



UBS Group AG

2017 **semiannual** Pillar 3 report

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Section 1 Regulatory exposures and risk-weighted assets

Introduction

This report provides additional Pillar 3 disclosures for UBS Group AG on a consolidated basis as of 30 June 2017 that are required on a semiannual basis. It should be read in conjunction with our UBS Group AG and significant regulated subsidiaries and sub-groups second quarter 2017 Pillar 3 report, available under "Pillar 3 disclosures" at www.ubs.com/investors, which includes disclosures required on a quarterly basis.

More information on risk-weighted assets (RWA) is provided in our first and second quarter 2017 reports, both available under "Quarterly reporting" at www.ubs.com/investors and in our UBS Group AG and significant regulated subsidiaries and sub-groups first and second quarter 2017 Pillar 3 reports, which include information required on a quarterly basis, both available under "Pillar 3 disclosures" at www.ubs.com/investors.

UBS's Pillar 3 disclosures are based on phase-in rules under the Basel III framework as implemented by the Swiss Federal Council's revised Swiss Capital Adequacy Ordinance and required by FINMA regulation.

FINMA-defined asset classes

For an overview of the FINMA-defined asset classes used within this Pillar 3 report, refer to the Basel III Pillar 3 UBS Group AG 2016 report under "Pillar 3 disclosures" at www.ubs.com/investors.

The tables on the following pages present the net exposure at default and RWA by risk type and FINMA-defined asset class with references to the sections of this report that contain more information on the respective topics.

RWA development during the first half of 2017

During the first half of 2017, phase-in RWA increased by CHF 12.4 billion to CHF 237.8 billion.

The increase was mainly driven by a CHF 9.7 billion increase in credit risk and a CHF 4.7 billion increase in counterparty credit risk. This was partly offset by a reduction in market risk RWA of CHF 1.8 billion and a reduction of CHF 1.4 billion in RWA, mainly resulting from the additional phase-in effect in the first half of 2017 due to capital deductions for deferred tax assets.

Regulatory exposures and risk-weighted assets¹

	30.6.17							
	A-IRB / model-based approaches			Standardized approaches ²			Total	
	Net EAD	RWA	Section or table reference	Net EAD	RWA	Section or table reference	Net EAD	RWA
<i>CHF million</i>								
Credit risk (excluding counterparty credit risk)	499,651	71,755	2	49,444	22,892	2	549,095	94,647
Central governments and central banks	143,461	2,751	CR6, CR7	13,195	470	CR4, CR5	156,656	3,221
Banks and securities dealers	13,679	3,222	CR6, CR7	7,094	1,912	CR4, CR5	20,774	5,134
Public sector entities, multilateral development banks	11,180	858	CR6, CR7	2,321	602	CR4, CR5	13,501	1,459
Corporates: specialized lending	22,682	9,826	CR6, CR7				22,682	9,826
Corporates: other lending	48,652	23,694	CR6, CR7	5,616	4,339	CR4, CR5	54,267	28,033
Central counterparties				584	36	CR4, CR5	584	36
Retail	259,997	31,404	CR6, CR7	11,103	7,041	CR4, CR5	271,100	38,444
<i>Residential mortgages</i>	<i>134,172</i>	<i>23,029</i>		<i>5,934</i>	<i>2,296</i>		<i>140,106</i>	<i>25,325</i>
<i>Qualifying revolving retail exposures (QRRE)</i>	<i>1,594</i>	<i>555</i>					<i>1,594</i>	<i>555</i>
<i>Other retail³</i>	<i>124,231</i>	<i>7,819</i>		<i>5,169</i>	<i>4,744</i>		<i>129,400</i>	<i>12,564</i>
Non-counterparty-related risk ⁴				9,531	8,493	CR4, CR5	9,531	8,493
<i>Property, equipment and software</i>				<i>8,364</i>	<i>8,364</i>		<i>8,364</i>	<i>8,364</i>
<i>Other</i>				<i>1,166</i>	<i>129</i>		<i>1,166</i>	<i>129</i>
Counterparty credit risk²	90,740	23,474	3	84,607	10,587	3	175,347	34,060
Central governments and central banks	4,453	1,131	CCR3, CCR4	1,530	206	CCR3, CCR4	5,984	1,337
Banks and securities dealers	18,840	4,971	CCR3, CCR4	5,702	1,231	CCR3, CCR4	24,542	6,202
Public sector entities, multilateral development banks	3,826	397	CCR3, CCR4	1,184	21	CCR3, CCR4	5,010	418
Corporates incl. specialized lending	42,409	13,969	CCR3, CCR4	18,992	5,576	CCR3, CCR4	61,401	19,545
Central counterparties	21,211	299		50,981	1,651		72,192	1,950
Retail				6,218	506	CCR3, CCR4	6,218	506
Credit valuation adjustment (CVA)		2,707	CCR2		1,394	CCR2		4,102
Equity positions in the banking book (CR)	578	2,393	2, CR10				578	2,393
Settlement risk	82	132		247	346		329	478
Securitization exposure in banking book	2,944	1,897	4				2,944	1,897
Market Risk		13,289	5	281	378		281	13,667
Value-at-risk (VaR)		1,315	MR3					1,315
Stressed value-at risk (SVaR)		5,654	MR3					5,654
Add-on for risks-not-in-VaR (Rniv)		2,840	MR3					2,840
Incremental risk charge (IRC)		3,383	MR3					3,383
Comprehensive risk measure (CRM)		97	MR3					97
Securitization / re-securitization in the trading book				281	378	SEC2, MR1	281	378
Operational risk		79,422						79,422
Amounts below thresholds for deduction (250% risk weight)	681	1,804		3,723	9,449		4,404	11,254
Deferred tax assets				3,723	9,449		3,723	9,449
Significant investments in non-consolidated financial institutions	681	1,804					681	1,804
Total	594,675	194,166		138,301	43,653		732,977	237,818

Regulatory exposures and risk-weighted assets (continued)¹

CHF million	31.12.16							
	A-IRB / model-based approaches			Standardized approaches ²			Total	
	Net EAD	RWA	Section or table reference	Net EAD	RWA	Section or table reference	Net EAD	RWA
Credit risk (excluding counterparty credit risk)	469,932	62,804	2	90,627	22,095	2	560,559	84,899
Central governments and central banks	129,371	2,074	CR6, CR7	52,930	349	CR4, CR5	182,300	2,423
Banks and securities dealers	13,937	2,753	CR6, CR7	5,334	1,290	CR4, CR5	19,272	4,043
Public sector entities, multilateral development banks	10,998	712	CR6, CR7	4,084	888	CR4, CR5	15,082	1,600
Corporates: specialized lending	23,331	8,252	CR6, CR7				23,331	8,252
Corporates: other lending	49,225	22,892	CR6, CR7	6,694	4,173	CR4, CR5	55,919	27,066
Central counterparties				971	59	CR4, CR5	971	59
Retail	243,070	26,120	CR6, CR7	10,995	6,910	CR4, CR5	254,065	33,030
<i>Residential mortgages</i>	<i>133,470</i>	<i>19,985</i>		<i>5,790</i>	<i>2,182</i>		<i>139,260</i>	<i>22,167</i>
<i>Qualifying revolving retail exposures (QRRE)</i>	<i>1,552</i>	<i>541</i>					<i>1,552</i>	<i>541</i>
<i>Other retail³</i>	<i>108,048</i>	<i>5,594</i>		<i>5,205</i>	<i>4,728</i>		<i>113,253</i>	<i>10,322</i>
Non-counterparty-related risk ⁴				9,620	8,426	CR4, CR5	9,620	8,426
<i>Property, equipment and software</i>				<i>8,259</i>	<i>8,259</i>		<i>8,259</i>	<i>8,259</i>
<i>Other</i>				<i>1,361</i>	<i>168</i>		<i>1,361</i>	<i>168</i>
Counterparty credit risk²	85,619	19,666	3	84,223	9,696	3	169,842	29,362
Central governments and central banks	4,282	444	CCR3, CCR4	1,673	157	CCR3, CCR4	5,955	601
Banks and securities dealers	18,492	3,838	CCR3, CCR4	5,232	944	CCR3, CCR4	23,724	4,782
Public sector entities, multilateral development banks	4,182	320	CCR3, CCR4	2,444	51	CCR3, CCR4	6,627	371
Corporates incl. specialized lending	42,378	10,586	CCR3, CCR4	16,018	4,287	CCR3, CCR4	58,396	14,873
Central counterparties	16,284	275		53,429	2,117		69,713	2,392
Retail				5,426	616	CCR3, CCR4	5,426	616
Credit valuation adjustment (CVA)		4,202	CCR2		1,524	CCR2		5,726
Equity positions in the banking book (CR)	602	2,375	2, CR10				602	2,375
Settlement risk	76	87		432	440		508	528
Securitization exposure in banking book	3,350	2,068	4				3,350	2,068
Market Risk		15,062	5	345	428		345	15,490
Value-at-risk (VaR)		2,158	MR3					2,158
Stressed value-at risk (SVaR)		6,128	MR3					6,128
Add-on for risks-not-in-VaR (Rniv)		3,709	MR3					3,709
Incremental risk charge (IRC)		2,963	MR3					2,963
Comprehensive risk measure (CRM)		104	MR3					104
Securitization / re-securitization in the trading book				345	428	SEC2, MR1	345	428
Operational risk		77,827						77,827
Amounts below thresholds for deduction (250% risk weight)	756	2,000		3,823	10,864		4,579	12,864
Deferred tax assets				3,823	10,864		3,823	10,864
Significant investments in non-consolidated financial institutions	756	2,000					756	2,000
Total	560,336	181,888		179,450	43,524		739,786	225,412

¹ The presentation of this table has been aligned with the principles applied in "OV1: Overview of RWA," which is available in the UBS Group AG and significant regulated subsidiaries and sub-groups second quarter 2017 Pillar 3 report, available under "Pillar 3 disclosures" at www.ubs.com/investors. ² The split between A-IRB / model-based approaches and Standardized approaches for counterparty credit risk refers to the exposure measure, whereas the split in CCR3 and CCR4 refers to the risk weighting approach. As of 30 June 2017, CHF 101,665 million of EAD (31 December 2016: CHF 98,194 million) was subject to the advanced risk weighting approach, and CHF 1,490 million of EAD (31 December 2016: CHF 1,934 million) was subject to the standardized risk weighting approach. ³ Consists primarily of Lombard lending, which represents loans made against the pledge of eligible marketable securities or cash, as well as exposures to small businesses, private clients and other retail customers without mortgage financing. ⁴ Excludes EAD for deferred tax assets on net operating losses (30 June 2017: CHF 1,708 million; 31 December 2016: CHF 3,877 million), which is not subject to credit risk RWA calculation.

Section 2 Credit risk

Introduction

The tables in this section provide information on the exposures used to determine the firm's credit risk-related regulatory capital requirement on the basis of the credit risk framework illustrated in the "Regulatory exposures and risk-weighted assets" table in section 1 of this report. Information on counterparty credit risk that arises from over-the-counter derivatives, exchange-traded derivatives, securities financing transactions and long settlement transactions, is discussed in section 3 of this report. Securitization positions subject to the securitization regulatory framework are reported in section 4 of this report.

The exposure information presented in this section may differ from our internal management view disclosed in the "Risk management and control" section of our annual and quarterly reports. This is due to the fact that certain treatments are specified by regulatory requirements, although the parameters applied under the advanced internal ratings-based (A-IRB) approach are generally based on the same methodologies, data and systems we use for internal credit risk quantification. Such regulatory requirements include the application of regulatory floors and multipliers, and differences with respect to eligibility criteria and exposure definitions. Similarly, the regulatory capital

measure of credit risk exposure also differs from that defined under IFRS.

This section is structured into four sub-sections:

- Credit quality of assets
- Credit risk mitigation
- Credit risk under the standardized approach
- Credit risk under internal ratings-based approaches

Refer to page 14 of our Basel III Pillar 3 UBS Group AG 2016 report, available under "Pillar 3 disclosures" at www.ubs.com/investors for more information on credit risk management, credit risk exposure categories and our use of the term "loans."

Credit quality of assets

The table below provides a breakdown of defaulted and non-defaulted loans, debt securities and off-balance sheet exposures.

Refer to page 17 of our Basel III Pillar 3 UBS Group AG 2016 report under "Pillar 3 disclosures" at www.ubs.com/investors for more information on policies for past due, non-performing and impaired claims as well as our definition of default.

CR1: Credit quality of assets

CHF million	a		b		c		d	
	Gross carrying values of:				Allowances / impairments		Net values (a + b + c)	
	Defaulted exposures		Non-defaulted exposures					
	30.6.17	31.12.16	30.6.17	31.12.16	30.6.17	31.12.16	30.6.17	31.12.16
1 Loans ¹	2,087	2,190	426,167	428,758	(577)	(599)	427,677	430,348
2 Debt securities	0	0	78,375	94,175	0	0	78,375	94,175
3 Off-balance sheet exposures	332	267	166,762	178,637	(53)	(54)	167,041	178,849
4 Total	2,420	2,456	671,304	701,569	(630)	(653)	673,093	703,372

¹ Loan exposure is reported in line with the Pillar 3 definition.

CR2: Changes in stock of defaulted loans and debt securities

CHF million	a
1 Defaulted loans and debt securities as of 31.12.16	2,456
2 Loans and debt securities that have defaulted since the last reporting period	504
3 Returned to non-defaulted status	(257)
4 Amounts written off	(65)
5 Other changes	(220)
6 Defaulted loans and debt securities as of 30.6.17	2,420

Credit risk mitigation

The table below provides a breakdown of unsecured and partially or fully secured exposures, including security type, for the categories *Loans* and *Debt securities*.

The total carrying amount of loans decreased by CHF 2.7 billion, mainly driven by a reduction in cash and balances with central banks, primarily reflecting higher funding utilization by the business divisions, partly offset by various debt

issuances and rebalancing within our high-quality liquid assets (HQLA) portfolio. This was partly offset by an increase in Lombard lending in Wealth Management.

The reduction of CHF 15.8 billion in debt securities was primarily driven by a decrease in financial assets designated at fair value, available for sale and held to maturity, mainly reflecting rebalancing within our HQLA portfolio.

CR3: Credit risk mitigation techniques – overview¹

CHF million	a	b1	Total: carrying amount	b	d	f
	Exposures unsecured: carrying amount	Exposures partially or fully secured: carrying amount		Exposures secured by collateral	Exposures secured by financial guarantees	Exposures secured by credit derivatives
			30.6.17			
1 Loans ²	133,340	294,337	427,677	290,773	1,444	96
2 Debt securities	78,375	0	78,375	0	0	0
3 Total	211,715	294,337	506,052	290,773	1,444	96
4 of which: defaulted	203	1,308	1,511	697	258	0
			31.12.16			
1 Loans ²	137,267	293,081	430,348	288,314	1,930	751
2 Debt securities	94,175	0	94,175	0	0	0
3 Total	231,442	293,082	524,523	288,314	1,930	751
4 of which: defaulted	130	1,461	1,591	665	318	0

¹ Exposures in this table represent carrying values in accordance with the regulatory scope of consolidation. This table was prepared on the basis of the disclosure requirements published by FINMA in October 2015. Once we adopt the interpretation included in "Frequently asked questions on the revised Pillar 3 disclosure requirements (BCBS 376)" issued by BCBS in August 2016, exposures secured by collateral and by credit derivatives will be subject to haircuts. ² Loan exposure is reported in line with the Pillar 3 definition.

Standardized approach – credit risk mitigation

The table below shows the effect of credit risk mitigation on the calculation of capital requirements under the standardized approach.

Credit risk exposure post-credit conversion factors (CCF) and post-CRM measured under the standardized approach decreased by CHF 40.2 billion to CHF 49.4 billion as of 30 June 2017. This decrease was primarily due to the migration of portfolios held for local liquidity requirements from a measurement under the standardized approach to a measurement under the A-IRB approach, including a decrease of CHF 37.8 billion in exposure to central governments and central banks, exposures of CHF 2.3 billion to public sector entities and multilateral development banks and exposures to corporates of

CHF 1.4 billion. This migration increased credit risk exposures under the A-IRB approach by CHF 33.1 billion. The portion of the migration related to the aforementioned rebalancing within our HQLA portfolio represents counterparty credit risk, which did not result in a significant EAD impact due to higher collateralization levels as of 30 June 2017.

The increase in RWA density was primarily driven by the aforementioned migration of portfolios held for local liquidity requirements from measurement under the standardized approach to measurement under the A-IRB approach, which resulted in a change in the composition of the portfolio under the standardized approach. However, the net impact on RWA from this change was not material.

CR4: Standardized approach – credit risk exposure and credit risk mitigation (CRM) effects

	a		b		c		d		e		f
	Exposures before CCF and CRM			Exposures post CCF and CRM			RWA and RWA density				
	On-balance sheet amount	Off-balance sheet amount	Total	On-balance sheet amount	Off-balance sheet amount	Total	RWA	RWA density in %			
<i>CHF million, except where indicated</i>											
30.6.17											
Asset classes¹											
1 Central governments and central banks	13,187	106	13,293	13,187	0	13,187	493	3.7			
2 Banks and securities dealers	6,680	897	7,576	6,677	437	7,115	1,932	27.2			
3 Public sector entities and multilateral development banks	2,321	2	2,323	2,329	0	2,329	606	26.0			
4 Corporates ²	6,695	3,621	10,316	5,674	600	6,273	4,391	70.0			
5 Retail	11,739	2,188	13,927	10,754	255	11,009	6,977	63.4			
6 Equity											
7 Other assets	9,531		9,531	9,531		9,531	8,493	89.1			
8 Total	50,153	6,813	56,967	48,152	1,292	49,444	22,892	46.3			
31.12.16											
Asset classes¹											
1 Central governments and central banks	52,921	0	52,921	52,921	0	52,921	354	0.7			
2 Banks and securities dealers	4,919	877	5,796	4,898	437	5,334	1,290	24.2			
3 Public sector entities and multilateral development banks	4,093	2	4,094	4,093	0	4,093	892	21.8			
4 Corporates	7,364	5,027	12,391	6,605	168	6,774	4,200	62.0			
5 Retail	11,520	3,212	14,732	10,679	236	10,915	6,873	63.0			
6 Equity											
7 Other assets	9,620		9,620	9,620		9,620	8,426	87.6			
8 Total	90,437	9,117	99,554	88,816	841	89,657	22,036	24.6			

¹ The effect of credit risk mitigation (CRM) is reflected in the original asset class. ² As of 30 June 2017, we have prospectively included loan exposures to central counterparties in accordance with the "Frequently asked questions on the revised Pillar 3 disclosure requirements (BCBS 376)" document published by BCBS in August 2016.

IRB approach – credit derivatives used as credit risk mitigation

We actively manage the credit risk in our corporate loan portfolios by utilizing credit derivatives. Single-name credit derivatives that fulfill the operational requirements prescribed by FINMA are recognized in the RWA calculation using the probability of default (PD) or rating (and asset class) assigned to the hedge provider. The PD (or rating) substitution is only applied in the RWA calculation when the PD (or rating) of the hedge provider is lower than the PD (or rating) of the obligor. In

addition, default correlation between the obligor and hedge provider is taken into account through the double default approach. Credit derivatives with tranching cover or first-loss protection are recognized through the securitization framework. Refer to the “CCR6: Credit derivatives exposures” table for notional and fair value information on credit derivatives used as credit risk mitigation.

CR7: IRB – effect on RWA of credit derivatives used as CRM techniques¹

		30.6.17		31.12.16	
		a	b	a	b
<i>CHF million</i>		Pre-credit derivatives RWA	Actual RWA	Pre-credit derivatives RWA	Actual RWA
1	Central governments and central banks – FIRB				
2	Central governments and central banks – AIRB	2,750	2,733	2,085	2,061
3	Banks and securities dealers – FIRB				
4	Banks and securities dealers – AIRB	2,978	2,978	2,437	2,437
5	Public sector entities, multilateral development banks – FIRB				
6	Public sector entities, multilateral development banks – AIRB	889	889	748	748
7	Corporates: Specialized lending – FIRB				
8	Corporates: Specialized lending – AIRB	9,877	9,877	8,326	8,326
9	Corporates: Other lending – FIRB				
10	Corporates: Other lending – AIRB	25,100	23,874	24,855	23,110
11	Retail: mortgage loans	23,029	23,029	19,985	19,985
12	Retail exposures: qualifying revolving retail (QRRE)	555	555	541	541
13	Retail: other	7,820	7,820	5,594	5,594
14	Equity positions (PD/LGD - approach)				
15	Total	72,997	71,755	64,572	62,804

¹ The effect of credit risk mitigation (CRM) is reflected on the original asset class.

Credit risk under the standardized approach

The standardized approach is generally applied where it is not possible to use the A-IRB approach. More information on the movements shown in the table below is provided on page 7 under "Standardized approach – credit risk mitigation."

CR5: Standardized approach – exposures by asset classes and risk weights

CHF million	a	b	c	d	e	f	g	h	i	j
Risk weight	0%	10%	20%	35%	50%	75%	100%	150%	Others	Total credit exposures amount (post CCF and CRM)
										30.6.17
Asset classes										
1 Central governments and central banks	12,308		123		638		125		1	13,195
2 Banks and securities dealers			5,539		1,501		54			7,094
3 Public sector entities and multilateral development banks	524		1,041		726		30		0	2,321
4 Corporates ¹	64		2,042		143		3,885		64	6,199
5 Retail				5,536		1,857	3,711			11,104
6 Equity										
7 Other assets	1,038						8,493			9,531
8 Total	13,933		8,745	5,536	3,008	1,857	16,299	65		49,444
9 of which: mortgage loans				5,536		158	240			5,934
10 of which: past due								59 ²		59

										31.12.16
Asset classes										
1 Central governments and central banks	51,862		879		31		156		1	52,930
2 Banks and securities dealers			4,650		645		39		0	5,334
3 Public sector entities and multilateral development banks	1,811		1,226		810		237		0	4,084
4 Corporates			3,057		149		3,482		6	6,694
5 Retail				5,518		1,993	3,483			10,995
6 Equity										
7 Other assets	1,194						8,426			9,620
8 Total	54,867		9,812	5,518	1,636	1,993	15,823	7	0	89,657
9 of which: mortgage loans				5,518		87	257			5,861
10 of which: past due							0	0		0

¹ As of 30 June 2017, we have prospectively included loan exposures to central counterparties in accordance with the "Frequently asked questions on the revised Pillar 3 disclosure requirements (BCBS 376)" document published by BCBS in August 2016. ² Includes mortgage loans.

Credit risk under internal ratings-based approaches

The tables in this sub-section provide information on credit risk exposures under the A-IRB approach, including the main parameters used in A-IRB models for the calculation of capital requirements, presented by portfolio and probability of default (PD) range.

Under the A-IRB approach, the required capital for credit risk is quantified through empirical models, which we have developed to estimate the PD, loss given default (LGD), exposure at default (EAD) and other parameters, subject to FINMA approval. The proportion of EAD covered by either the standardized or the A-IRB approach is provided in the "Regulatory exposures and risk-weighted assets" table in section 1 of this report.

The "CR6: IRB – Credit risk exposures by portfolio and PD range" table on the following pages provides a breakdown of the key parameters used for calculation of capital requirements under the A-IRB approach, shown by PD range across FINMA-defined asset classes.

Exposures before the application of CCFs increased by CHF 65.9 billion to CHF 608.6 billion as of 30 June 2017 and exposures post-CCF and post-credit risk mitigation (CRM) increased by CHF 29.7 billion to CHF 499.7 billion as of 30 June 2017. This increase was primarily driven by a model update required by FINMA to apply CCFs for unutilized Lombard loan facilities that were previously excluded from the RWA calculation. It resulted in an increase of CHF 62.9 billion in the asset class "Retail: other retail" and, with a contribution of CHF 14.9 billion, was also the main driver for the increase in EADs post CCF and post CRM in this portfolio. The migration of portfolios held for local liquidity requirements from a measurement under the standardized approach to a measurement under the A-IRB approach, as explained in the "CR4: Standardized approach – credit risk exposure and credit risk mitigation (CRM) effects" table, resulted in an increase of

CHF 30.7 billion in exposures to central governments and central banks, an increase of CHF 1.8 billion in exposure to corporates and an increase of CHF 0.6 billion in exposures to public sector entities and multilateral development banks. The effect of CHF 30.7 billion on exposures to central governments and central banks was partly offset by higher funding utilization by the business divisions, which reduced cash and balances at central banks, resulting in a net EAD post CCF and post CRM increase of CHF 14.1 billion in central governments and central banks.

Average CCFs decreased 4 percentage points, as the aforementioned changes introduced for unutilized Lombard loan facilities were below the average CCF of the portfolio. The effects from higher CCFs for construction loans did not materially affect the average CCFs.

In the first half of 2017, we implemented changes to the PD and LGD parameters for income-producing real estate exposures (IPRE) and Lombard exposures, as well as LGD parameter updates for exposures to multinationals, sovereigns and financial institutions. These changes primarily impacted average LGDs, which increased 3.3 percentage points due to i) IPRE exposures, mainly reflected in "Corporates: specialized lending," ii) exposures to multinationals, sovereigns and financial institutions, mainly reflected in "Banks and securities dealers" and in "Public sector entities, multilateral development banks," and iii) Lombard exposures, mainly reflected in "Retail: other retail." Average PDs remained broadly stable compared with 31 December 2016.

Information on RWA, including details on movements in RWA, is provided on pages 3-4 in our UBS Group AG and significant regulated subsidiaries and sub-groups reports for the first and second quarters of 2017, available under "Pillar 3 disclosures" at www.ubs.com/investors.

Expected loss increased by CHF 103 million, primarily due to the aforementioned changes to LGD and PD parameters.

CR6: IRB – Credit risk exposures by portfolio and PD range

	a	b	c	d	e	f	g	h	i	j	k	l
<i>CHF million, except where indicated</i>	Original on-balance sheet gross exposure	Off-balance sheet exposures pre-CCF	Total exposures pre-CCF	Average CCF in %	EAD post CCF and post CRM ¹	Average PD in %	Number of obligors (in thousands)	Average LGD in %	Average maturity in years	RWA	RWA density in %	EL Provisions ²
Central governments and central banks							30.6.17					
0.00 to <0.15	143,335	334	143,669	29	143,431	0.0	0.1	34.2	1.0	2,731	1.9	5
0.15 to <0.25	0	0	0	55	0	0.2	<0.1	28.3	1.0	0	18.4	0
0.25 to <0.50	6	0	6	14	6	0.3	<0.1	70.0	2.3	6	92.2	0
0.50 to <0.75	6	0	6	15	6	0.6	<0.1	24.2	2.7	2	38.9	0
0.75 to <2.50	0	5	5	27	1	1.3	<0.1	10.1	5.0	0	31.0	0
2.50 to <10.00	5	5	10	37	7	3.9	<0.1	9.9	4.2	3	36.8	0
10.00 to <100.00	0	0	0	0	0	16.4	<0.1	15.5	1.0	0	72.1	0
100.00 (default)	20	1	21	55	9	<0.1	<0.1			9	106.0	12
Subtotal	143,373	345	143,718	29	143,461	0.0	0.1	34.2	1.0	2,751	1.9	17
Central governments and central banks							31.12.16					
0.00 to <0.15	129,277	227	129,504	16	129,312	0.0	<0.1	33.7	1.0	2,035	1.6	5
0.15 to <0.25												
0.25 to <0.50	8	0	8	14	8	0.3	<0.1	72.9	2.8	8	105.2	0
0.50 to <0.75	7	0	7	13	7	0.6	<0.1	23.8	3.0	3	39.2	0
0.75 to <2.50	0	0	0	55	0	1.4	<0.1	19.7	3.6	0	44.2	0
2.50 to <10.00	4	18	22	29	9	3.9	<0.1	19.2	3.3	6	67.8	0
10.00 to <100.00	27	0	27	48	27	10.2	<0.1	10.0	5.0	14	52.7	0
100.00 (default)	18	1	19	55	8	<0.1	<0.1			8	106.0	11
Subtotal	129,341	245	129,587	17	129,371	0.0	0.2	33.7	1.0	2,074	1.6	16
Banks and securities dealers							30.6.17					
0.00 to <0.15	8,892	5,827	14,719	47	10,972	0.0	0.5	40.8	1.2	1,606	14.6	3
0.15 to <0.25	1,309	729	2,038	46	1,467	0.2	0.3	46.7	1.3	627	42.7	4
0.25 to <0.50	595	219	814	37	674	0.4	0.2	53.9	1.2	473	70.3	1
0.50 to <0.75	477	219	697	34	239	0.7	0.1	44.4	1.1	181	75.9	1
0.75 to <2.50	317	285	602	40	171	1.2	0.2	43.6	1.0	164	96.1	1
2.50 to <10.00	197	205	402	20	106	4.3	0.2	42.4	1.0	139	130.6	2
10.00 to <100.00	63	29	92	39	49	11.0	<0.1	12.9	2.4	30	61.9	1
100.00 (default)	3	0	3	0	1	<0.1	<0.1			1	106.0	3
Subtotal	11,853	7,513	19,367	43	13,679	0.2	1.5	42.1	1.2	3,222	23.6	15
Banks and securities dealers							31.12.16					
0.00 to <0.15	8,245	8,638	16,883	45	11,446	0.0	0.5	35.7	1.4	1,407	12.3	2
0.15 to <0.25	1,299	907	2,206	44	1,356	0.2	0.4	39.2	1.3	490	36.2	4
0.25 to <0.50	565	388	953	31	541	0.4	0.2	43.1	1.2	288	53.2	1
0.50 to <0.75	339	267	606	43	227	0.6	0.1	44.3	1.1	175	77.4	1
0.75 to <2.50	319	217	536	42	156	1.3	0.2	43.2	1.0	149	95.3	1
2.50 to <10.00	295	191	486	21	196	3.7	0.2	37.5	1.3	228	116.2	3
10.00 to <100.00	13	28	41	41	15	12.4	<0.1	20.8	3.4	15	101.5	0
100.00 (default)	3		3			<0.1	<0.1			0	106.0	3
Subtotal	11,078	10,636	21,714	42	13,937	0.2	1.5	36.6	1.4	2,753	19.8	15

CR6: IRB – Credit risk exposures by portfolio and PD range (continued)

	a	b	c	d	e	f	g	h	i	j	k	l	
<i>CHF million, except where indicated</i>	Original on-balance sheet gross exposure	Off-balance sheet exposures pre-CCF	Total exposures pre-CCF	Average CCF in %	EAD post CCF and post CRM ¹	Average PD in %	Number of obligors (in thousands)	Average LGD in %	Average maturity in years	RWA	RWA density in %	EL	Provisions ²
Public sector entities, multilateral development banks							30.6.17						
0.00 to <0.15	9,631	1,634	11,265	15	9,881	0.0	0.3	34.9	1.2	528	5.3	1	
0.15 to <0.25	457	254	710	11	485	0.2	0.2	30.3	3.1	141	29.0	0	
0.25 to <0.50	682	329	1,011	21	752	0.3	0.2	19.8	2.5	170	22.6	1	
0.50 to <0.75	51	5	55	10	51	0.6	<0.1	19.8	2.5	15	30.1	0	
0.75 to <2.50	7	3	10	12	8	1.3	<0.1	18.8	2.0	2	28.7	0	
2.50 to <10.00	3	0	3	70	3	2.7	<0.1	27.0	1.0	2	53.6	0	
10.00 to <100.00													
100.00 (default)													
Subtotal	10,830	2,224	13,055	16	11,180	0.0	0.7	33.6	1.3	858	7.7	2	0
Public sector entities, multilateral development banks							31.12.16						
0.00 to <0.15	9,452	1,812	11,264	15	9,722	0.0	0.4	29.6	1.2	457	4.7	0	
0.15 to <0.25	464	376	840	11	507	0.2	0.2	21.8	3.0	102	20.1	0	
0.25 to <0.50	646	318	964	22	716	0.3	0.2	17.3	2.5	140	19.6	0	
0.50 to <0.75	44	4	48	10	44	0.6	<0.1	15.6	2.6	11	24.5	0	
0.75 to <2.50	3	1	4	20	3	1.2	<0.1	14.0	2.1	1	37.5	0	
2.50 to <10.00	4	0	5	70	4	2.7	<0.1	8.8	1.0	1	17.2	0	
10.00 to <100.00													
100.00 (default)													
Subtotal	10,614	2,510	13,125	15	10,998	0.0	0.8	28.4	1.4	712	6.5	1	0
Corporates: specialized lending							30.6.17						
0.00 to <0.15	1,134	343	1,477	64	1,352	0.1	0.3	16.4	2.0	83	6.1	0	
0.15 to <0.25	793	715	1,509	41	1,090	0.2	0.3	24.6	1.8	176	16.2	1	
0.25 to <0.50	3,124	2,570	5,694	24	3,705	0.4	0.5	31.7	1.7	1,161	31.3	4	
0.50 to <0.75	4,681	2,059	6,740	32	5,270	0.6	0.7	29.6	1.7	2,012	38.2	10	
0.75 to <2.50	8,462	2,373	10,835	41	9,401	1.4	1.9	32.2	1.7	4,832	51.4	44	
2.50 to <10.00	1,640	271	1,911	54	1,786	3.4	0.4	40.6	1.6	1,480	82.9	25	
10.00 to <100.00	4	2	6	94	6	13.1	<0.1	29.2	1.4	6	95.1	0	
100.00 (default)	154	10	164	35	72		<0.1			76	106.0	85	
Subtotal	19,993	8,343	28,336	35	22,682	1.4	4.1	30.9	1.7	9,826	43.3	169	55
Corporates: specialized lending							31.12.16						
0.00 to <0.15	2,162	711	2,872	65	2,635	0.1	0.7	15.1	2.0	286	10.8	0	
0.15 to <0.25	1,372	740	2,112	38	1,651	0.2	0.3	18.2	1.8	307	18.6	1	
0.25 to <0.50	2,874	2,256	5,130	26	3,432	0.3	0.5	29.1	1.5	1,146	33.4	3	
0.50 to <0.75	5,027	2,188	7,215	31	5,685	0.6	0.6	18.8	1.8	1,923	33.8	6	
0.75 to <2.50	7,986	2,367	10,353	37	8,818	1.3	1.7	18.2	1.6	3,841	43.6	19	
2.50 to <10.00	975	103	1,079	36	1,010	3.5	0.2	17.6	1.8	608	60.2	6	
10.00 to <100.00	52	16	68	29	56	14.2	<0.1	28.9	1.6	84	148.5	2	
100.00 (default)	127	20	147	50	44		<0.1			57	106.0	83	
Subtotal	20,575	8,401	28,976	35	23,331	1.1	4.2	19.7	1.7	8,252	35.4	121	54

CR6: IRB – Credit risk exposures by portfolio and PD range (continued)

	a	b	c	d	e	f	g	h	i	j	k	l
<i>CHF million, except where indicated</i>	Original on-balance sheet gross exposure	Off-balance sheet exposures pre-CCF	Total exposures pre-CCF	Average CCF in %	EAD post CCF and post CRM ¹	Average PD in %	Number of obligors (in thousands)	Average LGD in %	Average maturity in years	RWA	RWA density in %	EL Provisions ²
Corporates: other lending							30.6.17					
0.00 to <0.15	12,718	20,497	33,214	36	15,590	0.1	2.2	33.1	2.2	3,764	24.1	6
0.15 to <0.25	3,986	5,832	9,817	38	5,071	0.2	1.3	33.5	2.1	1,729	34.1	4
0.25 to <0.50	2,235	4,758	6,993	39	4,001	0.4	1.5	31.8	1.8	1,832	45.8	5
0.50 to <0.75	3,238	3,944	7,182	35	4,635	0.6	1.7	28.1	2.1	2,345	50.6	8
0.75 to <2.50	8,149	5,791	13,941	40	10,580	1.3	8.1	22.6	1.8	5,859	55.4	31
2.50 to <10.00	4,181	6,234	10,415	42	6,814	4.1	4.4	22.3	2.0	6,045	88.7	62
10.00 to <100.00	399	513	912	54	672	15.6	0.3	16.4	2.3	753	112.1	16
100.00 (default)	1,458	347	1,806	46	1,290		0.5			1,367	106.0	343
Subtotal	36,363	47,917	84,280	38	48,652	3.8	19.9	28.7	2.0	23,694	48.7	474
												458
Corporates: other lending							31.12.16					
0.00 to <0.15	10,023	17,209	27,232	36	14,214	0.1	1.7	32.9	2.3	3,227	22.4	6
0.15 to <0.25	3,101	9,992	13,093	33	5,068	0.2	1.0	39.4	1.8	2,025	40.0	4
0.25 to <0.50	3,717	9,150	12,867	38	6,421	0.4	1.4	34.6	1.8	3,040	47.3	8
0.50 to <0.75	2,841	3,332	6,173	38	3,936	0.6	1.5	26.8	1.6	1,768	44.9	7
0.75 to <2.50	7,159	10,831	17,989	36	10,575	1.3	8.1	22.3	1.6	5,262	49.8	29
2.50 to <10.00	4,491	7,029	11,520	41	6,880	4.1	4.3	21.0	1.9	5,308	77.1	58
10.00 to <100.00	473	471	944	52	708	16.9	0.1	16.7	2.3	753	106.4	19
100.00 (default)	1,612	398	2,010	55	1,423		0.5			1,508	106.0	348
Subtotal	33,417	58,412	91,829	36	49,225	4.3	18.7	29.2	1.8	22,892	46.5	479
												468
Retail: residential mortgages							30.6.17					
0.00 to <0.15	61,616	1,017	62,633	74	62,366	0.1	127.2	10.7		2,033	3.3	3
0.15 to <0.25	12,869	182	13,051	77	12,983	0.2	21.2	11.4		1,114	8.6	3
0.25 to <0.50	16,213	256	16,469	79	16,357	0.3	25.4	13.2		2,117	12.9	7
0.50 to <0.75	10,195	184	10,378	82	10,307	0.6	14.2	16.6		2,018	19.6	11
0.75 to <2.50	20,775	1,497	22,272	66	21,700	1.4	28.5	18.7		8,186	37.7	55
2.50 to <10.00	8,918	750	9,668	45	9,209	4.2	11.2	14.5		6,197	67.3	51
10.00 to <100.00	747	22	769	90	763	15.3	0.9	11.4		849	111.3	13
100.00 (default)	515	1	516	49	486		0.7			515	106.0	29
Subtotal	131,848	3,908	135,757	66	134,172	1.1	229.3	13.2		23,029	17.2	172
												28
Retail: residential mortgages							31.12.16					
0.00 to <0.15	60,210	1,209	61,419	64	60,987	0.1	124.7	10.7		1,841	3.0	3
0.15 to <0.25	12,473	167	12,639	68	12,586	0.2	21.2	11.1		1,017	8.1	2
0.25 to <0.50	15,405	214	15,618	66	15,546	0.3	25.6	11.3		1,847	11.9	6
0.50 to <0.75	11,294	1,011	12,305	15	11,449	0.6	14.5	12.3		1,978	17.3	8
0.75 to <2.50	21,820	2,189	24,009	39	22,679	1.4	29.7	12.1		6,818	30.1	35
2.50 to <10.00	8,743	197	8,940	68	8,877	4.3	11.1	10.8		5,105	57.5	39
10.00 to <100.00	849	27	876	70	868	15.4	1.0	10.7		873	100.6	13
100.00 (default)	510	1	511	36	478		0.7			507	106.0	33
Subtotal	131,305	5,013	136,318	44	133,470	1.1	228.4	11.3		19,985	15.0	139
												31

CR6: IRB – Credit risk exposures by portfolio and PD range (continued)

	a	b	c	d	e	f	g	h	i	j	k	l
<i>CHF million, except where indicated</i>	Original on-balance sheet gross exposure	Off-balance sheet exposures pre-CCF	Total exposures pre-CCF	Average CCF in %	EAD post CCF and post CRM ¹	Average PD in %	Number of obligors (in thousands)	Average LGD in %	Average maturity in years	RWA	RWA density in %	EL Provisions ²
Retail: qualifying revolving retail exposures (QRRE)³							30.6.17					
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	98	322	420		137	1.7	34.4	47.0		38	28.0	1
2.50 to <10.00	1,035	4,814	5,850		1,450	2.7	796.2	42.0		510	35.2	16
10.00 to <100.00												
100.00 (default)	24	0	24		7		19.6			7	106.0	0
Subtotal	1,158	5,136	6,294		1,594	3.0	850.1	42.3		555	34.8	17
Retail: qualifying revolving retail exposures (QRRE)³							31.12.16					
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	90	329	419		126	1.7	32.7	47.0		35	28.0	1
2.50 to <10.00	1,015	4,789	5,804		1,420	2.7	764.4	42.0		500	35.2	16
10.00 to <100.00												
100.00 (default)	24	0	24		6		19.8			7	106.0	0
Subtotal	1,128	5,119	6,247		1,552	2.6	816.9	42.4		541	34.9	17

CR6: IRB – Credit risk exposures by portfolio and PD range (continued)

	a	b	c	d	e	f	g	h	i	j	k	l	
<i>CHF million, except where indicated</i>	Original on- balance sheet gross exposure	Off-balance sheet exposures pre-CCF	Total exposures pre- CCF	Average CCF in %	EAD post CCF and post CRM ¹	Average PD in %	Number of obligors (in thousands)	Average LGD in %	Average maturity in years	RWA	RWA density in %	EL	Provisions ²
Retail: other retail⁴							30.6.17						
0.00 to <0.15	91,957	62,255	154,212	25	107,515	0.0	203.4	26.9		4,104	3.8	13	
0.15 to <0.25	2,737	857	3,594	21	2,915	0.2	5.4	28.3		317	10.9	1	
0.25 to <0.50	6,238	3,206	9,443	11	6,597	0.3	3.6	22.3		890	13.5	5	
0.50 to <0.75	1,382	625	2,007	23	1,529	0.6	2.0	26.0		344	22.5	3	
0.75 to <2.50	2,819	1,683	4,502	30	3,320	1.2	70.4	32.2		1,205	36.3	12	
2.50 to <10.00	1,927	1,626	3,553	13	2,146	6.1	2.5	24.7		836	39.0	29	
10.00 to <100.00	149	299	448	17	200	16.6	3.4	26.4		114	57.2	9	
100.00 (default)	24	0	25	33	8		<0.1			9	106.0	16	
Subtotal	107,232	70,551	177,783	24	124,231	0.2	290.8	26.8		7,819	6.3	88	57
Retail: other retail							31.12.16						
0.00 to <0.15	90,111	7,191	97,301	26	91,943	0.1	167.3	20.0		3,052	3.3	10	
0.15 to <0.25	2,513	99	2,612	32	2,546	0.2	0.9	20.0		196	7.7	1	
0.25 to <0.50	8,342	522	8,864	8	8,384	0.4	4.4	20.0		1,035	12.3	6	
0.50 to <0.75	1,932	300	2,232	11	1,965	0.6	1.0	20.0		340	17.3	2	
0.75 to <2.50	1,734	1,054	2,788	63	2,396	1.1	12.9	23.1		632	26.4	6	
2.50 to <10.00	769	320	1,089	11	803	5.4	1.0	26.3		329	41.0	10	
10.00 to <100.00													
100.00 (default)	38	0	38	0	11		<0.1			11	106.0	27	
Subtotal	105,439	9,485	114,925	28	108,048	0.2	187.5	20.1		5,594	5.2	63	70
Total 30.6.17	462,652	145,938	608,590	29	499,651	0.8	1,396.5	26.3	1.3	71,755	14.4	953	630
Total 31.12.16	442,898	99,821	542,719	33	469,932	0.9	1,258.5	23.0	1.3	62,804	13.4	850	653

¹ CRM through financial collateral is considered in the EAD post CCF and post CRM, but not in the calculation of average CCF. ² In line with the Pillar 3 guidance, provisions are only provided for the subtotals by asset class. ³ For the calculation of column d) "EAD post CCF and post CRM" a balance factor approach is used instead of a CCF approach. The EAD is calculated by multiplying the on-balance sheet exposure with a fixed factor of 1.4. ⁴ Reporting has been enhanced to include debit balances outside approved Lombard lending facilities, which resulted in an increase for Number of obligors.

Equity exposures

The table below provides information on our equity exposures under the simple risk weight method. Exposure from equities subject to measurement under the simple risk weight method remained stable during the first half of 2017.

CR10: IRB (equities under the simple risk weight method)¹

<i>CHF million, except where indicated</i>	On-balance sheet amount	Off-balance sheet amount	Risk weight in %	Exposure amount ²	RWA ³
			30.6.17		
Exchange traded equity exposures	59		300	59	187
Other equity exposures	871		400	519	2,205
Total	930	0		578	2,393
			31.12.16		
Exchange traded equity exposures	586		300	168	535
Other equity exposures	791		400	434	1,840
Total	1,377	0		602	2,375

¹ This table excludes significant investments in the common shares of non-consolidated financial institutions (banks, insurance and other financial entities) that are subject to the threshold treatment and risk weighted at 250%. ² The exposure amount for equities in the banking book is based on the net position. ³ RWA is calculated post-application of the A-IRB multiplier of 6%, therefore the respective average risk weight is higher than 300% and 400%.

Section 3 Counterparty credit risk

Counterparty credit risk (CCR) includes over-the-counter and exchange-traded derivatives, securities financing transactions (SFTs) and long settlement transactions. Within traded products, we determine the regulatory credit exposure on the majority of our derivatives portfolio by applying the effective expected positive exposure (EPE) and stressed EPE as defined in the Basel III framework. However, for the rest of the portfolio we apply the current exposure method (CEM) based on the replacement value of derivatives in combination with a regulatory prescribed add-on. For the majority of SFTs (securities

borrowing, securities lending, margin lending, repurchase agreements and reverse repurchase agreements), we determine the regulatory credit exposure using the close-out period (COP) approach.

RWA for CCR increased by CHF 6.8 billion, primarily driven by an update of the stress period used for the Basel III exposure-at-default calculation, as well as the implementation of changes to the loss given default (LGD) parameters for exposures to multinationals, sovereigns and financial institutions.

CCR1: Analysis of counterparty credit risk (CCR) exposure by approach

	a	b	c	d	e	f
<i>CHF million, except where indicated</i>	Replacement cost	Potential future exposure	EEPE	Alpha used for computing regulatory EAD	EAD post-CRM	RWA
			30.6.17			
1 SA-CCR (for derivatives) ¹	11,117 ²	6,647		1.0 ³	17,764	3,981
2 Internal model method (for derivatives)			29,801	1.6	47,682	16,495
3 Simple approach for credit risk mitigation (for SFTs)						
4 Comprehensive approach for credit risk mitigation (for SFTs)					15,862	3,560
5 VaR (for SFTs)					21,846	3,972
6 Total					103,155	28,008
			31.12.16			
1 SA-CCR (for derivatives) ¹	13,642 ²	4,092		1.0 ³	17,734	3,744
2 Internal model method (for derivatives)			30,163	1.6	48,260	12,482
3 Simple approach for credit risk mitigation (for SFTs)						
4 Comprehensive approach for credit risk mitigation (for SFTs)					13,059	2,312
5 VaR (for SFTs)					21,075	2,706
6 Total					100,128	21,244

¹ Standardized approach for CCR. Calculated in accordance with the current exposure method (CEM) until SA-CCR is implemented with expected effective date 1 January 2018. ² Replacement costs include collateral mitigation for on- and off-balance sheet exposures related to CCR for derivative transactions. ³ With expected effective date 1 January 2018, an alpha factor of 1.4 will be used for calculating regulatory EAD, following the implementation of SA-CCR.

In addition to the default risk capital requirements for CCR determined based on the A-IRB or standardized approach, we are required to add a capital charge on derivatives to cover the risk of mark-to-market losses associated with the deterioration of counterparty credit quality. This capital charge is called credit valuation adjustment (CVA). The advanced CVA value-at-risk (VaR) approach was used to calculate the CVA capital charge where we apply the internal model method (IMM). Where this is not the case, the standardized CVA approach was applied. More

information on our portfolios subject to the CVA capital charge as of 30 June 2017 is provided in the table below.

Exposures at default (EADs) subject to the advanced CVA capital charge decreased by CHF 8.6 billion. This was primarily due to a decrease in our Foreign Exchange, Rates and Credit businesses within the Investment Bank, mainly related to foreign exchange contracts, and a reduction in Corporate Center – Non-core and Legacy Portfolio, mainly reflecting fair value changes in interest rate contracts, as well as maturities and trade terminations.

CCR2: Credit valuation adjustment (CVA) capital charge

	30.6.17		31.12.16	
<i>CHF million</i>	a	b	a	b
	EAD post CRM ¹	RWA	EAD post CRM ¹	RWA
Total portfolios subject to the advanced CVA capital charge	29,102	2,707	37,663	4,202
1 (i) VaR component (including the 3× multiplier)		614		1,326
2 (ii) Stressed VaR component (including the 3× multiplier)		2,093		2,876
3 All portfolios subject to the standardized CVA capital charge	7,472	1,394	8,034	1,524
4 Total subject to the CVA capital charge	36,574	4,102	45,698	5,726

¹ Includes EAD of the underlying portfolio subject to the respective CVA charge.

CCR3: Standardized approach – CCR exposures by regulatory portfolio and risk weights

CHF million									
	a	b	c	d	e	f	g	h	i
Risk weight	0%	10%	20%	50%	75%	100%	150%	Others	Total credit exposure
Regulatory portfolio									30.6.17
1 Central governments and central banks	194								194
2 Banks and securities dealers			311	76		2			389
3 Public sector entities and multilateral development banks	4					3			7
4 Corporates						819			819
5 Retail					8	74			82
6 Equity									
7 Other assets									
8 Total	198		311	76	8	898	0	0	1,490
Regulatory portfolio									31.12.16
1 Central governments and central banks	206								206
2 Banks and securities dealers			314	61					375
3 Public sector entities and multilateral development banks						4			4
4 Corporates						984	0		984
5 Retail						365			365
6 Equity									
7 Other assets									
8 Total	206		314	61		1,353	0	0	1,934

RWA for CCR increased by CHF 7.2 billion, primarily driven by the implementation of changes to the LGD parameters for exposures to multinationals, sovereigns and financial institutions, and by an update of the stress period used for the Basel III EAD calculation. These changes also impacted the RWA density, which increased 6.4 percentage points to 26.6% as of 30 June 2017. More information on RWA, including details on movements in RWA, is provided on pages 4-5 in our UBS Group

AG and significant regulated subsidiaries and sub-groups reports for the first and second quarters of 2017, available under "Pillar 3 disclosures" at www.ubs.com/investors.

The 10.1 percentage point increase in average LGDs is primarily driven by the aforementioned changes to the LGD parameters for exposures to multinationals, sovereigns and financial institutions.

CCR4: IRB – CCR exposures by portfolio and PD scale

CHF million, except where indicated									
	a	b	c	d	e	f	g		
	EAD post CRM	Average PD in %	Number of obligors (in thousands)	Average LGD in %	Average maturity in years	RWA	RWA density in %		
Central governments and central banks									30.6.17
0.00 to <0.15	5,038	0.0	0.1	52.3	0.7	642	12.7		
0.15 to <0.25	127	0.2	<0.1	71.0	0.9	56	43.9		
0.25 to <0.50	573	0.3	<0.1	98.1	1.0	555	96.8		
0.50 to <0.75									
0.75 to <2.50	44	0.8	<0.1	86.5	0.0	62	141.7		
2.50 to <10.00	7	4.3	<0.1	86.8	1.0	22	303.6		
10.00 to <100.00									
100.00 (default)									
Subtotal	5,789	0.1	0.2	57.5	0.7	1,336	23.1		
Central governments and central banks									31.12.16
0.00 to <0.15	5,346	0.0	0.1	42.4	0.7	418	7.8		
0.15 to <0.25	249	0.2	<0.1	61.7	1.0	99	39.8		
0.25 to <0.50	107	0.3	<0.1	42.0	1.0	45	41.8		
0.50 to <0.75	0	0.7	<0.1	42.0	1.0	0	61.4		
0.75 to <2.50	38	0.8	<0.1	42.0	0.1	27	69.1		
2.50 to <10.00	8	4.6	<0.1	42.0	1.0	12	142.6		
10.00 to <100.00									
100.00 (default)									
Subtotal	5,750	0.1	0.2	43.2	0.7	601	10.4		

CCR4: IRB – CCR exposures by portfolio and PD scale (continued)

	a	b	c	d	e	f	g
<i>CHF million, except where indicated</i>	EAD post CRM	Average PD in %	Number of obligors (in thousands)	Average LGD in %	Average maturity in years	RWA	RWA density in %
Banks and securities dealers				30.6.17			
0.00 to <0.15	17,933	0.1	0.4	50.0	0.7	3,171	17.7
0.15 to <0.25	4,204	0.2	0.3	50.0	0.7	1,552	36.9
0.25 to <0.50	1,265	0.4	0.2	50.9	0.9	702	55.5
0.50 to <0.75	290	0.6	0.1	65.8	0.7	267	92.0
0.75 to <2.50	359	1.1	0.2	65.1	0.6	268	74.6
2.50 to <10.00	70	5.0	0.1	43.1	0.7	106	151.2
10.00 to <100.00	0	13.0	<0.1	66.0	1.0	1	350.5
100.00 (default)	31		<0.1			33	106.0
Subtotal	24,153	0.3	1.3	50.5	0.7	6,099	25.3
Banks and securities dealers				31.12.16			
0.00 to <0.15	16,912	0.1	0.4	37.9	0.7	2,161	12.8
0.15 to <0.25	4,051	0.2	0.3	39.7	0.9	1,251	30.9
0.25 to <0.50	1,185	0.4	0.2	44.5	1.0	572	48.3
0.50 to <0.75	510	0.7	0.1	52.0	0.5	182	35.6
0.75 to <2.50	524	1.1	0.2	46.2	0.7	320	61.0
2.50 to <10.00	165	5.1	0.1	34.9	1.0	207	125.1
10.00 to <100.00	1	10.2	<0.1	42.0	1.0	1	175.6
100.00 (default)							
Subtotal	23,348	0.2	1.2	39.0	0.7	4,694	20.1
Public sector entities, multilateral development banks				30.6.17			
0.00 to <0.15	4,846	0.0	0.1	41.6	1.9	356	7.3
0.15 to <0.25	100	0.2	<0.1	43.3	1.0	27	26.9
0.25 to <0.50	34	0.4	<0.1	58.7	1.0	20	59.0
0.50 to <0.75							
0.75 to <2.50	0	1.6	<0.1	35.2	1.0	0	74.2
2.50 to <10.00	0	2.7	<0.1	35.0	0.6	0	83.4
10.00 to <100.00	23	28.0	<0.1	10.0	1.0	13	55.4
100.00 (default)							
Subtotal	5,004	0.2	0.2	41.6	1.9	416	8.3
Public sector entities, multilateral development banks				31.12.16			
0.00 to <0.15	6,438	0.0	0.1	32.2	1.4	308	4.8
0.15 to <0.25	125	0.2	<0.1	38.7	1.0	31	24.5
0.25 to <0.50	35	0.4	<0.1	41.2	1.0	14	41.3
0.50 to <0.75	0	0.6	<0.1	32.0	1.0	0	35.4
0.75 to <2.50	1	1.4	<0.1	44.3	1.0	1	107.6
2.50 to <10.00	0	2.7	<0.1	31.0	0.3	0	71.4
10.00 to <100.00	24	28.0	<0.1	10.0	1.0	13	55.4
100.00 (default)							
Subtotal	6,623	0.1	0.2	32.3	1.4	367	5.5

CCR4: IRB – CCR exposures by portfolio and PD scale (continued)

	a	b	c	d	e	f	g
<i>CHF million, except where indicated</i>	EAD post CRM	Average PD in %	Number of obligors (in thousands)	Average LGD in %	Average maturity in years	RWA	RWA density in %
Corporates: including specialized lending¹				30.6.17			
0.00 to <0.15	36,489	0.0	11.3	36.1	0.6	4,548	12.5
0.15 to <0.25	10,726	0.2	1.5	43.8	0.5	4,300	40.1
0.25 to <0.50	2,753	0.3	0.9	61.9	1.1	2,774	100.8
0.50 to <0.75	2,226	0.6	0.9	54.0	0.8	2,569	115.4
0.75 to <2.50	6,540	1.1	1.8	20.1	0.8	3,567	54.5
2.50 to <10.00	1,843	3.2	0.3	13.4	0.4	961	52.2
10.00 to <100.00	4	13.0	<0.1	28.6	1.0	7	183.5
100.00 (default)	1		<0.1			1	106.0
Subtotal	60,582	0.3	16.7	36.9	0.6	18,727	30.9
Corporates: including specialized lending¹				31.12.16			
0.00 to <0.15	37,120	0.0	11.0	23.4	0.6	3,237	8.7
0.15 to <0.25	9,294	0.2	1.5	33.9	0.5	3,317	35.7
0.25 to <0.50	2,913	0.4	1.0	58.3	1.1	2,548	87.5
0.50 to <0.75	1,819	0.6	0.8	46.0	0.9	1,616	88.9
0.75 to <2.50	5,039	1.2	1.7	18.8	0.9	2,494	49.5
2.50 to <10.00	1,225	3.1	0.2	15.1	0.6	672	54.8
10.00 to <100.00	2	13.5	<0.1	35.3	1.0	4	208.9
100.00 (default)	1		<0.1			2	106.0
Subtotal	57,413	0.3	16.1	27.0	0.6	13,889	24.2
Retail: other retail²				30.6.17			
0.00 to <0.15	5,344	0.0	17.8	26.9		196	3.7
0.15 to <0.25	35	0.2	0.2	25.6		3	9.8
0.25 to <0.50	125	0.4	0.2	21.2		16	13.1
0.50 to <0.75	155	0.6	0.1	29.5		40	25.6
0.75 to <2.50	439	1.0	11.6	30.9		152	34.6
2.50 to <10.00	33	3.5	5.0	33.5		17	50.0
10.00 to <100.00	4	20.9	<0.1	30.5		3	73.2
100.00 (default)							
Subtotal	6,136	0.2	35.0	27.2		427	7.0
Retail: other retail				31.12.16			
0.00 to <0.15	4,619	0.1	10.1	20.2		152	3.3
0.15 to <0.25	87	0.2	0.1	20.0		7	7.7
0.25 to <0.50	129	0.3	0.1	20.0		16	12.4
0.50 to <0.75	9	0.6	0.0	20.0		1	17.3
0.75 to <2.50	52	1.2	0.4	20.1		19	36.7
2.50 to <10.00	166	5.7	0.6	21.0		55	33.3
10.00 to <100.00							
100.00 (default)							
Subtotal	5,061	0.3	11.4	20.2		251	5.0
Total 30.6.17	101,665	0.3	53.3	40.9	0.9	27,005	26.6
Total 31.12.16	98,194	0.2	29.1	30.8	0.9	19,802	20.2

¹ Includes exposures to managed funds. ² Reporting has been enhanced to include debit balances outside approved Lombard lending facilities, which resulted in an increase for Number of obligors.

Collateral received and posted from derivative transactions decreased by CHF 8 billion and CHF 6 billion, respectively. This was mostly driven by a reduction in replacement values, predominantly in our Foreign Exchange, Rates and Credit businesses within the Investment Bank, mainly related to foreign exchange contracts, reflecting currency market movements, and a reduction in Corporate Center – Non-core and Legacy

Portfolio, mostly in interest rate contracts, reflecting fair value changes, as well as maturities and trade terminations. The increase in collateral received from securities financing transactions was primarily related to our prime brokerage business. Collateral posted in securities financing transactions increased mainly due to the aforementioned rebalancing of our HQLA portfolio.

CCR5: Composition of collateral for CCR exposure¹

CHF million	a			b			c			d			e		f
	Collateral used in derivative transactions						Collateral used in SFTs				Fair value of collateral received	Fair value of posted collateral			
	Fair value of collateral received			Fair value of posted collateral											
Segregated ²	Unsegregated	Total	Segregated ³	Unsegregated	Total										
	30.6.17														
Cash – domestic currency		1,140	1,140	24	966	989	296	3,605							
Cash – other currencies	2,243	36,028	38,271	2,625	19,318	21,943	37,949	98,942							
Sovereign debt	1,381	11,674	13,055	5,640	7,849	13,490	197,339	134,796							
Other debt securities		1,135	1,135	348	660	1,008	68,835	27,525							
Equity securities	2,715	279	2,994	706	1,350	2,056	246,743	146,167							
Total	6,339	50,255	56,595	9,343	30,144	39,487	551,162	411,035							
	31.12.16														
Cash – domestic currency		1,643	1,643	19	1,258	1,277	384	3,088							
Cash – other currencies	1,636	39,633	41,269	2,048	23,301	25,350	35,160	88,136							
Sovereign debt	1,209	16,302	17,511	6,761	9,363	16,123	214,573	129,668							
Other debt securities		1,530	1,530	31	667	698	70,723	31,409							
Equity securities	2,613	40	2,653	547	1,731	2,277	208,426	149,493							
Total	5,458	59,148	64,606	9,406	36,319	45,725	529,266	401,794							

¹ This table was prepared on the basis of the disclosure requirements published by FINMA in October 2015. Once we adopt the interpretation included in "Frequently asked questions on the revised Pillar 3 disclosure requirements (BCBS 376)" issued by BCBS in August 2016, collateral received and posted will be subject to haircuts. Furthermore, this table includes collateral received and posted with and without the right of rehypothecation, but excludes securities placed with central banks related to undrawn credit lines and for payment, clearing and settlement purposes for which there were no associated liabilities or contingent liabilities. ² Includes collateral received in derivative transactions, primarily initial margins, that are placed with a third-party custodian and to which UBS has only access in the case of counterparty default. Prior-period information has been restated accordingly. ³ Includes collateral posted to central counterparties, where we apply a 0% risk weight for trades that we have entered into on behalf of a client and where the client has signed a legally enforceable agreement stipulating that the default risk of that central counterparty is carried by the client.

Notionals for derivatives decreased by CHF 19.7 billion for protection bought and by CHF 18.4 billion for protection sold, primarily driven by reductions in Corporate Center – Group ALM following trade compression with central counterparties, as well

as the continuous reduction in Corporate Center – Non-core and Legacy Portfolio. An additional reduction was due to lower trading volumes in the Investment Bank.

CCR6: Credit derivatives exposures

CHF million	30.6.17		31.12.16	
	a	b	a	b
	Protection bought	Protection sold	Protection bought	Protection sold
Notionals¹				
Single-name credit default swaps	75,638	64,614	91,418	81,326
Index credit default swaps	40,603	42,905	45,034	44,611
Total return swaps	4,540	2,088	5,478	2,088
Credit options	4,431	55	2,946	54
Other credit derivatives				
Total notionals	125,212	109,662	144,875	128,079
Fair values				
Positive fair value (asset)	1,087	1,947	1,969	1,917
Negative fair value (liability)	2,699	1,270	2,780	2,036

¹ Includes notional amounts for client-cleared transactions.

Section 4 Securitizations

Introduction

This section provides information on traditional and synthetic securitization exposures in the banking and trading book based on the Basel III framework. Securitized exposures are generally risk weighted, based on their external ratings. This section also provides information on the regulatory capital requirement associated with the securitization exposures in the banking book.

In a traditional securitization, a pool of loans (or other debt obligations) is typically transferred to structured entities that have been established to own the loan pool and to issue tranches of securities to third-party investors referencing this pool of loans. In a synthetic securitization, legal ownership of securitized pools of assets is typically retained, but associated credit risk is transferred to structured entities typically through guarantees, credit derivatives or credit-linked notes. Hybrid structures with a mix of traditional and synthetic features are disclosed as synthetic securitizations.

We act in various roles in securitization transactions. As originator, we create or purchase financial assets, which are

then securitized in traditional or synthetic securitization transactions, enabling us to transfer significant risk to third-party investors. As sponsor, we manage, provide financing for or advise securitization programs. In line with the Basel III framework, sponsoring includes underwriting activities. In all other cases, we act in the role of investor by taking securitization positions.

Securitization exposures in the banking and trading book

The tables "SEC1: Securitization exposures in the banking book" and "SEC2: Securitization exposures in the trading book" outline the carrying values on the balance sheet in the banking and trading books as of 30 June 2017 and 31 December 2016. The activity is further broken down by our role (originator, sponsor or investor) and by securitization type (traditional or synthetic).

Amounts disclosed under the *Traditional* column of these tables reflect the total outstanding notes at par value issued by the securitization vehicle at issuance. For synthetic securitization transactions, the amounts disclosed generally reflect the balance sheet carrying values of the securitized exposures at issuance.

SEC1: Securitization exposures in the banking book

	a		b		c		e		f		g		h1		h2		h3		i		j		k			
	Bank acts as originator						Bank acts as sponsor						Bank acts as originator & sponsor						Bank acts as investor						Total	
	Traditional		Synthetic		Sub-total		Traditional		Synthetic		Sub-total		Traditional		Synthetic		Sub-total		Traditional		Synthetic		Sub-total			
<i>CHF million</i>	30.6.17																									
Asset classes																										
1 Retail (total)	86		86		142		142						75		75		303									
of which:																										
2 Residential mortgage	86		86										75		75		161									
3 Credit card receivables																										
4 Student loans					142		142										142									
5 Consumer loans																										
6 Other retail exposures																										
7 Wholesale (total)	15		2,540		2,555		30		30				130		130		2,715									
of which:																										
8 Loans to corporates or SME			2,465		2,465												2,465									
9 Commercial mortgage					0		0						0		0		0									
10 Lease and receivables																										
11 Trade receivables																										
12 Other wholesale	15		75		90		30		30				130		130		250									
13 Re-securitization	0				0		0						0		0		0									
14 Total securitization / re-securitization (including retail and wholesale)	101		2,540		2,641		172		172				204		204		3,018									
	31.12.16																									
Asset classes																										
1 Retail (total)	103		103		162		162						210		210		475									
of which:																										
2 Residential mortgage	103		103										210		210		313									
3 Credit card receivables																										
4 Student loans					162		162										162									
5 Consumer loans																										
6 Other retail exposures																										
7 Wholesale (total)	2,712		2,712		31		31						175		175		2,918									
of which:																										
8 Loans to corporates or SME			2,670		2,670												2,670									
9 Commercial mortgage					0		0						0		0		0									
10 Lease and receivables					0		0										0									
11 Trade receivables																										
12 Other wholesale			43		43		31		31				175		175		249									
13 Re-securitization	0				0		0						0		0		0									
14 Total securitization / re-securitization (including retail and wholesale)	103		2,712		2,815		193		193				385		385		3,393									

SEC2: Securitization exposures in the trading book

CHF million	a		b		c		e		f		g		h1		h2		h3		i		j		k		Total
	Bank acts as originator						Bank acts as sponsor						Bank acts as originator & sponsor						Bank acts as investor						
	Traditional			Synthetic			Traditional			Synthetic			Traditional			Synthetic			Traditional			Synthetic			
30.6.17																									
Asset classes																									
1	Retail (total)		1		1		5		5										31		31		38		
<i>of which:</i>																									
2	Residential mortgage		1		1		5		5										31		31		38		
3	Credit card receivables																								
4	Student loans																								
5	Consumer loans																								
6	Other retail exposures																								
7	Wholesale (total)						1		1		5		5		8		8		8		8		14		
<i>of which:</i>																									
8	Loans to corporates or SME																								
9	Commercial mortgage										5		5		8		8		8		8		14		
10	Lease and receivables																								
11	Trade receivables																								
12	Other wholesale						1		1														1		
13	Re-securitization		5		5														9		9		14		
14	Total securitization / re-securitization (including retail and wholesale)		1		5		7		6		6		5		5		48		48		48		66		
31.12.16																									
Asset classes																									
1	Retail (total)		5		5		6		6										31		31		42		
<i>of which:</i>																									
2	Residential mortgage		5		5		6		6										31		31		42		
3	Credit card receivables																								
4	Student loans																		0		0		0		
5	Consumer loans																								
6	Other retail exposures																								
7	Wholesale (total)						0		0		36		36		3		3		3		3		39		
<i>of which:</i>																									
8	Loans to corporates or SME																								
9	Commercial mortgage										36		36		3		3		3		3		39		
10	Lease and receivables																								
11	Trade receivables																								
12	Other wholesale						0		0						0		0		0		0		0		
13	Re-securitization		5		5														9		9		14		
14	Total securitization / re-securitization (including retail and wholesale)		5		5		10		6		6		36		36		43		43		43		95		

SEC3: Securitization exposures in the banking book and associated regulatory capital requirements - bank acting as originator or as sponsor

	Total exposure values	a b c d e f g i j k m											n o q				
		Exposure values (by RW bands)					Exposure values (by regulatory approach)			Total RWA	RWA (by regulatory approach)			Total capital charge after cap	Capital charge after cap		
		≤20% RW	>20% to 50% RW	>50% to 100% RW	>100% to <1250% RW	1250% RW	IRB RBA	IRB SFA	1250%	IRB RBA	IRB SFA	1250%	IRB RBA	IRB SFA	1250%		

CHF million

30.6.17

Asset classes

1	Total exposures	2,739	162	2,465	11	102	172	2,465	102	1,823	31	523	1,269	146	2	42	102
2	Traditional securitization	274	162		11	102	172		102	1,300	31	523	1,269	104	2	42	102
3	of which: securitization	274	162		11	102	172		102	1,300	31	523	1,269	104	2	42	102
4	of which: retail underlying	229	142			87	142		87	1,101	18		1,083	88	1		87
5	of which: wholesale	45	19		11	15	30		15	199	13		186	16	1		15
6	of which: re-securitization	0		0		0			0	0	0		0	0	0		0
7	of which: senior																
8	of which: non-senior	0	0		0	0			0	0	0		0	0	0		0
9	Synthetic securitization	2,465	2,465					2,465		523		523		42		42	
10	of which: securitization	2,465	2,465					2,465		523		523		42		42	
11	of which: retail underlying																
12	of which: wholesale	2,465	2,465					2,465		523		523		42		42	
13	of which: re-securitization																
14	of which: senior																
15	of which: non-senior																

31.12.16

Asset classes

1	Total exposures	2,966	182	2,670	11	103	193	2,670	103	1,940	41	613	1,286	155	3	49	103
2	Traditional securitization	296	182		11	103	193		103	1,327	41	613	1,286	106	3	49	103
3	of which: securitization	296	182		11	103	193		103	1,327	41	613	1,286	106	3	49	103
4	of which: retail underlying	265	162			103	162		103	1,312	26		1,286	105	2		103
5	of which: wholesale	31	20		11	0	31		0	17	16		1	1	1		0
6	of which: re-securitization	0		0		0			0	0	0		0	0	0		0
7	of which: senior																
8	of which: non-senior	0	0		0	0			0	0	0		0	0	0		0
9	Synthetic securitization	2,670	2,670					2,670		613		613		49		49	
10	of which: securitization	2,670	2,670					2,670		613		613		49		49	
11	of which: retail underlying																
12	of which: wholesale	2,670	2,670					2,670		613		613		49		49	
13	of which: re-securitization																
14	of which: senior																
15	of which: non-senior																

SEC4: Securitization exposures in the banking book and associated regulatory capital requirements - bank acting as investor

	Total exposure values	a	b	c	d	e	f	g	i	j	k	m	Total capital charge after cap	n	o	q	
		Exposure values (by RW bands)					Exposure values (by regulatory approach)			Total RWA	RWA (by regulatory approach)			Capital charge after cap			
		≤20% RW	>20% to 50% RW	>50% to 100% RW	>100% to <1250% RW	1250% RW	IRB RBA	IRB SFA	1250%	IRB RBA	IRB SFA	1250%		IRB RBA	IRB SFA	1250%	

CHF million

30.6.17

Asset classes

1	Total exposures	204	124	9	71	0	0	204	0	74	72	2	6	6	0
2	Traditional securitization	204	124	9	71	0	0	204	0	74	72	2	6	6	0
3	of which: securitization	204	124	9	71	0	0	204	0	74	72	2	6	6	0
4	of which: retail underlying	75	62	9	3	0	74	0	18	16	2	1	1	0	
5	of which: wholesale	130	62	0	68	0	130	0	56	56	0	4	4	0	
6	of which: re-securitization	0				0		0	0		0	0		0	
7	of which: senior														
8	of which: non-senior	0				0		0	0		0	0		0	
9	Synthetic securitization														
10	of which: securitization														
11	of which: retail underlying														
12	of which: wholesale														
13	of which: re-securitization														
14	of which: senior														
15	of which: non-senior														

31.12.16

Asset classes

1	Total exposures	385	255	48	81	0	1	383	1	128	111	17	10	9	1
2	Traditional securitization	385	255	48	81	0	1	383	1	128	111	17	10	9	1
3	of which: securitization	385	255	48	81	0	1	383	1	128	111	17	10	9	1
4	of which: retail underlying	210	147	48	15	0	0	210	0	55	53	2	4	4	0
5	of which: wholesale	175	108	0	66	0	1	173	1	73	58	15	6	5	1
6	of which: re-securitization	0				0			0			0	0		0
7	of which: senior														
8	of which: non-senior	0				0			0			0	0		0
9	Synthetic securitization														
10	of which: securitization														
11	of which: retail underlying														
12	of which: wholesale														
13	of which: re-securitization														
14	of which: senior														
15	of which: non-senior														

Section 5 Market risk

Overview

The amount of capital required to underpin market risk in the regulatory trading book is calculated using a variety of methods approved by FINMA. The components of market risk RWA are value-at-risk (VaR), stressed VaR (SVaR), an add-on for risks that are potentially not fully modeled in VaR, the incremental risk charge (IRC), the comprehensive risk measure (CRM) for the correlation portfolio and the securitization framework for securitization positions in the trading book. Refer to pages 38-39 in the Basel III Pillar 3 UBS Group AG 2016 report under "Pillar 3 disclosures" at www.ubs.com/investors for more information on each of these components.

Securitization positions in the trading book

Our exposure to securitization positions in the trading book is limited and relates primarily to positions in Corporate Center – Non-core and Legacy Portfolio that we continue to wind down. A small amount of exposure also arises from secondary trading in commercial mortgage-backed securities in the Investment Bank. Refer to the "Regulatory exposures and risk-weighted assets" table in section 1 and to section 4 of this report for more information.

The table below provides information on market risk RWA from securitization exposures in the trading book.

MR1: Market risk under standardized approach

		30.6.17	31.12.16
		a	a
Outright products			
1	Interest rate risk (general and specific)		
2	Equity risk (general and specific)		
3	Foreign exchange risk		
4	Commodity risk		
Options			
5	Simplified approach		
6	Delta-plus method		
7	Scenario approach		
8	Securitization	378	428
9	Total	378	428

Regulatory calculation of market risk

The table below shows minimum, maximum, average and period-end regulatory VaR, SVaR, the IRC and the comprehensive risk capital charge.

During the first half of 2017, 10-day 99% regulatory and SVaR increased, driven primarily by Equities and Foreign Exchange, Rates and Credit businesses.

MR3: Internal models approach values for trading portfolios

		For the six-month period ended 30.6.17	For the six-month period ended 31.12.16
<i>CHF million</i>		a	a
VaR (10-day 99%)			
1	Maximum value	69	84
2	Average value	25	27
3	Minimum value	2	5
4	Period end	31	16
Stressed VaR (10-day 99%)			
5	Maximum value	364	179
6	Average value	76	67
7	Minimum value	9	20
8	Period end	42	31
Incremental risk charge (99.9%)			
9	Maximum value	325	280
10	Average value	244	225
11	Minimum value	174	144
12	Period end	271	192
Comprehensive risk capital charge (99.9%)			
13	Maximum value	9	12
14	Average value	8	8
15	Minimum value	4	7
16	Period end	5	8
17	Floor (standardized measurement method)	1	1

MR4: Comparison of VaR estimates with gains/losses

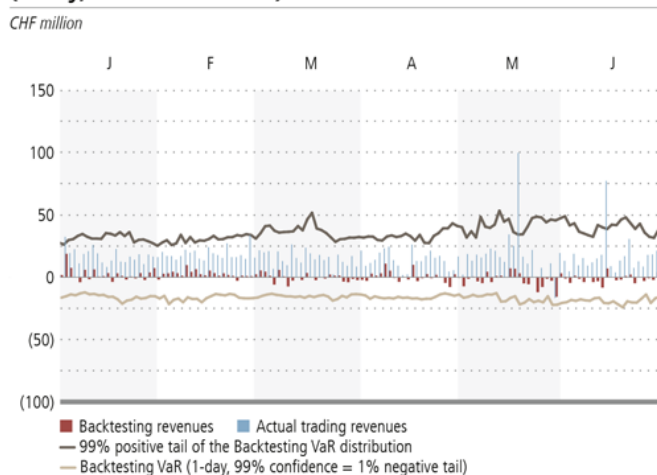
The “Group: development of backtesting revenues and actual trading revenues against backtesting VaR (1-day, 99% confidence)” chart below shows the six-month development of backtesting VaR against the Group’s backtesting revenues for the first half of 2017. The chart shows the negative and the positive tails of the backtesting VaR distribution at 99% confidence intervals representing, the losses and gains, respectively, that could potentially be realized over a one-day period at that level of confidence.

The asymmetry between the negative and positive tails is due to the long gamma risk profile that was run historically in the Investment Bank. This long gamma position profits from increases in volatility, which therefore benefits the positive tail of the VaR simulated profit or loss distribution.

There were no Group VaR negative backtesting exceptions in the first half of 2017. The total number of negative backtesting exceptions within a 250-business-day window decreased from seven to two as the oldest exceptions had fallen out of the time window. Correspondingly, the FINMA VaR multiplier for market risk RWA calculation decreased from 3.65 to 3.00.

More information on the backtesting exceptions that occurred during 2016 is provided on page 151 of our Annual Report 2016, available under “Annual reporting” at www.ubs.com/investors, and on page 48 of our Basel III Pillar 3 UBS Group AG 2016 report, available under “Pillar 3 disclosures” at www.ubs.com/investors.

Group: development of backtesting revenues¹ and actual trading revenues² against backtesting VaR³ (1-day, 99% confidence)



¹ Excludes non-trading revenues, such as valuation reserves, commissions and fees, and revenues from intraday trading. ² Includes backtesting revenues, revenues from intraday trading as well as commissions and fees. ³ Based on Basel III regulatory VaR, excludes CVA positions and their eligible hedges which are subject to the standalone CVA charge.

Abbreviations frequently used in our financial reports

A		D		G	
ABS	asset-backed security	DBO	defined benefit obligation	GAAP	generally accepted accounting principles
AEI	automatic exchange of information	DCCP	Deferred Contingent Capital Plan	GBP	British pound
AGM	annual general meeting of shareholders	DOJ	Department of Justice	GEB	Group Executive Board
A-IRB	advanced internal ratings-based	DOL	Department of Labor	GIIPS	Greece, Italy, Ireland, Portugal and Spain
AIV	alternative investment vehicle	DTA	deferred tax asset	Group ALM	Group Asset and Liability Management
AMA	advanced measurement approach	DVA	debit valuation adjustment	G-SIB	global systemically important bank
AT1	additional tier 1	E		H	
B		EAD	exposure at default	HQLA	high-quality liquid assets
BCBS	Basel Committee on Banking Supervision	EC	European Commission	I	
BD	business division	ECB	European Central Bank	IAS	International Accounting Standards
BIS	Bank for International Settlements	EIR	effective interest rate	IASB	International Accounting Standards Board
BoD	Board of Directors	EMEA	Europe, Middle East and Africa	IFRS	International Financial Reporting Standards
C		EOP	Equity Ownership Plan	IRB	internal ratings-based
CC	Corporate Center	EPS	earnings per share	IRC	incremental risk charge
CCAR	Comprehensive Capital Analysis and Review	ETD	exchange-traded derivatives	ISDA	International Swaps and Derivatives Association
CCF	credit conversion factor	ETF	exchange-traded fund	K	
CCP	central counterparty	EU	European Union	KPI	key performance indicator
CCR	counterparty credit risk	EUR	euro	L	
CDO	collateralized debt obligation	EURIBOR	Euro Interbank Offered Rate	LCR	liquidity coverage ratio
CDR	constant default rate	F		LGD	loss given default
CDS	credit default swap	FCA	UK Financial Conduct Authority	LIBOR	London Interbank Offered Rate
CEA	Commodity Exchange Act loss	FCT	foreign currency translation	LLC	limited liability company
CEO	Chief Executive Officer	FDIC	Federal Deposit Insurance Corporation	LRD	leverage ratio denominator
CET1	common equity tier 1	FINMA	Swiss Financial Market Supervisory Authority	LTV	loan-to-value
CFO	Chief Financial Officer	FRA	forward rate agreement		
CHF	Swiss franc	FSA	UK Financial Services Authority		
CLN	credit-linked note	FSB	Financial Stability Board		
CLO	collateralized loan obligation	FTA	Swiss Federal Tax Administration		
CMBS	commercial mortgage-backed security	FTP	funds transfer price		
CVA	credit valuation adjustment	FVA	funding valuation adjustment		
		FX	foreign exchange		

Abbreviations frequently used in our financial reports (continued)

N		R		T	
NAV	net asset value	RBC	risk-based capital	TBTF	too big to fail
NPA	non-prosecution agreement	RMBS	residential mortgage-backed security	TLAC	total loss-absorbing capacity
NRV	negative replacement value	RoAE	return on attributed equity	U	
NSFR	net stable funding ratio	RoE	return on equity	USD	US dollar
O		RoTE	return on tangible equity	V	
OCI	other comprehensive income	RWA	risk-weighted assets	VaR	value-at-risk
OTC	over-the-counter	S			
P		SE	structured entity		
PD	probability of default	SEC	US Securities and Exchange Commission		
PFE	potential future exposure	SEEOP	Senior Executive Equity Ownership Plan		
PRA	UK Prudential Regulation Authority	SFT	securities financing transaction		
PRV	positive replacement value	SNB	Swiss National Bank		
		SRB	systemically relevant bank		
		SRM	Single Resolution Mechanism		
		SVaR	stressed value-at-risk		

Cautionary Statement | This report and the information contained herein are provided solely for information purposes, and are not to be construed as solicitation of an offer to buy or sell any securities or other financial instruments in Switzerland, the United States or any other jurisdiction. No investment decision relating to securities of or relating to UBS Group AG, UBS AG or their affiliates should be made on the basis of this report. Refer to UBS's second quarter 2017 report and its Annual Report 2016, available at www.ubs.com/investors, for additional information.

Rounding | Numbers presented throughout this report may not add up precisely to the totals provided in the tables and text. Percentages, percent changes and absolute variances are calculated on the basis of rounded figures displayed in the tables and text and may not precisely reflect the percentages, percent changes and absolute variances that would be calculated on the basis of figures that are not rounded.

Tables | Within tables, blank fields generally indicate that the field is not applicable or not meaningful, or that information is not available as of the relevant date or for the relevant period. Zero values generally indicate that the respective figure is zero on an actual or rounded basis. Percentage changes are presented as a mathematical calculation of the change between periods.

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