OP Amalgamation Capital Adequacy Report
30 June 2020

OP

Table of Contents

Introduction

This report discloses a summary of 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 other 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 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 notes 22 and 45 to the financial statements of 2019. Changes in Group structure are presented in OP Financial Group's Half-year Financial Report for 1 January–30 June 2020.

OP Financial Group's risk management practices and goals can be found in the 2019 Financial Statements Notes 2 and 51. 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 Notes 47 and 48 in the financial statements 2019, OP Financial Group's website dealing with remuneration (op.fi > OP Financial Group > About us > Corporate governance > Remuneration) as well as in OP Financial Group's Remuneration Statement and 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 exposures. OP Card Company aims to adopt IRBA for its exposures. OP Financial Group has begun discussions with the ECB on reassessing the extent of the IRBA application. In the calculation of capital adequacy and the leverage ratio, the Group has not applied the IFRS 9 transitional provision.

1 Capital base and capital adequacy

1.1 Capital base

EUR million	30 June 2020	31 Dec. 2019
OP Financial Group's equity capital	12,515	12,570
The effect of insurance companies on the Group's shareholders' equity is excluded	-224	-237
Fair value reserve, cash flow hedge	-199	-141
Common Equity Tier 1 (CET1) before deductions	**12,092**	**12,192**
Intangible assets	-590	-630
Excess funding of pension liability and valuation adjustments	-105	-76
Items deducted from cooperative capital	-2	-142
Expected profit distribution	-69	-97
Shortfall of ECL minus expected losses	-481	-428
Common Equity Tier 1 (CET1)	**10,845**	**10,819**
Hybrid capital to which transitional provision is applied	40	60
Additional Tier 1 capital (AT1)	**40**	**60**
Tier 1 capital (T1)	**10,885**	**10,879**
Debenture loans	2,049	806
Tier 2 capital (T2)	**2,049**	**806**
Total capital base	**12,934**	**11,685**

The table presents how OP Amalgamation's CET1 capital derives from OP Financial Group's equity capital. The CET1 capital was increased by banking earnings and decreased by an increase in the expected loss (EL) caused by growth in risk parameters. The amount of Profit Shares in CET1 capital was EUR 2.9 billion (2.9). The amount of Tier 2 (T2) loans issued during the second quarter totalled EUR 1.3 billion.

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 2020	31 March 2020	30 June 2020
1 Credit risk (excluding CCR)	**53,288**	**52,802**	**4,263**
2 Of which the standardised approach	5,048	4,860	404
3 Of which the foundation IRB (FIRB) approach	27,538	27,684	2,203
4 Of which the advanced IRB (AIRB) approach	13,607	13,049	1,089
5 Of which equity IRB under the simple risk-weighted approach	326	442	26
5a Of which equity investments under PD/LGD method	6,769	6,768	542
6 CCR	**907**	**917**	**73**
7 Of which mark to market	665	661	53
12 Of which CVA	**242**	**255**	**19**
13 Settlement risk	**0**	**0**	**0**
14 Securitisation exposures in the banking book (after the cap)	**112**	**120**	**9**
15 Of which IRB approach	112	120	9
19 Market risk	**2,016**	**2,012**	**161**
20 Of which the standardised approach	2,016	2,012	161
23 Operational risk	**3,964**	**3,964**	**317**
25 Of which standardised approach	3,964	3,964	317
27 Amounts below the thresholds for deduction (subject to 250% risk weight)	**359**	**378**	**29**
27a Other risks	**611**		**49**
29 Total	**61,256**	**60,192**	**4,900**
30 Risk weight floors based on ECB's decision	**179**	**518**	**14**
31 Total risk exposure amount including risk weight floors	**61,435**	**60,710**	**4,915**

The risk exposure amount (REA) totalled EUR 61.4 billion (55.5), or 11% higher than on 31 December 2019. The risk weight floor for retail exposures set by the ECB decreased to EUR 0.2 billion. Because of the adoption of the new definition of default, the average retail and corporate exposure risk weights rose from the 2019-end level as result of the risk weighting factors set by the ECB in March 2020. The loan portfolio grew especially in corporate exposures. To prepare for the effects of the COVID-19 pandemic, OP Financial Group made an extra addition of EUR 0.6 billion to risk-weighted assets in the second quarter. This is shown in line Other risks.

On 25 April 2019, OP Financial Group received the ECB's decision on increases in the risk weights of retail exposures secured by real estate as part of the targeted review of internal models (TRIM). These risk weight increases will be valid until further notice, until the qualitative requirements set out in the decision have been met. The relevant risk weight floor for exposures other than mortgage-backed ones, based on the ECB's decision in 2017, is 32.7%.

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 CCF 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.

	30 June 2020		31 Dec. 2019	
EUR million	Capital requirement*	Risk weighted assets	Capital requirement*	Risk weighted assets
Credit and counterparty credit risk	**4,354**	**54,424**	**3,937**	**49,216**
Standardised Approach	**357**	**4,462**	**328**	**4,101**
Exposures to central government and central banks	29	359	22	279
Exposures to public sector entities	3	32	2	25
Exposures to multilateral development banks	0	0		
Exposures to institutions	1	7	1	8
Exposures to corporates	235	2,937	212	2,645
Retail exposures	81	1,008	86	1,069
Exposures secured by mortgages on immovable property	2	21	0	1
Exposures in default	3	39	2	23
Exposures in the form of units or shares in collective investment undertakings (CIU)	0	0	0	0
Equity exposures	2	23	2	22
Other items	3	36	2	30
Internal Ratings-based Approach (IRB)	**3,997**	**49,962**	**3,609**	**45,115**
Exposures to institutions	85	1,056	82	1,023
Exposures to corporates	2,171	27,137	2,046	25,580
Retail exposures	1,089	13,607	826	10,320
Exposures secured by mortgages on immovable property	870	10,869	636	7,946
Other retail exposures	219	2,738	190	2,374
Equity investments	568	7,095	552	6,898
PD/LGD method	542	6,769	516	6,447
Simple Risk Weight Approach	26	326	36	451
Private equity investments	3	38	3	39
Other	23	288	33	412
Securitisation exposures	9	112	4	46
Other non-credit obligations	76	953	100	1,247
Clearing/settlement risk	**0**	**0**	**0**	**0**
Market risk (Standardised Approach)	**161**	**2,016**	**105**	**1,309**
Position risk	160	2,005	105	1,308
Commodity risk	1	12	0	1
Operational risk	**317**	**3,964**	**339**	**4,232**
Risk associated with exposure value adjustment	**19**	**242**	**15**	**191**
Other risks	**49**	**611**	**1**	**11**
Risk exposure amount	**4,900**	**61,256**	**4,397**	**54,959**
Risk weight floors based on ECB's decision	**14**	**179**	**40**	**505**
Total risk exposure amount including risk weight floors	**4,915**	**61,435**	**4,437**	**55,464**

* Capital requirement = Risk-weighted assets x 0.08

1.4 Capital Ratios

Ratios, %	30 June 2020	31 Dec. 2019
CET1 capital ratio	17.7	19.5
Tier 1 ratio	17.7	19.6
Capital adequacy ratio	21.1	21.1

Ratios, fully loaded, %	30 June 2020	31 Dec. 2019
CET1 capital ratio	17.7	19.5
Tier 1 ratio	17.7	19.5
Capital adequacy ratio	21.0	21.0

The lower ratio was affected by the increase in the loan portfolio and the rise in risk weights caused by the new definition of default.

Capital requirement, EUR million	30 June 2020	31 Dec. 2019
Capital base	12,934	11,685
Capital requirement	8,449	8,068
Buffer for capital requirements	4,484	3,617

As a credit institution, 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 13.8% comprises the minimum requirement of 8%, the capital conservation buffer of 2.5%, the O-SII buffer requirement of 1.0% (previously 2.0%), the minimum requirement (P2R) of 2.25% (2.0% a year ago) set by the ECB and the changing capital conservation buffers by country for foreign exposures.

In the first quarter, OP Financial Group adopted the European Banking Authority's (EBA) Guidelines on the application of the definition of default under Article 178 of Regulation (EU) No 575/2013. The Guidelines harmonise the definition of default applied by European banks on their customers. The new process in accordance with the Guidelines recognises defaulted customers earlier, for example, based on information in external credit registers. As regards retail customers, the new process extends the default to cover all exposures of an individual obligor. This change increased the number of observations of default and weakened the parameters of credit risk.

OP Financial Group will apply a so-called two-step approach. The first step involved the change of the definition of default during the first quarter of 2020. The second step to be taken later involves the calibration of credit risk parameters. The supervisory obligation related to the adoption of the new definition of default increased the average risk weights of OP Financial Group's loan portfolio at the first step.

In OP Financial Group's view, the most significant open changes in the regulatory and supervisory environment affecting capital adequacy for credit institutions include obligations, if any, imposed by the supervisor due to the ECB's targeted review of internal (IRBA) models (TRIM), and changes resulting from the update of the EU capital requirements regulation (CRR2). The ECB review of the internal models for corporate exposures is expected to reduce OP Financial Group's CET1 ratio by around 0.6 percentage points. More detailed information on the effects is expected in the second half of 2020. The CRR2 changes are expected to reduce OP Financial Group's CET1 ratio by around 0.5 percentage points during 2021.

OP Financial Group has begun to discuss with the ECB on reassessing the scope of the IRBA application. Based on the current estimate, the change in the scope of IRBA would decrease OP Financial Group's CET1 ratio by around 1.1 percentage points during 2020. The final effect and its schedule will be specified after discussions with the supervisor and the approval process related to the scope of IRBA.

2 Credit Risk

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

2.1 Concentration of exposures by industry or counterparty types (EU CRB-D)

	Net value, 30 June 2020, EUR million	IRB Corporates	Of which SME exposures	IRB Retail	Of which SME exposures	IRB Institutions	SA Central government and central banks	Other	Total
a	Renting and operation of residential real estate	9,226	7,520	448	434			3	9,676
b	Operating of other real estate	4,913	2,455	90	73		69	673	5,744
c	Trade	5,251	1,164	456	247			489	6,196
d	Energy	4,382	734	4	2			334	4,720
e	Services	5,047	1,296	1,072	341	0	575	266	6,961
f	Construction	4,333	1,831	672	293		1	113	5,119
g	Other manufacturing	1,909	269	61	30			79	2,049
h	Manufacture of machinery and equipment (incl. maintenance)	2,525	156	61	23			17	2,603
i	Transportation and storage	1,390	401	425	253			300	2,116
j	Financial and insurance activities	3,504	1,141	32	15	1,464	3,712	3,227	11,939
k	Central bank deposits						21,883		21,883
l	Covered bonds					6,641			6,641
m	Agriculture, forestry and fishing	1,938	1,284	3,161	147		5	109	5,212
n	Forest industry	1,552	75	24	11			45	1,620
o	Metal industry	1,223	313	57	30			10	1,290
p	Food industry	762	80	20	12			60	843
q	Buying and selling of own real estate	656	67	21	3			24	701
r	Information and communication	1,311	337	68	24			44	1,423
s	Other sectors	378	233	24	20	0		967	1,369
t	Water supply and waste management	311	104	19	14		22	63	414
u	Mining and quarrying	212	41	25	16			5	242
v	Manufacture of chemicals and chemical products	297	26	2	1			2	300
x	Activities of households as employers; undifferentiated goods and services producing activities of households for own use	0	0	356	0			145	501
y	Public administration and defence (incl. compulsory social security)	254	93	1	1		4,777	87	5,119
z	Activities of extraterritorial organisations and bodies	0	0	0	0				0
å	Households			49,647				3,782	53,429
ä	**Total**	**51,373**	**19,618**	**56,744**	**1,993**	**8,105**	**31,043**	**10,845**	**158,110**

The table presents the breakdown by industry concerning material exposure classes while immaterial exposure classes are presented under other sectors. Central government exposures include exposures from central banks, local governments, public-sector entities, international development banks and international organisations.

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

	a	b	c	e	f	g
	Gross carrying values of		Specific credit risk adjustments	Accumulated write-offs	Credit risk adjustment charges of the period	Net values (a+b-c)
Net value, 30 June 2020, EUR million	Defaulted exposures	Non-defaulted exposures				
IRB approach						
2 Institutions		8,105	1		0	8,105
3 Corporates	1,263	50,605	495	8	67	51,373
5 Of which: SMEs	337	19,413	132	6	12	19,618
6 Retail	1,087	55,815	158	8	44	56,744
7 Secured by real estate property	830	47,023	76	1	23	47,778
8 SMEs	30	1,044	3	0	0	1,071
9 Non-SMES	800	45,979	73	1	23	46,707
11 Other retail	257	8,792	83	7	21	8,966
12 SMEs	40	895	13	1	3	922
13 Non-SMEs	216	7,897	69	6	18	8,044
14 Equity		2,408				2,408
14a Other non-credit obligations	3	950				953
15 **Total IRB approach**	**2,353**	**117,883**	**654**	**15**	**112**	**119,582**
Standardised approach						
16 Central government and central banks		24,843	0		0	24,843
17 Regional government or local authorities		4,428	1		0	4,427
18 Public sector entities		426	0		0	426
19 Multilateral development banks		720				720
20 International organisations		627				627
21 Institutions		62	14		14	48
22 Corporates		3,294	9		1	3,285
23 Of which: SMEs		2,200	9		5	2,192
24 Retail		4,006	16	9	1	3,990
25 Of which: SMEs		3	0		0	3
26 Secured by mortgages on immovable property		42	0		0	42
28 Exposures in default	79		21	6	12	57
32 Collective investments undertakings		0				0
33 Equity exposures		23				23
34 Other exposures		40				40
35 **Total standardised approach**	**79**	**38,511**	**62**	**15**	**27**	**38,528**
36 **Total**	**2,432**	**156,394**	**716**	**30**	**139**	**158,110**
37 Of which: Loans	2,087	96,336	631		98	97,792
38 Of which: Debt securities		12,991				12,991
39 Of which: Off-balance-sheet exposures	332	24,632			-2	24,964

The quality of the loan portfolio remained good. Defaulted exposures increased year on year. Impairment loss for the period is presented in net terms for the first year-half. Impairment loss refers to expected credit losses (ECL). Credit losses are presented in gross 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.

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

	a	b	c	e	f	g
	Gross carrying values of		Specific credit risk adjustments	Accumulated write-offs	Credit risk adjustment charges of the period	Net values (a+b-c)
Net value, 30 June 2020, EUR million	Defaulted exposures	Non-defaulted exposures				
1 Renting and operation of residential real estate	107	9,600	32		0	9,676
2 Operating of other real estate	70	5,699	25	0	7	5,744
3 Trade	145	6,089	38	1	19	6,196
4 Energy	55	4,702	37		1	4,720
5 Services	204	6,836	80	3	39	6,961
6 Construction	221	4,962	65	2	5	5,119
7 Other manufacturing	150	1,930	30	1	-6	2,049
8 Manufacture of machinery and equipment (incl. maintenance)	83	2,537	18	0	2	2,603
9 Transportation and storage	59	2,073	17	1	4	2,116
10 Financial and insurance activities	23	11,922	5	0	1	11,939
11 Central bank deposits		21,883				21,883
12 Covered bonds		6,641				6,641
13 Agriculture, forestry and fishing	264	5,000	52	1	18	5,212
14 Forest industry	140	1,580	100	0	3	1,620
15 Metal industry	40	1,266	17	0	2	1,290
16 Food industry	11	839	7	0	-5	843
17 Buying and selling of own real estate	5	699	2		0	701
18 Information and communication	29	1,406	11	0	1	1,423
19 Other sectors	5	1,384	20	0	7	1,369
20 Water supply and waste management	1	413	0	0	0	414
21 Mining and quarrying	29	235	22		0	242
22 Manufacture of chemicals and chemical products	1	300	1		0	300
23 Activities of households as employers; undifferentiated goods and services producing activities of households for own use	6	497	2	0	1	501
24 Public administration and defence (incl. compulsory social security)		5,120	1		0	5,119
25 Activities of extraterritorial organisations and bodies	0	0	0		0	0
26 Households	782	52,781	135	20	41	53,429
24 Total	**2,432**	**156,394**	**716**	**30**	**139**	**158,110**

In the second quarter, the most significant expected credit losses were recognised in corporate exposures related to services, agriculture, forestry, fishery and the trade sector.
Credit risk adjustments in the real estate sector are low due to extensive collateral securities. The defaulted exposure amount in the construction industry increased as the general industry outlook became weaker. The amount of defaulted exposures in Agriculture, forestry and fishing relative to credit risk adjustments is explained by technical defaults resulting from aid payment schedules. The high amount of defaulted exposures in Forest industry, Mining and quarrying relative to exposures is due to individual cases where the exposure amount is highlighted in comparison with the total exposure amount in the sector.

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

	a	b	c	e	f	g
	Gross carrying values of		Specific credit risk adjustments	Accumulated write-offs	Credit risk adjustment charges of the period	Net values (a+b-c)
Net value, 30 June 2020, EUR million	Defaulted exposures	Non-defaulted exposures				
1 Finland	2,361	137,439	696	30	132	139,103
2 Other Nordic countries	7	3,506	2	0	0	3,512
3 Baltic States	20	3,835	14	0	6	3,841
4 Rest of EU	40	9,365	2	0	1	9,403
5 Rest of Europe	0	172	0		0	172
6 USA	1	301	0		0	301
7 Asia	0	395	0	0	0	395
8 Other	3	1,380	1		0	1,382
11 Total	**2,432**	**156,394**	**716**	**30**	**139**	**158,110**

A total of 88% of total exposures are in Finland and other distribution is presented applying the materiality principle. A total of 97% of defaulted exposures and 97% credit risk adjustments are in Finland.

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

	a
Net value, 30 June 2020, EUR million	Accumulated specific credit risk adjustment
1 Opening balance 31 Dec 2019	**577**
2 Increases due to amounts set aside for estimated loan losses during the period	194
3 Decreases due to amounts reversed for estimated loan losses during the period	-36
4 Decreases due to amounts taken against accumulated credit risk adjustments	-15
9 Closing balance 30 June 2020	**716**

Credit risk adjustments under IFRS 9 (ECL) are presented as specific credit risk adjustments. Impairment loss changes have been presented for the first half of the year.

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

Net value, 30 June 2020, EUR million	a Gross carrying value defaulted exposures
1 Opening balance 31 Dec 2019	**1,407**
2 Loans and debt securities that have defaulted or impaired since the last reporting period	1,078
3 Returned to non-defaulted status	-45
4 Amounts written off	-30
5 Other changes	22
6 Closing balance 30 June 2020	**2,432**

In March 2020, OP Financial Group adopted the new definition of default, which increased the number of defaulted contracts. As a result of the COVID-19 crisis, customers have actively applied for loan repayment holidays and changes to loan repayment schedules, and the amount of forborne exposures grew during the reporting period.

2.7 CRM techniques – Overview (EU CR3)

Net value, 30 June 2020, EUR million	a Exposures unsecured – Carrying amount	b Exposures secured – Carrying amount	c Exposures secured by collateral	d Exposures secured by financial guarantees	e Exposures secured by credit derivatives
1 Total loans	36,732	61,060	55,395	5,665	
2 Total debt securities	5,706	7,285	6,641	643	
3 Total exposures	**88,080**	**70,031**	**63,287**	**6,743**	
4 Of which defaulted	794	1,100	937	163	

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 have been given by a number of sources, the largest single one being the State of Finland.

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

	a	b	c	d	e	f
	Exposures before CCF and CRM		Exposures post CCF and CRM		RWAs and RWA density (%)	
Exposure classes, EUR million	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	24,457	387	26,529	131	359	1.3
2 Regional government or local authorities	3,359	1,068	4,223	290		
3 Public sector entities	269	157	75	75	30	20.2
4 Multilateral development banks	720	0	863	4	0	0.0
5 International organisations	627		627			
6 Institutions	48	0	90	9	0	0.1
7 Corporates	2,657	628	2,653	311	2,937	99.1
8 Retail	1,345	2,645	1,345	0	1,008	75.0
9 Secured by mortgages on immovable property	42		42		21	50.0
10 Exposures in default	34	23	34	0	39	114.1
14 Collective investment undertakings	0		0		0	100.0
15 Equity	23		23		23	100.0
16 Other items	40		40		36	91.5
17 Total	**33,619**	**4,909**	**36,543**	**822**	**4,453**	**11.9**

The exposure amount under the Standardised Approach increased during the first half. Central government exposures include deferred tax assets which have not been deducted from the Group's own assets; these are treated with a risk weight of 250%.

2.9 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	26,516							144		26,660	22,992
2 Regional government or local authorities	4,514									4,514	2,867
3 Public sector entities		150				0				151	0
4 Multilateral development banks	866	1								867	147
5 International organisations	627									627	
6 Institutions	99	1								99	99
7 Corporates						2,849			115	2,964	2,852
8 Retail					1,343				2	1,345	1,345
9 Secured by mortgages on immovable property				42						42	42
10 Exposures in default						24	10		0	34	34
14 Collective investment undertakings						0				0	0
15 Equity						23				23	23
16 Other items	3					36				40	40
17 Total	**32,625**	**152**		**42**	**1,343**	**2,933**	**10**	**144**	**118**	**37,364**	**30,441**

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.

2.10 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
Retail												
0,00 - < 0,15	35,349	2,931	52.8 %	36,868	0.1 %	554,638	26.1 %	15	2,255	6.1 %	5	
0,15 - < 0,25	5,090	110	54.2 %	5,145	0.2 %	98,369	26.8 %	15	965	18.7 %	3	
0,25 - < 0,50	2,666	147	59.4 %	2,746	0.4 %	119,835	29.2 %	10	704	25.6 %	3	
0,50 - < 0,75	1,667	56	52.6 %	1,694	0.6 %	69,313	32.6 %	12	697	41.1 %	3	
0,75 - < 2,50	4,131	179	61.4 %	4,232	1.3 %	114,335	32.5 %	12	2,580	61.0 %	18	
2,50 - < 10,00	2,238	80	64.2 %	2,281	5.0 %	81,055	36.1 %	10	2,692	118.0 %	42	
10,00 - < 100,00	1,155	18	73.6 %	1,168	29.3 %	34,741	33.2 %	11	2,426	207.7 %	110	
100.00	1,073	14	0.0 %	1,073	100.0 %	28,323	32.4 %	13	1,290	120.2 %	246	
Total	**53,368**	**3,534**	**53.6 %**	**55,208**	**1.0 %**	**1,100,609**	**27.7 %**	**14**	**13,607**	**22.8 %**	**430**	**158**

The average risk weights of private customer exposures increased from the 2019-end level, in particular as a result of the risk weighting factors set by the ECB in March. In the second quarter, the distribution of PD showed a transition from the best borrower grades to weaker ones. This resulted both from the new definition of default and the effects of the COVID-19 crisis. Defaulted exposures increased, too. The most significant effect of the COVID-19 crisis arises from repayment holidays granted on loans.

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. The Group has taken account of uncertainty associated with the data using a margin of conservatism.

In the risk weight calculation, the Group applies the regulatory 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
Retail - Secured by real estate property												
0,00 - < 0,15	33,140	710	54.8 %	33,529	0.1 %	404,162	25.0 %	15.2	1,976	5.9 %	5	
0,15 - < 0,25	4,554	53	52.1 %	4,581	0.2 %	50,021	27.8 %	15.6	901	19.7 %	3	
0,25 - < 0,50	1,640	60	61.7 %	1,677	0.4 %	29,626	24.3 %	12.6	386	23.0 %	1	
0,50 - < 0,75	1,117	17	53.0 %	1,125	0.5 %	15,257	28.4 %	14.8	411	36.5 %	2	
0,75 - < 2,50	3,218	89	62.7 %	3,274	1.2 %	43,317	27.7 %	13.9	1,990	60.8 %	11	
2,50 - < 10,00	1,496	30	66.5 %	1,517	4.6 %	20,624	28.1 %	13.1	1,991	131.3 %	20	
10,00 - < 100,00	889	10	72.6 %	897	31.3 %	11,357	28.0 %	12.7	2,063	230.1 %	80	
100.00	826	4	0.0 %	826	100.0 %	10,256	19.6 %	13.6	1,152	139.5 %	70	
subtotal	**46,880**	**973**	**56.1 %**	**47,426**	**0.9 %**	**584,620**	**25.6 %**	**14.9**	**10,869**	**20.9 %**	**191**	**76**
Retail - Other												
0,00 - < 0,15	2,208	2,221	1	3,339	0	204,570	0	11	278	0	1	
0,15 - < 0,25	536	57	1	564	0	50,742	0	13	64	0	0	
0,25 - < 0,50	1,026	87	1	1,069	0	92,233	0	7	317	0	2	
0,50 - < 0,75	550	40	1	568	0	54,806	0	6	286	1	2	
0,75 - < 2,50	913	89	1	957	0	76,156	0	5	591	1	6	
2,50 - < 10,00	741	49	1	765	0	63,745	1	5	701	1	22	
10,00 - < 100,00	266	8	1	271	0	24,985	1	5	363	1	31	
100.00	247	9		247	1	21,142	1	12	138	1	175	
subtotal	**6,488**	**2,561**	**52.7 %**	**7,781**	**1.7 %**	**588,379**	**40.8 %**	**8.9**	**2,738**	**34.5 %**	**239**	**83**
Total	**53,368**	**3,534**	**53.6 %**	**55,208**	**1.0 %**	**1,172,999**	**27.7 %**	**14.0**	**13,607**	**22.8 %**	**430**	**158**

The ECB's risk parameter and risk-weighting factors affect the average PD and LGD parameters and the average risk weights of mortgage-backed retail exposures. Considering that one and the same customer may be included in several sub-exposure classes, the sums of the number of obligors 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
Corporates												
0,00 - < 0,15	7,066	4,734	68.3 %	8,979	0.1 %	559	44.3 %	4.7	2,386	26.6 %	3	
0,15 - < 0,25	2,625	1,773	69.7 %	3,381	0.2 %	633	44.0 %	6.0	1,509	44.6 %	3	
0,25 - < 0,50	8,362	2,920	59.3 %	9,560	0.4 %	9,636	43.4 %	9.6	5,227	54.7 %	16	
0,50 - < 0,75												
0,75 - < 2,50	8,680	3,632	58.5 %	10,210	1.2 %	10,177	42.4 %	8.5	8,955	87.7 %	53	
2,50 - < 10,00	7,907	2,208	57.6 %	5,669	4.4 %	9,930	42.8 %	7.8	7,235	127.6 %	107	
10,00 - < 100,00	653	130	36.0 %	691	22.7 %	1,426	42.1 %	6.6	1,318	190.8 %	66	
100.00	885	293	58.9 %	965	100.0 %	1,022	43.5 %	13.2			419	
Total	**36,178**	**15,690**	**62.2 %**	**39,454**	**1.5 %**	**33,383**	**43.3 %**	**7.7**	**26,629**	**69.2 %**	**667**	**495**

The average risk weight of corporate exposures increased slightly from the 2019-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
Corporates - Other												
0,00 - < 0,15	5,899	3,883	68.9 %	7,563	0.1 %	342	44.3 %	4.3	2,049	27.1 %	3	
0,15 - < 0,25	2,033	1,528	70.4 %	2,632	0.2 %	160	44.4 %	4.3	1,212	46.1 %	2	
0,25 - < 0,50	3,561	2,347	68.9 %	4,591	0.4 %	1,342	43.9 %	4.7	2,918	63.6 %	7	
0,50 - < 0,75												
0,75 - < 2,50	4,068	2,367	58.7 %	5,022	1.2 %	1,746	42.4 %	5.7	5,080	101.2 %	26	
2,50 - < 10,00	3,771	1,419	57.8 %	2,653	4.3 %	1,768	43.1 %	7.7	4,004	150.9 %	49	
10,00 - < 100,00	279	87	30.2 %	295	21.8 %	202	41.7 %	4.6	682	231.0 %	27	
100.00	604	273	59.2 %	677	100.0 %	240	43.5 %	12.3			295	
subtotal	**20,214**	**11,904**	**65.1 %**	**23,433**	**1.2 %**	**5,800**	**43.7 %**	**5.3**	**15,945**	**70.1 %**	**407**	**363**
Corporates - SMEs												
0,00 - < 0,15	1,167	851	64.2 %	1,416	0.1 %	217	44.3 %	6.8	337	23.8 %	0	
0,15 - < 0,25	592	245	67.3 %	749	0.2 %	473	42.7 %	12.0	297	39.6 %	1	
0,25 - < 0,50	4,802	573	31.5 %	4,969	0.4 %	8,294	43.0 %	14.1	2,309	46.5 %	8	
0,50 - < 0,75												
0,75 - < 2,50	4,612	1,265	58.1 %	5,188	1.2 %	8,431	42.5 %	11.2	3,874	74.7 %	27	
2,50 - < 10,00	4,136	789	57.3 %	3,015	4.6 %	8,162	42.6 %	8.0	3,231	107.2 %	59	
10 - < 100	373	44	44.3 %	396	23.5 %	1,224	42.3 %	8.1	636	160.8 %	40	
100	281	19	56.0 %	287	100.0 %	782	43.4 %	15.3			125	
subtotal	**15,963**	**3,787**	**54.2 %**	**16,021**	**2.0 %**	**27,583**	**42.8 %**	**11.1**	**10,685**	**67.9 %**	**259**	**132**
Total	**36,178**	**15,690**	**62.2 %**	**39,454**	**1.5 %**	**33,383**	**43.3 %**	**7.7**	**26,629**	**69.2 %**	**667**	**495**

	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
Institutions												
0,00 - < 0,15	6,321	426	71.2 %	6,655	0.0 %	160	14.4 %	5.2	533	8.0 %	0	
0,15 - < 0,25	419	189	75.4 %	499	0.2 %	22	16.8 %	2.8	102	20.4 %	0	
0,25 - < 0,50	20	62	58.4 %	56	0.3 %	40	45.0 %	3.1	45	80.3 %	0	
0,50 - < 0,75	483	36	42.1 %	216	0.7 %	50	14.6 %	6.2	77	35.6 %	0	
0,75 - < 2,50	8	7	52.1 %	13	1.3 %	18	45.0 %	11.0	17	134.7 %	0	
2,50 - < 10,00	23	107	47.8 %	75	3.7 %	49	45.0 %	1.3	129	173.2 %	1	
10,00 - < 100,00	1	4	36.7 %	2	11.9 %	12	45.0 %	0.5	5	240.6 %	0	
Total	**7,274**	**831**	**66.2 %**	**7,516**	**0.1 %**	**351**	**15.2 %**	**5.0**	**908**	**12.1 %**	**2**	**1**

The average risk weights of credit institution exposures decreased slightly during the year. Some 88% 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.

2.11 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	20		190 %	20	38	3
Other equity exposures	78		370 %	78	288	23
Total	**98**			**98**	**326**	**26**

Equity investments decreased slightly during the year. 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	2,310			2,310	1.3	3	90.0	21.5	6,769	293.1	26	

The PD/LGD method for equity investments has been used to treat the consolidation 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. The average risk weight increased due to the ECB's risk weighting factors. Maturity has been presented for instruments with a maturity.

2.12 Non-deducted participations in insurance undertakings (EU INS1)

30 June 2020, 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	6,759

The consolidation group treats insurance holdings in equity investments based on the supervisor's permission. In October 2015, OP Financial Group received permission from the ECB to treat insurance holdings within the conglomerate as risk-weighted assets according to the previous practice. Because of the adoption of the new definition of default, the risk-weighted assets of insurance holdings rose as result of the risk weighting factors set by the ECB.

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

		a	b
EUR million		RWA amounts	Capital requirements
1	RWAs as at the end of the previous reporting period 31 March 2020	40,732	3,259
2	Asset size	-1	0
3	Asset quality	413	33
9	RWAs as at the end of the reporting period 30 June 2020	41,145	3,292

Changes occurred in retail exposures, corporate exposures and credit institution exposures during the last quarter are presented using the flow statements. In the Asset quality line, higher risk weights were explained by the transition of exposures to weaker borrower grades.

2.14 Credit quality of forborne exposures (Template 1, EU CQ1)

	a	b	c	d	e	f	g	h
	Gross carrying amount/nominal amount of exposures with forbearance measures				Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions		Collateral received and financial guarantees received on forborne exposures	
		Non-performing forborne			On performing forborne exposures	On non-performing forborne exposures		Of which collateral and financial guarantees received on non-performing exposures with forbearance measures
30 June 2020, EUR million	Performing forborne		Of which defaulted	Of which impaired				
1 Loans and advances	2,862	793	658	507	18	111	3,368	650
5 Other financial corporations	0				0		0	
6 Non-financial corporations	661	290	261	197	13	69	805	206
7 Households	2,201	503	398	311	5	42	2,562	444
8 Debt Securities								
9 Loan commitments given	4	15	15	15		2	2	0
10 Total	**2,866**	**809**	**673**	**523**	**18**	**113**	**3,369**	**651**

The amount of forbearance measures – in practice, the amount of repayment holidays – has increased as a result of the COVID-19 crisis.

2.15 Credit quality of performing and non-performing exposures by past due days (Template 3, EU CQ3)

	a	b	c
	Gross carrying amount/nominal amount		
	Performing exposures		
30 June 2020, EUR million		Not past due or past due ≤ 30 days	Past due > 30 days ≤ 90 days
1 Loans and advances	114,611	114,545	67
2 Central banks	22,240	22,240	
3 General governments	1,939	1,939	
4 Credit institutions	240	240	
5 Other financial corporations	1,038	1,038	
6 Non-financial corporations	36,018	36,007	11
7 Of which SMEs	17,051	17,042	9
8 Households	53,136	53,081	55
9 Debt securities	14,492	14,492	
11 General governments	4,602	4,602	
12 Credit institutions	7,906	7,906	
13 Other financial corporations	139	139	
14 Non-financial corporations	1,845	1,845	
15 Off-balance-sheet exposures	24,912		
17 General governments	1,818		
18 Credit institutions	845		
19 Other financial corporations	520		
20 Non-financial corporations	15,663		
21 Households	6,066		
22 Total	**154,015**	**129,037**	**67**

	d	e	f	g	h		j	k	l
	Gross carrying amount/nominal amount								
	Non-performing exposures								
30 June 2020, EUR million		Unlikely to pay that are not past due or are past due ≤ 90 days	Past due > 90 days ≤ 180 days	Past due > 180 days ≤ 1 year	Past due > 1 year ≤ 2 years	Past due > 2 years ≤ 5 year	Past due > 5 years ≤ 7 years	Past due > 7 years	Of which defaulted
1 Loans and advances	2,514	1,426	96	164	129	200	104	48	2,267
5 Other financial corporations	0	0			0				0
6 Non-financial corporations	1,379	679	22	69	41	102	86	34	1,281
7 Of which SMEs	624	389	21	20	40	92	55	7	554
8 Households	1,135	747	74	95	88	98	19	14	986
9 Debt securities	0	0							0
14 Non-financial corporations	0	0							0
15 Off-balance-sheet exposures	177								165
20 Non-financial corporations	163								154
21 Households	14								11
22 Total	**2,691**	**1,426**	**96**	**164**	**129**	**200**	**104**	**48**	**2,432**

2.16 Performing and non-performing exposures and related provisions (Template 4, EU CR1)

30 June 2020, EUR million	a	b	c	d	e	f
	Gross carrying amount/nominal amount					
	Performing exposures			Non-performing exposures		
		Of which stage 1	Of which stage 2		Of which stage 2	Of which stage 3
1 Loans and advances	114,611	105,599	9,012	2,514	145	1,982
2 Central banks	22,240	22,240				
3 General governments	1,939	1,927	12			
4 Credit institutions	240	240				
5 Other financial corporations	1,038	1,034	3	0		0
6 Non-financial corporations	36,018	32,652	3,366	1,379	40	966
7 Of which SMEs	17,051	14,846	2,202	624	34	575
8 Households	53,136	47,505	5,631	1,135	106	1,016
9 Debt securities	14,492	14,492		0		
11 General governments	4,602	4,602				
12 Credit institutions	7,906	7,906				
13 Other financial corporations	139	139				
14 Non-financial corporations	1,845	1,845		0		
15 Off-balance-sheet exposures	24,912	23,838	1,074	177	3	141
17 General governments	1,818	1,823	-5	0		
18 Credit institutions	845	845				
19 Other financial corporations	520	516	4			
20 Non-financial corporations	15,663	14,678	985	163	2	130
21 Households	6,066	5,975	91	14	1	11
22 Total	**154,015**	**143,929**	**10,087**	**2,691**	**148**	**2,123**

30 June 2020, EUR million	g	h	i	j	k	l	m	n	o
	Accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions						Accumulated partial write-off	Collateral and financial guarantees received	
	Performing exposures – accumulated impairment and provisions			Non-performing exposures – accumulated impairment, accumulated negative changes in fair value due to credit risk and provisions				On performing exposures	On non-performing exposures
		Of which stage 1	Of which stage 2		Of which stage 2	Of which stage 3			
1 Loans and advances	156	56	100	533	3	533		75,592	1,426
3 General governments	1	1	0	0				297	
4 Credit institutions	1	1						9	
5 Other financial corporations	1	1	0	0		0		597	0
6 Non-financial corporations	116	45	70	391	2	392		26,045	528
7 Of which SMEs	47	18	33	193	2	190		15,927	387
8 Households	38	9	30	142	1	141		48,644	897
9 Debt securities	2	2						3	
11 General governments	0	0						1	
12 Credit institutions	0	0						1	
13 Other financial corporations	1	0							
14 Non-financial corporations	1	1						1	
15 Off-balance-sheet exposures	16	4	3	9	0	18		5,085	5
17 General governments	0	0						399	
18 Credit institutions	0	0						11	
19 Other financial corporations	0	0	0					28	
20 Non-financial corporations	15	3	3	9	0	18		3,836	4
21 Households	0	0	0	0	0			813	1
22 Total	**174**	**61**	**102**	**541**	**3**	**551**		**80,680**	**1,431**

2.17 Collateral obtained by taking possession and execution processes (Template 9, EU CQ7)

30 June 2020, EUR million	a	b
	Collateral obtained by taking possession	
	Value at initial recognition	Accumulated negative changes
1 Property, plant and equipment (PP&E)		
2 Other than PP&E	5	-1
4 Commercial Immovable property	5	-1
8 Total	**5**	**-1**

2.18 Information on newly originated loans and advances provided under newly applicable public guarantee schemes introduced in response to COVID-19 crisis (template 3)

30 June 2020, EUR million		a	b	c	d
		Gross carrying amount		Maximum amount of the guarantee that can be considered	Gross carrying amount
			of which: forborne	Public guarantees received	Inflows to non-performing exposures
1	**Newly originated loans and advances subject to public guarantee schemes**	118	1	67	2
2	of which: Households	2			
3	of which: Collateralised by residential immovable property	1			
4	of which: Non-financial corporations	102	1	60	2
5	of which: Small and Medium-sized Enterprises	72			2
6	of which: Collateralised by commercial immovable property	9			1

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 risk using a fair value model, whereby the value of exposure comprises the contract market value and the expected potential future exposure. The exposure amount based on the fair value model is used in the calculation of regulatory capital requirement and of economic capital.

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.

Net value, 30 June 2020, EUR million	b	c	f	g
	Replacement cost/current market value	Potential future credit exposure	EAD post CRM	RWAs
1 Mark to market	2,156	1,316	3,472	665

Counterparty credit risk exposures increased from their level at the end of 2019.

3.2 CVA capital charge (EU CCR2)

Net value, 30 June 2020, EUR million	a	b
	Exposure value	RWAs
4 All portfolios subject to the standardised method	353	242
5 Total subject to the CVA capital charge	353	242

No major changes took place in the CVA capital requirement.

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

Exposure classes, EUR million	Risk Weight						Of which unrated
	0 %	2 %	50 %	100 %	Others	Total	
1 Central governments or central banks	373					373	
2 Regional government or local authorities	738					738	
3 Public sector entities				1		1	1
4 Multilateral development banks	249					249	
6 Institutions		364				364	364
11 Total	**1,360**	**364**		**1**		**1,726**	**366**

Exposures for central counterparty clearing are shown in column 2%. Exposure amounts increased from their 2019-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
Corporates							
0,00 - < 0,15	572	0.1 %	101	44.6 %	-0.1	150	26.3 %
0,15 - < 0,25	162	0.2 %	34	45.0 %	0.2	76	46.7 %
0,25 - < 0,50	117	0.3 %	63	44.8 %	0.1	74	63.1 %
0,75 - < 2,50	179	1.2 %	113	38.4 %	0.0	154	86.0 %
2,50 - < 10,00	39	3.7 %	66	45.0 %	0.0	53	134.7 %
10,00 - < 100,00	1	12.7 %	4	45.0 %	-0.1	1	233.8 %
100.00	13	100.0 %	4	45.0 %	-0.1		
Total	**1,083**	**1.6 %**	**385**	**43.7 %**	**0.0**	**508**	**46.9 %**

	a	b	c	d	e	f	g
PD scale	EAD post CRM	Average PD	Number of obligors	Average LGD	Average maturity	RWAs	RWA density
Institutions							
0,00 - < 0,15	520	0.1 %	26	22.7 %	-0.1	86	16.5 %
0,15 - < 0,25	18	0.2 %	12	9.2 %	-0.1	2	9.3 %
0,25 - < 0,50	125	0.3 %	8	27.3 %	-0.1	61	48.7 %
Total	**663**	**0.1 %**	**46**	**23.2 %**	**-0.1**	**148**	**22.3 %**

The average risk weights of corporate exposures and credit institution exposures increased from their 2019-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
Net value, 30 June 2020, EUR million	Gross positive fair value	Netting benefits	Netted current credit exposure	Collateral held	Net credit exposure
1 Derivatives	7,268	3,291	3,977	505	3,472
4 Total	**7,268**	**3,291**	**3,977**	**505**	**3,472**

The amount of net exposures on derivatives increased from the end of 2019.

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

	a	b	c	d
	Collateral used in derivative transactions			
	Fair value of collateral received		Fair value of posted collateral	
Net value, 30 June 2020, EUR million	Segregated	Unsegregated	Segregated	Unsegregated
1 Cash		457	0	700
2 Sovereign debt		0	435	227

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
	Credit derivative hedges		
Net value, 30 June 2020, EUR million	Protection bought	Protection sold	Other credit derivatives
Notionals			
Index credit default swaps		121	
Other credit derivatives		58	
Total notionals		**178**	
Fair values		**-21**	
Positive fair value (asset)		1	
Negative fair value (liability)		-21	

The amount of credit derivatives was slightly lower than at the end of 2019.

3.8 Exposures to CCPs (EU CCR8)

	a	b
Net value, 30 June 2020, EUR million	EAD post CRM	RWAs
1 Exposures to QCCPs (total)	364	7
2 Exposures for trades at QCCPs (excluding initial margin and default fund contributions); of which	364	7
3 (i) OTC derivatives	364	7
7 Segregated initial margin	435	

The amount of exposures related to the central counterparty rose slightly during 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)

Net value, 30 June 2020, EUR million		a RWAs	b Capital requirements
	Outright products		
1	Interest rate risk (general and specific)	1,175	94
4	Commodity risk	12	1
	Options		
6	Delta-plus method	829	66
9	**Total**	**2,016**	**161**

The amount of general and specific risk remained at the 2019-end level. The amount of risk-weighted assets based on the Delta-plus method increased.

4 Leverage and Liquidity Coverage Ratio (LCR)

4.1 Leverage

Leverage ratio, EUR million	30 June 2020	31 Dec. 2019
Tier 1 capital (T1)	10,885	10,879
Total exposure	144,356	131,504
Leverage ratio, %	**7.5**	**8.3**

Leverage ratio decreased particularly as a result of the increase in exposures caused by central bank deposits. The leverage ratio that describes a company's degree of indebtedness is presented in accordance with Commission Delegated Regulation. According to these rules, the minimum ratio is three per cent. The leverage ratio is based on period-end figures.

4.2 LCR disclosure template (EU LIQ1)

Scope of consolidation
Consolidated

EUR million	**Total weighted value (average)**			
Quarter ending on (30, June 2020)	**30 June 2020**	**31 March 2020**	**31 Dec 2019**	**30 Sept 2019**
Number of data points used in the calculation of averages: 12				
	TOTAL ADJUSTED VALUE			
21 LIQUIDITY BUFFER	**21,847**	**20,064**	**20,026**	**19,462**
22 TOTAL NET CASH OUTFLOWS	**13,473**	**13,071**	**13,023**	**12,807**
23 LIQUIDITY COVERAGE RATIO (%)	**162 %**	**153 %**	**154 %**	**152 %**

The liquidity coverage ratio figures are presented as month-end averages for each quarter.

5 Requirements

5.1 Compliance with disclosure requirements

CRR Article	Reference
431 Scope of disclosure requirements	
1	This report, OP Financial Group's financial statements 2019 and information disclosed at www.op.fi
2	Note 2. to the 2019 financial statements OP Financial Group's risk and capital adequacy management principles, section 10 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
432 Non-material, proprietary or confidential information	
1–4	Point 5.2
433 Frequency of disclosure	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.
434 Means of disclosures	**www.op.fi**
435 Risk management objectives and policies	
1 a)	Note 2. to the 2019 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 2019 financial statements OP Financial Group's risk and capital adequacy management principles, points 2. and 3. (EU OVA, EU CRA, EU CCRA, EU MRA, LIQA)
1 c)	Note 2. to the 2019 financial statements OP Financial Group's risk and capital adequacy management principles (EU OVA, EU CRA, EU CCRA, EU MRA, LIQA) and www.op.fi > OP Financial Group > To the media > Reports > OP's reports > year 2019 > Corporate Governance Statement, point 6.
1 d)	Note 2. to the 2019 financial statements OP Financial Group's risk and capital adequacy management principles (EU OVA, EU CRA, EU CCRA, EU MRA, LIQA), and points 2.10 (EU CR3) and 2.11 of this report.
1 e)	Note 2. to the 2019 financial statements OP Financial Group's risk and capital adequacy management principles, point 5. (EU OVA, EU CRA, EU CCRA, EU MRA, LIQA)
1 f)	Note 51. to the 2019 financial statements OP Financial Group's 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 2019 financial statements OP Financial Group's risk and capital adequacy management principles, especially point 4. (LIQA)
2 a)-e)	www.op.fi: OP Financial Group > About us > Corporate governance and www.op.fi > OP Financial Group > To the media > Reports > OP's reports > year 2019 > Corporate Governance Statement
436 Scope of application	
a)	Introduction
b)	Introduction
c)	Not applicable.
d)	Not applicable.
e)	Not applicable.
437 Own funds	
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: op.fi > OP Financial Group > About us > Group member cooperative banks The terms and conditions of AT1 and T2 capital instruments can be found on OP Corporate Bank's website: op.fi > OP Financial Group > Debt Investors
1d)	Point 1.1
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
438 Capital requirements	
a)	Note 2. to the 2019 financial statements OP Financial Group's risk and capital adequacy management principles and note 51. to the 2019 financial statements OP Financial Group's risk tolerances
b)	Point 1.4.
c)	Points 1.2 (EU OV1) and 1.3
c)	Points 1.2 (EU OV1) and 1.3
i)	Points 1.2 (EU OV1) and 1.3
ii)	Points 1.2 (EU OV1) and 1.3
iii)	Not applicable.
iv)	Not applicable.
e)	Points 1.2 (EU OV1), 1.3 and 3.9 (MR1)
f)	Points 1.2 (EU OV1) and 1.3
Exposures related to financing for special objects and equity exposures, basic method – risk weights	Point 2.11 (EU CR10)
439 Exposure to counterparty credit risk	
a)	Point 3.1 (EU CCR1), (EU CCRA) and Note 2. to the 2019 financial statements OP Financial Group's risk and capital adequacy management principles (EU CCRA), section 4.8
b)	Point 3.1 (EU CCR1), (EU CCRA) and Note 2. to the 2019 financial statements OP Financial Group's risk and capital adequacy management principles (EU CCRA), section 4.8
c)	Note 2. to the 2019 financial statements OP Financial Group's risk and capital adequacy management principles (EU CCRA), point 4.8
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.
440 Capital buffers	
1a)	Not presented half-yearly
1b)	Not presented half-yearly
441 Indicators of global systemic importance	Not applicable
442 Credit risk adjustments	
a)	Note 1. to the 2019 financial statements Accounting policies and Note 56. Receivables from credit institutions and customers, and doubtful receivables
b)	Note 1. to the 2019 financial statements Accounting policies
c)	Not presented half-yearly
d)	Point 2.4 (EU CR1-C)
e)	Points 2.1 (EU CRB-D) and 2.3 (EU CR1-B) Specified material exposure classes.
f)	Point 2.15 (Template 3, EU CQ3)
g)	Points 2.2 (EU CR1-A) and 2.3 (EU CR1-B)
a.	Points 2.2 (EU CR1-A) and 2.3 (EU CR1-B)
b.	Points 2.2 (EU CR1-A) and 2.3 (EU CR1-B)
c.	Points 2.2 (EU CR1-A) and 2.3 (EU CR1-B)
h)	Point 2.4 (EU CR1-C)
i)	Point 2.5 (EU CR2-A)
i.	Point 2.5 (EU CR2-A)
ii.	Point 2.5 (EU CR2-A)
iii.	Point 2.5 (EU CR2-A)
iv.	Point 2.5 (EU CR2-A)
v.	Point 2.5 (EU CR2-A)
Specific credit risk adjustments and recoveries recorded directly to the income statement shall be disclosed separately.	Not applicable.
443 Unencumbered assets	
EBA/GL/2014/03 Guidelines on disclosure of encumbered and unencumbered assets	Not presented half-yearly
444 Use of ECAIs	
a)	Point 2.9 (EU CRD)
b)	Point 2.9 (EU CRD)
c)	Point 2.9 (EU CRD)
d)	Not applicable.
e)	Points 2.8 (EU CR4) and 2.9 (EU CR5)
445 Exposure to market risk	**Points 1.3 and 3.9 (EU MR1)**
446 Operational risk	**Note 2. to the 2019 financial statements OP Financial Group's risk and capital adequacy management principles, section 4.9 and point 1.3 of this report**
447 Exposures in equities not included in the trading book	
a)	Note 1. to the 2019 financial statements Accounting policies
b)	Point 2.11 (EU CR10)
c)	Point 2.11 (EU CR10)
d)	Note 7. to the 2019 financial statements Net investment income
e)	Note 35. to the 2019 financial statements Equity and Note 20. Investment assets
448 Exposures in equities not included in the trading book	
a)	Note 2. to the 2019 financial statements OP Financial Group's risk and capital adequacy management principles, section 4.5 and Note 58. Sensitivity analysis of interest rate and market risk
b)	Note 58. to the 2019 financial statements Sensitivity analysis of interest rate and market risk
449 Exposure to securitisation positions	
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.
450 Remuneration policy	
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
451 Leverage	
a)	Point 4.1
b)	Not presented half-yearly
c)	Not presented half-yearly
d)	Not presented half-yearly
e)	Not presented half-yearly
452 Use of the IRB Approach to credit risk	
a)	Note 2. to the 2019 financial statements OP Financial Group's risk and capital adequacy management principles, section 4.3 and the introduction of this report (EU CRE)
b)	Note 2. to the 2019 financial statements OP Financial Group's risk and capital adequacy management principles, section 4.3 and the introduction of this report (EU CRE)
i)	Note 2. to the 2019 financial statements OP Financial Group's risk and capital adequacy management principles, section 4.3 and the introduction of this report (EU CRE)
ii)	Note 2. to the 2019 financial statements OP Financial Group's risk and capital adequacy management principles, section 4.3. (EU CRE)
iii)	Note 2. to the 2019 financial statements OP Financial Group's risk and capital adequacy management principles, section 4.3. (EU CRE)
iv)	Note 2. to the 2019 financial statements OP Financial Group's risk and capital adequacy management principles, section 4.3. (EU CRE)
c)	Note 2. to the 2019 financial statements OP Financial Group's risk and capital adequacy management principles, section 4.3.
i)	Note 2. to the 2019 financial statements OP Financial Group's risk and capital adequacy management principles, section 4.3.
ii)	Note 2. to the 2019 financial statements OP Financial Group's risk and capital adequacy management principles, section 4.3.
iii)	Note 2. to the 2019 financial statements OP Financial Group's risk and capital adequacy management principles, section 4.3.
iv)	Note 2. to the 2019 financial statements OP Financial Group's risk and capital adequacy management principles, section 10.
v)	Note 2. to the 2019 financial statements OP Financial Group's risk and capital adequacy management principles, section 10.
d)	Points 2.10 (EU CR6) and 2.11 (EU CR6), (EU CR10)
	Points 2.10 (EU CR6) and 2.11 (EU CR6), (EU CR10)
e)	Points 2.10 (EU CR6) and 2.11 (EU CR6), (EU CR10)
i)	Points 2.10 (EU CR6) and 2.11 (EU CR6), (EU CR10)
ii)	Points 2.10 (EU CR6) and 2.11 (EU CR6), (EU CR10)
iii)	Points 2.10 (EU CR6) and 2.11 (EU CR6), (EU CR10)
f)	Points 2.10 (EU CR6) and 2.11 (EU CR6), (EU CR10)
g)	Point 2.2 (EU CR1-A)
h)	Point 2.10 (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 2019 financial statements OP Financial Group's risk and capital adequacy management principles, section 4.3 and point 2.10 of this report (EU CR6)
453 Use of credit risk mitigation techniques	
a)	Point 2.7 (EU CRC)
b)	Point 2.7 (EU CRC)
c)	Point 2.7 (EU CRC)
d)	Point 2.7 (EU CRC)
e)	Point 2.7 (EU CRC)
f)	Point 2.7 (EU CR3)
g)	Point 2.7 (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

Disclosure requirement	
CRR Article 452 j)	A total of over 90% of OP Financial Group's IRBA 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 classes Retail exposures - Mortgage-backed exposures and Other exposures are not presented under division between SMEs and non-SMEs because the SME EAD accounts for less than 2% of 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 the amount of counterparty risk exposures under retail exposures is not material.
Template EU CRB-D based on the EBA's guidelines (EBA/GL/2016/11)	Material exposure classes are broken down in the table.
Information required on a half-yearly basis by Commission Implementing Regulation (EU) No 1423/2013	No material change
Blank templates and zero lines based on the EBA's guidelines (EBA/GL/2016/11) are not presented.	