OP Amalgamation Capital Adequacy Report
31 March 2020

OP

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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 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 2019 Financial Statement's Notes 22 and 45.

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. 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	31 March 2020	31 Dec. 2019
OP Financial Group's equity capital	12,277	12,570
The effect of insurance companies on the Group's shareholders' equity is excluded	-36	-237
Fair value reserve, cash flow hedge	-180	-141
Common Equity Tier 1 (CET1) before deductions	**12,062**	**12,192**
Intangible assets	-609	-630
Excess funding of pension liability and valuation adjustments	-151	-76
Items deducted from cooperative capital	-2	-142
Planned profit distribution and unpaid profit distribution for previous period	-113	-97
Shortfall of ECL minus expected losses	-471	-428
Common Equity Tier 1 (CET1)	**10,716**	**10,819**
Hybrid capital to which transitional provision is applied	40	60
Additional Tier 1 capital (AT1)	**40**	**60**
Tier 1 capital (T1)	**10,756**	**10,879**
Debenture loans	773	806
Tier 2 capital (T2)	**773**	**806**
Total capital base	**11,530**	**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 a higher 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 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.

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

1.2 Overview of RWAs (EU-OV1)

EUR million	RWAs 31 March 2020	RWAs 31 Dec. 2019	Minimum capital requirements 31 March 2020
1 Credit risk (excluding CCR)	52,802	48,385	4,224
2 Of which the standardised approach	4,860	5,061	389
3 Of which the foundation IRB (FIRB) approach	27,684	26,105	2,215
4 Of which the advanced IRB (AIRB) approach	13,049	10,320	1,044
5 Of which equity IRB under the simple risk-weighted approach	442	451	35
5a Of which equity investments under PD/LGD method	6,768	6,447	541
6 CCR	917	698	73
7 Of which mark to market	661	506	53
12 Of which CVA	255	191	20
13 Settlement risk	0	0	0
14 Securitisation exposures in the banking book (after the cap)	120	46	10
15 Of which IRB approach	120	46	10
19 Market risk	2,012	1,309	161
20 Of which the standardised approach	2,012	1,309	161
23 Operational risk	3,964	4,232	317
25 Of which standardised approach	3,964	4,232	317
27 Amounts below the thresholds for deduction (subject to 250% risk weight)	378	279	30
27a Other risks		11	
29 Total	**60,192**	**54,959**	**4,815**
30 Risk weight floors based on ECB's decision	518	505	41
31 Total risk exposure amount including risk weight floors	**60,710**	**55,464**	**4,857**

The risk exposure amount (REA) totalled EUR 60.7 billion (55.5), or 9.5% higher than on 31 December 2019. The risk-weight floor for retail exposures set by the ECB remained unchanged at EUR 0.5 billion. Because of the adoption of the new definition of default, the average retail and corporate exposure risk weights rose as result of the risk weighting factors set by the ECB. The loan portfolio grew especially in corporate exposures.

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 Capital Ratios

Ratios, %	31 March 2020	31 Dec. 2019
CET1 capital ratio	17.7	19.5
Tier 1 ratio	17.7	19.6
Capital adequacy ratio	19.0	21.1

Ratios, fully loaded, %	31 March 2020	31 Dec. 2019
CET1 capital ratio	17.7	19.5
Tier 1 ratio	17.7	19.5
Capital adequacy ratio	18.9	21.0

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

Capital requirement, EUR million	31 March 2020	31 Dec. 2019
Capital base	11,530	11,685
Capital requirement	8,968	8,068
Buffer for capital requirements	2,561	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 14.8% comprises the minimum requirement of 8%, the capital conservation buffer of 2.5%, the O-SII buffer requirement of 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. Based on a decision made by the Finnish Financial Supervisory Authority in April, OP Financial Group's O-SII buffer requirement is 1.0% as of Q2/2020 in which case the capital requirement decreases to 13.8%.

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 1.2 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 extent 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 0.6 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, 31 March 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	9,204	7,453	447	432			3	9,653
b	Operating of other real estate	5,149	2,472	117	72		72	553	5,892
c	Trade	5,105	1,107	482	251			483	6,070
d	Energy	4,261	724	5	2			337	4,603
e	Services	5,019	1,512	1,105	340	0	580	262	6,966
f	Construction	4,314	1,790	682	293		1	126	5,122
g	Other manufacturing	1,967	365	63	32			764	2,794
h	Manufacture of machinery and equipment (incl. maintenance)	2,433	158	61	23			17	2,511
i	Transportation and storage	1,384	410	441	261			286	2,112
j	Financial and insurance activities	3,464	1,117	34	15	1,510	3,218	2,768	10,994
k	Central bank deposits						10,108		10,108
l	Covered bonds					6,518			6,518
m	Agriculture, forestry and fishing	1,846	1,223	3,250	142		5	107	5,208
n	Forest industry	1,430	82	24	11			56	1,509
o	Metal industry	1,221	344	59	31			9	1,289
p	Food industry	788	74	21	12			81	890
q	Buying and selling of own real estate	636	66	21	3			16	673
r	Information and communication	1,216	324	68	23			67	1,351
s	Other sectors	394	252	24	21	0		573	991
t	Water supply and waste management	344	102	20	14		24	63	451
u	Mining and quarrying	218	46	26	16			5	249
v	Manufacture of chemicals and chemical products	315	23	2	2			2	319
x	Activities of households as employers; undifferentiated goods and services producing activities of households for own use	1	0	417	0			141	559
y	Public administration and defence (incl. compulsory social security)	238	105	1	1		5,192	76	5,507
z	Activities of extraterritorial organisations and bodies	0	0	0	0				0
å	Households			50,452				3,718	54,170
ä	**Total**	**50,947**	**19,751**	**57,821**	**1,998**	**8,028**	**19,198**	**10,512**	**146,505**

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 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 (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	Impair-ments and value adjustments
Retail												
0,00 - < 0,15	36,578	4,099	52.4 %	38,692	0.1 %	575,049	26.5 %	14.6	2,374	6.1 %	6	
0,15 - < 0,25	4,482	114	53.3 %	4,540	0.2 %	97,270	26.1 %	15.0	824	18.2 %	3	
0,25 - < 0,50	2,621	160	58.4 %	2,706	0.4 %	131,200	29.6 %	9.9	700	25.9 %	3	
0,50 - < 0,75	1,617	59	52.3 %	1,647	0.6 %	71,830	32.9 %	10.9	683	41.5 %	3	
0,75 - < 2,50	3,932	169	60.8 %	4,030	1.3 %	113,067	32.5 %	11.5	2,436	60.4 %	17	
2,50 - < 10,00	1,989	71	65.2 %	2,031	4.8 %	60,296	35.1 %	11.1	2,430	119.7 %	34	
10,00 - < 100,00	1,144	17	73.8 %	1,157	31.2 %	24,468	31.3 %	11.9	2,526	218.4 %	111	
100.00	894	13	1.5 %	894	100.0 %	26,379	34.2 %	13.4	1,076	120.3 %	222	
Total	**53,258**	**4,703**	**53.0 %**	**55,696**	**1.0 %**	**1,099,559**	**27.8 %**	**13.9**	**13,049**	**21.8 %**	**399**	**141**

The average risk weights of private customer exposures increased and defaulted exposures increased as a result of the new definition of default.

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	Impair-ments and value adjustments
Retail - Secured by real estate property												
0,00 - < 0,15	34,424	729	54.7 %	34,822	0.1 %	416,786	25.0 %	15.1	2,031	5.8 %	5	
0,15 - < 0,25	3,909	52	52.3 %	3,936	0.2 %	44,265	27.2 %	15.2	756	19.2 %	2	
0,25 - < 0,50	1,496	59	61.9 %	1,532	0.4 %	27,734	23.6 %	12.4	342	22.3 %	1	
0,50 - < 0,75	995	11	55.0 %	1,001	0.5 %	13,808	28.0 %	14.5	361	36.1 %	1	
0,75 - < 2,50	2,979	83	62.8 %	3,031	1.2 %	40,965	27.3 %	13.5	1,810	59.7 %	10	
2,50 - < 10,00	1,484	29	67.7 %	1,503	4.7 %	20,576	27.7 %	13.0	1,956	130.1 %	20	
10,00 - < 100,00	1,005	10	74.0 %	1,012	32.1 %	12,316	28.3 %	12.7	2,357	232.9 %	93	
100.00	656	4	1.6 %	656	100.0 %	8,937	19.6 %	13.8	907	138.4 %	58	
subtotal	**46,947**	**976**	**56.0 %**	**47,494**	**1.0 %**	**585,387**	**25.4 %**	**14.8**	**10,520**	**20.5 %**	**191**	**67**

	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	Impair-ments and value adjustments
Corporates												
0,00 - < 0,15	6,641	4,852	69.6 %	8,672	0.1 %	584	44.4 %	5.2	2,268	26.2 %	3	
0,15 - < 0,25	3,002	1,892	69.1 %	3,782	0.2 %	616	44.0 %	5.3	1,698	44.9 %	3	
0,25 - < 0,50	7,878	2,898	58.4 %	9,018	0.4 %	9,542	43.3 %	10.3	4,873	54.0 %	15	
0,50 - < 0,75												
0,75 - < 2,50	8,624	3,722	60.0 %	10,253	1.2 %	9,999	42.8 %	8.4	9,172	89.5 %	54	
2,50 - < 10,00	7,980	2,209	60.5 %	5,876	4.4 %	9,591	42.8 %	7.7	7,502	127.7 %	110	
10,00 - < 100,00	628	97	41.5 %	657	23.2 %	1,512	42.4 %	7.2	1,241	188.8 %	64	
100.00	849	157	61.9 %	934	100.0 %	931	43.6 %	14.8			407	
Total	**35,602**	**15,827**	**63.3 %**	**39,192**	**1.5 %**	**32,775**	**43.4 %**	**7.9**	**26,754**	**69.9 %**	**657**	**481**

The average risk weights of corporate customer exposures increased and defaulted exposures increased as a result of the new definition of default.

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	Impair-ments and value adjustments
Corporates - Other												
0,00 - < 0,15	5,518	3,938	70.5 %	7,262	0.1 %	350	44.3 %	4.7	1,919	26.4 %	2	
0,15 - < 0,25	2,499	1,701	69.6 %	3,175	0.2 %	170	44.3 %	4.7	1,463	46.1 %	3	
0,25 - < 0,50	3,039	2,184	68.8 %	3,965	0.4 %	1,324	43.8 %	5.6	2,525	63.7 %	6	
0,50 - < 0,75												
0,75 - < 2,50	3,962	2,476	61.1 %	5,005	1.3 %	1,761	42.7 %	6.2	5,164	103.2 %	27	
2,50 - < 10,00	3,840	1,389	60.4 %	2,800	4.1 %	1,757	43.2 %	7.3	4,198	150.0 %	50	
10,00 - < 100,00	238	61	41.8 %	255	22.5 %	223	42.5 %	6.6	600	235.6 %	24	
100.00	556	146	63.0 %	638	100.0 %	219	43.6 %	13.7			278	
subtotal	**19,652**	**11,896**	**66.4 %**	**23,099**	**1.2 %**	**5,804**	**43.7 %**	**5.8**	**15,869**	**70.7 %**	**390**	**351**
Corporates - SMEs												
0,00 - < 0,15	1,123	914	64.4 %	1,410	0.1 %	234	44.7 %	7.8	349	24.8 %	0	
0,15 - < 0,25	503	191	66.3 %	607	0.2 %	446	42.3 %	8.8	235	38.6 %	0	
0,25 - < 0,50	4,839	714	35.2 %	5,053	0.4 %	8,219	43.0 %	14.0	2,348	46.5 %	9	
0,50 - < 0,75												
0,75 - < 2,50	4,662	1,246	58.0 %	5,248	1.2 %	8,246	42.8 %	10.5	4,008	76.4 %	28	
2,50 - < 10,00	4,141	820	60.6 %	3,076	4.6 %	7,836	42.4 %	8.0	3,304	107.4 %	60	
10 - < 100	390	36	41.1 %	402	23.7 %	1,291	42.3 %	7.6	641	159.2 %	41	
100	292	11	46.1 %	296	100.0 %	712	43.7 %	17.1			129	
subtotal	**15,950**	**3,931**	**54.8 %**	**16,093**	**2.0 %**	**26,984**	**42.9 %**	**10.9**	**10,885**	**68.9 %**	**267**	**130**
Total	**35,602**	**15,827**	**63.3 %**	**39,192**	**1.5 %**	**32,788**	**43.4 %**	**7.9**	**26,754**	**69.9 %**	**657**	**481**

	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	Impair-ments and value adjustments
Institutions												
0,00 - < 0,15	6,184	430	71.1 %	6,514	0.0 %	159	14.7 %	6.2	536	8.2 %	0	
0,15 - < 0,25	448	193	74.6 %	527	0.2 %	22	16.4 %	2.8	104	19.7 %	0	
0,25 - < 0,50	21	78	48.1 %	58	0.4 %	40	45.0 %	4.1	46	80.4 %	0	
0,50 - < 0,75	481	28	45.1 %	235	0.7 %	51	13.8 %	6.7	78	33.1 %	0	
0,75 - < 2,50	10	4	66.2 %	16	1.3 %	21	45.0 %	16.4	21	135.4 %	0	
2,50 - < 10,00	25	123	47.1 %	84	3.3 %	48	45.0 %	1.4	140	167.4 %	1	
10,00 - < 100,00	0	4	41.4 %	2	11.9 %	12	45.0 %	0.5	4	238.2 %	0	
Total	**7,168**	**860**	**64.8 %**	**7,435**	**0.1 %**	**353**	**15.4 %**	**6.0**	**930**	**12.5 %**	**2**	**1**

The average risk weights of credit institution exposures remained unchanged in the first quarter. 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.

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

	a	b
EUR million	RWA amounts	Capital require-ments
1 RWAs as at the end of the previous reporting period 31 Dec 2019	36,425	2,914
2 Asset size	766	61
3 Asset quality	-259	-21
5 Methodology and policy	3,800	304
9 RWAs as at the end of the reporting period 31 March 2020	40,732	3,259

Changes occurred in retail exposures, corporate exposures and credit institution exposures during the last quarter are presented using the flow statements. The Methodology and policy line presents the effect of the ECB's risk parameter factors related to the adoption of the new definition of default. The factors increased the risk-weighted items of retail and corporate exposures. In the Asset quality line, lower risk weights were explained by the transition of exposures to defaulted ones. The loan portfolio too grew especially in corporate exposures.

3 Leverage

3.1 Leverage

Leverage ratio, EUR million	31 March 2020	31 Dec. 2019
Tier 1 capital (T1)	10,756	10,879
Total exposure	132,303	131,504
Leverage ratio, %	**8.1**	**8.3**

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.