



OP Amalgamation
Capital Adequacy Report 2018

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Annex 1. Main features of capital instruments

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 point 5.3 (L13) and in Financial Statement's Notes 22 and 47.

OP Financial Group's risk management practices and goals can be found in the 2018 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 2018 Financial Statements Notes 49 and 50, 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 exposures. OP Card Company aims to adopt IRBA for its exposures.

1 Capital base and capital adequacy

1.1 Capital base

| EUR million | 31 Dec. 2018 | 31 Dec. 2017 |
|---|-----------------|-----------------|
| OP Financial Group's equity capital | 11 835 | 11 121 |
| The effect of insurance companies on the Group's shareholders' equity is excluded | 189 | 92 |
| Fair value reserve, cash flow hedge | -33 | -16 |
| Common Equity Tier 1 (CET1) before deductions | 11 991 | 11 197 |
| Intangible assets | -710 | -717 |
| Excess funding of pension liability and valuation adjustments | -76 | -31 |
| Cooperative capital deducted from own funds | -147 | -148 |
| Expected profit distribution | -94 | -90 |
| Shortfall of ECL minus expected losses | -288 | -320 |
| Common Equity Tier 1 (CET1) | 10 677 | 9 891 |
| Hybrid capital to which transitional provision is applied | 80 | 81 |
| Additional Tier 1 capital (AT1) | 80 | 81 |
| Tier 1 capital (T1) | 10 757 | 9 973 |
| Debenture loans | 995 | 1 121 |
| Tier 2 capital (T2) | 995 | 1 121 |
| Total capital base | 11 752 | 11 093 |

The table presents how OP Amalgamation's CET1 capital derives from OP Financial Group's equity capital. CET1 capital increased by EUR 786 million during the financial year. CET1 capital was increased by Banking performance, dividends from the Group's insurance institutions, transfer of pension liabilities to Ilmarinen and Profit Share issues. The amount of Profit Shares in CET1 capital was EUR 2,910 million (2,760). 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 |
|--|---------------|---------------|------------------------------|
| | 31 Dec. 2018 | 30 Sept. 2018 | 31 Dec. 2018 |
| 1 Credit risk (excluding CCR) | 40 833 | 40 218 | 3 267 |
| 2 Of which the standardised approach | 4 798 | 4 532 | 384 |
| 3 Of which the foundation IRB (FIRB) approach | 24 100 | 23 670 | 1 928 |
| 4 Of which the advanced IRB (AIRB) approach | 5 276 | 5 173 | 422 |
| 5 Of which equity IRB under the simple risk-weighted approach | 205 | 390 | 16 |
| 5a Of which equity investments under PD/LGD method | 6 454 | 6 453 | 516 |
| 6 CCR | 638 | 674 | 51 |
| 7 Of which mark to market | 463 | 447 | 37 |
| 12 Of which CVA | 175 | 227 | 14 |
| 13 Settlement risk | 0 | 0 | 0 |
| 14 Securitisation exposures in the banking book (after the cap) | 46 | 41 | 4 |
| 15 Of which IRB approach | 46 | 41 | 4 |
| 19 Market risk | 1 319 | 1 393 | 106 |
| 20 Of which the standardised approach | 1 319 | 1 393 | 106 |
| 23 Operational risk | 4 136 | 4 136 | 331 |
| 25 Of which standardised approach | 4 136 | 4 136 | 331 |
| 27 Amounts below the thresholds for deduction (subject to 250% risk weight) | 261 | 312 | 21 |
| 29 Total | 47 233 | 46 773 | 3 779 |
| 30 Risk weight floors based on ECB's decision | 4 893 | 4 915 | 391 |
| 31 Total risk exposure amount including risk weight floors | 52 126 | 51 688 | 4 170 |

During the quarter, total risk exposure increased by 1.0%.

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 exposures secured by mortgages and 32.7% for other than exposures secured by mortgages. Point 2.16 presents average risk weights based in internal exposure models which the risk-weight floor does not affect.

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 | 31 Dec. 2018 | | 31 Dec. 2017 | |
|--|----------------------|----------------------|----------------------|----------------------|
| | Capital requirement* | Risk weighted assets | Capital requirement* | Risk weighted assets |
| Credit and counterparty credit risk | 3 328 | 41 602 | 3 151 | 39 383 |
| Standardised Approach | 310 | 3 878 | 309 | 3 859 |
| Exposures to central government and central banks | 21 | 261 | | |
| Exposures to regional government or local authorities | | | 1 | 18 |
| Exposures to public sector entities | 3 | 33 | | |
| Exposures to multilateral development banks | 0 | 0 | | |
| Exposures to institutions | 1 | 7 | 1 | 8 |
| Exposures to corporates | 203 | 2 533 | 176 | 2 203 |
| Retail exposures | 77 | 961 | 85 | 1 057 |
| Exposures secured by mortgages on immovable property | 2 | 29 | 18 | 220 |
| Exposures in default | 2 | 19 | 2 | 28 |
| Exposures in the form of units or shares in collective investment undertakings (CIU) | 0 | 0 | | |
| Equity exposures | 1 | 12 | | |
| Other items | 2 | 24 | 26 | 324 |
| Internal Ratings-based Approach (IRB) | 3 018 | 37 724 | 2 842 | 35 525 |
| Exposures to institutions | 87 | 1 083 | 84 | 1 054 |
| Exposures to corporates | 1 878 | 23 474 | 1 715 | 21 438 |
| Retail exposures | 422 | 5 276 | 397 | 4 959 |
| Exposures secured by mortgages on immovable property | 264 | 3 302 | 251 | 3 140 |
| Other retail exposures | 158 | 1 974 | 146 | 1 819 |
| Equity investments | 533 | 6 659 | 560 | 7 002 |
| PD/LGD method | 516 | 6 454 | 517 | 6 461 |
| Simple Risk Weight Approach | 16 | 205 | 43 | 541 |
| Private equity investments | 12 | 152 | 6 | 74 |
| Listed investments | | | 1 | 13 |
| Other | 4 | 52 | 36 | 454 |
| Securitisation exposures | 4 | 46 | 3 | 42 |
| Other non-credit obligations | 95 | 1 188 | 82 | 1 030 |
| Clearing/settlement risk | 0 | 0 | 0 | 1 |
| Market risk (Standardised Approach) | 106 | 1 319 | 94 | 1 178 |
| Position risk | 105 | 1 309 | 93 | 1 159 |
| Commodity risk | 1 | 11 | 2 | 19 |
| Operational risk | 331 | 4 136 | 317 | 3 958 |
| Risk associated with exposure value adjustment | 14 | 175 | 16 | 205 |
| Risk exposure amount | 3 779 | 47 233 | 3 937 | 44 725 |
| Risk weight floors based on ECB's decision | 391 | 4 893 | 359 | 4 492 |
| Total risk exposure amount including risk weight floors | 4 170 | 52 126 | 4 297 | 49 216 |

* Capital requirement = Risk-weighted assets x 0.08

1.4 Capital Ratios

| Ratios, % | 31 Dec. 2018 | 31 Dec. 2017 | Ratios, fully loaded, % | 31 Dec. 2018 | 31 Dec. 2017 |
|--|--------------|--------------|----------------------------------|--------------|--------------|
| CET1 capital ratio | 20,5 | 20,1 | CET1 capital ratio | 20,5 | 20,1 |
| Tier 1 ratio | 20,6 | 20,3 | Tier 1 ratio | 20,5 | 20,1 |
| Capital adequacy ratio | 22,5 | 22,5 | Capital adequacy ratio | 22,4 | 22,4 |
| Ratios excluding the risk weight floors, % | 31 Dec. 2018 | 31 Dec. 2017 | Capital requirement, EUR million | 31 Dec. 2018 | 31 Dec. 2017 |
| CET1 capital ratio | 22,6 | 22,1 | Capital base | 11 752 | 11 093 |
| Tier 1 ratio | 22,8 | 22,3 | Capital requirement | 7 448 | 7 027 |
| Capital adequacy ratio | 24,9 | 24,8 | Buffer for capital requirements | 4 304 | 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 transfer of pension liabilities to Ilmarinen improved the CET1 ratio by 0.4 percentage points.

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 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 Total and average net amount of exposures (EU CRB-B)

| | a | b |
|---|---|---------------------------------------|
| | Net value of exposures at the end of the period | Average net exposures over the period |
| 31 Dec. 2018, EUR million | | |
| IRB approach | | |
| 2 Institutions | 7 406 | 7 341 |
| 3 Corporates | 46 752 | 45 033 |
| 5 Of which: SMEs | 17 172 | 16 526 |
| 6 Retail | 55 686 | 54 301 |
| 7 Secured by real estate property | 47 214 | 46 335 |
| 8 SMEs | 1 209 | 1 032 |
| 9 Non-SMES | 46 005 | 45 303 |
| 11 Other retail | 8 472 | 7 966 |
| 12 SMEs | 1 163 | 994 |
| 13 Non-SMEs | 7 310 | 6 971 |
| 14 Equity | 2 406 | 2 443 |
| 14a Other non-credit obligations | 1 187 | 1 109 |
| 15 Total IRB approach | 113 437 | 110 227 |
| Standardised approach | | |
| 16 Central government and central banks | 14 334 | 14 592 |
| 17 Regional government or local authorities | 3 715 | 3 616 |
| 18 Public sector entities | 351 | 346 |
| 19 Multilateral development banks | 529 | 548 |
| 20 International organisations | 386 | 431 |
| 21 Institutions | 20 | 159 |
| 22 Corporates | 2 863 | 2 709 |
| 23 Of which: SMEs | 1 604 | 768 |
| 24 Retail | 3 471 | 3 483 |
| 25 Of which: SMEs | 13 | 9 |
| 26 Secured by mortgages on immovable property | 58 | 295 |
| 27 Of which: SMEs | | 5 |
| 28 Exposures in default | 15 | 17 |
| 32 Collective investments undertakings | 0 | 0 |
| 33 Equity exposures | 12 | 6 |
| 34 Other exposures | 24 | 89 |
| 35 Total standardised approach | 25 778 | 26 292 |
| 36 Total | 139 215 | 136 518 |

The loan portfolio continued to grow in corporate and retail exposures. 85% of sovereign exposures are deposits with the central bank.

2.2 Geographical breakdown of exposures (EU CRB-C)

| | a | b | c | d | e | f | g | h | i |
|---|----------------|------------------------|---------------|--------------|----------------|------------|------------|--------------|----------------|
| | Finland | Other Nordic countries | Baltic States | Rest of EU | Rest of Europe | USA | Asia | Other | Total |
| Net value, 31 Dec. 2018, EUR million | | | | | | | | | |
| IRB approach | | | | | | | | | |
| 1 Central government and central banks | | | | | | | | | |
| 2 Institutions | 541 | 1 799 | 0 | 3 431 | 70 | 72 | 256 | 1 238 | 7 406 |
| 3 Corporates | 44 139 | 1 194 | 475 | 733 | 101 | 22 | 40 | 49 | 46 752 |
| 4 Retail | 55 347 | 97 | 14 | 117 | 31 | 29 | 32 | 18 | 55 686 |
| 5 Equity | 2 370 | | | 1 | 1 | 35 | | | 2 406 |
| 5a Other non-credit obligations | 1 187 | 0 | | | | | | | 1 187 |
| 6 Total IRB approach | 103 583 | 3 090 | 489 | 4 282 | 203 | 158 | 328 | 1 305 | 113 437 |
| Standardised approach | | | | | | | | | |
| 7 Central government and central banks | 13 029 | 6 | 154 | 1 145 | | | | | 14 334 |
| 8 Regional government or local authorities | 2 103 | 143 | 117 | 1 321 | | | | 31 | 3 715 |
| 9 Public sector entities | 176 | | | 176 | | | | | 351 |
| 10 Multilateral development banks | 93 | | | 436 | | | | | 529 |
| 11 International organisations | | | | 386 | | | | | 386 |
| 12 Institutions | 17 | 0 | | 2 | | | | | 20 |
| 13 Corporates | 1 074 | 149 | 1 640 | -1 | | | | | 2 863 |
| 14 Retail | 3 450 | 5 | 1 | 9 | 1 | 2 | 2 | 1 | 3 471 |
| 15 Secured by mortgages on immovable property | 58 | 0 | 0 | 0 | | | | | 58 |
| 16 Exposures in default | 9 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 15 |
| 20 Collective investments undertakings | 0 | | | | | | | | 0 |
| 21 Equity exposures | 12 | | 0 | | | | | | 12 |
| 22 Other exposures | 24 | | | | | | | | 24 |
| 23 Total standardised approach | 20 045 | 303 | 1 918 | 3 474 | 1 | 2 | 2 | 32 | 25 778 |
| 24 Total | 123 628 | 3 393 | 2 407 | 7 756 | 204 | 160 | 329 | 1 338 | 139 215 |

A total of 89% of total exposures are in Finland. A total of 91% of exposures within the scope of IRBA are in Finland. No substantial changes have taken place in the geographical breakdown of exposures.

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

| Net value, 31 Dec. 2018, 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 | 8 550 | 6 432 | 433 | 422 | | | 5 | 8 988 |
| b | Operating of other real estate | 4 254 | 2 340 | 124 | 86 | | 64 | 547 | 4 989 |
| c | Trade | 4 721 | 917 | 527 | 291 | | | 370 | 5 618 |
| d | Energy | 3 962 | 465 | 5 | 3 | | 2 | 422 | 4 392 |
| e | Services | 4 486 | 1 340 | 1 162 | 397 | | 488 | 174 | 6 310 |
| f | Construction | 3 769 | 1 469 | 753 | 336 | | | 78 | 4 600 |
| g | Other manufacturing | 2 185 | 259 | 75 | 42 | | | 656 | 2 916 |
| h | Manufacture of machinery and equipment (incl. maintenance) | 2 299 | 118 | 68 | 28 | | | 34 | 2 401 |
| i | Transportation and storage | 1 381 | 354 | 515 | 322 | | | 141 | 2 038 |
| j | Financial and insurance activities | 2 607 | 1 186 | 35 | 18 | 1 288 | 2 781 | 2 660 | 9 371 |
| k | Central bank deposits | | | | | | 12 216 | | 12 216 |
| l | Covered bonds | | | | | 6 118 | | | 6 118 |
| m | Agriculture, forestry and fishing | 1 583 | 966 | 3 512 | 260 | | 2 | 63 | 5 160 |
| n | Forest industry | 1 370 | 84 | 27 | 15 | | | 16 | 1 413 |
| o | Metal industry | 1 137 | 310 | 69 | 40 | | | 4 | 1 211 |
| p | Food industry | 1 005 | 79 | 22 | 13 | | | 74 | 1 101 |
| q | Buying and selling of own real estate | 846 | 99 | 21 | 5 | | | 15 | 881 |
| r | Information and communication | 1 079 | 247 | 80 | 31 | | | 7 | 1 166 |
| s | Other sectors | 233 | 179 | 25 | 20 | 0 | 0 | 1 555 | 1 813 |
| t | Water supply and waste management | 374 | 119 | 25 | 19 | | 3 | 59 | 461 |
| u | Mining and quarrying | 312 | 161 | 32 | 21 | | | 4 | 347 |
| v | Manufacture of chemicals and chemical products | 442 | 17 | 2 | 1 | | | 2 | 446 |
| | Activities of households as employers; undifferentiated goods and services producing activities of households for own use | 0 | 0 | 177 | 0 | | | 143 | 320 |
| y | Public administration and defence (incl. compulsory social security) | 157 | 31 | 1 | 1 | | 3 760 | 58 | 3 976 |
| z | Activities of extraterritorial organisations and bodies | 0 | 0 | 0 | 0 | | | | 0 |
| ã | Households | | | 47 996 | | | | 2 968 | 50 964 |
| ã | Total | 46 752 | 17 172 | 55 686 | 2 372 | 7 406 | 19 315 | 10 056 | 139 215 |

In Renting and operation of residential real estate, Trade, Services, Construction, Financial and insurance activities and Public administration, exposure amounts increased during the year. 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.

2.4 Maturity of exposures (EU CRB-E)

| Net value, 31 Dec. 2018, EUR million | a | b | c | | d | e | f |
|--------------------------------------|--|---------------|--------------------|---------------|---------------|--------------------|----------------|
| | On demand | ≤ 1 year | Net exposure value | | > 5 years | No stated maturity | Total |
| | | | > 1 year ≤ 5 years | | | | |
| IRB approach | | | | | | | |
| 2 | Institutions | 71 | 1 029 | 4 180 | 2 119 | 7 | 7 406 |
| 3 | Corporates | | 6 104 | 16 873 | 18 045 | 5 730 | 46 752 |
| 4 | Retail | | 959 | 6 146 | 45 821 | 2 761 | 55 686 |
| 5 | Equity | | | 56 | 1 207 | 1 143 | 2 406 |
| 5a | Other non-credit obligations | | 93 | 150 | 30 | 914 | 1 187 |
| 6 | Total IRB approach | 71 | 8 184 | 27 404 | 67 223 | 10 555 | 113 437 |
| Standardised approach | | | | | | | |
| 7 | Central government and central banks | 12 299 | 2 | 596 | 1 105 | 332 | 14 334 |
| 8 | Regional government or local authorities | | 68 | 1 316 | 1 712 | 618 | 3 715 |
| 9 | Public sector entities | | 183 | 102 | 64 | 2 | 351 |
| 10 | Multilateral development banks | | 112 | 246 | 170 | | 529 |
| 11 | International organisations | | 37 | 71 | 278 | | 386 |
| 12 | Institutions | | | | 0 | 19 | 20 |
| 13 | Corporates | | 95 | 793 | 667 | 1 306 | 2 863 |
| 14 | Retail | | 2 023 | 618 | 305 | 525 | 3 471 |
| 15 | Secured by mortgages on immovable property | | | 54 | 4 | | 58 |
| 16 | Exposures in default | | 0 | 8 | 1 | 6 | 15 |
| 20 | Collective investments undertakings | | | | | 0 | 0 |
| 21 | Equity exposures | | | | 12 | | 12 |
| 22 | Other exposures | | 4 | 16 | 2 | 2 | 24 |
| 23 | Total standardised approach | 12 299 | 2 526 | 3 820 | 4 322 | 2 811 | 25 778 |
| 24 | Total | 12 370 | 10 710 | 31 224 | 71 545 | 13 366 | 139 215 |

No substantial changes have taken place in maturity breakdown. The maturity is presented according to the contractual maturity.

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

| Net value, 31 Dec. 2018, EUR million | a | | b | c | e | f | g |
|---|---------------------|--------------------------|---|----------------------------------|------------------------|--|--------------------|
| | 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) |
| | | Non-defaulted exposures | | | | | |
| IRB approach | | | | | | | |
| 2 Institutions | | 7 407 | | 1 | | 0 | 7 406 |
| 3 Corporates | 716 | 46 439 | | 403 | 23 | 44 | 46 752 |
| 5 Of which: SMEs | 298 | 17 006 | | 132 | 7 | 0 | 17 172 |
| 6 Retail | 471 | 55 321 | | 106 | 12 | -10 | 55 686 |
| 7 Secured by real estate property | 364 | 46 900 | | 51 | 1 | 6 | 47 214 |
| 8 SMEs | 31 | 1 182 | | 3 | 0 | 2 | 1 209 |
| 9 Non-SMES | 334 | 45 719 | | 48 | 1 | 5 | 46 005 |
| 11 Other retail | 107 | 8 420 | | 55 | 11 | -16 | 8 472 |
| 12 SMEs | 31 | 1 144 | | 12 | 3 | 5 | 1 163 |
| 13 Non-SMEs | 76 | 7 276 | | 43 | 8 | -21 | 7 310 |
| 14 Equity | 0 | 2 411 | | 5 | | 2 | 2 406 |
| 14a Other non-credit obligations | 1 | 1 186 | | 1 | | 1 | 1 187 |
| 15 Total IRB approach | 1 188 | 112 764 | | 516 | 35 | 37 | 113 437 |
| Standardised approach | | | | | | | |
| 16 Central government and central banks | | 14 335 | | 0 | | 0 | 14 334 |
| 17 Regional government or local authorities | | 3 715 | | 1 | | 1 | 3 715 |
| 18 Public sector entities | | 351 | | 0 | | 0 | 351 |
| 19 Multilateral development banks | | 529 | | 0 | | 0 | 529 |
| 20 International organisations | | 386 | | 0 | | 0 | 386 |
| 21 Institutions | | 20 | | 0 | | 0 | 20 |
| 22 Corporates | | 2 869 | | 7 | | 1 | 2 863 |
| 23 Of which: SMEs | | 1 611 | | 7 | | 3 | 1 604 |
| 24 Retail | | 3 487 | | 16 | 0 | 7 | 3 471 |
| 25 Of which: SMEs | | 13 | | 0 | | 0 | 13 |
| 26 Secured by mortgages on immovable property | | 58 | | 0 | | -1 | 58 |
| 28 Exposures in default | 21 | | | 6 | 8 | 0 | 15 |
| 32 Collective investments undertakings | | 0 | | 0 | | | 0 |
| 33 Equity exposures | | 13 | | 0 | | 0 | 12 |
| 34 Other exposures | | 24 | | 0 | | | 24 |
| 35 Total standardised approach | 21 | 25 787 | | 29 | 8 | 9 | 25 778 |
| 36 Total | 1 209 | 138 551 | | 545 | 43 | 46 | 139 215 |
| 37 Of which: Loans | 1 118 | 90 794 | | 492 | | 94 | 91 419 |
| 38 Of which: Debt securities | | 11 385 | | | | | 11 385 |
| 39 Of which: Off-balance-sheet exposures | 63 | 23 941 | | 5 | | 5 | 23 999 |

The quality of the loan portfolio still remained good. The amount of defaulted exposures was lower than a year ago despite an increase in the loan portfolio. Credit risk adjustment charges (ECL) are not comparable with those a year ago due to the adoption of IFRS 9. Credit risk adjustment charges for the period are presented in net terms for the whole year.

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.

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

| Net value, 31 Dec. 2018, EUR million | Gross carrying values of | | c Specific credit risk adjustments | e Accumulated write-offs | f Credit risk adjustment charges of the period | g Net values (a+b-c) |
|--|-----------------------------|---------------------------------|---|--------------------------------|--|----------------------------|
| | a Defaulted exposures | b Non-defaulted exposures | | | | |
| 1 Renting and operation of residential real estate | 55 | 8 959 | 26 | 0 | 25 | 8 988 |
| 2 Operating of other real estate | 52 | 4 959 | 23 | 2 | 7 | 4 989 |
| 3 Trade | 57 | 5 584 | 24 | 2 | 6 | 5 618 |
| 4 Energy | 39 | 4 388 | 35 | 0 | 23 | 4 392 |
| 5 Services | 85 | 6 259 | 34 | 2 | 8 | 6 310 |
| 6 Construction | 75 | 4 555 | 30 | 2 | 12 | 4 600 |
| 7 Other manufacturing | 46 | 2 887 | 17 | 1 | -3 | 2 916 |
| 8 Manufacture of machinery and equipment (incl. maintenance) | 35 | 2 384 | 18 | 15 | -9 | 2 401 |
| 9 Transportation and storage | 42 | 2 017 | 21 | 1 | 10 | 2 038 |
| 10 Financial and insurance activities | 8 | 9 376 | 14 | 0 | 4 | 9 371 |
| 11 Central bank deposits | 0 | 12 216 | 0 | 0 | 0 | 12 216 |
| 12 Covered bonds | 0 | 6 118 | 0 | 0 | 0 | 6 118 |
| 13 Agriculture, forestry and fishing | 114 | 5 083 | 37 | 2 | 3 | 5 160 |
| 14 Forest industry | 151 | 1 362 | 100 | 2 | -1 | 1 413 |
| 15 Metal industry | 57 | 1 176 | 23 | 1 | -2 | 1 211 |
| 16 Food industry | 21 | 1 097 | 16 | 0 | 5 | 1 101 |
| 17 Buying and selling of own real estate | 4 | 880 | 2 | 0 | 1 | 881 |
| 18 Information and communication | 12 | 1 162 | 8 | 0 | 2 | 1 166 |
| 19 Other sectors | 4 | 1 820 | 10 | 0 | -34 | 1 813 |
| 20 Water supply and waste management | 1 | 460 | 1 | 0 | 0 | 461 |
| 21 Mining and quarrying | 34 | 336 | 23 | 0 | 1 | 347 |
| 22 Manufacture of chemicals and chemical products | 0 | 446 | 0 | 0 | 0 | 446 |
| Activities of households as employers; undifferentiated goods and services producing activities of | | | | | | |
| 23 households for own use | 2 | 319 | 1 | 0 | 1 | 320 |
| 24 Public administration and defence (incl. compulsory social security) | 0 | 3 977 | 1 | 0 | 1 | 3 976 |
| 25 Activities of extraterritorial organisations and bodies | 0 | 0 | 0 | 0 | 0 | 0 |
| 26 Households | 316 | 50 731 | 84 | 14 | -12 | 50 964 |
| 24 Total | 1 209 | 138 551 | 545 | 43 | 46 | 139 215 |

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.

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

| Net value, 31 Dec. 2018, EUR million | Gross carrying values of | | c Specific credit risk adjustments | e Accumulated write-offs | f Credit risk adjustment charges of the period | g Net values (a+b-c) |
|--------------------------------------|-----------------------------|---------------------------------|---|--------------------------------|--|----------------------------|
| | a Defaulted exposures | b Non-defaulted exposures | | | | |
| 1 Finland | 1 193 | 122 969 | 534 | 42 | 42 | 123 628 |
| 2 Other Nordic countries | 2 | 3 392 | 1 | 0 | 0 | 3 393 |
| 3 Baltic States | 9 | 2 404 | 6 | 0 | 3 | 2 407 |
| 4 Rest of EU | 2 | 7 756 | 2 | 0 | 0 | 7 756 |
| 5 Rest of Europe | 0 | 204 | 0 | 0 | 0 | 204 |
| 6 USA | 0 | 160 | 1 | 0 | 0 | 160 |
| 7 Asia | 0 | 329 | 0 | 0 | 0 | 329 |
| 8 Other | 2 | 1 336 | 1 | 0 | 1 | 1 338 |
| 11 Total | 1 209 | 138 551 | 545 | 43 | 46 | 139 215 |

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.

2.8 Ageing of past-due exposures (EU CR1-D)

| Net value, 31 Dec. 2018, EUR million | Gross carrying values | | | | | f > 1 year |
|--------------------------------------|-----------------------|-----------------------------|-----------------------------|------------------------------|-----------------------------|---------------|
| | a ≤ 30 days | b > 30 days ≤ 60 days | c > 60 days ≤ 90 days | d > 90 days ≤ 180 days | e > 180 days ≤ 1 year | |
| 1 Loans | 302 | 177 | 79 | 159 | 162 | 453 |
| 2 Debt securities | | | | | | |
| 3 Total exposures | 302 | 177 | 79 | 159 | 162 | 453 |

Total past due exposures were low, accounting for 1% of exposures.

2.9 Non-performing and forborne exposures (EU CR1-E)

| Net value, 31 Dec. 2018, EUR million | Debt securities | Loans and advances | Off-balance-sheet exposures |
|---|-----------------|--------------------|-----------------------------|
| Gross carrying values of performing and non-performing exposures | 11 385 | 91 912 | 24 004 |
| Of which performing but past due > 30 days and <= 90 days | | 154 | |
| Of which performing forborne | | 2 565 | |
| Of which non-performing | | 1 407 | 71 |
| Of which defaulted | | 1 118 | 63 |
| Of which impaired | | 1 129 | |
| Of which forborne | | 426 | |
| Accumulated impairment and provisions and negative fair value adjustments due to credit risk | | | |
| On performing exposures | -3 | -98 | -5 |
| Of which forborne | | -9 | |
| On non-performing exposures | | -429 | |
| Of which forborne | | -67 | |
| Collaterals and financial guarantees received | | | |
| On non-performing exposures | 57 | 734 | 5 |
| Of which forborne exposures | | 2 360 | |

Forborne exposures increased slightly during the year.

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

| Net value, 31 Dec. 2018, EUR million | a Accumulated specific credit risk adjustment |
|--|--|
| 1 Opening balance 31 Dec 2017 | 499 |
| 2 Increases due to amounts set aside for estimated loan losses during the period | 73 |
| 3 Decreases due to amounts reversed for estimated loan losses during the period | -12 |
| 4 Decreases due to amounts taken against accumulated credit risk adjustments | -15 |
| 9 Closing balance 31 Dec 2018 | 545 |

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.

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

| Net value, 31 Dec. 2018, EUR million | a Gross carrying value defaulted exposures |
|---|---|
| 1 Opening balance 30 June 2018 | 1 182 |
| 2 Loans and debt securities that have defaulted or impaired since the last reporting period | 256 |
| 3 Returned to non-defaulted status | -84 |
| 4 Amounts written off | -37 |
| 5 Other changes | -108 |
| 6 Closing balance 31 Dec 2018 | 1 209 |

Defaulted loans decreased slightly especially in corporate customers.

2.12 CRM techniques – Overview (EU CR3)

| Net value, 31 Dec. 2018, 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 | 30 737 | 60 668 | 55 375 | 5 293 | |
| 2 Total debt securities | 4 414 | 6 970 | 6 118 | 852 | |
| 3 Total exposures | 69 465 | 69 750 | 63 205 | 6 545 | |
| 4 Of which defaulted | 347 | 461 | 415 | 46 | |

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.

2.13 Collateral used in capital adequacy calculation

| Net value, 31 Dec. 2018, EUR million | Exposure | Guarantees | Financial collateral | Other collateral |
|--|----------------|--------------|----------------------|------------------|
| Standardised Approach | 26 669 | 176 | 11 | 58 |
| Exposures to central government and central banks | 14 614 | | 2 | |
| Exposures to regional government or local authorities | 3 927 | | | |
| Exposures to public sector entities | 352 | 176 | 8 | |
| Exposures to multilateral development banks | 630 | | | |
| Exposures to international organisations | 386 | | | |
| Exposures to institutions | 317 | | | |
| Exposures to corporates | 2 863 | | 0 | |
| Retail exposures | 3 471 | | | |
| Exposures secured by mortgages on immovable property | 58 | | | 58 |
| Exposures in default | 15 | | | |
| Exposures in the form of units or shares in collective investment undertakings (CIU) | 0 | | | |
| Equity exposures | 12 | | | |
| Other items | 24 | | | |
| Internal Ratings-based Approach | 115 762 | 6 314 | 766 | 49 002 |
| Exposures to institutions | 8 056 | 202 | 269 | |
| Exposures to corporates | 47 707 | 3 114 | 334 | 3 255 |
| Retail exposures | 55 793 | 2 998 | 163 | 45 747 |
| Exposures secured by mortgages on immovable property | 47 265 | 835 | 90 | 44 522 |
| Other retail exposures | 8 528 | 2 163 | 72 | 1 225 |
| Equity investments | 2 406 | | | |
| PD/LGD method | 2 312 | | | |
| Simple Risk Weight Approach | 94 | | | |
| Items representing securitisation positions | 613 | | | |
| Other non-credit obligations | 1 188 | | | |
| Total | 142 432 | 6 489 | 776 | 49 059 |

The table contains information on both credit risk and counterparty risk, i.e. the information does not match with the amounts of net exposures presented in other tables. The amount of immovable property collateral securities is not comparable with that previously reported due to change in reporting. The amount of guarantees has decreased from the end of 2017.

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

| Exposure classes, EUR million | a | | b | | c | | d | | e | | f | |
|--|-------------------------|--------------------------|-------------------------|--------------------------|-------------------------|--------------------------|-------------------------|--------------------------|------|-----------------|------|-----------------|
| | On-balance-sheet amount | Off-balance-sheet amount | On-balance-sheet amount | Off-balance-sheet amount | On-balance-sheet amount | Off-balance-sheet amount | On-balance-sheet amount | Off-balance-sheet amount | RWAs | RWA density (%) | RWAs | RWA density (%) |
| 1 Central governments or central banks | 14 000 | 334 | 15 800 | 89 | 261 | 1,6 | | | | | | |
| 2 Regional government or local authorities | 2 715 | 1 000 | 3 547 | 277 | | | | | | | | |
| 3 Public sector entities | 247 | 104 | 70 | 51 | 32 | 26,5 | | | | | | |
| 4 Multilateral development banks | 529 | | 630 | 18 | 0 | 0,0 | | | | | | |
| 5 International organisations | 386 | | 386 | | | | | | | | | |
| 6 Institutions | 20 | 0 | 20 | 0 | 1 | 3,2 | | | | | | |
| 7 Corporates | 2 230 | 632 | 2 230 | 316 | 2 533 | 99,5 | | | | | | |
| 8 Retail | 1 284 | 2 187 | 1 284 | 0 | 961 | 74,8 | | | | | | |
| 9 Secured by mortgages on immovable property | 58 | | 58 | | 29 | 49,7 | | | | | | |
| 10 Exposures in default | 15 | 0 | 15 | | 19 | 127,5 | | | | | | |
| 14 Collective investment undertakings | 0 | | 0 | | 0 | 100,0 | | | | | | |
| 15 Equity | 12 | | 12 | | 12 | 100,0 | | | | | | |
| 16 Other items | 24 | | 24 | | 24 | 99,6 | | | | | | |
| 17 Total | 21 520 | 4 258 | 24 076 | 751 | 3 871 | 15,6 | | | | | | |

The exposure amount and RWAs under the Standardised Approach decreased slightly during the year. Central government exposures include deferred tax assets which have not been deducted from the Group's own funds; these are treated with a risk weight of 250%. Deferred tax assets were previously presented in Other items.

2.15 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 | 15 785 | | | | | | | 104 | | 15 889 | 104 |
| 2 Regional government or local authorities | 3 824 | | | | | | | | | 3 824 | 956 |
| 3 Public sector entities | | 111 | | | | 10 | | | | 121 | |
| 4 Multilateral development banks | 647 | | | | | 0 | | | | 647 | 647 |
| 5 International organisations | 386 | | | | | | | | | 386 | 386 |
| 6 Institutions | 17 | 3 | | | | | | | | 21 | 21 |
| 7 Corporates | | | | | | 2 546 | | | | 2 546 | |
| 8 Retail | | | | | 1 284 | | | | | 1 284 | 1 284 |
| 9 Secured by mortgages on immovable property | | | 1 | 56 | | | | | | 58 | 58 |
| 10 Exposures in default | | | | | | 7 | 8 | | | 15 | 15 |
| 14 Collective investment undertakings | | | | | | 0 | | | | 0 | 0 |
| 15 Equity | | | | | | 12 | | | | 12 | 12 |
| 16 Other items | 0 | | | | | 24 | | | | 24 | 24 |
| 17 Total | 20 660 | 114 | 1 | 56 | 1 284 | 2 599 | 8 | 104 | 0 | 24 827 | 3 507 |

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.

2.16 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.

| PD scale | a Original on-balance-sheet gross exposures | b Off-balance-sheet exposures pre-CCF | c Average CCF | d EAD post CRM and post CCF | e Average PD | f Number of obligors | g Average LGD | h Average maturity | i RWAs | j RWA density | k EL | l Impairments and value adjustments |
|------------------|--|--|------------------|--------------------------------|-----------------|-------------------------|------------------|-----------------------|--------------|------------------|------------|--|
| Retail | | | | | | | | | | | | |
| 0,00 - < 0,15 | 42 973 | 3 131 | 53,3 % | 41 489 | 0,0 % | 593 680 | 15,9 % | 14 | 928 | 2,2 % | 3 | |
| 0,15 - < 0,25 | 2 368 | 116 | 66,7 % | 2 325 | 0,2 % | 76 959 | 15,8 % | 14 | 167 | 7,2 % | 1 | |
| 0,25 - < 0,50 | 3 628 | 175 | 64,7 % | 3 557 | 0,4 % | 141 111 | 23,0 % | 11 | 535 | 15,0 % | 3 | |
| 0,50 - < 0,75 | 1 047 | 27 | 57,2 % | 1 034 | 0,7 % | 53 018 | 23,9 % | 10 | 242 | 23,4 % | 2 | |
| 0,75 - < 2,50 | 2 411 | 147 | 67,4 % | 2 352 | 1,4 % | 88 971 | 29,2 % | 9 | 812 | 34,5 % | 10 | |
| 2,50 - < 10,00 | 1 797 | 85 | 68,5 % | 1 760 | 5,7 % | 71 111 | 29,1 % | 9 | 1 073 | 61,0 % | 29 | |
| 10,00 - < 100,00 | 1 097 | 22 | 75,0 % | 1 090 | 25,8 % | 33 986 | 25,2 % | 10 | 1 068 | 98,0 % | 70 | |
| 100,00 | 471 | 5 | 1,5 % | 467 | 100,0 % | 12 172 | 27,9 % | 18 | 451 | 96,5 % | 113 | |
| Total | 55 792 | 3 709 | 55,0 % | 54 073 | 0,9 % | 1 071 008 | 17,8 % | 14 | 5 276 | 9,0 % | 230 | 106 |

The average risk parameters of retail exposures rose slightly from 2017-end levels.

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 | 38 734 | 791 | 54,5 % | 38 374 | 0,0 % | 453 719 | 14,1 % | 14,7 | 732 | 1,9 % | 3 | |
| 0,15 - < 0,25 | 1 786 | 24 | 53,7 % | 1 775 | 0,2 % | 23 215 | 14,8 % | 14,2 | 120 | 6,8 % | 1 | |
| 0,25 - < 0,50 | 2 346 | 67 | 62,2 % | 2 321 | 0,4 % | 38 152 | 14,3 % | 13,1 | 224 | 9,7 % | 1 | |
| 0,50 - < 0,75 | 654 | 5 | 57,1 % | 652 | 0,7 % | 10 555 | 14,4 % | 12,9 | 100 | 15,4 % | 1 | |
| 0,75 - < 2,50 | 1 454 | 69 | 66,6 % | 1 431 | 1,4 % | 25 529 | 16,0 % | 11,2 | 347 | 24,2 % | 3 | |
| 2,50 - < 10,00 | 1 120 | 31 | 67,8 % | 1 110 | 5,8 % | 17 165 | 16,8 % | 11,6 | 623 | 56,2 % | 11 | |
| 10,00 - < 100,00 | 806 | 10 | 74,7 % | 804 | 26,5 % | 10 321 | 16,3 % | 12,1 | 752 | 93,5 % | 35 | |
| 100,00 | 364 | 2 | 2,8 % | 362 | 100,0 % | 4 619 | 18,6 % | 16,6 | 404 | 111,6 % | 40 | |
| subtotal | 47 265 | 1 000 | 56,3 % | 46 828 | 0,7 % | 583 275 | 14,3 % | 14,4 | 3 302 | 6,2 % | 93 | 51 |
| Retail - Other | | | | | | | | | | | | |
| Retail - Other - Non-SMEs | | | | | | | | | | | | |
| 0,00 - < 0,15 | 4 238 | 2 339 | 52,9 % | 3 115 | 0,1 % | 198 042 | 38,2 % | 10,6 | 196 | 6,3 % | 1 | |
| 0,15 - < 0,25 | 581 | 91 | 70,6 % | 549 | 0,2 % | 54 940 | 18,7 % | 13,8 | 47 | 8,6 % | 0 | |
| 0,25 - < 0,50 | 1 015 | 79 | 65,7 % | 983 | 0,4 % | 102 363 | 35,8 % | 7,1 | 243 | 24,7 % | 1 | |
| 0,50 - < 0,75 | 393 | 22 | 57,3 % | 382 | 0,7 % | 43 100 | 40,1 % | 5,0 | 142 | 37,1 % | 1 | |
| 0,75 - < 2,50 | 440 | 22 | 67,5 % | 430 | 1,4 % | 54 683 | 36,1 % | 6,6 | 188 | 43,7 % | 2 | |
| 2,50 - < 10,00 | 398 | 14 | 78,4 % | 391 | 6,1 % | 48 365 | 37,4 % | 6,1 | 236 | 60,4 % | 9 | |
| 10,00 - < 100,00 | 211 | 2 | 71,1 % | 210 | 24,4 % | 22 470 | 40,0 % | 5,8 | 208 | 99,0 % | 20 | |
| 100,00 | 76 | 0 | 0,0 % | 76 | 100,0 % | 5 196 | 48,7 % | 21,5 | 10 | 12,5 % | 46 | |
| subtotal | 7 352 | 2 570 | 54,0 % | 6 137 | 1,5 % | 529 159 | 36,2 % | 9,4 | 1 269 | 20,8 % | 81 | 43 |
| Retail - Other - SMEs | | | | | | | | | | | | |
| 0,00 - < 0,15 | 0 | 0 | 66,0 % | 0 | 0,0 % | 16 | 65,9 % | 0,8 | 0 | 5,3 % | 0 | |
| 0,15 - < 0,25 | 1 | 0 | 53,5 % | 1 | 0,2 % | 33 | 109,0 % | 5,8 | 0 | 33,7 % | 0 | |
| 0,25 - < 0,50 | 267 | 29 | 70,8 % | 253 | 0,4 % | 3 299 | 52,5 % | 3,8 | 68 | 26,9 % | 1 | |
| 0,50 - < 0,75 | | | | | | | | | | | | |
| 0,75 - < 2,50 | 516 | 57 | 68,7 % | 490 | 1,4 % | 11 848 | 61,7 % | 4,1 | 277 | 56,6 % | 4 | |
| 2,50 - < 10,00 | 280 | 41 | 65,9 % | 259 | 4,9 % | 8 190 | 69,4 % | 4,3 | 214 | 82,5 % | 9 | |
| 10,00 - < 100,00 | 81 | 10 | 76,4 % | 77 | 22,9 % | 3 163 | 78,5 % | 4,6 | 109 | 141,9 % | 15 | |
| 100,00 | 31 | 2 | 0,1 % | 29 | 100,0 % | 3 112 | 90,3 % | 20,4 | 37 | 127,7 % | 27 | |
| subtotal | 1 175 | 139 | 67,5 % | 1 108 | 3,5 % | 29 661 | 63,3 % | 4,5 | 704 | 61,9 % | 56 | 12 |
| Total | 55 792 | 3 709 | 52,9 % | 54 073 | 0,8 % | 1 142 095 | 17,7 % | 13,5 | 5 276 | 8,6 % | 230 | 106 |

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 year. 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.

| PD scale | a | b | c | d | e | f | g | h | i | j | k | l |
|-------------------|---|-------------------------------------|---------------|---------------------------|--------------|--------------------|---------------|------------------|---------------|---------------|----|-----------------------------------|
| | 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 | 10 785 | 4 270 | 71,0 % | 8 577 | 0,1 % | 540 | 44,1 % | 4,1 | 2 049 | 23,9 % | | 3 |
| 0,15 - < 0,25 | 5 034 | 2 129 | 67,9 % | 3 816 | 0,2 % | 590 | 44,5 % | 5,9 | 1 650 | 43,2 % | | 3 |
| 0,25 - < 0,50 | 10 166 | 3 363 | 64,2 % | 8 454 | 0,4 % | 8 618 | 43,3 % | 10,1 | 4 447 | 52,6 % | | 14 |
| 0,50 - < 0,75 | | | | | | | | | | | | |
| 0,75 - < 2,50 | 10 944 | 3 383 | 62,0 % | 9 052 | 1,3 % | 9 084 | 43,0 % | 9,0 | 7 935 | 87,7 % | | 51 |
| 2,50 - < 10,00 | 8 570 | 1 797 | 61,2 % | 4 623 | 4,5 % | 8 537 | 43,0 % | 8,1 | 5 601 | 121,1 % | | 90 |
| 10,00 - < 100,00 | 940 | 290 | 61,2 % | 789 | 20,0 % | 1 428 | 43,4 % | 7,9 | 1 511 | 191,6 % | | 69 |
| 100,00 | 716 | 58 | 51,3 % | 679 | 100,0 % | 919 | 44,1 % | 18,0 | 0 | 0,0 % | | 301 |
| Total | 47 155 | 15 291 | 65,4 % | 35 991 | 1,5 % | 29 716 | 43,5 % | 7,8 | 23 194 | 65,7 % | | 531 |

The average risk weight 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.

| PD scale | a | b | c | d | e | f | g | h | i | j | k | l |
|---------------------------|---|-------------------------------------|---------------|---------------------------|--------------|--------------------|---------------|------------------|---------------|---------------|----|-----------------------------------|
| | 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 | 9 111 | 3 660 | 71,2 % | 7 280 | 0,1 % | 334 | 44,0 % | 4,3 | 1 783 | 24,5 % | | 2 |
| 0,15 - < 0,25 | 4 524 | 1 886 | 69,1 % | 3 420 | 0,2 % | 167 | 44,5 % | 4,6 | 1 508 | 44,1 % | | 3 |
| 0,25 - < 0,50 | 5 177 | 2 447 | 72,4 % | 3 978 | 0,4 % | 1 287 | 44,0 % | 5,9 | 2 502 | 62,9 % | | 7 |
| 0,50 - < 0,75 | | | | | | | | | | | | |
| 0,75 - < 2,50 | 5 995 | 2 392 | 64,1 % | 4 677 | 1,4 % | 1 683 | 43,2 % | 7,4 | 4 816 | 103,0 % | | 27 |
| 2,50 - < 10,00 | 4 086 | 1 098 | 59,3 % | 1 918 | 4,4 % | 1 546 | 43,5 % | 7,9 | 2 832 | 147,7 % | | 37 |
| 10,00 - < 100,00 | 540 | 249 | 63,6 % | 411 | 16,5 % | 187 | 44,3 % | 7,1 | 935 | 227,3 % | | 30 |
| 100,00 | 417 | 45 | 52,9 % | 388 | 100,0 % | 170 | 44,5 % | 17,2 | | | | 173 |
| subtotal | 29 850 | 11 778 | 68,3 % | 22 072 | 1,1 % | 5 374 | 43,9 % | 5,9 | 14 377 | 65,1 % | | 279 |
| Corporates - SMEs | | | | | | | | | | | | |
| 0,00 - < 0,15 | 1 674 | 610 | 68,2 % | 1 297 | 0,1 % | 206 | 44,6 % | 3,1 | 266 | 20,5 % | | 0 |
| 0,15 - < 0,25 | 510 | 243 | 61,8 % | 397 | 0,2 % | 423 | 44,2 % | 17,9 | 142 | 35,9 % | | 0 |
| 0,25 - < 0,50 | 4 990 | 916 | 47,0 % | 4 476 | 0,4 % | 7 333 | 42,6 % | 13,7 | 1 945 | 43,5 % | | 7 |
| 0,50 - < 0,75 | | | | | | | | | | | | |
| 0,75 - < 2,50 | 4 949 | 992 | 57,3 % | 4 375 | 1,3 % | 7 403 | 42,7 % | 10,8 | 3 119 | 71,3 % | | 24 |
| 2,50 - < 10,00 | 4 484 | 698 | 63,5 % | 2 706 | 4,5 % | 6 992 | 42,6 % | 8,2 | 2 769 | 102,3 % | | 53 |
| 10 - < 100 | 400 | 41 | 49,4 % | 378 | 23,8 % | 1 241 | 42,5 % | 8,8 | 577 | 152,7 % | | 39 |
| 100 | 298 | 13 | 47,4 % | 291 | 100,0 % | 749 | 43,5 % | 19,1 | | | | 128 |
| subtotal | 17 304 | 3 514 | 56,5 % | 13 919 | 2,1 % | 24 347 | 42,9 % | 10,8 | 8 818 | 63,4 % | | 251 |
| Total | 47 155 | 15 291 | 65,4 % | 35 991 | 1,5 % | 29 721 | 43,5 % | 7,8 | 23 194 | 64,4 % | | 531 |

| PD scale | a | b | c | d | e | f | g | h | i | j | k | l |
|---------------------|---|-------------------------------------|---------------|---------------------------|--------------|--------------------|---------------|------------------|------------|---------------|----|-----------------------------------|
| | 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 | 6 261 | 477 | 70,2 % | 6 128 | 0,0 % | 160 | 14,4 % | 4,8 | 503 | 8,2 % | | 0 |
| 0,15 - < 0,25 | 491 | 68 | 69,6 % | 472 | 0,2 % | 24 | 14,7 % | 3,4 | 83 | 17,5 % | | 0 |
| 0,25 - < 0,50 | 235 | 73 | 52,4 % | 200 | 0,4 % | 42 | 19,2 % | 6,0 | 74 | 37,0 % | | 0 |
| 0,50 - < 0,75 | 278 | 64 | 61,3 % | 60 | 0,7 % | 49 | 45,0 % | 1,9 | 65 | 107,9 % | | 0 |
| 0,75 - < 2,50 | 38 | 20 | 26,5 % | 24 | 1,3 % | 21 | 45,0 % | 4,8 | 31 | 131,3 % | | 0 |
| 2,50 - < 10,00 | 98 | 38 | 44,8 % | 79 | 4,4 % | 47 | 45,0 % | 1,6 | 144 | 181,0 % | | 2 |
| 10,00 - < 100,00 | 5 | 3 | 37,0 % | 3 | 11,5 % | 11 | 45,0 % | 0,3 | 6 | 246,1 % | | 0 |
| Total | 7 407 | 743 | 65,0 % | 6 965 | 0,1 % | 354 | 15,3 % | 4,7 | 906 | 13,0 % | | 1 |

The average risk weights of credit institution exposures increased 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.

2.17 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 | 80 | | 190 % | 80 | 152 | 12 |
| Exchange-traded equity exposures | | | 290 % | | | |
| Other equity exposures | 14 | | 370 % | 14 | 52 | 4 |
| Total | 94 | | | 94 | 205 | 16 |

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 | 2 312 | | | 2 312 | 1,3 | 4 | 90,0 | 21,5 | 6 454 | 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.

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

| 31 Dec. 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.

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

| EUR million | a | b |
|--|-------------|----------------------|
| | RWA amounts | Capital requirements |
| 1 RWAs as at the end of the previous reporting period 30 Sept 2018 | 28 842 | 2 307 |
| 2 Asset size | 423 | 34 |
| 3 Asset quality | 111 | 9 |
| 9 RWAs as at the end of the reporting period 31 Dec 2018 | 29 376 | 2 350 |

Changes occurred in retail exposures, corporate exposures and credit institution exposures during the last 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.

2.20 IRB approach – Backtesting of PD per exposure class (EU CR9)

The following tables compare the probability of default (PD) applied in capital adequacy measurement with the actual historical average default. The calculation of the weighted average PD has not taken account of defaulted exposures (PD = 100%).

| a Exposure class | b PD Range | d Weighted average PD | e Arithmetic average PD by obligors | f Number of obligors | | g Defaulted obligors in the year | h Of which new obligors | i Average historical annual default rate |
|---------------------|-----------------|--------------------------|--|-------------------------|------------------|-------------------------------------|----------------------------|---|
| | | | | End of previous year | End of the year | | | |
| Retail | 0,00 -< 0,15 | 0,0 % | 0,1 % | 570 880 | 593 680 | | | |
| | 0,15 -< 0,25 | 0,2 % | 0,2 % | 75 395 | 76 959 | | | |
| | 0,25 -< 0,50 | 0,4 % | 0,4 % | 133 226 | 141 111 | | | |
| | 0,50 -< 0,75 | 0,7 % | 0,7 % | 51 523 | 53 018 | | | |
| | 0,75 -< 2,50 | 1,4 % | 1,4 % | 84 402 | 88 971 | | | |
| | 2,50 -< 10,00 | 5,7 % | 5,8 % | 61 947 | 71 111 | | | |
| | 10,00 -< 100,00 | 25,8 % | 24,4 % | 33 184 | 33 986 | | | |
| | 100,00 | 100,0 % | 100,0 % | 10 717 | 12 172 | 7 799 | 673 | |
| | Total | | 0,9 % | 1,4 % | 1 021 274 | 1 071 008 | 7 799 | 673 |

| a Exposure class | b PD Range | d Weighted average PD | e Arithmetic average PD by obligors | f Number of obligors | | g Defaulted obligors in the year | h Of which new obligors | i Average historical annual default rate |
|---|-----------------|--------------------------|--|-------------------------|-----------------|-------------------------------------|----------------------------|---|
| | | | | End of previous year | End of the year | | | |
| Retail - Secured by real estate property | 0,00 -< 0,15 | 0,0 % | 0,0 % | 444 812 | 453 719 | | | |
| | 0,15 -< 0,25 | 0,2 % | 0,2 % | 25 234 | 23 215 | | | |
| | 0,25 -< 0,50 | 0,4 % | 0,4 % | 38 759 | 38 152 | | | |
| | 0,50 -< 0,75 | 0,7 % | 0,7 % | 11 064 | 10 555 | | | |
| | 0,75 -< 2,50 | 1,4 % | 1,4 % | 24 813 | 25 529 | | | |
| | 2,50 -< 10,00 | 5,8 % | 5,7 % | 16 517 | 17 165 | | | |
| | 10,00 -< 100,00 | 26,5 % | 25,9 % | 9 823 | 10 321 | | | |
| | 100,00 | 100,0 % | 100,0 % | 4 336 | 4 619 | 3 087 | 14 | |
| | Total | | 0,7 % | 0,7 % | 575 358 | 583 275 | 3 087 | 14 |
| Retail - Other - Non-SMEs | 0,00 -< 0,15 | 0,1 % | 0,1 % | 179 244 | 198 042 | | | |
| | 0,15 -< 0,25 | 0,2 % | 0,2 % | 51 635 | 54 940 | | | |
| | 0,25 -< 0,50 | 0,4 % | 0,4 % | 94 169 | 102 363 | | | |
| | 0,50 -< 0,75 | 0,7 % | 0,7 % | 41 112 | 43 100 | | | |
| | 0,75 -< 2,50 | 1,4 % | 1,4 % | 51 637 | 54 683 | | | |
| | 2,50 -< 10,00 | 6,1 % | 6,0 % | 41 192 | 48 365 | | | |
| | 10,00 -< 100,00 | 24,4 % | 24,3 % | 22 289 | 22 470 | | | |
| | 100,00 | 100,0 % | 100,0 % | 4 314 | 5 196 | 3 665 | 191 | |
| | Total | | 1,5 % | 1,9 % | 485 592 | 529 159 | 3 665 | 191 |
| Retail - Other - SMEs | 0,00 -< 0,15 | 0,0 % | 0,0 % | | 16 | | | |
| | 0,15 -< 0,25 | 0,2 % | 0,2 % | 26 | 33 | | | |
| | 0,25 -< 0,50 | 0,4 % | 0,4 % | 2 885 | 3 299 | | | |
| | 0,50 -< 0,75 | | | | | | | |
| | 0,75 -< 2,50 | 1,4 % | 1,4 % | 10 708 | 11 848 | | | |
| | 2,50 -< 10,00 | 4,9 % | 5,2 % | 6 660 | 8 190 | | | |
| | 10,00 -< 100,00 | 22,9 % | 21,4 % | 2 836 | 3 163 | | | |
| | 100,00 | 100,0 % | 100,0 % | 2 788 | 3 112 | 1 047 | 468 | |
| | Total | | 3,5 % | 4,8 % | 25 903 | 29 661 | 1 047 | 468 |

In calculating the historical default rate, the Group has used five years as the average in other exposure classes but three years in exposures secured by real estate property. The classification scale of retail exposures has not been linked to external credit ratings.

| a Exposure class | b PD Range | c External rating equivalent | d Weighted average PD | e Arithmetic average PD by obligors | f Number of obligors | | g Defaulted obligors in the year | h Of which new obligors | i Average historical annual default rate |
|---------------------|-----------------|---------------------------------|--------------------------|--|-------------------------|-----------------|-------------------------------------|----------------------------|---|
| | | | | | End of previous year | End of the year | | | |
| Corporates | 0,00 -< 0,15 | AAA...BBB+ | 0,1 % | 0,1 % | 583 | 540 | | | |
| | 0,15 -< 0,25 | BBB | 0,2 % | 0,2 % | 607 | 590 | | | |
| | 0,25 -< 0,50 | BBB...BB+ | 0,4 % | 0,4 % | 8 427 | 8 618 | | | |
| | 0,50 -< 0,75 | BB+ | | | | | | | |
| | 0,75 -< 2,50 | BB...BB- | 1,3 % | 1,4 % | 8 712 | 9 084 | | | |
| | 2,50 -< 10,00 | B+...B | 4,5 % | 3,2 % | 8 574 | 8 537 | | | |
| | 10,00 -< 100,00 | B-...C | 20,0 % | 22,8 % | 1 486 | 1 428 | | | |
| | 100,00 | D | 100,0 % | 100,0 % | 1 131 | 919 | 223 | 10 | |
| | Total | | 1,5 % | 2,6 % | 29 520 | 29 716 | 223 | 10 | 1,0 % |

| a Exposure class | b PD Range | c External rating equivalent | d Weighted average PD | e Arithmetic average PD by obligors | f Number of obligors | | g Defaulted obligors in the year | h Of which new obligors | i Average historical annual default rate |
|---------------------------|-----------------|---------------------------------|--------------------------|--|-------------------------|-----------------|-------------------------------------|----------------------------|---|
| | | | | | End of previous year | End of the year | | | |
| Corporates - Other | 0,00 -< 0,15 | AAA...BBB+ | 0,1 % | 0,1 % | 329 | 334 | | | |
| | 0,15 -< 0,25 | BBB+...BBB | 0,2 % | 0,2 % | 142 | 167 | | | |
| | 0,25 -< 0,50 | BBB...BB+ | 0,4 % | 0,4 % | 1 172 | 1 287 | | | |
| | 0,50 -< 0,75 | BB+...BB | | | | | | | |
| | 0,75 -< 2,50 | BB...BB- | 1,4 % | 1,4 % | 1 487 | 1 683 | | | |
| | 2,50 -< 10,00 | BB-...B | 4,4 % | 3,0 % | 1 552 | 1 546 | | | |
| | 10,00 -< 100,00 | B...C | 16,5 % | 20,4 % | 159 | 187 | | | |
| | 100,00 | D | 100,0 % | 100,0 % | 173 | 170 | 45 | 7 | |
| | Total | | 1,1 % | 2,2 % | 5 014 | 5 374 | 45 | 7 | 0,7 % |
| Corporates - SMEs | 0,00 -< 0,15 | AAA...BBB+ | 0,1 % | 0,1 % | 254 | 206 | | | |
| | 0,15 -< 0,25 | BBB+...BBB | 0,2 % | 0,2 % | 465 | 423 | | | |
| | 0,25 -< 0,50 | BBB...BB+ | 0,4 % | 0,4 % | 7 255 | 7 333 | | | |
| | 0,50 -< 0,75 | BB+...BB | | | | | | | |
| | 0,75 -< 2,50 | BB...BB- | 1,3 % | 1,4 % | 7 225 | 7 403 | | | |
| | 2,50 -< 10,00 | BB-...B | 4,5 % | 3,2 % | 7 022 | 6 992 | | | |
| | 10,00 -< 100,00 | B...C | 23,8 % | 23,2 % | 1 327 | 1 241 | | | |
| | 100,00 | D | 100,0 % | 100,0 % | 958 | 749 | 178 | 3 | |
| | Total | | 2,1 % | 2,7 % | 24 506 | 24 347 | 178 | 3 | 1,6 % |

In the calculation of the historical default rate, the Group has used five years as the average. In corporate exposures, the average PD is around 50% higher than the average historical default rate. The external credit rating equivalent has been presented according to the credit rating by Standard & Poor's.

| a Exposure class | b PD Range | c External rating equivalent | d Weighted average PD | e Arithmetic average PD by obligors | f Number of obligors | | g Defaulted obligors in the year | h Of which new obligors | i Average historical annual default rate |
|---------------------|-----------------|---------------------------------|--------------------------|--|-------------------------|-----------------|-------------------------------------|----------------------------|---|
| | | | | | End of previous year | End of the year | | | |
| Institutions | 0,00 -< 0,15 | AAA...A | 0,0 % | 0,1 % | 169 | 160 | | | |
| | 0,15 -< 0,25 | A- | 0,2 % | 0,2 % | 27 | 24 | | | |
| | 0,25 -< 0,50 | BBB+...BBB- | 0,4 % | 0,4 % | 45 | 42 | | | |
| | 0,50 -< 0,75 | BB+ | 0,7 % | 0,5 % | 36 | 49 | | | |
| | 0,75 -< 2,50 | BB+...BB | 1,3 % | 1,6 % | 37 | 21 | | | |
| | 2,50 -< 10,00 | BB-...B- | 4,4 % | 5,3 % | 45 | 47 | | | |
| | 10,00 -< 100,00 | CCC+...CC | 11,5 % | 15,3 % | 8 | 11 | | | |
| | 100,00 | D | | | | | | | |
| | Total | | 0,1 % | 1,4 % | 367 | 354 | | | 0,0 % |

In the calculation of the historical default rate, the Group has used five years as the average. In credit institution exposures, the average PD is considerably higher than the average historical default rate. The Group applies the definition of default on a customer-specific basis to credit institution exposures. The external credit rating equivalent has been presented according to the credit rating by Standard & Poor's.

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.

If S&P had downgraded OP Financial Group's credit rating from AA- to A on 31 December 2018, an additional collateral worth EUR 59 million would have been required. If the credit rating had been downgraded in 2017, additional collateral of EUR 7 million would have been required.

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 |
| Net value, 31 Dec. 2018, EUR million | | | | |
| 1 Mark to market | 1 236 | 856 | 2 090 | 463 |

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

3.2 CVA capital charge (EU CCR2)

| | a | b |
|---|----------------|------|
| | Exposure value | RWAs |
| Net value, 31 Dec. 2018, EUR million | | |
| 4 All portfolios subject to the standardised method | 400 | 175 |
| 5 Total subject to the CVA capital charge | 400 | 175 |

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 | 278 | | | | | 278 | |
| 2 Regional government or local authorities | 212 | | | | | 212 | |
| 3 Public sector entities | | | | 1 | | 1 | 1 |
| 4 Multilateral development banks | 102 | | | | | 102 | 102 |
| 6 Institutions | | 298 | | | | 298 | |
| 11 Total | 591 | 298 | | 1 | | 889 | 102 |

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 |
| Corporates | | | | | | | |
| 0,00 - < 0,15 | 249 | 0,1 % | 115 | 44,7 % | 10,1 | 55 | 22,0 % |
| 0,15 - < 0,25 | 111 | 0,2 % | 36 | 45,0 % | 12,8 | 49 | 44,5 % |
| 0,25 - < 0,50 | 79 | 0,4 % | 73 | 44,9 % | 8,0 | 48 | 60,5 % |
| 0,75 - < 2,50 | 84 | 1,2 % | 125 | 45,0 % | 11,4 | 82 | 97,4 % |
| 2,50 - < 10,00 | 19 | 4,3 % | 76 | 45,0 % | 4,1 | 26 | 139,3 % |
| 10,00 - < 100,00 | 8 | 12,7 % | 4 | 45,0 % | 5,5 | 19 | 222,4 % |
| 100,00 | 1 | 100,0 % | 1 | 45,0 % | 9,2 | | |
| Total | 552 | 0,9 % | 430 | 44,8 % | 10,3 | 279 | 50,6 % |

| | 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 | 478 | 0,1 % | 35 | 19,8 % | 6,2 | 74 | 15,5 % |
| 0,15 - < 0,25 | 37 | 0,2 % | 12 | 18,1 % | 5,0 | 12 | 32,4 % |
| 0,25 - < 0,50 | 129 | 0,4 % | 8 | 32,4 % | 10,4 | 82 | 63,7 % |
| 0,50 - < 0,75 | 5 | 0,7 % | 1 | 45,0 % | 2,6 | 9 | 167,5 % |
| Total | 649 | 0,1 % | 56 | 22,4 % | 7,0 | 177 | 27,3 % |

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 |
|--------------------------------------|---------------------------|------------------|--------------------------------|-----------------|---------------------|
| Net value, 31 Dec. 2018, EUR million | Gross positive fair value | Netting benefits | Netted current credit exposure | Collateral held | Net credit exposure |
| 1 Derivatives | 3 911 | 1 331 | 2 580 | 490 | 2 090 |
| 4 Total | 3 911 | 1 331 | 2 580 | 490 | 2 090 |

The gross positive fair value of derivatives and netting benefits are not comparable due to change in reporting. The amount of collateral increased. Net exposure amounts were at the 2017-end level.

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

| | a | b | c | d |
|--------------------------------------|--|--------------|---------------------------------|--------------|
| Net value, 31 Dec. 2018, EUR million | Collateral used in derivative transactions | | | |
| | Fair value of collateral received | | Fair value of posted collateral | |
| | Segregated | Unsegregated | Segregated | Unsegregated |
| 1 Cash | | 490 | 1 | 458 |
| 2 Sovereign debt | | | 174 | 244 |

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 |
|--------------------------------------|--------------------------|-----------------|--------------------------|
| Net value, 31 Dec. 2018, EUR million | Credit derivative hedges | | |
| | Protection bought | Protection sold | Other credit derivatives |
| Notionals | | | |
| Index credit default swaps | | | 118 |
| Other credit derivatives | | | 90 |
| Total notionals | | | 209 |
| Fair values | | | |
| Positive fair value (asset) | | | 6 |
| Negative fair value (liability) | | | -3 |

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

3.8 Exposures to CCPs (EU CCR8)

| Net value, 31 Dec. 2018, EUR million | a EAD post CRM | b RWAs |
|---|-------------------|-----------|
| 1 Exposures to QCCPs (total) | 298 | 6 |
| 2 Exposures for trades at QCCPs (excluding initial margin and default fund contributions); of which | 298 | 6 |
| 3 (i) OTC derivatives | 298 | 6 |
| 7 Segregated initial margin | 175 | |

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

3.9 Market risk under the standardised approach (EU MR1)

| Net value, 31 Dec. 2018, EUR million | a RWAs | b Capital requirements |
|---|--------------|---------------------------|
| Outright products | | |
| 1 Interest rate risk (general and specific) | 1 041 | 83 |
| 2 Equity risk (general and specific) | 0 | 0 |
| 4 Commodity risk | 11 | 1 |
| Options | | |
| 6 Delta-plus method | 268 | 21 |
| 9 Total | 1 319 | 106 |

The general risk increased slightly during the year. 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 Securitisation positions

4.1 Securitisation positions

| Securitisation positions by rating category, Moody's equivalent, EUR million | 2018 | | 2017 | |
|--|------------|----------------------|------------|----------------------|
| | Exposure | Risk-weighted assets | Exposure | Risk-weighted assets |
| Non-trading book positions | | | | |
| Securitisation positions | | | | |
| Aaa | | | 488 | 36 |
| A1-A3 | 613 | 46 | 21 | 3 |
| Baa1-Baa3 | | | 9 | 3 |
| Total | 613 | 46 | 518 | 42 |

OP Financial Group acts as an investor in the securitisation process and it has no resecured positions. Securitised positions did not include past due or impaired receivables.

The IRBA has been applied to securitisation positions. OP Financial Group pays special attention to bonds' structural and collateral-related features in its investment in securitised assets.

OP Financial Group follows regularly changes related to the credit and market risk of securitised loans.

5 Scope of application, capital base and countercyclical capital buffer

5.1 Differences between accounting and regulatory scopes of consolidation and the mapping of financial statement categories with regulatory risk categories (EU LI1)

| | a | b | c | d | e | f | g |
|---|---|---|--------------------------------------|------------------------------|---|--------------------------------------|--|
| | Carrying values as reported in financial statements | Carrying values under scope of regulatory consolidation | Subject to the credit risk framework | Subject to the CCR framework | Subject to the securitisation framework | Subject to the market risk framework | Not subject to capital requirements or subject to deduction from capital |
| 31 Dec 2018, EUR million | | | | | | | |
| Assets | | | | | | | |
| Cash and cash equivalents | 12 350 | 12 299 | 12 299 | | | | |
| Receivables from credit institutions | 183 | 181 | 181 | | | | |
| Derivative contracts | 3 482 | 3 365 | | 3 365 | | 2 916 | |
| Investment assets | 22 810 | 15 454 | 14 351 | | 613 | 489 | |
| Assets covering unit-linked contracts | 9 771 | | | | | | |
| Investments in associates | 237 | 75 | 51 | | | | |
| of which goodwill in associates | 24 | 24 | | | | | 24 |
| Intangible assets | 1 490 | 685 | | | | | 685 |
| Property, plant and equipment (PPE) | 737 | 665 | 665 | | | | |
| Other assets | 2 033 | 1 452 | 1 277 | 175 | | | |
| of which pension assets | 34 | 34 | | | | | 27 |
| Tax assets | 209 | 157 | 157 | | | | |
| Total assets | 140 382 | 121 484 | 116 131 | 3 541 | 613 | 3 405 | 710 |
| Liabilities | | | | | | | |
| Liabilities to credit institutions | 4 807 | 4 804 | | | | | 4 804 |
| Derivative contracts | 2 821 | 2 825 | | 2 825 | | | 2 825 |
| of which DVA | -26 | -26 | | | | | -21 |
| Liabilities to customers | 66 112 | 66 793 | | | | | 66 793 |
| Insurance liabilities | 9 476 | | | | | | |
| Debt securities issued to the public | 30 456 | 30 598 | | | | | 30 598 |
| Provisions and other liabilities | 2 785 | 2 318 | | | | | 2 318 |
| Tax liabilities | 921 | 735 | | | | | 735 |
| Subordinated liabilities | 1 358 | 1 385 | | | | | 1 385 |
| Total liabilities | 128 547 | 109 460 | | 2 825 | | | 109 460 |
| Equity capital | | | | | | | |
| Share of OP Financial Group's owners | | | | | | | |
| Cooperative capital | | | | | | | |
| Cooperative share | 199 | 199 | | | | | 199 |
| Profit share (Non-voting cooperative share) | 3 042 | 3 042 | | | | | 3 042 |
| Fair value reserve | 7 | 6 | | | | | 6 |
| of which cash flow hedge reserve | 33 | 33 | | | | | 33 |
| Other reserves | 2 183 | 2 134 | | | | | 2 134 |
| Retained earnings | 6 250 | 6 643 | | | | | 6 643 |
| Profit for previous financial years | 5 879 | 6 189 | | | | | 6 189 |
| Actuarial gains and losses | -415 | -412 | | | | | -412 |
| Profit for the financial year | 786 | 866 | | | | | 866 |
| Non-controlling interests | 154 | | | | | | |
| Total equity capital | 11 835 | 12 024 | | | | | 12 024 |
| Total liabilities and equity capital | 140 382 | 121 484 | | 2 825 | | | 121 484 |

The differences between the balance sheets of OP Financial Group and the consolidation group are due to differences in the content and extent of consolidation. Within the consolidation group, insurance companies have not been consolidated but are shown in investments made by the consolidation group and the insurance companies' equity capital is not included in the equity capital of the consolidation group. The consolidation group has applied the materiality threshold specified in Article 19 of CRR in the consolidation of its companies. Points 1.1 and 5.4 present items deducted from the capital base.

5.2 Main sources of differences between regulatory exposure amounts and carrying values in financial statements (EU LI2)

| | a | b | c | d | e |
|--|----------------|-----------------------|---------------|---|--------------|
| | Total | Credit risk framework | CCR framework | Items subject to Securitisation framework | Market risk |
| 31 Dec. 2018, € million | | | | | |
| 1 Assets carrying value amount under the scope of regulatory consolidation (as per template EU LI1) | 123 690 | 116 131 | 3 541 | 613 | 3 405 |
| 2 Liabilities carrying value amount under the regulatory scope of consolidation (as per template EU LI1) | | | | | |
| 4 Off-balance-sheet amounts | 24 004 | 9 734 | | | |
| 6 Differences due to different netting rules, other than those already included in row 2 | -1 451 | | -1 451 | | |
| 7 Differences due to consideration of provisions | 516 | 516 | | | |
| 8 Differences due to prudential filters | | | | | |
| 9 Other adjustments | -931 | -931 | | | |
| 10 Exposure amounts considered for regulatory purposes | 145 827 | 125 449 | 2 090 | 613 | 3 405 |

In capital adequacy regulation, it is possible to take account of netting on a more extensive basis than in accounting. Given that certain accounting items cannot be unambiguously divided into risk types, these items have been removed from calculation to avoid their overlapping treatment. Of off-balance-sheet items, contractual exposure amount has been presented in column a and in column b exposure amount after applying the credit conversion factor.

5.3 Outline of the differences in the scopes of consolidation (entity by entity) (EU LI3)

| Name of the entity | a Method of accounting consolidation | b Full consolidation | c Method of regulatory consolidation | | | d Neither consolidated nor deducted | e Supervisor's permission to risk weighting | f Description of the entity |
|--|---|-------------------------|---|--|---|--|---|--------------------------------|
| | | | Proportional consolidation | | | | | |
| OP Cooperative | Full consolidation | x | | | | | Entity assisting in financial intermediation | |
| OP-Services Ltd | Full consolidation | x | | | | | Activities serving financing | |
| OP Customer Services Ltd | Full consolidation | x | | | | | Activities serving financing | |
| OP Mortgage Bank | Full consolidation | x | | | | | Banking | |
| OP Custody Ltd | Full consolidation | x | | | | | Asset management | |
| OP-Card Company Plc | Full consolidation | x | | | | | Banking | |
| OP Fund Management Company Ltd | Full consolidation | x | | | | | Fund management company | |
| Helsinki Area Cooperative Bank | Full consolidation | x | | | | | Banking | |
| Checkout Finland Oy | Full consolidation | x | | | | | Activities serving financing | |
| OP Asset Management Ltd | Full consolidation | x | | | | | Asset management | |
| Pivo Wallet Oy | Full consolidation | x | | | | | Activities serving financing | |
| OP Life Assurance Company Ltd | Full consolidation | | | | x | x | Insurance business | |
| Helsingin OP-Kiinteistökeskus Oy | Full consolidation | | | | x | | Real estate agent services | |
| OP Asset Management Execution Services Oy | Full consolidation | | | | x | | Activities serving financing and investment | |
| PAM USA Funds Oy | Full consolidation | | | | x | | Activities serving financing and investment | |
| OP Property Management Ltd | Full consolidation | x | | | | | Real-estate investment operations | |
| Real Estate Fund Finland Oy | Full consolidation | | | | x | | Real-estate investment operations | |
| Real Estate Fund of Funds Finland Oy | Full consolidation | | | | x | | Real-estate investment operations | |
| Real Estate Fund Finland III GP Oy | Full consolidation | | | | x | | Real-estate investment operations | |
| Real Estate Debt And Secondaries GP Oy | Full consolidation | | | | x | | Real-estate investment operations | |
| OP Asuntorahasto I GP Oy | Full consolidation | | | | x | | Real-estate investment operations | |
| OP Toimitilakiinteistö GP Oy | Full consolidation | | | | x | | Real-estate investment operations | |
| OP Rent Oy | Full consolidation | | | | x | | Real-estate investment operations | |
| OP Tonttirahasto GP Oy | Full consolidation | | | | x | | Real-estate investment operations | |
| Access Capital Partners Group S.A. | Equity method | | x | | | | Activities serving financing and investment | |
| PAM USA Fund I Ky | | | | | x | | Mutual fund business | |
| Oy Kaisaniemenkatu 1 | IFRS11 | | x | | | | Ownership and possession of real estate | |
| Kiinteistö Oy Arkadiankatu 23 | IFRS11 | | | | x | | Ownership and possession of real estate | |
| Kiint. Oy Ansatie 5 | IFRS11 | | | | x | | Ownership and possession of real estate | |
| Kiint. Oy Quartetto Intermezzo | IFRS11 | | | | x | | Ownership and possession of real estate | |
| Kiint. Oy Uusi Paino | IFRS11 | | | | x | | Ownership and possession of real estate | |
| Kiinteistö Oy Eteläesplanadi 12 | IFRS11 | | | | x | | Ownership and possession of real estate | |
| Kiinteistö Oy Fenix Terra | IFRS11 | | | | x | | Ownership and possession of real estate | |
| OP Helsinki property (less than MEUR 10) | IFRS11 | | | | x | | Ownership and possession of real estate | |
| OP Life Assurance Company's property (less than MEUR 10) | IFRS11 | | | | x | | Ownership and possession of real estate | |
| Automatia Pankkiautomaatit Oy | Equity method | | x | | | | Activities serving financing | |
| Finanssi-Kontio Oy | Equity method | | x | | | | IT hardware and software consulting | |
| Paja Finanssipalvelut Oy | Equity method | | x | | | | Business and other management consultancy activities | |
| Opset Oy | | | | | x | | Other mail delivery and courier services | |
| Real Estate Fund of Funds II Ky | Full consolidation | | | | x | | Property investment | |
| Real Estate Fund Finland III Ky | Full consolidation | | | | x | | Property investment | |
| OP-Vallila Rahasto VYM Oy | Full consolidation | | | | x | | Property investment | |
| OP-Vallila Rahasto Ky | Full consolidation | x | | | | | Property investment | |
| Kiint. Oy Vääksyntie 2 | IFRS11 | | x | | | | Property company | |
| Kiint. Oy Vääksyntie 4 | IFRS11 | | x | | | | Property company | |
| Kiinteistö Oy OPK-Vallila | IFRS11 | | x | | | | Property company | |
| Aino Holdingyhtiö Ky | Equity method | | | | x | | Mutual fund business | |
| Joukahainen Oy | Equity method | | | | x | | Asset management | |
| Otso Infrastruktuuri I Ky | Full consolidation | | | | x | | Asset management | |
| Real Estate Fund of Funds V Gp Oy | Full consolidation | | | | x | | Financial services unclassified elsewhere | |
| Real Estate Fund of Funds V Ky | Equity method | | | | x | | Financial services unclassified elsewhere | |
| European Real Estate Senior Debt 1 | Full consolidation | | | | x | | Financial services unclassified elsewhere | |
| European Real Estate Senior Debt 2 | Full consolidation | | | | x | | Financial services unclassified elsewhere | |
| European Real Estate Senior Debt 3 | Full consolidation | | | | x | | Financial services unclassified elsewhere | |
| OP Co-Ride Oy | Full consolidation | | | | x | | Rental and lease of cars and light motor vehicles | |
| CapMan Hotels RE Ky | Equity method | | | | x | | Buying and selling of own real estate | |
| European Fund Investments II L.P. | Equity method | | | | x | | Mutual fund business | |
| HRJ Global Buy-Out III (Asia) L.P. | Equity method | | | | x | | Mutual fund business | |
| Certior Credit Opportunities Fund Ky | Equity method | | | | x | | Mutual fund business | |
| Certior Credit Investments I Ky | Equity method | | | | x | | Mutual fund business | |
| Access Capital Private Debt Fund II Ky | Equity method | | | | x | | Mutual fund business | |
| ShipFunk Oy | Equity method | | | | x | | Software development and manufacture | |
| OP Corporate Bank plc | Full consolidation | x | | | | | Banking | |
| OP Finance Estonia AS | Full consolidation | x | | | | | Other lending/Leasing company | |
| OP Finance SIA | Full consolidation | x | | | | | Other lending/Leasing company | |
| OP Finance UAB | Full consolidation | x | | | | | Other lending/Leasing company | |
| OP Insurance Ltd | Full consolidation | | | | x | x | Non-life insurance | |
| A-Insurance Ltd | Full consolidation | | | | x | x | Non-life insurance | |
| Kaivokadun PL-hallinto Oy | Full consolidation | | | | x | | No activities | |
| Euroopalainen Insurance Company Ltd | Full consolidation | | | | x | x | Non-life insurance | |
| Pohjola Health Ltd | Full consolidation | | | | x | | Medical centres, private doctors and comparable specialist physician services | |
| Tikkurilan Kauppatalo Oy | IFRS11 | | | | x | | Property company | |
| Kiint. Oy Helsingin Puutarhurinkuja 2 | IFRS11 | | | | x | | Property company | |
| Kiinteistö Oy Vantaan Kisällintie 13 | IFRS11 | | | | x | | Property company | |
| Kiint. Oy STC Viinikkala | IFRS11 | | | | x | | Property company | |
| OP Corporate Bank property (less than MEUR 10) | IFRS11 | | | | x | | Property company | |

| | | | |
|---|--------------------|---|---|
| OP Insurance property (less than MEUR 10) | IFRS11 | x | Property company |
| Kiint. Oy Grand Cargo Terminal 1 | IFRS11 | x | Property company |
| Kiint. Oy Grand Cargo Terminal 2 | IFRS11 | x | Property company |
| Kiint. Oy Tampereen Ratinankaari | IFRS11 | x | Property company |
| Kiinteistö Oy Vuosaaren Pohjoinen Ostoskeskus | IFRS11 | x | Property company |
| Kiinteistö Oy Kanta-sarvis I | IFRS11 | x | Property company |
| Kiinteistö Oy Koskitammi | IFRS11 | x | Property company |
| Kiinteistö Oy Helsingin Topeliuksenkatu 41b | IFRS11 | x | Property company |
| Kiinteistö Oy Helsingin Franzéninkatu 13 | IFRS11 | x | Property company |
| Kiinteistö Oy Turun Joukahaisenkadun Pysäköinti | IFRS11 | x | Property company |
| Kiinteistö Oy Turun Joukahaisenkatu 9 | IFRS11 | x | Property company |
| Kiinteistö Oy Oulun Kiilakivi | IFRS11 | x | Property company |
| Kiinteistö Oy Kuopion Isabella | IFRS11 | x | Property company |
| Kiinteistö Oy Espoon Siuntiontie 3 | IFRS11 | x | Property company |
| Kiinteistö Oy Kanta-Sarvis II | IFRS11 | x | Property company |
| Kiinteistö Oy Asiakkaankatu 3 | IFRS11 | x | Property company |
| Kiinteistö Oy Hatanpääkatu 1 | IFRS11 | x | Property company |
| Kiinteistö Oy Tuusulan Jatke | IFRS11 | x | Property company |
| Keskinäinen kiinteistö Oy Marikko | IFRS11 | x | Property company |
| Kiinteistö Oy Koivuhaan Yrityskeskus | IFRS11 | x | Property company |
| Kiinteistö Oy Kaarlenkadun Fenno | IFRS11 | x | Property company |
| Prime Property Oy | Full consolidation | x | Buying and selling of own real estate |
| Prime DK 1 ApS | Full consolidation | x | Financial services unclassified elsewhere |
| Prime DK 2 ApS | Full consolidation | x | Financial services unclassified elsewhere |
| Akaan Seudun Op | Full consolidation | x | Banking |
| Alajärven Op | Full consolidation | x | Banking |
| Alastaron Op | Full consolidation | x | Banking |
| Alavieskan Op | Full consolidation | x | Banking |
| Alavuden seudun Op | Full consolidation | x | Banking |
| Andelsbanken för Åland | Full consolidation | x | Banking |
| Andelsbanken Raseborg | Full consolidation | x | Banking |
| Artjärven Op | Full consolidation | x | Banking |
| Askolan Op | Full consolidation | x | Banking |
| Auranmaan Op | Full consolidation | x | Banking |
| Etelä-Hämeen Op | Full consolidation | x | Banking |
| Etelä-Karjalan Op | Full consolidation | x | Banking |
| Etelä-Pohjanmaan Op | Full consolidation | x | Banking |
| Euran Op | Full consolidation | x | Banking |
| Haapamäen Seudun Op | Full consolidation | x | Banking |
| Hailuodon Op | Full consolidation | x | Banking |
| Halsuan-Ylipään Op | Full consolidation | x | Banking |
| Himangan Op | Full consolidation | x | Banking |
| Honkilahden Op | Full consolidation | x | Banking |
| Humppilän Op | Full consolidation | x | Banking |
| Itä-Uudenmaan Op | Full consolidation | x | Banking |
| Janakkalan Op | Full consolidation | x | Banking |
| Jokioisten Op | Full consolidation | x | Banking |
| Jämsän Seudun Op | Full consolidation | x | Banking |
| Järvi-Hämeen Op | Full consolidation | x | Banking |
| Kainuun Op | Full consolidation | x | Banking |
| Kalajoen Op | Full consolidation | x | Banking |
| Kalkisten Op | Full consolidation | x | Banking |
| Kangasalan Seudun Op | Full consolidation | x | Banking |
| Kangasniemen Op | Full consolidation | x | Banking |
| Kannuksen Op | Full consolidation | x | Banking |
| Kemin Seudun Op | Full consolidation | x | Banking |
| Kerimäen Op | Full consolidation | x | Banking |
| Keski-Pohjanmaan Op | Full consolidation | x | Banking |
| Keski-Suomen Op | Full consolidation | x | Banking |
| Keski-Uudenmaan Op | Full consolidation | x | Banking |
| Kesälahden Op | Full consolidation | x | Banking |
| Kihniön Op | Full consolidation | x | Banking |
| Kiikoisten Op | Full consolidation | x | Banking |
| Kiteen Seudun Op | Full consolidation | x | Banking |
| Koitin-Pertunmaan Op | Full consolidation | x | Banking |
| Korpilahden Op | Full consolidation | x | Banking |
| Korsnäs Andelsbank | Full consolidation | x | Banking |
| Kronoby Andelsbank | Full consolidation | x | Banking |
| Kuhmon Op | Full consolidation | x | Banking |
| Kuortaneen Op | Full consolidation | x | Banking |
| Kurun Op | Full consolidation | x | Banking |
| Kuusamon Op | Full consolidation | x | Banking |
| Kymenlaakson Op | Full consolidation | x | Banking |
| Kärkölan Op | Full consolidation | x | Banking |
| Köyliön Op | Full consolidation | x | Banking |
| Laihian Op | Full consolidation | x | Banking |
| Lapin Op | Full consolidation | x | Banking |
| Lehtimäen Op | Full consolidation | x | Banking |
| Lemin Op | Full consolidation | x | Banking |
| Limingan Op | Full consolidation | x | Banking |
| Liperin Op | Full consolidation | x | Banking |
| Loimaan Seudun Op | Full consolidation | x | Banking |
| Lokalahden Op | Full consolidation | x | Banking |
| Lounaismaan OP | Full consolidation | x | Banking |

| | | | |
|-----------------------------|--------------------|---|---------|
| Lounaisrannikon Op | Full consolidation | x | Banking |
| Lounais-Suomen Op | Full consolidation | x | Banking |
| Luhangan Op | Full consolidation | x | Banking |
| Luopioisten Op | Full consolidation | x | Banking |
| Luumäen Op | Full consolidation | x | Banking |
| Länsi-Kymen Op | Full consolidation | x | Banking |
| Länsi-Suomen Op | Full consolidation | x | Banking |
| Länsi-Uudenmaan Op | Full consolidation | x | Banking |
| Maaningan Op | Full consolidation | x | Banking |
| Melliän Seudun Op | Full consolidation | x | Banking |
| Merimaskun Op | Full consolidation | x | Banking |
| Metsämaan Op | Full consolidation | x | Banking |
| Miehikkälän Op | Full consolidation | x | Banking |
| Mouhijärven Op | Full consolidation | x | Banking |
| Multian Op | Full consolidation | x | Banking |
| Mynämäen-Nousiaisten Op | Full consolidation | x | Banking |
| Mäntsälän Op | Full consolidation | x | Banking |
| Nagu Andelsbank | Full consolidation | x | Banking |
| Nakkila-Luvian Op | Full consolidation | x | Banking |
| Niinijoen Op | Full consolidation | x | Banking |
| Nilakan Seudun Op | Full consolidation | x | Banking |
| Nivalan Op | Full consolidation | x | Banking |
| Op Kantrisola | Full consolidation | x | Banking |
| Orimattilan Op | Full consolidation | x | Banking |
| Oripään Op | Full consolidation | x | Banking |
| Oulaisten Op | Full consolidation | x | Banking |
| Oulun Op | Full consolidation | x | Banking |
| Outokummun Op | Full consolidation | x | Banking |
| Paltamon Op | Full consolidation | x | Banking |
| Parikkalan Op | Full consolidation | x | Banking |
| Pedersörenejdens Andelsbank | Full consolidation | x | Banking |
| Perhon Op | Full consolidation | x | Banking |
| Perhonjokilaakson Op | Full consolidation | x | Banking |
| Peräseinäjoen Op | Full consolidation | x | Banking |
| Petäjäveden Op | Full consolidation | x | Banking |
| Pihtiputaan Op | Full consolidation | x | Banking |
| Pohjois-Hämeen Op | Full consolidation | x | Banking |
| Pohjois-Karjalan Op | Full consolidation | x | Banking |
| Pohjois-Savon Op | Full consolidation | x | Banking |
| Pohjolan Op | Full consolidation | x | Banking |
| Polvijärven Op | Full consolidation | x | Banking |
| Posion Op | Full consolidation | x | Banking |
| Pudasjärven Op | Full consolidation | x | Banking |
| Pukkilan Op | Full consolidation | x | Banking |
| Pulkkilan Op | Full consolidation | x | Banking |
| Punkalaitumen Op | Full consolidation | x | Banking |
| Purmo Andelsbank | Full consolidation | x | Banking |
| Päijät-Hämeen Op | Full consolidation | x | Banking |
| Raahen seudun Op | Full consolidation | x | Banking |
| Rantasalmen Op | Full consolidation | x | Banking |
| Rautalammin Op | Full consolidation | x | Banking |
| Riistaveden Op | Full consolidation | x | Banking |
| Ruoveden Op | Full consolidation | x | Banking |
| Ruukin Op | Full consolidation | x | Banking |
| Rymättylän Op | Full consolidation | x | Banking |
| Rääkkylän Op | Full consolidation | x | Banking |
| Sallan Op | Full consolidation | x | Banking |
| Sastamalan Op | Full consolidation | x | Banking |
| Satakunnan Op | Full consolidation | x | Banking |
| Satapirkan Op | Full consolidation | x | Banking |
| Savitaipaleen Op | Full consolidation | x | Banking |
| Siikajoen Op | Full consolidation | x | Banking |
| Siikalatvan Op | Full consolidation | x | Banking |
| Simpeleen Op | Full consolidation | x | Banking |
| Sonkajärven Op | Full consolidation | x | Banking |
| Suomenselän Op | Full consolidation | x | Banking |
| Suur-Savon Op | Full consolidation | x | Banking |
| Säkylän Op | Full consolidation | x | Banking |
| Taivalkosken Op | Full consolidation | x | Banking |
| Taivassalon Op | Full consolidation | x | Banking |
| Tampereen Seudun Op | Full consolidation | x | Banking |
| Tervolan Op | Full consolidation | x | Banking |
| Tervon Op | Full consolidation | x | Banking |
| Toholammin Op | Full consolidation | x | Banking |
| Tornion Op | Full consolidation | x | Banking |
| Turun Seudun Op | Full consolidation | x | Banking |
| Tuusniemen Op | Full consolidation | x | Banking |
| Tymävän Op | Full consolidation | x | Banking |
| Ullavan Op | Full consolidation | x | Banking |
| Urjalan Op | Full consolidation | x | Banking |
| Utajärven Op | Full consolidation | x | Banking |
| Vaara-Karjalan Op | Full consolidation | x | Banking |
| Vaasan Op | Full consolidation | x | Banking |
| Valkeakosken Op | Full consolidation | x | Banking |

| | | | | |
|--|--------------------|---|---|---|
| Vampulan Op | Full consolidation | x | | Banking |
| Vehmersalmen Op | Full consolidation | x | | Banking |
| Vesannon Op | Full consolidation | x | | Banking |
| Vihannin Op | Full consolidation | x | | Banking |
| Vimpelin Op | Full consolidation | x | | Banking |
| Virtain Op | Full consolidation | x | | Banking |
| Ylitornion Op | Full consolidation | x | | Banking |
| Ylä-Kainuun Op | Full consolidation | x | | Banking |
| Yläneen Op | Full consolidation | x | | Banking |
| Ylä-Savon Op | Full consolidation | x | | Banking |
| Ypäjän Op | Full consolidation | x | | Banking |
| OP-Kiinteistökeskus real estate agencies around 60 (excl. Helsinki OPKK) | Full consolidation | | x | Real estate agent services |
| Saimaa Capital Oy | Fair value | | x | Financial services unclassified elsewhere |
| Länsi-Suomen Pääomarahasto Oy | Fair value | | x | Financial services unclassified elsewhere |
| Uudenmaan Pääomarahasto Oy | Fair value | | x | Financial services unclassified elsewhere |
| Turun TeknologiaKiinteistöt Oy | Equity method | | x | Renting and operating other real property |
| Pohjois-Karjalan Kiinteistöt Oy | IFRS11 | | x | Renting of residential real estate |
| Pyhäselän Ranta Oy | IFRS11 | | x | Buying and selling of own real estate |
| TOP Rahastosijoitukset Oy | IFRS11 | | x | Activities of holding companies in the financial sector |
| Jyväskylän Kassatalo Oy | IFRS11 | | x | Ownership and possession of real estate |
| Kiinteistö Oy Vammalan Torikeskus | IFRS11 | | x | Ownership and possession of real estate |
| Mikkelin Forum Oy | IFRS11 | | x | Ownership and possession of real estate |
| Kiinteistö Oy Tampereen Hämeenkatu 12 | IFRS11 | | x | Ownership and possession of real estate |
| Kiinteistö Oy Hämeenkivi | IFRS11 | | x | Ownership and possession of real estate |
| Kiinteistö Oy Joensuun Koskikatu 9 | IFRS11 | | x | Ownership and possession of real estate |
| Asunto Oy Oulun Kalevankulma | IFRS11 | | x | Ownership and possession of real estate |
| As Oy Lappeenrannan Kirkkokatu 9 | IFRS11 | | x | Ownership and possession of real estate |
| OP cooperative banks' real estate management companies (less than MEUR 10) | IFRS11 | | x | Property company |

According to the definition of the consolidation group, insurance companies have not been consolidated into capital adequacy but are treated as investments. Other non-consolidated entities are less than EUR 10 in terms of their balance sheet. There are no investments that are deducted from own funds.

5.4 Capital base using formula by the European Banking Authority

According to the European Commission implementing regulation, a credit institution must present its own funds using the model for disclosure for own funds determined by the European Banking Authority.

| 31 Dec. 2018, EUR million | | Regulation (EU) No 575/2013 Article Reference | |
|--|---|--|-----------------------------|
| Common Equity Tier 1 (CET1) capital: instruments and reserves | | | |
| 1 | Capital instruments and related share premium accounts | 3 094 | 26 (1), 27, 28, 29 |
| | of which: cooperative shares | 199 | EBA list, 26 (3) |
| | of which: profit shares (Non-voting cooperative share) | 3 042 | EBA list, 26 (3) |
| | of which: cooperative capital deducted from own funds | -147 | |
| 2 | Retained earnings | 6 189 | 26 (1) c |
| 3 | Accumulated other comprehensive income (and other reserves) | 1 728 | 26 (1) |
| 5a | Independently reviewed interim profits net of any foreseeable charge or dividend | 771 | 26 (2) |
| 6 | CET1 before regulatory adjustments: | 11 783 | |
| Common Equity Tier 1 (CET1) capital: regulatory adjustments | | | |
| 7 | Additional value adjustments | -27 | 34, 105 |
| 8 | Intangible assets | -710 | 36 (1) b, 37 |
| 11 | Fair value reserves related to gains or losses on cash flow hedges | -33 | 33 (1) a |
| 12 | Negative amounts resulting from the calculation of expected loss amounts | -288 | 36 (1) d, 40, 159 |
| 14 | Gains or losses on liabilities valued at fair value resulting from changes in own credit standing | -21 | 33 (1) b |
| 15 | Defined benefit pension fund assets | -27 | 36 (1) e, 41 |
| 28 | Total regulatory adjustments to CET1 | -1 106 | |
| 29 | Common Equity Tier 1 (CET1) capital | 10 677 | |
| Additional Tier 1 (AT1) capital: instruments | | | |
| 33 | Amount of qualifying items referred to in Article 484 (4) and the related share premium accounts subject to phase out from AT1. | 80 | 486 (3) |
| 36 | Additional Tier 1 (AT1) capital before regulatory adjustments | 80 | |
| Additional Tier 1 (AT1) capital: regulatory adjustments | | | |
| 43 | Total regulatory adjustments to Additional Tier 1 (AT1) capital | | |
| 44 | Additional Tier 1 (AT1) capital | 80 | |
| 45 | Tier 1 capital (T1 = CET1 + AT1) | 10 757 | |
| Tier 2 (T2) capital: Instruments and provisions | | | |
| 46 | Capital instruments and the related share premium accounts | 995 | 62, 63 |
| 51 | T2 before regulatory adjustments | 995 | |
| Tier 2 (T2): regulatory adjustments | | | |
| 57 | Total regulatory adjustments to Tier 2 (T2) capital | | |
| 58 | Tier 2 (T2) capital | 995 | |
| 59 | Total capital (TC = T1 + T2) | 11 752 | |
| 60 | Total risk weighted assets | 52 126 | |
| Capital ratios and buffers | | | |
| 61 | Common Equity Tier 1 (CET1) (as a percentage of total risk exposure amount) | 20,5 | 92 (2) a |
| 62 | Tier 1 (T1) (as a percentage of total risk exposure amount) | 20,6 | 92 (2) b |
| 63 | Total capital (as a percentage of total risk exposure amount) | 22,5 | 92 (2) c |
| 64 | Institution specific buffer requirement expressed as a percentage of risk exposure amount | 9,0 | CRD 128, 129, 130, 131, 133 |
| 65 | of which: capital conservation buffer requirement | 2,5 | |
| 66 | of which: countercyclical buffer requirement | 0,0 | |
| 67a | of which: Global Systemically Important Institution (G-SII) of Other Systemically Important Institution (O-SII) buffer | 2,0 | |
| 68 | Common Equity Tier 1 (CET1) available to meet buffers (as a percentage of risk exposure amount) | 20,5 | CRD 128 |
| Amounts below the thresholds for deduction (before risk weighting) | | | |
| Applicable caps on the inclusion of provisions in Tier 2 | | | |
| 79 | Cap for inclusion of credit risk adjustments in T2 under internal ratings-based approach | 37 724 | 62 |
| Capital instruments subject to phase-out arrangements (only applicable between 1 Jan 2014 and 1 Jan 2022) | | | |
| 82 | Current cap on AT1 instruments subject to phase out arrangements | 80 | 484 (4), 486 (3),(5) |
| 83 | Amount excluded from AT1 due to cap (excess over cap after redemptions and maturities) | 1 | 484 (4), 486 (3),(5) |

5.5 Institution-specific countercyclical capital buffer

Table 1: Geographical distribution of credit exposures relevant for the calculation of the countercyclical capital buffer, EUR million

| Row | | General credit exposures | | Trading book exposure | | Securitisation exposure | |
|------------|------------------------------|------------------------------|---------------------------|---|---|------------------------------|-------------------------------|
| | | Exposure value for SA 010 | Exposure value IRB 020 | Sum of long and short position of trading book 030 | Value of trading book exposure for internal models 040 | Exposure value for SA 050 | Exposure value for IRB 060 |
| 010 | Breakdown by country* | | | | | | |
| | Finland | 2 424 | 93 374 | 397 | | | 48 |
| | Sweden | 150 | 659 | 29 | | | |
| | Norway | 0 | 185 | 3 | | | |
| | Iceland | 0 | 1 | | | | |
| | Czech | 0 | 10 | | | | |
| | Slovakia | 0 | 0 | | | | |
| | United Kingdom | 0 | 34 | | | | |
| | Lithuania | 687 | 104 | | | | |
| | Other | 678 | 1 149 | 9 | | | 565 |
| 020 | Total | 3 940 | 95 516 | 437 | | | 613 |

| Row | | Own funds requirements | | | | | |
|------------|------------------------------|---|---|---|--------------|--------------------------------------|---|
| | | Of which: General credit exposures 070 | Of which: Trading book exposures 080 | Of which: Securitisation exposures 090 | Total 100 | Own funds requirement weights 110 | Counter-cyclical capital buffer rate 120 |
| 010 | Breakdown by country* | | | | | | |
| | Finland | 2 910 | 22 | 0 | 3 028 | 0,93 | 0,00 % |
| | Sweden | 39 | 2 | | 41 | 0,01 | 2,00 % |
| | Norway | 4 | 0 | | 5 | 0,00 | 2,00 % |
| | Iceland | 0 | | | 0 | 0,00 | 1,25 % |
| | Czech | 1 | | | 1 | 0,00 | 1,00 % |
| | Slovakia | 0 | | | 0 | 0,00 | 1,25 % |
| | United Kingdom | 1 | | | 1 | 0,00 | 1,00 % |
| | Lithuania | 63 | | | 63 | 0,02 | 0,50 % |
| | Other | 102 | 1 | 3 | 106 | 0,03 | 0,00 % |
| 020 | Total | 3 121 | 25 | 4 | 3 245 | 1,00 | |

Table 2: Amount of institution-specific countercyclical capital buffer

| Row | | Column 010 |
|------------|--|---------------|
| 010 | Total risk exposure amount | 52 126 |
| 020 | Institution specific countercyclical buffer rate | 0,04 % |
| 030 | Institution specific countercyclical buffer requirement | 20 |

* Exposures calculated based on Article 140.4 of the Capital Requirements Directive exclude government exposures, exposures comparable to them and credit institution exposures.

6 Leverage

6.1 Leverage

| Leverage ratio, EUR million | 31 Dec 2018 | 31 Dec. 2017 |
|-----------------------------|----------------|-----------------|
| Tier 1 capital (T1) | 10 757 | 9 973 |
| Total exposure | 125 510 | 127 027 |
| Leverage ratio, % | 8,6 | 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.

| Table LRSum: Summary reconciliation of accounting assets and leverage ratio exposures | | Applicable amount |
|---|--|-------------------|
| 1 | Total assets as per published financial statements | 140 382 |
| 2 | Adjustment for entities which are consolidated for accounting purposes but are outside the scope of regulatory consolidation | -18 898 |
| 4 | Adjustments for derivative financial instruments | 1 331 |
| 6 | Adjustment for off-balance sheet items (ie conversion to credit equivalent amounts of off-balance sheet exposures) | 7 988 |
| 7 | Other adjustments | -5 293 |
| 8 | Leverage ratio total exposure measure | 125 510 |

| Table LRCom: Leverage ratio common disclosure CRR | | CRR leverage ratio exposures |
|---|--|------------------------------|
| On-balance sheet exposures (excluding derivatives and SFTs) | | |
| 1 | On-balance sheet items (excluding derivatives, SFTs and fiduciary assets, but including collateral) | 116 337 |
| 2 | Asset amounts deducted in determining Tier 1 capital | -1 025 |
| 3 | Total on-balance sheet exposures (excluding derivatives, SFTs and fiduciary assets) | 115 312 |
| Derivative exposures | | |
| 4 | Replacement cost associated with all derivatives transactions (ie net of eligible cash variation margin) | 962 |
| 5 | Add-on amounts for PFE associated with all derivatives transactions (mark- to-market method) | 1 130 |
| 9 | Adjusted effective notional amount of written credit derivatives | 131 |
| 10 | (Adjusted effective notional offsets and add-on deductions for written credit derivatives) | -14 |
| 11 | Total derivatives exposures | 2 210 |
| Other off-balance sheet exposures | | |
| 17 | Off-balance sheet exposures at gross notional amount | 24 004 |
| 18 | Adjustments for conversion to credit equivalent amounts | -16 015 |
| 19 | Other off-balance sheet exposures | 7 988 |
| Capital and total exposure measure | | |
| 20 | Tier 1 capital | 10 757 |
| 21 | Leverage ratio total exposure measure | 125 510 |
| Leverage ratio | | |
| 22 | Leverage ratio | 8,6 |
| Choice on transitional arrangements and amount of derecognised fiduciary items | | |
| EU-23 | Choice on transitional arrangements for the definition of the capital measure | Transitional |

| Table LRSpl: Split-up of on balance sheet exposures (excluding derivatives, SFTs and exempted exposures) | | CRR leverage ratio exposures |
|--|---|------------------------------|
| EU-1 | Total on-balance sheet exposures (excluding derivatives, SFTs, and exempted exposures), of which: | 116 337 |
| EU-2 | Trading book exposures | 496 |
| EU-3 | Banking book exposures, of which: | 115 841 |
| EU-4 | Covered bonds | 6 118 |
| EU-5 | Exposures treated as sovereigns | 17 630 |
| EU-6 | Exposures to regional governments, MDB, international organisations and PSE not treated as sovereigns | 247 |
| EU-7 | Institutions | 549 |
| EU-8 | Secured by mortgages of immovable properties | 45 968 |
| EU-9 | Retail exposures | 9 487 |
| EU-10 | Corporate | 30 814 |
| EU-11 | Exposures in default | 789 |
| EU-12 | Other exposures (eg equity, securitisations, and other non-credit obligation assets) | 4 237 |

Table LRQua: Free format text boxes for disclosure on qualitative items

| | |
|----------|---|
| 1 | Description of the processes used to manage the risk of excessive leverage |
| | By means of ALM and capital management, the Group ensures that leverage will remain controlled in view of maturity transformation and that adequate tools will remain available for leverage management. OP Financial Group has set its capital adequacy target sufficiently high, in which case leverage will not be high or the minimum leverage ratio will not decrease close to the minimum level. The Group monitors leverage by means of its internal target levels for the leverage ratio and of capital adequacy; in addition, the Group monitors, for example, the net stable funding ratio (NSFR) and the asset encumbrance (AE). |
| 2 | Description of the factors that had an impact on the leverage Ratio during the period to which the disclosed leverage Ratio refers |
| | Exposures increased less than the capital base. As a result, the leverage ratio rose. The amount of exposures decreased due to specifications of the treatment of off-balance-sheet items. The balance sheet grew in line with the growth targets set for the loan portfolio and the liquidity buffer. The Report by the Executive Board describes changes in the operating environment. |

7 Liquidity Coverage Ratio (LCR) and Asset Encumbrance (AE)

7.1 LCR disclosure template (EU LIQ1)

Scope of consolidation

Consolidated

EUR million

Total unweighted value (average)

Total weighted value (average)

| | 31 Dec 2018 | 30 Sept 2018 | 30 June 2018 | 31 March 2018 | 31 Dec 2018 | 30 Sept 2018 | 30 June 2018 | 31 March 2018 |
|---|----------------|-----------------|-----------------|------------------|-----------------------------|-----------------|-----------------|------------------|
| Quarter ending on (31, Dec 2018) | | | | | | | | |
| Number of data points used in the calculation of averages: 12 | | | | | | | | |
| HIGH-QUALITY LIQUID ASSETS | | | | | | | | |
| 1 Total high-quality liquid assets (HQLA) | | | | | 19 603 | 19 559 | 19 066 | 18 339 |
| CASH - OUTFLOWS | | | | | | | | |
| 2 Retail deposits and deposits from small business customers, of | 42 620 | 41 810 | 41 055 | 40 349 | 2 635 | 2 577 | 2 524 | 2 475 |
| 3 stable deposits | 32 651 | 32 185 | 31 749 | 31 327 | 1 633 | 1 609 | 1 587 | 1 566 |
| 4 Less stable deposits | 9 969 | 9 625 | 9 306 | 9 022 | 1 003 | 968 | 936 | 909 |
| 5 Unsecured wholesale funding | 21 859 | 21 964 | 21 580 | 20 967 | 9 877 | 10 044 | 9 819 | 9 650 |
| 6 Operational deposits (all counterparties) and deposits in networks of cooperative banks | 8 301 | 8 358 | 8 380 | 8 152 | 2 062 | 2 077 | 2 083 | 2 026 |
| 7 Non-operational deposits (all counterparties) | 11 746 | 11 863 | 11 578 | 11 309 | 6 004 | 6 225 | 6 115 | 6 118 |
| 8 Unsecured debt | 1 812 | 1 742 | 1 621 | 1 507 | 1 812 | 1 742 | 1 621 | 1 507 |
| 9 Secured wholesale funding | | | | | | | | |
| 10 Additional requirements | 12 639 | 12 497 | 12 245 | 11 904 | 1 960 | 2 033 | 2 110 | 2 138 |
| 11 Outflows related to derivative exposures and other collateral requirements | 711 | 808 | 891 | 920 | 711 | 808 | 891 | 920 |
| 12 Outflows related to loss of funding on debt | 92 | 83 | 92 | 112 | 92 | 83 | 92 | 112 |
| 13 Credit and liquidity facilities | 11 836 | 11 605 | 11 263 | 10 872 | 1 157 | 1 141 | 1 127 | 1 105 |
| 14 Other contractual funding obligations | 225 | 221 | 202 | 197 | 101 | 98 | 82 | 81 |
| 15 Other contingent funding obligations | 12 227 | 12 084 | 11 918 | 11 689 | 572 | 565 | 556 | 544 |
| 16 TOTAL CASH OUTFLOWS | | | | | 15 146 | 15 317 | 15 091 | 14 889 |
| CASH - INFLOWS | | | | | | | | |
| 18 Inflows from fully performing exposures | 1 959 | 1 916 | 1 886 | 1 875 | 1 113 | 1 090 | 1 077 | 1 071 |
| 19 Other cash inflows | 1 843 | 1 886 | 1 935 | 1 786 | 875 | 782 | 773 | 635 |
| 20 TOTAL CASH INFLOWS | 3 803 | 3 802 | 3 821 | 3 661 | 1 988 | 1 872 | 1 850 | 1 706 |
| EU-20c Inflows subject to 75% cap | 3 803 | 3 802 | 3 821 | 3 661 | 1 988 | 1 872 | 1 850 | 1 706 |
| | | | | | TOTAL ADJUSTED VALUE | | | |
| 21 LIQUIDITY BUFFER | | | | | 19 603 | 19 559 | 19 066 | 18 339 |
| 22 TOTAL NET CASH OUTFLOWS | | | | | 13 158 | 13 445 | 13 241 | 13 183 |
| 23 LIQUIDITY COVERAGE RATIO (%) | | | | | 149 % | 145 % | 144 % | 139 % |

7.2 Disclosure on asset encumbrance

The tables below provide information on asset encumbrance and liabilities related to encumbered assets. The figures are presented as the quarterly median for 2018. An asset is considered encumbered if it has been pledged or given as collateral or they secure transactions recognised in the balance sheet (e.g. to secure debt). Other assets that are not freely available within the Group are also classified as encumbered. Encumbered assets mainly relate to collateral pertaining to OP Corporate Bank plc's derivatives, loans with collateral of central bank refinancing and collateral with respect to covered bonds issued by OP Mortgage Bank. Of the collateral related to covered bonds, EUR 2.142 million is overcollateralised. EUR 8.286 million of unencumbered assets is not eligible as collateral (e.g. intangible assets, and property, plant and equipment, adjusting entries for assets and tax assets).

| EUR million | | 010 Carrying amount of encumbered assets | 040 Fair value of encumbered assets | 060 Carrying amount of unen- cumbered assets | 090 Fair value of unen- cumbered assets |
|-------------|---|--|--|---|---|
| 010 | Assets of the reporting institution | 18 917 | | 101 885 | |
| 030 | Equity instruments | | | 67 | |
| 040 | Debt securities | 2 440 | 2 439 | 10 179 | 10 149 |
| 050 | of which: covered bonds | 1 579 | 1 579 | 4 377 | 4 377 |
| 060 | of which: asset-backed securities | 249 | 249 | 331 | 331 |
| 070 | of which: issued by general governments | 530 | 528 | 3 100 | 3 072 |
| 080 | of which: issued by financial corporations | 1 618 | 1 618 | 5 425 | 5 331 |
| 090 | of which: issued by non-financial corporations | 210 | 210 | 1 783 | 1 783 |
| 120 | Other assets | 16 234 | | 91 520 | |
| 121 | of which: Loans and advances other than loans on demand | 15 677 | | 69 977 | |

The table below presents collateral received by asset type

| Collateral received, EUR million | | 010 Fair value of encumbered collateral received or own debt securities issued | 040 Fair value of collateral received or own debt securities issued available for encumbrance |
|----------------------------------|---|---|--|
| 130 | Collateral received by the reporting institution | | 460 |
| 140 | Loans on demand | | 460 |
| 250 | TOTAL ASSETS, COLLATERAL RECEIVED AND OWN DEBT SECURITIES ISSUED | 18 917 | |

Encumbered assets and collateral received accounted for 15.6 % of the assets of the amalgamation of the Group's member cooperative bank.

| Encumbered assets and associated liabilities, EUR million | | 010 Liabilities associated with encumbered assets | 030 Encumbered assets |
|---|--|---|-----------------------------|
| 010 | Carrying amount of selected financial liabilities | 17 660 | 18 917 |
| 011 | Covered bonds | 10 666 | 13 148 |
| 012 | Other secured debt | 6 993 | 5 769 |

8 Signatures

The Executive Board confirms that information in this report has been provided in compliance with Part 8 of the CRR and the related EBA guidelines and the report has been prepared applying the principles of capital adequacy disclosure adopted by OP Financial Group's Executive Board. The principles define methods used to verify the accuracy of information to be disclosed and the assessment of the materiality of the information.

Helsinki, 11 February 2019

Executive Board of OP Cooperative

Timo Ritakallio
OP Financial Group's President and Group Executive Chairman

Tony Vepsäläinen

Vesa Aho

Katja Keitaanniemi

Olli Lehtilä

Juho Malmberg

Harri Nummela

Tiia Tuovinen

9 Requirements

9.1 Compliance with disclosure requirements

| CRR Article | Reference |
|--|--|
| 431 Scope of disclosure requirements | |
| 1 | This report, OP Financial Group's financial statements 2017 and information disclosed at www.op.fi |
| 2 | Note 2. to the 2018 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 9.2 |
| | 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. |
| 433 Frequency of disclosure | |
| 434 Means of disclosures | www.op.fi |
| 435 Risk management objectives and policies | |
| 1 a) | Note 2. to the 2018 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 2018 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 2018 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 www.op.fi > OP Financial Group > To the media > Reports > OP's reports > year 2018 > Corporate Governance Statement, point 8. |
| 1 d) | Note 2. to the 2018 financial statements OP Financial Group's risk and capital adequacy management principles (EU OVA, EU CRA, EU CCRA, EU MRA, LIQA), and points 2.12. (EU CR3) and 2.13 of this report. |
| 1 e) | Note 2. to the 2018 financial statements OP Financial Group's risk and capital adequacy management principles, point 16. (EU OVA, EU CRA, EU CCRA, EU MRA, LIQA) |
| 1 f) | Note 53. to the 2018 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 7.1. (LIQ1) and Note 2. to the 2018 financial statements OP Financial Group's risk and capital adequacy management principles, especially point 12. (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 2018 > Corporate Governance Statement |
| 436 Scope of application | |
| 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. |
| 437 Own funds | |
| 1a) | Points 1.1 and 5.1. (EU LI1) |
| 1b) | Annex 1. Main features of capital instruments |
| 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 |
| 1d) | 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, and on the Helsinki Area Cooperative Bank's website: op.fi > OP Financial Group > About us > Group member cooperative banks > OP Helsinki |
| 1e) | Points 1.1, 5.1 (EU LI1) and 5.4 |
| 1f) | Points 1.1 and 5.4 |
| 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 | Points 1.1, 5.1 (EU LI1), 5.4 and annex 1. Main features of capital instruments |
| 438 Capital requirements | |
| a) | Note 2. to the 2018 financial statements OP Financial Group's risk and capital adequacy management principles, points 2.2 and 2.4 and note 53. to the 2018 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 2.17 (EU CR10) |
| 439 Exposure to counterparty credit risk | |
| a) | Point 3.1 (EU CCR1), (EU CCRA) and Note 2. to the 2018 financial statements OP Financial Group's risk and capital adequacy management principles (EU CCRA), section 10.5. |
| b) | Point 3.1 (EU CCR1), (EU CCRA) and Note 2. to the 2018 financial statements OP Financial Group's risk and capital adequacy management principles (EU CCRA), section 10.5. |
| c) | Note 2. to the 2018 financial statements OP Financial Group's risk and capital adequacy management principles (EU CCRA), point 10.5 |
| d) | Point 3.1 (EU CCR1), (EU CCRA) |
| 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) | Point 5.5 |
| 1b) | Point 5.5 |
| 441 Indicators of global systemic importance | Not applicable |
| 442 Credit risk adjustments | |
| a) | Note 1. to the 2018 financial statements Accounting policies and Note 56. Receivables from credit institutions and customers, and doubtful receivables |
| b) | Note 1. to the 2018 financial statements Accounting policies |
| c) | Point 2.1 (EU CRB-B) |
| d) | Points 2.2 (EU CRB-C) and 2.7 (EU CR1-C) |
| e) | Points 2.3 (EU CRB-D) and 2.6 (EU CR1-B) |
| f) | Specified material exposure classes. |
| g) | Point 2.4 (EU CRB-E) |
| a. | Points 2.5 (EU CR1-A) and 2.6 (EU CR1-B) |
| b. | Points 2.5 (EU CR1-A) and 2.6 (EU CR1-B) |
| c. | Points 2.5 (EU CR1-A) and 2.6 (EU CR1-B) |
| h) | Point 2.7 (EU CR1-C) |
| i) | Point 2.10 (EU CR2-A) |
| i. | Point 2.10 (EU CR2-A) |
| ii. | Point 2.10 (EU CR2-A) |
| iii. | Point 2.10 (EU CR2-A) |
| iv. | Point 2.10 (EU CR2-A) |
| v. | Point 2.10 (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 | Point 7.2 |
| 444 Use of ECAIs | |
| a) | Point 2.15 (EU CRD) |
| b) | Point 2.15 (EU CRD) |
| c) | Point 2.15 (EU CRD) |
| d) | Not applicable. |
| e) | Points 2.14 (EU CR4) and 2.15 (EU CR5) |
| 445 Exposure to market risk | Points 1.3 and 3.9 (EU MR1) |
| 446 Operational risk | Note 2. to the 2018 financial statements OP Financial Group's risk and capital adequacy management principles, section 6 and point 1.3 of this report |
| 447 Exposures in equities not included in the trading book | |
| a) | Note 1. to the 2018 financial statements Accounting policies |
| b) | Point 2.17 (EU CR10) |
| c) | Point 2.17 (EU CR10) |
| d) | Note 7. to the 2018 financial statements Net investment income |
| e) | Note 35. to the 2018 financial statements Equity and Note 20. Investment assets |
| 448 Exposures in equities not included in the trading book | |
| a) | Note 2. to the 2018 financial statements OP Financial Group's risk and capital adequacy management principles, section 13.1 and Note 61. Sensitivity analysis of interest rate and market risk |
| b) | Note 61. to the 2018 financial statements Sensitivity analysis of interest rate and market risk |
| 449 Exposure to securitisation positions | |
| a) | Information is available in Note 2. OP Financial Group's risk and capital adequacy management principles, section 10.4 to the extent they apply to OP Financial Group. |
| b) | Information is available in Note 2. OP Financial Group's risk management and capital adequacy management principles to the extent they apply to OP Financial Group. |
| c) | OP Financial Group has no re-securitised items. |
| d) | Information is available in Note 2. OP Financial Group's risk and capital adequacy management principles, section 9.4 to the extent they apply to OP Financial Group. OP Financial Group acts only as an investor. |
| e) | Information is available in Note 2. OP Financial Group's risk management and capital adequacy management principles to the extent they apply to OP Financial Group. OP Financial Group acts only as an investor. |
| f) | Information is available in Note 2. OP Financial Group's risk management and capital adequacy management principles to the extent they apply to OP Financial Group as well as point 4.1 in this report. |
| g) | Not applicable. |
| h) | Note 2. OP Financial Group's risk and capital adequacy management principles, and point 4.1 of this report |
| 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) | Point 4.1 |
| i) | Point 4.1 |
| ii) | Point 4.1 |
| p) | Point 4.1 |

| | |
|---|--|
| q) | Not applicable. |
| r) | Not applicable. |
| 450 Remuneration policy | |
| 1a) | www.op.fi: OP Financial Group > About us > Corporate governance > Remuneration and www.op.fi > OP Financial Group > To the media > Reports > OP's reports > year 2018 > Corporate Governance Statement and Note 50. to the financial statements Variable remuneration |
| 1b) | www.op.fi: OP Financial Group > About us > Corporate governance > Remuneration > EBA-report and www.op.fi > OP Financial Group > To the media > Reports > OP's reports > year 2018 > Corporate Governance Statement and Note 50. to the financial statements Variable remuneration |
| 1c) | www.op.fi: OP Financial Group > About us > Corporate governance > Remuneration and www.op.fi > OP Financial Group > To the media > Reports > OP's reports > year 2018 > Corporate Governance Statement and Note 50. to the financial statements Variable remuneration |
| 1d) | www.op.fi: OP Financial Group > About us > Corporate governance > Remuneration and www.op.fi > OP Financial Group > To the media > Reports > OP's reports > year 2018 > Corporate Governance Statement and Note 50. to the financial statements Variable remuneration |
| 1e) | www.op.fi: OP Financial Group > About us > Corporate governance > Remuneration and www.op.fi > OP Financial Group > To the media > Reports > OP's reports > year 2018 > Corporate Governance Statement and Note 50. to the financial statements Variable remuneration |
| 1f) | www.op.fi: OP Financial Group > About us > Corporate governance > Remuneration and www.op.fi > OP Financial Group > To the media > Reports > OP's reports > year 2018 > Corporate Governance Statement and Note 50. to the financial statements Variable remuneration |
| 1g) | www.op.fi: OP Financial Group > About us > Corporate governance > Remuneration > EBA-report |
| 1h) | www.op.fi: OP Financial Group > About us > Corporate governance > Remuneration > EBA-report and www.op.fi > OP Financial Group > To the media > Reports > OP's reports > year 2018 > Corporate Governance Statement and Note 50. to the financial statements Variable remuneration |
| 1i) | www.op.fi: OP Financial Group > About us > Corporate governance > Remuneration > EBA-report and www.op.fi > OP Financial Group > To the media > Reports > OP's reports > year 2018 > Corporate Governance Statement and Note 50. to the financial statements Variable remuneration |
| 1j) | www.op.fi > OP Financial Group > To the media > Reports > OP's reports > year 2018 > Corporate Governance Statement and Financial Statement's Note 49. Related-party transactions and Note 50. Variable remuneration |
| 2) | www.op.fi > OP Financial Group > To the media > Reports > OP's reports > year 2018 > Corporate Governance Statement and Financial Statement's Note 49. Related-party transactions and Note 50. Variable remuneration |
| 451 Leverage | |
| a) | Point 6.1 |
| b) | Point 6.1 |
| c) | Point 6.1 |
| d) | Point 6.1 |
| e) | Point 6.1 |
| 452 Use of the IRB Approach to credit risk | |
| a) | Note 2. to the 2018 financial statements OP Financial Group's risk and capital adequacy management principles, section 10 and the introduction of this report (EU CRE) |
| b) | Note 2. to the 2018 financial statements OP Financial Group's risk and capital adequacy management principles, section 10 and the introduction of this report (EU CRE) |
| i) | Note 2. to the 2018 financial statements OP Financial Group's risk and capital adequacy management principles, section 10 and the introduction of this report (EU CRE) |
| ii) | Note 2. to the 2018 financial statements OP Financial Group's risk and capital adequacy management principles, section 10. (EU CRE) |
| iii) | Note 2. to the 2018 financial statements OP Financial Group's risk and capital adequacy management principles, section 10. (EU CRE) |
| iv) | Note 2. to the 2018 financial statements OP Financial Group's risk and capital adequacy management principles, section 10. (EU CRE) |
| c) | Note 2. to the 2018 financial statements OP Financial Group's risk and capital adequacy management principles, section 10. |
| i) | Note 2. to the 2018 financial statements OP Financial Group's risk and capital adequacy management principles, section 10. |
| ii) | Note 2. to the 2018 financial statements OP Financial Group's risk and capital adequacy management principles, section 10. |
| iii) | Note 2. to the 2018 financial statements OP Financial Group's risk and capital adequacy management principles, section 10. |
| iv) | Note 2. to the 2018 financial statements OP Financial Group's risk and capital adequacy management principles, section 10. |
| v) | Note 2. to the 2018 financial statements OP Financial Group's risk and capital adequacy management principles, section 10. |
| d) | Points 2.16 (EU CR6) and 2.17 (EU CR6), (EU CR10) |
| e) | Points 2.16 (EU CR6) and 2.17 (EU CR6), (EU CR10) |
| i) | Points 2.16 (EU CR6) and 2.17 (EU CR6), (EU CR10) |
| ii) | Points 2.16 (EU CR6) and 2.17 (EU CR6), (EU CR10) |
| iii) | Points 2.16 (EU CR6) and 2.17 (EU CR6), (EU CR10) |
| f) | Points 2.16 (EU CR6) and 2.17 (EU CR6), (EU CR10) |
| g) | Point 2.5 (EU CR1-A) |
| h) | Point 2.16 (EU CR6) |
| i) | Point 2.20 (EU CR9) |
| j) | |
| i) | Point 9.2 |
| ii) | Point 9.2 |

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 2018 financial statements OP Financial Group's risk and capital adequacy management principles, section 10 and point 2.16 of this report (EU CRE)

| | |
|---|-------------------------------|
| 453 Use of credit risk mitigation techniques | |
| a) | Point 2.12 (EU CRC) |
| b) | Point 2.12 (EU CRC) |
| c) | Point 2.12 (EU CRC) |
| d) | Point 2.12 (EU CRC) |
| e) | Point 2.12 (EU CRC) |
| f) | Points 2.12 (EU CR3) and 2.13 |
| g) | Points 2.12 (EU CR3) and 2.13 |
| 454 Use of the Advanced Measurement Approaches to operational risk | Not applicable. |
| 455 Use of Internal Market Risk Models | Not applicable. |

9.2 Immaterial items not disclosed

Disclosure requirement

| | |
|---|--|
| CRR Article 452 j) | A total of over 89% 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. |
| Template EU CRB-D based on the EBA's guidelines (EBA/GL/2016/11) | Material exposure classes are broken down in the table. |
| CRR Article 437 1b) Main features of capital instruments | The fixed debenture has not been specified; the amount included in own funds is less than EUR 200,000 |
| 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. | |

Annex 1. Capital instruments' main features

| Capital instruments' main features template | Cooperative share | Profit share (Non-voting cooperative share) | EUR 50,000,000 Non-cumulative Perpetual Capital Securities | EUR 40,000,000 Perpetual Non-Step-Up Hybrid Tier 1 |
|--|---|---|---|---|
| 1 Issuer | Group member cooperative banks | Group member cooperative banks | OP Corporate Bank plc | OP Corporate Bank plc |
| 2 Unique identifier (e.g. CUSIP, ISIN or Bloomberg identifier for private placement) | Not applicable | Not applicable | ISIN: XS0213603177 | ISIN: XS0237073498 |
| 3 Governing law(s) of the instrument | Finnish law, especially the Co-operatives Act and the Act on the Amalgamation of Deposit Banks, the EU Capital Requirements Regulation (575/2013) (CRR) | Finnish law, especially the Co-operatives Act and the Act on the Amalgamation of Deposit Banks, CRR | English law, except for conditions relating to creditor order of priority and distributable assets, Dividend Stopper, permission for early redemption, and to capital adequacy, to which Finnish law is applied | English law, except for conditions relating to creditor order of priority and distributable assets, Dividend Stopper, permission for early redemption, and to capital adequacy, to which Finnish law is applied |
| Regulatory treatment | | | | |
| 4 Transitional CRR rules | Common Equity Tier 1 (CET1) | Common Equity Tier 1 (CET1) | Additional Tier 1 capital (AT1) | Additional Tier 1 capital (AT1) |
| 5 Post-transitional CRR rules | Common Equity Tier 1 (CET1) | Common Equity Tier 1 (CET1) | Not applicable | Not applicable |
| 6 Eligible at solo(sub-)consolidated/ solo & (sub-)consolidated | Solo and consolidated | Solo and consolidated | Solo and consolidated | Solo and consolidated |
| 7 Instrument type (types to be specified by each jurisdiction) | CET1 as published in the EBA list | CET1 as published in the EBA list | Not applicable | Not applicable |
| 8 Amount recognised in regulatory capital (currency as of most recent reporting date) EUR mln | 196 | 2 898 | 41 | 39 |
| 9 Nominal amount of instrument (in millions) | EUR 196 | EUR 2 898 | EUR 50 | EUR 40 |
| 9a Issue price | 100 % | 100 % | 100 % | 100 % |
| 9b Redemption price | 100 % | 100 % | 100 % | 100 % |
| 10 Accounting classification | Central cooperative's share, cooperative capital | Central cooperative's share, cooperative capital | Liability - carried at amortised cost | Liability - carried at amortised cost |
| 11 Original date of issuance | Not applicable | Not applicable | 31.3.2005 | 30.11.2005 |
| 12 Perpetual or dated | Perpetual | Perpetual | Perpetual | Perpetual |
| 13 Original maturity date | No maturity | No maturity | No maturity | No maturity |
| 14 Issuer call subject to prior supervisory approval | Yes | Yes | Yes | Yes |
| 15 Optional call date, contingent call dates and redemption amount | Cooperative banks refund shareholders their cooperative contributions upon termination of membership. However, cooperative banks have the right to refuse to refund the contributions while the bank is operating. If a cooperative bank has not refused to refund the contribution, this may take place within 12 months after the end of the financial year when membership terminated. If the refund cannot be made in full in any given year, the balance will be refunded from disposable cooperative capital based on subsequent financial statements. However, this entitlement to the refund for the balance will terminate after the fifth financial statements. | Cooperative banks refund shareholders the subscription price of their Profit shares upon termination of membership. A Profit share's subscription price is also refunded to the shareholder when the shareholder has cancelled the Profit share. However, cooperative banks have the right to refuse to refund the Profit share contributions while the bank is operating. If a cooperative bank has not refused to refund the Profit share contribution, this may take place within 12 months after the end of the financial year when membership terminated or the Profit share has been cancelled. If the refund cannot be made in full in any given year, the balance will be refunded from disposable cooperative capital based on subsequent financial statements. However, this entitlement to the refund for the balance will terminate after the fifth financial statements. | The issuer has the right to capital payment. Right to redeem if, owing to (i) change in law, (ii) official interpretation or (iii) Financial Supervisory Authority decision, the issuer cannot include the instrument under its Tier 1 capital; The issuer also has right to early redemption on the basis of such tax laws and interpretations that would result in the issuer having to pay extra or not being able to deduct interest. Redemption price 100% | 1) Right to redeem on 30 November 2010 or the following interest payment dates: 28 February, 30 May, 30 August or 30 November; 2) Right to redeem if, owing to (i) change in law, (ii) official interpretation or (iii) Financial Supervisory Authority decision, the issuer cannot include the instrument under its Tier 1 capital; 3) Right to early redemption on the basis of such tax laws and interpretations that would result in the issuer having to pay extra or not being able to deduct interest. Redemption price 100% |
| 16 Subsequent call dates, if applicable | See item 15 | See item 15 | See item 15 | See item 15 |
| Coupons/dividends | | | | |
| 17 Fixed or floating dividend/coupon | Floating | Floating | From fixed to floating | Floating |
| 18 Coupon rate and any related index | Not applicable | Not applicable | 6.5% per annum until 11 April 2006, after which 10-year Swap interest + 0.1% per annum, maximum interest 8% per annum | 3-month EURIBOR + 1.25% per annum |
| 19 Existence of dividend stopper | No | No | Yes | Yes |
| 20a Fully discretionary, partially discretionary or mandatory (in terms of timing) | Fully discretionary | Fully discretionary | Partially discretionary | Partially discretionary |
| 20b Fully discretionary, partially discretionary or mandatory (in terms of amount) | Fully discretionary | Fully discretionary | Partially discretionary [if the issuer's distributable funds were not be enough for the payment of interest on (i) the instrument, (ii) other subordinated loans or (iii) subordinated loans guaranteed by the issuer.] | Partially discretionary [if the issuer's distributable funds were not be enough for the payment of interest on (i) the instrument, (ii) other subordinated loans or (iii) subordinated loans guaranteed by the issuer.] |
| 21 Existence of step up or other incentive to redeem | Not applicable | Not applicable | No | No |
| 22 Non-cumulative or cumulative | Non-cumulative | Non-cumulative | Non-cumulative | Non-cumulative |
| 23 Convertible or non-convertible | Non-convertible | Non-convertible | Non-convertible | Non-convertible |
| 24 If convertible, conversion triggers | Not applicable | Not applicable | Not applicable | Not applicable |
| 25 If convertible, fully or partially | Not applicable | Not applicable | Not applicable | Not applicable |
| 26 If convertible, conversion rate | Not applicable | Not applicable | Not applicable | Not applicable |
| 27 If convertible, mandatory or optional conversion | Not applicable | Not applicable | Not applicable | Not applicable |
| 28 If convertible, specify instrument type convertible into | Not applicable | Not applicable | Not applicable | Not applicable |
| 29 If convertible, specify issuer of instrument it converts into | Not applicable | Not applicable | Not applicable | Not applicable |
| 30 Write-down features | Yes | Yes | Not applicable | Not applicable |
| 31 If write-down, write-down triggers | Accumulation of losses | Accumulation of losses | Not applicable | Not applicable |
| 32 If write-down, full or partial | Full or partial | Full or partial | Not applicable | Not applicable |
| 33 If write-down, permanent or temporary | Temporary | Temporary | Not applicable | Not applicable |
| 34 If temporary write-down, description of write-up mechanism | Through increase of cooperative capital | Through increase of cooperative capital | Not applicable | Not applicable |
| 35 Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument) | If a cooperative bank is dissolved either through liquidation or bankruptcy, any supplementary cooperative capital is refunded before other cooperative capital or, if the funds are insufficient, that part of supplementary cooperative capital that is proportional to the supplementary cooperative capital paid. | If a cooperative bank is dissolved either through liquidation or bankruptcy, any supplementary cooperative capital is refunded before other cooperative capital or, if the funds are insufficient, that part of supplementary cooperative capital that is proportional to the supplementary cooperative capital paid. | The issuer's Tier 2 instruments and other subordinated debt with a higher priority than the instrument | The issuer's Tier 2 instruments and other subordinated debt with a higher priority than the instrument |
| 36 Non-compliant transitioned features | No | No | Yes | Yes |
| 37 If yes, specify non-compliant features | Not applicable | Not applicable | No loss cover mechanism and dividend stopper | No loss cover mechanism and dividend stopper |

The terms and conditions of CET1 instruments can be found in the bylaws of each Group member cooperative bank on their website: [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](#), and on the Helsinki OP Bank website: [op.fi > OP Financial Group > About us > Group member cooperative banks > OP Helsinki](#)

Annex 1. Capital instruments' main features

| Capital instruments' main features template | EUR 500,000,000 Subordinated Instruments due 2022 | EUR 100,000,000 5.25 per cent. Subordinated Instruments due 14 September 2021 | CHF 100,000,000 3.375 Subordinated Instruments | JPY 10,000,000,000 Subordinated Floating Rate Instruments due 3 July 2025 |
|--|---|---|---|---|
| 1 Issuer | OP Corporate Bank plc | OP Corporate Bank plc | OP Corporate Bank plc | OP Corporate Bank plc |
| 2 Unique identifier (e.g. CUSIP, ISIN or Bloomberg identifier for private placement) | ISIN: XS0750702507 [[EMTN Series 130]] | ISIN: XS0677081993 [[EMTN Series 127]] | ISIN: CH0132112993 | ISIN: XS1255402288 |
| 3 Governing law(s) of the instrument | English law, except for conditions relating to creditor order of priority, to which Finnish law is applied | English law, except for conditions relating to creditor order of priority, to which Finnish law is applied | English law, except for conditions relating to creditor order of priority, to which Finnish law is applied | English law, except for the subordination provisions which are governed by Finnish law |
| Regulatory treatment | | | | |
| 4 Transitional CRR rules | Tier 2 Capital (T2) | Tier 2 Capital (T2) | Tier 2 Capital (T2) | Tier 2 Capital (T2) |
| 5 Post-transitional CRR rules | Tier 2 Capital (T2) | Tier 2 Capital (T2) | Tier 2 Capital (T2) | Tier 2 Capital (T2) |
| 6 Eligible at solo(sub-)-consolidated/ solo & (sub-)-consolidated | Solo and consolidated | Solo and consolidated | Solo and consolidated | Solo and consolidated |
| 7 Instrument type (types to be specified by each jurisdiction) | Not applicable | Not applicable | Not applicable | Not applicable |
| 8 Amount recognised in regulatory capital (currency as of most recent reporting date) EUR mln | 296 | 54 | 42 | 72 |
| 9 Nominal amount of instrument (in millions) | EUR 500 | EUR 100 | CHF 100 | JPY 10 000 |
| 9a Issue price | 99.977% | 99.612% | 100.208% | 100 % |
| 9b Redemption price | 100 % | 100 % | 100 % | 100 % |
| 10 Accounting classification | Liability - carried at amortised cost | Liability - carried at amortised cost | Liability - carried at amortised cost | Liability - carried at amortised cost |
| 11 Original date of issuance | 28.2.2012 | 14.9.2011 | 14.7.2011 | 3.7.2015 |
| 12 Perpetual or dated | Dated | Dated | Dated | Dated |
| 13 Original maturity date | 28.2.2022 | 14.9.2021 | 14.7.2021 | 3.7.2025 |
| 14 Issuer call subject to prior supervisory approval | Yes | Yes | Yes | Yes |
| 15 Optional call date, contingent call dates and redemption amount | The issuer has the right of redemption, which begins on the date of issuance and ends 90 calendar days after CRD IV entered into force and the directive was adopted in Finland, provided the Financial Supervisory Authority decides that the issuer may no longer include the instrument under its Tier 2 capital, in part or in full. Redemption price 101%. Also the right to early redemption on the basis of such tax laws and interpretations that would result in the issuer having to pay extra. Redemption price 100% | Right to early redemption on the basis of such changes in tax laws and interpretations that would result in the issuer having to pay extra. Redemption price 100% | Right to early redemption on the basis of such changes in tax laws and interpretations that would result in the issuer having to pay extra. Redemption price 100% | Right to early redemption on the basis of such changes in tax laws and interpretations that would result in the issuer having to pay extra. Redemption price 100% |
| 16 Subsequent call dates, if applicable | See item 15 | See item 15 | See item 15 | See item 15 |
| Coupons/dividends | | | | |
| 17 Fixed or floating dividend/coupon | Fixed | Fixed | Fixed | Floating |
| 18 Coupon rate and any related index | 5.75% per annum | 5.25% per annum | 3.375% per annum | 3-month JPY Libor + 0.735% per annum |
| 19 Existence of dividend stopper | No | No | No | No |
| 20a Fully discretionary, partially discretionary or mandatory (in terms of timing) | Mandatory | Mandatory | Mandatory | Mandatory |
| 20b Fully discretionary, partially discretionary or mandatory (in terms of amount) | Mandatory | Mandatory | Mandatory | Mandatory |
| 21 Existence of step up or other incentive to redeem | No | No | No | No |
| 22 Non-cumulative or cumulative | Non-cumulative | Non-cumulative | Non-cumulative | Non-cumulative |
| 23 Convertible or non-convertible | Non-convertible | Non-convertible | Non-convertible | Non-convertible |
| 24 If convertible, conversion triggers | Not applicable | Not applicable | Not applicable | Not applicable |
| 25 If convertible, fully or partially | Not applicable | Not applicable | Not applicable | Not applicable |
| 26 If convertible, conversion rate | Not applicable | Not applicable | Not applicable | Not applicable |
| 27 If convertible, mandatory or optional conversion | Not applicable | Not applicable | Not applicable | Not applicable |
| 28 If convertible, specify instrument type convertible into | Not applicable | Not applicable | Not applicable | Not applicable |
| 29 If convertible, specify issuer of instrument it converts into | Not applicable | Not applicable | Not applicable | Not applicable |
| 30 Write-down features | Not applicable | Not applicable | Not applicable | Not applicable |
| 31 If write-down, write-down triggers | Not applicable | Not applicable | Not applicable | Not applicable |
| 32 If write-down, full or partial | Not applicable | Not applicable | Not applicable | Not applicable |
| 33 If write-down, permanent or temporary | Not applicable | Not applicable | Not applicable | Not applicable |
| 34 If temporary write-down, description of write-up mechanism | Not applicable | Not applicable | Not applicable | Not applicable |
| 35 Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument) | Issuer's senior instruments | Issuer's senior instruments | Issuer's senior instruments | Issuer's senior instruments |
| 36 Non-compliant transitioned features | No | No | No | No |
| 37 If yes, specify non-compliant features | Not applicable | Not applicable | Not applicable | Not applicable |

Annex 1. Capital instruments' main features

| Capital instruments' main features template | SEK 3,500,000,000 Callable Floating Rate Dated Tier 2 Instruments due 2025 | EUR 100,000,000 2.405 per cent Dated Tier 2 Instruments due 2025 | Helsinki OP Fixed Debenture 1/2014 | Helsinki OP Fixed Debenture 2/2014 |
|--|---|---|--|--|
| 1 Issuer | OP Corporate Bank plc | OP Corporate Bank plc | Helsinki Area Cooperative Bank | Helsinki Area Cooperative Bank |
| 2 Unique identifier (e.g. CUSIP, ISIN or Bloomberg identifier for private placement) | ISIN: XS1280147569 | ISIN: XS1296897579 | ISIN: FI4000090360 | ISIN: FI4000096938 |
| 3 Governing law(s) of the instrument | English law, except for the subordination provisions which are governed by Finnish law | English law, except for the subordination provisions which are governed by Finnish law | Finnish law | Finnish law |
| Regulatory treatment | | | | |
| 4 Transitional CRR rules | Tier 2 Capital (T2) | Tier 2 Capital (T2) | Tier 2 Capital (T2) | Tier 2 Capital (T2) |
| 5 Post-transitional CRR rules | Tier 2 Capital (T2) | Tier 2 Capital (T2) | Tier 2 Capital (T2) | Tier 2 Capital (T2) |
| 6 Eligible at solo(sub-)consolidated/ solo & (sub-)consolidated | Solo and consolidated | Solo and consolidated | Solo and consolidated | Solo and consolidated |
| 7 Instrument type (types to be specified by each jurisdiction) | Not applicable | Not applicable | Not applicable | Not applicable |
| 8 Amount recognised in regulatory capital (currency as of most recent reporting date) EUR mln | 371 | 100 | 11 | 11 |
| 9 Nominal amount of instrument (in millions) | SEK 3 500 | EUR 100 | EUR 11 | EUR 11 |
| 9a Issue price | 100 % | 100 % | 100 % | 100 % |
| 9b Redemption price | 100 % | 100 % | 100 % | 100 % |
| 10 Accounting classification | Liability - carried at amortised cost | Liability - carried at amortised cost | Liability - carried at amortised cost | Liability - carried at amortised cost |
| 11 Original date of issuance | 25.8.2015 | 25.9.2015 | 14.5.2014 | 18.6.2014 |
| 12 Perpetual or dated | Dated | Dated | Dated | Dated |
| 13 Original maturity date | 25.8.2025 | 25.9.2025 | 14.5.2024 | 18.6.2024 |
| 14 Issuer call subject to prior supervisory approval | Yes | Yes | Yes | Yes |
| 15 Optional call date, contingent call dates and redemption amount | The issuer's opportunity to redeem on 25 August 2020. The right of redemption at nominal value at any time due during the loan term due to a capital transaction or taxable event. Right to early redemption on the basis of such changes in tax laws and interpretations that would result in the issuer having to pay extra. Redemption price 100%. | The right of redemption at nominal value at any time due during the loan term due to a capital transaction or taxable event. Right to early redemption on the basis of such changes in tax laws and interpretations that would result in the issuer having to pay extra. Redemption price 100%. | The debenture is refunded in full in one instalment on 14 May 2024, on early refund date on 14 May 2019 or on the date specified in the issuer's general loan terms. Amount to be refunded: Nominal value | The debenture is refunded in full in one instalment on 18 June 2024, on early refund date on 18 June 2019 or on the date specified in the issuer's general loan terms. Amount to be refunded: Nominal value |
| 16 Subsequent call dates, if applicable | See item 15 | See item 15 | See item 15 | See item 15 |
| Coupons/dividends | | | | |
| 17 Fixed or floating dividend/coupon | Floating | Fixed | Fixed | From fixed to floating |
| 18 Coupon rate and any related index | 3-month Stöbor + 1.6 % per annum. Minimum interest rate of 0% per annum | 2.405% per annum | 3.25% per annum | 3.25% per annum until 18 June 2019, after which 6-month EURIBOR + 2.54.% per annum |
| 19 Existence of dividend stopper | No | No | No | No |
| 20a Fully discretionary, partially discretionary or mandatory (in terms of timing) | Mandatory | Mandatory | Mandatory | Mandatory |
| 20b Fully discretionary, partially discretionary or mandatory (in terms of amount) | Mandatory | Mandatory | Mandatory | Mandatory |
| 21 Existence of step up or other incentive to redeem | No | No | No | No |
| 22 Non-cumulative or cumulative | Non-cumulative | Non-cumulative | Non-cumulative | Non-cumulative |
| 23 Convertible or non-convertible | Non-convertible | Non-convertible | Non-convertible | Non-convertible |
| 24 If convertible, conversion triggers | Not applicable | Not applicable | Not applicable | Not applicable |
| 25 If convertible, fully or partially | Not applicable | Not applicable | Not applicable | Not applicable |
| 26 If convertible, conversion rate | Not applicable | Not applicable | Not applicable | Not applicable |
| 27 If convertible, mandatory or optional conversion | Not applicable | Not applicable | Not applicable | Not applicable |
| 28 If convertible, specify instrument type convertible into | Not applicable | Not applicable | Not applicable | Not applicable |
| 29 If convertible, specify issuer of instrument it converts into | Not applicable | Not applicable | Not applicable | Not applicable |
| 30 Write-down features | Not applicable | Not applicable | Not applicable | Not applicable |
| 31 If write-down, write-down triggers | Not applicable | Not applicable | Not applicable | Not applicable |
| 32 If write-down, full or partial | Not applicable | Not applicable | Not applicable | Not applicable |
| 33 If write-down, permanent or temporary | Not applicable | Not applicable | Not applicable | Not applicable |
| 34 If temporary write-down, description of write-up mechanism | Not applicable | Not applicable | Not applicable | Not applicable |
| 35 Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument) | Issuer's senior instruments | Issuer's senior instruments | Debentures are debt instruments that have lower priority belonging to Tier 2 capital as specified in Article 63 of Regulation No. 575/2013 of the European Parliament and of the Council, provided the other conditions in the article are met. The debenture has lower priority than the issuer's other commitments. The debenture cannot be used to set off counter receivables. | Debentures are debt instruments that have lower priority belonging to Tier 2 capital as specified in Article 63 of Regulation No. 575/2013 of the European Parliament and of the Council, provided the other conditions in the article are met. The debenture has lower priority than the issuer's other commitments. The debenture cannot be used to set off counter receivables. |
| 36 Non-compliant transitioned features | No | No | No | No |
| 37 If yes, specify non-compliant features | Not applicable | Not applicable | Not applicable | Not applicable |

Annex 1. Capital instruments' main features

| Capital instruments' main features template | Helsinki OP Fixed Debenture 3/2014 | Helsinki OP Fixed Debenture 4/2014 | Helsinki OP Fixed Debenture 5/2014 | Helsinki OP Fixed Debenture 6/2014 |
|--|--|--|--|--|
| 1 Issuer | Helsinki Area Cooperative Bank | Helsinki Area Cooperative Bank | Helsinki Area Cooperative Bank | Helsinki Area Cooperative Bank |
| 2 Unique identifier (e.g. CUSIP, ISIN or Bloomberg identifier for private placement) | FI4000100409 | FI4000106398 | FI4000113063 | FI4000115530 |
| 3 Governing law(s) of the instrument | Finnish law | Finnish law | Finnish law | Finnish law |
| Regulatory treatment | | | | |
| 4 Transitional CRR rules | Tier 2 Capital (T2) | Tier 2 Capital (T2) | Tier 2 Capital (T2) | Tier 2 Capital (T2) |
| 5 Post-transitional CRR rules | Tier 2 Capital (T2) | Tier 2 Capital (T2) | Tier 2 Capital (T2) | Tier 2 Capital (T2) |
| 6 Eligible at solo(sub-)-consolidated/ solo & (sub-)-consolidated | Solo and consolidated | Solo and consolidated | Solo and consolidated | Solo and consolidated |
| 7 Instrument type (types to be specified by each jurisdiction) | Not applicable | Not applicable | Not applicable | Not applicable |
| 8 Amount recognised in regulatory capital (currency as of most recent reporting date) EUR mln | 6 | 11 | 12 | 8 |
| 9 Nominal amount of instrument (in millions) | EUR 6 | EUR 11 | EUR 12 | EUR 8 |
| 9a Issue price | 100 % | 100 % | 100 % | 100 % |
| 9b Redemption price | 100 % | 100 % | 100 % | 100 % |
| 10 Accounting classification | Liability - carried at amortised cost | Liability - carried at amortised cost | Liability - carried at amortised cost | Liability - carried at amortised cost |
| 11 Original date of issuance | 22.8.2014 | 10.10.2014 | 14.11.2014 | 29.12.2014 |
| 12 Perpetual or dated | Dated | Dated | Dated | Dated |
| 13 Original maturity date | 22.8.2024 | 10.10.2024 | 14.11.2024 | 29.12.2024 |
| 14 Issuer call subject to prior supervisory approval | Yes | Yes | Yes | Yes |
| 15 Optional call date, contingent call dates and redemption amount | The debenture is refunded in full in one instalment on 22 August 2024, on early refund date on 22 August 2019 or on the date specified in the issuer's general loan terms. Amount to be refunded: Nominal value | The debenture is refunded in full in one instalment on 10 October 2024, on early refund date on 10 October 2019 or on the date specified in the issuer's general loan terms. Amount to be refunded: Nominal value | The debenture is refunded in full in one instalment on 14 November 2024, on early refund date on 14 November 2019 or on the date specified in the issuer's general loan terms. Amount to be refunded: Nominal value | The debenture is refunded in full in one instalment on 29 December 2024, on early refund date on 29 December 2019 or on the date specified in the issuer's general loan terms. Amount to be refunded: Nominal value |
| 16 Subsequent call dates, if applicable | See item 15 | See item 15 | See item 15 | See item 15 |
| Coupons/dividends | | | | |
| 17 Fixed or floating dividend/coupon | From fixed to floating | From fixed to floating | From fixed to floating | From fixed to floating |
| 18 Coupon rate and any related index | 3.25% per annum until 22 August 2019, after which 6-month EURIBOR + 2.67% per annum | 3.25% per annum until 10 October 2019, after which 6-month EURIBOR + 2.78% per annum | 3.25% per annum until 14 November 2019, after which 6-month EURIBOR + 2.81% per annum | 3.25% per annum until 29 December 2019, after which 6-month EURIBOR + 2.86% per annum |
| 19 Existence of dividend stopper | No | No | No | No |
| 20a Fully discretionary, partially discretionary or mandatory (in terms of timing) | Mandatory | Mandatory | Mandatory | Mandatory |
| 20b Fully discretionary, partially discretionary or mandatory (in terms of amount) | Mandatory | Mandatory | Mandatory | Mandatory |
| 21 Existence of step up or other incentive to redeem | No | No | No | No |
| 22 Non-cumulative or cumulative | Non-cumulative | Non-cumulative | Non-cumulative | Non-cumulative |
| 23 Convertible or non-convertible | Non-convertible | Non-convertible | Non-convertible | Non-convertible |
| 24 If convertible, conversion triggers | Not applicable | Not applicable | Not applicable | Not applicable |
| 25 If convertible, fully or partially | Not applicable | Not applicable | Not applicable | Not applicable |
| 26 If convertible, conversion rate | Not applicable | Not applicable | Not applicable | Not applicable |
| 27 If convertible, mandatory or optional conversion | Not applicable | Not applicable | Not applicable | Not applicable |
| 28 If convertible, specify instrument type convertible into | Not applicable | Not applicable | Not applicable | Not applicable |
| 29 If convertible, specify issuer of instrument it converts into | Not applicable | Not applicable | Not applicable | Not applicable |
| 30 Write-down features | Not applicable | Not applicable | Not applicable | Not applicable |
| 31 If write-down, write-down triggers | Not applicable | Not applicable | Not applicable | Not applicable |
| 32 If write-down, full or partial | Not applicable | Not applicable | Not applicable | Not applicable |
| 33 If write-down, permanent or temporary | Not applicable | Not applicable | Not applicable | Not applicable |
| 34 If temporary write-down, description of write-up mechanism | Not applicable | Not applicable | Not applicable | Not applicable |
| 35 Position in subordination hierarchy in liquidation (specify instrument type immediately senior to instrument) | Debentures are debt instruments that have lower priority belonging to Tier 2 capital as specified in Article 63 of Regulation No. 575/2013 of the European Parliament and of the Council, provided the other conditions in the article are met. The debenture has lower priority than the issuer's other commitments. The debenture cannot be used to set off counter receivables. | Debentures are debt instruments that have lower priority belonging to Tier 2 capital as specified in Article 63 of Regulation No. 575/2013 of the European Parliament and of the Council, provided the other conditions in the article are met. The debenture has lower priority than the issuer's other commitments. The debenture cannot be used to set off counter receivables. | Debentures are debt instruments that have lower priority belonging to Tier 2 capital as specified in Article 63 of Regulation No. 575/2013 of the European Parliament and of the Council, provided the other conditions in the article are met. The debenture has lower priority than the issuer's other commitments. The debenture cannot be used to set off counter receivables. | Debentures are debt instruments that have lower priority belonging to Tier 2 capital as specified in Article 63 of Regulation No. 575/2013 of the European Parliament and of the Council, provided the other conditions in the article are met. The debenture has lower priority than the issuer's other commitments. The debenture cannot be used to set off counter receivables. |
| 36 Non-compliant transitioned features | No | No | No | No |
| 37 If yes, specify non-compliant features | Not applicable | Not applicable | Not applicable | Not applicable |