Regulatory Disclosure Report for H1 2020
of Aareal Bank Group

Aareal
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Regulatory Disclosure Report for H1 2020

Preface

Aareal Bank Group is classified as a significant institution within the scope of the Single Supervisory Mechanism (SSM) and is therefore subject to direct supervision by the European Central Bank (ECB).

The European Banking Authority (EBA) published its guidelines on disclosure requirements under Part Eight of Regulation (EU) 575/2013 (the Capital Requirements Regulation – "CRR") (EBA/GL/2016/11) on 14 December 2016. These substantiate the existing disclosure requirements of the CRR.

Aareal Bank Group is – in principle – not covered by the EBA guidelines and is therefore not formally required to meet the disclosure requirements formulated therein, as it is not classified by the ECB as a Global Systemically Important Institution (G-SII) on the basis of Delegated Regulation (EU) 1222/2014 or as an Other Systemically Important Institution (O-SII) on the basis of Article 131 (3) CRD IV. Nor is it obliged to meet the EBA guidelines. Nonetheless, Aareal Bank Group meets the EBA guidelines in full, on a voluntary basis.

The disclosure report comprises all information that has to be disclosed on a half-yearly basis, the scope of which is oriented upon the guidelines EBA/GL/2016/11, in conjunction with the revised guidelines on materiality, proprietary activity and confidentiality, and on disclosure frequency (EBA/GL/2014/14). For this reason, this report does not contain any references to other publications of Aareal Bank.

Aareal Bank complies with the requirements of parts 2 and 3 of the CRR at a Group level, due to the fact that Aareal Bank Group has elected to use the waiver option provided by section 2a (1) sentence 1 of the German Banking Act (Kreditwesengesetz – "KWG") (in conjunction with Article 7 (3) of the CRR), whereby reports for financial holding companies or banking groups may be prepared on a consolidated basis. Aareal Bank AG, whose registered office is in Wiesbaden, Germany, is the parent institution of the Group.

The details we have published in this disclosure report are based on both the Credit Risk Standard Approach (CRSA) and the Advanced IRB Approach (Advanced Internal Ratings-Based Approach – AIRBA).

Minor differences may occur regarding the figures stated, due to rounding.

Aareal Bank does not apply the transitional provisions, pursuant to Article 473a of the CRR, to mitigate the impact of the introduction of IFRS 9 on regulatory capital requirements. Accordingly, the obligation to provide additional disclosures (as specified in detail in EBA guidelines EBA/GL/2018/01) is waived.

Since the NPL ratio to be determined in accordance with EBA Guidelines on disclosure of non-performing and forborne exposures (EBA/GL/2018/10) is below 5% as at the relevant reporting date, disclosure of the tables set out in Article 15 point b) of these EBA Guidelines is not required.

Regulatory Capital

Aareal Bank Group has to comply with the capital adequacy requirements set out in the Capital Requirements Regulation (CRR), the Capital Requirements Directive (CRD IV), the German Banking Act (Kreditwesengesetz – "KWG") and the German Solvency Regulation (Solvabilitätsverordnung – "SolvV").

Following these regulations, institutions and companies operating in the financial sector must calculate their existing regulatory capital on a regular basis, and present these detailed results thereon to the supervisory authorities on specific dates.

Strict regulatory criteria are applied to the availability and sustainability of the qualifying capital when calculating regulatory capital. These provisions are not consistent with the recognition rules pursuant to the German Commercial Code (Handelsgesetzbuch – "HGB") or IFRSs.

The regulatory capital as well as equity disclosed in Aareal Bank Group's half-yearly financial report are based on the items reported in the statement of financial position according to IFRSs. However, there are differences between items disclosed for regulatory and accounting purposes which are due to different scopes of consolidation on the one hand, as well as adjustments to the Group's regulatory capital on the other hand.

Upon the Regulation (EU) 2019/876 (Capital Requirements Regulation II, CRR II) coming into effect on 27 June 2019, the IFRS carrying amount (instead of the nominal amount) on the first day of the final five-year period has to be used in the calculation of the eligible amount for the amortisation of Tier 2 instruments in the last five years of their contractual maturity, in accordance with Article 64 (2) CRR II. The IFRS carrying amount is also used for Tier 2 instruments with a residual maturity of more than five years, to ensure consistency in the measurement basis for all Tier 2 instruments.

The disclosures in this report are based on the binding provisions for the implementation of disclosure requirements set out in the Commission Implementing Regulation 1423/2013/EU, in the interests of comparability and increased transparency pursuant to Article 437 of the CRR.

Main features of capital instruments

The overview of the main features published on our website is limited to a description of the issued capital instruments. Shares as well as reserves attributable to Common Equity Tier 1 capital are not considered since they are covered in position 1 of the table under section "Disclosure of own funds".

In addition to the overview of the issued capital instruments' main features, Aareal Bank is required, pursuant to Article 437 (1) lit. c) of the CRR, to disclose the full terms and conditions of all Common Equity Tier 1, Additional Tier 1 and Tier 2 instruments. Such terms and conditions of issue have been published in full on Aareal Bank's website under the "Investors" item.

Disclosure of own funds

€ mn		Amount as at 30 June 2020	Regulation (EU) No 575/2013 – reference to Article(s)
Common Equity Tier 1 (CET1) capital: instruments and reserves			
1	Capital instruments and the related share premium accounts	901	26 (1), 27, 28, 29
	of which: ordinary shares	180	EBA index pursuant to section 26 (3)
2	Retained earnings	1,779	26 (1) (c)
3	Accumulated other comprehensive income (and other reserves designated to account for unrealised gains and losses according to applicable accounting standards)	-146	26 (1)
3a	Fund for general banking risks	–	26 (1) (f)
4	Amount of qualifying items referred to in Art. 484 (3) and the related share premium accounts subject to phase out from CET1	–	486 (2)
5	Minority interests (amount allowed in consolidated CET1)	–	84
5a	Independently reviewed interim profits net of any foreseeable charge or dividend	1	26 (2)
6	**Common Equity Tier 1 (CET1) capital before regulatory adjustments**	**2,534**	
Common Equity Tier 1 (CET1) capital: regulatory adjustments			
7	Additional value adjustments (negative amount)	-3	34, 105
8	Intangible assets (net of related tax liability) (negative amount)	-28	36 (1) (b), 37
9	Empty set in the EU	–	
10	Deferred tax assets that rely on future profitability excluding those arising from temporary differences (net of related tax liability where the conditions of Art. 38 (3) are met) (negative amount)	-8	36 (1) (c), 38
11	Fair value reserves related to gains or losses on cash flow hedges of financial instruments	–	33 (a)
12	Negative amounts resulting from the calculation of expected loss amounts	-5	36 (1) (d), 40, 159
13	Increase in equity resulting from securitised assets (negative amount)	–	32 (1)
14	Gains or losses on liabilities valued at fair value resulting from changes in own credit standing	–	33 (b)
15	Defined-benefit pension fund assets (negative amount)	–	36 (1) (e), 41
16	Direct and indirect holdings of own Common Equity Tier 1 instruments (negative amount)	–	36 (1) (f), 42
17	Direct, indirect and synthetic holdings of Common Equity Tier 1 instruments of financial sector entities where those entities have reciprocal cross holdings with the institution designed to inflate artificially the own funds of the institution (negative amount)	–	36 (1) (g), 44
18	Direct, indirect and synthetic holdings by the institution of Common Equity Tier 1 instruments of financial sector entities in which the institution does not hold a material interest (amount above 10% threshold and net of eligible short positions) (negative amount)	–	36 (1) (h), 43, 45, 46, 49 (2) (3), 79
19	Direct, indirect and synthetic holdings by the institution of Common Equity Tier 1 instruments of financial sector entities in which the institution holds a material interest (amount above 10% threshold and net of eligible short positions) (negative amount)	–	36 (1) (i), 43, 45, 47, 48 (1) (b), 49 (1) to (3), 79
20	Empty set in the EU	–	
20a	Exposure amount of the following items which qualify for a risk weight of 1,250%, where the institution opts for the deduction alternative	–	36 (1) (k)
20b	of which: qualifying holdings outside the financial sector (negative amount)	–	36 (1) (k) (i), 89 to 91
20c	of which: securitisation positions (negative amount)	–	36 (1) (k) (ii), 243 (1) (b), 244 (1) (b), 258
20d	of which: free deliveries (negative amount)	–	36 (1) (k) (iii), 379 (3)

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€ mn		Amount as at 30 June 2020	Regulation (EU) No 575/2013 – reference to Article(s)
21	Deferred tax assets dependant on future profitability arising from temporary differences (amount above 10% threshold, net of related tax liability where the conditions of Article 38 (3) are met) (negative amount)	–	36 (1) (c), 38, 48 (1) (a)
22	Amount exceeding the 15% threshold (negative amount)	–	48 (1)
23	of which: direct and indirect holdings of Common Equity Tier 1 instruments of financial sector entities in which the institution holds a material interest	–	36 (1) (i), 48 (1) (b)
24	Empty set in the EU	–	
25	of which: deferred tax assets dependant on future profitability arising from temporary differences	–	36 (1) (c), 38, 48 (1) (a)
25a	Losses for the current financial year (negative amount)	–	36 (1) (a)
25b	Foreseeable tax charges relating to Common Equity Tier 1 items (negative amount)	–	36 (1) (l)
27	Amount of items required to be deducted from Additional Tier 1 items exceeding the Additional Tier 1 capital of the institution (negative amount)	–	36 (1) (j)
	Deductions pursuant to Art. 3 of the CRR	-143	
	Components of, or deductions with respect to, Common Equity Tier 1 capital	-30	
28	**Total regulatory adjustments to Common Equity Tier 1 (CET1) capital**	-216	
29	**Common Equity Tier 1 (CET1) capital**	**2,318**	
Additional Tier 1 (AT1) capital: instruments			
30	Capital instruments and related share premium accounts	300	51, 52
31	of which: classified as equity according to applicable accounting standards	300	
32	of which: classified as equity and liabilities according to applicable accounting standards	–	
33	Amount of qualifying items referred to in Art. 484 (4) and the related share premium accounts subject to phase out from AT1	–	486 (3)
34	Qualifying Tier 1 instruments included in consolidated Additional Tier 1 capital (including minority interests not included in row 5) issued by subsidiaries and held by third parties	–	85, 86
35	of which: instruments issued by subsidiaries subject to phase-out	–	486 (3)
36	**Additional Tier 1 (AT1) capital before regulatory adjustments**	**300**	
Additional Tier 1 (AT1) capital: regulatory adjustments			
37	Direct and indirect holdings of own Additional Tier 1 instruments (negative amount)	–	52 (1) (b), 56 (a), 57
38	Direct, indirect and synthetic holdings of Additional Tier 1 instruments of financial sector entities where those entities have reciprocal cross holdings with the institution designed to inflate artificially the own funds of the institution (negative amount)	–	56 (b), 58
39	Direct, indirect and synthetic holdings by the institution of Additional Tier 1 instruments of financial sector entities in which the institution holds no material interest (amount above 10% threshold and net of eligible short positions) (negative amount)	–	56 (c), 59, 60, 79
40	Direct, indirect and synthetic holdings by the institution of Additional Tier 1 instruments of financial sector entities in which the institution holds a material interest (net of eligible short positions) (negative amount)	–	56 (d), 59, 79
41	Empty set in the EU	–	
42	Amount of items required to be deducted from Tier 2 items exceeding the Tier 2 capital of the institution (negative amount)	–	56 (e)
43	**Total regulatory adjustments to Additional Tier 1 (AT1) capital**	**–**	
44	**Additional Tier 1 (AT1) capital**	**300**	
45	**Tier 1 capital (T1 = CET1 + AT1)**	**2,618**	

€ mn		Amount as at 30 June 2020	Regulation (EU) No 575/2013 – reference to Article(s)
Tier 2 (T2) capital: instruments and reserves			
46	Capital instruments and related share premium accounts	784	62, 63
47	Amount of qualifying items referred to in Art. 484 (5) and the related share premium accounts subject to phase-out from T2	–	486 (4)
48	Qualifying own funds instruments included in consolidated Tier 2 capital (including minority interests and AT1 instruments not included in row 5 or 34) issued by subsidiaries and held by third parties	–	87, 88
49	of which: instruments issued by subsidiaries subject to phase-out	–	486 (4)
50	Credit risk adjustments	55	62 (c) and (d)
51	**Tier 2 (T2) capital before regulatory adjustments**	839	
Tier 2 (T2) capital: regulatory adjustments			
52	Direct and indirect holdings by an institution of own tier 2 instruments and subordinated loans (negative amount)	–	63 (b) (i), 66 (a)
53	Holdings of Tier 2 instruments and subordinated loans of financial sector entities where those entities have reciprocal cross holdings with the institution designed to inflate artificially the own funds of the institution (negative amount)	–	66 (b), 68
54	Direct and indirect holdings of Tier 2 instruments and subordinated loans of financial sector entities in which the institution does not hold a material interest (amount above 10% threshold and net of eligible short positions) (negative amount)	–	66 (c), 69, 70, 79
55	Direct and indirect holdings by the institution of Tier 2 instruments and subordinated loans of financial sector entities in which the institution holds a material interest (net of eligible short positions) (negative amount)	–	66 (d), 69, 79
56	Empty set in the EU	–	
	Adjustments due to grandfathering rights regarding Additional Tier 1 instruments or subordinated loans	–	
57	**Total regulatory adjustments to Tier 2 (T2) capital**	–	
58	**Tier 2 (T2) capital**	839	
59	**Own funds (TC = T1 + T2)**	3,457	
60	**Total risk-weighted assets**	11,702	
Capital ratios1 and buffers			
61	Common Equity Tier 1 capital (as a percentage of total risk exposure amount)	19.8%	92 (2) (a)
62	Tier 1 capital (as a percentage of total risk exposure amount)	22.4%	92 (2) (b)
63	Total capital (as a percentage of total risk exposure amount)	29.5%	92 (2) (c)
64	Institution-specific buffer requirement (CET1 requirement in accordance with Article 92 (1) (a) plus capital conservation and countercyclical buffer requirements, plus systemic risk buffer, plus systemically important institution (G-SII or O-SII) buffer expressed as a percentage of total risk exposure amount)	7.2%	CRD 128, 129, 130, 131, 133
65	of which: capital conservation buffer requirement	2.5%	
66	of which: countercyclical capital buffer requirement	0.2%	
67	of which: systemic risk buffer requirement	–	
67a	of which: buffer for Global Systemically Important Institution (G-SII) or Other Systemically Important Institutions (O-SII)	–	CRD 131
68	Common Equity Tier 1 capital available to meet buffers (as a percentage of total risk exposure amount)	15.1%	CRD 128

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€ mn		Amount as at 30 June 2020	Regulation (EU) No 575/2013 – reference to Article(s)
Amounts below thresholds for deductions (before risk weighting)			
72	Direct and indirect holdings of capital instruments of financial sector entities in which the institution does not hold a material interest (amount below 10% threshold and net of eligible short positions)	–	36 (1) (h), 45, 46, 56 (c), 59, 60, 66 (c), 69, 70
73	Direct and indirect holdings of Common Equity Tier 1 instruments of financial sector entities where the institution has a significant investment in those entities (amount below 10% threshold and net of eligible short positions)	–	36 (1) (i), 45, 48
74	Empty set in the EU	–	
75	Deferred tax assets dependent upon future profitability arising from temporary differences (amount below 10% threshold and net of related tax liability where the conditions of Art. 38 (3) are met)	141	(36) (1) (c), 38, 48
Applicable caps on the inclusion of provisions in Tier 2			
76	Credit risk adjustments included in Tier 2 in respect of exposures subject to standardised approach (prior to the application of the cap)	–	62
77	Cap on inclusion of credit risk adjustments in Tier 2 under standardised approach	14	62
78	Credit risk adjustments included in Tier 2 in respect of exposures subject to internal ratings-based approach (prior to the application of the cap)	55	62
79	Cap on inclusion of credit risk adjustments in Tier 2 under internal ratings-based approach	50	62
Capital instruments subject to phase-out arrangements (only applicable between 1 Jan 2013 and 1 Jan 2022)			
80	Current cap on CET1 instruments subject to phase out arrangements	–	484 (3), 486 (2) and (5)
81	Amount excluded from CET1 due to cap (excess over cap after redemptions and maturities)	–	484 (3), 486 (2) and (5)
82	Current cap on AT1 instruments subject to phase out arrangements	–	484 (4), 486 (3) and (5)
83	Amount excluded from AT1 due to cap (excess over cap after redemptions and maturities)	–	484 (4), 486 (3) and (5)
84	Current cap on T2 instruments subject to phase out arrangements	–	484 (5), 486 (4) and (5)
85	Amount excluded from T2 due to cap (excess over cap after redemptions and maturities)	–	484 (5), 486 (4) and (5)

Compared to the previous reporting date (31 March 2020), the Common Equity Tier 1 (CET1) ratio and the Tier 1 (T1) ratio increased slightly: the €59 million increase in regulatory capital was not fully neutralised by the €239 million increase in risk-weighted assets (RWAs).

The increase in RWA was mainly due to a COVID-19-related increase in probabilities of default (PD). However, the RWA increase does not reflect any anticipated rating changes given the management overlay[1]. The same applies to properties where there were indications for a fluctuation in value. Due to the COVID-19 pandemic, only a very limited number of new appraisals could be obtained. Specifically, retail properties were closed well into the second quarter – with hotels being closed beyond this period in some cases.

The increase in own funds was largely due to a €77 million increase in CET1 capital, This is largely attributable to the fact that the loss allowances recorded during the year were not deducted, but were already taken into account in CET1 capital through the inclusion of the interim result.

[1] Regarding the management overlay, please refer to our explanations on loss allowance on pages 13 et seqq. in the Report on the Economic Position in the Aareal Bank Group Interim Report II/2020.

Reconciliation from equity, as disclosed in the Statement of Financial Position, to regulatory capital

€ mn	Equity according to reporting scope of consolidation	Equity according to regulatory scope of consolidation	Regulatory capital according to regulatory scope of consolidation
Subscribed capital	**180**	**180**	**180**
Capital reserves	**721**	**721**	**721**
Retained earnings	**1,811**	**1,793**	**1,780**
AT1 bond [2]	**300**	**300**	**–**
Other reserves	**-167**	**-147**	**-147**
Reserve from remeasurements of defined benefit plans	-149	-135	-135
Reserve from the measurement of debt instruments (fvoci)	1	1	1
Reserve from the measurement of equity instruments (fvoci)	-4	-4	-4
Reserve from changes in the value of foreign currency basis spreads	-11	-11	-11
Currency translation reserve	-4	2	2
Non-controlling interests	**2**	**0**	**–**
Common Equity Tier 1 (CET1) capital before regulatory adjustments	2,847	2,848	2,534
Regulatory adjustments	**–**	**–**	**-217**
Amounts to be deducted	**-200**	**-22**	**-41**
Intangible assets	-200	-22	-28
Goodwill	-102	–	-6
Other intangible assets	-98	-22	-22
Deferred tax assets dependant on future profitability not resulting from temp. differences	–	–	-8
IRB deficit (non-defaulted exposures)	–	–	-5
Qualified investment outside the financial sector (alternative risk weighting 1,250%)	–	–	–
Deductible deferred tax assets dependant on future profitability and resulting from temp. differences	–	–	–
Prudential filters	**–**	**–**	**-3**
Prudent valuation allowances	–	–	-3
Deductions pursuant to Art. 3 of the CRR	**–**	**–**	**-143**
Components of, or deductions with respect to, Common Equity Tier 1 capital	**–**	**–**	**-30**
Common Equity Tier 1 (CET1) capital	–	–	2,318
AT1 bond	**–**	**–**	**300**
I capital instruments with grandfathering rights	**–**	**–**	**–**
Non-controlling interests	–	–	–
Contributions by silent partners	–	–	–
Amounts to be deducted	**–**	**–**	**–**
Other intangible assets	–	–	–
IRB deficit (non-defaulted exposures)	–	–	–

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[2] Consideration within Additional Tier 1 (AT1) capital.

€ mn	Equity according to reporting scope of consolidation	Equity according to regulatory scope of consolidation	Regulatory capital according to regulatory scope of consolidation
Additional Tier 1 (AT1) capital	–	–	300
Tier 1 capital (T1)	–	–	2,618
Capital instruments and subordinated loans eligible as Tier 2 capital	**–**	**–**	**784**
Subordinated liabilities	–	–	784
T2 capital instruments with grandfathering rights	**–**	**–**	**–**
Subordinated liabilities	–	–	–
Amounts to be deducted	**–**	**–**	**–**
IRB deficit (non-defaulted exposures)	–	–	–
IRB surplus (defaulted exposures)	**–**	**–**	**55**
Tier 2 capital (T2)	–	–	839
Total capital (TC)	–	–	3,457

Regulatory capital requirements

The capital requirements for a transaction's counterparty credit risk under the CRSA are essentially based on the following:

1. the regulatory classification (balance sheet, off-balance sheet, or derivatives business);
2. the amount of the loan at the time of default (Exposure at Default, EaD);

and, under the AIRBA, additionally depends on

3. the Probability of Default (PD); as well as
4. the Loss Given Default (LGD).

The credit conversion factors for off-balance sheet transactions are predefined by the supervisory authorities for capital requirements under the CRSA. The borrowers are subdivided into exposure classes; the exposure amounts are risk-weighted, based on their external ratings.

As at 30 June 2020, no risks associated with outstanding delivery as part of counterparty risks had to be taken into account when determining counterparty usage limits.

Based on the AIRBA or CRSA calculation approach, the following RWAs and capital requirements were determined as at the reporting date for the types of risk that are relevant for regulatory purposes.

EU OV1: Overview of risk-weighted assets (RWAs)

€ mn		RWAs		Regulatory capital requirements
		30 June 2020	31 March 2020	30 June 2020
1	**Credit risk (excluding CCR)**	**9,534**	**9,263**	**763**
2	of which: Credit Risk Standard Approach (CRSA)	511	578	41
3	of which: Foundation IRB approach (FIRB)	–	–	–
4	of which: Advanced IRB Approach (AIRBA)	8,209	7,885	657
5	of which: Equity IRB under the simple risk-weighted approach or the IMA	815	801	65
6	**CCR**	**546**	**490**	**44**
7	of which: Mark to market	308	293	25
8	of which: Original exposure	–	–	–
9	of which: Standardised approach	–	–	–
10	of which: (IMM)	–	–	–
11	of which: Risk exposure amount from contributions to the default fund of a CCP	0	0	0
12	of which: CVA	218	197	17
	of which: securities financing transactions (SFTs)	20	–	2
13	**Settlement risk**	**–**	**–**	**–**
14	**Securitisation exposures in the banking book (after the cap)**	**–**	**–**	**–**
15	of which: IRB Approach	–	–	–
16	of which: IRB supervisory formula approach (SFA)	–	–	–
17	of which: Internal assessment approach (IAA)	–	–	–
18	of which: Standardised approach	–	–	–
19	**Market risk**	**34**	**48**	**3**
20	of which: Standardised approach	34	48	3
21	of which: IMA	–	–	–
22	**Large exposures**	**–**	**–**	**–**
23	**Operational risk**	**1,236**	**1,236**	**99**
24	of which: Basic indicator approach	29	29	2
25	of which: Standardised approach	1,207	1,207	97
26	of which: Advanced measurement approach	–	–	–
27	**Amounts below the thresholds for deduction (subject to 250% risk weight)**	**352**	**425**	**28**
28	**Floor adjustment**	**–**	**–**	**–**
29	**Total**	**11,702**	**11,463**	**936**

Regarding the causes of RWA changes during the second quarter of 2020, reference is made to the explanations in the chapter „Disclosure of own funds“.

The simple risk weight method is exclusively used to determine the regulatory capital requirements of the equity investments reported under the AIRBA.

In the following table, the equity investments reported under the AIRBA and previously disclosed on a consolidated level – for which the simple risk weight method is used exclusively pursuant to Article 155 (2) of the CRR – are disclosed separately according to the risk exposures determined in the Regulation.

The specialised lendings held in the portfolio as at the current disclosure date are not assigned any regulatory risk weights prescribed in accordance with Article 153 (5) of the CRR. Therefore, they are not disclosed in table EU CR10.

EU CR10: IRB (specialised lending and equities)

Regulatory categories	Remaining maturity	Specialised lending					
		On-balance-sheet amount	Off-balance sheet amount	Risk weight	Exposure at Default	RWAs	Expected losses
€ mn							
Category 1	Less than 2.5 years	–	–	50%	–	–	–
	Equal to or more than 2.5 years	–	–	70%	–	–	–
Category 2	Less than 2.5 years	–	–	70%	–	–	–
	Equal to or more than 2.5 years	–	–	90%	–	–	–
Category 3	Less than 2.5 years	–	–	115%	–	–	–
	Equal to or more than 2.5 years	–	–	115%	–	–	–
Category 4	Less than 2.5 years	–	–	250%	–	–	–
	Equal to or more than 2.5 years	–	–	250%	–	–	–
Category 5	Less than 2.5 years	–	–	–	–	–	–
	Equal to or more than 2.5 years	–	–	–	–	–	–
Total	**Less than 2.5 years**	**–**	**–**		**–**	**–**	**–**
	Equal to or more than 2.5 years	**–**	**–**		**–**	**–**	**–**

Regulatory categories	Equities under the simple risk-weighted approach					
	On-balance-sheet amount	Off-balance sheet amount	Risk weight	Exposure at Default	RWAs	Regulatory capital requirements
€ mn						
Private equity exposures	–	–	190%	–	–	–
Exchange-traded equity exposures	0	–	290%	0	0	0
Other equity exposures	220	–	370%	220	815	65
Total	**220**	**–**		**220**	**815**	**65**

The regulatory capital requirements set out in table EU OV1 for the market risks under the standardised approach are also disclosed in the table EU MR1 for the various market risk positions in accordance with Article 92 (3) lit. c) of the CRR.

EU MR1: Market risk under the standardised approach

€ mn		a RWAs	b Regulatory capital requirements
	Outright products		
1	Interest rate risk (general and specific)	–	–
2	Equity risk (general and specific)	–	–
3	Foreign exchange risk	34	3
4	Commodity risk	–	–
	Options		
5	Simplified approach	–	–
6	Delta-Plus method	–	–
7	Scenario approach	–	–
8	**Securitisation (specific risk)**	–	–
9	**Total**	**34**	**3**

Credit Risks and Quantitative Information on Credit Risk Mitigation

Aareal Bank defines credit risk – or counterparty credit risk – as the risk of losses being incurred due to (i) a business partner defaulting on contractual obligations; (ii) collateral being impaired; or (iii) a risk arising upon realisation of collateral. Both credit business and trading activities may be subject to counterparty credit risk. Counterparty credit risk exposure from trading activities may refer to risk exposure vis-à-vis counterparties or issuers. Country risk is also defined as a form of counterparty credit risk.

The following chapters are limited to purely quantitative information on credit risk, with different levels of detail.

Credit quality of exposures

In the following tables, the breakdown of past due and impaired exposures and the related allowances required by Article 442 lit. g) and h) of the CRR, as submitted to banking supervisors as part of Solvency reporting, are disclosed with different levels of detail. Pursuant to EBA guidelines, the exposures in tables EU CR1-A to EU CR1-C must be classified as to whether a default under the terms of Article 178 of the CRR exists or not.

Pursuant to Article 1 of the Commission Delegated Regulation (EU) No. 183/2014, general and specific credit risk adjustments require the inclusion of all amounts "...by which an institution's Common Equity Tier 1 capital has been reduced in order to reflect losses exclusively related to credit risk according to the applicable accounting framework and recognised as such in the profit or loss account, irrespective of whether they result from impairments, value adjustments, or provisions for off-balance sheet items."

Aareal Bank's specific credit risk adjustments at the reporting date comprise existing loss allowance carried. For details concerning the recognition of loss allowance, based on the Bank's internal staging and expected credit loss model, please refer to the explanations in Aareal Bank Group's annual report for 2019.[1)]

Such utilisations are shown in the „Accumulated write-offs" column of the following tables, for information only.

Credit risk adjustment charges disclosed in column f of tables EU CR1-A to EU CR1-C comprise loss allowance recognised and reversed during the reporting period.

EU CR1-A: Credit quality of exposures by exposure class and instrument

		a	b	c	d	e	f	g
		Gross carrying values of						Net values
€ mn		Defaulted exposures	Non-defaulted exposures	Specific credit risk adjustment	General credit risk adjustment	Accumu-lated write-offs	Credit risk adjustment charges of the period	(a+b-c-d)
2	Institutions	–	–	–	–	–	–	**–**
3	Corporates	1,277	25,507	466	–	99	93	**26,317**
4	of which: specialised lending	1,112	23,214	425	–	70	178	**23,901**
5	of which: SMEs	165	1,037	40	–	28	-69	**1,162**
14	Equity	–	220	–	–	–	–	**220**
	Other non-credit obligation assets	–	633	–	–	–	–	**633**
15	**Total IRB approach**	**1,277**	**26,360**	**466**	**–**	**99**	**93**	**27,170**
16	Central governments or central banks	–	6,822	2	–	–	0	**6,820**
17	Regional governments and similar entities	–	4,087	0	–	–	0	**4,087**
18	Other public sector entities	–	1,302	0	–	–	0	**1,302**
19	Multilateral development banks	–	351	–	–	–	–	**351**
20	International organisations	–	744	0	–	–	0	**744**
21	Institutions	–	1,459	1	–	–	0	**1,458**
22	Corporates	8	310	11	–	–	3	**306**
23	of which: SMEs	7	135	7	–	–	0	**136**
24	Retail	4	29	1	–	0	0	**32**
25	of which: SMEs	–	–	–	–	–	–	**-**
26	Secured by mortgages on immovable property	–	496	4	–	–	3	**491**
27	of which: SMEs	–	136	0	–	–	–	**136**
28	Exposures in default	12	–	8	–	0	–	**4**
29	Items associated with particularly high risk	–	–	–	–	–	–	**–**

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1) Aareal Bank Group 2019 Annual Report: chapter "Accounting policies", Note (9) in the Notes to the consolidated financial statements, pages 138 et seqq.

		a	b	c	d	e	f	g
		Gross carrying values of						Net values
		Defaulted exposures	Non-defaulted exposures	Specific credit risk adjustment	General credit risk adjustment	Accumu-lated write-offs	Credit risk adjustment charges of the period	(a+b-c-d)
€ mn								
30	Covered bonds	–	44	–	–	–	–	**44**
31	Claims on institutions and corporates with a short-term credit assessment	–	–	–	–	–	–	**–**
32	Collective investment undertakings	–	46	–	–	–	–	**46**
33	Equity exposures	–	0	–	–	–	–	**0**
34	Other exposures	–	–	–	–	–	–	**–**
35	**Total Standardised Approach**	**12**	**15,689**	**20**	**–**	**0**	**5**	**15,681**
36	**Total**	**1,289**	**42,049**	**487**	**–**	**99**	**99**	**42,851**
37	of which: loans	1,288	33,008	481	–	99	97	**33,815**
38	of which: debt securities	–	6,855	2	–	–	–	**6,853**
39	of which: off-balance sheet exposures	1	1,333	3	–	–	2	**1,330**

Table EU CR1-A above additionally includes the figures for exposures in default listed in line 28 for the original CRSA exposure classes (Corporates, Retail, and exposures secured by mortgages on immovable property). In this way, Aareal Bank has implemented the EBA recommendations on disclosure of exposures in default within the scope of this table. Accordingly, line 28 is only for information, since it is not included in the calculation of totals across all CRSA exposure classes.

Aareal Bank monitors industries included in the template EU CR1-B by assigning risk exposures to the industries listed in the EBA Guidelines 2016/11, taking into account the industry codes defined by Deutsche Bundesbank. The presentation thus corresponds to the differentiation by NACE codes in the context of Financial Reporting (FINREP).

EU CR1-B: Credit quality of exposures by industry

€ mn		a	b	c	d	e	f	g
		Gross carrying values of						Net values
		Defaulted exposures	Non-defaulted exposures	Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges of the period	(a+b-c-d)
1	Agriculture forestry and fishing	–	2	0	–	–	0	**2**
2	Mining and quarrying	–	0	0	–	–	0	**0**
3	Manufacturing	–	3	0	–	–	0	**3**
4	Electricity, gas, steam and air conditioning supply	7	31	6	–	–	0	**32**
5	Water supply	0	4	0	–	–	0	**4**
6	Construction	216	27	42	–	10	-1	**201**
7	Wholesale and retail trade	43	106	0	–	–	0	**148**
8	Transport and storage	0	4	0	–	–	0	**4**
9	Accommodation and food service activities	83	1,681	19	–	3	1	**1,745**
10	Information and communication	–	2	0	–	–	0	**2**
	Financial and insurance services	124	8,032	83	–	1	3	**8,073**
11	Real estate and housing	680	23,197	233	–	81	83	**23,643**
12	Professional, scientific and technical activities	0	325	2	–	–	0	**324**
13	Administrative and support service activities	0	24	0	–	–	0	**24**
14	Public administration and defence; compulsory social security	–	8,175	2	–	–	0	**8,173**
15	Education	–	2	0	–	–	0	**2**
16	Health and social services	0	7	0	–	–	0	**7**
17	Arts, entertainment and recreation	0	22	0	–	–	0	**22**
18	Other service activities	137	406	98	–	4	13	**444**
19	**Total**	**1,289**	**42,049**	**487**	**–**	**99**	**99**	**42,851**

The presented breakdown of the credit quality by major geographical markets in the table EU CR1-C is based on our three-continent strategy, which covers Europe, North America and Asia/Pacific, as explained in our Annual Report 2019. The breakdown criterion used is the country the respective property used as collateral is located in.

Moreover, countries in which the exposure amounts to at least €300 million (before consideration of loss allowances) are listed separately for each region (Germany excluded). All remaining countries are listed under item “Others”.

EU CR1-C: Credit quality of exposures by geography

		a	b	c	d	e	f	g
		Gross carrying values of						Net values
€ mn		Defaulted exposures	Non-defaulted exposures	Specific credit risk adjustment	General credit risk adjustment	Accumulated write-offs	Credit risk adjustment charges of the period	(a+b-c-d)
1	**Germany**	**29**	**14,715**	**35**	**–**	**0**	**9**	**14,710**
2	**Western Europe**	**389**	**10,383**	**65**	**–**	**10**	**13**	**10,706**
	Austria	–	1,277	0	–	–	0	**1,277**
	Belgium	–	393	0	–	–	0	**393**
	Switzerland	–	306	0	–	–	0	**306**
	France	112	2,499	9	–	5	0	**2,601**
	United Kingdom	277	4,330	54	–	1	11	**4,554**
	Netherlands	–	1,223	2	–	4	1	**1,222**
	Other	–	354	0	–	–	0	**353**
3	**Northern Europe**	**9**	**1,391**	**10**	**–**	**0**	**1**	**1,391**
	Finland	9	558	9	–	0	1	**558**
	Sweden	–	774	0	–	–	0	**774**
	Other	–	59	0	–	–	0	**59**
4	**Southern Europe**	**737**	**3,928**	**307**	**–**	**88**	**19**	**4,358**
	Spain	41	1,590	18	–	2	1	**1,613**
	Italy	696	2,302	288	–	86	18	**2,710**
	Other	–	35	0	–	–	0	**35**
5	**Eastern Europe**	**67**	**1,074**	**7**	**–**	**–**	**3**	**1,134**
	Poland	57	683	2	–	–	1	**738**
	Other	9	390	4	–	–	1	**396**
6	**North America**	**58**	**8,594**	**61**	**–**	**–**	**53**	**8,591**
	Canada	–	1,384	2	–	–	1	**1,381**
	US	58	7,211	59	–	–	52	**7,210**
	Other	–	–	–	–	–	–	**–**
7	**Asia/Pacific**	**–**	**868**	**2**	**–**	**–**	**1**	**865**
8	**Other countries**	**–**	**1,097**	**0**	**–**	**–**	**0**	**1,097**
9	**Total**	1,289	42,049	487	–	99	99	42,851

Pursuant to Article 442 lit. i) of the CRR, the Bank must disclose relevant specific credit risk adjustments during the reporting period. Details are shown in table EU CR2-A (page 18).

EU CR2-A: Changes in the stock of general and specific credit risk adjustments

€ mn		a Accumulated specific credit risk adjustment	b Accumulated general credit risk adjustment
1	**Opening balance (1 January)**	**388**	**–**
2	Increases due to amounts set aside for estimated loan losses during the period (additions)	124	–
3	Decreases due to amounts reversed for estimated loan losses during the period (reversals)	-18	–
4	Decreases due to amounts taken against accumulated credit risk adjustments (utilisations)	-7	–
5	Transfers between credit risk adjustments	–	–
6	Impact of exchange rate differences	-3	–
7	Business combinations, including acquisitions and disposals of subsidiaries	–	–
8	Other adjustments	3	–
9	**Closing balance (30 June)**	**487**	**–**
10	Recoveries on credit risk adjustments recorded directly to the statement of profit or loss (payments on loans and advances previously written off)	0	–
11	Specific credit risk adjustments directly recorded to the statement of profit or loss (direct write-offs)	–	–

The following table provides an overview of the changes in the stock of defaulted and impaired loans and debt securities within the first half of 2019.

EU CR2-B: Changes in the stock of defaulted and impaired loans and debt securities

€ mn		a Gross carrying value defaulted exposures
1	**Opening balance (1 January)**	**1,271**
2	Loans and debt securities that have defaulted since the last reporting period	62
3	Returned to non-defaulted status	–
4	Amounts written off	-7
5	Other changes	-37
6	**Closing balance (30 June)**	**1,289**

Whilst lines 2 and 3 disclose exposures which have newly defaulted or which returned to non-defaulted status during the period under review, respectively, line 4 sets out utilisations of loss allowance recognised in previous periods against uncollectable exposures.

The changes shown in line 5 mainly result from changes in the measurement of the defaulted risk exposures.

Exposures subject to a general payment moratorium

As a result of the COVID-19 pandemic, both national and European supervisory authorities initiated a number of regulatory activities. These include the following disclosure requirements. They are based on the requirements introduced by EBA that were specified as part of the guidelines on reporting and disclosure of exposures subject to measures applied in response to the COVID-19 crisis (EBA/GL/2020/07) and have to be implemented for the first time as at 30 June 2020.

In the following two tables, only those exposures are assessed that meet the conditions for a general payment moratorium in accordance with Art. 10 of EBA Guidelines EBA/GL/2020/02 ("Guidelines on legislative and non-legislative moratoria on loan repayments applied in the light of the COVID-19 crisis").

Table 1 shows information on the gross carrying amount of performing and non-performing loans and advances that are subject to an EBA-compliant payment moratorium, and on the coverage of existing risks through impairments.

Table 1: loans and advances subject to legislative and non-legislative moratoria

	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
	Gross carrying amount							Accumulated impairment, accumulated negative changes in fair value due to credit risk							Gross carrying amount
		Performing exposures			Non-performing exposures				Performing exposures			Non-performing exposures			
€ mn			of which: exposures with forbearance measures	of which: Stage 2		of which: exposures with forbearance measures	of which: Unlikely to pay and not past due or past due ≤ 90 days			of which: exposures with forbearance measures	of which: Stage 2		of which: exposures with forbearance measures	of which: Unlikely to pay and not past due or past due ≤ 90 days	Inflow to non-performing exposures
1 Loans and advances subject to moratorium	**45**	**45**	**–**	**16**	**–**	**–**	**–**	**0**	**0**	**–**	**0**	**–**	**–**	**–**	**–**
2 of which: Households	–		–	–	–	–	–	–		–	–	–	–	–	–
3 of which: Collateralised by residential immovable property	–	–	–	–	–	–	–	–		–	–	–	–	–	–
4 of which: Non-financial corporations	45	45	–	16	–	–	–	0	0	–	0	–	–	–	–
5 of which: SMEs	45	45	–	16	–	–	–	0	0	–	0	–	–	–	–
6 of which: Collateralised by commercial immovable properties	41	41	–	16	–	–	–	0	0	–	0	–	–	–	–

In the reporting period, Aareal Bank did not hold any exposures subject to a payment moratorium that are classified as non-performing or were classified as such in the context of the COVID-19 crisis. All of the risk exposures presented are loans and advances subject to legislative moratoria. In the context of these legislative moratoria (here: Italy and Germany), there was only a temporary suspension of payments with a corresponding extension of the contractual overall term.

In addition to the exposures disclosed in Table 1, Table 2 also shows the exposures for which the moratorium was offered and their number. Moreover, columns g) to k) shows the gross carrying amount of all exposures subject to a payment moratorium, presented by residual maturity of the moratorium.

Table 2: Loans and advances by residual maturity of moratoria

	a	b	c	d	g	h	i	j	k
		Gross carrying amount							
	Number of obligors				Remaining term of moratoria				
€ mn			of which: statutory moratoria	of which: expired	≤ 3 months	> 3 months ≤ 6 months	> 6 months ≤ 9 months	> 9 months ≤ 12 months	> 1 year
1 Loans and advances for which a moratorium was offered	**47**	**50**							
2 Loans and advances for which a moratorium was granted	**47**	**50**	**50**	**4**	**45**	**–**	**–**	**–**	**–**
3 of which: Households		4	4	4	–	–	–	–	–
4 of which: Collateralised by residential immovable property		4	4	4	–	–	–	–	–
5 of which: Non-financial corporations		45	45	–	45	–	–	–	–
6 of which: SMEs		45	45	–	45	–	–	–	–
7 of which: Collateralised by commercial immovable properties		41	41	–	41	–	–	–	–

Overall, 47 borrowers were granted legislative moratoria on the basis of requests by the customers. A portion of these moratoria refers to consumer credit agreements within the discontinued business in Germany where the moratorium rules no longer apply since 30 June 2020. The total volume subject to continuing forbearance arrangements is reported in column d). In addition, loans in a volume of €45 million to Italian loan customers are subject to legislative moratoria applicable until 30 September 2020 due to a corresponding prolongation of payment dates by up to six months. In accordance with legal requirements, the original term of the loan is prolonged by the forbearance period. The residual maturity shown above is the result of the legislative moratorium applicable until 30 September 2020. A forbearance within this portfolio is granted only until 30 September 2020.

Credit risk mitigation

Collateral in the amount of €26,348 million was applied within the scope of credit risk mitigation. This figure comprises no financial collateral included for derivatives transactions.

The following table shows collateral for each exposure class considered under AIRBA and CRSA. The real property liens (99%) relevant for Aareal Bank as an international property specialist are disclosed in column c) along with the financial collateral, whereas warranties (financial guarantees) are disclosed under column d). Aareal Bank currently does not hold any credit derivatives which may be used for collaterali-sation purposes.

In addition to credit risk mitigating collateral and secured exposures (column b)), column a) discloses the amount of all generally unsecured exposures.

EU CR3: Overview of credit risk mitigation techniques

		a	b	c	d	e
		Exposures unsecured – Net amount	Exposures secured – Net amount	Exposures secured by collateral	Exposures secured by financial guarantees	Exposures secured by credit derivatives
Mio. €						
	Total IRB approach	**1,462**	**25,708**	**25,518**	**17**	**–**
	Institutions	–	–	–	–	–
	Corporates	609	25,708	25,518	17	–
	of which: specialised lending	163	23,738	23,675	–	–
	of which: SMEs	66	1,095	1,027	17	–
	Equity exposures	220	–	–	–	–
	Other non-credit related assets	633	–	–	–	–
	Total Standardised Approach	**13,806**	**1,875**	**503**	**310**	**–**
	Central governments or central banks	6,820	–	–	–	–
	Regional governments and similar entities	4,087	–	–	–	–
	Other public-sector entities	1,148	154	–	143	–
	Multilateral development banks	351	–	–	–	–
	International organisations	744	–	–	–	–
	Institutions	314	1,144	–	151	–
	Covered bonds	44	–	–	–	–
	Corporates	231	74	11	6	–
	of which: SMEs	96	39	11	2	–
	Retail	28	1	–	–	–
	of which: SMEs	–	–	–	–	–
	Secured by mortgages on immovable property	–	491	491	–	–
	of which: SMEs	–	136	136	–	–
	Collective investment undertakings (CIU)	37	8	–	8	–
	Equity exposures	0	–	–	–	–
	Other items	–	–	–	–	–
	Exposures in default	3	1	0	1	–
	Exposures associated with particularly high risk	–	–	–	–	–
1	Total loans	7,142	26,532	24,850	32	–
2	Total debt securities	6,559	294	–	294	–
3	**Total**	**15,269**	**27,583**	**26,021**	**327**	**–**
4	of which: defaulted	24	1,332	823	1	–

Credit Risk Standard Approach

Identical types of collateral respond differently, depending on what transactions they can be offset against.

This is due to the composition of the CRSA exposure amount as well as the exposure categories for undrawn credit facilities and other off-balance sheet transactions (Article 111 of the CRR in conjunction with Annex I of the CRR). The credit conversion factors assigned to each exposure category ensure that lower regulatory capital requirements are calculated for loan commitments and other off-balance sheet transactions rather than on-balance sheet receivables.

Cash deposits as financial collateral and warranties within the meaning of the CRR can be distinguished in terms of how they mitigate credit risk:

- Financial collateral reduces the assessment basis to which the credit conversion factor is applied. The risk weight impacts the exposure amount.
- Warranties do not impact on the assessment basis, but on the risk weighting. A loan collateralised through a warranty is taken into account, with the warranty amount to be included and the risk weight of the guarantor in the guarantor's exposure class.

The following table shows CRSA exposure amounts both before and after mitigating credit risk, shown separately as on- and off-balance sheet exposures. In addition, risk-weighted assets (RWAs) are disclosed for each exposure class.

EU CR4: Credit Risk Standard Approach – credit risk exposure and credit risk mitigation effects

	Exposure classes	a	b	c	d	e	f
		Exposures before CCF and CRM		Exposures post CCF and CRM		RWAs and RWA density	
		On-balance-sheet amount (EAD)	Off-balance-sheet amount (EAD)	On-balance-sheet amount (EAD)	Off-balance-sheet amount (EAD)	RWAs	RWA density
		€ mn	€ mn	€ mn	€ mn	€ mn	%
1	Central governments or central banks	6,820	–	7,123	–	14	0.20
2	Regional governments and similar entities	4,087	–	4,094	–	359	8.77
3	Other public-sector entities	1,300	1	1,146	–	2	0.19
4	Multilateral development banks	351	–	351	–	–	–
5	International organisations	744	–	744	–	–	–
6	Institutions	1,458	–	355	–	99	27.97
7	Corporates	209	96	162	15	173	97.79
8	Retail	28	1	28	0	21	75.00
9	Secured by mortgages on immovable property	491	–	491	–	181	36.75
10	Exposures in default	4	–	3	–	4	122.64
11	Items associated with particularly high risk	–	–	–	–	–	–
12	Covered bonds	44	–	44	–	4	10.00

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Exposure classes	a	b	c	d	e	f
	Exposures before CCF and CRM		Exposures post CCF and CRM		RWAs and RWA density	
	On-balance-sheet amount (EAD)	Off-balance-sheet amount (EAD)	On-balance-sheet amount (EAD)	Off-balance-sheet amount (EAD)	RWAs	RWA density
	€ mn	€ mn	€ mn	€ mn	€ mn	%
13 Claims on institutions and corporates with a short-term credit assessment	–	–	–	–	–	–
14 Collective investment undertakings (CIU)	46	–	37	–	4	11.83
15 Equity exposures	0	–	0	–	0	100.00
16 Other exposures	–	–	–	–	–	–
17 Total	**15,583**	**98**	**14,579**	**15**	**863**	**5.91**

The table EU CR5 shows the exposure amount after mitigating credit risk of all exposures to which CRSA is applied, for each exposure class and broken down according to risk weight pursuant to Article 114 et seqq. of the CRR. The exposures disclosed in the column „of which: unrated" are exposures for which no external rating is used to derive the risk weight.

EU CR5: Standardised approach (after credit risk mitigation)

Exposure classes	Exposure classes																	
	0%	2%	4%	10%	20%	35%	50%	70%	75%	100%	150%	250%	370%	1250%	Others	Deducted	Total	of which: unrated
€ mn																		
1 Central governments or central banks	7,052	–	–	–	70	–	–	–	–	–	–	–	–	–	–	–	**7,123**	6,956
2 Regional governments and similar entities	3,918	–	–	–	35	–	–	–	–	–	–	141	–	–	–	–	**4,094**	4,060
3 Other public-sector entities	1,135	–	–	–	11	–	–	–	–	–	–	–	–	–	–	–	**1,146**	1,135
4 Multilateral development banks	351	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**351**	351
5 International organisations	744	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**744**	744
6 Institutions	–	–	–	–	261	–	94	–	–	–	–	–	–	–	–	–	**355**	–
7 Corporates	–	–	–	–	–	–	0	–	–	177	–	–	–	–	–	–	**177**	177
8 Retail	–	–	–	–	–	–	–	–	28	–	–	–	–	–	–	–	**28**	28
9 Secured by mortgages on immovable property	–	–	–	–	–	406	85	–	–	–	–	–	–	–	–	–	**491**	491
10 Exposures in default	–	–	–	–	–	–	–	–	–	2	1	–	–	–	–	–	**3**	3
11 Exposures associated with particularly high risk	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**–**	–
12 Covered bonds	–	–	–	44	–	–	–	–	–	–	–	–	–	–	–	–	**44**	–
13 Institutions and corporates with a short-term credit assessment	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**–**	–
14 Collective investment undertakings CIU)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	37	–	**37**	37
15 Equity	–	–	–	–	–	–	–	–	–	0	–	–	–	–	–	–	**0**	0
16 Other items	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	**–**	–
17 Total	**13,201**	**–**	**–**	**44**	**378**	**406**	**180**	**–**	**28**	**179**	**1**	**141**	**–**	**–**	**37**	**–**	**14,594**	**13,983**

Advanced IRB Approach (AIRBA)

EU CR6: IRB approach – Credit risk exposures by exposure class and PD range

IRBA exposure class	PD scale	a Original on-balance sheet gross exposure	b Off-balance sheet exposures pre-CCF	c Average CCF	d EaD post CRM and post-CCF	e Average PD
	%	€ mn	€ mn	%	€ mn	%
Corporates – SMEs	0.00 to < 0.15	31	–	–	31	0.10
	0.15 to < 0.25	109	6	100.00	119	0.22
	0.25 to < 0.50	208	27	100.00	241	0.40
	0.50 to < 0.75	208	18	100.00	231	0.70
	0.75 to < 2.50	239	19	100.00	266	1.36
	2.50 to < 10.00	170	3	100.00	175	3.41
	10.00 to < 100.00	–	–	–	–	–
	100.00 (Default)	165	–	–	165	100.00
	Subtotal	**1,129**	**73**	**100.00**	**1,228**	**14.43**
Corporates – specialised lending	0.00 to < 0.15	253	–	–	259	0.09
	0.15 to < 0.25	1,387	32	100.00	1,452	0.23
	0.25 to < 0.50	3,077	46	100.00	3,193	0.43
	0.50 to < 0.75	4,536	198	100.00	4,841	0.70
	0.75 to < 2.50	8,608	293	100.00	9,092	1.39
	2.50 to < 10.00	4,630	137	100.00	4,864	2.91
	10.00 to < 100.00	18	–	–	18	30.00
	100.00 (Default)	1,111	1	–	1,115	100.00
	Subtotal	**23,620**	**706**	**100.00**	**24,834**	**5.80**
Corporates – Others	0.00 to < 0.15	245	-	–	250	0.10
	0.15 to < 0.25	16	78	100.00	96	0.23
	0.25 to < 0.50	158	114	100.00	279	0.40
	0.50 to < 0.75	134	175	100.00	316	0.70
	0.75 to < 2.50	217	72	100.00	297	1.23
	2.50 to < 10.00	29	18	100.00	48	2.62
	10.00 to < 100.00	–	–	–	–	–
	100.00 (Default)	–	–	–	–	–
	Subtotal	**800**	**456**	**100.00**	**1,285**	**0.68**
	Total	**25,548**	**1,236**	**100.00**	**27,347**	**5.94**

The property lending portfolio (treated under the AIRBA) shall be disclosed in the EU CR6 table to be published on a half-yearly basis, which considers clearly-defined PD classes. Expected loss (EL) is also reported per PD class, thus also ensuring a statement concerning the collateral quality.

Exposures subject to counterparty credit risk pursuant to Article 92 (3) lit. f of the CRR and treated under the IRBA are not covered in the statements.

f	g	h	i	j	k	l
Number of obligors	Average LGD	Average maturity	Risk-weighted items (RWAs)	RWA density	Expected Loss (EL)	Value adjustments and provisions
	%		€ mn	%	€ mn	€ mn
2	4.53	900	1	2.51	0	
27	9.15	982	10	8.07	0	
41	24.14	900	79	32.64	0	
36	14.81	900	53	22.90	0	
29	15.78	947	86	32.19	1	
16	30.51	763	137	78.10	2	
–	–	–	–	–	–	
12	42.93	900	62	37.88	66	
163	**22.05**	**899**	**427**	**34.74**	**70**	**-40**
8	4.63	1,021	7	2.75	0	
49	5.87	1,167	90	6.19	0	
52	4.76	1,052	226	7.09	1	
111	9.04	1,146	890	18.38	3	
141	10.06	1,134	2,090	22.98	13	
88	16.60	1,042	2,191	45.05	25	
2	4.32	1,795	5	27.43	0	
28	29.25	838	859	77.03	257	
479	**11.01**	**1,096**	**6,358**	**25.60**	**299**	**-425**
2	9.56	1,800	27	10.88	0	
4	38.88	1,374	51	53.50	0	
23	37.99	1,362	185	66.26	0	
16	42.87	1,636	349	110.60	1	
14	20.68	1,475	165	55.61	1	
3	9.20	1,243	13	27.87	0	
–	–	–	–	–	–	
–	–	–	–	–	–	
62	**28.66**	**1,537**	**791**	**61.56**	**2**	**-1**
664	**12.34**	**1,108**	**7,575**	**27.70**	**371**	**-466**

The table EU CR8 (page 26) provides an overview of the RWA changes and the associated causes to be analysed since 31 March 2020.

The starting and end balances represent the sums of figures disclosed in lines 4 and 5 of table EU OV1 for the respective reporting date.

EU CR8: RWA flow statements of credit risk exposures under the IRB approach

€ mn		a Risk-weighted items (RWA)	b Regulatory capital requirements
1	**Position as at 31 March 2020**	**8,686**	**695**
2	Asset size	111	9
3	Asset quality	278	22
4	Model updates	–	–
5	Methodology and policy	–	–
6	Acquisitions and disposals	–	–
7	Foreign exchange movements	-52	-4
8	Other	–	–
9	**Position as at 30 June 2020**	**9,024**	**722**

Besides exposures from new business originated, the changes reported in line 2 also include RWA changes from existing exposures – where we also include investments and other non-credit related assets, except for changes purely related to exchange rate fluctuations, which are presented separately in line 7.

Line 3 reports changes in risk-weighted exposures resulting from changed borrower probabilities of default or loss given default. The main drivers for the change compared to the previous quarter are changes in the quality of the credit portfolio due to a COVID-19-related increase in the borrowers' probabilities of default. However, the RWA increase does not reflect any anticipated rating changes given the management overlay. The same applies to properties where there were indications for a fluctuation in value. Due to the COVID-19 pandemic, only a very limited number of new appraisals could be obtained. Specifically, retail properties were closed well into the second quarter – with hotels being closed beyond this period in some cases.

At present, line 4 does not show any changes; this is due to the fact that no new models for estimating risk parameters were implemented, nor were any adjustments made to internal models already approved.

Line 5 only requires disclosure of any changes resulting from a changed RWA calculation methodology – for example, where exposures previously subject to the CRSA are being included under the Advanced IRB Approach. No such changes applied during the period under review.

Line 6 does not show any changes, due to the fact that Aareal Bank did not acquire any new investments (or disposed of any existing investments) outside the regulatory scope of consolidation, which need to be included as RWAs in the reporting pursuant to sections 10 and 10a of the KWG.

No figures are shown in line 8 since we were able to assign RWA changes within Aareal Bank Group to the aforementioned categories.

Counterparty Credit Risk

The counterparty credit risk results from derivatives and securities financing transactions, the risk being that the transaction‘s counterparty defaults. Thus, the transaction could not be settled as intended.

Derivatives are defined for regulatory purposes as "...unconditional forward transactions or option contracts (including financial contracts for differences) that are structured as a purchase, exchange or other acquisition of an underlying instrument, whose value is determined by reference to the underlying instrument and whose value may change in future for at least one counterparty due to future settlement" (section 19 (1a) of the KWG).

Aareal Bank Group's derivatives positions have substantially been entered into in order to hedge interest rate and currency risk exposure, and for refinancing purposes.

The equivalent value of derivatives and the related counterparty credit risk are determined using the mark-to-market method (Article 274 of the CRR) for the purpose of regulatory reporting.

The securities financing transactions (SFT) of Aareal Bank are generally treated in accordance with the comprehensive method pursuant to Part 3 Title II Chapter 4 of the CRR. Bilateral master netting agreements have been concluded with all counterparties. However, Aareal Bank currently does not make any use of this netting option.

Pursuant to Article 439 of the CRR, Aareal Bank is obliged to disclose details on the calculation of the exposure value, and on the methods to include financial collateral for securities financing transactions, as set out in table EU CCR1. However, this excludes trades concluded with a central counterparty (CCP) or CCP-related transactions, as well as capital requirements for credit valuation adjustment (CVA). These transactions are analysed in the following tables.

EU CCR1: Analysis of CCR exposure by approach

		a	b	c	d	e	f	g
€ mn		Notional	Replacement cost / current market value	Potential future replacement value	EEPE	Multiplier	EAD post CRM	RWAs
1	Mark to market		5,080	462			535	307
2	Original exposure	–					–	–
3	Standardised approach		–			–	–	–
4	IMM (for derivatives and SFTs)				–	–	–	–
5	of which: securities financing transactions (SFTs)				–	–	–	–
6	of which: derivatives and long-term settlement transactions				–	–	–	–
7	of which: from contractual cross-product netting				–	–	–	–
8	Financial collateral simple method (for SFTs)						–	–
9	Financial collateral comprehensive method (for SFTs)						1	0
10	VaR for SFTs						–	–
11	**Total**							**307**

The following table, EU CCR2, gives an overview of the credit value adjustment (CVA) calculations, resulting in additional capital requirements aimed at absorbing the risk of a negative change in the market value of OTC derivatives in the case of a decline in the counterparty's credit quality. Aareal Bank uses the standard method pursuant to Article 384 of the CRR for calculating the CVA charge.

EU CCR2: CVA capital charge

€ mn		a EAD	b RWAs
1	Total portfolios subject to the advanced method	–	–
2	i) VaR component (including the 3x multiplier)		–
3	ii) VaR component under stress conditions (sVaR, including the 3x multiplier)		–
4	All portfolios subject to the standardised method	471	218
EU4	Based on the original exposure method	–	–
5	**Total subject to the CVA capital charge**	**471**	**218**

Table EU CCR8 discloses the exposure value and risk-weighted exposure (RWA) for exposures to central counterparties. As at the reporting date, Eurex Clearing AG (in short: Eurex) and LCH.Clearnet Limited (which are both qualified counterparties) acted as central counterparties to Aareal Bank. There were no exposures to non-qualified CCPs as at 30 June 2020. In accordance with section 306 (2) of the CRR, for the purpose of solvency reporting, Aareal Bank assigns an exposure value of zero to initial margin pledged to Eurex.

EU CCR8: Exposures to CCPs

€ mn		a EAD post CRM	b RWAs
1	**Exposures to QCCPs (total)**		21
2	Exposures from trades at QCCPs (excluding initial margin and default fund contributions); of which	1,047	21
3	i) OTC derivatives	47	1
4	ii) Exchange-traded derivatives	–	–
5	iii) SFTs	1,000	20
6	iv) Netting sets where cross-product netting has been approved	–	–
7	Segregated initial margin	27	
8	Non-segregated initial margin	–	–
9	Pre-funded default fund contributions	8	–
10	Alternative calculation of own funds requirements for exposures		–
11	**Exposures to non-QCCPs (total)**		**–**
12	Exposures from trades at non-QCCPs (excluding initial margin and default fund contributions); of which	–	–
13	i) OTC derivatives	–	–

>

€ mn		a EAD post CRM	b RWAs
14	ii) Exchange-traded derivatives	–	–
15	iii) SFTs	–	–
16	iv) Netting sets where cross-product netting has been approved	–	–
17	Segregated initial margin	–	
18	Non-segregated initial margin	–	–
19	Pre-funded default fund contributions	–	–
20	Unfunded default fund contributions	–	–

Table EU CCR3 discloses the exposure amount after mitigating credit risk of all counterparty credit risk exposures to which CRSA is applied, by analogy with table EU CR5 for each exposure class, and broken down according to risk weight pursuant to Article 114 et seqq. of the CRR.

EU CCR3: Standardised approach – counterparty credit risk exposure by supervisory portfolio and risk

Exposure classes		Risk weight												
€ mn		0%	2%	4%	10%	20%	50%	70%	75%	100%	150%	Other	Total	of which: unrated
1	Central governments or central banks	–	–	–	–	–	–	–	–	–	–	–	**–**	–
2	Regional governments and similar entities	–	–	–	–	–	–	–	–	–	–	–	**–**	–
3	Other public-sector entities	1	–	–	–	–	–	–	–	–	–	–	**1**	1
4	Multilateral development banks	–	–	–	–	–	–	–	–	–	–	–	**–**	–
5	International organisations	–	–	–	–	–	–	–	–	–	–	–	**–**	–
6	Institutions	–	1,047	–	–	173	296	–	–	–	–	–	**1,515**	1,068
7	Corporates	–	–	–	–	0	–	–	–	2	–	–	**2**	2
8	Retail	–	–	–	–	–	–	–	–	–	–	–	**–**	–
9	Claims on institutions and corporates with a short-term credit assessment	–	–	–	–	–	–	–	–	–	–	–	**–**	–
10	Other exposures	–	–	–	–	–	–	–	–	–	–	–	**–**	–
11	**Total**	**1**	**1,047**	**–**	**–**	**173**	**296**	**–**	**–**	**2**	**–**	**–**	**1,519**	**1,071**

The following table EU CCR4 (page 30) shows the derivative exposures treated in AIRBA – by analogy with the table EU CR6 within clearly-defined PD classes. The IRBA exposures classified as specialised lending as at the reporting date do not comprise any derivative exposures.

The derivatives held by Aareal Bank Group, and entered into with internally rated property customers whose share in EaD after mitigating the credit risk of the entire AIRBA client portfolio is below one per cent, are mainly used to hedge interest rate and currency risks. As the available collateral is fully considered within the scope of determining the LGD of the respective property financing, a default LGD of 90% is used for calculating the expected loss on the derivatives.

EU CCR4: IRB approach – counterparty credit risk exposure by portfolio and PD scale

IRBA exposure class	PD scale	a EAD post CRM	b Average PD	c Number of obligors	d Average LGD	e Average maturity	f RWAs	g RWA density
		€ mn	%		%		€ mn	%
Corporates – SMEs	0.00 to < 0.15	–	–	–	–	–	–	–
	0.15 to < 0.25	4	0.23	6	90.00	900	3	80.80
	0.25 to < 0.50	10	0.47	3	90.00	900	11	115.12
	0.50 to < 0.75	4	0.70	7	90.00	1,016	6	142.34
	0.75 to < 2.50	12	1.21	14	90.00	905	22	174.80
	2.50 to < 10.00	21	3.12	2	90.00	1,081	52	250.75
	10.00 to < 100.00	–	–	–	–	–	–	–
	100.0 (Default)	–	–	–	–	–	–	–
	Subtotal	**51**	**1.72**	**32**	**90.00**	**983**	**94**	**183.99**
Corporates – Others	0.00 to < 0.15	–	–	–	–	–	–	–
	0.15 to < 0.25	–	–	–	–	–	–	–
	0.25 to < 0.50	–	–	–	–	–	–	–
	0.50 to < 0.75	9	0.70	1	90.00	1,505	19	214.62
	0.75 to < 2.50	5	1.16	2	90.00	1,173	10	226.78
	2.50 to < 10.00	–	–	–	–	–	–	–
	10.00 to < 100.00	–	–	–	–	–	–	–
	100.0 (Default)	–	–	–	–	–	–	–
	Subtotal	**14**	**0.86**	**3**	**90.00**	**1,392**	**29**	**218.74**
	Total	**65**	**1.54**	**35**	**90.00**	**1,069**	**123**	**191.23**

Pursuant to Article 439 lit. (e) of the CRR, Aareal Bank must disclose the effect of netting and of collateral held on the exposure value of derivatives and securities financing transactions (including those settled via a CCP), in table EU CCR5-A, broken down by type of contract.

Master agreements with netting clauses provide for the netting of claims and liabilities in the event of insolvency or counterparty default, and thus further reduce counterparty risk.

The collateral received for securities financing transactions with a market value of € 1,000 million currently does not fully meet with the requirements of Part 3 Title II Chapter 4 of the CRR. Only collateral eligible for inclusion from solvency reporting is included in table EU CCR5-A.

EU CCR5-A: Impact of netting and collateral held on exposure values

€ mn		a Gross positive fair value or net carrying amount	b Netting benefits	c Netted current credit exposure	d Collateral held	e Net credit exposure
1	Derivatives	2,055	1,183	872	845	27
2	SFTs	1,502	–	1,502	502	1,001
3	Cross-product netting	–	–	–	–	–
4	**Total**	**3,557**	**1,183**	**2,374**	**1,347**	**1,027**

The aggregate positive replacement value for our derivatives contracts subject to reporting requirements stood at €2,055 million as at 30 June 2020. This amount is reduced to €27 million through netting framework agreements in the amount of € 1,183 million and the deduction of collateral provided in the amount of €845 million.

At present, Aareal Bank does not use credit derivatives to hedge individual contracts, nor does it act as a broker, seller or buyer of credit derivatives.

Table EU CCR5-B supplements the disclosure requirements under Article 439 lit. (e) of the CRR, as well as the disclosures in table EU CCR5-A with additional information on collateral received or posted. For this purpose, collateral received or posted must be broken down by type of financial instrument, and by segregated and non-segregated collateral. Collateral is deemed to be segregated if client assets are bankruptcy-remote as defined in Article 300 (1) of the CRR.

EU CCR5-B: Composition of collateral for exposures subject to counterparty credit risk

	a	b	c	d	e	f
	Collateral used in derivative transactions				Collateral used in SFTs	
	Fair value of collateral received		Fair value of posted collateral		Fair value of collateral received	Fair value of posted collateral
€ mn	Segregated	Unsegregated	Segregated	Unsegregated		
Cash collateral	117	729	130	950	–	–
Government bonds	–	–	–	130	–	–
Securities financing transactions	–	–	–	–	1,502	–
Total	**117**	**729**	**130**	**1,080**	**1,502**	**–**

Leverage Ratio

The Bank manages the risk of excessive leverage on a quarterly basis, within the scope of forecasting own funds. For this purpose, both Tier 1 capital and total assets are forecast for the year-end dates of the two following years, one month prior to the end of each quarter. In this context, the minimum 3% Leverage Ratio, as set out in the framework published by the Basel Committee on Banking Supervision in 2014, must be complied with at any time. The information is then submitted to senior management.

Aareal Bank determines the Leverage Ratio to be disclosed, taking into account the regulatory scope of consolidation, based on the Delegated Regulation (EU) 2015/62.

The following disclosure tables are based on the requirements set out in the Implementation Regulation (EU) 2016/200 dated 15 February 2016.

LRSum: Summary reconciliation of accounting assets and leverage ratio exposures

€ mn		Applicable amount
1	**Total assets as per published financial statements**	**45,322**
2	Adjustment for entities which are consolidated for accounting purposes but are outside the scope of regulatory consolidation	284
3	(Adjustment for fiduciary assets recognised on the balance sheet pursuant to the applicable accounting framework but excluded from the leverage ratio total exposure measure in accordance with Article 429 (13) of Regulation (EU) 575/2013)	–
4	Adjustments for derivative financial instruments	-2,187
5	Adjustments for securities financing transactions (SFTs)	1,001
6	Adjustment for off-balance sheet items (i.e. conversion to credit equivalent amounts of off-balance sheet exposures)	524
EU-6a	(Adjustment for intra-group exposures excluded from the leverage ratio total exposure measure in accordance with Article 429 (7) of Regulation (EU) 575/2013)	–
EU-6b	(Adjustment for exposures excluded from the leverage ratio total exposure measure in accordance with Article 429 (14) of Regulation (EU) 575/2013)	–
7	Other adjustments	322
8	**Leverage ratio total exposure measure**	**45,266**

LRCom: Leverage Ratio common disclosure

€ mn		CRR leverage ratio exposures
	On-balance sheet exposures (excluding derivatives and SFTs)	
1	On-balance sheet items (excluding derivatives, SFTs and fiduciary assets, but including collateral)	42,413
2	(Asset amounts deducted in determining Tier 1 capital)	-41
3	**Total on-balance sheet exposures (excluding derivatives, SFTs and fiduciary assets) (sum of lines 1 and 2)**	**42,371**
	Derivative exposures	
4	Replacement cost associated with all derivatives transactions (i.e. net of eligible cash variation margin)	215
5	Add-on amounts for PFE associated with all derivatives transactions (mark-to-market method)	556
EU-5a	Exposure determined under Original Exposure Method	–
6	Gross-up for derivatives collateral provided where deducted from the balance sheet assets pursuant to the applicable accounting framework	–
7	(Deductions of receivables assets for cash variation margin provided in derivatives transactions)	-903
8	(Exempted CCP leg of client-cleared trade exposures)	–
9	Adjusted effective notional amount of written credit derivatives	–
10	(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	–
11	**Total derivatives exposures (sum of lines 4 to 10)**	**-132**
	SFT exposures	
12	Gross SFT assets (with no recognition of netting), after adjusting for transactions posted as sales	1,502
13	(Netted amounts of cash payables and cash receivables of gross SFT assets)	–
14	Counterparty credit risk exposure for SFT assets	1,001
EU-14a	Derogation for SFTs: counterparty credit risk exposure in accordance with Articles 429b (4) and 222 of Regulation (EU) 575/2013	–
15	Agent transaction exposures	–
EU-15a	(Exempted CCP leg of client-cleared SFT exposures)	–
16	**Total securities financing transaction exposures (sum of lines 12 to 15a)**	**2,503**
	Other off-balance sheet exposures	
17	Off-balance sheet exposures at gross notional amount	1,333
18	(Adjustments for conversion to credit equivalent amounts)	-809
19	**Other off-balance sheet exposures (sum of lines 17 and 18)**	**524**
	Exempted exposures in accordance with Article 429 (14) of Regulation (EU) 575/2013 (on- and off-balance sheet)	
EU-19a	(Intragroup exposures (solo basis) exempted in accordance with Article 429 (7) of Regulation (EU) 575/2013 (on- and off-balance sheet))	–
EU-19b	Exempted exposures in accordance with Article 429 (14) of Regulation (EU) 575/2013 (on- and off-balance sheet)	–
	Capital and total exposure measure	
20	**Tier 1 capital**	**2,618**
21	**Leverage ratio total exposure measure (sum of lines 3, 11, 16, 19, EU-19a and EU-19b)**	**45,266**
	Leverage Ratio	
22	Leverage Ratio	5.8%
	Choice on transitional arrangements and amount of derecognised fiduciary items	
EU-23	Choice on transitional arrangements for the definition of the capital measure	Fully implemented
EU-24	Amount of derecognised fiduciary items in accordance with Article 429 (11) of Regulation (EU) 575/2013	–

The leverage ratio declined to 5.8%, compared to 6.5% on the disclosure date of 31 March 2020. This is attributable to a disproportionate increase of the total exposure measure compared with the increase in Tier 1 capital.

The following table provides a breakdown of on-balance sheet risk exposures (excluding derivatives, securities financing transactions, and exempted risk exposures).

LRSpl: Split-up of on-balance sheet exposures

€ mn		CRR leverage ratio exposures
EU-1	**Total on-balance sheet exposures (excluding derivatives, SFTs, and exempted exposures), of which:**	**41,510**
EU-2	Trading book exposures	–
EU-3	Banking book exposures, of which:	41,510
EU-4	Covered bonds	219
EU-5	Exposures treated as sovereigns	13,760
EU-6	Exposures to regional governments, MDB, international organisations and PSE not treated as sovereigns	143
EU-7	Institutions	622
EU-8	Secured by mortgages on immovable properties	23,940
EU-9	Retail exposures	28
EU-10	Corporate	1,061
EU-11	Exposures in default	864
EU-12	Other exposures (e.g. equity, securitisations, and other non-credit obligation assets)	872

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