is separated.

Dec 31, 2019

in € m. (unless stated otherwise)	Fair value		Valuation technique(s)	Significant unobservable input(s) (Level 3)	Range	
	Assets	Liabilities				
Financial instruments held at fair value:						
Market values from derivative financial instruments:						
Interest rate derivatives	4,941	3,387	Discounted cash flow	Swap rate (bps) Inflation swap rate Constant default rate Constant prepayment rate	(69) 0 % 0 % 2 %	668 3 % 13 % 59 %
			Option pricing model	Inflation volatility Interest rate volatility IR - IR correlation Hybrid correlation	0 % 0 % (25) % (70) %	5 % 33 % 99 % 100 %
Credit derivatives	618	822	Discounted cash flow	Credit spread (bps) Recovery rate	0 0 %	18,812 75 %
			Correlation pricing model	Credit correlation	33 %	84 %
Equity derivatives	834	1,132	Option pricing model	Stock volatility Index volatility Index - index correlation Stock - stock correlation Stock Forwards Index Forwards	4 % 4 % 1 18 % 0 % 0 %	93 % 69 % 1 93 % 18 % 5 %
FX derivatives	1,320	1,158	Option pricing model	Volatility	(12) %	27 %
Other derivatives	810	117 ¹	Discounted cash flow	Credit spread (bps)	–	–
			Option pricing model	Index volatility Commodity correlation	7 % 5 %	67 % 86 %
Total market values from derivative financial instruments	8,524	6,616				

¹ Includes derivatives which are embedded in contracts where the host contract is held at amortized cost but for which the embedded derivative is separated.

Unrealized gains or losses on level 3 instruments held or in issue at the reporting date

The unrealized gains or losses on level 3 Instruments are not due solely to unobservable parameters. Many of the parameter inputs to the valuation of instruments in this level of the hierarchy are observable and the gain or loss is partly due to movements in these observable parameters over the period. Many of the positions in this level of the hierarchy are economically hedged by instruments which are categorized in other levels of the fair value hierarchy. The offsetting gains and losses that have been recorded on all such hedges are not included in the table below, which only shows the gains and losses related to the level 3 classified instruments themselves held at the reporting date in accordance with IFRS 13. The unrealized gains and losses on level 3 instruments are included in both net interest income and net gains on financial assets/liabilities at fair value through profit or loss in the consolidated income statement.

in € m.	Six months ended	
	Jun 30, 2020	Jun 30, 2019
Financial assets held at fair value:		
Trading securities	(30)	121
Positive market values from derivative financial instruments	2,300	1,476
Other trading assets	(207)	62
Non-trading financial assets mandatory at fair value through profit or loss	40	94
Financial assets designated at fair value through profit or loss	1	0
Financial assets at fair value through other comprehensive income	(0)	0
Other financial assets at fair value	8	15
Total financial assets held at fair value	2,111	1,769
Financial liabilities held at fair value:		
Trading securities	0	(0)
Negative market values from derivative financial instruments	(1,787)	(1,516)
Other trading liabilities	0	1
Financial liabilities designated at fair value through profit or loss	41	(107)
Other financial liabilities at fair value	219	(206)
Total financial liabilities held at fair value	(1,527)	(1,829)
Total	584	(60)

Recognition of trade date profit

If there are significant unobservable inputs used in a valuation technique, the financial instrument is recognized at the transaction price and any trade date profit is deferred. The table below presents the year-to-year movement of the trade date profits deferred due to significant unobservable parameters for financial instruments classified at fair value through profit or loss. The balance is predominantly related to derivative instruments.

in € m.	Jun 30, 2020	Jun 30, 2019
Balance, beginning of year	441	531
New trades during the period	205	73
Amortization	(70)	(60)
Matured trades	(85)	(76)
Subsequent move to observability	(9)	(34)
Exchange rate changes	(1)	1
Balance, end of period	480	434

Fair value of financial instruments not carried at fair value

This section should be read in conjunction with Note 14 “Fair Value of Financial Instruments not carried at Fair Value” of the Group’s Annual Report 2019.

The valuation techniques used to establish fair value for the Group’s financial instruments which are not carried at fair value in the balance sheet are consistent with those outlined in Note 13 “Financial Instruments carried at Fair Value” of the Group’s Annual Report 2019.

Financial instruments not carried at fair value are not managed on a fair value basis, for example, retail loans and deposits and credit facilities extended to corporate clients. For these instruments fair values are calculated for disclosure purposes only and do not impact the balance sheet or income statement. Additionally, since the instruments generally do not trade there is significant management judgment required to determine these fair values.

Estimated fair value of financial instruments not carried at fair value on the balance sheet¹

in € m.	Jun 30, 2020		Dec 31, 2019	
	Carrying value	Fair value	Carrying value	Fair value
Financial assets:				
Cash and central bank balances	166,232	166,232	137,592	137,592
Interbank balances (w/o central banks)	10,159	10,160	9,636	9,636
Central bank funds sold and securities purchased under resale agreements	7,504	7,457	13,801	13,801
Securities borrowed	13	13	428	428
Loans	437,014	442,490	429,841	436,997
Other financial assets	128,186	128,650	94,157	94,423
Financial liabilities:				
Deposits	572,963	573,201	572,208	572,596
Central bank funds purchased and securities sold under repurchase agreements	6,959	6,957	3,115	3,114
Securities loaned	1,156	1,156	259	259
Other short-term borrowings	4,116	4,123	5,218	5,221
Other financial liabilities	125,002	125,002	87,669	87,669
Long-term debt	153,080	150,547	136,473	136,494
Trust preferred securities	1,348	1,169	2,013	2,236

¹ Amounts are generally presented on a gross basis, in line with the Group’s accounting policy regarding offsetting of financial instruments as described in Note 1 “Significant Accounting Policies and Critical Accounting Estimates” of the Group’s Annual Report 2019.

Allowance for credit losses

Development of allowance for credit losses for financial assets at amortized cost

in € m.	Six months ended Jun 30, 2020				
	Allowance for credit losses ³				
	Stage 1	Stage 2	Stage 3	Stage 3 POCI	Total
Balance, beginning of year	549	492	3,015	36	4,093
Movements in financial assets including new business	108	401	668	71	1,248
Transfers due to changes in creditworthiness	39	(93)	54	N/M	0
Changes due to modifications that did not result in derecognition	N/M	N/M	N/M	N/M	N/M
Changes in models	0	0	0	0	0
Financial assets that have been derecognized during the period ²	0	0	(280)	0	(280)
Recovery of written off amounts	0	0	23	0	23
Foreign exchange and other changes	(14)	(5)	(43)	14	(47)
Balance, end of reporting period	683	796	3,438	121	5,037
Provision for credit losses excluding country risk ^{1,4}	148	308	722	71	1,248

¹ Movements in financial assets including new business, transfers due to changes in creditworthiness and changes in models add up to Provision for Credit Losses excluding country risk.

² This position includes charge offs of allowance for credit losses.

³ Allowance for credit losses does not include allowance for country risk amounting to €5 million as of June 30, 2020.

⁴ Credit Loss Provision does include €42 million reimbursement gain as of June 30, 2020.

in € m.	Six months ended Jun 30, 2019				
	Allowance for credit losses ³				
	Stage 1	Stage 2	Stage 3	Stage 3 POCI	Total
Balance, beginning of year	509	501	3,247	3	4,259
Movements in financial assets including new business	(13)	110	171	23	291
Transfers due to changes in creditworthiness	64	(69)	5	N/M	0
Changes due to modifications that did not result in derecognition	N/M	N/M	N/M	N/M	N/M
Changes in models	0	0	0	0	0
Financial assets that have been derecognized during the period ²	0	0	(463)	0	(463)
Recovery of written off amounts	0	0	41	0	41
Foreign exchange and other changes	(4)	(8)	(5)	12	(5)
Balance, end of reporting period	556	534	2,996	37	4,123
Provision for credit losses excluding country risk ¹	52	41	176	23	291

¹ The above table breaks down the impact on provision for credit losses from movements in financial assets including new business, transfers due to changes in creditworthiness and changes in models.

² This position includes charge offs of allowance for credit losses.

³ Allowance for credit losses does not include allowance for country risk amounting to €3 million as of June 30, 2019.

Development of allowance for credit losses for off-balance sheet positions

in € m.	Six months ended Jun 30, 2020				
	Allowance for credit losses ²				
	Stage 1	Stage 2	Stage 3	Stage 3 POCI	Total
Balance, beginning of year	128	48	166	0	342
Movements including new business	1	33	2	0	35
Transfers due to changes in creditworthiness	(2)	0	1	N/M	0
Changes in models	0	0	0	0	0
Foreign exchange and other changes	7	8	11	0	26
Balance, end of reporting period	134	89	180	0	403
Provision for credit losses excluding country risk ¹	(1)	33	4	0	35

¹ The above table breaks down the impact on provision for credit losses from movements in financial assets including new business, transfers due to changes in creditworthiness and changes in models.

² Allowance for credit losses does not include allowance for country risk amounting to €4 million as of June 30, 2020.

in € m.	Six months ended Jun 30, 2019				
	Allowance for credit losses ²				
	Stage 1	Stage 2	Stage 3	Stage 3 POCI	Total
Balance, beginning of year	132	73	84	0	289
Movements including new business	2	6	3	0	12
Transfers due to changes in creditworthiness	4	(7)	3	N/M	0
Changes in models	0	0	0	0	0
Foreign exchange and other changes	0	0	(0)	0	1
Balance, end of reporting period	139	73	90	0	301
Provision for credit losses excluding country risk ¹	6	(0)	5	0	12

¹ The above table breaks down the impact on provision for credit losses from movements in financial assets including new business, transfers due to changes in creditworthiness and changes in models.

² Allowance for credit losses does not include allowance for country risk amounting to €5 million as of June 30, 2019.

IFRS 9 impairment approach

Forward-looking information

Under IFRS 9, the allowance for credit losses is based on reasonable and supportable forward looking information obtainable without undue cost or effort, which takes into consideration past events, current conditions and forecasts of future economic conditions.

To incorporate forward-looking information into Deutsche Bank's allowance for credit losses, the Group uses two key elements:

- As its base scenario, the Group uses external survey-based macro forecasts (consensus view on GDP and unemployment rates) supplemented by market-implied projections of interest and FX rates. In addition, our scenario expansion model, which has been initially developed for stress testing, is used for forecasting macroeconomic variables that are not covered by external consensus or market sources.
- Statistical techniques are then applied to transform the base scenario into a multiple scenario analysis. The scenarios specify deviations from the baseline forecasts and are used for deriving multi-year PD curves for different rating and counterparty classes, which are applied in the calculation of expected credit losses and in the identification of significant deterioration in credit quality of financial assets as described previously.

The general use of forward-looking information, including macro-economic factors, as well as adjustments taking into account extraordinary factors, are monitored by the Group's Risk and Finance Credit Loss Provision Forum. In certain situations, Credit Risk officers and senior management may have additional information in relation to specific portfolios to indicate that the statistical distribution used in the ECL calculation is not appropriate. In such situations, the Group would apply a judgmental overlay.

IFRS 9 – Forward Looking Information applied for the second quarter 2020

	Year 1 (4 quarter avg)	Year 2 (4 quarter avg)	Year 3 (4 quarter avg)
Credit - ITX Europe 125	74.90	–	–
FX - EUR/USD	1.12	–	–
GDP - Eurozone	(7.80) %	6.54 %	1.80 %
GDP - Germany	(6.58) %	5.91 %	1.87 %
GDP - Italy	(9.57) %	7.34 %	1.60 %
GDP - USA	(5.02) %	6.03 %	2.65 %
Rate - US Treasury 2y	0.18 %	–	–
Unemployment - Eurozone	10.05 %	9.11 %	8.63 %
Unemployment - Germany	4.22 %	4.00 %	3.94 %
Unemployment - Italy	12.08 %	11.32 %	10.45 %
Unemployment - Spain	19.62 %	16.35 %	14.47 %
Unemployment - USA	10.55 %	7.19 %	6.18 %

The economic data used in the forward-looking information for the calculation of the allowance for credit losses while derived from the same sources are not directly comparable with other economic data presented in this report due to the methodology used, the composition of the input factors and the periods under consideration

As explained in Chapter "Measures in context of COVID-19 pandemic" in the interim management report, the Bank has decided to perform an overlay to address substantial uncertainty about the impact of the COVID-19 pandemic on the economy, to overcome the weakness of the Forward Looking Information (FLI) model in the current economic environment and to reflect regulatory guidance and financial support to the industry.

The overlay calculation uses a 3 year average of the GDP and unemployment forecasts as presented in the table above for the base scenario (versus a four quarter averaging of the first and second year under normal circumstances), which is used for calculating point-in-time (PIT) rating migration matrices. In line with the Group's standard methodology, market rate forecasts are also used in the calibration of the PIT matrix for the next four quarters. A through-the-cycle matrix specifies rating migrations from 2022 onwards.

In addition, management decided to record a further management overlay to increase its ECL estimate to address the uncertainty on certain economic developments due to COVID-19 at the end of June 2020

Taking into account the above mentioned overlays, the Group reported provision for credit losses of €761 million in the second quarter of 2020, which is a significant increase compared to €161 million in the second quarter of 2019 and €247 million in the fourth quarter of 2019. This change mainly reflecting the following effects: €172 million from the inclusion of latest consensus forecast including the effects of the management overlays, €79 million due to deteriorated input parameter into the ECL calculation especially adverse rating developments due to COVID-19 across all business units and €510 million for defaulted clients.

In order to illustrate the sensitivity of our model with respect to future changes in macroeconomic variables (MEVs) we have calculated the ECL impact for stages 1 and 2 in a Downward and Upward shift across all scenarios used in the ECL calculation. Both shifts are applied to MEV forecasts as of June 30, 2020 by specifying Downward and Upward MEV values that are all either one standard deviation above or below the baseline forecasts, e.g. reducing forecasted GDP rates by 2 percentage points on average. The Downward shift resulted in an ECL increase of €802 million whereas the Upward shift reduced ECL by €439 million. All sensitivity calculations have been conducted with averaging GDP and unemployment rates.

Provisions

As of June 30, 2020, the Group recognized €2.6 billion (December 31, 2019: €2.6 billion) in provisions on its balance sheet. These relate to operational risk, civil litigation, regulatory enforcement, restructuring, allowances for credit related off-balance sheet positions and other matters, including bank levies. The consolidated financial statements contained in our Annual Report 2019 describe our provisions as of December 31, 2019, in Note 19 "Allowance for credit losses", and Note 27 "Provisions".

Civil litigation and regulatory enforcement matters

Within provisions as of June 30, 2020, the Group recognized provisions relating to civil litigation of €0.5 billion (December 31, 2019: €0.5 billion) and provisions relating to regulatory enforcement matters of €0.7 billion (December 31, 2019: €0.5 billion). For some matters for which the Group believes an outflow of funds is probable, no provisions were recognized as the Group could not reliably estimate the amount of the potential outflow.

For the matters for which a reliable estimate can be made, the Group currently estimates that, as of June 30, 2020, the aggregate future loss of which the possibility is more than remote but less than probable is approximately €1.9 billion for civil litigation matters (December 31, 2019: €1.8 billion) and €0.2 billion for regulatory enforcement matters (December 31, 2019: €0.2 billion). These figures include matters where the Group's potential liability is joint and several and where the Group expects any such liability to be paid by a third party. For other significant civil litigation and regulatory enforcement matters, the Group believes the possibility of an outflow of funds is more than remote but less than probable but the amount is not reliably estimable, and accordingly such matters are not included in the contingent liability estimates. For still other significant civil litigation and regulatory enforcement matters, the Group believes the possibility of an outflow of funds is remote and therefore has neither recognized a provision nor included them in the contingent liability estimates.

Note 27 "Provisions" to the consolidated financial statements contained in our Annual Report 2019 sets forth, in the section thereof captioned "Current Individual Proceedings", descriptions as of the date of such consolidated financial statements of civil litigation and regulatory enforcement matters or groups of matters for which the Group has taken material provisions, or for which there are material contingent liabilities that are more than remote, or for which there is the possibility of material business or reputational risk; similar matters are grouped together and some matters consist of a number of proceedings or claims. The disclosed matters include matters for which the possibility of a loss is more than remote but for which the Group cannot reliably estimate the possible loss.

Cum-ex Investigations and Litigations. As described in Note 27 "Provisions" to the consolidated financial statements contained in our Annual Report 2019, 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 Section 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, by way of inspection of 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 and none of these additional personnel have been notified by the CPP of being included in the investigation. The investigation is still at an early stage and the scope of the investigation may be further broadened.

DFS Consent Order. On July 7, 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 \$150 million civil penalty in connection with these three former relationships.

On July 15, 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 the Bank made material misrepresentations regarding the effectiveness of its AML controls and related remediation. The complaint cites allegations regarding control deficiencies raised in the DFS Consent Order related to the Bank's relationships with Danske Bank's Estonia branch, Jeffrey Epstein and FBME Bank. The case is in its early stages.

As described in Note 27 "Provisions" to the consolidated financial statements contained in our Annual Report 2019, Deutsche Bank has received requests for information from regulatory and law enforcement agencies concerning the Bank's former correspondent banking relationship with Danske Bank, including the Bank's 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. Deutsche Bank is providing information to and otherwise cooperating with the investigating agencies. The Bank has also completed an internal investigation into these matters, including of whether any violations of law, regulation or Bank policy occurred and the effectiveness of the related internal control environment. Additionally, on September 24 and 25, 2019, based on a search warrant issued by the Local Court (*Amtsgericht*) in Frankfurt, the Frankfurt public prosecutor's office conducted investigations into Deutsche Bank. The investigations are in connection with suspicious activity reports relating to potential money laundering at Danske Bank. The Bank is cooperating in the investigations. The Group has not established a provision or contingent liability with respect to the Danske Bank Estonia investigations and civil action, other than for the above-referenced \$150 million civil penalty relating to Danske Bank's Estonia branch and the other former relationships that were the subject of the DFS Consent Order. The remaining investigations relating to Danske Bank's Estonia branch are ongoing.

Deutsche Bank has also 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. The Group has not established a provision or contingent liability with respect to these investigations and civil action, other than for the above-referenced \$150 million civil penalty relating to Jeffrey Epstein and the other former relationships that were the subject of the DFS Consent Order. The remaining investigations relating to Jeffrey Epstein are ongoing.

Mortgage-Related and Asset-Backed Securities Matters and Investigation. *Regulatory and Governmental Matters.* As described in Note 27 “Provisions” to the consolidated financial statements contained in our Annual Report 2019, on December 23, 2016, Deutsche Bank announced that it reached a settlement-in-principle with the U.S. Department of Justice (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 January 17, 2017. Under the settlement, Deutsche Bank paid a civil monetary penalty of US\$ 3.1 billion and agreed to provide US\$ 4.1 billion in consumer relief. 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 June 1, 2017, Deutsche Bank and the Maryland Attorney General reached a settlement to resolve the matter for US\$ 15 million in cash and US\$ 80 million in consumer relief (to be allocated from the overall US\$ 4.1 billion consumer relief obligation agreed to as part of Deutsche Bank’s settlement with the DOJ).

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

Long-term debt

in € m.	Jun 30, 2020	Dec 31, 2019
Senior debt:		
Bonds and notes		
Fixed rate	73,128	77,243
Floating rate	25,924	23,944
Other	47,644	28,019
Subordinated debt:		
Bonds and notes		
Fixed rate	4,668	5,517
Floating rate	1,398	1,417
Other	319	333
Total long-term debt	153,080	136,473

Shares issued and outstanding

in million	Jun 30, 2020	Dec 31, 2019
Shares issued	2,066.8	2,066.8
Shares in treasury	9.9	0.7
Of which:		
Buyback	9.9	0.7
Other	0.0	0.0
Shares outstanding	2,056.9	2,066.1

Other financial information

Credit related commitments and contingent liabilities

Lending commitments and lending related contingent liabilities

In the normal course of business the Group regularly enters into irrevocable lending commitments, including fronting commitments as well as contingent liabilities consisting of financial and performance guarantees, standby letters of credit and indemnity agreements on behalf of its customers. Under these contracts the Group is required to perform under an obligation agreement or to make payments to the beneficiary based on third party's failure to meet its obligations. For these instruments it is not known to the Group in detail if, when and to what extent claims will be made. In the event that the Group has to pay out cash in respect of its fronting commitments, the Group would immediately seek reimbursement from the other syndicate lenders. The Group considers all the above instruments in monitoring the credit exposure and may require collateral to mitigate inherent credit risk. If the credit risk monitoring provides sufficient perception about a loss from an expected claim, a provision is established and recorded on the balance sheet.

The following table shows the Group's revocable lending commitments, irrevocable lending commitments and lending related contingent liabilities without considering collateral or provisions. It shows the maximum potential utilization of the Group in case all these liabilities entered into must be fulfilled. The table therefore does not show the expected future cash flows from these liabilities as many of them will expire without being drawn and arising claims will be honored by the customers or can be recovered from proceeds of arranged collateral.

in € m.	Jun 30, 2020	Dec 31, 2019
Irrevocable lending commitments	158,758	167,788
Revocable lending commitments	45,581	43,652
Contingent liabilities	46,896	49,232
Total	251,235	260,672

Other commitments and other contingent liabilities

The following table shows the Group's other irrevocable commitments and other contingent liabilities without considering collateral or provisions. It shows the maximum potential utilization of the Group in case all these liabilities entered into must be fulfilled. The table therefore does not show the expected future cash flows from these liabilities as many of them will expire without being drawn and arising claims will be honored by the customers or can be recovered from proceeds of arranged collateral.

in € m.	Jun 30, 2020	Dec 31, 2019
Other commitments	136	143
Other contingent liabilities	73	78
Total	209	220

Irrevocable payment commitments with regard to levies

Irrevocable payment commitments related to bank levy according to Bank Recovery and Resolution Directive (BRRD), the Single Resolution Fund (SRF) and the German deposit protection amounted to € 865.4 million as of June 30, 2020 and to € 767.3 million as of December 31, 2019.

Related party transactions

Parties are considered to be related if one party has the ability to directly or indirectly control the other party or exercise significant influence over the other party in making financial or operational decisions. The Group's related parties include:

- key management personnel, close family members of key management personnel and entities which are controlled, significantly influenced by, or for which significant voting power is held by key management personnel or their close family members,
- subsidiaries, joint ventures and associates and their respective subsidiaries, and
- post-employment benefit plans for the benefit of Deutsche Bank employees.

Transactions with key management personnel

Key management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of Deutsche Bank Group, directly or indirectly. The Group considers the members of the Management Board as currently mandated and the Supervisory Board of the parent company to constitute key management personnel for purposes of IAS 24. Among the Group's transactions with key management personnel as of June 30, 2020, were loans and commitments of €9 million and deposits of €17 million. As of December 31, 2019, there were loans and commitments of €10 million and deposits of €38 million among the Group's transactions with key management personnel. In addition, the Group provides banking services, such as payment and account services as well as investment advice, to key management personnel and their close family members.

Transactions with subsidiaries, associates and joint ventures

Transactions between Deutsche Bank AG and its subsidiaries meet the definition of related party transactions. If these transactions are eliminated on consolidation, they are not disclosed as related party transactions. Transactions between the Group and its associated companies and joint ventures and their respective subsidiaries also qualify as related party transactions.

Transactions for subsidiaries, joint ventures and associates are presented combined in below table as these are not material individually.

Loans issued and guarantees granted

in € m.	Jun 30, 2020	Dec 31, 2019
Loans outstanding, beginning of period	228	228
Movement in loans during the period ¹	(3)	(3)
Changes in the group of consolidated companies	0	0
Exchange rate changes/other	(5)	4
Loans outstanding, end of period²	221	228

Other credit risk related transactions:

Allowance for loan losses	0	0
Provision for loan losses	0	0
Guarantees and commitments	3	7

¹ Net impact of loans issued and loans repayment during the year is shown as "Movement in loans during the period".

² There were no past due loans as of June 30, 2020 and December 31, 2019. For the above loans, the Group held collateral of €5 million and €5 million as of June 30, 2020 and December 31, 2019, respectively.

Deposits received

in € m.	Jun 30, 2020	Dec 31, 2019
Deposits, beginning of period	58	68
Movement in deposits during the period ¹	(11)	(11)
Changes in the group of consolidated companies	0	0
Exchange rate changes/other	0	1
Deposits, end of period	47	58

¹ Net impact of deposits received and deposits repaid during the year is shown as "Movement in deposits during the period".

Other transactions

Trading assets and positive market values from derivative financial transactions with associated companies amounted to € 1 million as of June 30, 2020, and € 1 million as of December 31, 2019. Trading liabilities and negative market values from derivative financial transactions with associated companies were € 0 million as of June 30, 2020, and € 0 million as of December 31, 2019.

Other assets related to transactions with associated companies amounted to € 46 million as of June 30, 2020, and € 1 million as of December 31, 2019. Other liabilities related to transactions with associated companies were € 5 million as of June 30, 2020, and € 0 million as of December 31, 2019.

Transactions with pension plans

The Group has business relationships with a number of pension plans pursuant to which it provides financial services, including investment management. Pension funds may hold or trade Deutsche Bank AG shares or securities. As of June 30, 2020, transactions with these plans were not material for the Group.

Non-current assets and disposal groups held for sale

Within the balance sheet, non-current assets and disposal groups held for sale are reported in Other assets and Other liabilities. This note provides further explanation on the nature and the financial impact of the non-current assets and disposal groups held for sale as of June 30, 2020.

Non-current assets and disposal groups held for sale at the reporting date

Total assets held for sale amounted to € 6.9 billion as of June 30, 2020 (December 31, 2019: € 5.0 billion) and the disposal groups included liabilities of € 9.1 billion as of June 30, 2020 (December 31, 2019: € 9.6 billion).

As of June 30, 2020, there were no unrealized net gains or losses (December 31, 2019: € 0 million) relating to non-current assets and disposal groups classified as held for sale recognized directly in accumulated other comprehensive income (loss).

Following on from the fourth quarter 2019, the transfer of the Global Prime Finance and Electronic Equities platform to BNP Paribas S.A. remains on track. As of June 30, 2020, the respective disposal group held for sale, established in CRU for the fourth quarter last year, contains assets (€ 6.9 billion) and liabilities (€ 9.1 billion), mainly comprised of financial instruments. These will either be novated to BNP Paribas, or the balances will be closed out between Deutsche Bank and the counterparties and simultaneously the clients would enter into the equivalent transactions with BNP Paribas. The current measurement of the disposal group at the lower of its carrying amount and fair value less costs to sell did not result in a further impairment loss. The Group still expects the transaction to unwind by the end of 2021 with client transactions, IT hardware and software and employees to be transferred over the period.

Capital expenditures and divestitures

During the first half of 2020, the Group did not make any significant capital expenditures or divestitures.

Events after the reporting period

After the reporting date no material events occurred which had a significant impact on our results of operations, financial position and net assets.

Review report

To Deutsche Bank Aktiengesellschaft, Frankfurt am Main

We have reviewed the interim consolidated financial statements of Deutsche Bank Aktiengesellschaft, Frankfurt am Main, which comprise the consolidated statement of income, consolidated statement of comprehensive income, consolidated balance sheet, consolidated statement of changes in equity, consolidated statement of cash flows and selected explanatory notes, and the interim group management report for the period from 1 January to 30 June 2020, which are part of the half-year financial report pursuant to Sec. 115 WpHG [“Wertpapierhandelsgesetz”: German Securities Trading Act]. The executive directors are responsible for the preparation of the interim consolidated financial statements in accordance with IFRSs on interim financial reporting as adopted by the EU, and of the interim group management report in accordance with the requirements of the WpHG applicable to interim group management reports. Our responsibility is to issue a report on the interim consolidated financial statements and the interim group management report based on our review.

We conducted our review of the interim consolidated financial statements and of the interim group management report in compliance with German Generally Accepted Standards for the Review of Financial Statements promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW) and in supplementary compliance with the International Standard on Review Engagements “Review of Interim Financial Information Performed by the Independent Auditor of the Entity” (ISRE 2410). Those standards require that we plan and perform the review to obtain a certain level of assurance in our critical appraisal to preclude that the interim consolidated financial statements are not prepared, in all material respects, in accordance with IFRSs on interim financial reporting as adopted by the EU and that the interim group management report is not prepared, in all material respects, in accordance with the requirements of the WpHG applicable to interim group management reports. A review is limited primarily to making inquiries of the Company’s employees and analytical assessments and therefore does not provide the assurance obtainable from an audit of financial statements. Since, in accordance with our engagement, we have not performed an audit of financial statements, we cannot issue an auditor’s report.

Based on our review, nothing has come to our attention that causes us to believe that the interim consolidated financial statements are not prepared, in all material respects, in accordance with IFRSs on interim financial reporting as adopted by the EU or that the interim group management report is not prepared, in all material respects, in accordance with the provisions of the WpHG applicable to interim group management reports.

Eschborn / Frankfurt am Main, July 29, 2020

Ernst & Young GmbH
Wirtschaftsprüfungsgesellschaft

signed
Barth
Wirtschaftsprüfer
[German Public Auditor]

signed
Lösken
Wirtschaftsprüfer
[German Public Auditor]

Responsibility statement by the Management Board

To the best of our knowledge, and in accordance with the applicable reporting principles for interim financial reporting, the interim consolidated financial statements give a true and fair view of the assets, liabilities, financial position and profit or loss of the Group in accordance with German accepted accounting principles, and the interim management report of the Group includes a fair review of the development and performance of the business and the position of the Group, together with a description of the material opportunities and risks associated with the expected development of the Group for the remaining months of the fiscal year.

Frankfurt am Main, July 27, 2020



Christian Sewing



Karl von Rohr



Fabrizio Campelli



Frank Kuhnke



Bernd Leukert



Stuart Lewis



James von Moltke



Christiana Riley



Werner Steinmüller

Non-GAAP financial measures

This document and other documents the Group has published or may publish contain non-GAAP financial measures. Non-GAAP financial measures are measures of the Group's historical or future performance, financial position or cash flows that contain adjustments that exclude or include amounts that are included or excluded, as the case may be, from the most directly comparable measure calculated and presented in accordance with IFRS in the Group's financial statements.

Return on equity ratios

The Group reports a post tax return on average shareholders' equity and a post-tax return on average tangible shareholders' equity, each of which is a non-GAAP financial measure.

The post-tax returns on average shareholders' equity and average tangible shareholders' equity are calculated as profit (loss) attributable to Deutsche Bank shareholders after AT1 coupon as a percentage of average shareholders' equity and average tangible shareholders' equity, respectively.

Profit (loss) attributable to Deutsche Bank shareholders after AT1 coupon for the segments is a non-GAAP financial measure and is defined as profit (loss) excluding post-tax profit (loss) attributable to noncontrolling interests and after AT1 coupon, which are allocated to segments based on their allocated average tangible shareholders' equity. For the Group, it reflects the reported effective tax rate which was 62 % for the second quarter of 2020 and (233) % for the prior year's comparative period. The tax rate was 65 % for the six months ended June 30, 2020 and (351) % for the prior year's comparative period. For the segments, the applied tax rate was 28 % for 2020 and all quarters in 2019.

At the Group level, tangible shareholders' equity is shareholders' equity as reported in the Consolidated Balance Sheet excluding goodwill and other intangible assets. Tangible shareholders' equity for the segments is calculated by deducting goodwill and other intangible assets from shareholders' equity as allocated to the segments. Shareholders' equity and tangible shareholders' equity are presented on an average basis.

The Group believes that a presentation of average tangible shareholders' equity makes comparisons to its competitors easier, and refers to this measure in the return on equity ratios presented by the Group. However, average tangible shareholders' equity is not a measure provided for in IFRS, and the Group's ratios based on this measure should not be compared to other companies' ratios without considering differences in the calculations.

The reconciliation of the aforementioned ratios is set forth in the table below:

in € m. (unless stated otherwise)	Three months ended Jun 30, 2020						
	Corporate Bank	Investment Bank	Private Bank	Asset Management	Capital Release Unit	Corporate & Other	Total Consolidated
Profit (loss) before tax	77	956	(241)	114	(595)	(152)	158
Profit (loss)	55	688	(174)	82	(428)	(163)	61
Profit (loss) attributable to noncontrolling interests	0	0	0	0	0	32	32
Profit (loss) attributable to DB shareholders and additional equity components	55	688	(174)	82	(428)	(195)	28
Profit (loss) attributable to additional equity components	19	46	21	4	14	0	105
Profit (loss) attributable to Deutsche Bank shareholders	36	642	(195)	78	(442)	(195)	(77)
Average allocated shareholders' equity	9,525	23,361	11,377	4,817	6,537	(0)	55,617
Deduct: Average allocated goodwill and other intangible assets ¹	605	1,106	1,262	3,054	160	(0)	6,187
Average allocated tangible shareholders' equity	8,920	22,255	10,115	1,763	6,377	(0)	49,429
Post-tax return on average shareholders' equity	1.5 %	11.0 %	(6.9 %)	6.5 %	(27.1 %)	N/M	(0.6 %)
Post-tax return on average tangible shareholders' equity	1.6 %	11.5 %	(7.7 %)	17.7 %	(27.7 %)	N/M	(0.6 %)

N/M – Not meaningful

¹ Goodwill and other intangible assets related to the share of DWS that is not held by Deutsche Bank are excluded since the first quarter of 2018

	Three months ended Jun 30, 2019						
in € m. (unless stated otherwise)	Corporate Bank	Investment Bank	Private Bank	Asset Management	Capital Release Unit	Corporate & Other	Total Consolidated
Profit (loss) before tax	(277)	218	(311)	89	(766)	101	(946)
Profit (loss)	(199)	157	(224)	64	(551)	(2,396)	(3,150)
Profit (loss) attributable to noncontrolling interests	0	0	0	0	0	40	40
Profit (loss) attributable to DB shareholders and additional equity components	(199)	157	(224)	64	(551)	(2,436)	(3,190)
Profit (loss) attributable to additional equity components	14	32	15	3	17	0	82
Profit (loss) attributable to Deutsche Bank shareholders	(214)	124	(239)	62	(568)	(2,436)	(3,272)
Average allocated shareholders' equity	10,367	23,502	12,061	4,823	11,046	0	61,799
Deduct: Average allocated goodwill and other intangible assets ¹	944	1,989	1,963	3,026	117	0	8,038
Average allocated tangible shareholders' equity	9,423	21,513	10,098	1,797	10,929	0	53,760
Post-tax return on average shareholders' equity	(8.3 %)	2.1 %	(7.9 %)	5.1 %	(20.6 %)	N/M	(21.2 %)
Post-tax return on average tangible shareholders' equity	(9.1 %)	2.3 %	(9.5 %)	13.7 %	(20.8 %)	N/M	(24.3 %)

N/M – Not meaningful

¹ Goodwill and other intangible assets related to the share of DWS that is not held by Deutsche Bank are excluded since the first quarter of 2018

	Six months ended Jun 30, 2020						
in € m. (unless stated otherwise)	Corporate Bank	Investment Bank	Private Bank	Asset Management	Capital Release Unit	Corporate & Other	Total Consolidated
Profit (loss) before tax	208	1,578	(108)	224	(1,362)	(176)	364
Profit (loss)	150	1,136	(78)	161	(980)	(263)	126
Profit (loss) attributable to noncontrolling interests	0	0	0	0	0	56	56
Profit (loss) attributable to DB shareholders and additional equity components	150	1,136	(78)	161	(980)	(318)	71
Profit (loss) attributable to additional equity components	35	83	39	7	26	0	190
Profit (loss) attributable to Deutsche Bank shareholders	115	1,054	(117)	154	(1,007)	(318)	(120)
Average allocated shareholders' equity	9,597	22,963	11,453	4,843	6,893	(0)	55,750
Deduct: Average allocated goodwill and other intangible assets ¹	550	1,189	1,272	3,049	155	(0)	6,215
Average allocated tangible shareholders' equity	9,047	21,774	10,181	1,795	6,738	(0)	49,536
Post-tax return on average shareholders' equity	2.4 %	9.2 %	(2.0 %)	6.4 %	(29.2 %)	N/M	(0.4 %)
Post-tax return on average tangible shareholders' equity	2.5 %	9.7 %	(2.3 %)	17.2 %	(29.9 %)	N/M	(0.5 %)

N/M – Not meaningful

¹ Goodwill and other intangible assets related to the share of DWS that is not held by Deutsche Bank are excluded since the first quarter of 2018

in € m. (unless stated otherwise)	Six months ended Jun 30, 2019						
	Corporate Bank	Investment Bank	Private Bank	Asset Management	Capital Release Unit	Corporate & Other	Total Consolidated
Profit (loss) before tax	9	470	(98)	186	(1,307)	86	(654)
Profit (loss)	7	339	(70)	134	(941)	(2,417)	(2,949)
Profit (loss) attributable to noncontrolling interests	0	0	0	0	0	63	63
Profit (loss) attributable to DB shareholders and additional equity components	7	339	(70)	134	(941)	(2,479)	(3,012)
Profit (loss) attributable to additional equity components	29	64	31	5	33	0	162
Profit (loss) attributable to Deutsche Bank shareholders	(22)	274	(101)	129	(974)	(2,479)	(3,174)
Average allocated shareholders' equity	10,495	23,504	12,145	4,788	11,125	0	62,056
Deduct: Average allocated goodwill and other intangible assets ¹	973	2,043	1,998	3,018	146	0	8,178
Average allocated tangible shareholders' equity	9,522	21,461	10,147	1,770	10,978	0	53,878
Post-tax return on average shareholders' equity	(0.4 %)	2.3 %	(1.7 %)	5.4 %	(17.5 %)	N/M	(10.2 %)
Post-tax return on average tangible shareholders' equity	(0.5 %)	2.6 %	(2.0 %)	14.5 %	(17.8 %)	N/M	(11.8 %)

N/M – Not meaningful

¹ Goodwill and other intangible assets related to the share of DWS that is not held by Deutsche Bank are excluded since the first quarter of 2018

Core Bank

The Core Bank represents the Group excluding the Capital Release Unit (CRU).

in € m. (unless stated otherwise)	Three months ended Jun 30, 2020	Three months ended Jun 30, 2019
Profit (loss) before tax	753	(180)
Profit (loss)	489	(2,598)
Profit (loss) attributable to noncontrolling interests	32	40
Profit (loss) attributable to Deutsche Bank shareholders and additional equity components	456	(2,639)
Profit (loss) attributable to additional equity components	91	65
Profit (loss) attributable to Deutsche Bank shareholders	366	(2,703)
Average allocated shareholders' equity	49,080	50,753
Deduct: Average allocated goodwill and other intangible assets	6,027	7,922
Average allocated tangible shareholders' equity	43,053	42,831
Post-tax return on average shareholders' equity	3.0 %	(21.3) %
Post-tax return on average tangible shareholders' equity	3.4 %	(25.2) %

in € m. (unless stated otherwise)	Six months ended Jun 30, 2020	Six months ended Jun 30, 2019
Profit (loss) before tax	1,726	653
Profit (loss)	1,107	(2,008)
Profit (loss) attributable to noncontrolling interests	56	63
Profit (loss) attributable to Deutsche Bank shareholders and additional equity components	1,051	(2,071)
Profit (loss) attributable to additional equity components	164	129
Profit (loss) attributable to Deutsche Bank shareholders	887	(2,200)
Average allocated shareholders' equity	48,857	50,931
Deduct: Average allocated goodwill and other intangible assets	6,059	8,032
Average allocated tangible shareholders' equity	42,798	42,900
Post-tax return on average shareholders' equity	3.6 %	(8.6) %
Post-tax return on average tangible shareholders' equity	4.1 %	(10.3) %

in € m. (unless stated otherwise)	Three months ended Jun 30, 2020	Three months ended Jun 30, 2019
Profit (loss) before tax - Group	158	(946)
Profit (loss) before tax - CRU	(595)	(766)
Profit (loss) before tax - Core Bank	753	(180)
Specific revenue items	(41)	(109)
Transformation charges	41	12
Impairment of goodwill / other intangibles	0	1,036
Restructuring & severance	182	82
Adjusted profit (loss) before tax – Core Bank	935	841

in € m. (unless stated otherwise)	Six months ended Jun 30, 2020	Six months ended Jun 30, 2019
Profit (loss) before tax - Group	364	(654)
Profit (loss) before tax - CRU	(1,362)	(1,307)
Profit (loss) before tax - Core Bank	1,726	653
Specific revenue items	(93)	(140)
Transformation charges	96	12
Impairment of goodwill / other intangibles	0	1,036
Restructuring & severance	266	85
Adjusted profit (loss) before tax – Core Bank	1,995	1,646

Transformation charges

Transformation charges are costs, included in adjusted costs, that are directly related to Deutsche Bank's transformation as a result of the strategy announced on 7 July 2019. Such charges include the transformation-related impairment of software and real estate, the accelerated software amortization and other transformation charges like onerous contract provisions or legal and consulting fees related to the strategy execution.

in € m.	Three months ended Jun 30, 2020
Compensation and benefits	4
IT costs	70
Professional service fees	4
Occupancy, furniture and equipment expenses	11
Communication, data services, marketing	5
Other	0
Transformation charges	95

in € m.	Six months ended Jun 30, 2020
Compensation and benefits	4
IT costs	142
Professional service fees	7
Occupancy, furniture and equipment expenses	19
Communication, data services, marketing	5
Other	1
Transformation charges	179

Adjusted costs

Adjusted costs is one of the key performance indicators and is a non-GAAP financial measure for which the most directly comparable IFRS financial measure is noninterest expenses. Adjusted costs is calculated by deducting (i) impairment of goodwill and other intangible assets, (ii) litigation charges, net and (iii) restructuring and severance from noninterest expenses under IFRS. The Group believes that a presentation of noninterest expenses excluding the impact of these items provides a more meaningful depiction of the costs associated with our operating businesses. To show the development of our cost initiatives excluding costs that are directly related to Deutsche Bank's transformation as a result of the strategy announced on July 7, 2019, the Group also presents, Adjusted costs excluding transformation charges, in which the transformation charges described above are deducted from Adjusted costs.

In addition, BNP Paribas and Deutsche Bank have signed a master transaction agreement to provide continuity of service to Deutsche Bank's Prime Finance and Electronic Equities clients. Under the agreement Deutsche Bank will continue to operate the platform until clients can be migrated to BNP Paribas, and BNP Paribas reimburses Deutsche Bank for the eligible expenses of the transferred business. To show the development of our cost initiatives excluding not only transformation charges but also these eligible reimbursable expenses, the Group also presents, Adjusted costs excluding transformation charges and expenses eligible for reimbursement related to Prime Finance.

	Three months ended Jun 30, 2020						
in € m.	Corporate Bank	Investment Bank	Private Bank	Asset Management	Capital Release Unit	Corporate & Other	Total Consolidated
Noninterest expenses	1,106	1,329	1,997	400	496	40	5,367
Impairment of goodwill and other intangible assets	0	0	0	0	0	0	0
Litigation charges, net	81	2	75	(0)	9	(1)	165
Restructuring and severance	10	16	136	18	3	2	185
Adjusted costs	1,015	1,311	1,786	382	484	39	5,018
Transformation charges	4	28	51	0	54	(42)	95
Adjusted costs ex. transformation charges	1,011	1,284	1,736	382	430	81	4,923
Expenses eligible for reimbursement related to Prime Finance							92
Adjusted costs ex. transformation charges and expenses eligible for reimbursement related to Prime Finance							4,831

	Three months ended Jun 30, 2019						
in € m.	Corporate Bank	Investment Bank	Private Bank	Asset Management	Capital Release Unit	Corporate & Other	Total Consolidated
Noninterest expenses	1,509	1,544	2,336	471	995	131	6,987
Impairment of goodwill and other intangible assets	491	0	545	0	(0)	0	1,035
Litigation charges, net	(12)	135	(14)	2	35	19	164
Restructuring and severance	18	25	(8)	28	9	20	92
Adjusted costs	1,013	1,384	1,814	442	951	93	5,696
Transformation charges	0	0	12	0	339	(0)	351
Adjusted costs ex. transformation charges	1,013	1,384	1,801	442	612	93	5,345
Expenses eligible for reimbursement related to Prime Finance							0
Adjusted costs ex. transformation charges and expenses eligible for reimbursement related to Prime Finance							5,345

in € m.	Six months ended Jun 30, 2020						
	Corporate Bank	Investment Bank	Private Bank	Asset Management	Capital Release Unit	Corporate & Other	Total Consolidated
Noninterest expenses	2,194	2,804	3,887	774	1,191	156	11,006
Impairment of goodwill and other intangible assets	0	0	0	0	0	0	0
Litigation charges, net	81	3	77	(0)	9	10	179
Restructuring and severance	21	14	202	25	7	4	273
Adjusted costs	2,093	2,787	3,608	749	1,174	142	10,554
Transformation charges	30	42	65	1	83	(41)	179
Adjusted costs ex. transformation charges	2,063	2,746	3,543	748	1,091	183	10,375
Expenses eligible for reimbursement related to Prime Finance							190
Adjusted costs ex. transformation charges and expenses eligible for reimbursement related to Prime Finance							10,185

in € m.	Six months ended Jun 30, 2019						
	Corporate Bank	Investment Bank	Private Bank	Asset Management	Capital Release Unit	Corporate & Other	Total Consolidated
Noninterest expenses	2,521	3,272	4,141	869	1,942	162	12,906
Impairment of goodwill and other intangible assets	491	0	545	0	(0)	0	1,035
Litigation charges, net	(12)	132	(37)	1	41	22	147
Restructuring and severance	20	43	(26)	32	13	17	98
Adjusted costs	2,022	3,097	3,659	836	1,888	123	11,626
Transformation charges	0	0	12	0	339	(0)	351
Adjusted costs ex. transformation charges	2,022	3,097	3,647	836	1,549	123	11,274
Expenses eligible for reimbursement related to Prime Finance							0
Adjusted costs ex. transformation charges and expenses eligible for reimbursement related to Prime Finance							11,274

Revenues excluding specific items

Revenues excluding specific items is a performance indicator that is a non-GAAP financial measure most directly comparable to the IFRS financial measure net revenues. Revenues excluding specific items is calculated by adjusting net revenues under IFRS for specific revenue items which generally fall outside the usual nature or scope of the business and are likely to distort an accurate assessment of the divisional operating performance. Excluded items are Debt Valuation Adjustment (DVA) and material transactions or events that are either one-off in nature or belong to a portfolio of connected transactions or events where the P&L impact is limited to a specific period of time. The Group believes that a presentation of net revenues excluding the impact of these items provides a more meaningful depiction of the revenues associated with our business.

	Three months ended Jun 30, 2020						
in € m.	Corporate Bank	Investment Bank	Private Bank	Asset Management	Capital Release Unit	Corporate & Other	Total Consolidated
Net revenues	1,328	2,654	1,981	549	(70)	(154)	6,287
DVA							
- IB Other / CRU	0	(27)	0	0	(23)	0	(49)
Change in valuation of an investment							
- FIC S&T	0	42	0	0	0	0	42
Sal. Oppenheim workout							
- Wealth Management	0	0	25	0	0	0	25
Revenues excluding specific items	1,328	2,639	1,955	549	(47)	(154)	6,269

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	Three months ended Jun 30, 2019						
in € m.	Corporate Bank	Investment Bank	Private Bank	Asset Management	Capital Release Unit	Corporate & Other	Total Consolidated
Net revenues	1,294	1,823	2,087	594	221	184	6,203
DVA							
- IB Other / CRU	0	(15)	0	0	0	0	(15)
Change in valuation of an investment							
- FIC S&T	0	101	0	0	0	0	101
Sal. Oppenheim workout							
- Wealth Management	0	0	23	0	0	0	23
Revenues excluding specific items	1,294	1,737	2,064	594	221	184	6,094

	Six months ended Jun 30, 2020						
in € m.	Corporate Bank	Investment Bank	Private Bank	Asset Management	Capital Release Unit	Corporate & Other	Total Consolidated
Revenues	2,653	4,993	4,142	1,068	(129)	(91)	12,637
DVA							
- IB Other / CRU	0	20	0	0	1	0	21
Change in valuation of an investment							
- FIC S&T	0	32	0	0	0	0	32
Sal. Oppenheim workout							
- Wealth Management	0	0	42	0	0	0	42
Revenues excluding specific items	2,653	4,942	4,101	1,068	(130)	(91)	12,543

	Six months ended Jun 30, 2019						
in € m.	Corporate Bank	Investment Bank	Private Bank	Asset Management	Capital Release Unit	Corporate & Other	Total Consolidated
Revenues	2,636	3,811	4,212	1,119	608	168	12,554
DVA							
- IB Other / CRU	0	(64)	0	0	0	0	(64)
Change in valuation of an investment							
- FIC S&T	0	138	0	0	0	0	138
Sal. Oppenheim workout							
- Wealth Management	0	0	66	0	0	0	66
Revenues excluding specific items	2,636	3,737	4,146	1,119	608	168	12,414

Adjusted profit (loss) before tax

Adjusted profit (loss) before tax is calculated by adjusting the profit (loss) before tax under IFRS for specific revenue items, transformation charges, impairments of goodwill and other intangibles, as well as restructuring and severance expenses. The Group believes that a presentation of profit (losses) before tax excluding the impact of the foregoing items provides a more meaningful depiction of the profitability of our operating business.

	Three months ended Jun 30, 2020						
in € m.	Corporate Bank	Investment Bank	Private Bank	Asset Management	Capital Release Unit	Corporate & Other	Total consolidated
Profit (loss) before tax	77	956	(241)	114	(595)	(152)	158
Specific revenue items	0	(16)	(25)	0	23	0	(18)
Transformation charges	4	28	51	0	54	(42)	95
Impairment of goodwill / other intangibles	0	0	0	0	0	0	0
Restructuring & severance	10	16	136	18	3	2	185
Adjusted profit (loss) before tax	91	984	(80)	132	(515)	(192)	419

	Three months ended Jun 30, 2019						
in € m.	Corporate Bank	Investment Bank	Private Bank	Asset Management	Capital Release Unit	Corporate & Other	Total consolidated
Profit (loss) before tax	(277)	218	(311)	89	(766)	101	(946)
Specific revenue items	0	(86)	(23)	0	0	0	(109)
Transformation charges	0	0	12	0	339	0	351
Impairment of goodwill / other intangibles	491	0	545	0	(0)	0	1,035
Restructuring & severance	18	25	(8)	28	9	20	92
Adjusted profit (loss) before tax	232	157	215	117	(418)	121	424

	Six months ended Jun 30, 2020						
in € m.	Corporate Bank	Investment Bank	Private Bank	Asset Management	Capital Release Unit	Corporate & Other	Total consolidated
Profit (loss) before tax	208	1,578	(108)	224	(1,362)	(176)	364
Specific revenue items	0	(51)	(42)	0	(1)	0	(94)
Transformation charges	30	42	65	1	83	(41)	179
Impairment of goodwill / other intangibles	0	0	0	0	0	0	0
Restructuring & severance	21	14	202	25	7	4	273
Adjusted profit (loss) before tax	259	1,582	118	250	(1,273)	(213)	722

	Six months ended Jun 30, 2019						
in € m.	Corporate Bank	Investment Bank	Private Bank	Asset Management	Capital Release Unit	Corporate & Other	Total consolidated
Profit (loss) before tax	9	470	(98)	186	(1,307)	86	(654)
Specific revenue items	0	(74)	(66)	0	0	0	(140)
Transformation charges	0	0	12	0	339	0	351
Impairment of goodwill / other intangibles	491	0	545	0	(0)	0	1,035
Restructuring & severance	20	43	(26)	32	13	17	98
Adjusted profit (loss) before tax	520	440	367	218	(956)	103	691

Net assets (adjusted)

Net assets (adjusted) are defined as IFRS Total assets adjusted to reflect the recognition of legal netting agreements, offsetting of cash collateral received and paid and offsetting pending settlements balances. The Group believes that a presentation of net assets (adjusted) makes comparisons to its competitors easier.

in € b. (unless stated otherwise)	Jun 30, 2020	Dec 31, 2019
Total assets	1,407	1,298
Deduct: Derivatives (incl. hedging derivatives & derivatives reclassified into hfs) credit line netting	291	266
Deduct: Derivatives cash collateral received / paid	94	74
Deduct: Securities Financing Transactions credit line netting	3	1
Deduct: Pending settlements netting	34	10
Net assets (adjusted)	986	946

Book value and tangible book value per basic share outstanding

Book value per basic share outstanding and tangible book value per basic share outstanding are non-GAAP financial measures that are used and relied upon by investors and industry analysts as capital adequacy metrics. Book value per basic share outstanding represents the Bank's total shareholders' equity divided by the number of basic shares outstanding at period-end. Tangible book value represents the Bank's total shareholders' equity less goodwill and other intangible assets. Tangible book value per basic share outstanding is computed by dividing tangible book value by period-end basic shares outstanding.

Tangible book value

in € m.	Jun 30, 2020	Dec 31, 2019
Total shareholders' equity (Book value)	55,343	55,857
Goodwill and other intangible assets ¹	(6,130)	(6,254)
Tangible shareholders' equity (Tangible book value)	49,213	49,603

¹ Excludes Goodwill and other intangible assets attributable to partial sale of DWS.

Basic shares outstanding

in million (unless stated otherwise)	Jun 30, 2020	Dec 31, 2019
Number of shares issued	2,066.8	2,066.8
Treasury shares	(9.9)	(0.7)
Vested share awards	54.1	52.4
Basic shares outstanding	2,111.0	2,118.5
Book value per basic share outstanding in €	26.22	26.37
Tangible book value per basic share outstanding in €	23.31	23.41

Regulatory fully loaded measures

Our regulatory assets, exposures, risk-weighted assets, capital and ratios thereof are calculated for regulatory purposes and are set forth throughout this document under the CRR/CRD as currently applicable.

We present in this report certain figures based on the CRR definition of own fund instruments (applicable for AT1 capital and T2 capital and figures based thereon, including Tier 1, Total Capital and Leverage Ratio) on a “fully loaded” basis. We calculate such “fully loaded” figures excluding the transitional arrangements for own fund instruments as provided in the currently applicable CRR/CRD. Note that for CET1 instruments we do not make use of transitional provisions such that the fully loaded definition only impacts AT1 capital and T2 capital and figures based thereon, including Tier 1, Total Capital and Leverage Ratio.

Transitional arrangements are applicable for Additional Tier 1 (AT1) and Tier 2 (T2) instruments. Capital instruments issued on or prior to December 31, 2011, that no longer qualify as AT1 or T2 capital under the fully loaded CRR/CRD as currently applicable are subject to grandfathering rules during the transitional period and are being phased out from 2013 to 2022 with their recognition capped at 30 % in 2019, 20 % in 2020 and 10 % in 2021 (in relation to the portfolio eligible for grandfathering which was still in issue on December 31, 2012). The current CRR as applicable since June 27, 2019, provides further grandfathering rules for AT1 and T2 instruments issued prior to June 27, 2019. Thereunder, AT1 and T2 instruments issued through special purpose entities are grandfathered until December 31, 2021, and AT1 and T2 instruments that do not meet certain new requirements that apply since June 27, 2019 continue to qualify until June 26, 2025. Instruments issued under UK law which do not fulfill all CRR requirements after the UK has left the European Union are also excluded from our fully loaded definition. Our CET 1 and RWA figures show no difference between CRR/CRD as currently applicable and fully loaded CRR/CRD based on our definition of “fully loaded”.

For the comparative numbers as per yearend 2019 we still applied our earlier concept of fully loaded, defined as excluding the transitional arrangements for own funds instruments introduced by the CRR/CRD applicable until June 26, 2019, but reflecting the transitional arrangements introduced by the amendments to the CRR/CRD applicable from June 27, 2019, and further amendments thereafter.

We believe that these “fully loaded” calculations provide useful information to investors as they reflect our progress against the regulatory capital standards and as many of our competitors have been describing calculations on a “fully loaded” basis. As our competitors’ assumptions and estimates regarding “fully loaded” calculations may vary, however, our “fully loaded” measures may not be comparable with similarly labelled measures used by our competitors.

Imprint

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Cautionary statement regarding forward-looking statements

This report contains forward-looking statements. Forward-looking statements are statements that are not historical facts; they include statements about our beliefs and expectations and the assumptions underlying them. These statements are based on plans, estimates and projections as they are currently available to the management of Deutsche Bank. Forward-looking statements therefore speak only as of the date they are made, and we undertake no obligation to update publicly any of them in light of new information or future events.

By their very nature, forward-looking statements involve risks and uncertainties. A number of important factors could therefore cause actual results to differ materially from those contained in any forward-looking statement. Such factors include the conditions in the financial markets in Germany, in Europe, in the United States and elsewhere from which we derive a substantial portion of our revenues and in which we hold a substantial portion of our assets, the development of asset prices and market volatility, potential defaults of borrowers or trading counterparties, the implementation of our strategic initiatives, the reliability of our risk management policies, procedures and methods, and other risks referenced in our filings with the U.S. Securities and Exchange Commission. Such factors are described in detail in our SEC Form 20-F of March 20, 2020 under the heading "Risk Factors".

2020

Financial Calendar

October 28, 2020

Earnings Report as of September 30, 2020

2021

Financial Calendar

February 4, 2021

Preliminary results for the 2020 financial year

March 12, 2021

Annual Report 2020 and Form 20-F

April 28, 2021

Earnings Report as of March 31, 2021

May 27, 2021

Annual General Meeting

July 28, 2021

Interim Report as of June 30, 2021

October 27, 2021

Earnings Report as of September 30, 2021