

OP Amalgamation Capital Adequacy Report  
30 June 2018

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## Introduction

This report discloses information on the capital adequacy of the consolidated group of the amalgamation of member cooperative banks, as specified in Part 8 of the Capital Requirements Regulation of the European Parliament and of the Council No. 575/2013 (CRR) (Pillar III disclosures) in compliance with the guidelines issued by the European Banking Authority (EBA/GL/2016/11). Given that this information is based on the consolidated capital adequacy on the amalgamation of member cooperative banks, it is not directly comparable with information disclosed on OP Financial Group. The Report is unaudited.

The amalgamation of cooperative banks consists of the amalgamation's central cooperative (OP Cooperative), the central cooperative's member credit institutions and the companies belonging to their consolidation groups. Although OP Financial Group's insurance companies do not belong to the amalgamation of the cooperative banks, investments made in them have a major impact on capital adequacy calculated in accordance with the capital adequacy regulations for credit institutions. More detailed information on companies within the consolidation group can be found in the 2017 Financial Statement's Notes 22 and 49.

OP Financial Group's risk management practices and goals can be found in the 2017 Financial Statements Notes 2 and 53. OP Financial Group's Corporate Governance and steering systems are available on websites covering respective issues (op.fi > OP Financial Group > About us > Corporate Governance) and in OP Financial Group's Corporate Governance Statement.

A description of the remuneration schemes and practices can be found in the 2017 Financial Statements Notes 50 and 51, OP Financial Group's website dealing with remuneration (op.fi > OP Financial Group > About us > Corporate governance > Remuneration) and in the Corporate Governance Statement.

OP Financial Group received IRBA permission in stages between 2008–2011. OP Financial Group has applied the Internal Ratings Based Approach (IRBA) to retail, credit institution and corporate exposures and equity investments. The Standardised Approach (SA) is used for other exposure categories. The Standardised Approach is used for OP Card Company's and new member cooperative banks' exposures. OP Card Company aims to adopt IRBA for its exposures. The new member cooperative banks aim to adopt IRBA after the supervisor has approved extended use of IRBA.

## 1 Capital base and capital adequacy

### 1.1 Capital base

EUR million	30 June 2018	31 Dec. 2017
<b>OP Financial Group's equity capital</b>	<b>11 291</b>	<b>11 121</b>
The effect of insurance companies on the Group's shareholders' equity is excluded	-30	92
Fair value reserve, cash flow hedge	-26	-16
<b>Common Equity Tier 1 (CET1) before deductions</b>	<b>11 236</b>	<b>11 197</b>
Intangible assets	-738	-717
Excess funding of pension liability and valuation adjustments	-44	-31
Repayable cooperative capital		-148
Expected profit distribution	-47	-90
Impairments – shortfall of expected losses	-297	-320
<b>Common Equity Tier 1 (CET1)</b>	<b>10 110</b>	<b>9 891</b>
Hybrid capital to which transitional provision is applied	80	81
<b>Additional Tier 1 capital (AT1)</b>	<b>80</b>	<b>81</b>
<b>Tier 1 capital (T1)</b>	<b>10 190</b>	<b>9 973</b>
Debenture loans	1 055	1 121
<b>Tier 2 capital (T2)</b>	<b>1 055</b>	<b>1 121</b>
<b>Total capital base</b>	<b>11 245</b>	<b>11 093</b>

The table presents how OP Amalgamation's CET1 capital derives from OP Financial Group's equity capital. CET1 capital increased by EUR 218 million. CET1 capital was increased by Banking performance, Profit Share issues and dividends from the Group's insurance institutions. Adjustments under IAS 19 reduced CET1 capital. The amount of Profit Shares in CET1 capital increased to EUR 2,910 billion (2,760, from which EUR 146 million has been deducted related to Profit Shares refunded to customers in January 2018). The amount of debenture loans included in Tier 2 capital (T2) decreased as the loans were transferred to the maturity of less than 5 years, in which case they are not included in the capital base in full.

EUR 27 (20) million of prudent valuation adjustment has been deducted from CET1 capital.

OP Financial Group has applied transitional provisions regarding old capital instruments to subordinated loans.

## 1.2 Overview of RWAs (EU-OV1)

EUR million	RWAs			Minimum capital requirements
	30 June 2018	31 March 2018	30 June 2018	
<b>1 Credit risk (excluding CCR)</b>	<b>39 634</b>	<b>38 563</b>	<b>3 171</b>	
2 Of which the standardised approach	4 752	4 544	380	
3 Of which the foundation IRB (FIRB) approach	23 132	22 394	1 851	
4 Of which the advanced IRB (AIRB) approach	4 887	4 786	391	
5 Of which equity IRB under the simple risk-weighted approach	409	386	33	
5a Of which equity investments under PD/LGD method	6 455	6 452	516	
<b>6 CCR</b>	<b>729</b>	<b>695</b>	<b>58</b>	
7 Of which mark to market	533	485	43	
12 Of which CVA	197	210	16	
<b>13 Settlement risk</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>14 Securitisation exposures in the banking book (after the cap)</b>	<b>40</b>	<b>37</b>	<b>3</b>	
15 Of which IRB approach	40	37	3	
<b>19 Market risk</b>	<b>1 298</b>	<b>1 427</b>	<b>104</b>	
20 Of which the standardised approach	1 298	1 427	104	
<b>23 Operational risk</b>	<b>4 136</b>	<b>4 136</b>	<b>331</b>	
25 Of which standardised approach	4 136	4 136	331	
<b>27 Amounts below the thresholds for deduction (subject to 250% risk weight)</b>	<b>358</b>	<b>346</b>	<b>29</b>	
<b>29 Total</b>	<b>46 196</b>	<b>45 205</b>	<b>3 696</b>	
<b>30 Risk weight floors based on ECB's decision</b>	<b>4 808</b>	<b>4 768</b>	<b>385</b>	
<b>31 Total risk exposure amount including risk weight floors</b>	<b>51 003</b>	<b>49 973</b>	<b>4 080</b>	

During the quarter, total risk exposure increased by 2.1%.

Risk weight floors based on the ECB's decision apply to corporate exposures of retail exposures other than SME corporate exposures. In these, floors set for the average risk weight are 15.4% for mortgage-backed securities and 32.7% for other than mortgage-backed securities. Point 2.11 presents average risk weights based on internal exposure models which the risk-weight floor does not affect. The ECB's risk-weight floor will be effective until at least Q3/2018.

### 1.3 Minimum capital requirement

OP Financial Group has used the Foundation Internal Ratings Based Approach (FIRB) to measure capital requirement for corporate and credit institution exposures. This approach uses internal credit ratings to determine a customer's probability of default (PD), whereas loss given default (LGD) and credit conversion factor (CCF) are regulatory standard estimates. The Group has used the Internal Ratings Based Approach (IRBA) to measure capital requirement for retail exposures. This approach uses internal credit ratings to determine a customer's PD. Also LGD and CF are estimated internally.

It is possible to use various methods to measure capital adequacy requirement for equity investments. In the PD/LGD method, investments' risk-weighted exposure is calculated using PD, based on internal credit rating, and a regulatory standard LGD. According to the Simple Risk Weight Approach, investments' risk-weighted exposure amount derives from multiplying each investment by the risk-weight determined by the type of investment.

OP Financial Group has used the Standardised Approach to measure capital requirement for operational risks and market risks.

EUR million	30 June 2018		31 Dec. 2017	
	Capital requirement*	Risk weighted assets	Capital requirement*	Risk weighted assets
<b>Credit and counterparty credit risk</b>	<b>3 245</b>	<b>40 565</b>	<b>3 151</b>	<b>39 383</b>
<b>Standardised Approach</b>	<b>322</b>	<b>4 024</b>	<b>309</b>	<b>3 859</b>
Exposures to regional government or local authorities	2	20	1	18
Exposures to institutions	1	8	1	8
Exposures to corporates	183	2 287	176	2 203
Retail exposures	87	1 081	85	1 057
Exposures secured by mortgages on immovable property	18	224	18	220
Exposures in default	3	36	2	28
Other items	29	368	26	324
<b>Internal Ratings-based Approach (IRB)</b>	<b>2 923</b>	<b>36 541</b>	<b>2 842</b>	<b>35 525</b>
Exposures to institutions	79	989	84	1 054
Exposures to corporates	1 812	22 653	1 715	21 438
Retail exposures	391	4 888	397	4 959
Exposures secured by mortgages on immovable property	245	3 065	251	3 140
Other retail exposures	146	1 822	146	1 819
Equity investments	549	6 863	560	7 002
PD/LGD method	516	6 455	517	6 461
Simple Risk Weight Approach	33	409	43	541
Private equity investments	11	135	6	74
Listed investments	1	11	1	13
Other	21	262	36	454
Other non-credit obligations	89	1 108	82	1 030
<b>Clearing/settlement risk</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>
<b>Market risk (Standardised Approach)</b>	<b>104</b>	<b>1 298</b>	<b>94</b>	<b>1 178</b>
Position risk	104	1 296	93	1 159
Commodity risk	0	2	2	19
<b>Operational risk</b>	<b>331</b>	<b>4 136</b>	<b>317</b>	<b>3 958</b>
<b>Risk associated with exposure value adjustment</b>	<b>16</b>	<b>197</b>	<b>16</b>	<b>205</b>
<b>Risk exposure amount</b>	<b>3 696</b>	<b>46 196</b>	<b>3 937</b>	<b>44 725</b>
<b>Risk weight floors based on ECB's decision</b>	<b>385</b>	<b>4 808</b>	<b>359,3236</b>	<b>4 492</b>
<b>Total risk exposure amount including risk weight floors</b>	<b>4 080</b>	<b>51 003</b>	<b>4 297</b>	<b>49 216</b>

\* Capital requirement = Risk-weighted assets x 0.08

### 1.4 Capital Ratios

Ratios, %	30 June 2018	31 Dec. 2017
CET1 capital ratio	19,8	20,1
Tier 1 ratio	20,0	20,3
Capital adequacy ratio	22,0	22,5

Ratios, fully loaded, %	30 June 2018	31 Dec. 2017
CET1 capital ratio	19,8	20,1
Tier 1 ratio	19,8	20,1
Capital adequacy ratio	21,9	22,4

Ratios excluding the risk weight floors, %	30 June 2018	31 Dec. 2017
CET1 capital ratio	21,9	22,1
Tier 1 ratio	22,1	22,3
Capital adequacy ratio	24,3	24,8

Capital requirement, EUR million	30 June 2018	31 Dec. 2017
Capital base	11 245	11 093
Capital requirement	7 280	7 027
Buffer for capital requirements	3 965	4 067

The risk weight floors set by the ECB decreased the CET1 ratio by 2.1 percentage points. An increase in total risk exposure amount resulting from growth in the loan portfolio exceeded an increase in CET1 capital. The effect of the calculated adjustments of defined benefit pension plans (IAS 19) on the Group's CET1 ratio was about -0.9 percentage points, or slightly lower than at the end of 2017.

OP Financial Group's capital adequacy is on a solid basis compared to the statutory requirements and those set by the authorities. The capital requirement of 14.3% comprises the minimum requirement of 8%, the capital conservation buffer of 2.5%, the O-SII buffer requirement of 2.0%, the minimum requirement of 1.75% (P2R) set by the ECB and the changing capital conservation buffers of 0.03% by country for foreign exposures. The ECB's P2R has been effective since 1 January 2017.

## 2 Credit Risk

The figures presented in the credit risk section excludes items treated within the scope of counterparty credit risk.

### 2.1 Credit quality of exposures by exposure class and instrument (EU CR1-A)

	a		b	c	e	f	g
	Defaulted exposures	Non-defaulted exposures	Gross carrying values of	Specific credit risk adjustments	Accumulated write-offs	Credit risk adjustment charges of the period	Net values (a+b-c-d)
<b>30 June 2018, EUR million</b>							
<b>IRB approach</b>							
2 Institutions		7 138		2		0	7 137
3 Corporates	743	44 572		368	18	9	44 947
5 Of which: SMEs	336	16 314		119	4	-14	16 531
6 Retail	397	54 085		118	7	3	54 364
7 Secured by real estate property	306	45 470		77	1	32	45 700
8 SMEs	18	833		1	0	0	850
9 Non-SMES	288	44 637		76	0	33	44 850
11 Other retail	91	8 614		41	6	-30	8 664
12 SMEs	25	835		8	1	0	852
13 Non-SMEs	66	7 780		33	5	-30	7 812
14 Equity		2 459		1		-2	2 458
14a Other non-credit obligations		1 164		0		0	1 164
<b>15 Total IRB approach</b>	<b>1 140</b>	<b>109 417</b>		<b>488</b>	<b>25</b>	<b>10</b>	<b>110 070</b>
<b>Standardised approach</b>							
16 Central government and central banks		17 801		1		1	17 800
17 Regional government or local authorities		3 529		1		1	3 528
18 Public sector entities		290		0		0	290
19 Multilateral development banks		551					551
20 International organisations		462					462
21 Institutions		225					225
22 Corporates		2 627		5		-1	2 622
23 Of which: SMEs		1 782		4		0	1 778
24 Retail		3 600		17	0	8	3 583
25 Of which: SMEs		13		0		0	13
26 Secured by mortgages on immovable property	1	538		1		0	539
27 Of which: SMEs	1	10		0		0	10
28 Exposures in default	40			13	4	7	27
34 Other exposures		153					153
<b>35 Total standardised approach</b>	<b>42</b>	<b>29 775</b>		<b>37</b>	<b>4</b>	<b>16</b>	<b>29 780</b>
<b>36 Total</b>	<b>1 182</b>	<b>139 192</b>		<b>525</b>	<b>29</b>	<b>26</b>	<b>139 850</b>
37 Of which: Loans	1 095	88 222		416		15	88 902
38 Of which: Debt securities		11 014					11 014
39 Of which: Off-balance-sheet exposures	66	24 071		4		4	24 133

The quality of the loan portfolio still remained good. Accumulated write-offs were lower than a year ago. Credit risk adjustment charges are not comparable with those off previous year due to the adoption of IFRS 9. Credit risk adjustment charges for the period are presented in net terms.

Defaulted exposures are exposures belonging to rating categories 11–12 or F. In the Standardised Approach exposures are defaulted in case interest or capital are over 90 days overdue.

## 2.2 Credit quality of exposures by industry or counterparty types (EU CR1-B)

	Gross carrying values of		Specific credit risk adjustments	Accumulated write-offs	Credit risk adjustment charges of the period	Net values (a+b-c-d)
	Defaulted exposures	Non-defaulted exposures				
<b>30 June 2018, EUR million</b>						
1 Renting and operation of residential real estate	40	8 405	4	0	3	8 441
2 Operating of other real estate	60	4 806	17	2	1	4 849
3 Trade	53	5 282	25	1	7	5 310
4 Energy	38	4 377	18		6	4 397
5 Services	86	5 945	28	0	2	6 003
6 Construction	81	4 403	28	0	11	4 455
7 Other manufacturing	49	2 719	19	1	0	2 749
8 Manufacture of machinery and equipment (incl. maintenance)	43	2 149	14	14	-12	2 178
9 Transportation and storage	38	2 063	14	1	2	2 088
10 Financial and insurance activities	9	7 145	12		3	7 142
11 Central bank deposits		15 553				15 553
12 Covered bonds		5 655				5 655
13 Agriculture, forestry and fishing	134	5 130	31	0	-2	5 232
14 Forest industry	134	1 209	100	1	-1	1 244
15 Metal industry	61	1 254	22	0	-2	1 292
16 Food industry	22	1 128	15	0	3	1 135
17 Buying and selling of own real estate	3	882	1	0	0	883
18 Information and communication	14	1 169	8	0	2	1 175
19 Other sectors	2	1 414	27	0	-17	1 389
20 Water supply and waste management	1	459	0		0	460
21 Mining and quarrying	36	328	22	0	0	341
22 Manufacture of chemicals and chemical products	0	408	0		0	408
23 Activities of households as employers; undifferentiated goods and services producing activities of household	2	303	2	0	1	304
24 Public administration and defence (incl. compulsory social security)		5 396	1		1	5 395
25 Activities of extraterritorial organisations and bodies		1 013	0		0	1 013
26 Households	276	50 596	116	8	19	50 757
<b>24 Total</b>	<b>1 182</b>	<b>139 192</b>	<b>525</b>	<b>29</b>	<b>26</b>	<b>139 850</b>

Credit risk adjustments in the real estate sector are low due to high collateral levels. The amount of defaulted exposures in Agriculture, forestry and fishing relative to credit risk adjustments is explained by technical defaults resulting from subsidies payment schedules. The high amount of defaulted exposures in the Forest industry, mining and quarrying relative to exposures is due to individual cases with high exposure amount in comparison with the total exposure amount in the sector.

## 2.3 Credit quality of exposures by geography (EU CR1-C)

	Gross carrying values of		Specific credit risk adjustments	Accumulated write-offs	Credit risk adjustment charges of the period	Net values (a+b-c-d)
	Defaulted exposures	Non-defaulted exposures				
<b>30 June 2018, EUR million</b>						
1 Finland	1 161	123 633	515	29	23	124 278
2 Other Nordic countries	2	3 119	1	0	1	3 120
3 Baltic States	17	2 590	6		2	2 601
4 Rest of EU	1	7 042	2	0	0	7 041
5 Rest of Europe	0	281	0	0	0	281
6 USA	1	159	0	0	0	159
7 Asia	0	383	0	0	0	383
8 Other	1	1 985	0	0	0	1 986
<b>11 Total</b>	<b>1 182</b>	<b>139 192</b>	<b>525</b>	<b>29</b>	<b>26</b>	<b>139 850</b>

A total of 89% of total exposures are in Finland and other distribution is presented applying the materiality principle. A total of 98% of defaulted exposures and 99% credit risk adjustments are in Finland.

## 2.4 Ageing of past-due exposures (EU CR1-D)

	Gross carrying values				
	≤ 30 days	> 30 days ≤ 60 days	> 60 days ≤ 90 days	> 90 days ≤ 180 days	> 180 days ≤ 1 year
<b>30 June 2018, EUR million</b>					
1 Loans	386	111	130	145	142
2 Debt securities					439
<b>3 Total exposures</b>	<b>386</b>	<b>111</b>	<b>130</b>	<b>145</b>	<b>142</b>

Past due exposures increased slightly during the first half but total exposures are low.

## 2.5 Non-performing and forborne exposures (EU CR1-E)

30 June 2018, EUR million	Debt securities	Loans and advances	Off-balance-sheet exposures
<b>Gross carrying values of performing and non-performing exposures</b>	<b>11 014</b>	<b>101 086</b>	<b>24 477</b>
Of which performing but past due > 30 days and <= 90 days		102	
Of which performing forborne		2 450	
Of which non-performing		1 427	86
Of which defaulted		1 142	73
Of which impaired		1 146	
Of which forborne		425	
<b>Accumulated impairment and provisions and negative fair value adjustments due to credit risk</b>			
On performing exposures	-2	-147	4
Of which forborne		-3	
On non-performing exposures		-372	0
Of which forborne		-52	
<b>Collaterals and financial guarantees received</b>			
On non-performing exposures		775	5
Of which forborne exposures		2 254	

Forborne exposures increased slightly during the first half.

## 2.6 Changes in the stock of general and specific credit risk adjustments (EU CR2-A)

30 June 2018, EUR million	a
	<b>Accumulated specific credit risk adjustment</b>
<b>1 Opening balance</b>	<b>543</b>
2 Increases due to amounts set aside for estimated loan losses during the period	44
3 Decreases due to amounts reversed for estimated loan losses during the period	-32
4 Decreases due to amounts taken against accumulated credit risk adjustments	-35
8 Other adjustments	4
<b>9 Closing balance</b>	<b>525</b>
10 Recoveries on credit risk adjustments recorded directly to the statement of profit or loss	
11 Specific credit risk adjustments directly recorded to the statement of profit or loss	

Credit risk adjustments under IFRS 9 (ECL) are presented as specific credit risk adjustments. Credit risk adjustments are not comparable with those of previous year due to the adoption of IFRS 9.

## 2.7 Changes in the stock of defaulted and impaired loans and debt securities (EU CR2-B)

30 June 2018, EUR million	a
	<b>Gross carrying value defaulted exposures</b>
<b>1 Opening balance</b>	<b>1 274</b>
2 Loans and debt securities that have defaulted or impaired since the last reporting period	225
3 Returned to non-defaulted status	-194
4 Amounts written off	-33
5 Other changes	-90
<b>6 Closing balance</b>	<b>1 182</b>

Defaulted loans decreased slightly. The decrease came from private customers.

## 2.8 CRM techniques – Overview (EU CR3)

30 June 2018, EUR million	a	b	c	d	e
	<b>Exposures unsecured – Carrying amount</b>	<b>Exposures secured – Carrying amount</b>	<b>Exposures secured by collateral</b>	<b>Exposures secured by financial guarantees</b>	<b>Exposures secured by credit derivatives</b>
1 Total loans	35 984	52 918	48 994	3 924	
2 Total debt securities	4 414	6 600	5 655	945	
<b>3 Total exposures</b>	<b>78 933</b>	<b>60 917</b>	<b>55 413</b>	<b>5 504</b>	
4 Of which defaulted	454	366	325	41	

In the IRBA applied to retail exposures, it is possible to use collateral securities on a more extensive basis than in the SA applied to credit institution and corporate exposures. Guarantees and collateral related to retail exposures are treated as part of LGD. Several collateral securities or guarantees may apply to the same exposure in the table.

In the SA and IRBA applied to credit institution and corporate exposures, OP Financial Group utilises the following real collateral securities specified in the capital adequacy regulations: residential buildings and shares entitling their holders to the possession of an apartment, deposits and securities (equities). Deposits and securities are financial collateral, as referred to in the regulatory framework, and alternative methods are available for their accounting treatment. OP Financial Group has treated financial collateral in the above approaches using the so-called comprehensive method and volatility adjustments given by the relevant regulator.

In the SA and IRBA applied to credit institution and corporate exposures, only approved guarantors specified in the capital adequacy regulations may be used, such as guarantees granted by the Finnish State and other states, and those granted by municipalities and banks. Credit derivatives have not been used in the calculation. Offsetting balance-sheet or off-balance-sheet items was not applied in credit risk.

Residential buildings and shares entitling their holders to the possession of an apartment in Finland lodged as collateral constitute the largest collateral type used in capital adequacy. The effect of other physical securities on the capital adequacy of credit risks is much less significant. Guarantees used have been given by a number of sources, the largest single one being the State of Finland.



## 2.9 Standardised approach – Credit risk exposure and CRM effects (EU CR4)

Exposure classes, EUR million	a	b	c	d	e	f
	Exposures before CCF and CRM		Exposures post CCF and CRM		RWAs and RWA density (%)	
	On-balance-sheet amount	Off-balance-sheet amount	On-balance-sheet amount	Off-balance-sheet amount	RWAs	RWA density (%)
1 Central governments or central banks	17 484	316	19 537	231	0	0,00
2 Regional government or local authorities	2 555	973	3 245	265	20	0,56
3 Public sector entities	190	100	65	0	0	0,00
4 Multilateral development banks	551	0	627	9	0	0,00
5 International organisations	462		462		0	0,00
6 Institutions	18	207	40	66	2	1,81
7 Corporates	2 045	577	2 040	275	2 286	98,78
8 Retail	1 461	2 122	1 435	10	1 081	74,87
9 Secured by mortgages on immovable property	534	5	534	3	208	38,85
10 Exposures in default	27		27		36	132,66
16 Other items	153		153		368	239,95
<b>17 Total</b>	<b>25 480</b>	<b>4 300</b>	<b>28 164</b>	<b>857</b>	<b>4 002</b>	<b>13,79</b>

The exposure amount under the Standardised Approach increased slightly during the first half. At the same time, the amount of risk-weighted items increased. Other items include deferred tax assets which have not been deducted from the Group's own funds; these are treated with a risk weight of 250%.

## 2.10 Standardised approach (EU CR5)

Exposure classes, EUR million	Risk weight									Total	Of which unrated
	0 %	20 %	35 %	50 %	75 %	100 %	150 %	250 %	Others		
1 Central governments or central banks	19 767									19 767	
2 Regional government or local authorities	3 412	98								3 510	940
3 Public sector entities	65									65	
4 Multilateral development banks	636									636	636
5 International organisations	462									462	462
6 Institutions	96	10				0				105	96
7 Corporates	0	18				2 239			58	2 314	2 314
8 Retail	0				1 434				11	1 444	1 444
9 Secured by mortgages on immovable property	0		386	142					8	536	536
10 Exposures in default	0					10	18			27	27
16 Other items						10		143		153	55
<b>17 Total</b>	<b>24 438</b>	<b>125</b>	<b>386</b>	<b>142</b>	<b>1 434</b>	<b>2 258</b>	<b>18</b>	<b>143</b>	<b>76</b>	<b>29 021</b>	<b>6 511</b>

In its capital adequacy measurement for credit risk under the Standardised Approach to determine the exposure's risk weight, OP Financial Group applies credit ratings by Moody's Investors Service, Fitch Ratings or Standard & Poor's Financial Services to receivables from central governments and central banks (and comparable items, above lines 2–5) and corporations. External credit assessment determines the receivable's credit rating category. In the capital adequacy requirement for receivables, the risk weight is determined by the credit rating category. If two credit rating applies to the counterparty or receivable, the lowest rating category is used to determine the rating category.

The risk weight of international development banks' receivables may also be determined on the basis of other than credit rating based on external credit assessment. If the risk weight is affected by external credit assessment, credit ratings issued by the aforementioned rating agencies will also apply to the risk weighting of international development banks' receivables in capital adequacy measurement.

For a receivable in capital adequacy measurement, the security-specific credit rating of the issue programme or arrangement to which the receivable belongs must be used. If such a rating is not available, the issuer's general credit rating will be used, provided that it is available. Items under the Standardised approach do not include items deducted from the capital base.

## 2.11 IRB approach – Credit risk exposures by exposure class and PD range (EU CR6)

The table below presents the PD class breakdown of credit exposures within the scope of the IRB approach, specification of risk parameters and other information. The defaults, or PD 100, are not included in the average PD and risk weight. The minimum PD is 0.03%. CCF stands for a credit conversion factor. Off-balance-sheet exposures include loans not drawn down and unused commitments. Exposure amounts do not include counterparty credit risk.

	a	b	c	d	e	f	g	h	i	j	k	l
PD scale	Original on-balance-sheet gross exposures	Off-balance-sheet exposures pre-CCF	Average CCF	EAD post CRM and post CCF	Average PD	Number of obligors	Average LGD	Average maturity	RWAs	RWA density	EL	Impairments and value adjustments
<b>Retail</b>												
0,00 - < 0,15	42 590	3 632	52,0 %	40 845	0,0 %	583 815	16,5 %	14	947	2,3 %	3	
0,15 - < 0,25	2 266	111	51,1 %	2 212	0,2 %	74 224	16,7 %	14	168	7,6 %	1	
0,25 - < 0,50	3 401	165	55,5 %	3 328	0,4 %	133 933	22,7 %	11	501	15,1 %	3	
0,50 - < 0,75	1 081	34	46,1 %	1 062	0,7 %	52 186	24,3 %	10	253	23,8 %	2	
0,75 - < 2,50	2 090	118	59,6 %	2 043	1,4 %	84 486	27,8 %	9	691	33,8 %	8	
2,50 - < 10,00	1 605	68	56,1 %	1 575	5,8 %	63 718	27,0 %	9	930	59,0 %	24	
10,00 - < 100,00	1 051	17	66,6 %	1 045	25,8 %	34 696	24,1 %	10	1 009	96,5 %	63	
100,00	397	4	0,0 %	393	100,0 %	10 141	26,7 %	19	389	98,8 %	88	
<b>Total</b>	<b>54 482</b>	<b>4 149</b>	<b>52,3 %</b>	<b>52 505</b>	<b>0,8 %</b>	<b>1 037 199</b>	<b>18,0 %</b>	<b>13</b>	<b>4 887</b>	<b>8,6 %</b>	<b>193</b>	<b>118</b>

The average risk parameters of retail exposures were at the 2017-end level.

In setting PD values given by rating models assessing solvency of personal customers' retail exposures, OP Financial Group has used its own default data and external data. As external data, OP Financial Group has made use of the unemployment rate since 1989. The Group has taken account of uncertainty associated with the data using a statistical margin of conservatism.

In setting PD values given by rating models assessing corporate customers in retail exposures, OP Financial Group has used its own default data and external data. As external data, the Group has used bankruptcy statistics since 1987. The Group has taken account of uncertainty associated with the data using a statistical margin of conservatism. The current corporate customer PDs in use were adopted in the first quarter of 2015.

In determining LGD estimates for retail exposures, the Group has used contract, customer, default, collateral and debt-collection data from 2008 until 2014. The Group applies the definition of default as in the PD models. In addition, the model uses product level cash flow data on uncollateralised returns and the recovery rate of default probabilities as well as recession valuation adjustments for collateral values based on the recession of the early 1990s.

In the risk weight calculation, the Group applies the LGD minimum of 10% and 15% to residential mortgage-backed exposures and commercial mortgage-backed exposures, respectively.

	a	b	c	d	e	f	g	h	i	j	k	l
PD scale	Original on-balance-sheet gross exposures	Off-balance-sheet exposures pre-CCF	Average CCF	EAD post CRM and post CCF	Average PD	Number of obligors	Average LGD	Average maturity	RWAs	RWA density	EL	Impairments and value adjustments
<b>Retail - Secured by real estate property</b>												
0,00 - < 0,15	37 730	808	54,6 %	37 363	0,0 %	447 586	14,2 %	14,5	718	1,9 %	2	
0,15 - < 0,25	1 711	28	54,0 %	1 698	0,2 %	23 332	15,2 %	14,2	118	6,9 %	1	
0,25 - < 0,50	2 258	64	62,3 %	2 234	0,4 %	37 509	14,2 %	13,0	216	9,6 %	1	
0,50 - < 0,75	684	8	54,2 %	680	0,7 %	10 567	14,8 %	13,2	107	15,7 %	1	
0,75 - < 2,50	1 290	57	66,5 %	1 271	1,4 %	24 228	15,3 %	11,3	305	24,0 %	3	
2,50 - < 10,00	1 023	26	67,7 %	1 014	5,9 %	16 341	15,5 %	11,7	551	54,3 %	9	
10,00 - < 100,00	775	8	74,2 %	773	26,4 %	10 090	15,9 %	12,3	720	93,1 %	32	
100,00	306	2	0,0 %	305	100,0 %	4 021	18,1 %	17,0	332	108,9 %	31	
<b>subtotal</b>	<b>45 777</b>	<b>1 000</b>	<b>56,1 %</b>	<b>45 338</b>	<b>0,7 %</b>	<b>573 674</b>	<b>14,3 %</b>	<b>14,2</b>	<b>3 065</b>	<b>6,1 %</b>	<b>81</b>	<b>77</b>
<b>Retail - Other - Non-SMEs</b>												
0,00 - < 0,15	4 860	2 824	51,2 %	3 482	0,1 %	194 635	41,1 %	10,8	228	6,6 %	1	
0,15 - < 0,25	554	82	50,1 %	513	0,2 %	52 222	21,3 %	13,5	50	9,8 %	0	
0,25 - < 0,50	962	76	48,3 %	923	0,4 %	96 025	37,2 %	6,5	237	25,7 %	1	
0,50 - < 0,75	397	26	43,5 %	382	0,7 %	42 288	41,2 %	5,0	146	38,2 %	1	
0,75 - < 2,50	424	22	44,4 %	412	1,4 %	52 240	37,2 %	6,4	185	44,9 %	2	
2,50 - < 10,00	372	9	36,5 %	366	6,1 %	42 704	38,1 %	5,6	225	61,5 %	9	
10,00 - < 100,00	212	2	35,1 %	211	24,5 %	23 605	40,6 %	5,3	212	100,7 %	21	
100,00	66	0	0,0 %	66	100,0 %	3 931	46,5 %	24,7	5	7,2 %	41	
<b>subtotal</b>	<b>7 845</b>	<b>3 041</b>	<b>50,9 %</b>	<b>6 354</b>	<b>1,4 %</b>	<b>507 650</b>	<b>38,6 %</b>	<b>9,4</b>	<b>1 288</b>	<b>20,4 %</b>	<b>77</b>	<b>33</b>
<b>Retail - Other - SMEs</b>												
0,00 - < 0,15												
0,15 - < 0,25	2	1	51,0 %	1	0,2 %	39	99,3 %	6,0	0	30,7 %	0	
0,25 - < 0,50	181	25	60,1 %	171	0,4 %	3 060	56,1 %	3,4	49	28,5 %	0	
0,50 - < 0,75												
0,75 - < 2,50	376	40	57,8 %	360	1,4 %	10 710	61,5 %	3,7	202	56,1 %	3	
2,50 - < 10,00	211	33	52,6 %	195	5,0 %	7 127	66,0 %	3,5	154	78,8 %	7	
10,00 - < 100,00	65	8	65,2 %	62	23,1 %	2 855	69,9 %	3,9	77	123,8 %	10	
100,00	25	2	0,0 %	23	100,0 %	2 793	83,6 %	21,7	52	224,9 %	16	
<b>subtotal</b>	<b>860</b>	<b>108</b>	<b>56,2 %</b>	<b>813</b>	<b>3,8 %</b>	<b>26 584</b>	<b>62,8 %</b>	<b>4,1</b>	<b>534</b>	<b>61,0 %</b>	<b>36</b>	<b>8</b>
<b>Total</b>	<b>54 482</b>	<b>4 149</b>	<b>52,9 %</b>	<b>52 505</b>	<b>0,8 %</b>	<b>1 107 908</b>	<b>17,7 %</b>	<b>13,5</b>	<b>4 887</b>	<b>8,6 %</b>	<b>193</b>	<b>118</b>

The average risk weights of mortgage-backed retail exposures were at the 2017-end level and the average risk parameters remained at the same levels during the first half. Considering that the one and the same customer may include in several sub-exposure classes, the sums of the number of debtors differ between the tables.

	a	b	c	d	e	f	g	h	i	j	k	l
PD scale	Original on-balance-sheet gross exposures	Off-balance-sheet exposures pre-CCF	Average CCF	EAD post CRM and post CCF	Average PD	Number of obligors	Average LGD	Average maturity	RWAs	RWA density	EL	Impairments and value adjustments
<b>Corporates</b>												
0,00 - < 0,15	10 289	4 262	52,5 %	8 280	0,1 %	593	44,2 %	4,4	1 961	23,7 %	3	
0,15 - < 0,25	4 584	1 918	53,6 %	3 451	0,2 %	594	44,4 %	3,9	1 474	42,7 %	3	
0,25 - < 0,50	9 504	2 964	49,5 %	7 879	0,4 %	8 846	44,7 %	9,2	4 119	52,3 %	13	
0,50 - < 0,75												
0,75 - < 2,50	10 125	3 248	49,6 %	8 387	1,3 %	9 517	44,3 %	8,7	7 320	87,3 %	50	
2,50 - < 10,00	9 117	2 154	53,1 %	4 882	4,4 %	8 908	44,2 %	6,9	5 857	120,0 %	95	
10,00 - < 100,00	953	240	53,6 %	836	20,9 %	1 562	44,3 %	6,7	1 587	189,8 %	77	
100,00	743	63	42,2 %	704	100,0 %	1 045	45,0 %	15,9	0	0,0 %	317	
<b>Total</b>	<b>45 315</b>	<b>14 849</b>	<b>51,4 %</b>	<b>34 418</b>	<b>1,6 %</b>	<b>31 065</b>	<b>44,4 %</b>	<b>7,1</b>	<b>22 318</b>	<b>66,2 %</b>	<b>558</b>	<b>368</b>

The average risk weights of corporate exposures increased slightly from the 2017-end level.

In setting PD values given by rating models assessing solvency of corporate customers' retail exposures, OP Financial Group has used its own default data and external data. As external data, the Group has used bankruptcy statistics since 1987. The Group has taken account of uncertainty associated with the data using a statistical margin of conservatism. The current corporate customer PDs in use were adopted in the first quarter of 2015.

	a	b	c	d	e	f	g	h	i	j	k	l
PD scale	Original on-balance-sheet gross exposures	Off-balance-sheet exposures pre-CCF	Average CCF	EAD post CRM and post CCF	Average PD	Number of obligors	Average LGD	Average maturity	RWAs	RWA density	EL	Impairments and value adjustments
<b>Corporates - Other</b>												
0,00 - < 0,15	8 688	3 489	57,8 %	7 275	0,1 %	339	44,2 %	3,9	1 740	23,9 %	2	
0,15 - < 0,25	4 236	1 792	53,2 %	3 177	0,2 %	154	44,5 %	3,2	1 384	43,6 %	3	
0,25 - < 0,50	4 669	2 163	53,2 %	3 541	0,4 %	1 230	44,7 %	4,5	2 132	60,2 %	6	
0,50 - < 0,75												
0,75 - < 2,50	5 499	2 388	51,5 %	4 259	1,4 %	1 658	44,2 %	7,2	4 246	99,7 %	26	
2,50 - < 10,00	4 679	1 476	50,3 %	2 179	4,2 %	1 589	44,6 %	4,8	2 998	137,6 %	41	
10,00 - < 100,00	486	192	54,6 %	396	17,7 %	177	44,7 %	4,7	865	218,4 %	31	
100,00	407	51	43,2 %	376	100,0 %	165	45,8 %	13,7	0	0,0 %	172	
<b>subtotal</b>	<b>28 665</b>	<b>11 552</b>	<b>54,1 %</b>	<b>21 202</b>	<b>1,2 %</b>	<b>5 312</b>	<b>44,4 %</b>	<b>4,8</b>	<b>13 366</b>	<b>64,2 %</b>	<b>281</b>	<b>248</b>
<b>Corporates - SMEs</b>												
0,00 - < 0,15	1 600	773	26,8 %	1 005	0,1 %	254	44,5 %	7,9	221	22,0 %	0	
0,15 - < 0,25	348	126	59,2 %	273	0,2 %	440	44,3 %	11,5	90	32,9 %	0	
0,25 - < 0,50	4 835	801	40,3 %	4 339	0,4 %	7 617	44,7 %	13,1	1 987	45,8 %	8	
0,50 - < 0,75												
0,75 - < 2,50	4 626	860	44,5 %	4 128	1,3 %	7 862	44,3 %	10,3	3 074	74,5 %	24	
2,50 - < 10,00	4 438	678	57,6 %	2 703	4,5 %	7 320	44,0 %	8,7	2 858	105,8 %	54	
10 - < 100	468	48	48,9 %	440	23,8 %	1 386	43,9 %	8,5	722	164,1 %	46	
100	336	11	37,6 %	328	100,0 %	880	44,1 %	18,4	0	0,0 %	145	
<b>subtotal</b>	<b>16 650</b>	<b>3 297</b>	<b>42,3 %</b>	<b>13 216</b>	<b>2,3 %</b>	<b>25 759</b>	<b>44,4 %</b>	<b>10,9</b>	<b>8 952</b>	<b>69,5 %</b>	<b>276</b>	<b>119</b>
<b>Total</b>	<b>45 315</b>	<b>14 849</b>	<b>51,4 %</b>	<b>34 418</b>	<b>1,6 %</b>	<b>31 071</b>	<b>44,4 %</b>	<b>7,1</b>	<b>22 318</b>	<b>66,2 %</b>	<b>558</b>	<b>368</b>

	a	b	c	d	e	f	g	h	i	j	k	l
PD scale	Original on-balance-sheet gross exposures	Off-balance-sheet exposures pre-CCF	Average CCF	EAD post CRM and post CCF	Average PD	Number of obligors	Average LGD	Average maturity	RWAs	RWA density	EL	Impairments and value adjustments
<b>Institutions</b>												
0,00 - < 0,15	5 699	525	65,1 %	5 522	0,0 %	163	15,1 %	5,2	382	6,9 %	0	
0,15 - < 0,25	689	51	48,9 %	663	0,2 %	35	14,5 %	8,9	95	14,3 %	0	
0,25 - < 0,50	279	93	49,3 %	233	0,3 %	42	20,8 %	5,3	77	33,1 %	0	
0,50 - < 0,75	225	24	70,8 %	12	0,7 %	37	45,0 %	7,0	11	88,1 %	0	
0,75 - < 2,50	42	21	30,1 %	30	1,2 %	29	45,0 %	1,2	34	113,6 %	0	
2,50 - < 10,00	202	68	21,0 %	148	3,0 %	45	45,0 %	0,6	212	143,1 %	2	
10,00 - < 100,00	2	2	62,5 %	2	14,2 %	8	45,0 %	0,1	4	229,7 %	0	
100,00												
<b>Total</b>	<b>7 138</b>	<b>784</b>	<b>57,4 %</b>	<b>6 610</b>	<b>0,1 %</b>	<b>359</b>	<b>16,1 %</b>	<b>5,5</b>	<b>814</b>	<b>12,3 %</b>	<b>3</b>	<b>2</b>

The average risk weights of credit institution exposures decreased slightly during the first half. The majority of the credit institution exposures are covered bonds.

For setting PD values given by the credit institution exposure rating model, OP Financial Group has used rating scores for credit institution exposure and external credit ratings and the corresponding default data. PD values have been adjusted with a margin of conservatism in order to take account of uncertainties associated with the data.

## 2.12 Equities (EU CR10, EU CR6)

### Equities under the simple risk-weighted approach

Categories	On-balance-sheet amount	Off-balance-sheet amount	Risk weight	Exposure amount	RWAs	Capital requirements
Private equity exposures	64	7	190 %	71	135	11
Exchange-traded equity exposures	4	0	290 %	4	11	1
Other equity exposures	71	0	370 %	71	262	21
<b>Total</b>	<b>138</b>	<b>7</b>		<b>146</b>	<b>409</b>	<b>33</b>

Equity investments decreased during the the first half. Listed investments are measured at market value.

### PD/LGD method

	a	b	c	d	e	f	g	h	i	j	k	l
PD Scale	Original on-balance-sheet gross exposures	Off-balance-sheet exposures pre-CCF	Average CCF	EAD post CRM and post CCF	Average PD	Number of obligors	Average LGD	Average maturity	RWAs	RWA density	EL	Value adjustments and provisions
0,75 - < 2,50	2 312			2 312	1,3	5	90,0	22,5	6 455	279,2	26	

The PD/LGD method for equity investments has been used to treat the Group's strategic investments, of which the most significant ones (EAD EUR 2,306 million) include investments in the Group's insurance companies. In these exposures, EAD is the same as gross exposures and the exposures do not include off-balance-sheet items. PD for unlisted investments is 1.25 which is determined by regulation. No major changes have occurred in the amount of exposures. Maturity has been presented for instruments with a contractual maturity.

## 2.13 Non-deducted participations in insurance undertakings (EU INS1)

30 June 2018, EUR million	Value
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)	2 306
Total RWAs	6 438

The Group treats insurance holdings in equity investments based on the supervisor's permission. In October 2015, the Group received permission from the ECB to treat insurance holdings within the conglomerate as risk-weighted assets according to the previous practice.

## 2.14 RWA flow statements of credit risk exposures under the IRB approach (EU-CR8)

EUR million	a	b
	RWA amounts	Capital requirements
<b>1 RWAs as at the end of the previous reporting period 31 March 2018</b>	<b>27 180</b>	<b>2 174</b>
2 Asset size	538	43
3 Asset quality	295	24
5 Methodology and policy	6	0
<b>9 RWAs as at the end of the reporting period 30 June 2018</b>	<b>28 019</b>	<b>2 242</b>

Changes occurred in retail exposures, corporate exposures and credit institution exposures during the quarter are presented using the flow statements. Exposure amount increased risk-weighted assets and the credit quality weakened slightly in corporate exposures, which increased risk-weighted assets. The Group further specified the handling of retail exposure guarantees.

### 3 CCR and Market Risk

#### 3.1 Analysis of CCR exposure by approach (EU CCR1)

Counterparty credit risk arising from derivative contracts is based on the daily market valuation of derivative contracts.

The size of customer limits are defined on the basis of assets included in derivative contracts and the estimated validity of the contracts.

Counterparty credit risk associated with derivative contracts arises from receivables which OP Financial Group may have from its counterparties in case they default. OP Financial Group measures counterparty credit risk using a fair value model, whereby the value of liability comprises the contract market value and the expected potential future exposure. The credit equivalent based on the fair value model is used both in the regulatory capital adequacy requirement and economic capital requirement.

The Group confirms corporate counterparty exposure limits once a year and in this connection also checks the status of collateral applying to the limits for derivative transactions.

Credit risk arising from bank counterparties is reduced through collateral, which means the use of ISDA Credit Support Annex (CSA) contract associated with the ISDA general agreement. In the collateral system, the counterparty provides cash or securities in security for the receivable. Collateral matching between counterparties are performed on a daily basis. In respect of guarantees and collateral securities, the Group applies the same practice as in credit risks. The Group ensures sufficient collateral as part of its daily liquidity management through stress tests.

Capital adequacy requirement due to counterparty credit risk may arise from items related to banking book and the trading book. Capital adequacy requirement due to counterparty credit risk is calculated, for example, on OTC derivatives and sale and repurchase agreements.

	b	c	f	g
	Replacement cost/current market value	Potential future credit exposure	EAD post CRM	RWAs
<b>30 June 2018, EUR million</b>				
1 Mark to market	1 234	876	2 110	533

Counterparty credit risk exposures remained at the 2017-end level.

#### 3.2 CVA capital charge (EU CCR2)

	a	b
	Exposure value	RWAs
<b>30 June 2018, EUR million</b>		
4 All portfolios subject to the standardised method	486	197

The average maturity of derivatives decreased, which reduced exposure amounts and thereby risk-weighted assets.

#### 3.3 Standardised approach – CCR exposures by regulatory portfolio and risk (EU CCR3)

Exposure classes, EUR million	Risk Weight					Total	Of which unrated
	0 %	2 %	50 %	100 %	Others		
1 Central governments or central banks	303					303	
2 Regional government or local authorities	277					277	
4 Multilateral development banks	126					126	126
6 Institutions		300				300	
7 Corporates					1	1	1
8 Retail		0			0	0	0
8a Secured by mortgages on immovable property			29		2	31	31
<b>11 Total</b>	<b>707</b>	<b>300</b>	<b>29</b>		<b>3</b>	<b>1 039</b>	<b>158</b>

Exposures for central counterparty clearing are shown in column 2%. Exposure amounts were at the 2017-end level.

## 3.4 IRB approach – CCR exposures by portfolio and PD scale (EU CCR4)

	a	b	c	d	e	f	g
PD scale	EAD post CRM	Average PD	Number of obligors	Average LGD	Average maturity	RWAs	RWA density
<b>Corporates</b>							
0,00 - < 0,15	256	0,1 %	115	44,6 %	8,5	57	22,3 %
0,15 - < 0,25	101	0,2 %	39	45,0 %	13,2	44	43,3 %
0,25 - < 0,50	91	0,3 %	73	44,9 %	6,0	51	56,2 %
0,50 - < 0,75							
0,75 - < 2,50	62	1,5 %	120	45,0 %	7,1	61	99,4 %
2,50 - < 10,00	79	4,5 %	83	45,0 %	3,3	118	149,6 %
10,00 - < 100,00	2	12,6 %	4	40,5 %	6,1	4	171,9 %
100,00							
<b>Total</b>	<b>591</b>	<b>0,9 %</b>	<b>435</b>	<b>44,8 %</b>	<b>8,1</b>	<b>335</b>	<b>56,7 %</b>

	a	b	c	d	e	f	g
PD scale	EAD post CRM	Average PD	Number of obligors	Average LGD	Average maturity	RWAs	RWA density
<b>Institutions</b>							
0,00 - < 0,15	317	0,1 %	33	45,0 %	4,1	84	26,6 %
0,15 - < 0,25	79	0,2 %	16	45,0 %	8,6	33	42,2 %
0,25 - < 0,50	83	0,4 %	8	45,0 %	8,2	57	68,8 %
0,50 - < 0,75							
0,75 - < 2,50							
2,50 - < 10,00							
10,00 - < 100,00							
100,00							
<b>Total</b>	<b>479</b>	<b>0,1 %</b>	<b>57</b>	<b>45,0 %</b>	<b>5,6</b>	<b>175</b>	<b>36,5 %</b>

The average risk weights of corporate exposure rose. The average risk weights of credit institution exposures were at the 2017-end level. No information has been presented on retail exposures; the amount of counterparty risk exposures under retail exposures is not material.

## 3.5 Impact of netting and collateral held on exposure values (EU CCR5-A)

	a	b	c	d	e
30 June 2018, EUR million	Gross positive fair value	Netting benefits	Netted current credit exposure	Collateral held	Net credit exposure
1 Derivatives	6 980	4 223	2 757	647	2 110

The positive fair value of derivatives was at the 2017-end level. Benefits obtained from netting remained at the same level as at the 2017-end level. The amount of collateral increased. The amount of net exposures was at the 2017-end level.

## 3.6 Composition of collateral for exposures to CCR (EU CCR5-B)

	a	b	c	d
30 June 2018, EUR million	Collateral used in derivative transactions			
	Fair value of collateral received		Fair value of posted collateral	
	Segregated	Unsegregated	Segregated	Unsegregated
1 Cash			647	1
2 Sovereign debt				173
				555
				156

Collateral given to the central counterparty is segregated. Collateral with other counterparties are unsegregated. The majority of the collateral is cash.

## 3.7 Credit derivatives exposures (EU CCR6)

	a	b	c
30 June 2018, EUR million	Credit derivative hedges		
	Protection bought	Protection sold	Other credit derivatives
<b>Notionals</b>			
Index credit default swaps			123
Other credit derivatives			84
<b>Total notionals</b>			<b>207</b>
<b>Fair values</b>			<b>0</b>
Positive fair value (asset)			5
Negative fair value (liability)			-5

The amount of credit derivatives was at the 2017-end level.

### 3.8 Exposures to CCPs (EU CCR8)

30 June 2018, EUR million	a		b	
	EAD post CRM	RWAs		
1 Exposures to QCCPs (total)	300	6		
2 Exposures for trades at QCCPs (excluding initial margin and default fund contributions); of which	300	6		
3 (i) OTC derivatives	300	6		
7 Segregated initial margin	174			

The amount of exposures related to the central counterparty rose slightly in the first half. The initial margin depends on the risk level of the position; the margin amount increased during the first half.

### 3.9 Market risk under the standardised approach (EU MR1)

30 June 2018, EUR million	a		b	
	RWAs	Capital requirements		
<b>Outright products</b>				
1 Interest rate risk (general and specific)	988	79		
2 Equity risk (general and specific)	0	0		
4 Commodity risk	2	0		
<b>Options</b>				
6 Delta-plus method	308	25		
<b>9 Total</b>	<b>1 298</b>	<b>104</b>		

The general risk increased slightly during the first half. The specific risk increased slightly due to the position increase and the deterioration of the average credit rating level. The risk-weighted assets based on the Delta-plus method increased slightly.

## 4 Leverage and Liquidity Coverage Ratio (LCR)

### 4.1 Leverage

Leverage ratio, EUR million	30 June 2018	31 Dec. 2017
Tier 1 capital (T1)	10 190	9 973
Total exposure	132 538	127 027
Leverage ratio, %	7,7	7,9

The leverage ratio that describes a company's minimum leverage ratio is presented in accordance with Commission Delegated Regulation. According to these rules, the minimum ratio is three per cent. The minimum leverage ratio is based on end of quarter figures.

### 4.2 LCR disclosure template (EU LIQ1)

Scope of consolidation

**Consolidated**

EUR million	Total weighted value (average)			
	30 June 2018	31 March 2018	31 Dec 2017	30 Sept 2017
Quarter ending on (30, June 2018)				
Number of data points used in the calculation of averages: 12				
	TOTAL ADJUSTED VALUE			
21 LIQUIDITY BUFFER	19 066	18 339	17 871	17 900
22 TOTAL NET CASH OUTFLOWS	13 241	13 183	13 247	13 295
23 LIQUIDITY COVERAGE RATIO (%)	144 %	139 %	135 %	135 %

## 5 Requirements

### 5.1 Compliance with disclosure requirements

CRR Article	Reference
<b>431 Scope of disclosure requirements</b>	
1	This report, OP Financial Group's financial statements 2017 and information disclosed at <a href="http://www.op.fi">www.op.fi</a>
2	Note 2. to the 2017 financial statements OP Financial Group's risk and capital adequacy management principles, section 9 and the introduction and point 1.3 of this report
3	Disclosure principles of capital adequacy information approved by OP Financial Group's management
4	To be delivered on request
<b>432 Non-material, proprietary or confidential information</b>	
1-4	Point 5.2
	Information is disclosed on the date of publication of the financial statements. Information disclosed quarterly and half-yearly is presented in connection with interim reports. The frequency of disclosure will be assessed according to the disclosure principles of capital adequacy information.
<b>433 Frequency of disclosure</b>	
<b>434 Means of disclosures</b>	<b><a href="http://www.op.fi">www.op.fi</a></b>
<b>435 Risk management objectives and policies</b>	
1 a)	Note 2. to the 2017 financial statements OP Financial Group's risk and capital adequacy management principles (EU OVA, EU CRA, EU CCRA, EU MRA, LIQA)
1 b)	Note 2. to the 2017 financial statements OP Financial Group's risk and capital adequacy management principles, point 3. (EU OVA, EU CRA, EU CCRA, EU MRA, LIQA)
1 c)	Note 2. to the 2017 financial statements OP Financial Group's risk and capital adequacy management principles, point 2.6 (EU OVA, EU CRA, EU CCRA, EU MRA, LIQA) and <a href="http://www.op.fi">www.op.fi</a> > OP Financial Group > To the media > Reports > OP's reports > Year 2017 > Corporate Governance Statement, point 8.
1 d)	Note 2. to the 2017 financial statements OP Financial Group's risk and capital adequacy management principles (EU OVA, EU CRA, EU CCRA, EU MRA, LIQA), and points 2.8. (EU CR3) of this report.
1 e)	Note 2. to the 2017 financial statements OP Financial Group's risk and capital adequacy management principles, point 14. (EU OVA, EU CRA, EU CCRA, EU MRA, LIQA)
1 f)	Note 53. to the 2017 financial statements Risk tolerances
The EBA's guidelines on LCR disclosure to complement the disclosure of liquidity risk management under Article 435 (EBA/GL/2017/1)	Point 4.2. (LIQ1) and Note 2. to the 2017 financial statements. OP Financial Group's risk and capital adequacy management principles, especially point 10. (LIQA) <a href="http://www.op.fi">www.op.fi</a> : OP Financial Group > About us > Corporate governance and <a href="http://www.op.fi">www.op.fi</a> > OP Financial Group > To the media > Reports > OP's reports > Year 2017 > Corporate Governance Statement
2 a)-e)	
<b>436 Scope of application</b>	
a)	Introduction
b)	Introduction and points 5.1 (EU LI1), 5.2 (EU LI2) and 5.3 (EU LI3)
c)	Not applicable.
d)	Not applicable.
e)	Not applicable.
<b>437 Own funds</b>	
1a)	Point 1.1
1b)	Not presented half-yearly
1c)	The terms and conditions of instruments can be found on the websites of issuers. The terms and conditions of CET1 instruments can be found in the bylaws of each Group member cooperative bank on their websites: <a href="http://op.fi">op.fi</a> > OP Financial Group > About us > Group member cooperative banks
1d)	The terms and conditions of AT1 and T2 capital instruments can be found on OP Corporate Bank's website: <a href="http://op.fi">op.fi</a> > OP Financial Group > Debt Investors, and on the Helsinki Area Cooperative Bank's website: <a href="http://op.fi">op.fi</a> > OP Financial Group > About us > Group member cooperative banks > OP Helsinki
1e)	Point 1.1
1f)	Not applicable.
2) Commission Implementing Regulation (EU) No 1423/2013 laying down implementing technical standards with regard to disclosure of own funds requirements for institutions according to Regulation (EU) No 575/2013 of the European Parliament and of the Council	Not presented half-yearly
<b>438 Capital requirements</b>	
a)	Note 2. to the 2017 financial statements OP Financial Group's risk and capital adequacy management principles, points 2.2 and 2.4
b)	Point 1.4.
c)	Points 1.2 (EU OV1) and 1.3
c) i)	Points 1.2 (EU OV1) and 1.3
c) ii)	Points 1.2 (EU OV1) and 1.3
c) iii)	Points 1.2 (EU OV1) and 1.3
c) iv)	Not applicable.
e)	Not applicable.
f)	Points 1.2 (EU OV1), 1.3 and 3.9 (MR1)
Exposures related to financing for special objects and equity exposures, basic method – risk weights	Points 1.2 (EU OV1) and 1.3 Point 2.12 (EU CR10)
<b>439 Exposure to counterparty credit risk</b>	
a)	Point 3.1 (EU CCR1), (EU CCRA) and Note 2. to the 2017 financial statements OP Financial Group's risk and capital adequacy management principles (EU CCRA), section 11.4.
b)	Point 3.1 (EU CCR1), (EU CCRA) and Note 2. to the 2017 financial statements OP Financial Group's risk and capital adequacy management principles (EU CCRA), section 11.4.
c)	Note 2. to the 2017 financial statements OP Financial Group's risk and capital adequacy management principles (EU CCRA), point 11.4
d)	Not presented half-yearly
e)	Point 3.5 (EU CCR5-A)
f)	Point 3.4 (EU CCR4)
g)	Point 3.7. (EU CCR6)
h)	Point 3.7. (EU CCR6)



i)	Not applicable.
<b>440 Capital buffers</b>	
1a)	Not presented half-yearly
1b)	Not presented half-yearly
<b>441 Indicators of global systemic importance</b>	Not applicable
<b>442 Credit risk adjustments</b>	
a)	Note 1. to the 2017 financial statements Accounting policies and Note 56. Receivables from credit institutions and customers, and doubtful receivables
b)	Note 1. to the 2017 financial statements Accounting policies
c)	Not presented half-yearly
d)	Point 2.3 (EU CR1-C)
e)	Points 2.3 (EU CRB-D) and 2.6 (EU CR1-B)
f)	Specified material exposure classes.
g)	Not presented half-yearly
a.	Points 2.1 (EU CR1-A) and 2.2 (EU CR1-B)
b.	Points 2.1 (EU CR1-A) and 2.2 (EU CR1-B)
c.	Points 2.1 (EU CR1-A) and 2.2 (EU CR1-B)
h)	Point 2.3 (EU CR1-C)
i)	Point 2.3 (EU CR1-C)
i.	Point 2.3 (EU CR1-C)
ii.	Point 2.3 (EU CR1-C)
iii.	Point 2.3 (EU CR1-C)
iv.	Point 2.3 (EU CR1-C)
v.	Point 2.3 (EU CR1-C)
Specific credit risk adjustments and recoveries recorded directly to the income statement shall be disclosed separately.	Not applicable.
<b>443 Unencumbered assets</b>	
EBA/GL/2014/03 Guidelines on disclosure of encumbered and unencumbered assets	Not presented half-yearly
<b>444 Use of ECAIs</b>	
a)	Point 2.10 (EU CRD)
b)	Point 2.10 (EU CRD)
c)	Point 2.10 (EU CRD)
d)	Not applicable.
e)	Points 2.9 (EU CR4) and 2.10 (EU CR5)
<b>445 Exposure to market risk</b>	<b>Points 1.3 and 3.9 (EU MR1)</b>
<b>446 Operational risk</b>	<b>Note 2. to the 2017 financial statements OP Financial Group's risk and capital adequacy management principles, section 6 and point 1.3 of this report</b>
<b>447 Exposures in equities not included in the trading book</b>	
a)	Note 1. to the 2017 financial statements Accounting policies
b)	Point 2.12 (EU CR10)
c)	Point 2.12 (EU CR10)
d)	Note 7. to the 2017 financial statements Net investment income
e)	Note 36. to the 2017 financial statements Equity and Note 20. Investment assets
<b>448 Exposures in equities not included in the trading book</b>	
a)	Note 2. to the 2017 financial statements OP Financial Group's risk and capital adequacy management principles, section 11.1 and Note 61. Sensitivity analysis of interest rate and market risk
b)	Note 61. to the 2017 financial statements Sensitivity analysis of interest rate and market risk
<b>449 Exposure to securitisation positions</b>	
a)	Not presented half-yearly
b)	Not presented half-yearly
c)	Not presented half-yearly
d)	Not presented half-yearly
e)	Not presented half-yearly
f)	Not presented half-yearly
g)	Not applicable.
h)	Not presented half-yearly
i)	OP Financial Group does not act as an arranger
j)	OP Financial Group does not act as an arranger
i)	OP Financial Group does not act as an arranger
ii)	OP Financial Group does not act as an arranger
iii)	OP Financial Group does not act as an arranger
iv)	OP Financial Group does not act as an arranger
v)	OP Financial Group does not act as an arranger
vi)	OP Financial Group does not act as an arranger
k)	OP Financial Group does not act as a securitiser
l)	Not applicable.
m)	OP Financial Group does not act as a securitiser
n)	OP Financial Group does not act as a securitiser
i)	OP Financial Group does not act as a securitiser
ii)	OP Financial Group does not act as a securitiser
iii)	OP Financial Group does not act as a securitiser
iv)	OP Financial Group does not act as a securitiser
v)	OP Financial Group does not act as a securitiser
vi)	OP Financial Group does not act as a securitiser
o)	Not presented half-yearly
i)	Not presented half-yearly
ii)	Not presented half-yearly
p)	Not presented half-yearly
q)	Not applicable.
r)	Not applicable.
<b>450 Remuneration policy</b>	
1a)	Not presented half-yearly
1b)	Not presented half-yearly
1c)	Not presented half-yearly
1d)	Not presented half-yearly
1e)	Not presented half-yearly
1f)	Not presented half-yearly
1g)	Not presented half-yearly
1h)	Not presented half-yearly

1i)	Not presented half-yearly
1j)	Not presented half-yearly
2)	Not presented half-yearly
<b>451 Leverage</b>	
a)	Point 4.1
b)	Not presented half-yearly
c)	Not presented half-yearly
d)	Not presented half-yearly
e)	Not presented half-yearly
<b>452 Use of the IRB Approach to credit risk</b>	
a)	Note 2. to the 2017 financial statements OP Financial Group's risk and capital adequacy management principles, section 9 and the introduction of this report (EU CRE)
b)	Note 2. to the 2017 financial statements OP Financial Group's risk and capital adequacy management principles, section 9 and the introduction of this report (EU CRE)
i)	Note 2. to the 2017 financial statements OP Financial Group's risk and capital adequacy management principles, section 9 and the introduction of this report (EU CRE)
ii)	Note 2. to the 2017 financial statements OP Financial Group's risk and capital adequacy management principles, section 9. (EU CRE)
iii)	Note 2. to the 2017 financial statements OP Financial Group's risk and capital adequacy management principles, section 9. (EU CRE)
iv)	Note 2. to the 2017 financial statements OP Financial Group's risk and capital adequacy management principles, section 9. (EU CRE)
c)	Note 2. to the 2017 financial statements OP Financial Group's risk and capital adequacy management principles, section 9.
i)	Note 2. to the 2017 financial statements OP Financial Group's risk and capital adequacy management principles, section 9.
ii)	Note 2. to the 2017 financial statements OP Financial Group's risk and capital adequacy management principles, section 9.
iii)	Note 2. to the 2017 financial statements OP Financial Group's risk and capital adequacy management principles, section 9.
iv)	Note 2. to the 2017 financial statements OP Financial Group's risk and capital adequacy management principles, section 9.
v)	Note 2. to the 2017 financial statements OP Financial Group's risk and capital adequacy management principles, section 9.
d)	Points 2.11 and 2.12 (EU CR6), (EU CR10)
i)	Points 2.11 and 2.12 (EU CR6), (EU CR10)
ii)	Points 2.11 and 2.12 (EU CR6), (EU CR10)
iii)	Points 2.11 and 2.12 (EU CR6), (EU CR10)
f)	Points 2.11 and 2.12 (EU CR6), (EU CR10)
g)	Point 2.1 (EU CR1-A)
h)	Point 2.11 (EU CR6)
i)	Not presented half-yearly
j)	
i)	Point 5.2
ii)	Point 5.2

When applying the c) above, the description must incorporate the types of exposure included in the exposure class; definitions, techniques and information used in the estimation and validation of PD figures (and, if need be, LGD figures and credit conversion factors) including the assumptions used in the calculation of the variables concerned; description of material deviations from the definition of default under Article 178, including general segments which the deviations concerned affect.

Note 2. to the 2017 financial statements OP Financial Group's risk and capital adequacy management principles, section 9 and point 2.11 of this report (EU CR6)

**453 Use of credit risk mitigation techniques**

a)	Point 2.8 (EU CRC)
b)	Point 2.8 (EU CRC)
c)	Point 2.8 (EU CRC)
d)	Point 2.8 (EU CRC)
e)	Point 2.8 (EU CRC)
f)	Point 2.8 (EU CR3)
g)	Point 2.8 (EU CR3)

**454 Use of the Advanced Measurement Approaches to operational risk**

Not applicable.

**455 Use of Internal Market Risk Models**

Not applicable.

**5.2 Immaterial items not disclosed**

<b>Disclosure requirement</b>	
CRR Article 452 j)	A total of over 88% of OP Financial Group's exposures are in Finland. The average PD and LGD is not presented according to the split by geographic region.
Template EU CR6 based on the EBA's guidelines (EBA/GL/2016/11)	The exposure class Retail exposures - Mortgage-backed exposures is not presented with division SMEs / non-SMEs because the EAD share of exposures of SMEs with mortgage-backed exposures account for 2% of the mortgage-backed retail exposures.
Template EU CCR4 based on the EBA's guidelines (EBA/GL/2016/11)	Retail exposures are not presented in the table concerned because they amount to less than EUR 500,000.
Information required on a half-yearly basis by Commission Implementing Regulation (EU) No 1423/2013	No material change from 2017-end
Blank templates and zero lines based on the EBA's guidelines (EBA/GL/2016/11) are not presented.	