

Genossenschaftliche FinanzGruppe Volksbanken Raiffeisenbanken

June 30, 2018 Regulatory risk report of the DZ BANK banking group

DZ BANK Gruppe

CONTENTS

1	BASIS OF REGULATORY RISK REPORTING	3
2	SCOPE OF APPLICATION	5
2.1	Differences between the scope of consolidation for accounting purposes and the scope of consolidation for regulatory purposes	5
3	LIQUIDITY COVERAGE RATIO	9
4	OWN FUNDS, CAPITAL REQUIREMENTS, AND CAPITAL RATIOS	11
4.1 4.2 4.3 4.4 4.5	Own funds Capital requirements Capital ratios Regulatory minimum capital requirements Financial conglomerate solvency	11 26 30 31 32
5	CREDIT RISK	34
5.1	Quantitative information on credit risk	34
5.1.1 5.2	Credit quality, past-due, non-performing, and forborne exposures Use of credit risk mitigation techniques	34 41
5.2.1 5.3	Quantitative information on credit risk mitigation Credit risk and techniques for mitigating credit risk under the Standardized Approach	41 44
5.3.1 5.3.2 5.4	Transfer of credit ratings for bond issues to assets Quantitative information on use of the Standardized Approach Credit risk and techniques for mitigating credit risk under the IRB approach	44 44 48
5.4.1 5.5	Quantitative information on use of the IRB approach Counterparty credit risk	48 55
5.5.1 5.5.2 5.5.3 5.5.4	Regulatory measures Counterparty credit risk exposures: Standardized Approach Counterparty credit risk exposures: IRB approach Further information on counterparty credit risk	55 57 57 61
6	MARKET RISK	64
6.1 6.2	Market risk under the Standardized Approach Internal market risk model	64 64
7	LEVERAGE RATIO	70
7.1 7.2	Leverage pursuant to the CRR framework Description of the process for monitoring the risk of excessive leverage	70 73
8	OVERVIEW OF QUANTITATIVE AND QUALITATIVE REQUIREMENTS PURSUANT TO THE CRR, EBA/GL/2016/11, AND OTHER SOURCE	CES74
9	LIST OF FIGURES	82

1 Basis of regulatory risk reporting

The Basel Committee on Banking Supervision has created a global regulatory framework called Basel III setting out international standards for the capital adequacy and liquidity of banks. This framework was implemented into European law by Directive 2013/36/EU on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms (**Capital Requirements Directive IV, CRD IV**) and Regulation (EU) No. 575/2013 (**Capital Requirements Regulation, CRR**).

Articles 431 to 455 (Part 8) CRR define the quantitative and qualitative requirements in respect of regulatory disclosure. The Guidelines on disclosure requirements under Part 8 of Regulation (EU) No. 575/2013 (EBA/GL/2016/11) published by the European Banking Authority (EBA) dated July 7, 2017 and the Guidelines on LCR disclosure to complement the disclosure of liquidity risk management under article 435 of Regulation (EU) No. 575/2013 (EBA/GL/2017/01) dated March 8, 2017 apply, along with the CRR and various implementing and regulatory standards applicable to disclosure.

The guidelines set out the CRR disclosure requirements in more detail by providing specific requirements and formats, in particular by stipulating the tables and templates to be used. **Circular 05/2015 (BA)** from the Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin) [German Federal Financial Supervisory Authority] dated June 8, 2015 also continues to apply in relation to implementation of the EBA's guidelines on the disclosure of the materiality of information, proprietary and confidential information, and on disclosure frequency (EBA/GL/2014/14 dated December 23, 2014). The requirements regarding the frequency of disclosure have also been increased due to EBA/GL/2016/11.

As the parent company (EU parent institution) of the DZ BANK banking group (pursuant to section 10a (1) of the German Banking Act (KWG)), DZ BANK AG Deutsche Zentral-Genossenschaftsbank, Frankfurt am Main, (DZ BANK) has fulfilled this disclosure requirement at banking group level by publishing this consolidated **regulatory risk report** as at June 30, 2018.

The information in this report, which is based on the DZ BANK banking group, covers the following:

- Liquidity coverage ratio (LCR)
- Own funds
- Capital requirements
- Capital ratios
- Credit risk and counterparty credit risk
- Market risk
- Leverage ratio (LR).

An RWA flow statement for counterparty credit risk under the internal model method (IMM) (table EU CCR7) is not included, as DZ BANK does not have an IMM for this risk.

International Financial Reporting Standard 9 (IFRS 9) came into effect on January 1, 2018. The DZ BANK banking group is not currently using the regulatory transitional provisions for the effects of initial application of IFRS 9 in accordance with article 473a CRR.

In line with article 434 CRR, DZ BANK publishes the regulatory risk report on its website in the Investor Relations section under Reports and under Bondholder Information.

The **frequency** and **scope** (article 433 CRR) of the regulatory risk report are determined by the indicators regarding frequency of disclosure that are listed in Title V of EBA/GL/2016/11. These assessment criteria include not only DZ BANK's classification as an other systemically important institution (O-SII) but also the DZ BANK Group's total assets and the consolidated exposures pursuant to article 429 CRR. As at the reporting date, DZ BANK was one of the three largest banks in Germany. The assessment found that the DZ BANK banking group was again obliged in 2018 to publish certain information in an interim report.

Unless otherwise indicated, all information in this report relates to the entities consolidated for regulatory purposes in the **DZ BANK banking group** as at the reporting date pursuant to article 10a KWG in conjunction with articles 11 to 22 CRR.

Comparative figures as at a previous reporting date or relating to a previous period are also disclosed in accordance with the requirements in EBA/GL/2016/11. Any significant changes to the quantitative disclosures compared with the previous regulatory risk report are explained.

The quantitative disclosures in this risk report are rounded to the nearest whole million euros. This may give rise to small discrepancies between the totals shown in the tables and diagrams and totals calculated from the individual values shown. Table cells with a dark gray background are not relevant for disclosure purposes. The symbol – is used to indicate that a line item in a table has no value. If a line item (after rounding) amounts to less than \notin 1 million, a value of 0 is disclosed.

2 Scope of application

2.1 Differences between the scope of consolidation for accounting purposes and the scope of consolidation for regulatory purposes

(ARTICLE 436 SENTENCE 1 LETTER B CRR)

The entities in which DZ BANK has a direct or indirect long-term equity investment are aggregated and consolidated both for financial reporting purposes and in order to satisfy regulatory requirements. The commercial-law provisions to be applied for consolidation in accordance with IFRS differ in some regards from the provisions applicable to consolidation for regulatory purposes, in terms of both the consolidation methods used and the entities to be included. The consolidation matrix below (Fig. 1) shows the entities that are significant for internal risk management purposes and the companies that are consolidated for regulatory purposes – limited to direct long-term equity investments. As required by EBA/GL/2016/11, the description in column f of the matrix classifies the entities according to the nature of their business. The entities are also categorized according to the nature of their treatment for regulatory purposes (columns b to e) and the nature of their consolidation for commercial-law purposes (column a).

	a	b	с		d	е	f
Name of the entity		Method o	of regulator	y consolidatio	on		Description of the entity
	accounting consolidation			Neither consolidated nor deducted	Deducted		
DZ BANK AG Deutsche Zentral-Genossenschaftsbank, Frankfurt am Main, (DZ BANK)	Full consolidation	•					Credit institution
AGIMA Aktiengesellschaft für Immobilien-Anlage, Frankfurt am Main	Full consolidation	•					Rental and leasing of land and buildings
Bausparkasse Schwäbisch Hall AG, Schwäbisch Hall, (BSH)	Full consolidation	•					Credit institution
Beteiligungsgesellschaft Westend 1 mbH & Co. KG, Frankfurt am Main	Full consolidation	•					Management of long-term equity investments
Deutsche Genossenschafts- Hypothekenbank AG, Hamburg, (DG HYP)	Full consolidation	•					Credit institution
Deutsche WertpapierService Bank AG, Frankfurt am Main, (dwpbank)	Equity method		٠				Credit institution
DG Funding LLC, New York, USA	Full consolidation	•					Other activities linked to financial services
DG Holding Trust, New York, USA	Full consolidation	٠					Other activities linked to financial services
DVB Bank SE, Frankfurt am Main, (DVB)	Full consolidation	٠					Credit institution
DZ BANK Capital Funding LLC I, Wilmington, USA	Full consolidation	•					Other activities linked to financial services
DZ BANK Capital Funding LLC II, Wilmington, USA	Full consolidation	•					Other activities linked to financial services
DZ BANK Capital Funding LLC III, Wilmington, USA	Full consolidation	٠					Other activities linked to financial services
DZ BANK Capital Funding Trust I, Wilmington, USA	Full consolidation	٠					Other activities linked to financial services

Fig. 1 - EU LI3 - DIFFERENCES IN THE SCOPES OF CONSOLIDATION (ENTITY BY ENTITY) - CONSOLIDATION MATRIX

Name of the entity		b Method c	c of regulator	y consolidatio	d on	e	f Description of the entity	
	accounting consolidation	Full consolidation	Proportional consolidation	Equity method	Neither consolidated nor deducted	Deducted		
DZ BANK Capital Funding Trust II, Wilmington, USA	Full consolidation	•					Other activities linked to financial services	
DZ BANK Capital Funding Trust III, Wilmington, USA	Full consolidation	•					Other activities linked to financial services	
DZ BANK Perpetual Funding (Jersey) Limited, St. Helier, Jersey	Full consolidation	•					Other activities linked to financial services	
DZ BANK Perpetual Funding Issuer (Jersey) Limited, St. Helier, Jersey	Full consolidation				٠		Other activities linked to financial services	
DZ Beteiligungsgesellschaft mbH Nr. 18, Frankfurt am Main	Full consolidation	•					Management of long-term equity investments	
DZ PRIVATBANK (Schweiz) AG, Zurich, Switzerland	Full consolidation	•					Credit institution	
DZ PRIVATBANK S.A., Strassen, Luxembourg (DZ PRIVATBANK)	Full consolidation	•					Credit institution	
DZ Vierte Beteiligungsgesellsc haft mbH, Frankfurt am Main	Full consolidation	•					Management of long-term equity investments	
GAF Active Life 1 Renditebeteiligungs-GmbH & Co. KG, Nidderau	Not consolidated	•					Other financial services	
GAF Active Life 2 Renditebeteiligungs-GmbH & Co. KG, Nidderau	Not consolidated	•					Other financial services	
Immobilien-Gesellschaft 'DG Bank-Turm, Frankfurt am Main, Westend' mbH & Co. KG des genossenschaftlichen Verbundes, Frankfurt am Main	Full consolidation	٠					Rental and leasing of land and buildings	
IMPETUS Bietergesellschaft mbH, Düsseldorf	Full consolidation	•					Management of long-term equity investments	
IPConcept (Luxemburg) S.A., Strassen, Luxembourg	Full consolidation	٠					Other financial services	
IPConcept (Schweiz) AG, Zurich, Switzerland	Full consolidation	•					Other financial services	
KBIH Beteiligungsgesellschaft für Industrie und Handel mbH, Frankfurt am Main	Full consolidation	•					Management of long-term equity investments	
Phoenix Beteiligungsgesellschaft mbH, Düsseldorf	Full consolidation	٠					Management of long-term equity investments	
R+V Versicherung AG, Wiesbaden, (R+V)	Full consolidation			٠			Insurance company	
ReiseBank Aktiengesellschaft, Frankfurt am Main	Full consolidation	•					Credit institution	
TeamBank AG Nürnberg, Nuremberg, (TeamBank)	Full consolidation	•					Credit institution	
Union Asset Management Holding AG, Frankfurt am Main, (UMH)	Full consolidation	•					Financial services	

	а	b	с		d	е	f
Name of the entity	Method of Method of regulatory consolidation			n		Description of the entity	
	accounting consolidation	Full consolidation	Proportional consolidation	Equity method	Neither consolidated nor deducted	Deducted	
VR Equitypartner GmbH, Frankfurt am Main	Full consolidation	•					Management of long-term equity investments
VR GbR, Frankfurt am Main	Full consolidation	٠					Management of long-term equity investments
VR-LEASING Aktiengesellschaft, Eschborn, (VR LEASING)	Full consolidation	٠					Financial services
WL BANK AG Westfälische Landschaft Bodenkreditbank, Münster, (WL BANK)	Full consolidation	٠					Credit institution

The significant entities are consolidated for both regulatory and commercial-law purposes. However, insurance companies and companies not in the financial sector are not required to be consolidated in the banking group for regulatory purposes. In this context, R+V is fully consolidated for commercial-law purposes but is not directly subject to banking regulation. Instead, it is factored into the procedure used to determine the DZ BANK banking group's capital requirements and disclosures using the risk-weighted carrying amount of DZ BANK's investment in R+V. Furthermore, R+V is included in the cross-sectoral surveillance by the banking supervisory authority of the DZ BANK financial conglomerate at consolidated level in the legal framework applicable to financial conglomerates.

In both cases, the scope of consolidation includes a large number of other entities that are not shown because they are less material.

The following entities were **fully consolidated for regulatory purposes** pursuant to articles 11 to 20 and article 22 CRR as at June 30, 2018, including the entities listed in Fig. 1:

- 16 banks
- (March 31, 2018: 16)
- 10 financial services institutions (March 31, 2018: 10)
- 9 investment management companies (March 31, 2018: 9)
- 320 finance companies (March 31, 2018: 356)
 of which 288 project companies belonging to VR-IMMOBILIEN-LEASING GmbH, Eschborn, (March 31, 2018: 323), and
- 6 providers of related services (March 31, 2018: 6).

In addition, the following entities were consolidated on a pro-rata basis:

- 4 banks
 - (March 31, 2018: 4) and
- 1 finance company (March 31, 2018: 1), and
- 1 asset management company (March 31, 2018: 1).

The **waiver** available under section 2a (1), (2), and (5) KWG in conjunction with article 6 (1) and (5) CRR and article 7 CRR, which states that – provided certain conditions are met – the regulatory supervision of individual Germany-based institutions within a banking group may be replaced by supervision of the entire banking group, was used in the DZ BANK banking group for DG HYP and WL BANK (group waiver pursuant to article 7 (1) CRR).

In November 2012, DG HYP reported this to the banking supervisory authority together with evidence that the application criteria had been met (article 436 sentence 1 letter e CRR). WL BANK did the same in December 2013. In the context of the merger of the former WGZ BANK with DZ BANK, the European Central Bank (ECB) was notified that the waiver would continue to be used for WL BANK.

The merger of the two real estate companies DG HYP and WL BANK was completed on July 27, 2018 and was not taken into account in this report.

Fig. 2 shows how the entities included in the DZ BANK banking group are integrated into the quantitative regulatory disclosures pursuant to article 432 (1) CRR. The effects of intragroup consolidation have been taken into account.

Entity	Liquidity ratios	Own funds	Capital requirements	Capital ratios	Loss allowances for loans and advances	Standardized Approach exposure	lRBA ¹ exposure	Collateralized lending volume	Counterparty credit risk	Market risk (IMA)	Leverage ratio
DZ BANK	•	•	•	•	•	•	•	٠	•	•	•
BSH	•	•	•	•	•	•	•	•	•		•
DG HYP	•	•	•	•	•	•	•	•	•		•
DVB	•	•	•	•	•	•	•	•	•		•
DZ PRIVATBANK	•	•	•	•	•	•	•	•	•		•
TeamBank	٠	•	•	•	•	•	•				•
UMH		•	•	•	•	•			•		•
VR LEASING	•	•	•	•	•	•			•		•
WL BANK	٠	•	•	•	•	•	•	•	•		•
Other companies of relevance for regulatory purposes	٠	٠	٠	٠	٠	٠	٠				•

Fig. 2 – INCLUSION OF ENTITIES IN THE DZ BANK BANKING GROUP IN QUANTITATIVE REGULATORY DISCLOSURES

1 IRBA – internal ratings-based approach.

3 Liquidity coverage ratio

The **liquidity coverage ratio (LCR)** measures whether an adequate buffer is available in the form of liquid assets that enables an institution to compensate for a possible imbalance between inflows and outflows of cash in a 30-day stress scenario. The LCR is the ratio of liquid assets held ('liquidity buffer') to net cash outflows.

Since January 1, 2018, a minimum LCR of 100 percent has had to be maintained (2017: 80 percent). DZ BANK reports the LCR of the banking group, calculated in accordance with the CRR in conjunction with Delegated Regulation (EU) No. 2015/61 dated July 29, 2015, to the supervisory authority on a monthly basis (Fig. 4).

The liquidity coverage ratio shown for the DZ BANK banking group in Fig. 3 is based on EBA/GL/2017/01 dated June 21, 2017, which has had to be applied since December 31, 2017. The LCR is disclosed quarterly at consolidated level. The disclosed line items were each calculated as the average of the month-end values for the previous 12 months.

The average **LCR** for the DZ BANK banking group as at June 30, 2018 calculated in accordance with this method was 147.0 percent (March 31, 2018: 144.1 percent), based on average liquid assets of €86,333 million (March 31, 2018: €82,584 million) and net liquidity outflows of €58,856 million (March 31, 2018: €57,411 million) (Fig. 3).

The regulatory LCR is based on the DZ BANK banking group's scope of consolidation pursuant to article 11 (3) CRR, which differs from the scope of consolidation used to determine regulatory own funds. The difference is that the provisions of article 18 (2) to (8) CRR are not used to determine the consolidated liquidity position pursuant to article 18 (1) CRR. Accordingly, certain types of entity (such as providers of related services, asset management companies, and entities consolidated on a voluntary/pro-rata basis) and entities that are not subsidiaries are not consolidated for liquidity purposes. In addition, a request to waive consolidation of certain subsidiaries for the purposes of meeting liquidity requirements (article 19 (2) letter b CRR) has been granted by BaFin. This means that the regulator has agreed that subsidiaries that can be disregarded in the banking regulator's liquidity risk targets for the DZ BANK banking group do not have to be consolidated for liquidity purposes. This ruling applies specifically to entities that are almost entirely funded by equity or are funded to a large degree from within the group.

		Total weighted	value (average)
		Jun. 30, 2018	Mar. 31, 2018
21	Liquidity buffer (€ million)	86,333	82,584
22	Net liquidity outflows (€ million)	58,856	57,411
23	Liquidity coverage ratio (%)	147.0	144.1

Fig. 3 - LIQUIDITY COVERAGE RATIO OF THE DZ BANK BANKING GROUP (AVERAGE)

In addition, the DZ BANK banking group discloses the liquidity buffer, net liquidity outflows, and the LCR as at the reporting date at the end of each six-month period in accordance with Delegated Regulation (EU) No. 2015/61. These are shown in Fig. 4 . The LCR as at June 30, 2018 was 143.8 percent (December 31, 2017: 161.7 percent), based on liquid assets of €95,583 million (December 31, 2017: €77,459 million) and net liquidity outflows of €66,455 million (December 31, 2017: €47,912 million). The DZ BANK banking group's LCR is thus higher than the minimum ratio of 100 percent that is mandatory from 2018.

Fig. 4 – LIQUIDITY COVERAGE RATIO OF THE BANKING GROUP (REPORTING DATE)

	date)
	Jun. 30, 2018	Dec. 31, 2017
Liquidity buffer		
(€ million)	95,583	77,459
Net liquidity outflows		
(€ million)	66,455	47,912
Liquidity coverage ratio (%)	143.8	161.7

The decrease in the LCR compared with December 31, 2017 was attributable to this ratio's increased sensitivity to net liquidity outflows, with excess cover remaining almost unchanged. Excess cover is the difference between the liquidity buffer and the net liquidity outflows.

The DZ BANK banking group also has inflows that, contrary to the fundamental eligibility cap of 75 percent pursuant to article 33 (4) of Delegated Regulation (EU) No. 2015/61, are subject to a cap of 90 percent. These are attributable to an entity in the DZ BANK banking group that has been granted approval by the competent supervisory authority to apply the aforementioned article in conjunction with article 33 (5) of Delegated Regulation (EU) No. 2015/61. This entity's liquidity inflows are therefore not subject to the usual cap on eligibility for the LCR.

4 Own funds, capital requirements, and capital ratios

4.1 Own funds

(ARTICLE 437 CRR)

The **regulatory own funds** of the DZ BANK banking group are derived from the provisions of the CRR/CRD IV. Pursuant to the provisions of the CRR (article 25 et seq.), regulatory eligible own funds consist of common equity Tier 1 capital, additional Tier 1 capital, and Tier 2 capital. They are based on the carrying amounts recognized under IFRS and essentially comprise the equity reported on the balance sheet, hybrid capital instruments, and subordinated liabilities.

Fig. 5 shows the DZ BANK banking group's own funds as defined by article 437 (1) letters d and e CRR in conjunction with Commission Implementing Regulation (EU) No. 1423/2013 dated December 20, 2013. These disclosures relate to all the entities consolidated for regulatory purposes in the DZ BANK banking group.

The regulatory **own funds** of the **DZ BANK banking group** (row 59 in Fig. 5) as at June 30, 2018 determined in accordance with the currently applicable CRR provisions amounted to a total of €22,786 million (March 31, 2018: €22,138 million).

As the consolidated financial statements as at June 30, 2018 were reviewed by an auditor, the interim profit for the first half of 2018 is eligible for inclusion in common equity Tier 1 capital.

Fig. 5 – STRUCTURE OF OWN FUNDS AS AT JUNE 30, 2018 (ARTICLE 437 (1) LETTERS D AND E CRR IN CONJUNCTION WITH ANNEX IV OF IMPLEMENTING REGULATION (EU) NO. 1423/2013)

	(A)	(A)	(B)
	Amount on	Amount on	Reference to article of
	disclosure	disclosure	Regulation (EU) No.
	reporting	reporting	575/2013
	date	date	
€ million COMMON EQUITY TIER 1 (CET1): INSTRUMENTS AND RESERVES	Jun. 30, 2018	Mar. 31, 2018	
	10.470	10.470	26 (4) 27 20 20
1 Capital instruments and related share premium accounts	10,478	10,478	26 (1), 27, 28, 29
1a of which: financial instrument type 1	-	-	
1b of which: financial instrument type 2	-		EBA list in accordance
1c of which: financial instrument type 3	-		with article 26 (3)
2 Retained earnings	6,302	6,274	26 (1) (c)
3 Accumulated other comprehensive income (and other reserves)	2,360	1,969	26 (1)
3a Fund for general banking risks	-		26 (1) (f)
4 Amount of qualifying items referred to in article 484 (3) CRR and the			(-)
related share premium accounts subject to phase out from CET1	-	-	486 (2)
5 Non-controlling interests (amount allowed in consolidated CET1)	127	130	84
5a Independently reviewed interim profits net of	427		
any foreseeable charge or dividend	437	-	26 (2)
6 Common equity Tier 1 (CET1) before regulatory adjustments	19,704	18,851	Sum of rows 1 to 5a
COMMON EQUITY TIER 1 (CET1): REGULATORY ADJUSTMENTS			
7 Additional value adjustments (negative amount)	-348	-346	34, 105
8 Intangible assets (net of related tax liability) (negative amount)	-642	-651	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	6	C	
conditions in article 38 (3) CRR are met) (negative amount)	-6	-6	36 (1) (c), 38
11 Fair value reserves related to gains and losses on cash flow hedges	2	-9	33 (1) (a)
12 Negative amounts resulting from the calculation of expected loss amounts	-142	-139	36 (1) (d), 40, 159
13 Any increase in equity arising from securitized assets (negative amount)	-	-	32 (1)
14 Gains or losses on liabilities recognized at fair value resulting from	31	-8	32 (1) (b)
changes in own credit standing 15 Defined benefit pension fund assets (negative amount)	0	0	36 (1) (e), 41
16 Direct and indirect holdings by an institution of own CET1 instruments	0	0	50 (1) (2), 41
(negative amount)	-	-	36 (1) (f), 42
17 Direct, indirect and synthetic holdings by the institution of the CET1	-		
instruments of financial-sector entities where those entities have			
reciprocal cross-holdings with the institution designed to artificially inflate			
the institution's own funds (negative amount)	-2	-2	36 (1) (g), 44
18 Direct, indirect and synthetic holdings by the institution of CET1			
instruments of financial-sector entities where the institution does not have a significant investment in those entities (above 10 percent and net of			36 (1) (h), 43, 45, 46, 49 (2)
eligible short positions) (negative amount)	-	-	and (3), 79
19 Direct, indirect and synthetic holdings by the institution of CET1	-		
instruments of financial-sector entities where the institution has a			
significant investment in those entities (above 10 percent and net of			36 (1) (i), 43, 45, 47, 48 (1)
eligible short positions) (negative amount)	-	-	(b), 49 (1) to (3), 79
20 Empty set in the EU	•		
20a Exposure arising from the following items qualifying for a risk weighting			26 (1) (1)
of 1,250 percent, where the institution opts for the deduction alternative 20b of which: gualifying holdings outside the financial sector (negative			36 (1) (k)
amount)	-	-	36 (1) (k) (i), 89 to 91
anound	-		36 (1) (k) (ii), 243 (1) (b),
20c of which: securitization exposures (negative amount)	-	-	244 (1) (b), 258
20d of which: free deliveries (negative amount)	-	-	36 (1) (k) (iii), 379 (3)
21 Deferred tax assets that rely on future profitability, arising from			
temporary differences (amount above 10 percent threshold, net of related			
tax liability where the conditions in article 38 (3) CRR are met) (negative			
amount)	-	-	36 (1) (c), 38, 48 (1) (a)
22 Amount exceeding the 15 percent threshold (negative amount)	-	-	48 (1)
23 of which: direct and indirect holdings by the institution of CET1			
instruments of financial-sector entities where the institution has a significant investment in these antities			36 (1) (i), 48 (1) (b)
significant investment in those entities 24 Empty set in the EU	-	-	JU (1) (1), 40 (1) (D)
Empty set in the LO			

	(A)	(A)	(B)
	Amount on	Amount on	Reference to article of
	disclosure	disclosure	Regulation (EU) No
	reporting date	reporting date	575/2013
€million	Jun. 30, 2018	Mar. 31, 2018	
of which: deferred tax assets that rely 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 CET1 items (negative amount)	-	-	36 (1) (l)
27 Qualifying AT1 deductions that exceed the AT1 capital of the institution			
(negative amount)	-	-	36 (1) (j)
27a Other capital elements or deductions from common equity Tier 1	-24	-11	
			Sum of rows 7 to 20a, 21,
28 Total regulatory adjustments to common equity Tier 1 (CET1)	-1,131	-1,172	22 and 25a to 27
29 Common equity Tier 1 (CET1)	18,573	17,679	Row 6 minus row 28
ADDITIONAL TIER 1 CAPITAL (AT1): INSTRUMENTS			
30 Capital instruments and related share premium accounts	750	750	51, 52
of which: classified as equity under applicable accounting standards	750	750	
of which: classified as liabilities under applicable accounting standards			
33 Amount of qualifying items referred to in article 484 (4) CRR and the	-		
related share premium accounts subject to phase out from AT1	986	986	486 (3)
34 Qualifying Tier 1 capital instruments included in consolidated AT1 capital	-		
(including non-controlling interests not included in row 5) issued by			
subsidiaries and held by third parties	22	23	85, 86
of which: instruments issued by subsidiaries subject to phase out	-	-	486 (3)
36 Additional Tier 1 capital (AT1) before regulatory adjustments	1,758	1,759	Sum of rows 30, 33 and 34
ADDITIONAL TIER 1 CAPITAL (AT1): REGULATORY ADJUSTMENTS			
37 Direct and indirect holdings by an institution of its own AT1 instruments			
(negative amount)	-65	-65	52 (1) (b), 56 (a), 57
B8 Direct, indirect and synthetic holdings by the institution of the AT1			
instruments of financial-sector entities where those entities have			
reciprocal cross-holdings with the institution designed to artificially inflate			56 (b), 58
the institution's own funds (negative amount) 9 Direct, indirect and synthetic holdings by the institution of AT1	-		50 (D), 58
instruments of financial-sector entities where the institution does not have			
a significant investment in those entities (above 10 percent and net of			
eligible short positions) (negative amount)	-	-	56 (c), 59, 60, 79
40 Direct, indirect and synthetic holdings by the institution of AT1			
instruments of financial-sector entities where the institution has a			
significant investment in those entities (net of eligible short positions)			
(negative amount)	-	-	56 (d), 59, 79
41 Empty set in the EU ¹	-		
42 Qualifying T2 deductions that exceed the T2 capital of the institution (negative amount)		-	56 (e)
13 Total regulatory adjustments to additional Tier 1 capital (AT1)	-65	-65	Sum of rows 37 to 42
44 ADDITIONAL TIER 1 CAPITAL (AT1)			
	1,693	1,694	Row 36 minus row 43
45 Tier 1 capital (T1 = CET1 + AT1)	20,266	19,373	Sum of rows 29 and 44
TIER 2 CAPITAL (T2): INSTRUMENTS AND RESERVES			
46 Capital instruments and related share premium accounts	3,087	3,178	62, 63
47 Amount of qualifying items referred to in article 484 (5) CRR and the			
related share premium accounts subject to phase out from T2	3	6	486 (4)
48 Qualifying own funds instruments in consolidated T2 capital (including			
non-controlling interests and AT1 instruments not included in rows 5 or	100	110	07.00
34) issued by subsidiaries and held by third parties	122	110	87, 88
49 of which: instruments issued by subsidiaries subject to phase out	-	-	486 (4)
50 Credit risk adjustments	346	509	62 (c) and (d)
51 Tier 2 capital (T2) before regulatory adjustments	3,558	3,803	
TIER 2 CAPITAL (T2): REGULATORY ADJUSTMENTS			
52 Direct and indirect holdings by an institution of its own T2 instruments	-51	-51	63 (b) (i), 66 (a), 67
and subordinated loans (negative amount) 33 Holdings of T2 instruments and subordinated loans of financial-sector	-31	-51	υς (μ) (I), ου (a), ογ
entities where those entities have reciprocal cross-holdings with the			
entities where those entities have reciprocal cross-holdings with the institution designed to artificially inflate the institution's own funds			

		(A)	(A)	(B)
		Amount on	Amount on	Reference to article of
		disclosure	disclosure	Regulation (EU) No.
		reporting	reporting	575/2013
mil	lion	date Jun. 30, 2018		
	Direct and indirect holdings by the institution of T2 instruments and	Jun. 50, 2018	Ividi. 51, 2010	
	subordinated loans of financial-sector entities where the institution does			
	not have a significant investment in those entities (above 10 percent and			
	net of eligible short positions) (negative amount)	-	-	66 (c), 69, 70, 79
5 [Direct and indirect holdings by the institution of T2 instruments and			
5	subordinated loans of financial-sector entities where the institution has a			
	significant investment in those entities (net of eligible short positions)			())
	negative amount)	-1	-1	66 (d), 69, 79
	Empty set in the EU ¹	-986	-986	
7	Total regulatory adjustments to Tier 2 capital (T2)	-1,038	-1,038	Sum of rows 52 to 56
B 1	FIER 2 CAPITAL (T2)	2,520	2,765	Row 51 minus row 57
9 1	Fotal capital (TC = T1 + T2)	22,786	22,138	Sum of rows 45 and 58
	Fotal risk weighted assets	135,524	133,407	
	TAL RATIOS AND BUFFERS	155,524	155,407	
	Common equity Tier 1 capital ratio (as a percentage of total exposure)	12.70	12.25	02 (2) (2)
		13.70	13.25	92 (2) (a)
	Fier 1 capital ratio (as a percentage of total exposure)	14.95	14.52	92 (2) (b)
	Fotal capital ratio (as a percentage of total exposure)	16.81	16.59	92 (2) (c)
	nstitution-specific capital buffer requirement (minimum CET1			
	requirement pursuant to article 92 (1) letter a CRR, plus capital			
	conservation and countercyclical capital buffer requirements, systemic risk			CRD 128, 129,
	buffer and systemically important institution buffer (G-SII or O-SII buffer), expressed as a percentage of total exposure) ²	8.81	8.80	130, 131, 133
5	of which: capital conservation buffer			150, 151, 155
		1.88	1.88	
6	of which: countercyclical capital buffer	0.02	0.01	
7	of which: systemic risk buffer	0.66	0.66	
7a	of which: buffer for global systemically important institutions (G-SII)	0.00	0.00	
2	or other systemically important institutions (O-SII)	0.66	0.66	
	Common equity Tier 1 available to meet buffers (as a percentage of total	4.89	4.45	CRD 128
	exposure) not relevant in EU regulation]			CRD 120
	-	•	•	
	not relevant in EU regulation]	•	•	
	not relevant in EU regulation]	•	•	
мс	UNTS BELOW THRESHOLD FOR DEDUCTIONS (BEFORE RISK WEIGHTING)			
	Direct and indirect holdings by the institution of capital instruments of			
	financial-sector entities where the institution does not have a significant			
	nvestment in those entities (less than 10 percent and net of eligible short	1,086	1,160	36 (1) (h), 46, 45, 56 (c)
	positions)	1,000	1,100	59, 60, 66 (c), 69, 70
	Direct and indirect holdings by the institution of CET1 instruments of Financial-sector entities where the institution holds a significant			
	nvestment in those entities (above 10 percent and net of eligible short			
	positions)	498	495	36 (1) (i), 45, 48
	Empty set in the EU		•	
	Deferred tax assets that rely on future profitability, arising from	•	•	
	emporary differences (amount below 10 percent threshold, net of related			
	ax liability where the conditions in article 38 (3) CRR are met)	527	480	36 (1) (c), 38, 48
	ICABLE CAPS ON THE INCLUSION OF PROVISIONS IN TIER 2 CAPITAL			
	Credit risk adjustments included in Tier 2 capital in respect of exposures			
	subject to the standardized approach (prior to application of cap)	-	-	62
	Cap on inclusion of credit risk adjustments in Tier 2 capital under			
	tandardized approach	311	313	62
3 (Credit risk adjustments included in Tier 2 capital in respect of exposures			
5	subject to internal ratings-based approach (prior to application of cap)	346	509	62
	Cap on inclusion of credit risk adjustments in Tier 2 capital under internal		-	
	atings based approach	522	516	62
	TAL INSTRUMENTS SUBJECT TO PHASE-OUT ARRANGEMENTS (ONLY APPLI	CABLE BETWEEI	N JANUARY 1, 201	4 AND JANUARY 1, 2022)
) (Current cap on CET1 instruments subject to phase-out arrangements	-		484 (3), 486 (2) and (5)
/	Amount excluded from CET1 due to cap (excess over cap after			
	redemptions and maturities)	-	-	484 (3), 486 (2) and (5)
2 (Current cap on AT1 instruments subject to phase-out arrangements	986	986	484 (4), 486 (3) and (5)
3 /	Amount excluded from AT1 due to cap (excess over cap after redemptions	425	425	484 (4), 486 (3) and (5)

	(A)	(A)	(B)
	Amount on disclosure	Amount on disclosure	Reference to article of Regulation (EU) No.
	reporting	reporting	575/2013
	date	date	
€million	Jun. 30, 2018	Mar. 31, 2018	
84 Current cap on T2 instruments subject to phase-out arrangements	23	23	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)

1 Since January 1, 2018: additional Tier 1 capital instruments that, although subject to the provisions of article 486 CRR, were still eligible as additional Tier 1 capital as at the reporting date. 2 Including the Pillar 2 requirement of 1.75 percent.

As at June 30, 2018, **common equity Tier 1 capital (CET1)** (row 29 in Fig. 5) amounted to &18,573 million (March 31, 2018: &17,679 million). It largely consisted of paid-in capital, the capital reserve, and retained earnings, minus various capital deductions.

The increase of €894 million was due, in particular, to the inclusion of the profit for the period that was deemed eligible by the regulator. The quarterly profit could not be included as at March 31, 2018, because the first-quarter financial statements were not reviewed by an auditor.

Additional Tier 1 capital (AT1) predominantly comprises open-ended own funds instruments without redemption incentives (total in Fig. 6) with a value of €2,160 million (March 31, 2018: €2,160 million). There was a small reduction in additional Tier 1 capital (row 44 in Fig. 5) from €1,694 million to €1,693 million as at June 30, 2018.

There were no changes in the period under review in the portfolio of issued additional Tier 1 capital instruments (AT1 bonds).

As at June 30, 2018, **Tier 2 capital (T2)** before capital deductions (row 51 in Fig. 5) amounted to €3,558 million (March 31, 2018: €3,803 million). Subordinated capital pursuant to article 63 CRR (row 46 in Fig. 5) constitutes a significant component of Tier 2 capital. The decrease was due to the reduced level of eligibility of subordinated capital under the CRR in the last five years before the maturity date (row 46 in Fig. 5) and to the smaller write-down surplus (row 50 in Fig. 5). Further information about the write-down surplus can be found in the paragraphs after Fig. 6.

There were no new issues of Tier 2 capital instruments in the first half of the year. The decrease in Tier 2 capital was mainly attributable to effects resulting from the CRR transitional guidance.

Fig. 6 shows the **items, features, and terms and conditions** of the additional Tier 1 capital instruments classified as **additional Tier 1 capital** (AT1) before consolidation. Fig. 7 provides an overview of the **items, features, and terms and conditions of subordinated capital**.

Fig. 6 – ADDITIONAL TIER 1 CAPITAL INSTRUMENTS AS AT JUNE 30, 2018 (PURSUANT TO ANNEX II OF IMPLEMENTING REGULATION (EU) NO. 1423/2013)

Issuer	Volume (€ million)	Interest rate (%) ¹	Start date	Maturity	Next call date
DZ BANK Capital Funding LLC, Wilmington ²	300	3m EURIBOR + 250bp	Nov. 7, 2003	Perpetual	Aug. 7, 2018
DZ BANK Capital Funding LLC II, Wilmington ²	500	3m EURIBOR + 160bp	Nov. 22, 2004	Perpetual	Aug. 22, 2018
DZ BANK Capital Funding LLC III, Wilmington ²	350	3m EURIBOR + 150bp	Jun. 6, 2005	Perpetual	Sep. 6, 2018
DZ BANK Perpetual Funding (Jersey) Limited, St. Helier ²	45	3m EURIBOR + 110bp	Jan. 9, 2006	Perpetual	Jul. 9, 2018
DZ BANK Perpetual Funding (Jersey) Limited, St. Helier ²	84	3m EURIBOR + 80bp	Feb. 13, 2006	Perpetual	Aug. 13, 2018

Total	2,160				
SUBTOTAL II	750				
	100	+ 440bp	Nov. 11, 2015	Perpetual	Aug. 1, 2021
		swap rate			
		fixed rate based on 5-year euro mid-			
		1, 2021			
DZ BANK		4.85%, from Aug.			
	134	+ 420bp	Nov. 11, 2015	Perpetual	Aug. 1, 2026
		12m EURIBOR			
		2026			
DZ BANK	/4	5.5%, from Aug. 1,	Nov. 11, 2015	Perpetual	Aug. 1, 2021
	74	12m EURIBOR + 420bp	Nov 11 2015	Dorpotual	Aug. 1, 2021
		1, 2021			
DZ BANK		4.85%, from Aug.			
	221	+ 420bp	Nov. 11, 2015	Perpetual	Aug. 1, 2021
DZ BANK		12m EURIBOR			
	221	+ 420bp	Nov. 11, 2015	Perpetual	Aug. 1, 2021
DZ BANK		12m EURIBOR	· ·	· · ·	
SUBTOTAL I	1 , 410 ²				
St. Helier ²	40	+ 50bp	Apr. 16, 2007	Perpetual	Jul. 16, 2018
DZ BANK Perpetual Funding (Jersey) Limited,		3m EURIBOR			
DZ BANK Perpetual Funding (Jersey) Limited, St. Helier ²	87	3m EURIBOR + 80bp	Sep. 4, 2006	Perpetual	Sep. 6, 2018
St. Helier ²	4	+ 100bp	Mar. 17, 2006	Perpetual	Sep. 17, 2018
DZ BANK Perpetual Funding (Jersey) Limited,		3m EURIBOR			

1 bp = basis points.

2 Instruments subject to phase-out arrangements pursuant to articles 484 and 486 CRR.

_	Volu	ne	Interest rate	Start date	Maturity
Issuer	€million	Currency million	(%) ¹		-
DZ BANK	211	EUR 211	7.400/EURIBOR + 350bp	1997 to 1999	2018
DZ BANK	63	EUR 63	7.1000	2008	2020
DZ BANK	187	EUR 187	3.600 to 7.500/EURIBOR + 350bp	2003 to 2008	2018
DZ BANK	12	EUR 12	1.900 to 3.175/EURIBOR + 1.650	2013	2018
DZ BANK	340	EUR 340	2.433 to 7.410	1999 to 2009	2019
DZ BANK	285	EUR 285	2.200 to 3.00	2013	2019
DZ BANK	7	USD 8	4.000	2013	2019
DZ BANK	371	EUR 371	3.574 to 7.150	2004 to 2010	2020
DZ BANK	20	EUR 20	3.100 to 3.200	2013	2020
DZ BANK	15	EUR 15	7.000 to 7.070	2009	2021
DZ BANK	224	EUR 224	3.640 to 5.000	2013	2021
DZ BANK	156	EUR 156	3.300 to 6.350	2009 to 2013	2022
DZ BANK	30	EUR 30	4.039 to 7.250	2003	2023
DZ BANK	281	EUR 281	3.230 to 4.370	2013	2023
DZ BANK	103	CHF 120	3.240	2013	2023
DZ BANK	6	USD 7	2.600	2015	2021
DZ BANK	38	EUR 38	1.7500	2015	2023
DZ BANK	72	EUR 72	6.500	2009	2024
DZ BANK	3	EUR 3	5.700	2010	2025
DZ BANK	278	EUR 278	2.25 to 2.89/EURIBOR + 1.25 to 1.75	2015	2025
DZ BANK	2	EUR 2	3.080	2015	2027
DZ BANK	64	EUR 64	3.085 to 3.300	2015	2030
DZ BANK			3.5 fixed,		
	50	EUR 50	then 6m EURIBOR + 1.3 variable	2015	2030
DZ BANK	86	USD 100	4.800 to 4.900	2015	2030
DZ PRIVATBANK	15	EUR 15	6.100	1999	2019
DVB	10	EUR 10	6.000 to 6.110	2003	2018
DVB	79	EUR 79	3.950 to 4.000	2013	2018
DVB	40	EUR 40	2.640 to 2.750	2014	2019
DVB	75	EUR 75	2.200	2014	2019
DVB	100	EUR 100	2.000	2015	2021
DVB	77	EUR 77	2.300 to 2.560	2015	2022
DVB	50	EUR 50	2.000	2015	2023
Total	3,350				

Fig. 7 - SUBORDINATED CAPITAL AS AT JUNE 30, 2018 (PURSUANT TO ANNEX II OF IMPLEMENTING REGULATION (EU) NO. 1423/2013)

1 bp = basis points.

Another component of own funds derives from the **comparison of loan loss allowances** pursuant to article 159 CRR, which DZ BANK carries out at banking group level. In this comparison, the expected losses computed on the IRBA exposure classes of central governments and central banks, institutions, corporates, and retail business are compared with the amounts that can effectively be recognized in the annual or interim financial statements for actual or potential impairment losses (split into receivables that are in default and not in default).

This **comparison of loan loss allowances for receivables that are in default and not in default** produced a **write-down surplus**, i.e. the loss allowances recognized for the IRBA exposures in the exposure classes listed above exceeded the expected losses for these exposures.

The bank classifies the **write-down surplus** computed for the DZ BANK banking group for **receivables that are in default and not in default** as Tier 2 capital in accordance with article 62 sentence 1 letter d CRR. This classification is consequently capped at 0.6 percent of the risk-weighted IRBA exposure amounts. This cap had no effect as at June 30, 2018. The total eligible amount (row 50 in Fig. 5) for the DZ BANK banking group was calculated at €346 million (March 31, 2018: €509 million).

As at the reporting date, there was a **write-down deficit** (row 12 in Fig. 5) totaling €142 million (March 31, 2018: €139 million) for **long-term equity investments** that was deducted from common equity Tier 1 capital pursuant to article 36 (1) letter d CRR.

With very few exceptions, the CRR requires all capital deductions to be made from common equity Tier 1 capital. Since the start of 2018, 100 percent of the deduction from CET1 has had to be recognized, as the transitional guidance no longer applies. The deductions largely result from prudent valuation, intangible assets including goodwill, deferred income tax assets, and reciprocal cross-holdings.

Pursuant to article 437 (1) letter b CRR, the DZ BANK banking group is obliged to disclose a description of the main features of the common equity Tier 1, additional Tier 1, and Tier 2 capital instruments issued in accordance with Implementing Regulation (EU) No. 1423/2013.

This description is published in a separate annex on DZ BANK's website in the Investor Relations section under Bondholder Information, subsection Capital Instruments, together with the **full terms and conditions connected with these capital instruments**, whose publication is required pursuant to article 437 (1) letter c CRR.

Reconciliation of equity reported on the balance sheet with regulatory own funds of the DZ BANK banking group

(ARTICLE 437 (1) LETTER A CRR)

One of the disclosure requirements is a reconciliation of equity reported under IFRS with equity reported for companies consolidated for regulatory purposes (Financial Reporting, FINREP) and regulatory own funds (Common Reporting, COREP). This reconciliation as at the reporting date is shown in Fig. 8.

Fig. 8 – RECONCILIATION OF EQUITY REPORTED ON THE BALANCE SHEET WITH REGULATORY OWN FUNDS (ARTICLE 437 (1) LETTER A CRR IN CONJUNCTION WITH ANNEX I OF IMPLEMENTING REGULATION (EU) NO. 1423/2013 AS AT JUNE 30, 2018)

€million	Carrying amounts on consolidated balance sheet in accordance with financial reporting (IFRS)	Consolidation/ deconsolidation of entities	Carrying amounts under scope of regulatory consolidation (FINREP)	Regulatory law (COREP)	Reference to Fig. 5 – Structure of own funds
ASSETS	· · · ·		· · ·	· · ·	
Cash and cash equivalents	69,240	171	69,411	-	
Loans and advances to banks	92,791	612	93,403	-	
Loans and advances to customers	177,601	4,229	181,830	-	
Hedging instruments (positive fair values)	1,131	1	1,132	-	
Financial assets held for trading	40,900	-109	40,791	-	
Investments	49,816	6,196	56,012	0	
Investments held by insurance companies	101,112	-101,112	0	-	
Property, plant and equipment, and investment property	1,458	-83	1,375	-	
Income tax assets	1,151	-337	814	505	
Other assets	5,074	-3,239	1,835	671	
Loss allowances	-2,606	-102	-2,708	-	
Non-current assets and disposal groups classified as held for sale	120	-66	54	-	
Fair value changes of the hedged items in portfolio hedges of interest-rate risk	446	-2	444	-	
Total assets	538,234	-93,841	444,393	-	
EQUITY AND LIABILITIES					
Deposits from banks	144,346	675	145,021	-	
Deposits from customers	137,598	6,236	143,834	-	
Debt certificates issued including bonds	69,881	381	70,262	-	

	Carrying amounts on consolidated balance sheet in accordance with financial reporting (IFRS)	Consolidation/ deconsolidation of entities	Carrying amounts under scope of regulatory consolidation (FINREP)	Regulatory law (COREP)	Reference to Fig. 5 – Structure of own funds
€million	, , , , , , , , , , , , , , , , , , ,				
Derivatives used for hedging (negative fair			2.007		
values)	2,987	0	2,987	-	
Financial liabilities held for trading Provisions	50,750	2	50,752	-	
Insurance liabilities	3,153	61	3,214		
Income tax liabilities	93,823	-93,823 -631	0	29	
Other liabilities			338	- 29	
Subordinated capital	7,358	-5,703	1,655	-	
Liabilities included in disposal groups	5,420	04	5,404	-	
classified as held for sale	7	0	7		
Fair value changes of the hedged items in					
portfolio hedges of interest-rate risk	117	0	117	-	
COMMON EQUITY TIER 1 (CET1) BEFORE REG Subscribed capital		0	4.026	4.026	4
Capital reserve	4,926 5,551	0	4,926 5,551	4,926	1
Retained earnings		-294	7,845		1
Reserve from other comprehensive income	8,139 899	200	-	6,302	2
Non-controlling interests	2,817	-1,017	1,099	2,360	3
Unappropriated earnings	648	-1,017	1,800	437	5
Total common equity Tier 1 (CET1) before	040	0	000	19,704	<u> </u>
regulatory adjustments COMMON EQUITY TIER 1 (CET1): REGULATOR	RY ADJUSTMENTS			15,704	0
Capital deductions					
Loan loss allowances resulting from					
prudent valuation requirements (negative amount)				-348	7
Intangible assets (negative amount)	-654	-17	-671	-671	8
Deferred taxes related to other intangible	001		071	071	0
assets (negative amount)	25	4	29	29	8
Deferred tax assets that rely on future profitability, not arising from temporary					
differences (negative amount)	-75	69	-6	-6	10
Hedge reserve (cash flow hedge reserve)			2	2	11
Negative amounts resulting from the calculation of expected loss amounts			-	-142	12
Effects resulting from measurement of own liabilities				31	14
Holdings of the CET1 instruments of financial-sector entities where those entities have reciprocal cross-holdings with the institution			-	-2	17
Deductible deferred tax assets that rely on					17
future profitability, arising from temporary differences (negative amount)	-667	168	-499	-	21
Other capital elements or deductions from common equity Tier 1			-	-24	27a
TOTAL REGULATORY ADJUSTMENTS TO COMMON EQUITY TIER 1 (CET1)			-	-1,131	28
Common equity Tier 1 (CET1) after				40.533	
regulatory adjustments ADDITIONAL TIER 1 CAPITAL (AT1) BEFORE R	EGULATORY ADJU	ISTMENTS: INSTRUMI	ENTS	18,573	29
Capital instruments and related share					
premium accounts (additional equity components)	845	0	845	750	30
Amount of qualifying items referred to in article 484 (4) CRR and the related share premium accounts subject to phase out					
from AT1	1,410	0	1,410	986	33
Non-controlling interests in subsidiaries				-	33a

	Carrying amounts on consolidated balance sheet in accordance with financial reporting (IFRS)	Consolidation/ deconsolidation of entities	Carrying amounts under scope of regulatory consolidation (FINREP)	Regulatory law (COREP)	Reference to Fig. 5 – Structure of own funds
€million	1 3 7				
Qualifying Tier 1 capital instruments					
included in consolidated AT1 capital					
(including non-controlling interests not					
included in row 5) issued by subsidiaries and held by third parties				22	34 and 35
Additional Tier 1 capital (AT1) before					54 anu 55
regulatory adjustments				1,758	36
ADDITIONAL TIER 1 CAPITAL (AT1): REGULAT	ORY ADJUSTMEN	TS		.,	
Direct and indirect holdings by an					
institution of its own AT1 instruments					
(negative amount)	21	-21	0	-65	37
Holdings of AT1 instruments of financial-					
sector entities where those entities have					
reciprocal cross-holdings with the					
institution designed to artificially inflate the institution's own funds (negative					
amount)			-	-	38
Direct and indirect holdings by the					
institution of AT1 capital instruments of					
financial-sector entities where the					
institution does not have a significant					
investment in those entities (above 10					
percent and net of eligible short positions)					20
(negative amount)			-	-	39
Direct and indirect holdings by the					
institution of AT1 capital instruments of financial-sector entities where the					
institution has a significant investment in					
those entities (above 10 percent and net of					
eligible short positions) (negative amount)			-	-	40
Qualifying T2 deductions that exceed the					
T2 capital of the institution (negative					
amount)			-	-	42
TOTAL REGULATORY ADJUSTMENTS TO				65	(2)
ADDITIONAL TIER 1 CAPITAL (AT1)				-65	43
Additional Tier 1 capital (AT1) after regulatory adjustments:				1,693	44
TIER 2 CAPITAL (T2): INSTRUMENTS AND RES				.,	
Capital instruments and related share					
premium accounts	3,420	64	3,484	3,087	46
Amount of qualifying items referred to in					
article 484 (5) CRR and the related share					
premium accounts subject to phase out				3	47
from T2 Qualifying own funds instruments in					47
consolidated T2 capital (including non-					
controlling interests and AT1 instruments					
not included in rows 5 or 34) issued by					
subsidiaries and held by third parties				122	48
of which: instruments issued by					10
subsidiaries subject to phase out Credit risk adjustments				-	49
				346	50
IRB excess of provisions over expected					50
losses, eligible					50
Tier 2 capital (T2) before regulatory adjustments				3,558	51
TIER 2 CAPITAL (T2): REGULATORY ADJUSTM	IENIS				
Direct and indirect holdings by an institution of its own T2 instruments and					
subordinated loans (negative amount)				-51	52
Holdings of T2 instruments and					
subordinated loans of financial-sector					
suborumateu loans or imancial-sector					
entities where those entities have reciprocal cross-holdings with the					

	Carrying amounts on consolidated balance sheet in accordance with financial reporting (IFRS)	Consolidation/ deconsolidation of entities	Carrying amounts under scope of regulatory consolidation (FINREP)	Regulatory law (COREP)	Reference to Fig. 5 – Structure of own funds
€million					
the institution's own funds (negative amount)					
Direct and indirect holdings by the institution of T2 instruments and subordinated loans of financial-sector entities where the institution does not have a significant investment in those entities (above 10 percent and net of eligible short positions) (negative amount)				-	54
of which: new holdings not subject to transitional arrangements			-	-	54a
of which: holdings existing before January 1, 2013 and subject to transitional arrangements			-	-	54b
Direct and indirect holdings by the institution of T2 instruments and subordinated loans of financial-sector entities where the institution has a significant investment in those entities (net of eligible short positions) (negative amount)			-	-1	55
Regulatory adjustments to Tier 2 capital in respect of amounts subject to pre-CRR treatment and transitional treatments subject to phase out pursuant to Regulation (EU) No. 575/2013 (i.e. CRR					
residual amounts)			-	-986	56
TOTAL REGULATORY ADJUSTMENTS TO TIER 2 CAPITAL (T2)				-1,038	57
Tier 2 capital (T2) after regulatory adjustments				2,520	58
Equity (IFRS/FINREP)/ own funds (COREP)	23,825	-1,103	22,722	22,786	59
Total equity and liabilities	538,234	-93,841	444,393		

1 See Fig. 1.

Fig. 9 – RECONCILIATION OF EQUITY REPORTED ON THE BALANCE SHEET WITH REGULATORY OWN FUNDS (ARTICLE 437 (1) LETTER A CRR IN CONJUNCTION WITH ANNEX I OF IMPLEMENTING REGULATION (EU) NO. 1423/2013 AS AT DECEMBER 31, 2017)

€ million	Carrying amounts on consolidated balance sheet in accordance with financial reporting (IFRS)	Consolidation/ deconsolidation of entities	Carrying amounts under scope of regulatory consolidation (FINREP)	Regulatory law (COREP)	Reference to Fig. 5 – Structure of own funds
ASSETS	reporting (irks)				
Cash and cash equivalents	12,835	588	13,423		
Loans and advances to banks	120,489	479	120,968		
Loans and advances to customers	174,376	4,450	178,826		
Loss allowances	-2,794	-167	-2,961		
Derivatives used for hedging (positive fair values)	1,096	-1	1,095		
Financial assets held for trading	38,709	-272	38,437		
Investments	57,486	5,916	63,402	0	
Investments held by insurance companies	96,416	-96,416	0		
Property, plant and equipment, and investment property	1,498	-101	1,397		
Income tax assets	1,127	-331	796	428	
Other assets	4,546	-2,713	1,833	550	
Non-current assets and disposal groups classified as held for sale	84	-50	34	-	
Fair value changes of the hedged items in portfolio hedges of interest-rate risk	-274	0	-274	-	
Total assets	505,594	-88,618	416,976	-	
EQUITY AND LIABILITIES					
Deposits from banks	136,122	633	136,755	-	
Deposits from customers	126,319	6,714	133,033	-	
Debt certificates issued including bonds	67,327	303	67,630	-	
Derivatives used for hedging (negative fair values)	2,962	2	2,964	-	
Financial liabilities held for trading	44,280	10	44,290	-	
Provisions	3,372	75	3,447	-	
Insurance liabilities	89,324	-89,324	0	-	
Income tax liabilities	848	-544	304	29	
Other liabilities	7,523	-5,451	2,072	-	
Subordinated capital	3,899	65	3,964	-	
Liabilities included in disposal groups classified as held for sale	0	0	0	-	
Fair value changes of the hedged items in portfolio hedges of interest-rate risk	113	0	113	-	
COMMON EQUITY TIER 1 (CET1) BEFORE REC			4.000	4.000	
Subscribed capital Capital reserve	4,926	0	4,926	4,926	1
1	5,551	0	5,551	5,551	1
Retained earnings Revaluation reserve	7,597	-969	6,628	5,981	2/3
Cash flow hedge reserve	1,396	198 4	1,594	2,043	3
Currency translation reserve	43	-2	<u> </u>	41	3
Non-controlling interests					3
Unappropriated earnings	2,815	-996	1,819	199	5
Total common equity Tier 1 (CET1) before regulatory adjustments	324	664	988	665 19,415	6 6
COMMON EQUITY TIER 1 (CET1): REGULATO	RY ADJUSTMENTS				
Capital deductions Loan loss allowances resulting from					
prudent valuation requirements (negative amount)				-322	7
Intangible assets (negative amount)	-665	-15	-680	-550	8

€million	Carrying amounts on consolidated balance sheet in accordance with financial reporting (IFRS)	Consolidation/ deconsolidation of entities	Carrying amounts under scope of regulatory consolidation (FINREP)	Regulatory law (COREP)	Reference to Fig. 5 – Structure of own funds
Deferred taxes related to other intangible					
assets (negative amount)	25	4	29	29	8
Deferred tax assets that rely on future profitability, not arising from temporary differences (negative amount)	-103	97	-6	-5	10
Hedge reserve (cash flow hedge reserve)			-9	-9	11
Negative amounts resulting from the calculation of expected loss amounts			-	-110	12
Effects resulting from measurement of own liabilities			-	29	14
Holdings of the CET1 instruments of financial-sector entities where those entities have reciprocal cross-holdings with the institution			-	-2	17
Deductible deferred tax assets that rely on future profitability, arising from temporary differences (negative amount)	-530	108	-422	-	21
Regulatory adjustments relating to unrealized gains and losses pursuant to articles 467 and 468 CRR				-214	26a
Other capital elements or deductions from common equity Tier 1				-10	27a
Total regulatory adjustments to common equity Tier 1 (CET1)			-	-1,164	28
Common equity Tier 1 (CET1) after regulatory adjustments				18,251	29
ADDITIONAL TIER 1 CAPITAL (AT1) BEFORE R	EGULATORY ADJU	STMENTS: INSTRUM	ENTS		25
Capital instruments and related share				· · · · · · · · · · · · · · · · · · ·	
premium accounts Amount of qualifying items referred to in article 484 (4) CRR and the related share premium accounts subject to phase out	848	0	848	750	30
from AT1 Non-controlling interests in subsidiaries	1,410	0	1,410	1,232	33
Qualifying Tier 1 capital instruments included in consolidated AT1 capital (including non-controlling interests not included in row 5) issued by subsidiaries and held by third parties				17	33a 34 and 35
Additional Tier 1 capital (AT1) before regulatory adjustments				1,999	36
ADDITIONAL TIER 1 CAPITAL (AT1): REGULAT	ORY ADJUSTMEN	TS			
Direct and indirect holdings by an institution of its own AT1 instruments					
(negative amount)	26	-21	5	-65	37
Holdings of AT1 instruments of financial- sector entities where those entities have reciprocal cross-holdings with the institution designed to artificially inflate the institution's own funds (negative amount)			-	-	38
Direct and indirect holdings by the institution of AT1 capital instruments of financial-sector entities where the institution does not have a significant investment in those entities (above 10 percent and net of eligible short positions)					
(negative amount) Direct and indirect holdings by the institution of AT1 capital instruments of financial-sector entities where the institution has a significant investment in those entities (above 10 percent and net of				<u> </u>	39
eligible short positions) (negative amount)			-	-	40
Regulatory adjustments to additional Tier 1			-	-144	41

Creillion	consolidated balance sheet in accordance with financial	Consolidation/ deconsolidation of entities	Carrying amounts under scope of regulatory consolidation (FINREP)	Regulatory law (COREP)	Reference to Fig. 5 – Structure of own funds
€ million capital in respect of amounts subject to pre-CRR treatment and transitional treatments subject to phase out pursuant	reporting (IFRS)				
to Regulation (EU) No. 575/2013 (i.e. CRR residual amounts)					
Qualifying T2 deductions that exceed the T2 capital of the institution (negative amount)			-	-	42
Total regulatory adjustments to additional Tier 1 capital (AT1)				-209	43
Additional Tier 1 capital (AT1) after				1,790	44
regulatory adjustments TIER 2 CAPITAL (T2): INSTRUMENTS AND RES	FRVFS			1,750	44
Capital instruments and related share					
premium accounts Amount of qualifying items referred to in	3,898	66	3,964	3,302	46
article 484 (5) CRR and the related share premium accounts subject to phase out from T2				10	47
Qualifying own funds instruments in consolidated T2 capital (including non- controlling interests and AT1 instruments not included in rows 5 or 34) issued by					47
subsidiaries and held by third parties				156	48
of which: instruments issued by subsidiaries subject to phase out				8	49
Credit risk adjustments				503	50
IRB excess of provisions over expected losses, eligible				-	50
Tier 2 capital (T2) before regulatory adjustments				3,971	51
TIER 2 CAPITAL (T2): REGULATORY ADJUSTM	IFNTS				
Direct and indirect holdings by an institution of its own T2 instruments and				-51	
subordinated loans (negative amount) Holdings of T2 instruments and subordinated loans of financial-sector entities where those entities have reciprocal cross-holdings with the institution designed to artificially inflate the institution's own funds (negative					52
amount)			-	-	53
Direct and indirect holdings by the institution of T2 instruments and subordinated loans of financial-sector entities where the institution does not have a significant investment in those entities	2				
(above 10 percent and net of eligible short positions) (negative amount)			-	-	54
of which: new holdings not subject to transitional arrangements			-	-	54a
of which: holdings existing before January 1, 2013 and subject to transitional arrangements					54b
Direct and indirect holdings by the institution of T2 instruments and subordinated loans of financial-sector entities where the institution has a					
significant investment in those entities (net of eligible short positions) (negative amount)				-1	55
Regulatory adjustments to Tier 2 capital in respect of amounts subject to pre-CRR treatment and transitional treatments					
subject to phase out pursuant to					
			-	-1,232	56

€million	Carrying amounts on consolidated balance sheet in accordance with financial reporting (IFRS)	Consolidation/ deconsolidation of entities	Carrying amounts under scope of regulatory consolidation (FINREP)		Reference to Fig. 5 – Structure of own funds
from Tier 2 capital with regard to deduction from common equity Tier 1 capital during the transition period pursuant to article 472 of Regulation (EU) No. 575/2013					
of which: other capital elements or deductions from Tier 2 capital				-1,218	56d
TOTAL REGULATORY ADJUSTMENTS TO TIER 2 CAPITAL (T2)				-1,284	57
Tier 2 capital (T2) after regulatory adjustments				2,687	58
Equity (IFRS/FINREP)/ own funds (COREP)	23,505	-1,101	22,404	22,728	59
Total equity and liabilities	505,594	-88,618	416,976		

1 See Fig. 1.

The differences between the assets and the equity and liabilities reported in the IFRS consolidated financial statements and the DZ BANK banking group's assets and equity and liabilities under FINREP arose from different entities being included in each scope of consolidation and from different consolidation methods.

The variance in the consolidation methods relates to R+V, which was consolidated using the equity method in the DZ BANK banking group's financial statements under FINREP but was fully consolidated in the consolidated financial statements. As a result, the figure for non-controlling interests was €1,054 million lower (December 31, 2017: €1,032 million lower).

Differences in the scope of consolidation also arose at the level of the consolidated subgroups DVB, UMH, and VR LEASING.

The differences between the equity under FINREP and the **common equity Tier 1 capital** under the CRR/COREP arise solely from the provisions of the CRR. The reconciliation figures shown in Fig. 8 are explained below.

- The retained earnings according to FINREP includes the losses arising from revaluation of defined benefit pension plans in an amount of €524 million. In COREP, this line item is included in accumulated other comprehensive income (row 3 in the structure of own funds). The retained earnings according to FINREP also include other reserves in an amount of €1,783 million that, under COREP, are also recognized in accumulated other comprehensive income (row 3 in the structure of own funds). According to COREP, the fund for home savings risk is not eligible as CET1 and must therefore be deducted in an amount of €283 million.
- According to article 35 CRR in conjunction with article 468 CRR, 100 percent of the total volume of the reserve from other comprehensive income was eligible as CET1 as at June 30, 2018 (under the CRR transitional guidance, only 80 percent of the total volume had been eligible as at December 31, 2017).
- Furthermore, the CRR provisions state that **cash flow hedge reserves** cannot be recognized as equity, as a result of which the negative amount of €2 million has been included in common equity Tier 1 capital again.
- The capital instruments and related share premium accounts amounting to €845 million contain the €750 million included in additional Tier 1 capital (AT1) under COREP and further instruments of €95 million that have to be shown as Tier 2 capital according to article 63 CRR.
- The non-controlling interests contain further AT1 capital instruments of €1,410 million that, under COREP, have to be shown as additional Tier 1 capital in an amount of €986 million according to the transitional guidance.

The **Tier 2 capital** (T2) mainly consists of subordinated capital instruments. Under IFRS, these are included in the 'capital instruments and related share premium accounts' line item on the balance sheet. The eligibility of the instruments under the CRR is limited if their term to maturity is less than five years. This is the main reason for the reduction in eligibility for regulatory purposes. Furthermore, use of the pro rata interest reported on the balance sheet is not permitted according to the regulatory requirements.

4.2 Capital requirements (ARTICLE 438 CRR)

Fig. 10 and Fig. 11 give an overview of risk-weighted assets and the corresponding capital requirements.

The **DZ BANK banking group's** regulatory **capital requirements** totaled €10,842 million as at June 30, 2018 (March 31, 2018: €10,673 million).

Fig. 10 – CAPITAL REQUIREMENTS (PART 1)

	Jun. 30	Jun. 30, 2018		Mar. 31, 2018		
€million	Capital requirements	Risk-weighted assets	Capital requirements	Risk-weighted assets		
1 Credit risk	-					
1.1 Standardized Approach to credit risk						
Central governments or central banks	112	1,398	102	1,280		
Regional governments or local authorities	20	247	19	238		
Other public-sector entities	6	71	6	74		
Multilateral development banks	0	3	0	2		
International organizations	0		0	2		
	-	-	-	412		
Institutions	32	398	33	412		
Corporates	805	10,066	765	9,557		
Retail business	255	3,190	235	2,941		
Exposures secured by mortgages on immovable property	199	2,487	197	2,460		
Exposures in default	22	276	20	254		
Exposures associated with particularly high risk	58	728	115	1,436		
Covered bonds	4	53	4	4		
Institutions and corporates with a short-term credit assessment	0	0	-			
Units or shares in collective investment undertakings ('ClUs')	134	1,681	150	1,872		
Other items	108	1,355	107	1,343		
TOTAL CREDIT RISK UNDER THE STANDARDIZED APPROACH	1,756	21,953	1,753	21,917		
1.2 IRB approaches to credit risk						
Central governments or central banks	119	1,491	128	1,598		
Institutions	592	7,403	617	7,710		
Corporates	3,066	38,327	3,007	37,590		
of which: SMEs	198	2,477	196	2,456		
Retail business	1,039		1,022	12,776		
		12,982		-		
of which: mortgage-backed	635	7,942	623	7,791		
qualified revolving	-	-	-	-		
other retail business	403	5,039	399	4,985		
Other non-credit-obligation assets	194	2,431	187	2,335		
TOTAL UNDER IRB APPROACHES TO CREDIT RISK	5,011	62,634	4,960	62,008		
1.3 Securitizations						
Securitizations under the Standardized Approach to credit risk	224	2,805	247	3,082		
of which: re-securitizations	-	-	-	-		
Securitizations under IRB approaches	331	4,138	214	2,676		
of which: re-securitizations	0	2	0	1		
TOTAL SECURITIZATIONS	555	6,943	461	5,758		
1.4 Long-term equity investments						
Long-term equity investments under IRB approaches	1,845	23,058	1,808	22,605		
of which: internal modeling approach	3	43	3	43		
PD/LGD approaches	10	125	10	126		
simple risk-weighting approach	1,744	21,797	1,709	21,359		
of which: exchange-traded equity investments	0	1	0	4		
equity investments not exchange-traded,		·	0			
but part of a diversified portfolio	4	54	4	54		
			1,704			
other equity investments	1,739	21,742	1,704	21,301		
Equity investments exempted from IRB approaches and included in Standardized Approach to credit risk	8	95	5	57		
of which: grandfathering	-	- 95	5	57		
			-			
TOTAL LONG-TERM EQUITY INVESTMENTS	1,852	23,153	1,813	22,663		
1.5 Exposure amount for contributions to default fund of a CCP	14	173	17	213		
1.6 Credit valuation adjustments (CVA charge)	106	1,323	108	1,349		
1.7 Exposure amount for counterparty and settlement risk	0	0	0	3		
1.8 Large exposure excess amounts in the trading book	-	-	-			
TOTAL CREDIT RISK	9,294	116,180	9,113	113,910		

Fig. 11 - CAPITAL REQUIREMENTS (PART 2)

	Jun. 30	, 2018	Mar. 31, 2018	
€million	Capital requirements	Risk-weighted assets	Capital requirements	Risk-weighted assets
2 Market risk				
Standardized approach	134	1,680	137	1,713
of which: trading book risk exposures	5	64	8	100
of which: interest-rate risk	5	64	8	100
of which: general and specific price risk (net interest-rate exposure)	5	64	8	100
of which: specific price risk for securitization exposures in trading book	5	59	7	94
specific price risk in correlation trading portfolio (CTP)	0	4	0	5
equity risk	0	0	0	1
special approach for position risk from CIUs	9	118	12	145
currency risk	119	1,481	117	1,459
commodity risk	1	16	1	10
Internal modeling approach	437	5,458	493	6,164
TOTAL MARKET RISK	571	7,138	630	7,877
3 Operational risk				
Operational risk under Basic Indicator Approach	-	-	-	-
Operational risk under Standardized Approach	850	10,623	850	10,623
Operational risk under Advanced Measurement Approach (AMA)	-	-	-	-
TOTAL OPERATIONAL RISK	850	10,623	850	10,623
4 Other				
Additional exposure pursuant to article 3 CRR	127	1,583	80	996
TOTAL OTHER EXPOSURES	127	1,583	80	996
Sum total	10,842	135,524	10,673	133,407

Fig. 12 is based on the disclosure requirements in EBA/GL/2016/11 and provides a condensed summary of the risk-weighted assets and the associated capital requirements.

The capital requirements in the table below are shown for **credit risk excluding counterparty credit risk** in accordance with the **Standardized Approach to credit risk (CRSA)** and in accordance with the **internal ratings-based approach (IRB approach)** and for **counterparty credit risk (CCR)**. The capital requirement for **securitizations** also differs under the Standardized Approach and under the IRB approach. The exposures reported under the IRB approach are further broken down by Supervisory Formula Approach and Internal Assessment Approach. The capital requirement for **market risk** is determined using the **Standardized Approach** and **internal models approach (IMA)**; for **operational risk**, only the Standardized Approach is used. Row 27 contains amounts below the thresholds for deductions that relate to significant long-term equity investments within the financial sector that are subject to a risk weighting of 250 percent and deductions for deferred taxes resulting from temporary differences.

Compared with March 31, 2018, there was a shift of risk-weighted assets from 'exposures associated with particularly high risk' to 'corporates' as at the reporting date under the Standardized Approach to credit risk. This shift was due to reclassification of the VR Flexibel product at VR LEASING. The change in risk-weighted assets under the IRB approach was attributable to the use of cash collateral at DG HYP (\leq 300 million) and the new business in corporates and retail business of approximately \leq 800 million. The increase in the capital requirements for securitizations under the IRB approach was due to two securitization activities no longer being eligible for the internal assessment approach (IAA). Meanwhile, the \leq 438 million increase in risk-weighted assets in 'long-term equity investments' was attributable to the increase in R+V's carrying amount, calculated in accordance with the equity method. Furthermore, the risk-weighted assets in the 'Other items' row increased by \leq 587 million due to a flat-rate RWA markup on a portfolio under the IAA.

Fig. 12 provides an overview of risk-weighted assets and the associated capital requirements.

Fig. 12 - EU OV1 - OVERVIEW OF RISK-WEIGHTED ASSETS (RWAS)

€ million			Jun. 30,	2018	Mar. 31,	2018
			Risk-weighted	•	Risk-weighted	Capita
Reference to CRR			assets	requirements	assets	requirement
	1	Credit risk (excluding CCR)	101,396	8,112	100,082	8,004
Article 438 (c) and (d)	2	of which: Standardized Approach	19,020	1,522	18,808	1,505
	3	of which: foundation IRB (FIRB) approach	46,355	3,708	45,825	3,666
	4	of which: advanced IRB (AIRB) approach	15,764	1,261	15,043	1,203
Article 438 (d)	5	of which: long-term equity investments in the IRB approach under the simple risk- weighted approach or IMA	21,840	1,747	21,402	1,712
Article 107	6	Counterparty credit risk (CCR)				i
Article 438 (c) and (d)			5,429	434	5,586	447
Article 438 (c) and (d)		of which: mark-to-market method	3,932	315	4,024	322
	8	of which: original exposure method	-	-		-
	9	of which: Standardized Approach	-	-		-
	10	of which: internal model method (IMM)	-	-	-	-
Article 438 (c) and (d)	11	of which: risk exposure amount for contributions to the default fund of a central counterparty (CCP)	173	14	213	17
	12	of which: credit valuation adjustments (CVA)	1,323	106	1,349	108
Article 438 (e)		Settlement risk	0	0	3	0
		Securitization exposure in the banking book (after the cap)	6,943		5,758	461
	15	of which: IRB approach	2,879	230	1,106	88
	16	of which: IRB Supervisory Formula Approach (SFA)	127	10	132	11
	17	of which: Internal Assessment Approach (IAA)	1,260	101	1,439	115
	18	of which: Standardized Approach	2,805	224	3,082	247
Article 438 (e)	19	Market risk	7,138	571	7,877	630
	20	of which: Standardized Approach	1,680	134	1,713	137
	21	of which: IMA	5,458	437	6,164	493
Article 438 (e)	22	Large exposures	-	-	-	-
Article 438 (f)	23	Operational risk	10,623	850	10,623	850
	24	of which: Basic Indicator Approach	-	-	-	-
	25	of which: Standardized Approach	10,623	850	10,623	850
	26	of which: Advanced Measurement Approach	-	-	-	-
Article 437 (2), article 48, and article	27	Amounts below the thresholds for deduction (subject to 250% risk weighting)			2.402	200
60 Auticle 500			2,412	193	2,482	396
Article 500		Floor adjustment	-	-	-	-
	29	Total	135,524	10,842	133,407	10,673

However, the €438 million increase in R+V's carrying amount, calculated in accordance with the equity method can be seen in row 5 'long-term equity investments in the IRB approach under the simple risk-weighted approach or IMA'. With a capital requirement of €8,112 million, credit risk is particularly important within the DZ BANK banking group. The €2,117 million increase in the total risk amount (row 29) compared with March 31, 2018 was largely due to a change in the method of calculating the capital requirement for securitization exposures in the banking book under the Internal Assessment Approach (IAA) (rows 14 and 17).

Risk-weighted exposure amounts for specialized lending and long-term equity investments

(ARTICLE 438 SENTENCE 2 CRR)

Fig. 13 shows the risk exposures contained in the portfolio as at the reporting date for the banking group's specialized lending under the supervisory slotting approach (assignment of risk weightings prescribed by the supervisory authority). It also contains exposures for long-term equity investments under the simple risk-weighted approach, for which prescribed risk weightings have to be used.

Fig. 13 - EU CR10 - IRB (specialized lending and long-term equity investments)

SPECIALIZED LE € million	INDING						
Regulatory categories	Remaining maturity	On-balance- sheet amount	Off-balance- sheet amount	Risk weighting (%)	Exposure amount	RWAs	Expected losses
Category 1	Less than 2.5 years	263	35	50	290	145	-
	Equal to or more than 2.5 years	940	31	70	997	698	4
Category 2	Less than 2.5 years	88	27	70	105	73	0
	Equal to or more than 2.5 years	935	74	90	996	897	8
Category 3	Less than 2.5 years	6	13	115	15	17	0
	Equal to or more than 2.5 years	273	25	115	291	335	8
Category 4	Less than 2.5 years	-	-	250	-	-	-
	Equal to or more than 2.5 years	14	1	250	15	37	1
Category 5	Less than 2.5 years	-	-	-	-	-	-
	Equal to or more than 2.5 years	_	-	-		-	-
TOTAL	LESS THAN 2.5 YEARS	357	75		409	235	1
JUN. 30, 2018	EQUAL TO OR MORE THAN 2.5 YEARS	2,161	131		2,299	1,966	21
TOTAL	LESS THAN 2.5 YEARS	336	122		423	247	1
Dec. 31, 2017	EQUAL TO OR MORE THAN 2.5 YEARS	2,300	155		2,398	2,055	22
LONG-TERM EQ	QUITY INVESTMENTS UNDER TH	HE SIMPLE RISK	WEIGHTED APP	PROACH			
Regulatory cate	egories	On-balance- sheet amount	Off-balance- sheet amount	Risk weighting	Exposure amount	RWAs	Capital requirements
Private long-term equity investments		28	0	190	28	54	4
Exchange-traded long-term equity investments		0	-	290	0	1	0
Other long-terr	m equity investments	3,422	-	370	5,876	21,742	1,739
Total as at June	e 30, 2018	3,451	0		5,905	21,797	1,744
Total as at Decer	mber 31, 2017	5,721	0		5,721	21,147	1,692

DZ BANK has a significant long-term equity investment in R+V. The carrying amount (before risk weighting) of this long-term equity investment is not deducted from DZ BANK's own funds. Instead, it is deemed a risk-weighted asset and backed by own funds. Fig. 14 summarizes the effects for the DZ BANK banking group of the long-term equity investment in R+V.

Fig. 14 – EU INS1 – NON-DEDUCTED PARTICIPATIONS IN INSURANCE UNDERTAKINGS

	Valu	
€million	Jun. 30, 2018	Dec. 31, 2017
Holdings of own funds instruments of a financial-sector entity where the institution has a significant investment not deducted from own funds (before risk-weighting)		
	5,698	5,524
Total risk-weighted assets (RWAs)		
	21,081	20,440

The €641 million increase in risk-weighted assets was mainly the result of the adjustment to R+V's carrying amount, calculated in accordance with the equity method.

4.3 Capital ratios

The total capital ratio of the DZ BANK banking group rose from 16.6 percent as at March 31, 2018 to 16.8 percent as at the reporting date. The **Tier 1 capital ratio** amounted to 15.0 percent as at June 30, 2018, which was higher than the figure of 14.5 percent as at March 31, 2018. The **common equity Tier 1 capital ratio** stood at 13.7 percent at the reporting date, also higher than the figure as at March 31, 2018 (13.3 percent).

Fig. 15 – REGULATORY CAPITAL RATIOS OF THE DZ BANK BANKING GROUP IN ACCORDANCE WITH THE CRR

%	Total capit	al ratio	Tier 1		non equity er 1 capital ratio		
		Mar.		Mar.		Mar.	
	Jun. 30,	31, J	un. 30,	31,	Jun. 30,	31,	
Entity	2018	2018	2018	2018	2018	2018	
DZ BANK banking							
group	16.8	16.6	15.0	14.5	13.7	13.3	

The increase in the capital ratios was primarily attributable to the sharp rise in own funds resulting from the inclusion of the profit for the period, as it had been reviewed by an auditor along with the interim financial statements. This more than made up for the growth in capital requirements. There were no other material changes to the DZ BANK banking group's capital adequacy compared with March 31, 2018.

4.4 Regulatory minimum capital requirements

The minimum capital requirements that the DZ BANK banking group has to comply with in 2018 comprise those components of Pillar 1 laid down as mandatory by law and those individually specified by the banking supervisor. Institution-specific requirements under the additional capital requirements in Pillar 2, determined in the outcome of the Supervisory Review and Evaluation Process (SREP) conducted for the DZ BANK banking group in 2017, also have to be satisfied.

Since 2017, the ECB has used a modified approach for determining the additional capital requirements under Pillar 2. In the new approach, the supervisor specifies a mandatory add-on (Pillar 2 requirement) that is factored into the basis of calculation for the maximum distributable amount (MDA). The add-on is determined from the findings of the SREP.

In 2017, BaFin issued a decision that DZ BANK would continue to be classified as an other systemically important institution (O-SII). The DZ BANK banking group has to comply with an **O-SII capital buffer** (comprising common equity Tier 1 capital) as defined in section 10g (1) KWG at a level of 0.66 percent in 2018.

Fig. 16 - REGULATORY MINIMUM REQUIREMENTS

% ¹	Jun. 30, 2018	Mar. 31, 2018
Minimum requirement for common equity Tier 1 capital	4.50	4.50
Additional Pillar 2 capital requirement ²	1.75	1.75
Capital conservation buffer	1.88	1.88
Countercyclical capital buffer	0.02	0.01
O-SII capital buffer	0.66	0.66
Mandatory minimum requirement for common equity Tier 1 capital	8.81	8.80
Minimum requirement for additional Tier 1 capital ³	1.50	1.50
Mandatory minimum requirement for Tier 1 capital	10.31	10.30
Minimum requirement for Tier 2 capital ⁴	2.00	2.00
Mandatory minimum requirement for total capital	12.31	12.30
1 Percentage values based on risk-weighted assets.		

2 Disclosure pursuant to article 438 sentence 1 letter b CRR.

3 The minimum requirement can also be satisfied with common equity Tier 1 capital

4 The minimum requirement can also be satisfied with common equity Tier 1 or additional Tier 1 capital.

In addition to this mandatory component, there is a recommended own funds amount under Pillar 2 (Pillar 2 guidance), which likewise is determined from the SREP, but unlike the mandatory component relates only to common equity Tier 1 capital. Although failure to comply with the own funds guidance under Pillar 2 does not constitute a breach of regulatory capital requirements, this figure is relevant as an early warning indicator for capital planning. The mandatory minimum capital requirements and their components applicable to 2018 and 2017 are shown in Fig. 16.

The mandatory and the recommended minimum capital requirements were complied with throughout the first half of 2018. This applies to both the minimum capital requirements under the currently applicable solvency regime (CRR transitional guidance) and the regime in force from 2019 (full application of the CRR). According to current projections, the requirements will also be satisfied in 2018. The internal minimum targets for the common equity Tier 1 capital ratio, the Tier 1 capital ratio, and the total capital ratio were satisfied at all times during the reporting period. The internal minimum targets are shown in Fig. 16.

4.5 Financial conglomerate solvency

DZ BANK was classified as a financial conglomerate by way of a decision issued by BaFin on December 2, 2015; DZ BANK AG acts as the financial conglomerate's parent company. **Financial conglomerate solvency** is the amount equating to the difference between the total of eligible own funds and the total of solvency requirements for the financial conglomerate. The coverage ratio is calculated by dividing own funds by the solvency requirement. This ratio must be at least 100 percent.

The additional capital requirements for the financial conglomerate were calculated in accordance with the provisions of sections 17 and 18 of the German Supervision of Financial Conglomerates Act (FKAG) and Commission Delegated Regulation (EU) No. 342/2014 dated January 21, 2014 to set technical standards for the calculation methods of capital adequacy requirements for financial conglomerates. Financial conglomerate solvency is reported to the supervisory authority annually. Consequently, solvency ratios for the DZ BANK financial conglomerate as at June 30, 2018 have not been disclosed.

The solvency ratios as at December 31, 2017 were finalized in the first half of this year. The DZ BANK financial conglomerate's eligible own funds as at December 31, 2017 amounted to €26,811 million (as at December 31, 2017 based on a provisional calculation: €27,459 million). On the other side of the ratio, the solvency

requirement amounted to €14,661 million (provisional solvency requirement as at December 31, 2017: €14,567 million). This gives a coverage ratio of 182.9 percent (provisional coverage ratio stated as at December 31, 2017: 188.5 percent), which is significantly in excess of the regulatory minimum requirement of 100 percent.

5 Credit risk

Sections 5.1 to 5.4 of this regulatory risk report disclose the credit quality of on-balance-sheet and off-balance-sheet exposures by exposure class and by risk approach. Following implementation of EBA/GL/2016/11, exposures in the overviews EU CR1-A (Fig. 17) to EU CR1-C (Fig. 19) have to be broken down according to whether they are in default pursuant to article 178 CRR or not. Section 5.5 contains disclosures on counterparty credit risk; in accordance with the guidelines mentioned above, information on securitizations has not been included in the credit risk disclosures.

Pursuant to Delegated Regulation (EU) No. 183/2014 dated December 20, 2013 specifying the calculation of specific and general credit risk adjustments, specific credit risk adjustments (SCRA) and general credit risk adjustments (GCRA) must be classified as types of provision in accordance with IFRS. The DZ BANK Group prepares consolidated financial statements and interim consolidated financial statements as at the reporting date in accordance with IFRS. All impairment losses recognized at group level therefore have to be classified as specific credit risk adjustments.

The tables below provide a comprehensive picture of the credit quality of the DZ BANK banking group's onbalance-sheet and off-balance-sheet exposures. The past-due or impaired exposures contained in the COREP report are examined separately, as are the loss allowances recognized. These exposures are broken down by the Standardized Approach to credit risk and the IRB approach and by exposure class, sector, and region.

5.1 Quantitative information on credit risk

5.1.1 Credit quality, past-due, non-performing, and forborne exposures (ARTICLE 442 SENTENCE 1 LETTERS G AND H CRR)

FIG. 17 contains details of exposures in default and in arrears, broken down by the Standardized Approach to credit risk (CRSA) and the IRB approach. Exposures are deemed to be in default if they meet the IRB approach's definition of default pursuant to article 178 CRR, which also applies to the Standardized Approach. They are in arrears if they are past due by more than 90 days.

As well as the requirements in the EBA guidelines, Fig. 17 also reflects the EBA's recommendation to list the following original exposure classes used for the Standardized Approach to credit risk: corporates, retail business, and exposures secured by mortgages on immovable property (in accordance with Questions & Answers (Q&A) 2017_3481 dated January 2018).

Fig. 18 and Fig. 19 below also reflect the criteria of this recommendation from the EBA.

Fig. 17 – EU CR1-A – CREDIT QUALITY OF EXPOSURES BY EXPOSURE CLASS AND INSTRUMENT

	а	b	c	d	e	f	g	
				Jun. 30, 2018				Dec. 31 2017
	Gross carry	Gross carrying amounts of		General credit risk adjustments	Accumulate d write- offs	Credit risk adjustment charges in the reporting period		Net values
€million	Defaulted exposures	Non- defaulted exposures					(a+b-c-d-e)	
1 Central governments or central banks	-	16,536	2		1	6	16,534	8,929
2 Institutions	30	30,663	11		62	30	30,681	29,157
3 Corporates	3,815	101,698	1,614	-	65	1,649	103,899	102,664
4 of which: specialized lending	515	26,648	256	-	13	321	26,907	27,203
5 of which: SMEs	46	8,886	33	-	0	43	8,900	8,723
6 Retail business	954	70,823	536	-	2	408	71,241	68,247
Exposures secured by mortgages on								
7 immovable property	633	56,369	173	-	2	71	56,828	54,060
8 of which: SMEs	-	-	-	-	-	-	-	
9 of which: non-SMEs	633	56,369	173	-	2	71	56,828	54,060
10 Qualified revolving	-	-	-	-	-	-	-	
11 Other retail business	321	14,454	363	-	1	337	14,412	14,187
12 of which: SMEs	-	2	-	-	0	-	2	Ĩ
13 of which: non-SMEs	321	14,452	363	-	1	337	14,410	14,185
14 Equity exposures	0	6,120	-	-	-	-	6,120	5,759
Other non-credit-obligation assets		28,138	-	-	0	67	28,138	2,103
15 TOTAL AMOUNT UNDER IRB APPROACH	4,799	253,977	2,164	-	130	2,160	256,612	216,860
of which: loans	4,569	165,121	2,059	-	130	1,997	167,631	155,729
of which: debt securities		19,045	5	-	0	0	19,039	18,680
of which: off-balance-sheet								
receivables	229	35,250	99	-	-	96	35,380	34,043
16 Central governments or central banks		63,349	2		0	1	63,347	45,408
Regional governments or local 17 authorities	16	34,411	45		0	4	34,382	39,135
18 Public-sector entities	0	10,485			0	1	10,483	10,873
19 Multilateral development banks		419			0	1	419	426
20 International organizations		605	0		0		605	898
21 Institutions	0	93,967	3		0	3	93,964	90,800
22 Corporates	369	13,830	250		137	287	13,950	14,972
23 of which: SMEs	85	2,489	61	-	2	67	2,513	2,414
24 Retail business	145	8,384	125		49	85	8,404	7,314
25 of which: SMEs	53	1,735	42		44	39	1,746	1,292
Secured by mortgages on immovable		1,733	12				1,740	1,202
26 property	16	5,298	14	-	-	3	5,299	5,232
27 of which: SMEs	5	2,726	0	-	-	-	2,731	2,735
28 Exposures in default	547	-	307	-	169	312	240	209
Exposures associated with particularly								
29 high risk	15	295	15	-	0	14	295	888
30 Covered bonds	-	523	0	-	-	0	523	197
Exposures to institutions and corporates								
31 with a short-term credit assessment	-	0	0	-	-	0	0	(
32 <u>CIUs</u>	-	2,390	-	-	-	-	2,390	2,662
33 Equity exposures		93	-	-	-	-	93	409
34 Other items	1	170	1	-	0	0	170	304
	560	224.240	458		186	396	224 222	310 534
35 STANDARDIZED APPROACH of which: loans	562 519	234,219		-		396	234,323 160,355	219,521
of which: debt securities	213	160,206	370			369		158,510
of which: debt securities of which: off-balance-sheet		41,029	44	-	0	1	40,985	32,423
of which: off-balance-sheet receivables	46	29,475	27			26	29,494	25,160
36 Total as at June 30, 2018	5,361	488,196	2,621		316	2,556	490,935	436,380

37	of which: loans	5,088	325,327	2,430	-	316	2,366	327,986	314,240
38	of which: debt securities	-	60,074	50	-	0	1	60,024	51,103
	of which: off-balance-sheet								
39	receivables	275	64,725	127	-	-	122	64,873	59,203
36	Fotal as at December 31, 2017	5,914	433,663	3,197	-	720	1,450		436,380

The gross carrying amounts of the exposures not in default increased from €433,663 million as at December 31, 2017 to €488,196 million as at the reporting date. This change was due to the expansion of new business in the banking group.

5.1.1.1 Past-due and non-performing exposures by sector (ARTICLE 442 SENTENCE 1 LETTER G CRR)

Fig. 18 shows **exposures** in default and not in default, broken down into **significant sectors**. Sectors of little significance to the DZ BANK banking group are aggregated in the 'other' row in Fig. 18.

Fig. 18 – EU CR1-B – CREDIT QUALITY OF EXPOSURES BY INDUSTRY

		а	b	c	d	e	f	g	
				•	Jun. 30, 2018				Dec. 31, 2017
		Gross carry	ing amounts of	Specific credit risk adjustments	General credit risk adjustments	Accumulat ed write- offs	Credit risk adjustment charges	Net values	Net values
		Defaulted	Non-					(a+b-c-d-e)	
		exposures	defaulted						
	€ million		exposures						
1	Financial sector	63	218,839	49	-	79	78	218,853	191,954
2	Public sector	16	48,457	49	-	1	5	48,424	51,719
3	Corporates and retail customers	5,282	218,062	2,523	-	236	2,473	220,820	189,333
4	Other	-	2,838	0	-	-	-	2,838	3,373
5	Total as at June 30, 2018	5,361	488,196	2,621	-	316	2,556	490,935	
	Total as at December 31, 2017	5,914	433,663	3,197	-	720	1,449		436,380

The higher gross carrying amounts for the finance sector and for corporates and retail customers were the result of increased new business in the DZ BANK Group. By contrast, the gross carrying amounts for the public sector and for 'other' changed only moderately, reflecting normal fluctuation.

5.1.1.2 Past-due and non-performing exposures by country group (ARTICLE 442 SENTENCE 1 LETTER H CRR)

Fig. 19 provides an overview of exposures in default and not in default, broken down into major geographical areas. Areas of little significance are aggregated in rows 10, 18, 26, and 32 as 'other countries' or 'other' in Fig. 19. Row 33 shows the institutions that are not assigned to a geographical area. The individual volumes in these rows do not exceed the limit of 5 percent of the entire exposure.
Fig. 19 - EU CR1-C - CREDIT QUALITY OF EXPOSURES BY GEOGRAPHY

		а	b	с	d	е	f	g	
					Jun. 30, 2018				Dec. 31 2017
			oss carrying amounts of	Specific credit risk adjustments	General / credit risk adjustments	Accumulate d write- offs	Credit risk adjustment charges	Net values	Net values
	Carillian	Defaulted exposures	Non- defaulted					(a+b-c-d-e)	
1	€ million	2 2 2 2 0	exposures	1 204		231	1,422	200 026	244 505
2	Germany Other industrialized countries	2,230	388,900	1,294	-	-	•	389,836	344,585
		1,355 53	72,946	591	-	39 0	434 2	73,711	65,562
3	France		5,277		-			5,309	3,681
1	United Kingdom	121	10,083	37	-	0	23	10,167	7,830
5	Luxembourg	17	5,430	17	-	0	15	5,431	4,656
5	Netherlands	94	3,966	51	-	0	62	4,009	4,104
/	Austria	36	3,660	44	-	0	39	3,652	3,681
3	Switzerland	29	9,935	2	-	24	9	9,963	8,675
)	United States	41	13,428	21	-	15	20	13,447	7,559
10	Other countries	964	21,167	398	-	0	263	21,733	23,300
11	Advanced economies	444	7,332	181	-	43	95	7,596	7,631
12	Hong Kong	70	524	21	-	0	21	573	642
13	Korea	0	573	0	-	0	0	572	576
14	Malta	61	446	20	-	0	22	487	483
15	Singapore	146	1,666	64	-	6	48	1,748	1,684
16	Slovakia	35	1,000	22	-	0	2	1,012	642
17	Czech Republic	96	2,619	41	-	1	1	2,673	2,732
18	Other countries	37	504	12	-	36	0	529	491
19	Emerging markets	1,331	15,560	556	_	4	605	16,335	15,701
20	Bermuda	116	744	71	-		62	789	823
21	China	3	1,618	11	-	0	1	1,610	1,607
22	Liberia	49	1,297	13	-	-	21	1,333	1,328
23	Marshall Islands	721	3,032	294	-	-	351	3,459	3,764
24	Turkey	0	927	1	-	0	4	925	965
25	Hungary	20	1,635	14	-	0	5	1,641	1,679
26	Other countries	422	6,307	151	-	4	160	6,578	5,536
27	Supranational organizations	-	2,524	0	-	0	-	2,524	1,804
28	Other European institutions, governing bodies, and organizations	_	412	0	_	_	_	411	467
29	European Financial Stability Facility		48	0	_		_	48	249
30	European Investment Bank		749	0	-		_	749	837
31	European Stability Mechanism	-			-		_	-	
32	Other	-	1,317	0	-	_	_	1,317	216
33	Not allocated to a geographical area		934	0			_	934	1,096
34	Total as at June 30, 2018	5,361	488,196	2,621	_	316	2,556	490,935	1,050
	Total as at December 31, 2017	5,914	100,150	3,197		720	1,449	450,555	436,380

Whereas the exposures in emerging markets, advanced economies, and supranational organizations remained largely unchanged, the exposures in Germany and other industrialized countries rose sharply due to the increase in new business at DZ BANK.

5.1.1.3 Maturity structure of past-due exposures

(ARTICLE 442 SENTENCE 1 LETTERS G AND H CRR)

Fig. 20 presents the maturity structure of past-due on-balance-sheet exposures in accordance with FINREP (Implementing Regulation (EU) No. 680/2014 dated April 16, 2014 amended by Implementing Regulation (EU) No. 2017/1443 dated June 29, 2017), disregarding whether they are impaired or not. In this table, the gross carrying amounts of past-due exposures are broken down by the number of days by which the longest past-due exposure of each customer is past due.

Fig. 20 - EU CR1-D - AGEING OF PAST-DUE EXPOSURES

		а	b	c		d	е	1			
	-	Gross carrying amounts									
	-	\leq 30 days	> 30 days	> 60 days	> 30 days	> 90 days	> 180 days	> 1 year			
	€million		\leq 60 days	\leq 90 days	\leq 90 days	\leq 180 days	\leq 1 year				
	Loans	342,593	-	-	140	397	403	1,418			
2	Debt securities	45,445	-	-	-	-	-				
	Total exposures as at June 30, 2018	388,037	-	-	140	397	403	1,418			
	Total exposures as at December 31, 2017	364,041	159	167	-	883	285	1,513			

Here too, the changes to the gross carrying amounts are attributable to the expansion of new business at DZ BANK. The breakdown and presentation of the maturity structure in FINREP table 18 was changed with effect from January 1, 2018 in connection with the transition from International Accounting Standard 39 (IAS 39) to IFRS 9. Following the switch to IFRS 9, the past-due exposures previously shown in Fig. 20 in the maturity bands > 30 days \leq 60 days and > 60 days \leq 90 days have been aggregated in a single maturity band: > 30 days \leq 90 days. The presentation in this regulatory risk report for the DZ BANK banking group has been amended to reflect the changed structure of FINREP table 18 as at the reporting date.

5.1.1.4 Non-performing and forborne exposures (ARTICLE 442 SENTENCE 1 LETTERS G AND I CRR)

Fig. 21 contains details of impaired and past-due exposures in accordance with FINREP, supplemented by information about non-performing and forborne receivables in accordance with Implementing Regulation (EU) No. 680/2014 amended by Implementing Regulation (EU) 2017/1443 and broken down into debt securities, loans and advances, and off-balance-sheet exposures.

A loan is classified as a forborne exposure (FBE = receivables where concessions have been made owing to financial difficulties) if the circumstances listed below occur:

- The borrower is in financial difficulties or is at risk of getting into financial difficulties, and
- The bank makes a concession, for which the bank does not receive compensation from the borrower. This concession is made due to the borrower's financial difficulties.

Debt restructuring is defined as a crisis-induced, possibly loss-making, but unavoidable change to existing borrowing arrangements. It is not aimed at reducing the amount owed. Instead, the interest payments and the repayments of principal are usually lowered. The objective is to enable the customer or the customer's individual receivables to recover.

Fig. 21 – EU CR1-E – NON-PERFORMING AND FORBORNE EXPOSURES AS AT JUNE 30, 2018

	а	b	c	d	e	f	g	h	i	j	k	I	m
		Gross carrying amounts of performing and non-performing exposures							ılated impairr ir value adjus			Collateral and guarantees r	
	-	Of which: performing but past	Of which: performing,	Of which: I	non-performin	g		On perform exposures	ing	On non-per exposures	forming	On non- performing	of which: forborne
€million		due > 30 days and \leq 90 days	forborne	-	of which: in default	of which: impaired	of which: forborne		of which: forborne		of which: forborne	exposures	exposures
010 Debt securities	45,445	-	-	213	99	172	0	-	-	98	-	-	-
020 Loans and advances	344,950	140	1,012	5,858	5,667	5,071	3,765	-	-	2,299	-	2,910	2,038
030 Off-balance-sheet													
exposures	63,281	9	845	21,304	451	17,914	1,026	-	-	· 199	-	33	-

Fig. 22 – EU CR1-E – NON-PERFORMING AND FORBORNE EXPOSURES AS AT DECEMBER 31, 2017

	а	b	c	d	e	f	g	h	i	j	k	ļ	m
		Gross carrying an	ounts of perform	ming and I	non-performing	g exposures				nent, provisio tments due to	-	Collateral and f guarantees re	
		Of which: performing but past	C Of which:	Of which: r	non-performing	9		On performi exposures	ng	On non-perf exposures	orming	On non- performing	of which: forborne
€ million		due > 30 days and \leq 90 days	performing, forborne	-	of which: in default	of which: impaired	of which: forborne		of which forborne		of which: forborne	exposures	exposures
010 Debt securities	53,604	-	-	123	59	123	0	-		2	-	-	-
020 Loans and advances	313,444	326	1,352	6,378	5,982	5,582	3,916	-		3,922	1,653	3,097	2,433
030 Off-balance-sheet exposures	58,014	12	1,187	13,693	532	244	88	-		283	89	37	29

As can be seen by comparing Fig. 21 as at June 30, 2018 with Fig. 22 as at December 31, 2017, the gross carrying amounts of the non-performing and performing receivables increased from €425,062 million to €453,676 million; the rise for loans and advances was particularly pronounced.

5.1.1.5 Changes in loss allowances for loans and advances (ARTICLE 442 SENTENCE 1 LETTER I CRR)

Fig. 23 shows the changes in the balance of general and specific credit risk adjustments for defaulting or impaired exposures. Only specific credit risk adjustments are relevant in the DZ BANK banking group. Consequently, no values are shown in column b of Fig. 23.

There have been no transfers between the individual credit risk adjustments so far in 2018 (Fig. 23, row 5). However, the income statement was directly affected by income from derecognized receivables amounting to €32 million (December 31, 2017: €113 million), expenses arising on changes to the balances of specific credit risk adjustments in an amount of €15 million (December 31, 2017: €40 million), and directly recognized impairment losses of €19 million (December 31, 2017: €38 million).

Fig. 23 – EU CR2-A – CHANGES IN THE STOCK OF GENERAL AND SPECIFIC CREDIT RISK ADJUSTMENTS

		а	b	а	b
		Jun. 30), 2018	Dec. 31	, 2017
	€million	Accumulated specific credit risk adjustment	5	Accumulated specific credit risk adjustment	-
1	Opening balance	3,086		2,566	
2	Increases due to amounts set aside for estimated loan losses during the period	27		1,753	
3	Decreases due to amounts reversed for estimated loan losses during the period	-28		-800	
4	Decreases due to amounts taken against accumulated credit risk adjustments	-18		-392	
5	Transfers between credit risk adjustments	0		0	
6	Impact of exchange rate differences	6		-34	
7	Business combinations, including acquisitions and disposals of subsidiaries			-	
8	Other adjustments	-359		-98	
9	Closing balance	2,714		2,996	
10	Recoveries on credit risk adjustments recorded directly to the income statement	-32		-113	
11	Specific credit risk adjustments recorded directly to the income statement	15		40	
12	Direct write-downs or write-offs	19		38	
13	Recoveries on direct write-downs or write-offs	-		-	

The balance of specific credit risk adjustments decreased by a total of €282 million in the reporting period. This largely reflected the decrease in loss allowances at DZ BANK. In particular, the increase due to amounts set aside for estimated loan losses during the reporting period (Fig. 23, row 2) fell substantially compared with December 31, 2017. Supplementing the flow statement for credit risk adjustments in Fig. 23, Fig. 24 shows the balance of defaulting and impaired loans and debt securities, thereby providing a flow statement for exposures in default. Based on the scope of consolidation for regulatory purposes, the values disclosed correspond to the IFRS carrying amounts at the reporting date after deduction of impairment losses.

Fig. 24 - EU CR2-B - Changes in the stock of defaulted and impaired loans and debt securities

		Jun. 30, 2018	Dec. 31, 2017
	€million	Gross carrying amount of defaulted exposures	Gross carrying amount of defaulted exposures
1	Opening balance	6,610	5,746
2	Loans and debt securities that have defaulted or been impaired since the last reporting period	914	1,324
3	Returned to non-defaulted status	309	123
4	Amounts written off	941	2,327
5	Other changes	-914	1,990
9	Closing balance	5,361	6,610

Loans and debt securities in default (row 2) decreased by €1,249 million in the first half of 2018, primarily due to the reduction in loss allowances in the banking group. Loans and debt securities that have defaulted or been impaired since the last reporting period (row 2) and amounts written off (row 4) were both far lower as at the reporting date than as at December 31, 2017.

5.2 Use of credit risk mitigation techniques

5.2.1 Quantitative information on credit risk mitigation

(ARTICLE 453 SENTENCE 1 LETTERS F AND G CRR)

This section contains information about exposures backed by financial collateral, other collateral, guarantees, and credit derivatives.

Fig. 25 and Fig. 26 provide an overview of the extent to which credit risk mitigation techniques are used in the DZ BANK banking group. The tables also show the secured and unsecured exposures. All collateral, financial guarantees, and credit derivatives used to mitigate the credit risk of the secured exposures are listed, irrespective of whether the risk-weighted assets are calculated under the Standardized Approach (simple and comprehensive method of recognizing financial collateral) or under the IRB approach. The figures shown for credit risk mitigation in each case are the regulatory risk-weighted values.

For certain IRBA assets held by BSH, DG HYP, DVB, and WL BANK, the mortgage-related or real-estate collateral recognized for credit risk mitigation purposes is included in the calculation of capital requirements as LGD.

Fig. 25 – EU CR3 – CREDIT RISK MITIGATION TECHNIQUES – OVERVIEW AS AT JUNE 30, 2018

		а	b	c	d	e
	- € million	Unsecured exposures – carrying amount	Secured exposures – carrying amount	Exposures secured by collateral	Exposures secured by financial guarantees	Exposures secured by credit derivatives
1	Central governments or central					
	banks	14,505	2,032	1,742	248	-
2	Institutions	20,763	9,990	7,225	444	-
3	Corporates	56,971	44,890	29,682	2,609	-
4	of which: specialized lending	13,773	10,670	7,464	1,004	-
5	of which: SMEs	3,200	5,732	108	332	-
6	Retail business	13,386	57,860	41,084	66	-
7	Exposures secured by mortgages on immovable property	942	55,892	40,510	26	_
8	of which: SMEs	-				-
9	of which: non-SMEs	942	55,892	40,510	26	-
10	Qualified revolving	-	-	-	-	-
11	Other retail business	12,444	1,968	575	41	-
12	of which: SMEs	2	-	-	-	-
13	of which: non-SMEs	12,442	1,968	575	41	-

	-	а	b	c	d	e
	€million	Unsecured – exposures carrying amount	Secured exposures – carrying amount	Exposures secured by collateral	Exposures secured by financial guarantees	Exposures secured by credit derivatives
14	Equity exposures	2,661	7	7	guarantees	
-	Other non-credit-obligation assets	2,001	4			
16	TOTAL AMOUNT UNDER IRB APPROACH	136,420	114,784	79,740	3,368	-
17	of which: loans	62,819	105,319	72,099	2,946	-
18	of which: debt securities	15,572	3,472	3,077	-	-
19	of which: in default	1,359	3,446	3,071	179	-
20	Central governments or central banks	63,326	21	5	-	-
21	Regional governments or local authorities	34,258	108	75	2	-
22	Public-sector entities	9,479	1,004	235	611	-
23	Multilateral development banks	419	-	-	-	-
24	International organizations	605	-	_	_	-
25	Institutions	93,711	253	160		-
26	Corporates	11,052	2,924	970	1,312	-
27	of which: SMEs	2,157	345	19	223	-
28	Retail business	7,598	765	399	1	-
29	of which: SMEs	3,689	16	3	1	-
30	Secured by mortgages on immovable property	_	5,090	1,384	-	-
31	of which: SMEs	-	2,704	-	-	-
32	Exposures in default	217	23	7	6	-
33	Exposures associated with particularly high risk	262	33	-	-	-
34	Covered bonds	523	-	-	-	-
35	Exposures to institutions and corporates with a short-term credit assessment	0				
36	CIUs	2,390	-	-	-	-
37	Equity exposures	93	-	-	-	-
38	Other items	169	-			-
39	TOTAL AMOUNT UNDER STANDARDIZED APPROACH	224,103	10,220	3,236	1,933	-
40	of which: Ioans	154,278	8,426	2,483	1,404	-
41	of which: debt securities	40,152	833	171	442	-
42	of which: in default	218	23	7	6	-
43	Total exposures	360,523	125,005	82,976	5,300	_
44	of which: Ioans	217,098	113,745	74,582	4,350	-
45	of which: debt securities	55,724	4,306	3,248	442	-
46	of which: in default	1,578	3,468	3,078	185	-

Fig. 26 – EU CR3 – CREDIT RISK MITIGATION TECHNIQUES – OVERVIEW AS AT DECEMBER 31, 2017 b

а

d

с

е

42

	€million	Unsecured exposures – carrying amount	Secured exposures – carrying amount	Exposures secured by collateral	Exposures secured by financial guarantees	Exposures secured by credit derivatives
1	Central governments or central banks	7,866	1,063	648	-	
2	Institutions	20,610			489	
3	Corporates	53,341	49,323			
4	of which: specialized		-10,020	52,105	2,001	·
	lending	15,340	11,863	8,630	919	
5	of which: SMEs	2,195	6,528	125	337	
6	Retail business	16,486	51,761	39,955	66	
7	Exposures secured by mortgages on immovable property	4,277	49,783	39,490	29	
8	of which: SMEs	.,				
9	of which: non-SMEs	4,277	49,783	39,490	29	
10	Qualified revolving					
11	Other retail business	12,209	1,978	465	37	·
12	of which: SMEs	2	· · · ·			
13	of which: non-SMEs	12,207	1,978	465	37	
14		5,752			0	
14	1	5,752			0	
13	assets	2,102	1	0	0	1
16	TOTAL AMOUNT UNDER IRB APPROACH	106,157				
17	of which: loans	54,512	100,139	70,955	3,160	
18	of which: debt securities	16,639				
19	of which: in default	1,995	3,676		190	
20	Central governments or central banks	45,408				
21	Regional governments or local authorities	39,071	49	17	3	
22	Public-sector entities	9,876	998	291	611	
-	Multilateral development banks	426				
24	International organizations	898	-	-	-	
	Institutions	90,376	424	356		
26	Corporates	10,757	4,318	1,843	1,347	
27	of which: SMEs	1,788	354	11	242	
28	Retail business	6,295	995			
29	of which: SMEs	1,261	22			
30	Secured by mortgages on immovable property	3,586				
31	of which: SMEs	394				-
32		182		2	13	
_	Exposures associated with particularly high risk	888				
34	Covered bonds	197				
35	Exposures to institutions and corporates with a short-term					
_	credit assessment	0				
	CIUs	2,662				
37		409				
	Other items TOTAL AMOUNT UNDER	304				·
	STANDARDIZED APPROACH	211,335				
40	of which: loans	152,543				
41	of which: debt securities	31,843				
42	of which: in default	186				
43	Total exposures	316,067	118,888	83,116	5,697	
44	of which: Ioans	207,055	106,231	74,009	4,650	
15	of which:	207,055	100,231	74,009	4,050	
45	debt securities	48,481	2,622	1,802	427	
46	of which: in default	2,180	3,703	3,254	203	

Disclosures about the use of credit risk mitigation techniques under the Standardized Approach can be found in section 5.3 of this risk report, whereas information about credit risk mitigation techniques under the IRB approach is provided in section 5.4.

5.3 Credit risk and techniques for mitigating credit risk under the Standardized Approach

5.3.1 Transfer of credit ratings for bond issues to assets (ARTICLE 444 LETTER C CRR)

External credit ratings awarded by recognized rating agencies or export insurance agencies are applied to assets of the DZ BANK banking group in accordance with the requirements of articles 137 to 141 CRR and apply to all exposure classes used for the Standardized Approach to credit risk listed in article 112 CRR in which external credit ratings are used. To assess creditworthiness, the DZ BANK banking group draws on all of the main external rating sources that are available in the reporting software. The logic used by this software is described below.

In cases where an exposure-specific credit rating is not available for an exposure, and only an issuer-specific credit rating or a credit rating for another of the issuer's issues is available, DZ BANK applies this credit rating to the unrated exposure in accordance with the criteria of article 139 CRR. The available credit rating is applied if it produces a higher risk weighting than for the unrated exposure and the unrated exposure's ranking is equal to or lower than that of the rated exposure, or if it produces a lower risk weighting than for the unrated exposure (article 139 (2) sentence 1 letter b CRR). If these conditions are not met, the exposure is treated as unrated pursuant to article 139 (2) sentence 2 CRR.

No bond issue credit ratings are transferred to comparable exposures of equal or higher ranking.

Currently, the DZ BANK banking group does not use the aforementioned process for applying credit ratings of issuers and issues to exposures in the banking book as it is not relevant.

DZ BANK uses the standard assignment of credit ratings as published by the EBA. Therefore, no separate disclosure pursuant to article 444 letter d CRR is required.

5.3.2 Quantitative information on use of the Standardized Approach

(ARTICLE 444 LETTER E; ARTICLE 453 SENTENCE 1 LETTERS F AND G CRR)

Fig. 27 shows the exposures broken down by exposure class under the Standardized Approach to credit risk where such exposures are secured by financial collateral, life insurance, or guarantees. The figures for credit risk mitigation in each case are the regulatory risk-weighted values.

In this context, the exposures assigned to the exposure classes under the Standardized Approach to credit risk are shown before and after credit risk mitigation under the Standardized Approach. The classification of transactions in the regulatory risk-weighting categories depends on how the transactions are classified in the regulatory exposure classes, on the credit ratings of borrowers and transactions, and on the particular collateral provided. The sum total of exposures after credit risks have been mitigated under the Standardized Approach to credit risk arises from the provision of personal collateral for IRBA transactions by protection providers treated according to the Standardized Approach to credit risk.

In some cases, the exposures reported after credit risk mitigation are larger than exposures before credit risk mitigation. This is because exposures after credit risks have been mitigated include exposures reported under the IRB approach that are backed by protection providers, in particular guarantors, treated according to the Standardized Approach to credit risk.

€million								R	isk weig	hting (%)					
Exposure class	0	2	4	10	20	35	50	70	75	100	150	250	370	1,250	Other	Capital deducti on
					EXP	OSURE	BEFORE	CREDI	T RISK N	IITIGATIO	N					
Central governments and central banks	62,551	-	-	-	258	-	15	-		3	-	527	-	-		. <u> </u>
Regional governments or local authorities	33,796	-	-	-	729	-	202	-		3	-	-	-	-		. <u>-</u>
Other public-sector entities	10,097	-	-	-	291	-	213	-	-	306	-	-	-	-	-	
Multilateral development banks	406	-	-	-	13	-	-	-	-	0	-	-	-	-	-	
International organizations	606	-	-	-		-		-	-	0	-	-	-	-		
Institutions	80,159	-	-	-	1,255	-	17	-	-	19	-	-	-	-	-	
Corporates	11	-	-	-	985	-	1,441	-	-	10,989	1	-	-	-	4	-
Retail business	-	-	-	-	-	-	-	-	4,870	-	-	-	-	-	-	
Exposures secured by mortgages on immovable property	-	-	-	-	-	2,387	2,921	-	-	-	-	-	-	-		· · _
Past-due exposures	-	-	-	-	-	-	-	-	-	132	99	-	-	-	-	
Exposures associated with particularly high risk	-	-	-	-	0	-	-	-	-	-	183	-	-	-	-	
Covered bonds	226	-	-	61	235	-	-	-	-	-	-	-	-	-	-	
Institutions and corporates with a short-term credit assessment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CIUs	-	-	-	-	-	-	-	-	-	13	-	-	-	-	2,377	-
Long-term equity investments	-	-	-	-	-	-	-	-	-	75	-	17	-	1	-	-
Other items	7	-	-	-	5	-	-	-	-	67	-	-	-	89	-	
Total as at June 30, 2018	187,861	-	-	61	3,770	2,387	4,810	-	4,870	11,607	282	545	-	90	2,381	-
Total as at December 31, 2017	173,547	-	-	-	5,203	2,405	4,879	-	7,181	12,424	871	863	-	76	2,638	-

Fig. 27 – CRSA EXPOSURES BEFORE CREDIT RISK MITIGATION BY RATING CATEGORY

The increase in the exposures in the 0 percent risk weighting class mainly results from buoyant new business with institutions in the cooperative financial network. The decrease in the exposures in the 150 percent risk weighting class is due to the reclassification of the VR Flexibel product at VR LEASING from the exposures associated with particularly high risk exposure class to the retail business and corporates exposure classes. The fluctuation in the other risk weighting classes compared with December 31, 2017 was normal.

5.3.2.1 Credit risk and the effects of credit risk mitigation under the Standardized Approach (ARTICLE 453 LETTERS F AND G CRR)

Fig. 28 shows the effect of all the credit risk mitigation techniques used by DZ BANK as at the reporting date resulting from the recognition of financial collateral when calculating the capital requirements under the Standardized Approach in the DZ BANK banking group. In accordance with the requirements, receivables subject to counterparty credit risk or the frameworks for securitizations are not included in this table. RWA density is calculated by dividing exposures after credit conversion factor and credit risk mitigation by the total sum of risk-weighted assets. The values in this table are based on the regulatory figures according to the COREP report.

		а	b	c	d e	e f	:		
	€million	Exposures b conversion fac risk mit	tor and credit	Exposures a conversion fac risk mit	tor and credit	RWAs and R	RWAs and RWA density		
F	oosure class	On-balance-	Off-balance- sheet amount	On-balance- sheet amount	Off-balance-	RWAs	RWA density		
1	Central governments or central banks	63,375	13	65,536	182	1,398	(%)		
1		03,375	13	00,030	182	1,398	Z.13		
2	Regional governments or local authorities	34,042	324	34,412	178	247	0.71		
3	Public-sector entities	10,485	-	9,688	2	71	0.73		
4	Multilateral development banks	419	-	419	-	3	0.61		
5	International organizations	605	-	605	-	-	0.00		
6	Institutions	74,364	19,957	75,052	2,740	219	0.28		
7	Corporates	9,332	5,808	7,721	1,976	8,548	88.14		
8	Retail business	4,376	4,235	4,240	418	3,190	68.49		
9	Secured by mortgages on immovable property	5,429	149	5,323	76	2,477	45.87		
10	Exposures in default	216	23	209	20	276	120.44		
11	Exposures associated with particularly high risk	481	116	481	4	728	150.00		
12	Covered bonds	523	-	523	-	53	10.17		
13	Institutions and corporates with a short- term credit assessment	21		21	_	0	0.60		
14	CIUs	2,390	-	2,390	-	1,681	70.32		
15	Long-term equity investments	88	-	88	-	95	107.19		
16	Other items	389	89	527	101	1,355	215.58		
17	Total as at June 30, 2018	206,536	30,714	207,237	5,698	20,339	9.55		
	Total as at December 31, 2017	193,320	26,164	193,362	5,113	19,979	9.96		

Fig. 28 – EU CR4 – STANDARDIZED APPROACH – CREDIT RISK EXPOSURE AND CREDIT RISK MITIGATION EFFECTS

In Fig. 28, the on-balance-sheet and off-balance-sheet exposure values before credit conversion factor and credit risk mitigation rose sharply overall, by €17,766 million, (columns a and b) in the reporting period due to the growth of new business at DZ BANK. This growth was again mainly driven by business with the Volksbanken Raiffeisenbanken cooperative financial network. Because the risk assets of the Volksbanken Raiffeisenbanken cooperative financial network are given a weighting of zero, the risk-weighted assets increased only moderately, by €360 million.

The biggest changes in the risk-weighted assets outside the risk categories mentioned above were registered in the following components of the risk-weighted assets:

- Corporates: up by €828 million (December 31, 2017: €7,720 million),
- Retail business: up by €377 million (December 31, 2017: €2,813 million), and
- Business secured by mortgages on immovable property: up by €341 million (December 31, 2017: €2,136 million).

By contrast, the risk-weighted assets in the CIUs exposure class stood at €1,681 million and were thus down by €1,853 million compared with December 31, 2017.

5.3.2.2 Breakdown of exposures by risk weighting under the Standardized Approach (ARTICLE 444 LETTER E CRR)

Fig. 29 provides a breakdown of the DZ BANK banking group's regulatory exposures at the reporting date, broken down by risk weighting under the Standardized Approach. The table also shows the exposures broken down by credit conversion factor and credit risk mitigation techniques.

Fig. 29 – EU CR5 – STANDARDIZED	APPROACH – CREDIT RISK BY	EXPOSURE CLASS AND RISK WEIGHTING

Exp	oosure class								Risk	weigł	nting (%	6)						Total	of which: unrate d
	€ million	0	2	4	10	20	35	50	70	75	100	150	250	370	1,250	Other	Deduc ted		<u> </u>
1	Central governments or central banks	64,879	_	-	-	258	-	51	_	-	3	-	527	_	-	0	-	65,718	55,344
2	Regional governments or local authorities	33,665	-	-	-	722	-	202	_	-	1	-	-	_	-	0	-	34,590	33,078
3	Public-sector entities	9,458	-	-	-	181	-	34	-	-	17	-	-	-	-	-	-	9,690	9,235
4	Multilateral development banks	406	-	-	-	13	-	_	-	-	_	_	-	-	-	-	_	419	391
5	International organizations	605	-	-	-	-	_	-	-	-		-	-	-	-	-	_	605	605
6	Institutions	76,806	-	-	-	948	-	17	-	-	20	-	-	-	-	-	-	77,792	76,967
7	Corporates	47	-	-	-	779	0	902	4	-	7,960	0	-	-	-	4	-	9,698	6,782
8	Retail business	-	-	-	-	0	-	-		4,658	-	-	-	-	-	-	-	4,658	2,364
9	Secured by mortgages on immovable property	-	_	_	-	0	2,245	2,865	_	-	290	-	-	_	-		-	5,399	5,082
10	Exposures in default	-	-	-	-	0	_	_	_	_	135	94	-	_	-		-	229	200
11	Exposures associated with particularly high risk	_	_	-	_	0	_	_	-	_	_	485	_	_	-	-	_	485	183
12	Covered bonds	226	_	_	61		_	_	_	_	_		_	_	_		_	523	270
13	Institutions and corporates with a short-term credit assessment	21		_	_	_	_	-	_	_		0	_	_				21	
14	Collective investment undertakings	_	_	_	_	_	_	_	_	_	13	_	_	_	0	2,377	_	2,390	2,390
15	Long-term equity investments	-	_	-		_	_	_	_	_	88	-	-	-	1		_	88	18
16	Other items	245	-	-	-	11	-	-	-	-	234	-	-	-	89	50	-	628	295
17	Total as at June 30, 2018	186,360	_	-	61	3,147	2,245	4,071	4	4,658	8,762	579	527	-	90	2,431	-	212,935	196,296
	Total as at December 31, 2017	172,135	-	-	-	4,171	2,262	4,010	5	4,041	7,585	721	863	-	76	2,608	-	198,478	146,403

Fig. 29 shows exposures of €212,935 million as at June 30, 2018 (December 31, 2017: €198,478 million). The increase in the exposures in the 0 percent risk weighting class mainly results from the growth of new business

with institutions in the Volksbanken Raiffeisenbanken cooperative financial network. The decrease in the exposures in the 150 percent risk weighting class – as already stated in sections 4.2 and 5.3.2 – is due to the reclassification of the VR Flexibel product at VR LEASING from the exposures associated with particularly high risk exposure class to the retail business and corporates exposure classes. The fluctuation in the other risk weighting classes compared with December 31, 2017 was within the normal range.

5.4 Credit risk and techniques for mitigating credit risk under the IRB approach (ARTICLE 452 SENTENCE 1 LETTER A CRR)

This section of the DZ BANK banking group's regulatory risk report contains only disclosures relating to the use of IRBA models to determine credit risk.

Exposures subject to the framework for securitizations or to counterparty credit risk are not included in the tables in this section.

5.4.1 Quantitative information on use of the IRB approach (ARTICLE 452 SENTENCE 1 LETTERS D TO H CRR)

Fig. 30 and Fig. 31 show the lending volumes under the IRB approach for borrowers and transactions that are classified on the basis of internal credit ratings. The rating systems used internally are unambiguously assigned to one regulatory exposure class. The borrowers/transactions are assigned to a credit rating category based on their individual rating in the form of their specific default probability or the expected loss for a rating category.

5.4.1.1 Lending volume broken down by PD category under the foundation IRB approach (ARTICLE 452 SENTENCE 1 LETTERS D TO G CRR)

Fig. 30 shows the parameters used in the DZ BANK banking group to calculate the capital requirements on the basis of IRB rating systems. The exposure classes are broken down by PD category so that the credit quality of the portfolio can be assessed. The on-balance-sheet exposures before credit conversion factor and the off-balance-sheet exposures before credit risk mitigation are disclosed in columns a and b, while columns c to l contain the regulatory values, e.g. average values for PD, LGD, and term to maturity, as well as the RWAs and their density, expected loss (EL), and loan loss allowances and provisions for each exposure class.

The disclosures are based on the exposure classes (central governments and central banks, institutions, corporates, and long-term equity investments) under the IRB approach and are also broken down by PD category. The exposure for undrawn credit lines is calculated by applying the credit conversion factors to the carrying amount. The average risk weightings reveal borrowers' credit ratings and the extent to which transactions are collateralized. The number of borrowers in each exposure class is also stated.

PD scale	a	b	c	d	е	f	g	h	i	j	k	<u> </u>
	Original	Off-	Average	EAD	Average	Number	Average		RWAs	RWA	EL	Loan loss
		balance-	CCF	after	PD	of		maturity		density		allowanc
	balance-	sheet	(%)	credit	(%)	borrower	(%)	(days)		(%)		es and
€million		exposure s pre-CCF		risk mitigatio		S						provision s
(unless indicated	exposure	s pre-cci		n and								3
otherwise)	S			after CCF								
Central governme	nts and cen	tral banks										
0.00 to < 0.15	15,269	61	35.62	15,912	0.01	30	41.97	841	1,259	7.91	1	0
0.15 to < 0.25	33	48	75.00	. 69	0.23	5	45.00	900	. 35	50.17	0	0
0.25 to < 0.50	108	-	-	108	0.50	14	45.00	913	60	55.55	0	0
0.50 to < 0.75	27	53	75.00	20	0.50	4	45.00	900	15	73.79	0	0
0.75 to < 2.50	697		_	697	1.08	21	2.92	216	39	5.53	0	0
2.50 to < 10.00	105	-	-	43	6.43	17	32.95	900	57	132.71	1	-2
10.00 to < 100.00	126	10	69.17	6	14.00	11	45.00	900	14	228.38	0	0
100.00 (default)		-	-	-	-		-	-	-	-	-	-
SUBTOTAL	16,365	172	60.68	16,855	0.08	103	40.37	816	1,478	8.77	3	-3
Institutions	10,505	172	00.00	10,000	0.00	105	10.37	010	1,170	0.77		
0.00 to < 0.15	18,828	1,421	49.02	20,080	0.06	433	26.08	744	3,047	15.17	3	-2
0.15 to < 0.25	4,422	55	35.29	4,449	0.00	145	12.79	671	695	15.62	1	-2
0.25 to < 0.50	2,238	33	45.25	2,243	0.18	58	12.79	894	740	32.99	1	-2
0.50 to < 0.75		77	31.10	417	0.55	56	24.34	868	201	48.21	1	-1
	1,272	231	30.57	1,059	0.99	120	34.69	900	989	93.34	4	-1
0.75 to < 2.50 2.50 to < 10.00	1,272	98	38.28	70	7.13	48	26.46	900	81	115.56	4	-5
	-											
10.00 to < 100.00	94	56	46.10	80	41.37	<u>62</u> 5	44.96	900	207	257.22	8	-1
100.00 (default)	89	1.070	45.40	89	100.00		45.00	900	-	-	40	-61
SUBTOTAL	27,449	1,970	45.10	28,489	0.59	927	23.84	753	5,960	20.92	59	-73
Corporates – SME		474	75.40	4 400	0.07	644	26.25	012	606	12 50	4	4
0.00 to < 0.15	4,132	474	75.49	4,489	0.07	644	36.35	913	606	13.50	1	-1
0.15 to < 0.25	786	175	52.91	878	0.22	286	39.09	909	228	25.98	0	0
0.25 to < 0.50	658	172	49.04	741	0.35	211	38.85	908	261	35.26	1	0
0.50 to < 0.75	321	173	59.45	423	0.50	177	40.48	905	216	51.01	1	0
0.75 to < 2.50	826	544	50.27	1,088	1.10	653	42.33	903	829	76.23	5	-3
2.50 to < 10.00	174	119	62.37	246	4.08	202	43.49	901	298	121.08	4	-2
10.00 to < 100.00	327	6	78.98	13	17.96	68	41.86	902	24	181.09	1	0
100.00 (default)	23	23	94.87	45	100	67	44.32	900	0	-	20	-26
SUBTOTAL	7,246	1,686	60.01	7,924	1.00	2,308	38.21	910	2,463	31.08	33	-33
Corporates – speci	_					507				~~~~	-	
0.00 to < 0.15	7,968	298	81.53	8,190	0.07	527	39.75	900	1,915	23.38	2	
0.15 to < 0.25	3,678	735	77.62	4,190	0.20	278	41.39	900	1,804	43.06	4	-2
0.25 to < 0.50	2,915	1,310	73.84	3,759	0.35	214	43.06	900	2,300	61.19	6	-4
0.50 to < 0.75	1,390	496	73.82	1,704	0.50	193	44.24	900	1,251	73.38	4	-3
0.75 to < 2.50	3,144	692	76.26	3,102	0.96	342	44.00	900	2,933	94.56	13	-13
2.50 to < 10.00	401	114	75.86	268	3.60	85	43.89	900	373	139.29	4	-4
10.00 to < 100.00	13	1	93.00	12	15.58	33	39.84	900	26	217.73	1	-1
100.00 (default)	521	6	80.58	509	100.00	111	44.39	900	-		226	-233
SUBTOTAL	20,029	3,654	75.76	21,735	2.70	1,783	41.76	900	10,603	48.78	260	-261
Corporates – purc	-											
0.00 to < 0.15	3,391	242	67.82	3,555	0.07	1	36.47	913	607	17.08	1	-1
0.15 to < 0.25	584	37	78.69	613	0.16	4	36.82	913	159	25.91	0	0
0.25 to < 0.50	210	66	75.00	258	0.35	3	38.02	912	87	33.83	0	0
0.50 to < 0.75	80	119	92.24	190	0.50	9	35.70	912	77	40.39	0	0
0.75 to < 2.50	201	124	75.00	294	0.99	10	37.35	912	177	60.09	1	0
2.50 to < 10.00	14	-	-	14	6.12	7	42.19	904	21	147.21	0	0
10.00 to < 100.00	-	-	-	-	-	0	-	-	-	-	-	-
100.00 (default)	-	-	-	-	-	0	-	-	-	-	-	-
SUBTOTAL	4,481	588	75.78	4,926	0.19	34	36.64	913	1,128	22.91	2	-1
Corporates – othe	r											
0.00 to < 0.15	8,668	4,153	60.83	11,256	0.07	823	42.74	897	2,623	23.31	3	
0.15 to < 0.25	6,064	6,495	62.59	10,100	0.19	783	43.56	900	4,422	43.78	8	
0.25 to < 0.50	2,712	2,507	49.92	3,820	0.35	547	43.99	900	2,332	61.05	6	-3
0.50 to < 0.75	2,712	3,188	49.89	4,208	0.50	560	44.40	900	3,070	72.97	9	-4
0.75 to < 2.50	3,997	3,281	47.53	5,260	1.05	972	44.31	900	5,098	96.92	25	-15

Fig. 30 - EU CR6 - IRB APPROACH - CREDIT RISK EXPOSURES BY EXPOSURE CLASS AND PD RANGE (FIRB)

PD scale	а	b	с	d	е	f	g	h	i	j	k	I
	Original	Off-	Average	EAD	Average	Number	Average	Average	RWAs	RWA	EL	Loan loss
	on-	balance-	CCF	after	PD	of	LGD	maturity		density		allowanc
	balance-	sheet	(%)	credit	(%)	borrower	(%)	(days)		(%)		es and
		exposure		risk		S						provision
€ million	5	s pre-CCF		mitigatio								S
(unless indicated	exposure			n and								
otherwise)	S			after CCF								
2.50 to < 10.00	859	334	54.78	660	3.59	195	44.64	900	938	142.10	11	-11
10.00 to < 100.00	38	70	15.98	21	16.44	1,350	44.06	900	47	229.30	1	-1
100.00 (default)	708	103	76.47	626	100.00	234	44.33	900	-	-	278	-356
SUBTOTAL	25,758	20,133	55.96	35,950	2.14	5,464	43.59	899	18,530	51.55	341	-395
Long-term equity in	nvestment	s										
0.00 to < 0.15	36	-	-	36	0.09	5	71.64	1,800	28	76.81	0	-
0.15 to < 0.25	1	-	-	1	0.23	12	90.00	1,800	1	151.43	0	-
0.25 to < 0.50	-	-	-	-	-	3	-	-	-	-	-	-
0.50 to < 0.75	-	-	-	-	-	3	-	-	-	-	-	-
0.75 to < 2.50	30	-	-	30	1.70	2	90.00	1,800	91	300.26	0	-
2.50 to < 10.00	1	-	-	1	5.57	2	90.00	1,800	6	392.45	0	-
10.00 to < 100.00	-	-	-	-	-	0	-	-	-	-	-	-
100.00 (default)	0	-	-	0	100.00	3	90.00	5	-	-	0	-
SUBTOTAL	68	-	-	68	0.93	30	80.33	1,800	125	182.92	1	-
Total of all												
portfolios as at												
June 30, 2018	96,916	27,615	58.08	111,021	1.46	10,649	37.31	851	39,158	35.27	695	-765
Total of all												
portfolios as at												
December 31, 2017	90,888	27,520	59.18	104,775	3.46	10,573	36.96	780	38,882	37.11	951	-1,469

The growth of on-balance-sheet and off-balance-sheet exposures is due to the larger volume of new business at DZ BANK. The risk-weighted assets increased only moderately due to the low average PDs. Expected losses (EL) decreased compared with December 31, 2017 as a result of the lower average PDs and LGDs. The reduction in loan loss allowances and provisions is attributable to the lower level of loss allowances at DZ BANK this year.

5.4.1.2 Lending volume broken down by PD category under the advanced IRB approach (ARTICLE 452 SENTENCE 1 LETTERS D TO G CRR)

Fig. 31 shows the transactions assigned to the advanced IRB approach, broken down by exposure class pursuant to article 147 CRR. Within the exposure classes, they are allocated to one of 8 PD categories.

PD scale	а	b	c	d	е	f	g	h	i	j	k	
	Original			EAD								
	on-			after								
	balance-	Off-		credit								Loan los
	sheet	balance-		risk		Number						allowand
€million	gross			mitigatio	-		Average	-		RWA		es and
(unless indicated			CCF			borrower		maturity		density		provisior
otherwise)	S	s pre-CCF	(%)	after CCF	(%)	S	(%)	(days)	RWAs	(%)	EL	9
Central government	ts and cen	tral banks										
0.00 to < 0.15	-	-	-	-	-	-	-	-	-	-	-	
0.15 to < 0.25	-	-	-	-	-	-	-	-	-	-	-	
0.25 to < 0.50	-	-	-	-	-	-	-	-	-	-	-	
0.50 to < 0.75	-	-	-	_	-	-	-	-	-	-	_	
0.75 to < 2.50	-	-	-	-	-	-	-		-	-	-	
2.50 to < 10.00	-	-	-	-	-	-	-		-	-	-	
10.00 to < 100.00	_	_	_	_	_	_	_	_	_	_	_	
100.00 (default)					_							
SUBTOTAL												
		-	-	-	-	-			-	-		
nstitutions										40.00		
0.00 to < 0.15	120	-	-	120	0.08	10	81.00	1	16	13.03	0	
0.15 to < 0.25	-	-	-	-	-	-	-	-	-	-	-	
0.25 to < 0.50	27	-	-	27	0.35	2	81.00	1	21	78.46	0	
0.50 to < 0.75	94	-	-	94	0.50	1	81.00	2	4	4.74	0	
0.75 to < 2.50	-	-	-	-	-	-	_	-	-	-	-	
2.50 to < 10.00	-	-	-	-	-	-	-	-	-	-	-	
10.00 to < 100.00	-	-	-	-	-	-	-	-	-	-	-	
100.00 (default)	-	-	-	-	-	-	-	-	-	-	_	
SUBTOTAL	241	_	_	241	0.28	13	81.00	1	41	17.02	0	
Corporates – SMEs												
0.00 to < 0.15												
0.15 to < 0.25							-					
0.25 to < 0.50		-		-	-	-						
0.50 to < 0.75	-	-	-	-	-	-	-				-	
0.75 to < 2.50	-	-	-	-	-	-	-	-	-		-	
2.50 to < 10.00	-	-	-	-	-	-	-	-	-	-	-	
10.00 to < 100.00	-	-	-	-	-	-	-	-	-	-	-	
100.00 (default)	-	-	-	-	-	-	-	-	-	-	-	
SUBTOTAL	-	-	-	-	-	-	-	-	-	-	-	
Corporates – special	lized lend	ing										
0.00 to < 0.15	-	-	-	-	-	-	-	-	-	-	-	
0.15 to < 0.25	-	_	-	_	-	_	-	-		-	_	
0.25 to < 0.50	-	_	_	_	_	_	_	-			_	
0.50 to < 0.75					_		_					
0.75 to < 2.50												
								-				
2.50 to < 10.00								-	-			
10.00 to < 100.00	-	-	-	-	-	-	-	-	-	-	-	
100.00 (default)	-	-	-	-	-	-	-	-	-	-	-	
SUBTOTAL	-	-	-	-	-	-	-	-	-	-	-	
Corporates – purcha	sed recei	vables										
0.00 to < 0.15	-	-	-		-	-	-	-	-	-	-	
0.15 to < 0.25	-	-	-	-		-	-	-	-	-	-	
0.25 to < 0.50	-	-	-	-	-	-	-	-	-	-	-	
0.50 to < 0.75	-	-	-	-	-	-	-	-	-	-	-	
0.75 to < 2.50	-	-	-	_	_	_	_	-	-	-	_	
2.50 to < 10.00	-	_	-	_	-	_	_	-		-		
10.00 to < 100.00				_				_	_	_		
100.00 (default)												
SUBTOTAL		-		-				-		-		
	-		-		-	-	-	-	-	-		
Corporates – other									_			
0.00 to < 0.15	137		-		0.06		11.87	1,412	6	4.05	0	
0.15 to < 0.25	1,584		100.00		0.19	64	6.15	1,043	138	8.46	1	
0.25 to < 0.50	2,912	238	100.00	3,150	0.35	114	3.46	1,137	185	5.86	2	
0.50 to < 0.75	17	16	100.00	33	0.70	1	2.40	1,310	2	5.34	0	(
0.75 to < 2.50	3,713	265	100.00	3,978	1.45	171	5.39	1,219	593	14.90	4	-3
	5,302	144	100.00	5,446	6.30	258	3.96	1,096	840	15.43		-1

PD scale	а	b	c	d	е	f	g	h	i	j	k	I
	Original	_	_	EAD	_	_	-	_	_	_	-	_
	on-			after								
	balance-	Off-		credit								Loan loss
C		balance-	A	risk	A	Number	A	A				allowanc
€ million	gross		-	mitigatio	-		Average			RWA		es and
(unless indicated	•		CCF	n and		borrower		maturity		density	E1	provision
otherwise)		s pre-CCF		after CCF	(%)	S	(%)	(days)	RWAs	(%)	EL	S
10.00 to < 100.00	1,435	163	100.00	1,598	26.55	72	5.26	874	480	30.05	23	-16
100.00 (default)	2,404	90	100.00	2,494	100.00	95	36.21	1,186	-	-	893	-943
SUBTOTAL	17,505	961	100.00	18,465	18.06	781	8.90	1,120	2,243	12.15	937	-982
Retail business – SM	Es, secure	ed by mort	gages on	immovabl	e property	/						
0.00 to < 0.15	-	-	-	-	-	-	-	-	-	-	-	-
0.15 to < 0.25	-	-	-	-	-	-	-	-	-	-	-	-
0.25 to < 0.50	-	-	-	-	-	-	-	-	-	-	-	-
0.50 to < 0.75	-	-	-	-	-	-	-	-	-	-	-	-
0.75 to < 2.50	-	-	-	-	-	-	-	-	-	-	_	-
2.50 to < 10.00	-	_	-	_	-		-		-	-	_	_
10.00 to < 100.00												
100.00 (default)			-		-			-	-			
SUBTOTAL	-	-	-	-	-	-		-	-	-	-	-
Retail business – no												
0.00 to < 0.15	2,210	53	1.00	2,244	0.10	44,408	5.18	905	21	0.96	0	-1
0.15 to < 0.25	2,581	108	1.00	2,645	0.15	43,455	9.15	727	67	2.54	0	-1
0.25 to < 0.50	2,938	333	1.00	3,176	0.35	37,736	9.67	478	151	4.74	1	-1
0.50 to < 0.75	9,595	989	1.00	10,473	0.50	137,474	9.32	169	726	6.94	4	-2
0.75 to < 2.50	27,221	3,871	1.00	30,872	1.06	383,440	10.60	73	4,333	14.04	34	-21
2.50 to < 10.00	4,119	420	1.00	4,488	4.12	57,354	11.92	76	1,516	33.77	20	-17
10.00 to < 100.00	970	41	1.00	1,011	35.00	16,522	10.88	36	600	59.34	40	-35
100.00 (default)	607	6	1.00	613	100.00	9,222	24.02	18	334	54.49	119	-91
SUBTOTAL	50,241	5,820	1.00	55,522	2.79	729,611	10.28	178	7,748	13.96	218	-169
Retail business – qu			1.00	55,522	2.15	725,011	10.20	170	7,740	15.50	210	-105
· · · · · · · · · · · · · · · · · · ·	anneu rev	roiving										
0.00 to < 0.15	-	-		-		-	-					-
0.15 to < 0.25	-	-	-	-	-	-	-		-	-		-
0.25 to < 0.50	-	-	-	-	-	-	-	-	-		-	-
0.50 to < 0.75	-	-	-	-	-	-	-	-	-	-	-	-
0.75 to < 2.50	-	-	-	-	-	-	-	-	-	-	-	-
2.50 to < 10.00	-	-	-	-	-	-	-	-	-	-	-	-
10.00 to < 100.00	-	-	-	-	-	-	-	-	-	-	-	-
100.00 (default)	-	-	-	-	-	-	-	-	-	-	_	-
SUBTOTAL	-	_	-	_	-	_	-	_	_	-	_	_
Retail business – oth	ner SMEs											
0.00 to < 0.15				3,533	0.13	1			314	8.90	1	0
					0.15	1			514	0.50		0
0.15 to < 0.25	0	-	-	0	-			-	-			-
0.25 to < 0.50	0			0			-					-
0.50 to < 0.75	0	-	-	0	-	-	-		-	-	-	-
0.75 to < 2.50	0	-	-	0	-	-	-	-	-	-	-	-
2.50 to < 10.00	0	-	-	0	-	-		-	-	-	-	-
10.00 to < 100.00	0	-	-	0	-	-		-	-	-	-	-
100.00 (default)	0	-	-	0	-	-	-	-	-	-	-	-
SUBTOTAL	3,533	_	_	3,533	0.13	1	_	_	314	8.90	1	0
Retail business – otł		VIEs										
0.00 to < 0.15	15	16	1.00	29	0.08	20,681	30.07	489	1	4.54	0	0
0.15 to < 0.25	690	41	1.00	728	0.00	121,461		514	85	11.65	0	-1
							24.93					
0.25 to < 0.50	491	44	1.00	529	0.35	70,127	13.71	26	44	8.35	0	0
0.50 to < 0.75	2,394	35	1.00	2,421	0.54		34.57	1,090	674	27.83	5	-7
0.75 to < 2.50	4,406	99	1.00	4,487	1.20	331,582	35.62	1,478	1,862	41.50	20	-27
2.50 to < 10.00	2,220	24	1.00	2,239	3.91	166,237	42.25	1,969	1,424	63.62	36	-51
10.00 to < 100.00	446	2	1.00	448	25.29	36,368	37.13	1,519	384	85.79	37	-63
100.00 (default)	322	0	1.00	322	100.00	33,485	46.39	1,151	250	77.73	130	-216
SUBTOTAL	10,982	261	1.00	11,202	5.29	1,057,845	35.34	1,351	4,725	42.18	228	-364
Other non-credit-ob												
		-	-	-	-	-	-	-	-	-	_	-
0.00 to < 0.15	-											
0.00 to < 0.15 0.15 to < 0.25		-	-	-	-	-	-	-	-	-	_	-
0.00 to < 0.15 0.15 to < 0.25 0.25 to < 0.50	-	-	-	-	-	-	-	-	-	-	-	-

PD scale	а	b	c	d	е	f	g	h	i	j	k	I
	Original			EAD								
	on-			after								
	balance-	Off-		credit								Loan loss
	sheet	balance-		risk		Number						allowanc
€million	gross	sheet	Average	mitigatio	Average	of	Average	Average		RWA		es and
(unless indicated	exposure	exposure	CCF	n and		borrower	LGD	maturity		density		provision
otherwise)	S	s pre-CCF	(%)	after CCF	(%)	S	(%)	(days)	RWAs	(%)	EL	S
0.75 to < 2.50	-	-	-	-	-	-	-	-	-	-	-	-
2.50 to < 10.00	-	-	-	-	-	-	-	-	-	-	-	-
10.00 to < 100.00	-	-	-	-	-	-	-	-	-		-	-
100.00 (default)	-	-	-	-	-	-	-	-	-		-	-
SUBTOTAL	-	-	-	-	-	-	-	-	-	-	-	-
Total of all portfolios as at												
June 30, 2018	83,512	7,041	91.76	89,973	6.14	1,788,251	14.04	509	15,357	17.07	1,395	-1,520
Total of all portfolios as at December 31, 2017	82,391	6,332	91.92	88,211	14.07	1,769,314	14.01	423	15,231	17.27	1,561	-1,729

The growth of on-balance-sheet and off-balance-sheet exposures is due to the larger volume of new business at DZ BANK. The risk-weighted assets increased only moderately due to the low average PDs. Expected losses (EL) decreased compared with December 31, 2017 as a result of the lower average PDs. The reduction in loan loss allowances and provisions is attributable to the lower level of loss allowances at DZ BANK this year.

5.4.1.3 Collateralized lending volume under the IRB approaches (ARTICLE 453 SENTENCE 1 LETTER G CRR)

This section presents the impact of credit derivatives on the calculation of capital requirements under the IRB approach. To this end, Fig. 32 shows the RWAs before credit risk has been mitigated using credit derivatives and compares them with the actual RWAs (i.e. after risk mitigation using credit derivatives and guarantees). The RWA disclosures are also based on-balance-sheet and off-balance-sheet exposures. However, exposures subject to counterparty credit risk are not included in the following table.

Fig. 32 – EU CR7 – EFFECT ON THE RWAS OF CREDIT DERIVATIVES USED AS CREDIT RISK MITIGATION TECHNIQUES

		a	b	a	b
		Jun. 30, 2	018	Dec. 31, 2	017
€million		RWAs before credit derivatives	Actual RWAs	RWAs before credit derivatives	Actual RWAs
1 EXPOSURE CLASSES UN	DER FIRB APPROACH	40,578	40,578	43,634	43,634
2 Central governments a	nd central banks	1,411	1,411	981	981
3 Institutions		5,961	5,961	5,856	5,856
4 Corporates – SMEs		1,472	1,472	2,417	2,417
5 Corporates – specialize	d lending	13,145	13,145	13,385	13,385
6 Corporates – other		18,589	18,589	18,966	18,966
7 EXPOSURE CLASSES UN	DER AIRB APPROACH	40,048	40,048	15,161	15,161
8 Central governments a	nd central banks	-	-		-
9 Institutions		41	41	17	17
10 Corporates – SMEs		-	-	-	-
11 Corporates – specialize	d lending	-	-	-	-
12 Corporates – other		2,243	2,243	2,561	2,561
13 Retail business – SMEs, immovable property	secured by mortgages on	-	-		-
14 Retail business – non-SI immovable property	MEs, secured by mortgages on	7,253	7,253	7,575	7,575
15 Retail business - qualifi	ed revolving	-	-	-	-
16 Retail business – other	SMEs	0	0	0	0
17 Retail business - other	non-SMEs	5,023	5,023	5,007	5,007
18 Long-term equity inves	tments under the IRB approach	23,058	23,058	21,335	21,335
19 Other non-credit-obliga	ation assets ¹	2,431	2,431	2,029	2,029
20 Total		80,627	80,627	80,129	80,129

1 Other assets are assigned to the FIRB approach and form part of the total in row 1.

The actual RWAs under the IRB approach largely increased due to the reclassification of long-term equity investments from the Standardized Approach to credit risk to the FIRB approach. This was carried out because the transitional guidance in article 495 (1) CRR (grandfathering for long-term equity investments) ceased to apply on January 1, 2018.

In the DZ BANK banking group, no credit derivatives were used for risk mitigation under the IRB approach. As a result, the RWAs before the mitigation of credit risk using credit derivatives are the same as the actual RWAs.

5.4.1.4 RWA flow statement for credit risk under the IRB approach (ARTICLE 438 SENTENCE 1 LETTER D CRR)

Fig. 33 explains the fluctuation in the RWAs of risk-weighted exposure amounts under the IRB approach. The associated capital requirements during the reporting period are also shown.

Fig. 33 – EU CR8 – RWA FLOW STATEMENT OF CREDIT RISK EXPOSURES UNDER THE IRB APPROACH

		а	b	а	b	
		Jun. 30, 2	018	Mar. 31, 2	, 2018	
	€million	RWA amounts	Capital requirements	RWA amounts	Capital requirements	
1	Total RWAs as at the end of the previous reporting period	82,044	6,564	80,129	6,410	
2	Asset size	517	41	267	21	
3	Asset quality	-502	-40	-73	-6	
4	Model updates	-		0	0	
5	Methodology and policy	1,479	118	1,016	81	
6	Acquisitions and disposals	-	-	587	47	
7	Foreign exchange movements	35	3	-48	-4	
8	Other	-104	-8	167	13	
9	Total RWAs as at the end of the reporting period	83,469	6,678	82,044	6,564	

The RWA amounts rose from &82,044 million as at March 31, 2018 to &83,469 million as at the reporting date. The increase of &1,425 million in the RWAs was predominantly attributable to two effects that partially cancelled each other out. Asset size (row 2) went up by &517 million due to new business in the banking group. Moreover, asset quality (row 3) improved, mainly at DVB as a consequence of market data updates for the shipping portfolio. This caused RWAs to fall by &502 million. In particular, this reduction is attributable to adjustments of &1,479 million to the method for determining the capital requirements for securitizations in the banking book under the Internal Assessment Approach (IAA).

5.5 Counterparty credit risk

5.5.1 Regulatory measures

(ARTICLE 439 SENTENCE 1 LETTERS E, F, AND I CRR)

5.5.1.1 Analysis of counterparty credit risk

Fig. 34 presents the methods used to calculate the regulatory requirements for counterparty credit risk as well as the main parameters of each method.

Fig. 34 – EU CCR1 –	ANALYSIS OF COUNTERPARTY	CREDIT RISK BY APPROACH
ing. 51 LO CONT		

		а	b	c	d	e	f	g
	€million	Notional	Replacement cost/ current market value	Potential future credit exposure		Multiplier	EAD after credit risk mitigation	RWAs
1	Mark-to-market method		6,558	4,863			9,927	2,929
2	Original exposure method	-	-	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
3	Standardized Approach							-
4	Internal model method (IMM, for derivatives and securities financing transactions)					-		-
5	of which: securities financing transactions					-		-
6	of which: derivatives and long-settlement transactions							_
7	of which: from contractual cross- product netting					_		_
8	Financial collateral simple method (for securities financing transactions)							_
9	Financial collateral comprehensive method (for securities financing transactions)							_
10	VaR for securities financing transactions						-	-
11	Total as at June 30, 2018							2,929
11	Total as at December 31, 2017							2,763

The RWAs resulting from counterparty credit risk were higher than as at December 31, 2017 owing to increased market values and add-ons on the reporting date.

5.5.1.2 Capital requirement for adjustment of the credit valuation (ARTICLE 439 SENTENCE 1 LETTERS E AND F CRR)

The exposure value and the risk-weighted asset amount for transactions subject to capital requirements for credit valuation adjustments (CVA charge) must be disclosed separately. Based on the requirements in the CRR, Fig. 35 shows the regulatory calculations for adjustment of the credit valuation (broken down into the foundation and advanced approaches).

Fig. 35 – EU CCR2 – CVA CAPITAL CHARGE

	а	b	a	b
	Jun. 3	80, 2018	Dec. 3	31, 2017
	Exposure value	RWAs	Exposure value	RWAs
€ million				
Total portfolios subject to the advanced method				
2 i) VaR component (including the 3x multiplier)	_			
ii) Stressed VaR component (sVaR, including the 3x multiplier)				
All portfolios subject to the standardized method	2,89	1 1,323	3,285	5 1,423
EU4 Based on the original exposure method		-		

The capital requirement for adjustment of the credit valuation as at June 30, 2018 varied only slightly from the requirement as at December 31, 2017.

5.5.1.3 Exposures to central counterparties

(ARTICLE 439 SENTENCE 1 LETTERS E AND F CRR)

Specific information about credit risk arising from derivatives with central counterparties (CCPs) and associated exposures are shown in Fig. 36, which provides a comprehensive picture of the DZ BANK banking group's exposures. Only exposures to qualifying CCPs are included.

Fig. 36 - EU CCR8 - EXPOSURES TO CCPS

_		a	b	a	b
		Jun. 3	0, 2018	Dec. 31	, 2017
	€million	EAD after credit risk mitigation	RWAs	EAD after credit risk mitigation	RWAs
1	Total exposures to qualified CCPs		381		367
2	Exposures for trades at qualified CCPs (excluding initial margin and default fund contributions); of which:	316	213	2,824	127
3	i) OTC derivatives			162	73
4	ii) Exchange-traded derivatives	2,840	56	2,658	53
5	iii) Securities financing transactions	-1	C	4	0
6	iv) Netting sets where cross-product netting has been approved				
7	Segregated initial margin	-		-	
8	Non-segregated initial margin	1,686	166	1,633	240
9	Prefunded default fund contributions	68	1	55	1
10	Alternative calculation of capital requirements for exposures				-
11	Total exposures to non-qualified CCPs		42		42
12	Exposures for trades at non-qualified CCPs (excluding initial margin and default fund contributions); of which:	42	42	42	42
13	i) OTC derivatives	42	42	42	42
14	ii) Exchange-traded derivatives				
15	iii) Securities financing transactions				-

	а	b	а	b
	Jun.	30, 2018	Dec.	31, 2017
€ million	EAD after credit risk mitigation	RWAs	EAD after credit risk mitigation	RWAs
5 iv) Netting sets where cross-product netting has been approved		-		-
7 Segregated initial margin		-		-
3 Non-segregated initial margin		-	-	-
9 Prefunded default fund contributions		-	-	-
0 Unfunded default fund contributions		-	-	-

Exposures to qualifying central counterparties are not subject to significant changes.

5.5.2 Counterparty credit risk exposures: Standardized Approach

(ARTICLE 444 SENTENCE 1 LETTER E IN CONJUNCTION WITH ARTICLE 92 SENTENCE 3 LETTER F CRR)

Fig. 37 shows the counterparty credit risk exposures after credit risk mitigation, broken down by portfolio (type of counterparty) and risk weighting (risk content attributed according to the Standardized Approach).

Fig. 37 - EU CCR3 - STANDARDIZED APPROACH - COUNTERPARTY CREDIT RISK EXPOSURES BY REGULATORY PORTFOLIO AND RISK

€m	illion	Risk we	ighting	j (%)									Total	of which: unrate d
Exp	osure class	0	2	4	10	20	50	70	75	100	150	Other	-	
1	Central governments or central banks	9	-	-	-	-	-	_	-	-	-		- 9	7
2	Regional governments or local authorities	306	-	_	-	4	-	_	-	-	-		- 311	36
3	Public-sector entities	227	-	-	-	-	-	-	-	-	-		- 227	191
4	Multilateral development banks	-	-	-	-	-	-	-	-	-	-			-
5	International organizations	1	-	-	-	-	-	-	-	-	-		- 1	2
6	Institutions	2,791	-	-	-	897	0	-	-	-	-		- 3,688	3,038
7	Corporates	-	-	-	-	297	224	-	-	1,347	-		- 1,868	959
8	Retail business	-	-	-	-	-	-	-	-	-	-			-
9	Institutions and corporates with a short-term credit assessment	_	-	-	-	-	-	-	-	-	-			_
10	Other items	-	-	-	-	-	-	-	-	-	-			-
11	Secured by mortgages on immovable property	-	-	-	-	-	21	-	-	-	-		- 21	-
12	Exposures in default	-	-	-	-	-	-	-	-	0	0		- 0	0
13	Exposures associated with particularly high risk	_	-	-	-	-	-	-	-	_	-			_
14	Covered bonds	-	-	-	-	-	-	-	-	-	-			_
15	CIUs	-	-	-	-	-	-	-	-	-	-			_
16	Equity exposures	-	-	-	-	-	-	-	-	-	-			-
17	Total as at June 30, 2018	3,334	-	_	-	1,198	245	-	-	1,347	0		- 6,124	4,926
17	Total as at December 31, 2017	3,521	-	-	-	950	267	-	-	966	0		- 5,682	4,232

The increase in the total exposure compared with December 31, 2017 was primarily attributable to the corporates exposure class. While this rise was due to the growth of business with this customer group, the changes between the reporting dates of December 31, 2017 and June 30, 2018 in the other exposure classes were the result of fluctuation within the normal range.

5.5.3 Counterparty credit risk exposures: IRB approach

(ARTICLE 452 SENTENCE 1 LETTER E IN CONJUNCTION WITH ARTICLE 92 SENTENCE 3 LETTER F CRR)

Fig. 38 and Fig. 39 show key parameters used to calculate the capital requirements for counterparty credit risk in the IRB models.

€ million (unless indicated otherwise)	a	b	c	d	e	f	g
PD scale by exposure class	EAD after credit risk mitigation	Average PD (%)	Number of borrowers	Average LGD (%)	Average maturity (days)	RWAs	RWA density (%)
Central governments	and central banks						
0.00 to < 0.15	143	0.01	5	45.00	900	11	7.98
0.15 to < 0.25	-	-	-	-	-	-	-
0.25 to < 0.50	3	0.35	1	45.00	900	2	62.29
0.50 to < 0.75	-	-	-	-	-	-	-
0.75 to < 2.50	-		-	-	-		
2.50 to < 10.00	-	-	-	-	-		-
10.00 to < 100.00	-				-	-	-
100.00 (default)	-	-	-	-	-		-
Subtotal	146	0.02	6	45.00	900	14	9.27
Institutions							
0.00 to < 0.15	2,437	0.36	159	0.45	900	588	24.11
0.15 to < 0.25	729					251	
0.25 to < 0.50	363					167	
0.50 to < 0.75	335	3.15	13	11.38	901	78	23.19
0.75 to < 2.50	46	0.77	-		900		-
2.50 to < 10.00	1	7.66	5	45.00	900	3	192.20
10.00 to < 100.00	11	13.70	2	0.54	900	C	3.18
100.00 (default)	-		-		-		-
Subtotal	3,924	0.79	283	0.45	900	1,104	28.13
Corporates – SMEs							•
0.00 to < 0.15	0	0.10	2	45.00	900	C	28.88
0.15 to < 0.25	3	0.20	31	45.00	900	1	40.12
0.25 to < 0.50	3		36	45.00	900	2	47.29
0.50 to < 0.75	2					1	-
0.75 to < 2.50	10					8	
2.50 to < 10.00	2						
10.00 to < 100.00	0						
100.00 (default)	0					C	
Subtotal	20	1.77	256	45.00	900	14	70.15
Corporates – specializ	-						
0.00 to < 0.15	4						-
0.15 to < 0.25	48	-					
0.25 to < 0.50	21				900	13	
0.50 to < 0.75	18						
0.75 to < 2.50	71						
2.50 to < 10.00	5	2.6	2	45.00	900	6	130.88
10.00 to < 100.00	-		-		-		-
100.00 (default)	16						
Subtotal	182	9.44	211	44.87	900	124	68.32
Corporates – other	4.000	0.04	4.67	20.67		400	40.77
0.00 to < 0.15	1,008						
0.15 to < 0.25	206						
0.25 to < 0.50	106						
0.50 to < 0.75	179						
0.75 to < 2.50	113						
2.50 to < 10.00	32	2.90	32		900	43	135.27
10.00 to < 100.00	-	100.00					
100.00 (default)	2						
Subtotal	1.646	0.38	760	39.22	900	630) 38.29
Long-term equity invo		0.00	-	00.00	1 000		0.0045
0.00 to < 0.15					1,800	C	96.45-
0.15 to < 0.25							
0.25 to < 0.50							
0.50 to < 0.75 0.75 to < 2.50					-		
U / 1 U < / DU		-		-	-		

-

-

-

-

-

-

_

-

0.75 to < 2.50 2.50 to < 10.00

10.00 to < 100.00

€ million (unless indicated	а	b	c	d	е	f	g	
otherwise)								

PD scale by exposure class	EAD after credit risk mitigation	Average PD (%)	Number of borrowers	Average LGD (%)	Average maturity (days)	RWAs	RWA density (%)
100.00 (default)	-	-	-	-	-	-	-
Subtotal	0	0.09	3	90.00	1,800	0	96.45
Total (all portfolios) as at June 30, 2018	5,917	0.92	1,520	32.28	900	1,886	31.87
Total (all portfolios) as at December 31, 2017	5,916	1.01	1,558	35.20	877.61	2,059	34.81

There were no noteworthy changes in the exposure classes between the two reporting dates. The 'institutions' and 'corporates – other' exposure classes continue to be significant.

Fig. 39 - EU CCR4 - AIRB APPROACH - COUNTERPARTY CREDIT RISK EXPOSURES BY PORTFOLIO AND PD SCALE

€ million (unless indicated otherwise)	а	Ь	c	d	e	f	g
PD scale	EAD after credit risk mitigation	Average PD (%)	Number of borrowers	Average LGD (%)	Average maturity (days)	RWAs	RWA density (%)
Central government	-	(,0)	bonowers	//////////////////////////////////////	(uuys)		(,,,,
0.00 to < 0.15							_
0.15 to < 0.25							_
0.25 to < 0.50							_
0.50 to < 0.75							
0.75 to < 2.50							
2.50 to < 10.00		-					_
10.00 to < 100.00	-						_
100.00 (default)	-						_
Subtotal		_					_
Institutions		-		-			
0.00 to < 0.15	426	0.09	9	81.00	1,391	150	35.17
0.15 to < 0.25	46	0.20	2	2 81.00			
0.25 to < 0.50	29	0.35	2	81.00	509	34	118.64
0.50 to < 0.75	17	0.50	1	81.00	1,043	31	185.30
0.75 to < 2.50		_					
2.50 to < 10.00		_					_
10.00 to < 100.00		_					_
100.00 (default)	-						_
Subtotal	518	0.13	14	81.00	1,359	233	45.00
Corporates – SMEs							
0.00 to < 0.15				-			-
0.15 to < 0.25		-		-			-
0.25 to < 0.50		-					-
0.50 to < 0.75		-					-
0.75 to < 2.50		-					-
2.50 to < 10.00		-					-
10.00 to < 100.00				-			-
100.00 (default)		-					-
Subtotal		_					_
Corporates – specia	lized lending						
0.00 to < 0.15							-
0.15 to < 0.25		-					-
0.25 to < 0.50		-					-
0.50 to < 0.75				-			-
0.75 to < 2.50				-			-
2.50 to < 10.00							_
10.00 to < 100.00		_		-	-		_
100.00 (default)		-		-	-		-
Subtotal	-	-			-		_
Corporates – other							
0.00 to < 0.15	9	0.10	1	65.00	1,398	7	82.30
0.15 to < 0.25	1	0.20	3	9.44			14.98

PD scaleish mitigation(%)DerrowerNerroye Lo(%)(a)g.)NerroyNerr	
0.25 to c 0.5020.857.301.990.75 to c 2.5011.3445.626.530.75 to c 2.5011.3445.626.530.10 to c (10.00)22.7.27196.111.76210.00 (default)0100.00246.43110.00 (default)0100.00246.43110.00 (default)163.00340.551.4821Retall business - SMEs, secured by mortgages on immovable property011100 to < 0.151111110.75 to < 2.5011111110.75 to < 2.50111111110.05 to < 0.75111 <th>VA density</th>	VA density
0.50 to 0.75 0.75 to 0.25.00 1.34 4 5.62 6.53 0 0.75 to 0.25.00 1.25.79 5 42.00 360 3 0.00 (d-14) 0 10.00 to 0.2 46.43 - - Subtotal 16 3.00 3 40.55 1.82 11 Retall busines-ShEs, secured by mortgages on immovable property 0.010 co 0.15 -	11.52
0.75 to 2.50 1 1.34 4 5.62 653 0 2.50 to 210.00 2 7.27 19 8.19 1,762 1 100.00 (c) (d) 0.00 2 46.43	
2 50 to < 10.00	12.61
100 to < 100.00	36.63
100.00 (arfault) 0 100.00 (arfault) 16 Subtotal 16 3.00 39 40.55 1,482 11 Subtotal 16 3.00 39 40.55 1,482 11 0.00 to 0.15 0.015<	263.96
Subtotal 16 3.00 39 40.55 1,402 11 Retal basines - SMEs, secured by mortgages on immovable property	205.50
Retail business - SMEs, secured by mortgages on immovable property	68.03
0.00 to 0.15 - <t< td=""><td>00.03</td></t<>	00.03
0.15 to < 0.25	
0.25 to < 0.75	
0.50 to 0.75	
0.75 to < 2.50	
2.50 to < 10.00	
10.00 to < 100.00	
100.00 (default)	
Subtotal	
Retail business - non-SMEs, secured by mortgages on immovable property Image: constraint of the second	
0.00 to < 0.15	
0.00 to < 0.15	
0.15 to < 0.25	
0.25 to < 0.50	
0.50 to < 0.75	
0.75 to < 2.50	
2.50 to < 10.00	
10.00 to < 100.00	
100.00 (default) -	
Subtotal -<	
Retail business - qualified revolving 0.00 to < 0.15	
0.00 to < 0.15	
0.15 to < 0.25	
0.25 to < 0.50	
0.50 to < 0.75	
0.75 to < 2.50	
2.50 to < 10.00	
10.00 to < 100.00	
100.00 (default) -	
Subtotal -<	
Subtotal -<	
Retail business – other SMEs 0.00 to < 0.15	
0.00 to < 0.15	
0.15 to < 0.25	
0.25 to < 0.50	
0.50 to < 0.75	
0.75 to < 2.50	
2.50 to < 10.00	
10.00 to < 100.00	
100.00 (default) -	
Subtotal -<	
Retail business - other non-SMEs 0.00 to < 0.15	
0.00 to < 0.15	
0.15 to < 0.25	
0.25 to < 0.50	
0.50 to < 0.75	
0.75 to < 2.50	
0.75 to < 2.50	
2.50 to < 10.00	
10.00 to < 100.00	
100.00 (default)	
Subtotal	
Other non-credit-obligation assets	
0.00 to < 0.15	
0.15 to < 0.25	

€ million (unless indicated otherwise)	а	b	c	d	e	f	g
	EAD after credit	Average PD	Number of		Average maturity		RWA density
PD scale	risk mitigation	(%)	borrowers	Average LGD (%)	(days)	RWAs	(%)
0.25 to < 0.50			-			-	
0.50 to < 0.75			-	-		-	
0.75 to < 2.50			-	-		-	
2.50 to < 10.00						-	
10.00 to < 100.00			-			-	
100.00 (default)			-	-		-	
Subtotal						-	
Total (all portfolios) as at June 30, 2018	534	0.58	53	3 79.79	1,362	2 244	45.69
Total (all portfolios) as at December 31, 2017	710	0.47	47	7 79.93	1,395	5 317	44.73

Fig. 39 does not show any particular fluctuation.

5.5.4 Further information on counterparty credit risk

(ARTICLE 439 SENTENCE 1 LETTERS E, G, AND H CRR)

5.5.4.1 Impact of netting and collateral held on exposure values (ARTICLE 439 LETTER E CRR)

Fig. 40 shows the aggregate derivative counterparty risk exposure in the banking book and trading book in the form of positive fair values before and after the offsetting of net derivatives exposures and collateral.

Exposures that are processed directly via a central counterparty (clearing house) are not shown in Fig. 40.

Fig. 40 therefore primarily shows listed derivatives that are traded via an intermediary, such as a broker, and over-the-counter (OTC) derivatives.

Fig. 40 - EU CCR5-A - IMPACT OF NETTING AND COLLATERAL HELD ON EXPOSURE VALUES

		а	b	c	d	е
	€million	Gross positive fair value or net carrying amount	Netting benefits	Netted current credit exposure	Collateral held	Net credit exposure
1	 Derivatives	27,995	20,031	7,964	3,836	4,128
2	Securities financing transactions			-	-	
3	Cross-product netting	-	-	-	-	-
4	Total as at June 30, 2018	27,995	20,031	7,964	3,836	4,128
4	Total as at December 31, 2017	28,447	20,396	8,050	3,840	4,210

The change in the gross positive fair value over the first half of 2018 was due to the volatile market environment, while the small impact of netting was attributable to normal fluctuation in the derivatives business. The table above therefore shows a decrease in the net credit exposure.

5.5.4.2 Composition of collateral for exposures subject to counterparty credit risk (ARTICLE 439 LETTER E CRR)

Fig. 41 provides a breakdown for all types of collateral (cash collateral, sovereign debt, corporate bonds, etc.) posted or received by DZ BANK or the DZ BANK banking group in order to reduce counterparty credit risk related to derivatives transactions or securities financing transactions, including transactions cleared through a central counterparty.

Fig. 41 – EU CCR5-B – COMPOSITION OF COLLATERAL FOR EXPOSURES TO COUNTERPARTY CREDIT RISK

	а	b	c	d	е	f
	Collateral use	d in derivatives t	ransactions		Collateral used in securitie financing transactions	
Fair value of collateral received Fair value of collateral poste				collateral posted	Fair value of collateral	Fair value of collateral
€ million	Segregated	Unsegregated	Segregated	Unsegregated	received	posted
Derivatives		- 1,490		- 7,644	ļ	-
of which: cash collateral		- 1,191			-	-
of which: bonds of non-German borrowers		- 117				-
of which: other bonds		- 43			-	-
of which: long-term equity investments		- 90				-
of which: other collateral		- 1,200		- 6,163	3	-
Securities financing transactions					-	-
Cross-product netting				-		-
Total as at June 30, 2018		- 1,747		- 7,644		-
Total as at December 31, 2017		- 1,154		- 8,696		-

The changes to the values presented in Fig. 41 were caused by the volatile market environment in the first half of 2018.

5.5.4.3 Exposures secured by credit derivatives (ARTICLE 439 LETTERS G AND H CRR)

Fig. 42 shows the notional amounts of credit derivatives bought and sold, broken down by type of credit derivative. As had been the case at the end of 2017, no credit derivatives from the intermediary operations of DZ BANK banking group entities were held as at June 30, 2018.

Fig. 42 - EU CCR6 - CREDIT DERIVATIVES EXPOSURES

	а	b	c	d
	Credit derivative hedges		Other credit derivatives	Intermediary operations
€million	Protection bought	Protection sold		
Notionals				
Single-name credit default swaps	()	- 18,154	
Index credit default swaps		-		
Total return swaps		-	- 78	
Credit options		-		
Other credit derivatives		-	- 9,900	
Total notionals as at June 30, 2018	()	- 28,132	
Total notionals as at December 31, 2017		-	- 21,325	
Fair values				
Positive fair values (assets)	()	- 270	
Negative fair values (equity and liabilities)		_	61	
Total fair value as at June 30, 2018	(- 208	
Total fair value as at December 31, 2017		-	- 19,253	

The comparative figure in the total notionals row as at December 31, 2017 has been adjusted due to a technical change. The notionals for the exposures secured by credit derivatives increased as a result of the growth of new business in the DZ BANK banking group.

6 Market risk

6.1 Market risk under the Standardized Approach (ARTICLE 445 CRR)

Fig. 43 contains the disclosures on the capital requirements for market risk according to article 92 (3) letters b and c CRR under the Standardized Approach. The capital requirement for specific interest-rate risk relating to securitization exposures pursuant to article 445 sentence 2 CRR is also disclosed here. As at June 30, 2018, the proportion of market risk-weighted assets subject to the Standardized Approach was 23.53 percent.

		Jun. 3	0, 2018	Dec. 3	1, 2017
		а	b	а	b
€n	nillion	RWAs	Capital requireme nts	RWAs	Capital requireme nts
	Outright products				
1	Interest-rate risk (general and specific)	119	9	29	2
2	Equity risk (general and specific)	0	0	0	0
3	Currency risk	1,481	119	1,354	108
4	Commodity risk	16	1	10	1
5	Options				
6	Simplified approach	0	0	0	0
7	Delta-plus method	-	-	-	_
8	Scenario approach		_	-	
9	Securitization (specific risk)	64	5	97	8
10	Total	1,680	134	1,491	146

Fig. 43 – EU MR1 – MARKET RISK UNDER THE STANDARDIZED APPROACH

The fluctuation of market risk under the Standardized Approach compared with December 31, 2017 was entirely within the normal range. The dominant risk categories are currency risk and interest-rate risk.

6.2 Internal market risk model

Fig. 44 shows the components of the capital requirement under the internal models approach for market risk.

As at the reporting date, the proportion of market risk-weighted assets covered by the internal model was 76.47 percent. The change in the RWAs over the first half of the year was €171 million. This rise was primarily due to the increase in the latest value for the incremental risk charge (IRC) as at the reporting date. A decrease in the average of the daily stressed VaR (sVaR) on each of the preceding 60 business days partly offset this rise.

		Jun. 30,	2018	Dec. 31,	2017
		а	b	а	b
	€million	RWAs	Capital requirements	RWAs	Capital requirements
1	VaR (higher of values 1a) and 1b))	745	60	627	50
(a)	Previous day's VaR (article 365 (1) CRR (VaR t-1))		19		14
(b)	Average of the daily VaR (article 365 (1) CRR) on each of the preceding 60 business days (VaRavg) x multiplication factor (mc) in accordance with article 366 CRR		60		50
2	sVaR (higher of values 2a) and 2b))	3,516	281	3,774	302
(a)	Latest SVaR (article 365 (2) CRR (sVaR t-1))	5,510	95	5,774	78
(b)	Average of the daily sVaR (article 365 (2) CRR) on each of the preceding 60 business days (sVaRavg) x multiplication factor (ms) in accordance with article 366 CRR		281		302
3	IRC (higher of values a) and b))	1,197	96	886	71
(a)	Most recent IRC value (additional default and migration risks calculated in accordance with articles 370 and 371 CRR)		96		66
(b)	Average of the IRC number over the preceding 12 weeks		74		71
4	Internal model for correlation trading activities (higher of values a), b), and c))			-	-
(a)	Most recent risk number for the correlation trading portfolio (article 377 CRR)		-		-
(b)	Average of the risk number for the correlation trading portfolio over the preceding 12 weeks				-
(c)	8% of the capital requirements in the Standardized Approach on the most recent risk number for the correlation trading portfolio (article 338 (4) CRR)		-		
5	Other	-	-	-	-
6	Total	5,458	437	5,287	423

Fig. 44 – EU MR2-A – MARKET RISK UNDER THE INTERNAL MODELS APPROACH (IMA)

Fig. 45 is a flow statement designed to explain variations in the RWAs for market risk, which are based on internal models (e.g. VaR, sVaR) and have to be determined in accordance with Part 3 Title IV Chapter 5 CRR (IMA).

The decrease in the RWAs of approximately \notin 700 million compared with the previous quarter (column f) was largely due to the change in the sVaR (column b) during the period under review. Whereas the RWAs at the relevant individual dates for the sVaR rose by \notin 128 million (see rows 1(b) and 8(a)), there was a sharp fall in the 60-day average factored into the calculation through rows 1(a) and 8(b), which also contain a regulatory multiplication factor of 4.

		а	b	c	d	е	f	g
	€million	VaR	sVaR	IRC	Internal model for correlation trading activities	Other	Total risk- weighted assets (RWAs)	Total capital requirements
1	Total RWAs as at the end of the previous quarter	596	4,565	1,003	-	-	6,164	493
1(a)	Regulatory adjustment	-383	-3,505	-154	-	-	-4,042	-323
1(b)	RWAs as at the end of the previous quarter (end of the day)	213	1,061	849			2,122	170
2	Movement in risk levels	213	128	348			499	40
3	Model updates/changes	-	-	-	-	-	-	-
4	Methodology and policy	-	-	-	-	-	-	-
5	Acquisitions and disposals	-	-	-	-	-	-	-
6	Foreign exchange movements	0	-7	-	-	-	-7	-1
7	Other	-	-	-	-	-	-	-
8(a)	RWAs as at the end of the reporting period							
	(end of the day)	235	1,182	1,197	-	-	2,614	209
8(b)	Regulatory adjustment	510	2,334	-	-	-	2,844	228
8	Total RWAs as at the end of the reporting							
	period	745	3,516	1,197	-	-	5,458	437

Fig. 45 – EU MR2-B – RWA FLOW STATEMENTS OF MARKET RISK EXPOSURES UNDER THE IMA

Further quantitative disclosures

(ARTICLE 455 SENTENCE 1 LETTERS D, G, AND F CRR)

The value-at-risk for portfolios in the trading book, for which the capital requirement is determined using the internal modeling approach in accordance with section 363 et seq. CRR, and the potential stressed value-at-risk are disclosed in Fig. 46. It therefore shows the change in the market risk figures for the trading book portfolios.

This table also shows the extent of the additional default and migration risk measured in relation to the total trading book and in relation to the relevant subportfolios as specified in articles 372 to 376 CRR. As was the case as at December 31, 2017, this calculation is based on the assumption of a constant exposure over a risk horizon of one year. This disclosure is pursuant to article 455 sentence 1 letter f CRR.

		Jun. 30, 2018	Dec. 31, 2017
€r	million	a	а
Va	ıR (10 days, 99%)		
1	Maximum value	15	16
2	Average value	9	7
3	Minimum value	5	5
4	Period end	13	g
s٧	aR (10 days, 99%)		
1	Maximum value	102	123
2	Average value	65	51
3	Minimum value	38	26
4	Period end	67	63
IR	C (99%)		
1	Maximum value	96	115
2	Average value	77	85
3	Minimum value	61	59
4	Period end	95	66
Int	ternal model for correlation		
tra	ading activities		
1	Maximum value	-	
2	Average value	-	
3	Minimum value	-	
4	Period end	-	

Fig. 46 - EU MR3 - IMA VALUES FOR TRADING PORTFOLIOS

The value-at-risk (10 days, 99 percent) increased from \notin 9 million to \notin 13 million over the first half of the year. This rise was mainly caused by new relevant scenarios within the historical simulation in May and June 2018. The stressed value-at-risk (10 days, 99 percent) advanced from \notin 63 million to \notin 67 million over the same period. The incremental risk charge (1 year, 99.9 percent) climbed from \notin 66 million to \notin 95 million. Both of these increases were predominantly due to changes to the exposures.

In accordance with article 455 (1) letter a CRR, the VaR and sVaR are allocated to interest-rate, currency, equity, commodity, and credit spread risk as shown below.

€m	illion	Total VaR	Interest-rate VaR	Currency VaR	Equity VaR	-	Credit spread VaR
VaR	R (10 days, 99%)						
1	Maximum value	15	6	8	4	1	25
2	Average value	9	5	5	2	1	9
3	Minimum value	5	4	3	1	0	2
4	Period end	13	4	. 7	2	1	22
sVa	R (10 days, 99%)						
1	Maximum value	102	45	32	41	7	83
2	Average value	65	25	17	14	3	71
3	Minimum value	38	12	4	3	1	55
4	Period end	67	28	29	6	4	82

Fig. 47 – IMA VALUES FOR EACH SUBPORTFOLIO AS AT JUNE 30, 2018

The spread VaR was considerably higher than the total VaR. This fairly unusual situation was attributable to market turmoil in late May. Spreads widened dramatically during this phase, leading to very high losses in these scenarios and thus a high spread VaR. However, there was also significant movement of interest rates and exchange rates during this market phase, which in turn led to large gains. Consequently, these scenarios had little impact on the total VaR. The total VaR was determined by other scenario days, on all of which market movements were far less pronounced.

Fig. 48 - IMA VALUES FOR EACH SUBPORTFOLIO AS AT DECEMBER 31, 2017

€ million	Total VaR	Interest-rate VaR	Currency VaR	Equity VaR	Commodity VaR	Credit spread VaR
VaR (10 days, 99%)						
1 Maximum value	16	8	9	14	2	17

2	Average value	7	5	6	4	1	7
3	Minimum value	5	3	4	1	0	2
4	Period end	9	5	4	5	1	2
sVa	ıR (10 days, 99%)						
1	Maximum value	123	58	37	58	9	77
2	Average value	51	23	23	22	3	60
3	Minimum value	26	9	6	5	1	45
4	Period end	63	17	9	16	4	65

Market risk is particularly influenced by credit spread risk. The interest-rate, currency, equity, and commodity risk categories also have an impact, but to a lesser extent. The VaR, the stressed VaR (sVaR), and the incremental risk charge (IRC) are factored into the calculation of the capital requirement.

The disclosures on backtesting pursuant to article 455 sentence 1 letter g CRR are shown in Fig. 49.

Fig. 49 – EU MR4 – COMPARISON OF VAR ESTIMATES FOR MARKET RISK IN THE TRADING BOOK AND CURRENCY RISK AND COMMODITY RISK IN THE BANKING BOOK UNDER THE INTERNAL MODELING APPROACH AND HYPOTHETICAL CHANGES IN FAIR VALUE WITH GAINS/LOSSES AT DZ BANK AS AT JUNE 30, 2018



in Mio. €, Value-at-Risk bei 99,00 % Konfidenzniveau, 1 Tag Haltedauer, 1 Jahr Beobachtungszeitraum

Fig. 50 – EU MR4 – COMPARISON OF VAR ESTIMATES FOR MARKET RISK IN THE TRADING BOOK AND CURRENCY RISK AND COMMODITY RISK IN THE BANKING BOOK UNDER THE INTERNAL MODELING APPROACH AND HYPOTHETICAL CHANGES IN FAIR VALUE WITH GAINS/LOSSES AT DZ BANK AS AT DECEMBER 31, 2017



in Mio. €, Value-at-Risk bei 99,00 % Konfidenzniveau, 1 Tag Haltedauer, 1 Jahr Beobachtungszeitraum

The hypothetical and actual changes in fair value, in which all reserves are also included, did not exceed the forecast risk value at any time during the first half of 2018.

7 Leverage ratio

7.1 Leverage pursuant to the CRR framework (ARTICLE 451 (1) LETTERS A, B, C, D, AND E CRR)

The European Commission defined the requirements for calculating the **leverage ratio (LR)** in Delegated Regulation (EU) No. 2015/62 dated October 10, 2014. The leverage ratio is the ratio of the banking group's Tier 1 capital to its total exposure and thus represents an additional, risk-neutral capital ratio. A low leverage ratio therefore indicates a high level of debt in relation to Tier 1 capital. The purpose of the leverage ratio is to prevent the build-up of unsustainable leverage in the banking industry.

In contrast to risk-based capital requirements, the individual exposures in the leverage ratio are not given their own risk weighting but are generally included in the total exposure without a weighting.

The leverage ratio disclosures are based on Implementing Regulation (EU) No. 2016/200 dated February 15, 2016 and have been carried out at consolidated level. In accordance with article 499 (1) letter b CRR, the capital measure is based on Tier 1 capital, taking account of the transitional guidance (phase-in).

The DZ BANK banking group's leverage ratio pursuant to the CRR transitional guidance was 4.40 percent as at June 30, 2018 (December 31, 2017: 4.64 percent). Applying the CRR in full, the ratio was 4.18 percent (December 31, 2017: 4.38 percent).

Fig. 51 provides a summary of the components of the leverage ratio, in accordance with the CRR transitional guidance and with full application of the CRR.

Leverage ratio according to CRR Leverage ratio after full application of the CRR transitional guidance Jun. 30, 2018 Dec. 31, 2017 Jun. 30, 2018 Dec. 31, 2017 Regulatory Tier 1 capital (€ million) 20,266 20,041 19,280 18,916 Total exposure measure (€ million) 460,817 432,119 460,817 432,104 Leverage ratio as at the balance sheet date (%) 4.40 4.64 4.18 4.38

Fig. 51 - LEVERAGE RATIO ACCORDING TO THE CRR TRANSITIONAL GUIDANCE AND AFTER FULL APPLICATION OF THE CRR

Fig. 52 shows the reconciliation of the total assets of the DZ BANK Group to the leverage ratio total exposure measure of the DZ BANK banking group.

Fig. 52 - LRSUM - SUMMARY RECONCILIATION OF ASSETS ON THE BALANCE SHEET TO THE LEVERAGE RATIO TOTAL EXPOSURE MEASURE

Summar	y reconciliation of total assets and total exposure measure	Applicable an	ounts
€ millior	1	Jun. 30, 2018	Dec. 31, 2017
1	Total assets as per published financial statements	538,234	505,594
2	Adjustment for entities that are consolidated for accounting purposes but are outside		
	the scope of regulatory consolidation	-93,841	-88,618
3	Adjustment for trust assets recognized 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) No. 575/2013	-	-
4	Adjustments for derivatives	-6,964	-8,413
5	Adjustments for securities financing transactions (SFTs)	233	344
6	Adjustment for off-balance-sheet items (i.e. conversion to credit equivalent amounts of		
	off-balance-sheet exposures)	27,832	26,112
EU-6a	Adjustment for intragroup exposures excluded from the leverage ratio total exposure		
	measure in accordance with article 429 (7) of Regulation (EU) No. 575/2013	-	-
EU-6b	Adjustment for exposures excluded from the leverage ratio total exposure measure in		
	accordance with article 429 (14) of Regulation (EU) No. 575/2013	-	-
7	Other adjustments	-4,677	-2,899
8	Leverage ratio total exposure measure	460,817	432,119

Fig. 53 shows individual components of the total exposure measure, Tier 1 capital, and the DZ BANK banking group's resulting leverage ratio as at June 30, 2018, applying the CRR transitional guidance.

Fig. 53 – LRCOM – LEVERAGE RATIO COMMON DISCLOSURE

€million

Leverage	ratio exposures	Jun. 30, 2018	Dec. 31, 2017
On-ba	lance-sheet exposures (excluding derivatives and SFTs)		
1	On-balance-sheet items (excluding derivatives, SFTs, and trust assets but including collateral)	410,895	386,419
2	Asset amounts deducted in determining Tier 1 capital	-792	-785
3	Total on-balance-sheet exposures (excluding derivatives, SFTs, and trust assets) (sum of lines 1 and 2)	410,103	385,635
Derivativ	e exposures		
4	Replacement cost associated with all derivatives transactions (i.e. net of eligible cash variation margin)	6,732	6,738
5	Add-on amounts for PFE associated with all derivatives transactions (mark-to-market method)	10,646	9,859
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	-5,413	-5,777
8	Exempted CCP leg of client-cleared SFT exposure	-1,126	-1,035
9	Adjusted effective notional amount of written credit derivatives	15,478	16,581
10	Adjusted effective notional offsets and add-on deductions for written credit derivatives	-11,350	-12,659
11	Total derivatives exposures (sum of lines 4 to 10)	14,967	13,707
SFT expo	sures		
12	Gross SFT assets (with no recognition of netting), after adjusting for sales accounting transactions	11,810	10,244
13	Netted amounts of cash payables and cash receivables of gross SFT assets	-	-
14	Counterparty credit risk exposure for SFT assets	233	344
EU-14a	Derogation for SFTs: Counterparty credit risk exposure in accordance with articles 429b (4) and 222 of Regulation (EU) No. 575/2013	-	-
15	Agent transaction exposures	-	-
EU-15a	Exempted CCP leg of client-cleared SFT exposure	-	-
16	Total securities financing transaction exposures (sum of lines 12 to 15a)	12,043	10,588
Other of	f-balance-sheet exposures		
17	Off-balance-sheet exposures at gross notional amount	66,296	60,729
18	Adjustments for conversion to credit equivalent amounts	-42,592	-38,540
19	Other off-balance-sheet exposures (sum of lines 17 and 18)	23,705	22,189
EU-19a	Intragroup exposures (solo basis) exempted in accordance with article 429 (7) of Regulation (EU) No. 575/2013 (on and off balance sheet)	-	-
EU-19b	Exempted exposures in accordance with article 429 (14) of Regulation (EU) No. 575/2013 (on and off balance sheet)	-	-
Capital a	nd total exposure measure		

€million

Leverag	je ratio exposures	Jun. 30, 2018	Dec. 31, 2017
20	Tier 1 capital	20,266	20,041
21	Leverage ratio total exposure measure (sum of lines 3, 11, 16, 19, EU-19a, and EU-19b)	460,817	432,119
Leverag	je ratio		
22	Leverage ratio according to CRR transitional guidance (%)	4.40	4.64
Choice of	of transitional guidance and amount of derecognized trust items		
EU-23	Choice of transitional guidance for the definition of the capital measure	Transitional	guidance
EU-24	Amount of derecognized trust assets in accordance with article 429 (13) of Regulation (EU) No. 575/2013	_	-
The DZ BANK banking group's leverage ratio fell by 0.24 percentage points. This was mainly because the total exposure measure increased by €28,698 million to €460,817 million (December 31, 2017: €432,119 million), whereas Tier 1 capital rose only insignificantly, by €225 million, to €20,266 million (December 31, 2017: €20,041 million).

The rise in the DZ BANK banking group's total exposure measure over the course of 2018 was predominantly attributable to the following effects. On-balance-sheet exposures – particularly in the governments or central banks exposure class – increased in the course of normal business operations (especially at DZ BANK) and were accompanied by growth in securities financing transactions and in derivative and off-balance-sheet transactions.

Details of the main drivers of the change in Tier 1 capital can be found in section 4.1 of this report.

Fig. 54 provides an alternative breakdown by regulatory category of the exposures reported on the balance sheet.

€million	Leverage ratio exposures	Jun. 30, 2018	Dec. 31, 2017
EU-1	Total on-balance-sheet exposures (excluding derivatives, SFTs, and exempted exposures)	405,139	380,331
EU-2	of which: Trading book exposures	13,119	11,326
EU-3	Banking book exposures, of which:	392,020	369,006
EU-4	Covered bonds	8,103	9,002
EU-5	Exposures treated as sovereigns	121,807	103,098
EU-6	Exposures to regional governments, multilateral development banks, international organizations, and public-sector entities not treated as sovereigns	1,387	1,310
EU-7	Institutions	82,827	81,218
EU-8	Secured by mortgages on immovable property	76,245	74,753
EU-9	Retail exposures	19,400	18,823
EU-10	Corporates	62,201	60,342
EU-11	Exposures in default	2,999	3,222
EU-12	Other exposures (e.g. long-term equity investments, securitizations, and other non-credit-obligation assets)	17,050	17,236

Fig. 54 – LRSPL – BREAKDOWN OF ON-BALANCE-SHEET EXPOSURES (EXCLUDING DERIVATIVES, SFTS AND EXEMPTED EXPOSURES)

7.2 Description of the process for monitoring the risk of excessive leverage (ARTICLE 451 SENTENCE 1 LETTER D CRR)

In the strategic planning process, the Board of Managing Directors sets out the bank's overall strategy and the allocation of resources for the individual management units. Within these guidelines, the Treasury and Capital Committee operates with the aim of monitoring the optimization of resource efficiency during the year. To do so, it carries out detailed plan-versus-actual analysis for all relevant management units to determine where the actual resource situation has deviated from the original projection and highlights the factors driving these deviations. In its management role, the Treasury and Capital Committee identifies the action required and instigates mitigation steps or optimization measures. These tasks are accomplished either by means of a direct decision or a recommendation being made and, where necessary, the matter is referred to the Board of Managing Directors.

8 Overview of quantitative and qualitative requirements pursuant to the CRR, EBA/GL/2016/11, and other sources

				Relevan		D	isclosure frequen	cy	Boforonco
Legal basis	Table name	Source	Description	ce	Format	Quarterly	Half-yearly	Annually	Reference
		CRR EBA/GL/2016/11 paragraph 4.2 section A	Overview of quantitative and qualitative requirements pursuant to the CRR and EBA/GL/2016/11	х	Flexible	х	х	х	
Article 431 (3)		CRR	Scope of disclosure requirements – disclosure policy	х	Flexible	-	-	х	
Article 432	Inclusion of entities in the DZ BANK banking group in quantitative regulatory disclosures	CRR EBA/GL/2014/14	Non-material, proprietary, or confidential information	х	Flexible	х	х	х	
Article 433		CRR EBA/GL/2014/14	Frequency of disclosure	х	Flexible	х	х	х	
Article 434		CRR EBA/GL/2014/14	Means of disclosure	х	Flexible	х	х	х	
Article 435 (1)	EU OVA, EU CRA, EU CCRA, EU MRA, and EU LIA	CRR EBA/GL/2016/11 paragraph 4.3 sections A and B	 Institution's risk management approach General qualitative information about credit risk, counterparty credit risk, and market risk 	x	Flexible	-	-	x	Combined opportunity and risk report ('opportunity and risk report') contained in the DZ BANK Annual Report
Article 435 (2)		CRR EBA/GL/2016/11 paragraph 4.3 section C	Institution's risk management approach – governance arrangements	х	Flexible	-	-	х	
Article 436 letter e	EU LIA, EU LI1, EU LI2, and EU LI3	CRR EBA/GL/2016/11 paragraph 4.4	 Consolidation matrix – differences in the scopes of consolidation (entity by entity), Differences between accounting and regulatory scopes of consolidation and Reconciliation of financial statements categories to regulatory risk categories, Sources of differences between regulatory exposure amounts and carrying amounts on the balance sheet and Explanation of the differences between the carrying amounts for accounting purposes and the regulatory exposures. 	x	Flexible	-	-	x	
Article 437 (1) letter a	Reconciliation of equity reported on the balance sheet with regulatory own funds	CRR Implementing Regulation (EU) No. 1423/2013, Annex I	Full reconciliation of own funds items to the financial statements	х	Flexible	-	х	х	

				Relevan		D	isclosure frequen	су	_
Legal basis	Table name	Source	Description	ce	Format	Quarterly	Half-yearly	Annually	Reference
Article 437 (1) letter b	Main features of capital instruments	CRR Implementing Regulation (EU) No. 1423/2013, Annex I	Description of the main features of the common equity Tier 1, additional Tier 1, and Tier 2 instruments issued by institutions	х	Fixed	-	x	x	DZ BANK's website in the Investor Relations section under Bondholder Information, subsection Capital Instruments
Article 437 (1) letter c		CRR	Full terms and conditions of capital instruments	х	Flexible	-	x	x	DZ BANK's website in the Investor Relations section under Bondholder Information, subsection Capital Instruments
Article 437 (1) letters d and e	Structure of own funds	CRR Implementing Regulation (EU) No. 1423/2013, Annex IV	Disclosure of the nature and amounts of specific elements of own funds	х	Fixed	х	х	х	
Article 437 (1) letter f		CRR	Explanation of the basis on which capital ratios are calculated, if determined on a basis other than that laid down in the CRR	Not relevan t	Flexible	-	х	х	
Article 438 sentence 1 letter a		CRR	Qualitative disclosure requirements regarding the approach to assessing the adequacy of internal capital	х	Flexible	-	-	х	
Article 438 sentence 1 letter b		CRR	The result of the institution's internal capital adequacy assessment process, if requested by the relevant competent authority	Not relevan t	Flexible	-	-	х	
Article 438 sentence 1 letters c to f	EU OV1 and capital requirements	CRR EBA/GL/2016/11 paragraph 69	Overview of risk-weighted assets (RWAs) and capital requirements	х	Fixed	х	х	х	
Article 438 sentence 2	EU CR10	CRR EBA/GL/2016/11 paragraph 70	IRB (specialized lending and long-term equity investments)	х	Flexible	-	х	х	
Article 439 sentence 1 letters a to d	EU CCRA	CRR EBA/GL/2016/11 paragraph 53	Qualitative disclosure requirements regarding counterparty credit risk	х	Flexible	-	-	х	Opportunity and risk report
Article 439 sentence 1 letters e, and i	EU CCR1, EU CCR2, EU CCR8, EU CCR5-A, EU CCR5-B	CRR EBA/GL/2016/11 paragraphs 114, 115, 116, 120, 122	 Analysis of counterparty credit risk by approach; Capital requirement for adjustment of the credit valuation; Exposures to central counterparties; Impact of netting and collateral held on exposure values; 	х	Fixed & flexible	-	x	x	

		_		Relevan ce	Format	D	isclosure frequen	ю	
Legal basis	Table name	Source	Description			Quarterly	Half-yearly	Annually	Reference
			 Composition of collateral for exposures subject to counterparty credit risk 						
Article 439 sentence 1 letters g to h	EU CCR6	CRR EBA/GL/2016/11 paragraph 123	Exposures secured by credit derivatives	х	Flexible	-	х	х	
Article 440		CRR Delegated Regulation (EU) No. 2015/1555	Countercyclical capital buffer	х	Flexible	-	-	х	
Article 441		CRR Implementing Regulation (EU) No. 2016/818	Indicators of global systemic importance	х	Flexible	-	-	х	DZ BANK's website in the Investor Relations section under Reports
Article 442 sentence 1 letters a and b	EU CRB-A	CRR EBA/GL/2016/11 paragraph 76	Additional disclosure related to the credit quality of assets	х	Flexible	-	-	х	
Article 442 sentence 1 letter c	EU CRB-B	CRR EBA/GL/2016/11 paragraph 77	Total and average net amount of exposures	х	Flexible	-	-	х	
Article 442 sentence 1 letter d	EU CRB-C	CRR EBA/GL/2016/11 paragraph 78	Geographical breakdown of exposures	х	Flexible	-	-	х	
Article 442 sentence 1 letter e	EU CRB-D	CRR EBA/GL/2016/11 paragraph 81	Concentration of exposures by industry or counterparty type	х	Flexible	-	-	х	
Article 442 sentence 1 letter f	EU CRB-E	CRR EBA/GL/2016/11 paragraph 83	Residual maturity of exposures	х	Flexible	-	-	х	
Article 442 sentence 1 letters g and h	EU CR1-A	CRR EBA/GL/2016/11 paragraph 88	Credit quality of exposures by exposure class and instrument	х	Fixed	-	х	х	
Article 442 sentence 1 letter g	EU CR1-B	CRR EBA/GL/2016/11 paragraph 89	Credit quality of exposures by industry or counterparty type	х	Fixed	-	х	х	
Article 442 sentence 1 letter h	EU CR1-C	CRR EBA/GL/2016/11 paragraph 89	Credit quality of exposures by geography	х	Fixed	-	х	х	
Article 442 sentence 1 letters g and h	EU CR1-D	CRR EBA/GL/2016/11 paragraph 89	Maturity structure of past-due exposures	х	Fixed	-	х	х	
Article 442 sentence 1 letters g and i	EU CR1-E	CRR EBA/GL/2016/11 paragraph 90	Non-performing and forborne exposures	х	Flexible	-	х	х	

				Relevan		D	isclosure frequen	су	_
Legal basis	Table name	Source	Description	ce	Format	Quarterly	Half-yearly	Annually	Reference
Article 442 sentence 1 letter i	EU CR2-A and EU CR2-B	CRR EBA/GL/2016/11 paragraph 92	Changes in the stock of general and specific credit risk adjustments and changes in the stock of defaulted and impaired loans and debt securities	х	Fixed	-	х	х	
Article 443		CRR Delegated Regulation (EU) No. 2017/2295	Asset encumbrance	х	Fixed	-	-	х	
Article 444 sentence 1 letters a to d	EU CRD	CRR EBA/GL/2016/11 paragraph 97	Qualitative disclosure requirements regarding institutions' use of external credit ratings under the Standardized Approach to credit risk	х	Flexible	-	-	х	
Article 444 sentence 1 letter e	EU CR5, EU CCR3, and CRSA exposures before credit risk mitigation by rating category	CRR EBA/GL/2016/11 paragraph 97	Standardized Approach exposures before and after credit risk mitigation by rating category	x	Fixed	-	х	х	
Article 445	EU MR1	CRR EBA/GL/2016/11 paragraph 127	Market risk under the Standardized Approach	х	Fixed	-	х	х	
Article 446		CRR	Operational risk	х	Fixed	-	х	х	Opportunity and risk report
Article 447 sentence 1 letter a		CRR	Accounting policies applied to long-term equity investments	х	Flexible	-	-	х	
Article 447 sentence 1 letters b and c	Measurement of equity exposures	CRR	Disclosure of equity investment risk: carrying amounts under commercial law and current market value	х	Flexible	-	-	х	
Article 447 sentence 1 letters d and e	Realized and unrealized gains and losses on equity exposures in accordance with IFRS	CRR	Inclusion of unrealized gains and losses on long- term equity investments in own funds	х	Flexible	-	-	х	
Article 448 sentence 1 letter a		CRR BaFin Circular 11/2011	Nature of interest-rate risk, key assumptions made, and frequency of risk measurement	х	Flexible	-	-	х	
Article 448 sentence 1 letter b	Interest-rate risk in the banking book	CRR BaFin Circular 11/2011	Interest-rate risk in the banking book	х	Flexible	-	-	х	
Article 449 sentence 1 letters a, d, e, and i	Securitization exposures as originator and sponsor	CRR	Scope, objectives, and risks of securitization	х	Flexible	-	-	х	
Article 449 sentence 1 letters b, c, f,		CRR	Risk management in respect of securitizations	х	Flexible	-	-	х	Opportunity and risk report

		Source	Description	Relevan	Format	D	isclosure frequen	cy	
Legal basis	Table name			ce		Quarterly	Half-yearly	Annually	Reference
and g									
Article 449 sentence 1 letter h		CRR	Procedure for determining risk-weighted exposures	х	Flexible	-	-	х	
Article 449 sentence 1 letter j (i), (ii), (iii), (iv), (v), and (vi)		CRR	Accounting policies applied to securitizations	x	Flexible	-	-	х	
Article 449 sentence 1 letter l		CRR	Internal ratings	х	Flexible	-	-	х	
Article 449 sentence 1 letter k	Reconciliation of external and internal ABS ratings	CRR	External ratings	х	Flexible	-	-	х	
Article 449 sentence 1 n) (i) and q)	Total amount of securitizations with DZ BANK banking group as originator and sponsor	CRR	Total amount of asset securitizations	x	Flexible	-	-	x	
Article 449 sentence 1 n) (iii), (vi)		CRR	Total amount of planned securitizations; securitizations during the reporting period	х	Flexible	-	-	х	
Article 449 sentence 1 n) (ii)	Retained, purchased or off-balance-sheet securitization exposures	CRR	Retained, purchased or off-balance-sheet securitization exposures	х	Flexible	-	I	х	
Article 449 sentence 1 o) (i)	EU OV1 and exposures and capital requirements for retained or purchased securitizations	CRR EBA/GL/2016/11 paragraph 69	Exposures and capital requirements for retained or purchased securitizations broken down by the approach used to calculate the capital requirement	x	Fixed	x	x	x	
Article 449 sentence 1 n) (v)	Deductions from own funds and securitization exposures with a risk weighting of 1,250 percent by asset class	CRR	Securitization exposures and deductions from own funds	x	Flexible	-	-	x	

		_		Relevan		D	isclosure frequen	cy	_
Legal basis	Table name	Source	Description	ce	Format	Quarterly	Half-yearly	Annually	Reference
Article 449 sentence 1 o) (ii)	Re-securitization exposures and collateralization amounts	CRR	Re-securitization exposures and collateralization amounts	Х	Flexible	-	-	Х	
Article 449 sentence 1 letter p	Impaired securitizations, securitizations in arrears, and losses realized during the reporting period	CRR	Impaired securitizations, securitizations in arrears, and losses realized during the reporting period	х	Flexible	-	-	х	
Article 450		CRR EBA/GL/2015/22	Remuneration policy	Х	Flexible	-	-	х	DZ BANK's website in the Investor Relations section under Reports
Article 451 (1) letter a	Summary reconciliation of assets on the balance sheet to the leverage ratio total exposure measure	CRR Implementing Regulation (EU) No. 2016/200, Annex I (LRSum)	Reconciliation of the total assets of the DZ BANK Group to the leverage ratio total exposure measure	х	Fixed	-	х	х	
Article 451 (1) letter a	Leverage ratio according to the CRR transitional guidance and after full application of the CRR	CRR	Components for calculating the leverage ratio in accordance with the CRR transitional guidance and after application of the CRR in full	х	Flexible	х	х	х	
Article 451 (1) letter b	Leverage ratio common disclosure	CRR Implementing Regulation (EU) No. 2016/200, Annex I (LRCom)	Individual components of the total exposure measure, Tier 1 capital, and the resulting leverage ratio	х	Fixed	-	х	х	
Article 451 (1) letter c	Breakdown of on-balance- sheet exposures (excluding derivatives, SFTs and exempted exposures)	CRR Implementing Regulation (EU) No. 2016/200, Annex I (LRSpl)	Breakdown by regulatory category of the exposures reported on the balance sheet	Х	Fixed	-	х	х	
Article 451 (1) letters d and e	Change to the leverage ratio: - If pass-through development loans are excluded - If exposures within the cooperative financial network are excluded - If the exclusions in the tables above are applied cumulatively	CRR Implementing Regulation (EU) No. 2016/200, Annex I (LRQua)	Description of the processes for monitoring the risk of excessive leverage and factors influencing the leverage ratio during the reporting period	x	Flexible	x	x	x	

				Relevan		D	isclosure frequen	су	
Legal basis	Table name	Source	Description	ce	Format	Quarterly	Half-yearly	Annually	Reference
Article 452 letters a, b, and c	EU CRE	CRR EBA/GL/2016/11 paragraph 103	Qualitative disclosure requirements regarding IRB models	х	Flexible	-	-	х	Opportunity and risk report
Article 452 letters d, e, f, and g	EU CR6 and EU CCR4	CRR EBA/GL/2016/11 paragraph 103	IRB approach – Credit risk exposures by exposure class and PD range and counterparty credit risk exposures by portfolio and PD scale	х	Fixed	-	х	х	
Article 452 letter h		CRR	Description of the factors that impacted on the loss experience in the preceding period	х	Flexible	-	-	х	
Article 452 letter i	EU CR9	CRR EBA/GL/2016/11 paragraph 111	IRB approach – backtesting of the probability of default (PD) per exposure class	х	Flexible	-	-	х	
Article 452 letter j	Average PD by country and exposure class under the foundation IRB approach	CRR EBA/GL/2016/11 paragraph 111	Average risk parameters by country of domicile of borrowing entity and exposure class under the foundation IRB approach	х	Flexible	-	-	х	
Article 452 letter j	Average PD and LGD by country and exposure class under the advanced IRB approach	CRR EBA/GL/2016/11 paragraph 111	Average risk parameters by country of domicile of borrowing entity and exposure class under the advanced IRB approach	х	Flexible	-	-	х	
Article 453 letters a to e	EU CRC	CRR EBA/GL/2016/11 paragraph 93	Qualitative disclosure requirements regarding credit risk mitigation techniques	х	Flexible	-	-	х	Opportunity and risk report
Article 453 letters f and g	EU CR3 and EU CR4	CRR EBA/GL/2016/11	Credit risk mitigation techniques – overview; Standardized Approach – credit risk exposure and credit risk mitigation effects	х	Fixed	-	х	х	
Article 454		CRR	Use of Advanced Measurement Approaches for operational risk	Not relevan t	Flexible	-	-	х	
Article 455 letters a and b	EU MRB	CRR EBA/GL/2016/11 paragraphs 54 and 66	Qualitative disclosure requirements for institutions using the IMA	х	Flexible	-	-	х	
Article 455 letter c	EU MRA and EU LIA	CRR EBA/GL/2016/11 paragraph 129	EU MR2-A – market risk under the internal models approach	х	Fixed	-	х	х	
Article 455 letter e	EU MR2 A	CRR EBA/GL/2016/11 paragraph 129	EU MR2-A – market risk under the internal models approach	х	Fixed	-	х	х	
Article 455 letter e	EU MR2 B	CRR EBA/GL/2016/11 paragraph 129	EU MR2-B – RWA flow statements of market risk exposures under the IMA	х	Fixed	х	х	х	

			Description	Relevan		D	isclosure frequen	cy	Reference
Legal basis	Table name	Source		ce	Format	Quarterly	Half-yearly	Annually	
Article 455 letter d	EU MR3	CRR EBA/GL/2016/11 paragraph 130	EU MR3 – IMA values for trading portfolios	х	Fixed	-	х	х	
Article 455 letter f	IMA values for each portfolio	CRR	Additional default and migration risk measured in relation to the total trading book and in relation to the relevant subportfolios	х	Flexible	-	-	х	
Article 455 letter g	EU MR4	CRR EBA/GL/2016/11 paragraph 132	EU MR4 – comparison of VaR estimates with gains/losses	х	Flexible	-	х	х	
LCR in conjunction with article 435 (1)	EU LIQA	CRR EBA/GL/2017/01	Qualitative information on the LCR	х	Flexible	-	-	х	Opportunity and risk report
LCR in conjunction with article 435 (1)	EU LIQ1 and liquidity coverage ratio of the banking group	CRR EBA/GL/2017/01	Levels and components of the LCR of the banking group	x	Fixed	х	х	х	
Section 26a		KWG	Legal basis	х	Flexible	-	-	х	DZ BANK's website in the Investor Relations section under Reports
Section 35		German Bank Recovery and Resolution Act (SAG)	Legal basis	х	Flexible	-	-	х	Opportunity and risk report
Sections 17 and 18		German Supervision of Financial Conglomerates Act (FKAG) and Delegated Regulation (EU) No. 342/2014	Financial conglomerate solvency	х	Flexible	-	-	х	

9 List of figures

FIG. 1 – EU LI3 – DIFFERENCES IN THE SCOPES OF CONSOLIDATION (ENTITY BY ENTITY) – CONSOLIDATION MATRIX	5
FIG. 2 – INCLUSION OF ENTITIES IN THE DZ BANK BANKING GROUP IN QUANTITATIVE REGULATORY DISCLOSURES	8
FIG. 3 – LIQUIDITY COVERAGE RATIO OF THE DZ BANK BANKING GROUP (AVERAGE)	9
FIG. 4 – LIQUIDITY COVERAGE RATIO OF THE BANKING GROUP (REPORTING DATE)	9
FIG. 5 – STRUCTURE OF OWN FUNDS AS AT JUNE 30, 2018 (ARTICLE 437 (1) LETTERS D AND E CRR IN CONJUNCTION WITH ANNEX IV OF	
IMPLEMENTING REGULATION (EU) NO. 1423/2013)	12
FIG. 6 – ADDITIONAL TIER 1 CAPITAL INSTRUMENTS AS AT JUNE 30, 2018 (PURSUANT TO ANNEX II OF IMPLEMENTING REGULATION (EU) 1423/2013)	NO. 15
FIG. 7 – SUBORDINATED CAPITAL AS AT JUNE 30, 2018 (PURSUANT TO ANNEX II OF IMPLEMENTING REGULATION (EU) NO. 1423/2013)	17
FIG. 8 – RECONCILIATION OF EQUITY REPORTED ON THE BALANCE SHEET WITH REGULATORY OWN FUNDS (ARTICLE 437 (1) LETTER A CR	R
IN CONJUNCTION WITH ANNEX I OF IMPLEMENTING REGULATION (EU) NO. 1423/2013 AS AT JUNE 30, 2018)	18
FIG. 9 – RECONCILIATION OF EQUITY REPORTED ON THE BALANCE SHEET WITH REGULATORY OWN FUNDS (ARTICLE 437 (1) LETTER A CR IN CONJUNCTION WITH ANNEX I OF IMPLEMENTING REGULATION (EU) NO. 1423/2013 AS AT DECEMBER 31, 2017)	22
FIG. 10 – CAPITAL REQUIREMENTS (PART 1)	27
FIG. 11 – CAPITAL REQUIREMENTS (PART 2)	28
FIG. 12 – EU OV1 – OVERVIEW OF RISK-WEIGHTED ASSETS (RWAS)	29
FIG. 13 – EU CR10 – IRB (SPECIALIZED LENDING AND LONG-TERM EQUITY INVESTMENTS)	30
FIG. 14 – EU INS1 – NON-DEDUCTED PARTICIPATIONS IN INSURANCE UNDERTAKINGS	30
FIG. 15 – REGULATORY CAPITAL RATIOS OF THE DZ BANK BANKING GROUP IN ACCORDANCE WITH THE CRR	31
FIG. 16 – REGULATORY MINIMUM REQUIREMENTS	32
FIG. 17 – EU CR1-A – CREDIT QUALITY OF EXPOSURES BY EXPOSURE CLASS AND INSTRUMENT	35
FIG. 18 – EU CR1-B – CREDIT QUALITY OF EXPOSURES BY INDUSTRY	36
FIG. 19 – EU CR1-C – CREDIT QUALITY OF EXPOSURES BY GEOGRAPHY	37
FIG. 20 – EU CR1-D – AGEING OF PAST-DUE EXPOSURES	38
FIG. 21 – EU CR1-E – NON-PERFORMING AND FORBORNE EXPOSURES AS AT JUNE 30, 2018	39
FIG. 22 – EU CR1-E – NON-PERFORMING AND FORBORNE EXPOSURES AS AT DECEMBER 31, 2017	39
FIG. 23 – EU CR2-A – CHANGES IN THE STOCK OF GENERAL AND SPECIFIC CREDIT RISK ADJUSTMENTS	40
FIG. 24 – EU CR2-B – CHANGES IN THE STOCK OF DEFAULTED AND IMPAIRED LOANS AND DEBT SECURITIES	41
FIG. 25 – EU CR3 – CREDIT RISK MITIGATION TECHNIQUES – OVERVIEW AS AT JUNE 30, 2018	41
FIG. 26 – EU CR3 – CREDIT RISK MITIGATION TECHNIQUES – OVERVIEW AS AT DECEMBER 31, 2017	42
FIG. 27 – CRSA EXPOSURES BEFORE CREDIT RISK MITIGATION BY RATING CATEGORY	45
FIG. 28 – EU CR4 – STANDARDIZED APPROACH – CREDIT RISK EXPOSURE AND CREDIT RISK MITIGATION EFFECTS	46
FIG. 29 – EU CR5 – STANDARDIZED APPROACH – CREDIT RISK BY EXPOSURE CLASS AND RISK WEIGHTING	47
FIG. 30 – EU CR6 – IRB APPROACH – CREDIT RISK EXPOSURES BY EXPOSURE CLASS AND PD RANGE (FIRB)	49
FIG. 31 – EU CR6 – AIRB APPROACH – CREDIT RISK EXPOSURES BY EXPOSURE CLASS AND PROBABILITY OF DEFAULT	51
FIG. 32 – EU CR7 – EFFECT ON THE RWAS OF CREDIT DERIVATIVES USED AS CREDIT RISK MITIGATION TECHNIOUES	54
FIG. 33 – EU CR8 – RWA FLOW STATEMENT OF CREDIT RISK EXPOSURES UNDER THE IRB APPROACH	54
FIG. 34 – EU CCR1 – ANALYSIS OF COUNTERPARTY CREDIT RISK BY APPROACH	55
FIG. 35 – EU CCR2 – CVA CAPITAL CHARGE	56
FIG. 36 – EU CCR8 – EXPOSURES TO CCPS	56
FIG. 37 – EU CCR3 – STANDARDIZED APPROACH – COUNTERPARTY CREDIT RISK EXPOSURES BY REGULATORY PORTFOLIO AND RISK	57
FIG. 38 – EU CCR4 – FIRB APPROACH – COUNTERPARTY CREDIT RISK EXPOSURES BY PORTFOLIO AND PD SCALE	58
FIG. 39 – EU CCR4 – AIRB APPROACH – COUNTERPARTY CREDIT RISK EXPOSURES BY PORTFOLIO AND PD SCALE	59
FIG. 40 – EU CCR5-A – IMPACT OF NETTING AND COLLATERAL HELD ON EXPOSURE VALUES	61
FIG. 41 – EU CCR5-B – COMPOSITION OF COLLATERAL FOR EXPOSURES TO COUNTERPARTY CREDIT RISK	62
FIG. 42 – EU CCR6 – CREDIT DERIVATIVES EXPOSURES	63
	64
FIG. 43 – EU MR1 – MARKET RISK UNDER THE STANDARDIZED APPROACH	
FIG. 44 – EU MR2-A – MARKET RISK UNDER THE INTERNAL MODELS APPROACH (IMA)	65
FIG. 45 – EU MR2-B – RWA FLOW STATEMENTS OF MARKET RISK EXPOSURES UNDER THE IMA	66
FIG. 46 – EU MR3 – IMA VALUES FOR TRADING PORTFOLIOS	67
FIG. 47 – IMA VALUES FOR EACH SUBPORTFOLIO AS AT JUNE 30, 2018	67
FIG. 48 – IMA VALUES FOR EACH SUBPORTFOLIO AS AT DECEMBER 31, 2017	67
FIG. 49 – EU MR4 – COMPARISON OF VAR ESTIMATES FOR MARKET RISK IN THE TRADING BOOK AND CURRENCY RISK AND COMMODITY RISK IN THE BANKING BOOK UNDER THE INTERNAL MODELING APPROACH AND HYPOTHETICAL CHANGES IN FAIR VALUE WITH GAINS/LOSSES AT DZ BANK AS AT JUNE 30, 2018	
GAINS/LOSSES AT DZ BANK AS AT JUNE 30, 2018 FIG. 50 – EU MR4 – COMPARISON OF VAR ESTIMATES FOR MARKET RISK IN THE TRADING BOOK AND CURRENCY RISK AND COMMODITY	
RISK IN THE BANKING BOOK UNDER THE INTERNAL MODELING APPROACH AND HYPOTHETICAL CHANGES IN FAIR VALUE WITH GAINS/LOSSES AT DZ BANK AS AT DECEMBER 31, 2017	
	55

FIG. 51 – LEVERAGE RATIO ACCORDING TO THE CRR TRANSITIONAL GUIDANCE AND AFTER FULL APPLICATION OF THE CRR	70
FIG. 52 - LRSUM - SUMMARY RECONCILIATION OF ASSETS ON THE BALANCE SHEET TO THE LEVERAGE RATIO TOTAL EXPOSURE MEAS	URE
	71
FIG. 53 – LRCOM – LEVERAGE RATIO COMMON DISCLOSURE	71
FIG. 54 – LRSPL – BREAKDOWN OF ON-BALANCE-SHEET EXPOSURES (EXCLUDING DERIVATIVES, SFTS AND EXEMPTED EXPOSURES)	73

EDITORIAL INFORMATION

DZ BANK AG Deutsche Zentral-Genossenschaftsbank, Frankfurt am Main Platz der Republik 60325 Frankfurt am Main Germany

Postal address: 60265 Frankfurt am Main Germany

Tel: +49 (0)69 7447 01 Fax: +49 (0)69 7447 1685 mail@dzbank.de www.dzbank.com

Board of Managing Directors: Wolfgang Kirsch (Chief Executive Officer) Uwe Berghaus Dr. Christian Brauckmann Ulrike Brouzi Wolfgang Köhler Dr. Cornelius Riese Michael Speth Thomas Ullrich

General Executive Manager: Uwe Fröhlich