Deutsche Bank

Pillar 3 Report as of September 30, 2020

150 YEARS

Content

Regulatory framework

Introduction

This Report provides Pillar 3 disclosures on the consolidated level of Deutsche Bank Group (the Group) as required by the global regulatory framework for capital and liquidity, established by the Basel Committee on Banking Supervision, also known as Basel 3. On European level these are implemented in the disclosure requirements as laid down in Part Eight of the "Regulation (EU) 575/2013 on prudential requirements for credit institutions and investment firms" (Capital Requirements Regulation or "CRR") and the "Directive (EU) 2013/36 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms" (Capital Requirements Directive or "CRD") which have been further amended with subsequent Regulations and Directives. Germany implemented the CRD disclosure requirements into national law in Section 26a of the German Banking Act ("Kreditwesengesetz" or "KWG"). Further disclosure guidance has been provided by the European Banking Authority ("EBA") in its "Final Report on the Guidelines on Disclosure Requirements under Part Eight of Regulation (EU) No 575/2013" ("EBA Guideline", EBA/GL/2016/11, version 2*). The information provided in this Pillar 3 Report is unaudited.

Due to rounding, numbers presented throughout this document may not add up precisely to the totals we provide and percentages may not precisely reflect the absolute figures.

Basel 3 and CRR/CRD

In the European Union, the Basel 3 capital framework is implemented by the amended versions of CRR and CRD. As a single rulebook the CRR is directly applicable to credit institutions and investment firms in the European Union and provides the grounds for the determination of regulatory capital requirements, regulatory own funds, leverage and liquidity as well as other relevant regulations. In addition, the CRD was implemented into German law by means of further amendments to the KWG and the German Solvency Regulation (SolvV) and accompanying regulations. Jointly, these laws and regulations represent the regulatory framework applicable in Germany.

Regarding the regulatory minimum capital requirements the CRR/CRD lays the foundation for the calculation of risk weighted assets (RWA) for credit risk, including counterparty credit risk, credit valuation adjustments, market risk and operational risk.

In January 2019, Regulations (EU) 2017/2401 and 2017/2402 introduced changes to the methodology for determining RWAs for new securitizations originated on or after January 1, 2019. All securitization transactions originated before this date remained subject to the rules introduced by CRR/CRD as applicable until December 31, 2018 and are subject to the new framework since January 1, 2020.

In May 2019, Regulation (EU) 2019/876 and Directive (EU) 2019/878 introduced amendments to the CRR/CRD with various changes to the credit risk RWA framework becoming applicable in June 2021. These relate for example to the applicable risk weights for banking book investments in collective investment undertakings or the replacement of the mark-to-market method to determine the exposure value for derivatives that are not in scope of the internal model method by a new standardized approach to determine counterparty credit risk (SA-CCR).

As a reaction to the COVID-19 outbreak, certain legislative changes to the prudential framework have been made and are applicable since 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) are 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. In addition certain Euro-based exposures facing Eurosystem central banks may be excluded from the leverage exposure subject to having obtained permission from the European Central Bank. Based on Decision (EU) 2020/1306 of the European Central Bank, the Group is allowed for the first time to exclude these exposures from the leverage exposure. This exclusion currently applies until June 27, 2021. A further core element of the CRR/CRD framework is the development and maintenance of a high quality capital base which should primarily consist of Common Equity Tier 1 (CET 1). The CET 1 minimum capital requirement applicable to the Group is 4.5 % of risk-weighted assets. In addition to this minimum capital requirement, various capital buffer requirements were phased in starting 2016 and are fully effective from 2019 onwards. For all of our CET 1 measures we 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 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. For CET 1 instruments we do not make use of transitional provisions.

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 year end 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.

The CRR/CRD requires banks to calculate and disclose a regulatory leverage ratio that is generally based on the accounting value as the relevant exposure measure for assets. Specific regulatory exposure measures apply to derivatives and securities financing transactions as well as off-balance sheet exposures and must be added to determine the total leverage exposure. With effect from June 2021 the leverage exposure measure will be modified, e.g. the exposure measure for derivatives is determined based on a new standardized approach for counterparty credit risk and a minimum leverage ratio requirement of 3 % is introduced. From January 1, 2023 an additional leverage ratio buffer requirement of 50 % of the applicable G-SIB buffer rate will apply. It is currently expected that this additional requirement will equal 0.75 %.

The CRR/CRD framework further defines liquidity standards. The Liquidity Coverage Ratio (LCR) aims to measure a bank’s short-term resilience to a severe liquidity stress scenario during a stress period of 30 calendar days. Detailed rules for the calculation of the LCR are set out in the Commission Delegated Regulation 2015/61. The binding minimum liquidity coverage ratio is set to 100 % since 2018.

The Net Stable Funding Ratio (NSFR) requires banks to maintain a stable funding profile in relation to their on- and off-balance sheet exposures. The CRR/CRD requires banks to calculate and disclose certain items requiring and providing stable funding. With effect from June 2021 a minimum Net Stable Funding Ratio of 100 % will be introduced.

There are continuous improvements and additional regulatory guidance provided with regard to the interpretations of the CRR/CRD rules and related binding Technical Standards are still in preparation or not yet available in their final version. Thus, we will continue to refine our assumptions and models in line with evolution of our as well as the industry’s understanding and interpretation of the rules. Against this background, current CRR/CRD measures may not be comparable to previous expectations. Also, our CRR/CRD measures may not be comparable with similarly labeled measures used by our competitors as our competitors’ assumptions and estimates regarding such implementation may differ from ours.

TLAC and European MREL (SRMR/BRRD)

Global Systemically Important Institutions (G-SIIs) in Europe need to have at least 16 % plus the combined buffer requirement of their Risk Weighted Assets (RWA) or 3 % of their Leverage Ratio Exposure (LRE) as Total Loss Absorbing Capacity (TLAC). The requirement will increase to 18 % plus the combined buffer requirement of RWA or 3.75 % of LRE starting 2022.

Banks in the European Union are also required to meet at all times a minimum requirement for own funds and eligible liabilities (“MREL”) which ensures that banks have sufficient loss absorbing capacity in resolution to avoid recourse to taxpayers’ money. Relevant laws are the Single Resolution Mechanism Regulation (“SRMR”) and the Bank Recovery and Resolution Directive (“BRRD”) as implemented through the German Recovery and Resolution Act (Sanierungs- und Abwicklungsgesetz, “SAG”).

MREL is determined on a case-by-case basis by the resolution authority in line with guidance provided by Commission Delegated Regulation (EU) 2016/1450. The Single Resolution Board (“SRB”) as Deutsche Bank’s resolution authority has issued further MREL policies clarifying how the SRB will exercise its discretion under the above European laws in setting MREL and in determining eligible liabilities. MREL is expressed as a percentage of Total Liabilities and Own Funds (“TLOF”).

Instruments which qualify for TLAC and MREL are own funds (Common Equity Tier 1, Additional Tier 1 and Tier 2) as well as certain eligible liabilities (mainly plain-vanilla unsecured bonds). Instruments qualifying for TLAC need to be fully subordinated to general creditor claims (e.g. senior non-preferred bonds) while this is not required for MREL (e.g. senior preferred bonds). Nevertheless, current and future MREL regulation allows the SRB to also set an additional "subordination" requirement within MREL (but separate from TLAC) against which only subordinated liabilities and own funds can be counted.

ICAAP, ILAAP and SREP

The Internal Capital Adequacy Assessment Process ("ICAAP") as stipulated in Pillar 2 of Basel 3 requires banks to identify and assess risks, maintain sufficient capital to face these risks and apply appropriate risk management techniques to maintain adequate capitalization. Our Internal Liquidity Adequacy Assessment Process ("ILAAP") aims to ensure that sufficient levels of liquidity are maintained on an ongoing basis by identifying the key liquidity and funding risks to which the Group is exposed, by monitoring and measuring these risks, and by maintaining tools and resources to manage and mitigate these risks.

In accordance with Article 97 CRD supervisors regularly review, as part of the Supervisory Review and Evaluation Process ("SREP"), the arrangements, strategies, processes and mechanisms implemented by banks and evaluate: (a) risks to which the institution is or might be exposed; (b) risks the institution poses to the financial system; and (c) risks revealed by stress testing.

Prudential measures for non-performing exposure

In April 2019 the EU published final regulations for a prudential backstop reserve for non-performing loans, which will result in a deduction from CET 1 capital when a minimum loss coverage requirement is not met. We expect first impacts on our CET 1 ratio in 2021, as these rules apply to newly originated assets after application date and foresee a two year grace period before the defined backstop requirements apply.

In addition, in March 2018 ECB published its "Addendum to the ECB Guidance to banks on non-performing loans: supervisory expectations for prudential provisioning of non-performing exposures" and in August 2019 its "Communication on supervisory coverage expectations for NPEs". These guidances are applicable to all newly defaulted loans after April 1, 2018 and, similar to the EU rules, it requires banks to take measures in case a minimum impairment coverage requirement is not met. Within the annual SREP discussions ECB may impose Pillar 2 measures on banks in case ECB is not confident with measure taken by the individual bank.

In its 2019 SREP letter, ECB asks us to apply ECB's non-performing backstop requirements to the stock of Non-Performing Loans starting year end 2020. Similar to the Addendum to the ECB Guidance to banks on non-performing loans this measure will be evaluated as part of the annual SREP process.

Measures in context of COVID-19 pandemic

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." We 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". The Group has introduced this guidance into our 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 and to Deutsche Bank's Earnings Report as of September 30, 2020.

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.

Own funds

Disclosures under Article 473a CRR - Transitional arrangements for mitigating the impact of the introduction of IFRS 9 on own funds

For all of our CET 1 measures we applied for the first time for June 30, 2020, the transitional arrangements in relation to IFRS 9 as provided in the current CRR/CRD, Article 473a CRR. The CRR allowed for a phase-in of the corresponding CET 1 reduction due to the increase of IFRS 9 credit loss allowance over a five year period until year end 2022. The transitional provisions were structured such that there is a static component relating to increases of credit loss allowance observed as of January 2018 and a dynamic component relating to credit loss allowance increases observed between January 2018 and the current reporting date.

Via the CRR amendment published on June 26, 2020 the transitional provisions have been modified such that the dynamic component is reset, i.e. it separately covers the periods from January 1, 2018 to January 1, 2020 and the period from January 1, 2020 to the current reporting date, the phase-in period is extended until 2024, and the phase-in percentages are modified.

In addition, the CRR amendment simplifies the implementation of the transitional provisions as the requirement to recalculate the exposure at default (EaD) for each individual credit risk standardized approach (CRSA) exposure taking into account the amounts added back to CET 1 no longer applies. Instead, an additional credit risk RWA amount equal to 100 % times the credit loss allowance for the CRSA portfolio that has not reduced CET 1 due to the application of the transitional provisions is determined. The same amount is included in the leverage exposure. We do make use of this simplification in our application of transitional provisions.

In the following table CET 1, Tier 1 and Total Capital as well as risk weighted assets and leverage exposure are shown based on currently applicable CRR in comparison to not applying Article 473a CRR.

IFRS 9-Fully Loaded: Comparison of institutions' own funds and capital and leverage ratios with and without the application of transitional arrangements for IFRS 9 or analogous ECLs

		Sep 30, 2020	Jun 30, 2020
		a	b
	Available capital (in € m.)		
1	Common Equity Tier 1 (CET 1) capital	43,086	43,863
2	Common Equity Tier 1 (CET 1) capital as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	43,028	43,659
3	Tier 1 capital	49,935	50,712
4	Tier 1 capital as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	49,876	50,508
5	Total capital	57,164	57,807
6	Total capital as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	57,106	57,603
	Risk-weighted assets (in € m.)		
7	Total risk-weighted assets	324,548	330,879
8	Total risk-weighted assets as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	324,492	330,822
	Capital ratios		
9	Common Equity Tier 1 (as a percentage of risk exposure amount)	13.3	13.3
10	Common Equity Tier 1 (as a percentage of risk exposure amount) as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	13.3	13.2
11	Tier 1 (as a percentage of risk exposure amount)	15.4	15.3
12	Tier 1 (as a percentage of risk exposure amount) as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	15.4	15.3
13	Total capital (as a percentage of risk exposure amount)	17.6	17.5
14	Total capital (as a percentage of risk exposure amount) as if IFRS 9 or analogous ECLs transitional arrangements had not been applied	17.6	17.4
	Leverage ratio		
15	Leverage ratio total exposure measure[1, 2]	1,100,745	1,192,408
16	Leverage ratio[2]	4.5	4.3
17	Leverage ratio as if IFRS 9 or analogous ECLs transitional arrangements had not been applied[2]	4.5	4.2

[1] Leverage ratio total exposure measure if IFRS 9 or analogous ECL transitional arrangements had not been applied would have been lower by € 0.2 billion and € 0.1 billion for June 30, 2020 and September 30, 2020 respectively.
[2] For September 30, 2020 excluding central bank exposures of € 97 billion in accordance with the Decision (EU) 2020/1306 of the European Central Bank. The Leverage Ratio would amount to 4.2 % without excluding this respective central bank exposure.

The capital add back in total € 58.4 million for the third quarter of 2020 includes € 54.4 million from the static component solely stemming from the CRSA portfolio due to the increase in credit loss allowances for the CRSA portfolio at transition from IAS 39 to IFRS 9 at the end of 2017 and beginning of 2018. There was no contribution from the IRBA portfolios, given the regulatory expected loss exceeded IFRS 9 Credit Loss Allowances for the relevant reporting dates.

There is no contribution from the dynamic component from both CRSA and IBRA portfolios which compares credit loss allowance levels between January, 1 2018 and January, 1 2020. This is due to a reduction in credit loss allowance levels in aforementioned period for the CRSA portfolio and the regulatory expected loss exceeding the credit loss allowance levels for the IRBA portfolio.

There is a contribution of € 4.1 million from the dynamic component which compares the credit loss allowance levels since January 1, 2020 and the reporting date, whereby the IRBA portfolio contributing amounts to € 0.6 million and CRSA portfolio contribute € 3.4 million. This is due to the credit loss allowances levels for the IRBA portfolio being in excess of the regulatory expected loss in scope for Stage 1 and 2 assets and an increase in credit loss allowances levels for the CRSA portfolio since January 1, 2020.

Capital requirements

Article 438 (c-f) CRR - Overview of capital requirements

The table below shows RWA and regulatory capital requirements broken down by risk types and model approaches compared to the previous quarter-end.

EU OV1 – Overview of RWA

			Sep 30, 2020		Jun 30, 2020	
			a1	b1	a2	b2
		in € m.	RWA	Minimum capital requirements	RWA	Minimum capital requirements
	1	Credit risk (excluding CCR)	174,189	13,935	174,331	13,946
		of which:				
Art 438(c)(d)	2	The standardized approach (SA)	15,566	1,245	15,153	1,212
Art 438(c)(d)	3	The foundation IRB (FIRB) approach	4,361	349	3,941	315
Art 438(c)(d)	4	The advanced IRB (AIRB) approach	147,671	11,814	148,150	11,852
Art 438(d)	5	Equity IRB under the simple risk-weighted approach or the IMA	6,590	527	7,088	567
Art 107 Art 438(c)(d)	6	Counterparty credit risk (CCR)	26,685	2,135	27,943	2,235
		of which:				
Art 438(c)(d)	7	Mark to market	2,826	226	3,140	251
Art 438(c)(d)	8	Original exposure	0	0	0	0
	9	The standardized approach	0	0	0	0
	9a	Financial collateral comprehensive method (for SFTs)	1,321	106	1,667	133
	10	Internal model method (IMM)	17,664	1,413	17,736	1,419
Art 438(c)(d)	11	Risk exposure amount for contributions to the default fund of a CCP	171	14	166	13
Art 438(c)(d)	12	Credit Valuation Adjustment (CVA)	4,704	376	5,235	419
Art 438(e)	13	Settlement risk	93	7	222	18
Art 449(o)(i)	14	Securitization exposures in the banking book (after the cap)	12,964	1,037	14,173	1,134
		of which:				
	15	IRB approach	8,132	651	9,626	770
		of which:				
	16	IRB supervisory formula approach (SFA)	0	0	0	0
	17	Internal assessment approach (IAA)	0	0	0	0
	18	Standardized approach	4,832	387	4,547	364
	19	Market risk	27,800	2,224	29,468	2,357
		of which:				
	20	Standardized approach	2,821	226	2,945	236
	21	IMA	24,978	1,998	26,523	2,122
Art 438(e)	22	Large exposures	0	0	0	0
Art 438(f)	23	Operational risk	69,564	5,565	71,310	5,705
		of which:				
	24	Basic indicator approach	0	0	0	0
	25	Standardized approach	0	0	0	0
	26	Advanced measurement approach	69,564	5,565	71,310	5,705
Art 437(2), 48,60	27	Amounts below the thresholds for deduction (subject to 250 % risk weight)	13,254	1,060	13,432	1,075
Art 500	28	Floor adjustment	0	0	0	0
	29	Total	**324,548**	**25,964**	330,879	26,470

Our RWA were € 324.5 billion as of September 30, 2020, compared to € 330.9 billion as of June 30, 2020. The decrease of € 6.3 billion was driven by RWA reductions across different risk types. The decrease of € 0.1 billion for credit risk RWA (excluding CCR) was driven by de-risking initiatives in our Capital Release Unit and Private Bank as well as FX movements partially offset by loan growth in our Core Bank. The reduction of € 1.3 billion in counterparty credit risk (CCR) was primarily driven by mark-to-market movements, exposure reductions as well as FX movements. Securitization RWA decreased by € 1.2 billion and is attributable to exposure reductions. The operational risk RWA reduction of € 1.7 billion was mostly driven by a lighter internal and external loss profile feeding into our capital model, as well as a slightly increased expected loss deductible. The reduction in market risk RWA of € 1.7 billion was driven by VaR and SVaR components, along with the impact of Incremental risk charge and the market risk standardized approach.

The movements of RWA for the specific risk types are discussed further down in this report for credit risk in section “Article 438 (d) CRR - Development of credit risk RWA” on page 10, for counterparty credit risk in section “Article 438 (d) CRR - Development of CCR RWA” on page 11 and for market risk in section “Article 455 (e) CRR - Regulatory capital requirements for market risk“ on page 12.

Credit risk exposure and credit risk mitigation in the internal-rating-based approach

Quantitative information on the use of the IRB approach

Article 438 (d) CRR - Development of credit risk RWA

The following table provides an analysis of key drivers for RWA movements observed for credit risk, excluding counterparty credit risk, to the extent covered in IRB approaches in the current and previous reporting period. It also shows the corresponding movements in capital requirements, derived from RWA with an 8 % capital ratio.

EU CR8 – RWA flow statement of credit risk exposures under the IRB approach

		Three months ended Sep 30, 2020		Three months ended Jun 30, 2020	
		a	b	a	b
	in € m.	RWA	Capital requirements	RWA	Capital requirements
1	Credit risk RWA opening balance	**152,090**	**12,167**	157,890	12,631
2	Book size	2,383	191	(3,798)	(304)
3	Book quality	299	24	1,164	93
4	Model updates	0	0	(310)	(25)
5	Methodology and policy	0	0	(1,321)	(106)
6	Acquisitions and disposals	(685)	(55)	(498)	(40)
7	Foreign exchange movements	(2,055)	(164)	(1,037)	(83)
8	Other	0	0	0	0
9	Credit risk RWA closing balance	**152,032**	**12,163**	152,090	12,167

Organic changes in our portfolio size and composition are considered in the category “book size”. The category “book quality” mainly represents the effects from portfolio rating migrations, loss given default, model parameter recalibrations as well as collateral coverage and netting activities. “Model updates” include model refinements and advanced model roll out. RWA movements resulting from externally, regulatory-driven changes, e.g. applying new regulations, are considered in the “methodology and policy” section. “Acquisition and disposals” show significant exposure movements which can be clearly assigned to new businesses or disposal-related activities. Changes that cannot be attributed to the above categories are reflected in the category “other”.

The RWA for credit risk exposures under the IRB approach is almost flat with a decrease of 0.04 % or € 58 million since June 30, 2020 primarily stemming from FX related credit risk RWA movements and caused by the decrease in the category “acquisition and disposals” reflecting disposals within the Private Bank business. This was partly offset by the category “book size” reflecting the increased client demand versus prior quarter. The category “book quality” reflects the increase stemming from parameter developments, in particular rating changes.

Counterparty credit risk (CCR)

Article 438 (d) CRR - Development of CCR RWA

The following table provides an analysis of key drivers for RWA movements observed for counterparty credit risk (CCR) exposures calculated under the internal model method (IMM) in the current and previous reporting period. It also shows the corresponding movements in capital requirements, derived from RWA with an 8 % capital ratio.

EU CCR7 – RWA flow statement of counterparty credit risk exposures under the internal model method

		Three months ended Sep 30, 2020		Three months ended Jun 30, 2020	
		a	b	a	b
	in € m.	RWA	Capital requirements	RWA	Capital requirements
1	Counterparty credit risk RWA under the IMM opening balance	**17,736**	**1,419**	21,492	1,719
2	Book size	23	2	(1,703)	(136)
3	Book quality	176	14	(656)	(52)
4	Model updates	96	8	(1,024)	(82)
5	Methodology and policy	0	0	(171)	(14)
6	Acquisitions and disposals	0	0	0	0
7	Foreign exchange movements	(367)	(29)	(202)	(16)
8	Other	0	0	0	0
9	Counterparty credit risk RWA under the IMM closing balance	**17,664**	**1,413**	17,736	1,419

Organic changes in our portfolio size and composition are considered in the category “Book size”. The category “Book quality” mainly represents the effects from portfolio rating migrations, loss given default, model parameter recalibrations as well as collateral coverage and netting activities. “Model updates” include model refinements and model roll out. RWA movements resulting from externally, regulatory-driven changes, e.g. applying new regulations, are considered in the “Methodology and policy” section. “Acquisition and disposals” shows significant exposure movements which can be clearly assigned to new businesses or disposal-related activities. Changes that cannot be attributed to the above categories are reflected in the category “Other”.

The RWA for counterparty credit risk exposures under the IMM decreased by 0.4 % or € 72 million since June 30, 2020. The FX related decreases were partly offset by the category “Book quality” reflecting increases stemming from parameter developments, in particular rating changes. Further, the decrease in category “Model updates” is driven by updates to our internal models.

Market risk

Own funds requirements for market risk under the IMA

Article 455 (e) CRR - Regulatory capital requirements for market risk

The following table EU MR2-B provides an analysis of key drivers for movements observed for market risk RWA covered by internal models (i.e. value-at-risk, stressed value-at-risk, incremental risk charge and comprehensive risk measure) in the current and previous reporting period. It also shows the corresponding movements in capital requirements, derived from RWA with an 8 % capital ratio.

EU MR2-B – RWA flow statements of market risk exposures under the IMA

		Three months ended Sep 30, 2020						
		a	b	c	d	e	f	g
	in € m.	VaR	SVaR	IRC	Compre-hensive risk measure	Other	Total RWA	Total capital requirements
1	Market Risk RWA opening balance[1]	6,987	13,960	5,575	–	0	26,523	2,122
1a	Regulatory adjustment[2]	(5,237)	(10,219)	(523)	–	0	(15,979)	(1,278)
1b	RWA at the previous quarter-end (end of the day)[3]	1,751	3,741	5,053	–	0	10,544	844
2	Movement in risk levels	335	634	(140)	–	0	829	66
3	Model updates/changes	(492)	(1,409)	0	–	0	(1,901)	(152)
4	Methodology and policy	0	0	0	–	0	0	0
5	Acquisitions and disposals	0	0	0	–	0	0	0
6	Foreign exchange movements	0	0	0	–	0	0	0
6a	Market data changes and recalibrations	132	0	0	–	0	132	11
7	Other	0	0	0	–	0	0	0
8a	RWA at the end of the reporting period (end of the day)[3]	1,726	2,966	4,913	–	0	9,605	768
8b	Regulatory adjustment[2]	5,351	10,022	0	–	0	15,373	1,230
8	Market Risk RWA closing balance[1]	7,077	12,989	4,913	–	0	24,978	1,998

[1] Represents RWA at previous and current reporting period quarter end.
[2] Indicates the difference between RWA and RWA (end of day) at the beginning and end of period.
[3] For a given component (e.g. VaR) it refers to the RWA that would be computed if the previous or current quarter end snapshot figure of the component determines the quarter end RWA, as opposed to a 60-day average for regulatory purposes.

		Three months ended Jun 30, 2020						
		a	b	c	d	e	f	g
	in € m.	VaR	SVaR	IRC	Compre-hensive risk measure	Other	Total RWA	Total capital requirements
1	Market Risk RWA opening balance[1]	4,207	12,938	5,064	–	0	22,209	1,777
1a	Regulatory adjustment[2]	(2,580)	(9,564)	(684)	–	0	(12,828)	(1,026)
1b	RWA at the previous quarter-end (end of the day)[3]	1,627	3,374	4,380	–	0	9,381	750
2	Movement in risk levels	(853)	324	673	–	0	144	12
3	Model updates/changes	(472)	43	0	–	0	(429)	(34)
4	Methodology and policy	0	0	0	–	0	0	0
5	Acquisitions and disposals	0	0	0	–	0	0	0
6	Foreign exchange movements	0	0	0	–	0	0	0
6a	Market data changes and recalibrations	1,449	0	0	–	0	1,449	116
7	Other	0	0	0	–	0	0	0
8a	RWA at the end of the reporting period (end of the day)[3]	1,751	3,741	5,053	–	0	10,544	844
8b	Regulatory adjustment[2]	5,237	10,219	523	–	0	15,979	1,278
8	Market Risk RWA closing balance[1]	6,987	13,960	5,575	–	0	26,523	2,122

[1] Represents RWA at previous and current reporting period quarter end.
[2] Indicates the difference between RWA and RWA (end of day) at the beginning and end of period.
[3] For a given component (e.g. VaR) it refers to the RWA that would be computed if the previous or current quarter end snapshot figure of the component determines the quarter end RWA, as opposed to a 60-day average for regulatory purposes.

The market risk RWA movements due to position changes are represented in line “Movement in risk levels”. Changes to our market risk RWA internal models, such as methodology enhancements or risk scope extensions, are included in the category of “Model updates/changes”. In the “Methodology and policy” category we reflect regulatory driven changes to our market risk RWA models and calculations. Significant new businesses and disposals would be assigned to the line item “Acquisition and disposals”. The impacts of “Foreign exchange movements” are captured in “Movements in risk levels”. Changes in market data levels, volatilities, correlations, liquidity and ratings are included under the “Market data changes and recalibrations” category.

As of September 30, 2020 the IMA (Internal Models Approach) components for market risk totaled € 25.0 billion, which was a decrease of € 1.5 billion since June 30, 2020 driven by the stressed value-at-risk and incremental risk charge components.

We have received model approval from the ECB to change our internally developed Value-at-Risk model for managing and capitalizing market risk beginning October 1, 2020. The new model is a Historical Simulation model which predominantly utilizes full revaluation, as opposed to the previously used sensitivity based Monte Carlo model. Historical data in our external reports, including for third quarter of 2020, will be based on the Monte Carlo model; future reporting will be based on the Historical Simulation model.

List of tables