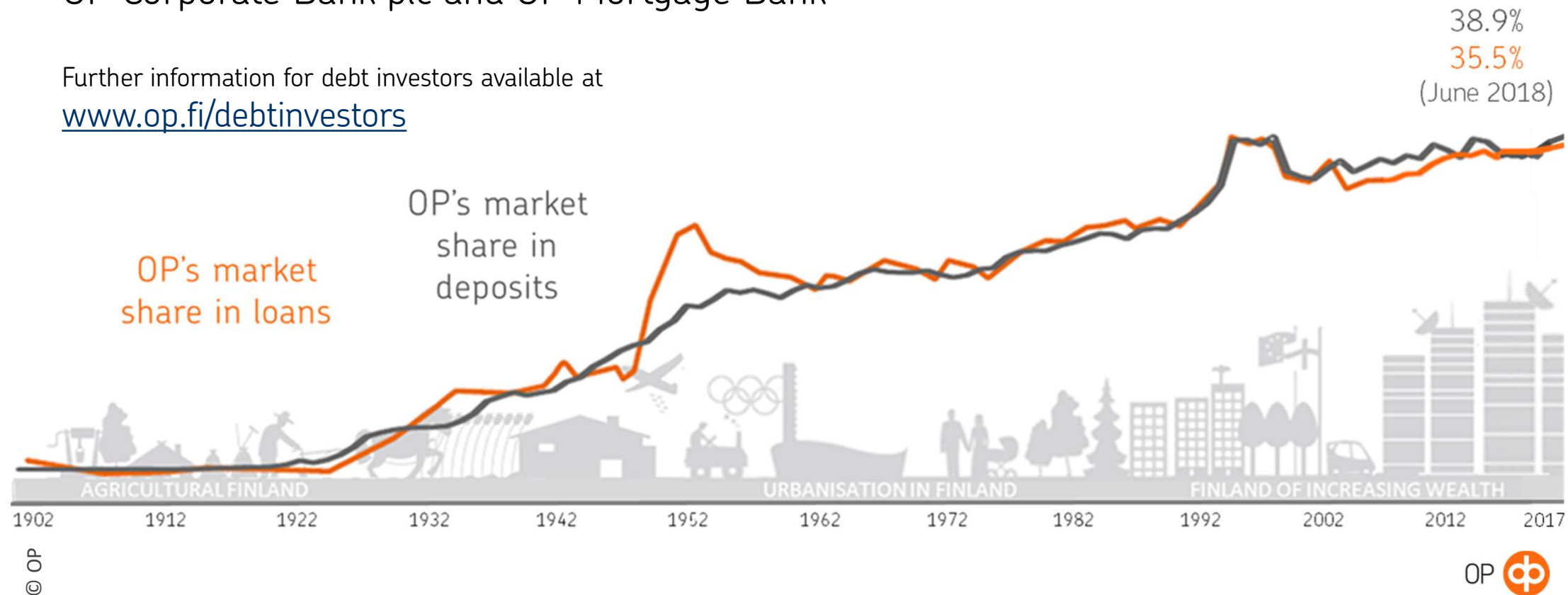


# Debt Investor Presentation FY/2018

OP Financial Group and issuing entities  
OP Corporate Bank plc and OP Mortgage Bank

Further information for debt investors available at  
[www.op.fi/debtinvestors](http://www.op.fi/debtinvestors)



# Disclaimer

Certain statements in this presentation are based on the beliefs of our management as well as assumptions made by and information currently available to the management. All forward-looking statements in this presentation expressing the management's expectations, beliefs, estimates, forecasts, projections and assumptions are based on the current view of the future development in the operating environment and the future financial performance of OP Financial Group and its various functions. No assurance can be given that such expectations will prove to have been correct. Accordingly, results may differ materially from those set out in the forward-looking statements as a result of various factors. OP Financial Group has used sources of information which it considers to be reliable, and the accuracy and reliability of which it has sought to establish to the best of its ability, but it can nevertheless not guarantee their accuracy or reliability.

A number of different factors may cause the actual performance to deviate significantly from the forward-looking statements in the presentations. Our financial reports also describe risks and factors that could affect our future performance and the industry in which we operate. Should one or more of these risks or uncertainties materialise or should any underlying assumptions prove to be incorrect, our actual financial position or results of operations could materially differ from that presented as anticipated, believed, estimated or expected. The views and other information provided are current as of the date of when such information was provided and may be subject to change without notice. OP Financial Group does not undertake and is not under any obligation to update any of the forward-looking statements or to conform such statements to actual results, except as may be required by law or applicable stock exchange regulations.

Past performance is no guide to future performance. Persons needing advice should consult an independent financial, legal or tax adviser.

# Contents

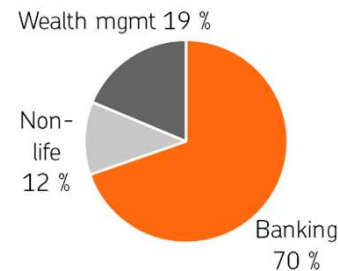
- OP Financial Group in brief
- Key financials FY/2018
- Finnish economy
- OP Financial Group
  - Structure, joint liability and market shares
  - Strategy, competitive advantages and digitalisation
  - CSR programme
  - Capitalisation, financial performance and asset quality
  - Credit ratings, liquidity and funding
- OP Mortgage Bank
- OPMB Cover Asset Pool Characteristics and ECBC Harmonised Transparency Template
- Appendix
- Debt IR contacts

# Co-operative OP Financial Group in brief

## TOTAL ASSETS & DIVERSIFIED EBT (2018)

€140 bn

at YE2018



## SOLID CAPITAL POSITION

20.5%

CET1 ratio  
at YE2018

22.5%

Total capital ratio  
at YE2018

8.6%

Leverage ratio  
at YE2018

## MARKET LEADER IN FINLAND

38.9%

Market share  
in deposits  
June 2018

35.5%

Market share  
in loans  
June 2018

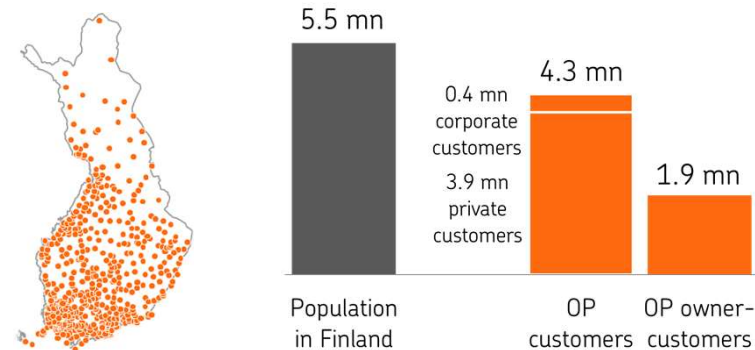
33.0%

Market share in  
non-life insurance  
2017

## JOINT LIABILITY

Central institution, OP Cooperative, and the member credit institutions (incl. both issuing entities) of the amalgamation are jointly liable for each others' debts and commitments, by virtue of the Finnish law.

## FINNISH RISK EXPOSURE



## HIGH CREDIT RATINGS

Moody's Aa3

S&P AA-

OP Corporate Bank plc

Moody's Aaa

S&P AAA

OP Mortgage Bank's  
covered bonds

# Key financials FY/2018

## KEY P&L LINE ITEMS

Group EBT €1,017 mn (-1%)	Banking EBT €795 mn (+28%) Non-life Insurance EBT €133 mn (-37%) Wealth Management EBT €213 mn (-14%)
Total income €2,943 mn (-4%)	NII €1,175 mn (+7%) Net insurance income €566 mn (+19%) Net commissions and fees €887 mn (+1%) Net investment income €254 mn (-51%)
Total expenses €1,681 mn (-5%)	Transfer of the portfolio of the statutory earnings-related pension insurance for OP Financial Group's personnel decreased pension expenses by €286 mn. Personnel costs, development costs, depreciation/amortisation, impairments and authority fees increased. Excl. non-recurring items, expenses grew by 11%.

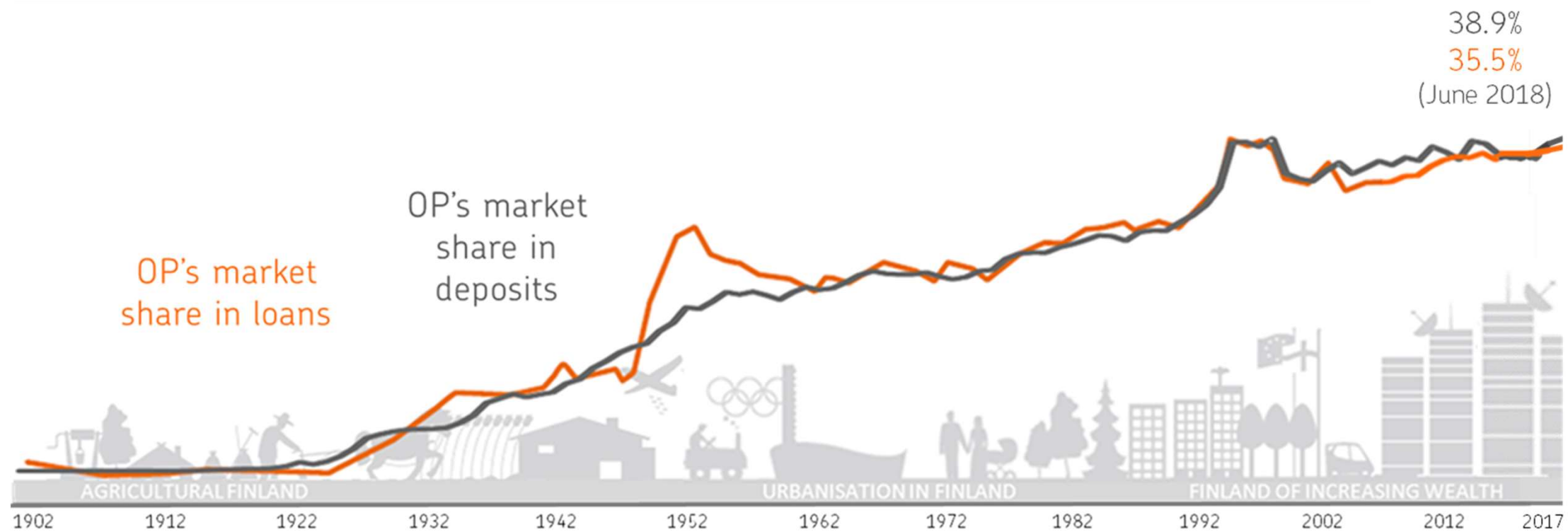
## VOLUMES (y-on-y)

Housing loans +3%
Corporate loans +7%
Deposits +6%
Insurance premium revenue +2%
AUM (gross) -8%

## OUTLOOK 2019

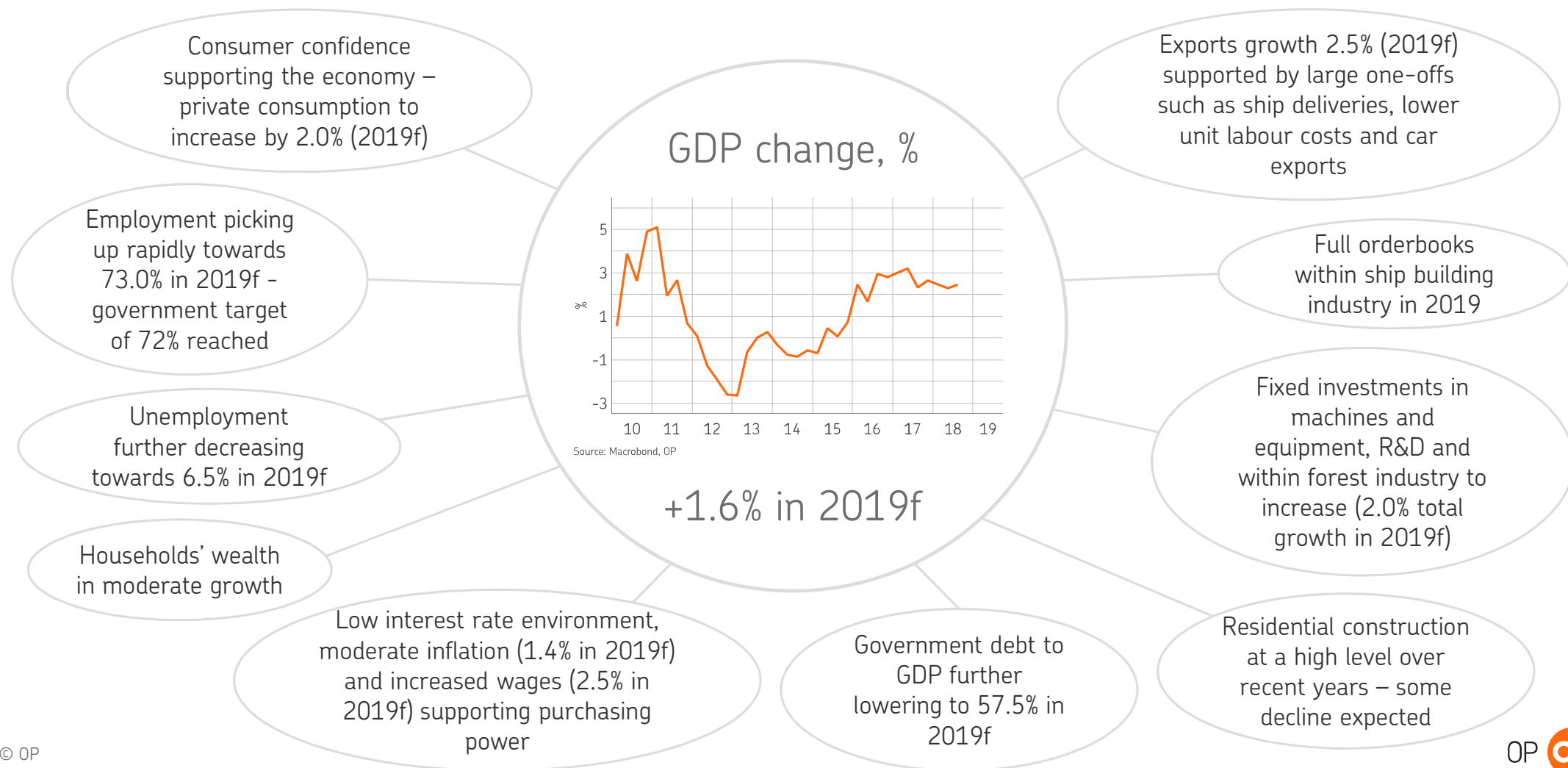
In 2019, OP's EBT is expected to be lower than in 2018

The most significant uncertainties concerning earnings are associated with changes in the interest rate and investment environment, market growth pace, changes in the competitive environment as well as impairment losses.



## Finnish economy

# Moderate economic development in Finland in 2019



# Finnish economy to grow by 1.6% in 2019f

Forecasts for the Finnish economy, January 2019

	EUR bn				
Volume, % change on previous year	2017	2017	2018f	2019f	2020f
GDP	223,8	2,8	2,4	1,6	0,8
Imports	85,4	3,5	3,0	2,8	1,5
Exports	86,3	7,5	1,7	2,5	0,7
Consumption	173,1	0,8	1,4	1,9	1,2
- Private	121,9	1,3	1,3	2,0	1,3
- Public	51,2	-0,5	1,5	1,5	1,0
Fixed investment	49,6	4,0	3,0	2,0	1,0
Other key indicators		2017	2018f	2019f	2020f
Consumer price index, % change y/y		0,7	1,1	1,4	1,5
Change in wage and salary earnings, %		0,2	1,9	2,5	2,5
Unemployment rate, %		8,6	7,4	6,5	6,5
Current account balance, % of GDP		-0,7	-1,4	-1,5	-1,7
General government net lending, % of GDP		-0,7	-0,5	0,0	0,0
General government debt, % of GDP		61,3	58,9	57,5	56,7

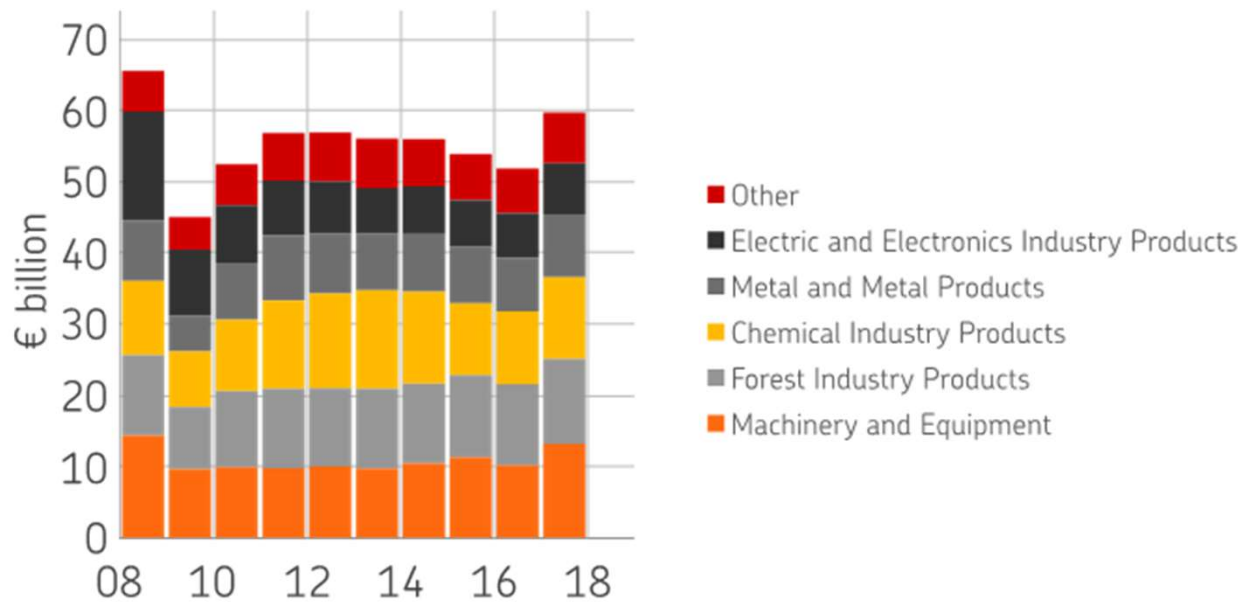
Finland is an exports-driven economy – around 40% of GDP derives from exports

Sources: Statistics Finland and OP Financial Group



# Balanced goods exports structure by commodity group

Goods exports by commodity group  
commodity group 2008–17



Source: Macrobond, Finnish Customs

Goods exports around 2/3 of  
Finnish exports

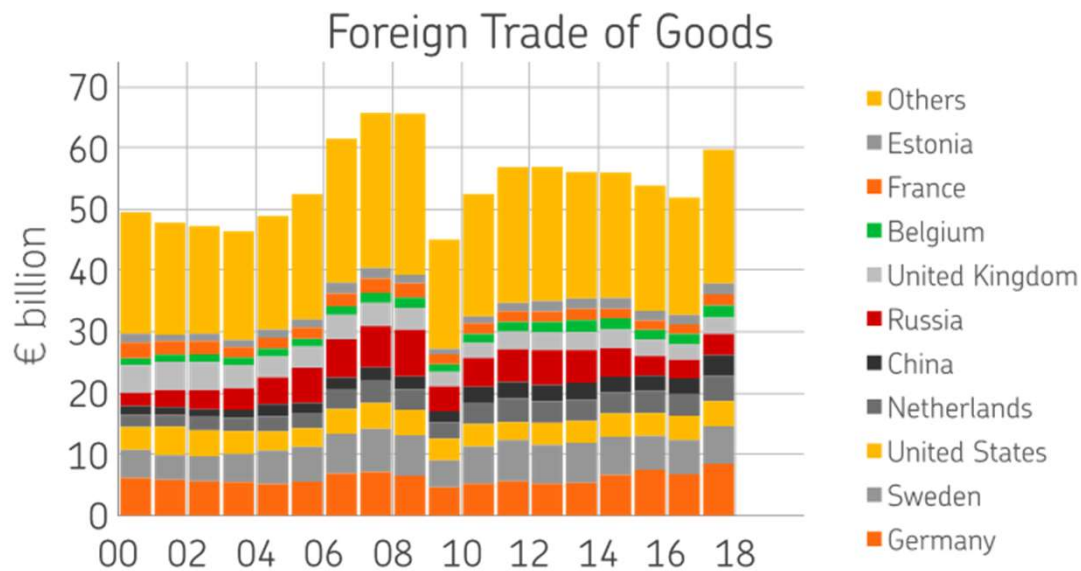


Source: Macrobond, OP  
Latest values: Q3/2018

# Diversified goods exports structure by country

Goods exports to EU member countries 59.7% and to Euro Area 38.4% in Jan.-Sept. 2018

Finland's largest goods exports countries  
2000-17



Source: Macrobond, OP

Finland's biggest trading partners  
(Sept. 2017–Sept. 2018, 12 mth moving avg)

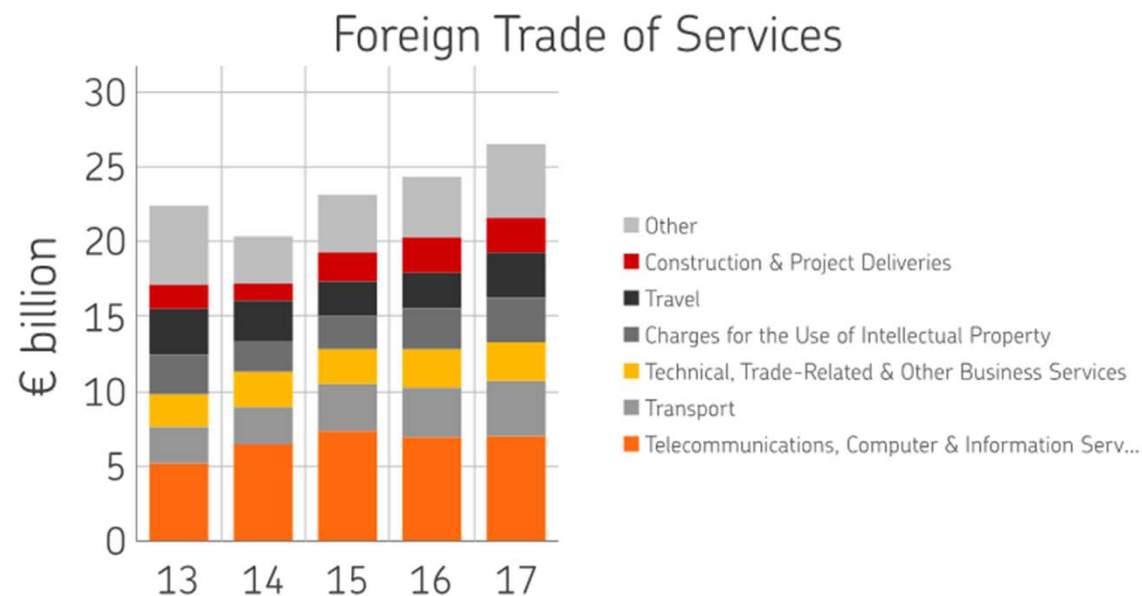


Source: Macrobond, OP

\* Poland (2.7%), Japan (2.3%), Italy (2.3%), Denmark (1.9%), Spain (1.6%), South Korea (1.5%), Turkey (1.2%), Switzerland (1.1%), Canada (1.0%), Australia (1.0%), Latvia (1.0%), India (0.9%), Lithuania (0.9%), Mexico (0.7%), Austria (0.6%), Indonesia (0.6%), Czech Republic (0.5%), South Africa (0.5%), Brazil (0.5%) and the remaining countries (11.8%) of which less than 0.5% each.

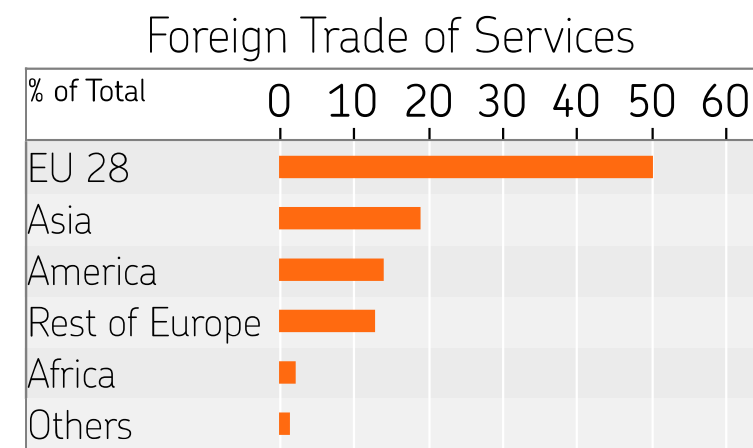
# Service exports structure rather stable

Finland's service exports by item  
2013–17



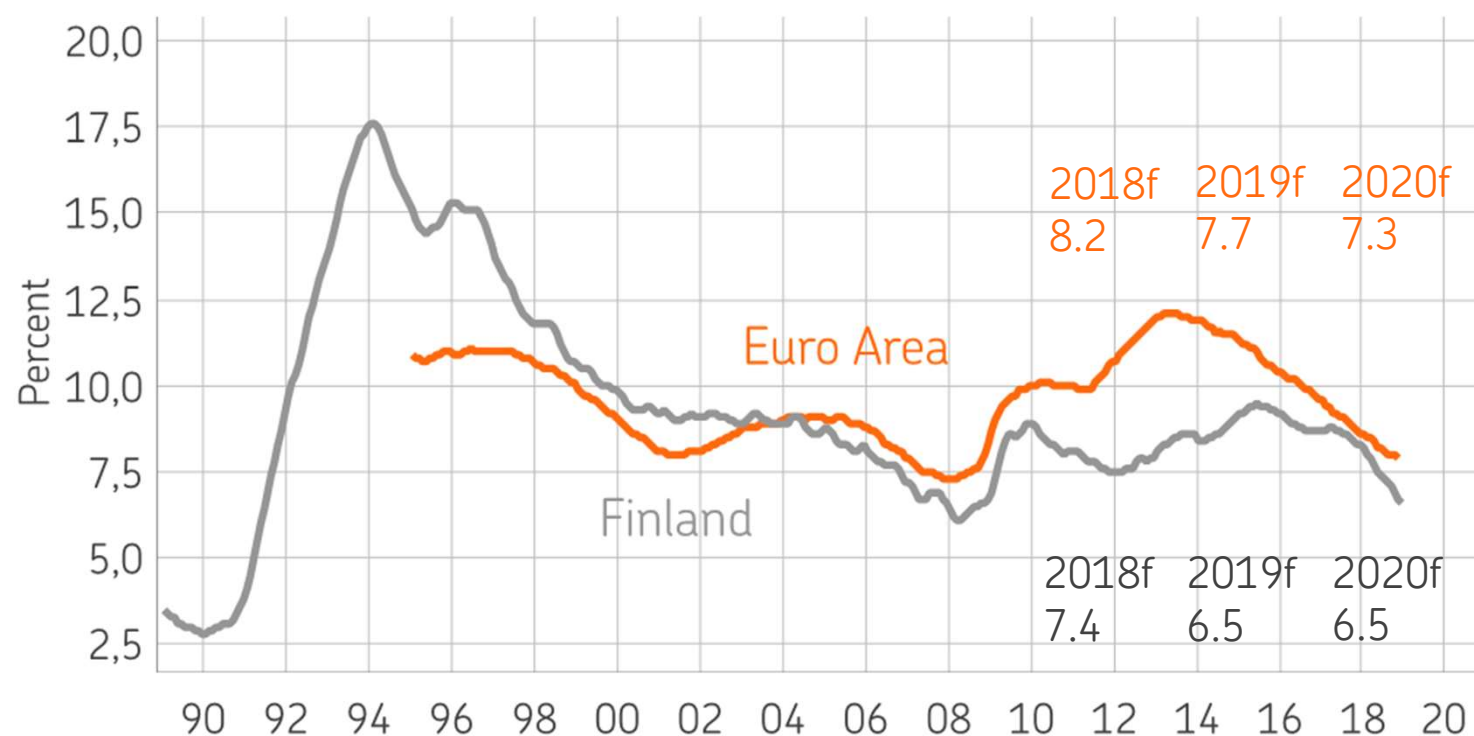
Source: Macrobond, OP

Finland's service exports by area  
(2017)



Source: Macrobond, OP

# Unemployment rate falling faster than expected

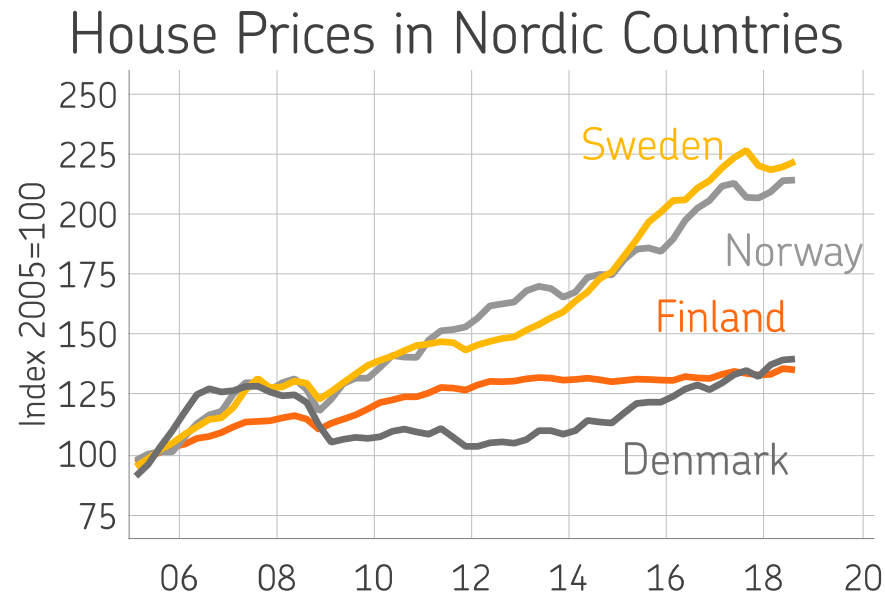


Employment picking up rapidly towards 73.0% in 2019f, the Finnish Government's target of 72% reached

Source: Macrobond, OP

# Average house prices and households' debt

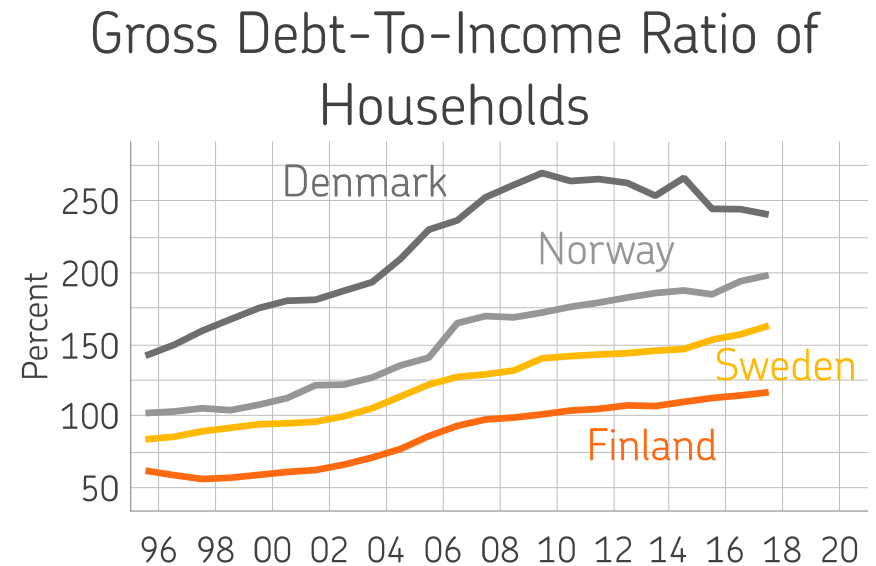
In Finland, housing market picking up and average house prices estimated to increase by 0–3% in 2019



Source: Macrobond, OP, Eurostat

The House Price Index (HPI) measures price changes of all residential properties purchased by households (flats, detached houses, terraced houses, etc.), both new and existing.

Latest values: Q3/2018



Source: Macrobond, OP

Gross debt-to-income ratio of households is defined as liabilities divided by gross disposable income with the latter being adjusted for the net change in pension entitlements.

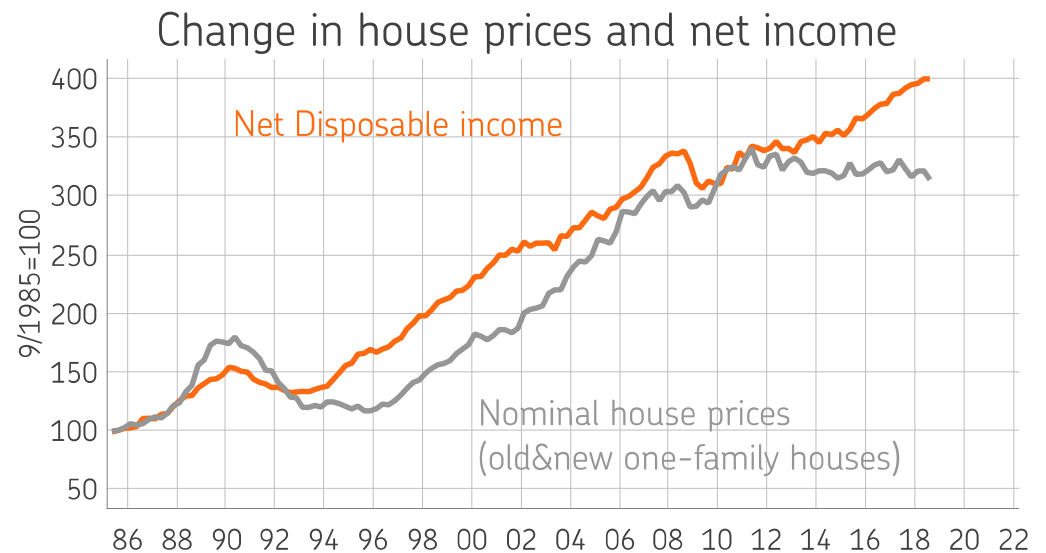
Latest values: 2017

# Finnish housing market is stable

## Characteristics of Finnish housing market

- Fully-amortizing market
- Average maturity of a new housing loan 19 years 11 months in Jan.-Nov. 2018
- 97.5% of housing loans tied to variable interest rates in Nov. 2018
  - At OP, stress-tested with 6% interest rate in 25 years' maturity
- Ownership ratio 72% at YE2017
  - Rental market: 44% municipalities, 35% private investors (households) and 21% professional investors at YE2016
- Average price of an old dwelling 2,063 €/sq m in Dec. 2018
  - 3,674 €/sq m in Helsinki Metropolitan Area
  - 1,589 €/sq m in rest of Finland (excl. HMA)

## Change in nominal house prices in relation to average net income



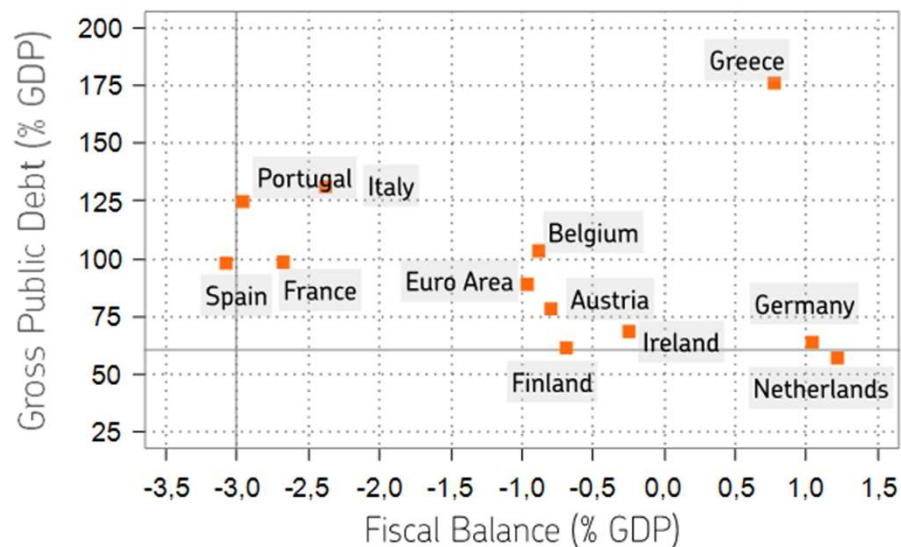
Source: Macrobond, OP

Updated: 31 January 2019

Sources: Statistics Finland and Bank of Finland

# Finland is wealthy and balanced economy in European comparison

Fiscal Balance and Public Debt  
% of GDP in 2017



Source: OP, Macrobond, European Commission estimates

Long-term sovereign credit ratings of selected  
European countries

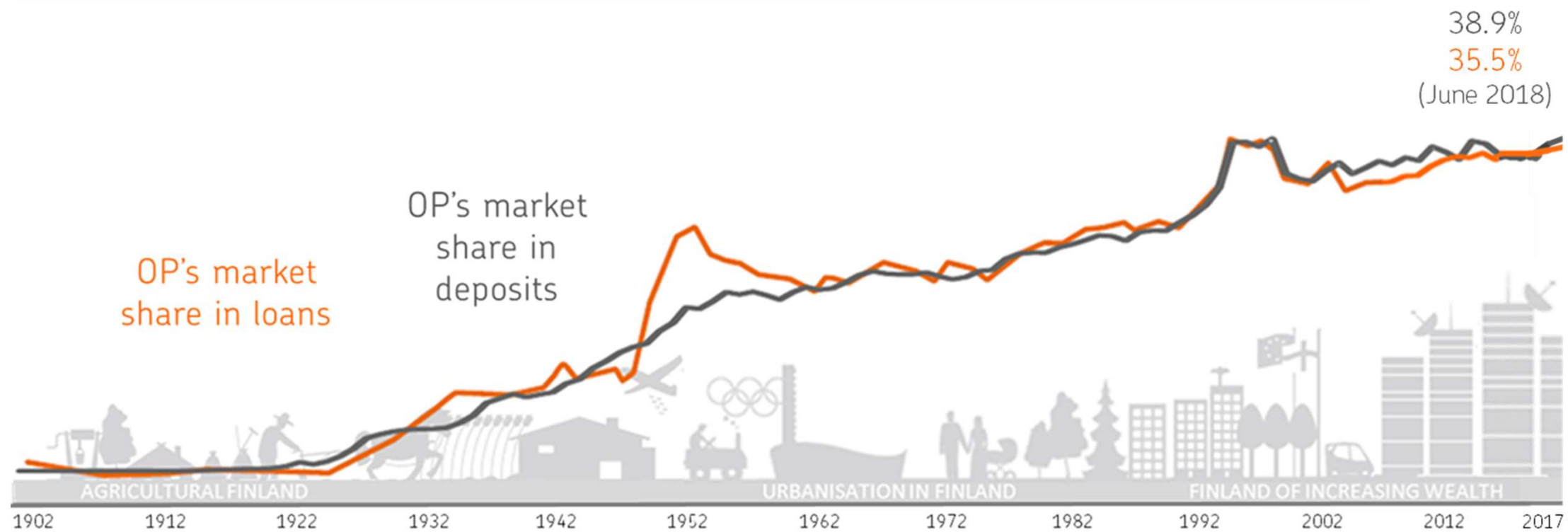
27 January 2019

	Moody's	S&P	Fitch
Germany	Aaa	AAA	AAA
Netherlands	Aaa	AAA	AAA
Austria	Aa1	AA+	AA+*
<b>Finland</b>	<b>Aa1</b>	<b>AA+</b>	<b>AA+*</b>
France	Aa2*	AA	AA
Belgium	Aa3	AA	AA-
Ireland	A2	A+	A+
Spain	Baa1	A-*	A-
Italy	Baa3	BBB**	BBB**
Portugal	Baa3	BBB-*	BBB
Greece	B3*	B+*	BB-

\* Positive outlook

\*\* Negative outlook

Sources: Rating agencies' websites



OP Financial Group



# Customer relationships and agile operating model at the core of OP's management

## OP's new business segments as of 1 Jan. 2019



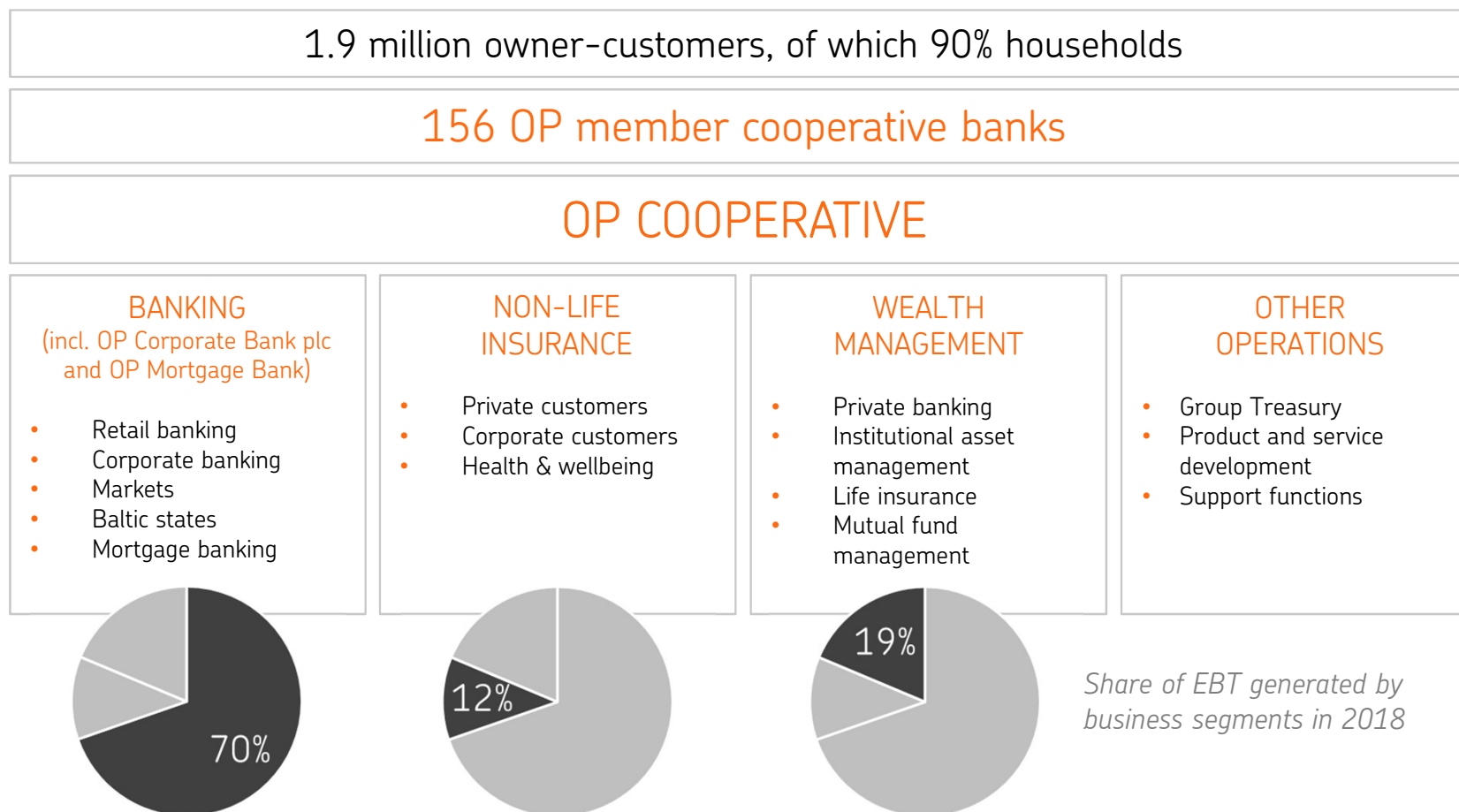
## Aim of organisational changes

- Decreasing annual costs incurred by OP Cooperative consolidated by €100 mn through sharpening the strategic focus, concentrating on core business, optimising relation of internal and external work, creating agile operating model and thereby maximising the benefit for customers
- Information and Consultation of Employees process (concerning total of 6,000 employees) resulted to 700 job terminations but 1,000 new positions and only minor lay-offs

## OP Agile operating model

- Lowers decision-making levels
- Increases cooperation and interaction between functions
- Highlights work significance and job satisfaction, which improve customer experience and workplace efficiency
- Will first be implemented by Banking Private & SME customers business segment, but will be further developed and expanded to entire organisation

# OP Financial Group's reporting structure (until YE2018)



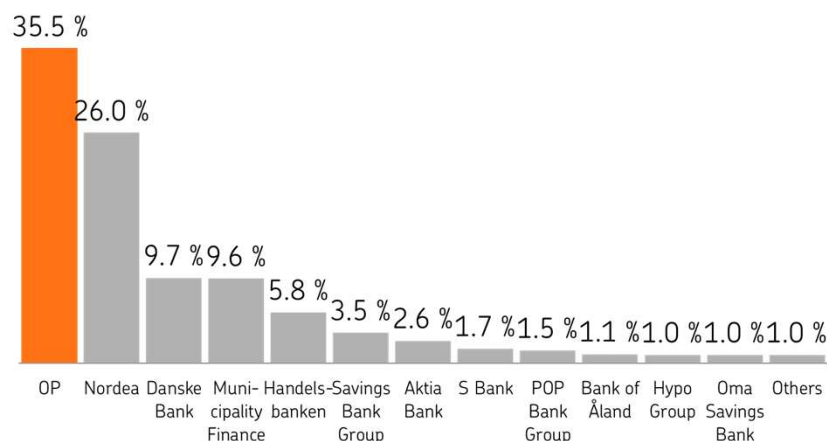
**Change in a company name:**  
As of 1 June 2019, OP Insurance will become Pohjola Insurance as Pohjola is one of the most renowned brands in Finland and the brand among customers is strongly associated with insurance services

## Joint liability within OP Financial Group

- Under the Act on the Amalgamation of Deposit Banks (*Laki talletuspankkien yhteenliittymästä 599/2010*), OP Cooperative and the member credit institutions are jointly liable for each others' debts.
- The member credit institutions include OP Corporate Bank plc, Helsinki Area Cooperative Bank, OP Mortgage Bank, OP Card Company Plc, OP Customer Services Ltd and the member cooperative banks. Insurance companies or other group entities do not fall within the scope of joint liability.
  - If a creditor has not received payment from a member credit institution on a due debt, the creditor may demand payment from OP Cooperative.
  - The member credit institutions must pay proportionate shares of the amount OP Cooperative has paid, and upon insolvency of OP Cooperative they have an unlimited liability to pay the debts of OP Cooperative.
  - OP Cooperative and the member credit institutions are under an obligation to take support actions to prevent a member credit institution's liquidation.
- Further information on the joint liability available in the Base Prospectuses of OP Corporate Bank plc and OP Mortgage Bank.

# OP – Leading financial group in Finland

Loans, June 2018 (Finland: €230 bn)



OP's market share at June 2018:

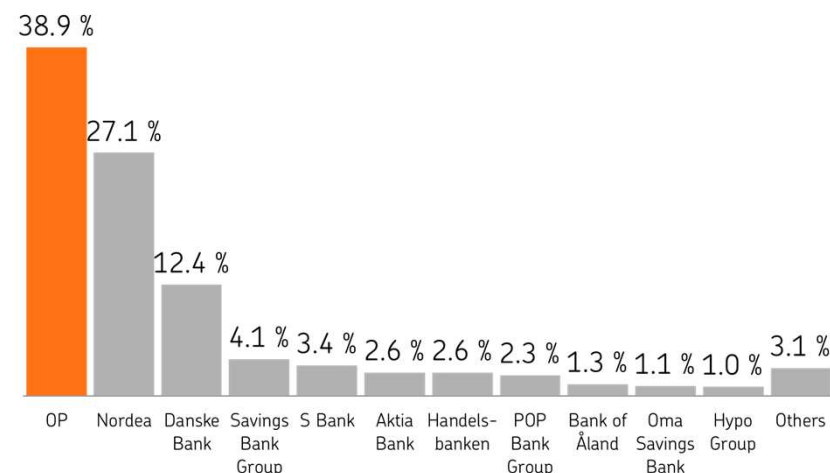
Housing loans

39.3%

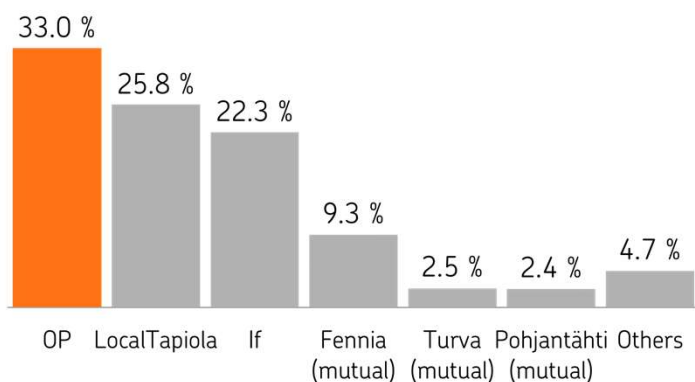
Corporate loans

38.7%

Deposits, June 2018 (Finland: €155 bn)

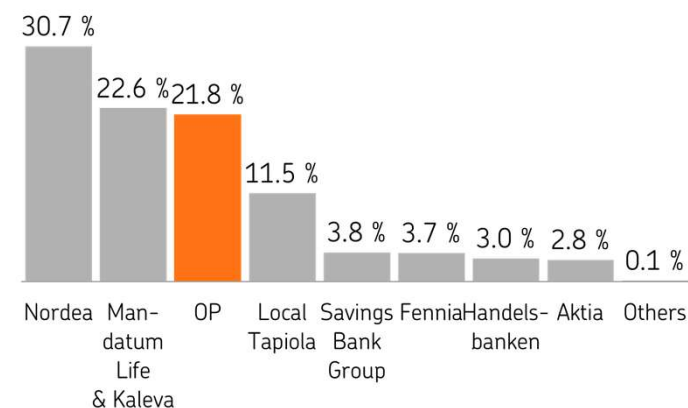


Non-life Insurance, 2017 (Finland: €4.2 bn)



Market share of premiums written under Finnish direct insurance

Life Insurance, 2017 (Finland: €4.5 bn)



Market share of gross premiums written

# OP's strategy based on customer focus

New vision: The leading and most attractive financial services group in Finland

## Strategy sharpened around 5 key focus areas



## Owner–customership rationale in brief

Based on co-operative company form and mission:

We promote our owner–customers' and operating environment's sustainable financial prosperity, safety and wellbeing

### Ownership

Co-operative mindset. Finnish and local. Genuinely close to customers. OP owned by its customers.

### Community spirit

Finnish roots, long history and collective values. Positive community and society impacts. Collective experiences and events.



### Financial benefits

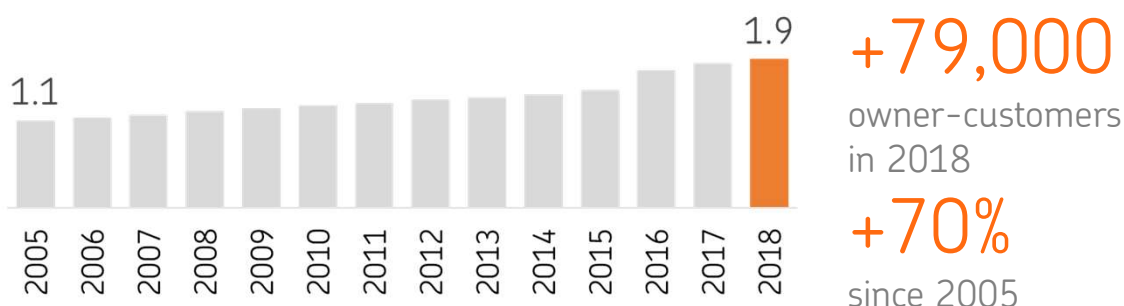
OP bonuses. Discounts from daily banking and insurance policies. Best service channels. Constantly renewing OP services. Benefits from partners.

### Opportunity to influence

Influencing on your own bank's decision-making. Local owner–customer community. OP cooperative bank assembly voting. Participation in product and service development.

# Growth in number of owner-customers and successful cross-selling supported by attractive loyalty benefits

Solid growth in number of owner-customers, mn



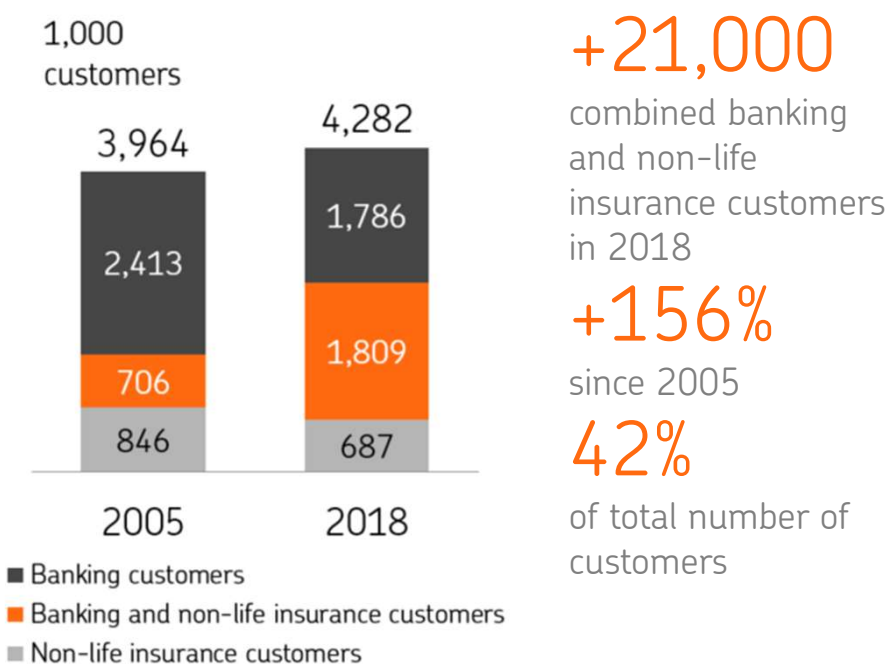
Owner-customer\* value through attractive loyalty benefits

- Accrued OP bonuses\*\* €230 mn in 2018 – Use of bonuses €111 mn to banking and wealth management services and €118 mn to insurances
- Investments in Profit shares €3 bn and estimated accrued interests €94 mn in 2018 – Return target 3.25% in 2018
- Daily banking discount – total benefit €31 mn in 2018
- Non-life insurance loyalty discount – total benefit €67 mn in 2018
- Selling, buying and trading of most mutual funds free of charge – total benefit €6 mn in 2018

\* Membership fee varies depending on the OP cooperative bank (eg. 100€ at Helsinki Area Cooperative Bank)

\*\* An owner-customer's loans, savings, investments and insurance premiums generate OP bonuses 0.25% of monthly transactions

Successful integration of banking and non-life insurance customerships



# Development activities within Group and core business lines



## Group-level

- Productivity of development – investments of €2 bn in developing operations and improving CX during 2016–2020 (majority to core business lines)
  - In 2018, total development expenditure €384 mn (454)
- Operational agility – process automation and service digitisation
- Basic system and ICT architecture renewal
- Utilisation of UX/UI, service design, AI, analytics, big data, block chain, robotics, voice control etc. – and related competence update
- OP Lab – Group-level innovation unit



## Banking – Private & SME Customers

- Digital housing loan offer enabling real-time housing loan decision online supported by AI – offered by 117 banks and totalling to >90% of housing loan application volume (Dec. 2018)
- Developing a digital platform for selling and purchasing a home, together with other banks, real estate businesses, a technology firm and authorities
- Digital corporate loan application
- Technology platform renewal and basic system upgrade within payment transfers, card business and private customer financing
- Open Banking StartUp Partnership Programme
- **Housing:** OP Home online marketplace and map service for home search and other home-related services
- **Mobility:** OP Kulku Electric Car as a service, DriveNow Car sharing service, 100 EV charging stations near to OP branches
- **Commerce:** Mobile and e-commerce payment solutions



# Development activities within Group and core business lines



## Banking – Corporate & Institutional Customers

- Production stability through basic system upgrades
- Improvements to service offering and processes – 20 new launches in 2018
- Better customer service shows in NPS improvement and Prospera Corporate Banking 2018 results – OP Corporate Bank selected by the largest Finnish corporates as the best bank in Finland
- New service launches within wealth management



## Insurance – Private & Corporate Customers

- Digital insurance card
- Developing online and mobile services in both insurance sales and claims reporting
- AI utilisation in claims handling process
- Basic system upgrade and digital service development
- [www.vahinkoapu.op.fi](http://www.vahinkoapu.op.fi) platform for non-life claim help service online

## Health & wellbeing

- 5 Pohjola Health hospitals
- Digital health services and processes – Pohjola Health App
- Pohjola Health Advisor assessing need for treatment and referring to appropriate treatment – new service for private and corporate customers with personal insurance against illness or injury

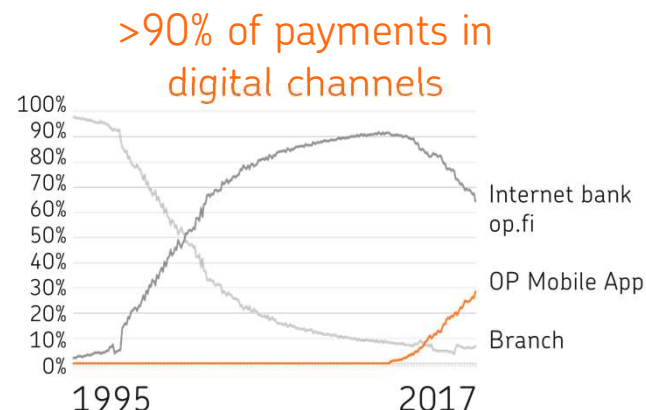
# Digital customer experience changes the role of local presence

OP Mobile App  
**>22 mn** visits in Dec. 2018  
**+288%** growth since Dec. 2014  
**>1 mn** users  
**+85%** growth since Dec. 2014

OP Business Mobile App  
**620,000** visits in Dec. 2018  
**+72%** 12-month-change

**79%**

of mutual fund transactions made in digital channels



**95%**

of private customer encounters occur in digital channels

**40%**

of private customers classified as remote customers using only digital channels (Dec. 2018)

Op.fi Internet Bank  
**9 mn** visits in Dec. 2018  
**-30%** decline since Dec. 2014



**70%**

of private customers' loss reports made in digital channels

**156**

OP member cooperative banks  
**-25** since Dec. 2014

**365**

branches  
**-90** since Dec. 2014



New OP branch concept

# Recent developments within digital channels

## OP Mobile App

Fingerprint authentication

Mobile Key to replace key code lists (450,000 users at YE2018)

Daily Banking: Accounts, Cards, Payments...

Loans: Loan details, Financing options...

Non-life insurance: Loss reports, Policy details,

Travel insurance cards...

Investments: Trading in equities and mutual funds,

Investment details, Market monitoring

Siirto Payment – Real-time P2P money transfers with phone number



## New OP Internet Bank

Re-designed internet bank and website at op.fi  
New customership digitally



## Pivo Mobile Wallet App

Contactless payment

Siirto Payment and Pivo P2P – Real-time money transfers with phone number

Siirto and Pivo payment buttons at webshops enabling purchases without key code list or card's PIN

Pivo wearable payment solutions

Pivo 2018 renewal: New user opportunities through opening the App for partnering service providers, new Pivo consumer loan, Pivo facial payment pilot



## OP Developer platform

Opening application programming interfaces for external developers



## OP Business Mobile App

for corporate customers' loans, daily banking, invoicing and monitoring receivables  
Mobile Key to replace key code lists

## OP Accessible

Accessible web service providing basic banking services to those who are unable to use eg. the op.fi service or OP Mobile App due to vision or hearing impairments, motoric challenges or other functional defects, available at saavutettava.op.fi

## OP Cashier App

for corporate customers' payment transactions and sales

## Social media channels & op.media

for customer service, employee interaction and sharing expertise

# CSR is an integral part of OP's business and strategy

## CSR programme built around 4 key themes

We link the ESG policies more closely to all business lines

We are strongly engaged to Finland and pay taxes to Finland

We seek to be CO2 positive by 2025

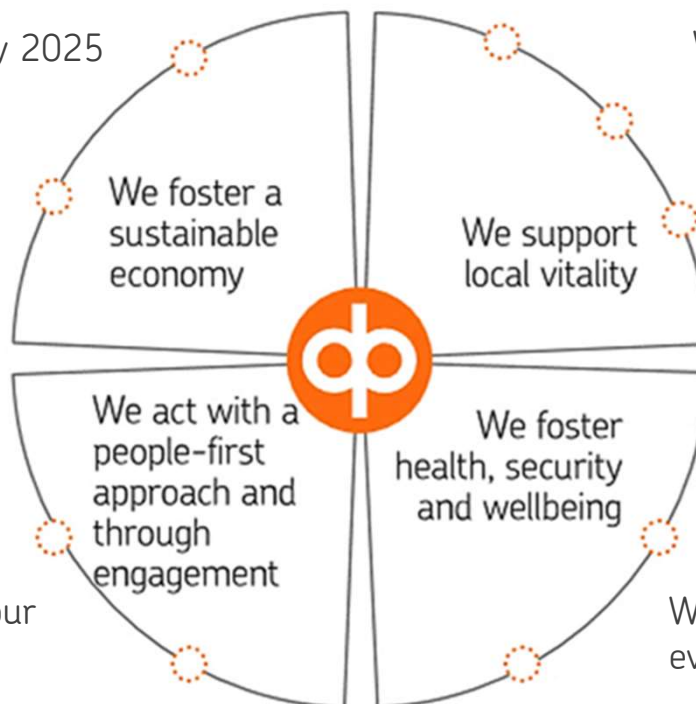
We make donations to charity

OP Green Bond Framework published in Nov. 2018

We finance sustainable economy

We continue socially responsible openings among our customers and locally in the entire society

We are a forerunner in sustainable investment



We promote diversity: both genders to represent at least 40% in defined managerial positions (women in 2018: 24%)

We are active in loss prevention within non-life insurance through developing risk management practices and sustainable insurance solutions

We develop our business together with our customers and other stakeholders

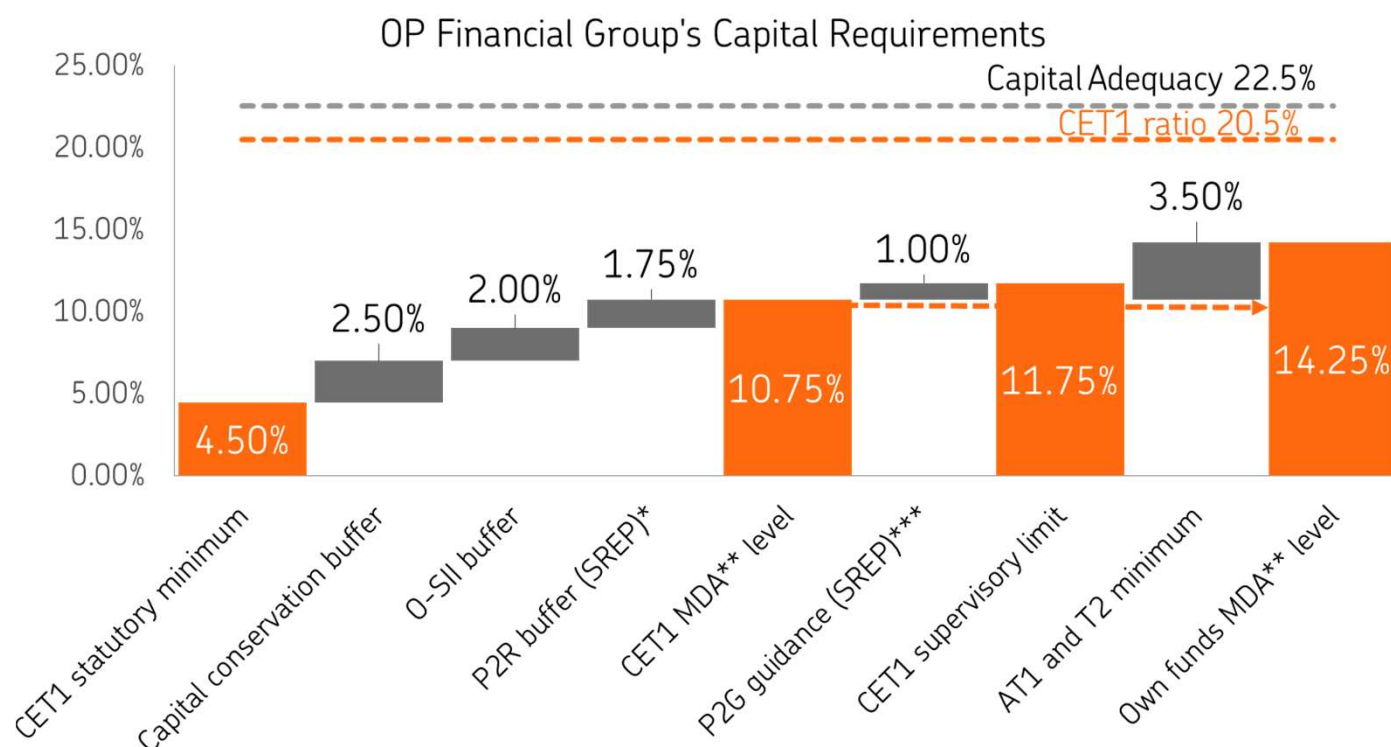
We develop solutions easing customers' everyday life and promoting health

We operate transparently and respect human rights

We take responsibility of customers' privacy protection

# OP has solid capital adequacy compared to requirements

Management buffers 9.75% (CET1) and 8.25% (total capital ratio)



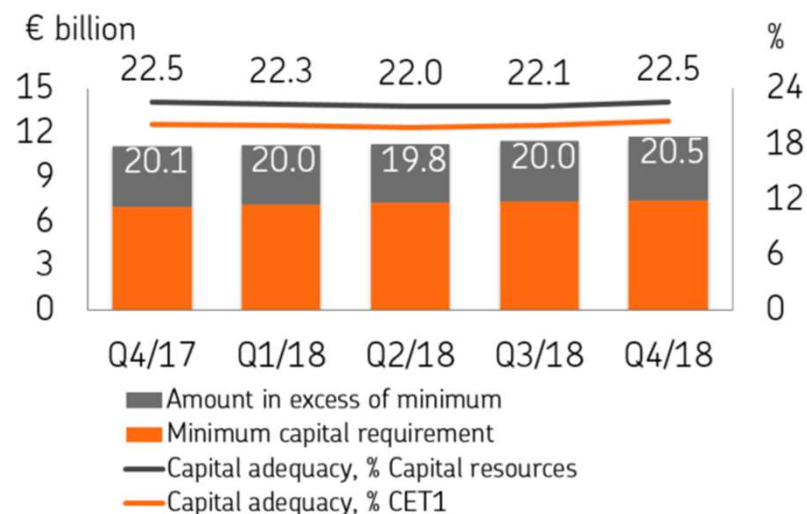
In June 2018, the FIN-FSA decided to set a 2% systemic risk buffer on OP Financial Group, ie. a capital buffer requirement that will enter into force on 1 July 2019. At the same time, it also confirmed OP Financial Group's O-SII buffer requirement at 2%. Considering that these capital buffer requirements are parallel buffers and the larger one is applied, the decision will have no effect on OP Financial Group's total capital adequacy requirement.

\* P2R supervisory Pillar II requirement \*\* Maximum distributable amount  
 \*\*\* P2G supervisory guidance, breach results enhanced supervisory measures

# CET1 ratio 20.5%

Transfer of OP Financial Group's personnel's statutory earnings-related pension insurance portfolio to Ilmarinen Mutual Pension Insurance Company improved CET1 ratio by 0.4 pps at YE2018

## Capital resources and capital adequacy



## CET1 ratio

- Target 22% by the end of 2019
- Profit shares outstanding in CET1 capital €2.9 bn at YE2018

## REA €52.1 bn (49.2)

- €4.9 bn caused by ECB RW floors

## Avg RWs excl. RW floors:

7.4% for retail exposures (AIRB) (7.5)

65.4% for corporate exposures (FIRB) (64.7)

- In Feb. 2017, ECB set RW floors for OP's retail exposures
  - 15.4% for mortgage-backed exposures
  - 32.7% for other private customer exposures
  - RW floors decreased CET1 ratio by 2.1 pps
- FIN-FSA's 15% RW floor on residential mortgage loans came into force on 1 January 2018 and is valid for 2 years unless renewed
  - If OP had no ECB RW floors, FIN-FSA RW floor would decrease OP's CET1 ratio by 1.4 pps

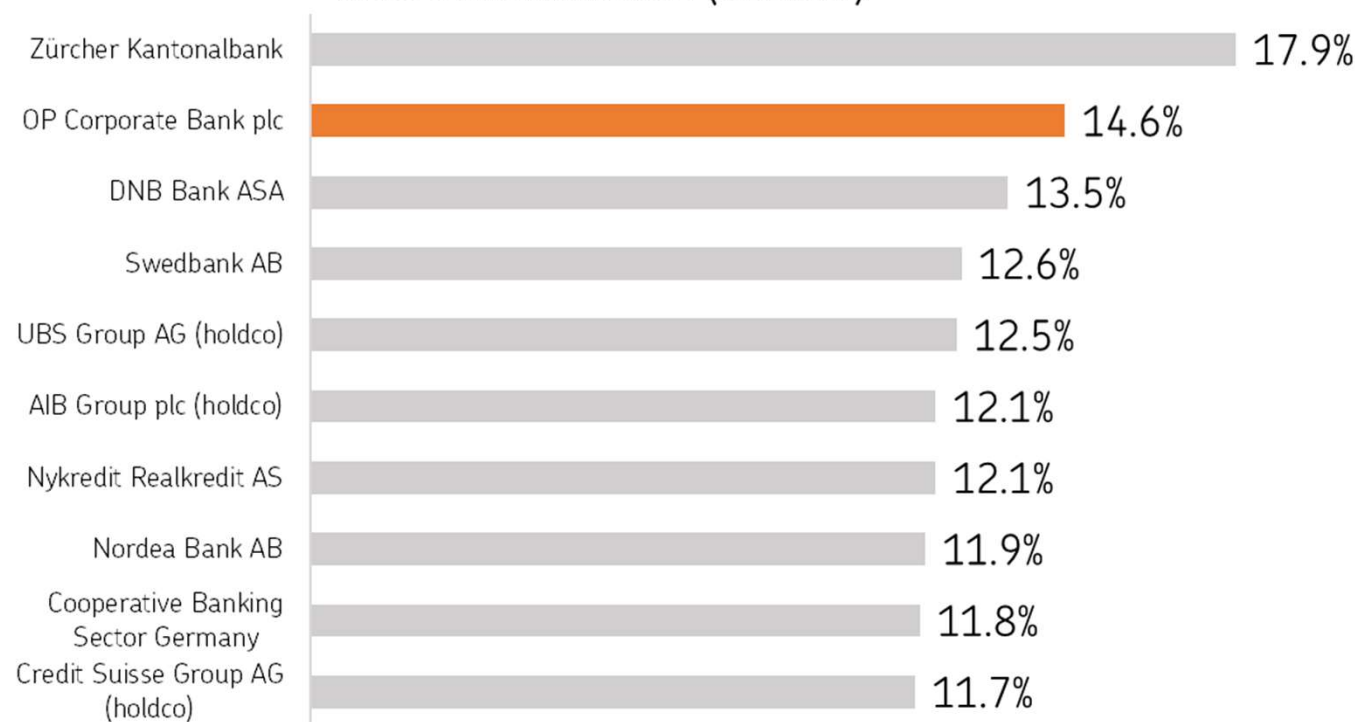
## Leverage ratio 8.6% (7.9)

- Minimum level in the draft regulations 3.0%



# OP is clear outperformer in S&P RAC ratio comparison leaving all Nordic peers behind

TOP10 Western European banks' S&P RAC ratios,  
before diversification (YE2017)

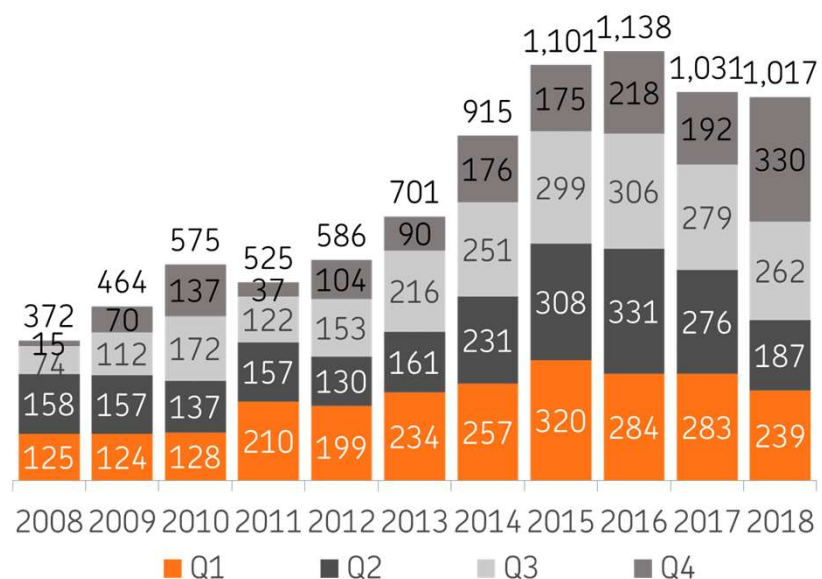


Source: Standard & Poor's, Risk-Adjusted Capital (RAC) Ratios for the Top 50 Western European Banks, 17 Oct. 2018

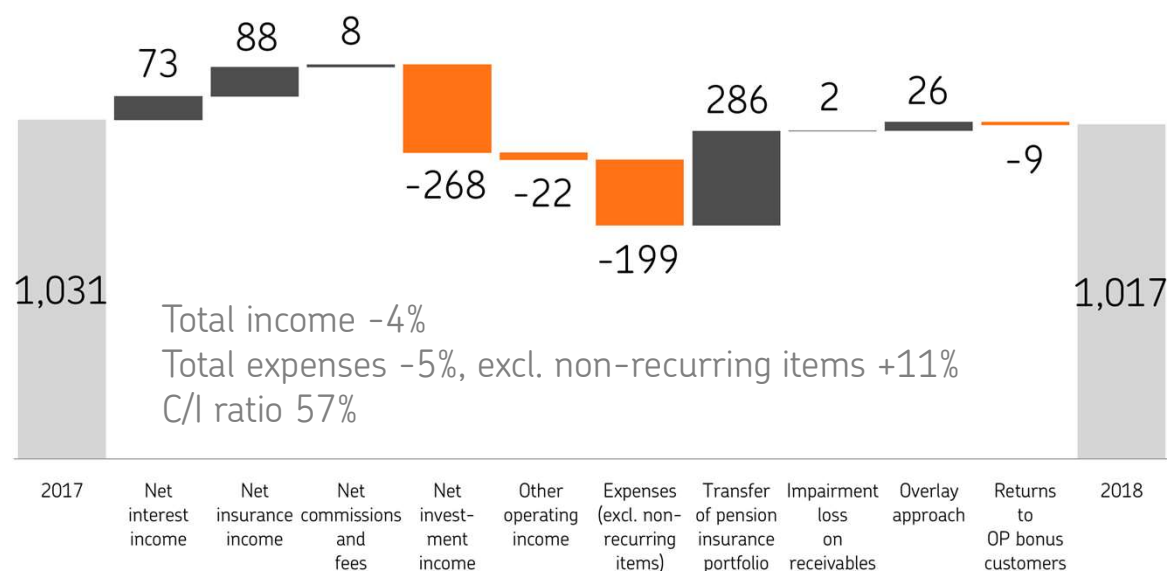
## EBT in 2019 expected to be lower than in 2018

Lower EBT in 2018 due to decreased net investment income and other operating income and increased underlying expenses – however mitigated by a positive non-recurring item

EBT by quarter 2008–18\*, € mn



EBT, y-o-y change by P&L line item\*, \*\*, \*\*\*, 2018 vs. 2017, € mn



\* 2017 comparatives have been changed as a result of entry into force of IFRS 15 and change in the recognition practice of loan service fees to correspond the current reporting approach.

\*\* A temporary exemption from IFRS 9 (overlay approach) is applied to some equity instruments of insurance companies (reported according to IAS39), which improved earnings for the reporting period by EUR 26 million.

\*\*\* Net insurance income includes net income from Non-life and Life insurance. Net investment income includes net trading income as well as net investment income from Non-life and Life insurance.



# OP's financial performance in 2018\*, \*\*

GROUP		BANKING		NON-LIFE INSURANCE		WEALTH MANAGEMENT		OTHER OPERATIONS	
EBT, € mn	1,017 (1,031) -1%	EBT, € mn	795 (619) +28%	EBT, € mn	133 (210) -37%	EBT, € mn	213 (247) -14%	EBT, € mn	-123 (-45)
NII, € mn	1,175 (1,102) +7%	NII, € mn	1,242 (1,192) +4%	Insurance premium revenue, € mn	1,466 (1,432) +2%	Net commissions and fees, € mn	345 (385) -11%	NII, € mn	-48 (-75)
Net insurance income, € mn	566 (478) +19%	Net commissions and fees, € mn	540 (576) -6%	Net insurance income, € mn	549 (459) +20%	Net investment income from Life Insurance, € mn	69 (85) -19%	Net commissions and fees, € mn	6 (-63)
Net commissions and fees, € mn	887 (879) +1%	Net investment income, € mn	105 (19)	Net investment income, € mn	0 (183)	Assets under management (gross), € bn	71.8 (78.0) -8%	Net investment income, € mn	86 (238) -64%
Net investment income, € mn	254 (522) -51%	Impairment loss on receivables, € mn	-45 (-47)	Operating combined ratio, %	92.0 (96.1)	Net inflows, € mn	754 (1,897) -60%	Long-term bonds issued to the public and TLTRO II funding, € bn	3.3 (5.0 in 2017)
Expenses, € mn	1,681 (1,768) -5%	Loan portfolio, € bn	87.1 (82.2) +6%	Operating expense ratio, %	21.0 (20.3)	Solvency II ratio*** within Life Insurance, %	176 (151)	Average margin of senior wholesale funding, TLTRO II funding and covered bonds, bps	14 (19 at YE2017)
Impairment loss on receivables, € mn	-46 (-48)	Deposits, € bn	61.3 (58.0) +6%	Solvency II ratio***, %	132 (135)				
Cost/income ratio, %	57 (58)	Cost/income ratio, %	45.9 (53.2)						

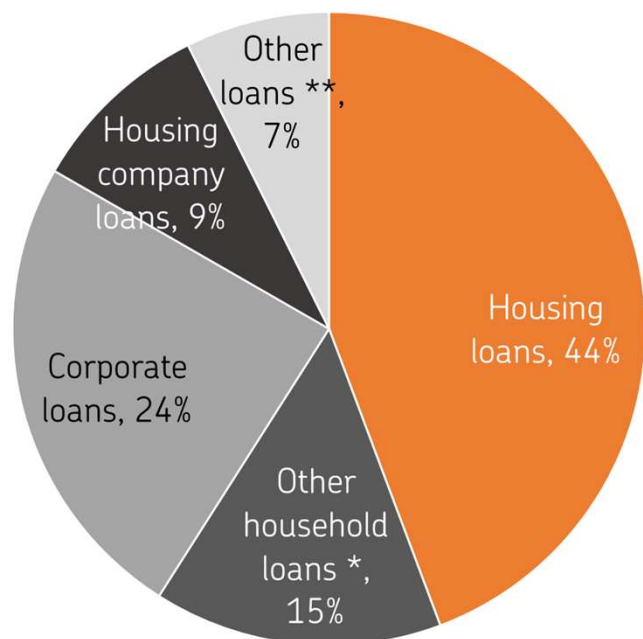
\* 2017 comparatives have been changed as a result of entry into force of IFRS 15 and change in the recognition practice of loan service fees to correspond the current reporting approach.

\*\* A temporary exemption from IFRS9 (overlay approach) is applied to some equity instruments of insurance companies (reported according to IAS39), which improved earnings for the reporting period by EUR 26 million. Transfer of the portfolio of the statutory earnings-related pension insurance for OP Financial Group's personnel decreased pension expenses by €286 mn.

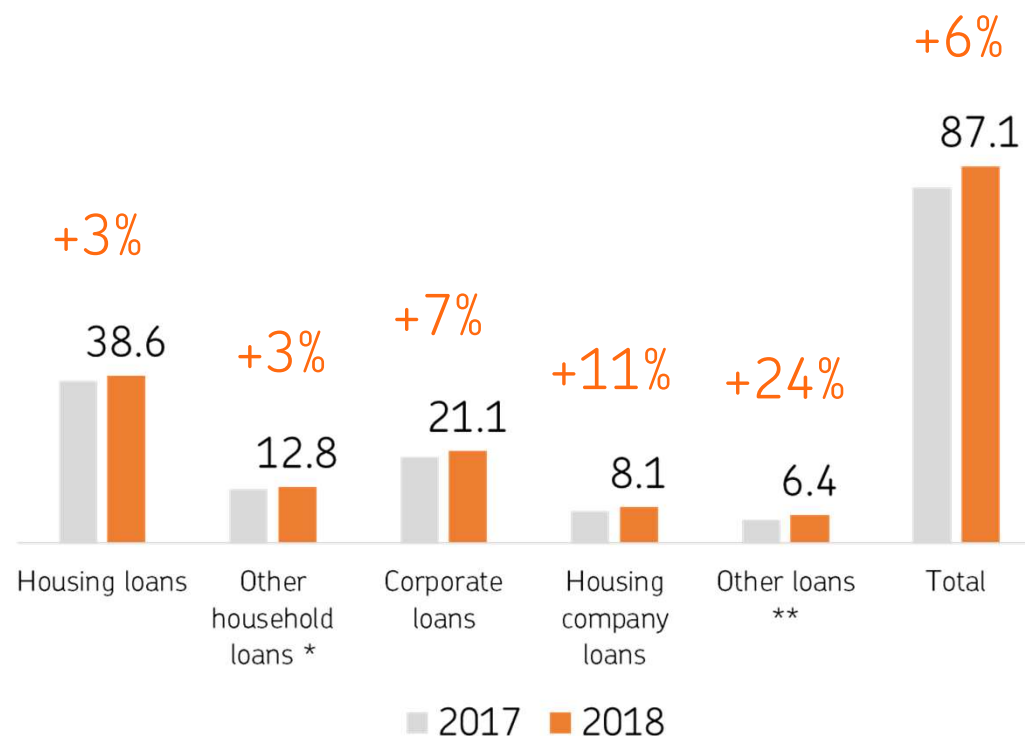
\*\*\* Excluding transitional provision

## Loan portfolio up by 6% in 2018

€87.1 bn Loan portfolio breakdown,  
31 December 2018, %



Loan portfolio growth by product group,  
31 Dec. 2018 vs. 31 Dec. 2017, € bn



\* Other household loans include loans for holiday houses, consumer loans, student loans etc.

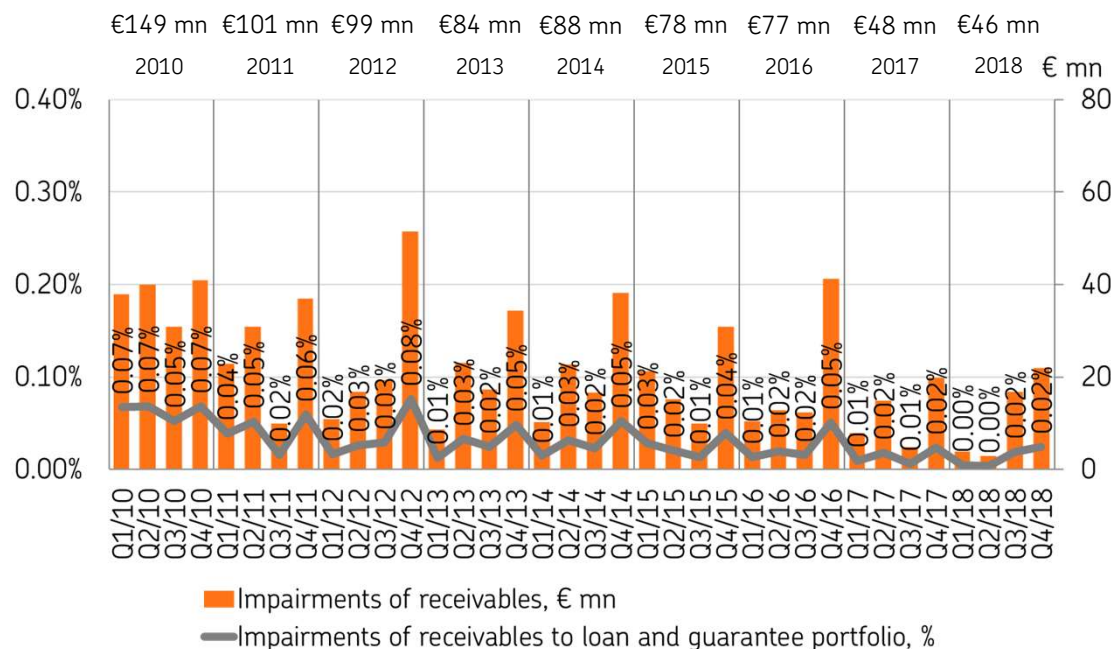
\*\* Other loans include loans to financial institutions, public sector, non-profit organisations and customers abroad

## 2018 impairment loss on receivables €46 mn, equaling to 0.05% of loan and guarantee portfolio (0.06)

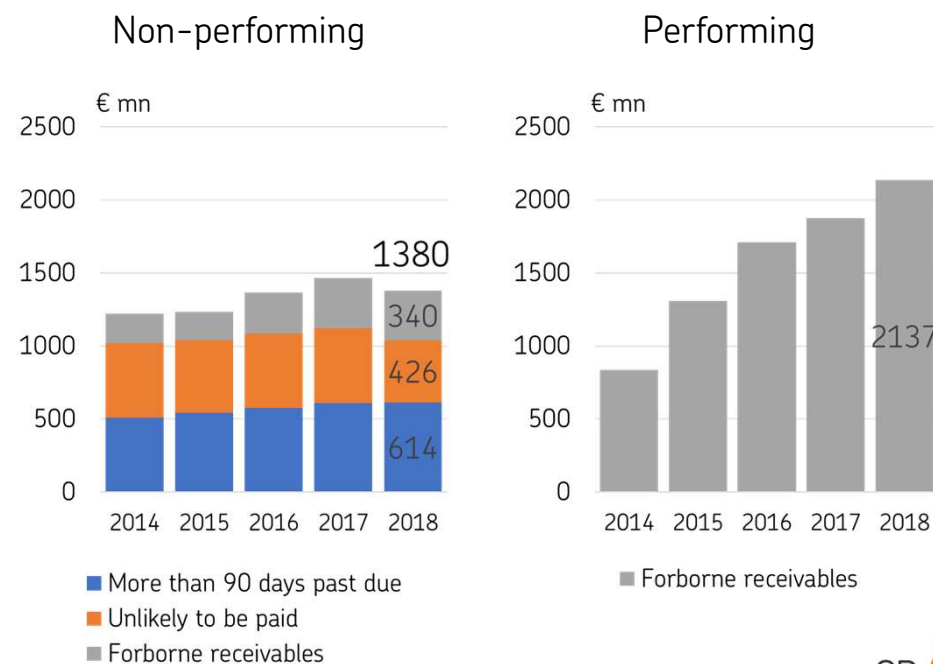
Non-performing receivables to loan and guarantee portfolio 1.0% as of 31 Dec. 2018 (1.2)

Ratio of exposures individually assessed for impairment/ECL to gross doubtful receivables 12.5% (12.6)

### Impairment loss on receivables



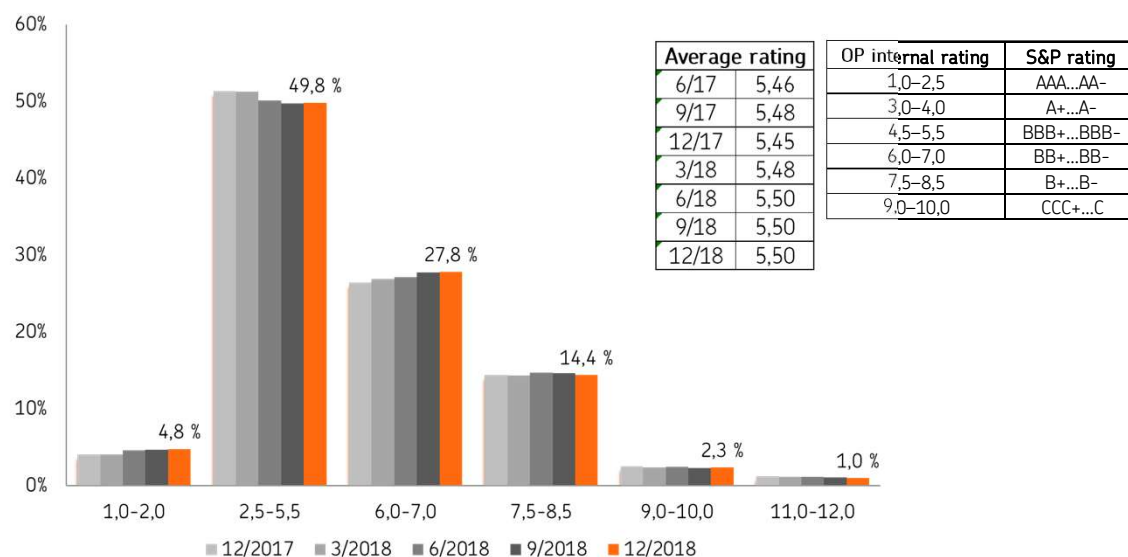
### Doubtful and forborne receivables (gross)



# Exposures by credit rating category

IG (1.0-5.5) 55% of the exposure from Non-financial corporations and housing companies sector

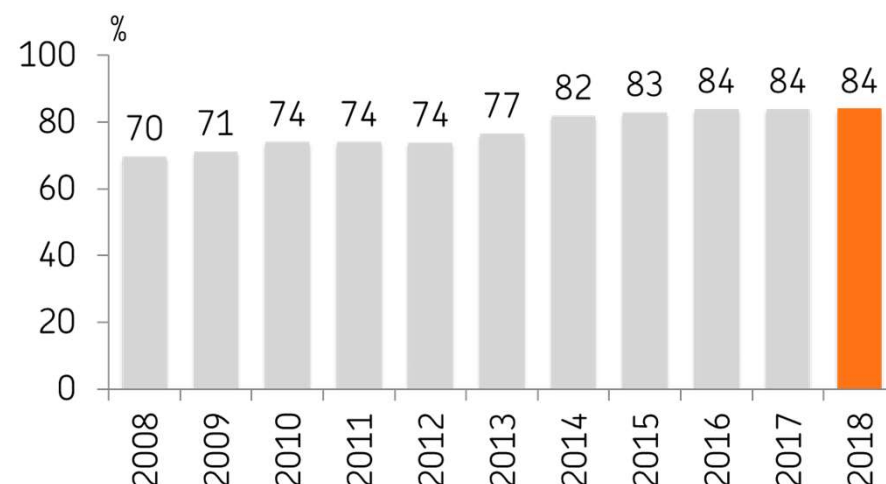
Exposures from the Non-financial Corporations and Housing Companies Sector by credit rating category  
(total corporate customer exposure €49.8 bn at YE2018)



Largest single customer risk to capital under FiCo capital adequacy at YE2017

5.0% (4.0)

Private Customer exposures of credit rating categories A and B, % of total exposure  
(total private customer exposure €51.5 bn at YE2018)



At YE2017, average PD of private customer exposures (Pillar III) with a credit rating of A and B a maximum of

0.1% (0.1)

# Corporate exposures well diversified by industry

Exposures from the Non-financial corporations and housing companies sector €49.8 bn at YE2018



	Dec 31, 2017	Dec 31, 2018
1 Renting and operating of residential real estate	17,4 %	17,9 %
2 Services	9,0 %	10,1 %
3 Renting and operating of other real estate	9,8 %	9,9 %
4 Wholesale and retail trade	9,2 %	9,3 %
5 Energy	9,8 %	9,1 %
6 Construction	7,9 %	7,8 %
7 Financial and insurance services	4,6 %	5,6 %
8 Manufacture of machinery and equipment (incl. services)	5,2 %	4,8 %
9 Transportation and storage	4,4 %	4,2 %
10 Agriculture, forestry and fishing	4,6 %	4,2 %
11 Forest industry	2,7 %	2,6 %
12 Chemical industry	2,3 %	2,3 %
13 Metal industry	2,4 %	2,1 %
14 Information and communication	2,0 %	2,1 %
15 Food industry	2,4 %	2,0 %

# Funding based on strong credit ratings

Rating target: Senior unsecured (long-term) debt rating at AA level affirmed by at least 2 rating agencies or the rating at least at the same level as main competitors' ratings

	Moody's (Senior unsecured/LT issuer rating)	S&P (LT issuer credit rating)
Svenska Handelsbanken	Aa2	AA-
Swedbank	Aa2	AA-
<b>OP Corporate Bank plc</b>	<b>Aa3</b>	<b>AA-</b>
Nordea Bank	Aa3	AA-
DNB Bank	Aa2*	AA-
SEB	Aa2	A+
Danske Bank	A2*	A*
<b>OP Mortgage Bank***</b>	<b>Aaa</b>	<b>AAA</b>
lf****	A1	A+
<b>OP Insurance Ltd****</b>	<b>A2</b>	<b>A+</b>
Finland	Aa1	AA+

\* Negative outlook

\*\* Positive outlook

\*\*\* Covered bond rating

\*\*\*\* Insurance financial strength rating

Updated: 27 January 2019

## OP CORPORATE BANK PLC

- Moody's affirmed Aa3 rating with stable outlook in December 2018
  - Uplifts from Loss-Given-Failure (+2 notches) and Government Support (+1 notch)
- S&P affirmed AA- rating and stable outlook in July 2018
  - Uplifts from Business Position (+1 notch), Capital and Earnings (+2 notches) and ALAC Support (+1 notch)

## OP MORTGAGE BANK

- Moody's affirmed Aaa rating with stable outlook in November 2018
  - TPI (Timely Payment Indicator) Leeway 5 notches
- S&P affirmed AAA rating with stable outlook in September 2018
  - 3 unused notches of jurisdictional support, 2 unused notches of collateral based uplift

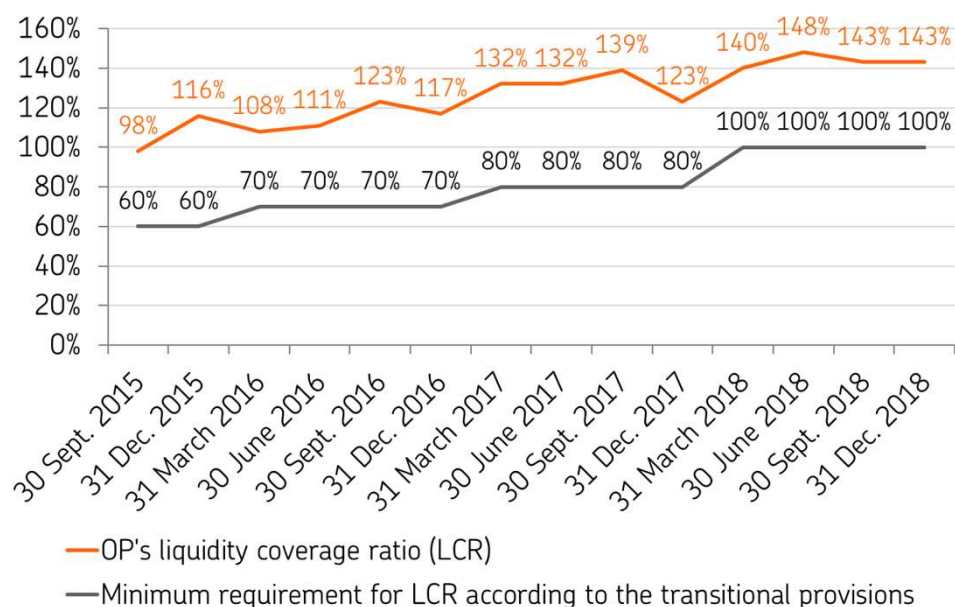
## OP INSURANCE LTD

- Moody's upgraded rating to A2 with stable outlook in January 2019
- S&P affirmed A+ rating and stable outlook in July 2018

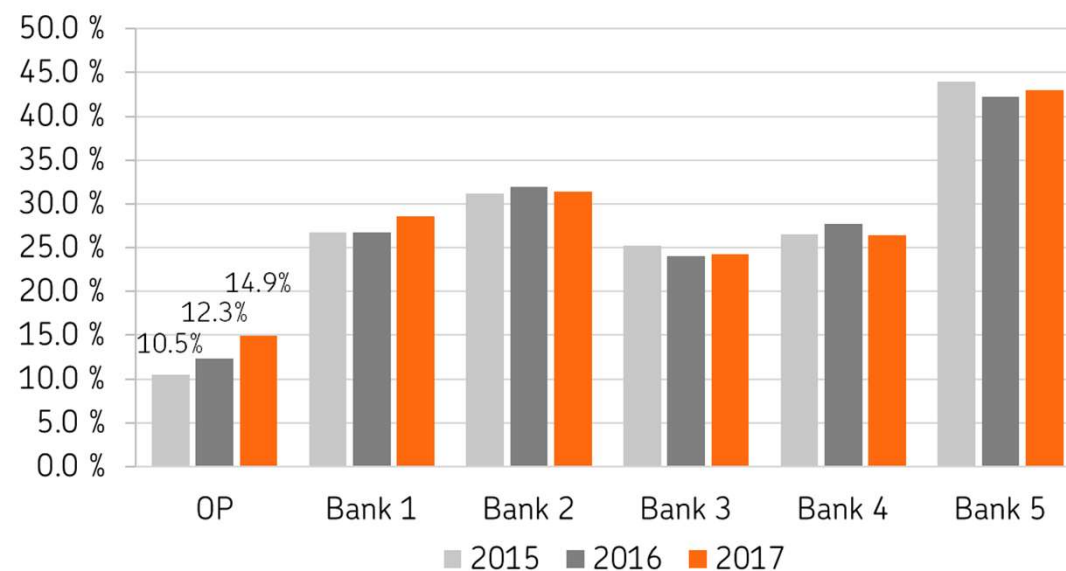
# LCR 143% and NSFR 111% at YE2018

Encumbrance ratio 14.9% at YE2017

## LCR vs. minimum requirement



## Encumbrance ratio in Nordic comparison

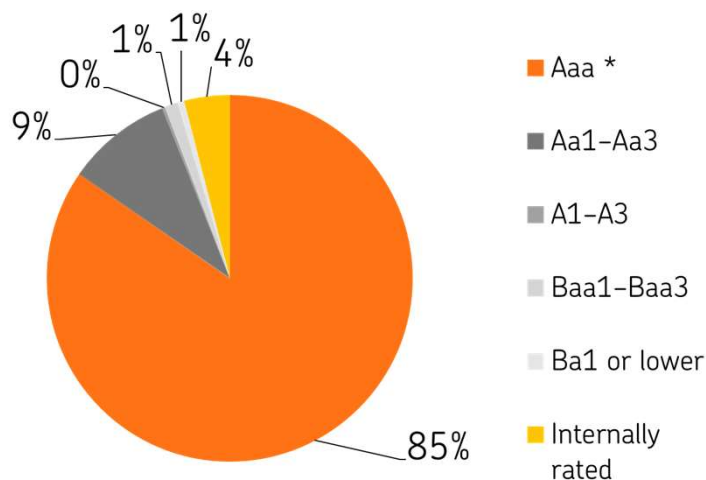


NSFR (Net Stable Funding Ratio) 111% at YE2018 (116% at YE2017)

# Liquidity buffer €22.7 bn at YE2018

The liquidity buffer is sufficient to cover the need for short-term funding for known and predictable payment flows and in a liquidity stress scenario

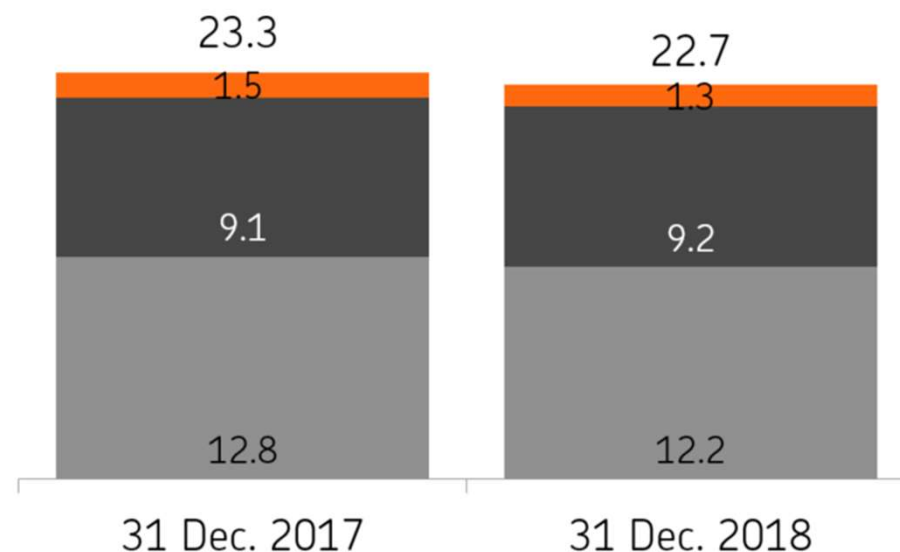
Liquidity buffer by credit rating\*\*, as of 31 December 2018



\*incl. deposits with the central bank

\*\*\*) "Internally rated" includes externally non-rated notes and bonds issued by public-sector entities and companies

Liquidity buffer breakdown, € bn



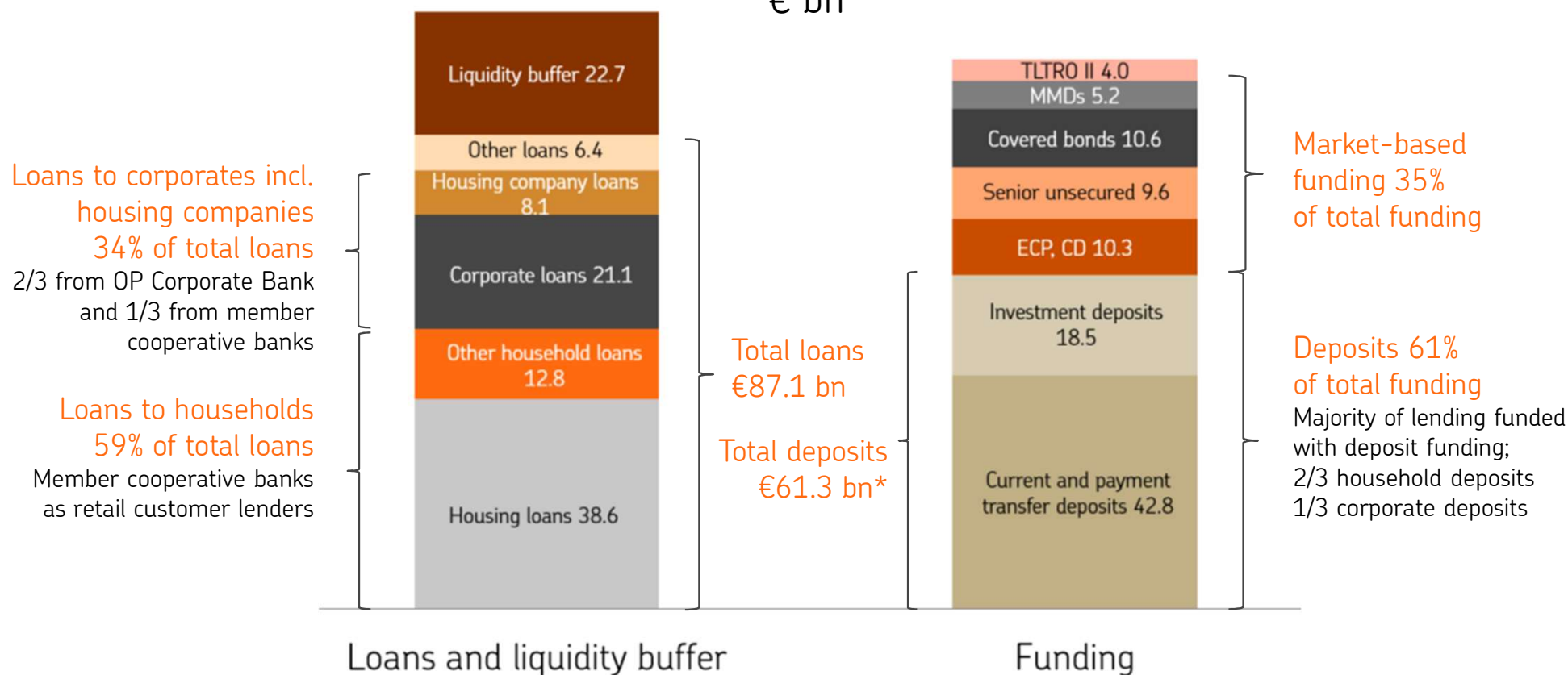
■ Receivables ineligible as ECB collateral  
■ Notes and bonds eligible as ECB collateral  
■ Deposits with the central bank



# Loans, liquidity buffer and funding

31 December 2018

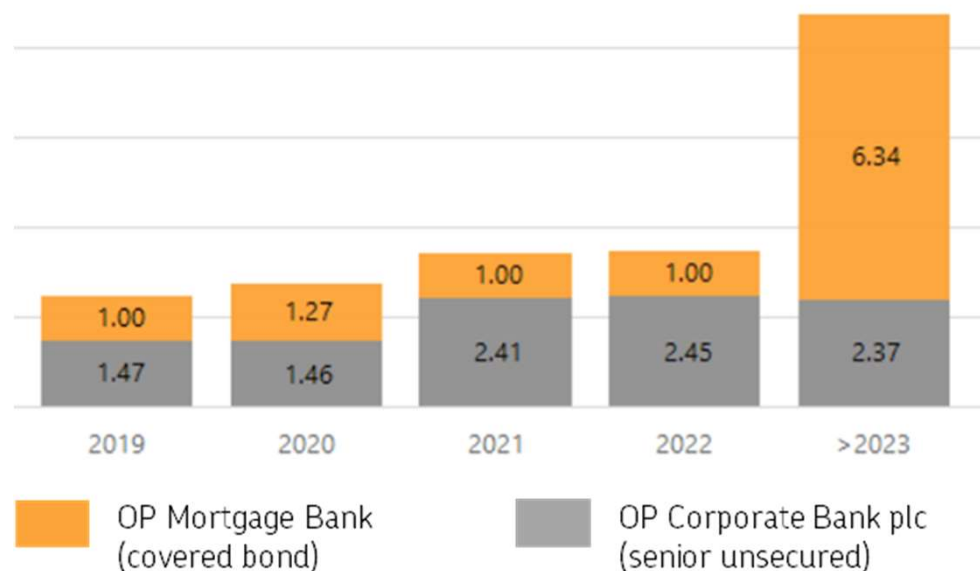
€ bn



\* Deposits within the scope of deposit guarantee totalled €36.0 bn (34.3) at YE2018. The Deposit Guarantee Fund compensates a maximum of €100,000 for each OP Financial Group customer.

# Maturity breakdown of wholesale funding well diversified

Issued senior unsecured and covered bonds by maturity, 31 December 2018 (€ bn)



OP issued long-term bonds worth €3.3 billion during 2018

## MREL regulation

- On 7 May 2018, the Finnish Financial Stability Authority set MREL for OP Financial Group of 12.2 billion euros, or 27.6% of the risk-weighted assets (RWA) at the end of 2016
- OP Financial Group clearly fulfils the requirement set by the authority: according to an estimate, OP Financial Group's MREL ratio was 35% at the turn of 2017
- OP Financial Group seeks to meet the requirements under the MREL with its capital base and other subordinated debt
- The Senior Non-Preferred debt regulations were incorporated into Finnish legislation at YE2018
- The SRB has confirmed a resolution strategy for OP Financial Group whereby the resolution measures would apply to OP Corporate Bank acting as a Single Point of Entry

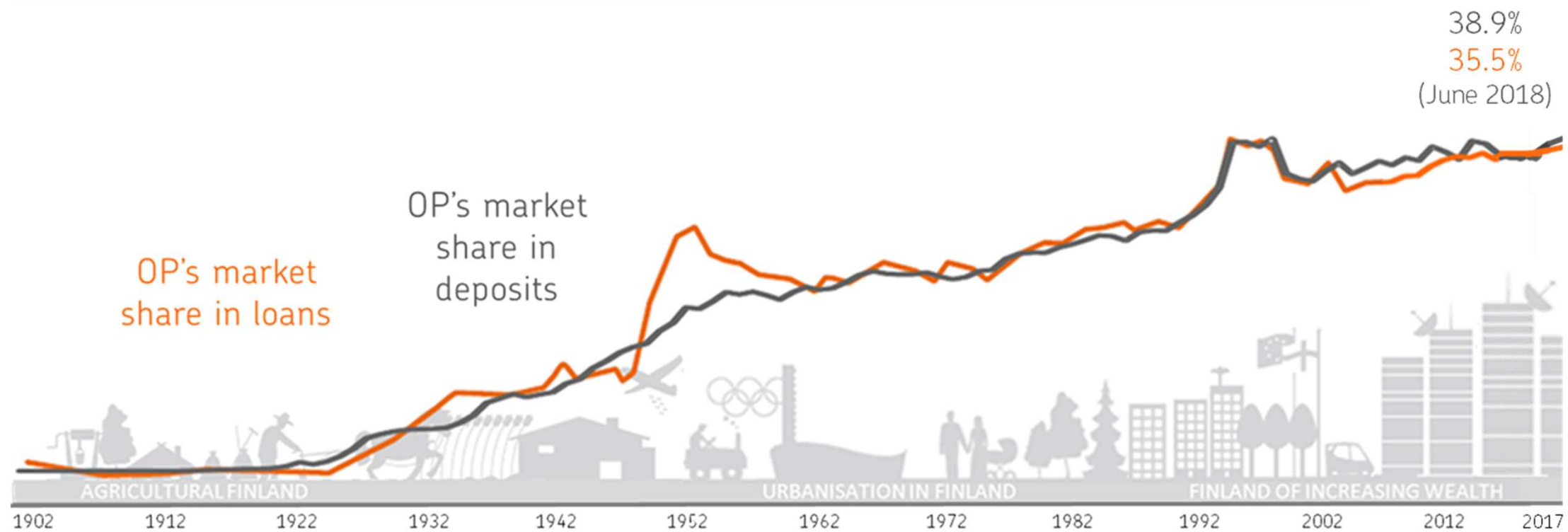
## Issued senior unsecured and covered bonds

### OP Corporate Bank plc's benchmark senior unsecured bonds 2015–18

Year	Month	Amount	Maturity	Interest rate
2018	August	€500 mn	5 yrs	m/s +22 bps
2018	May	GBP200 mn	3 yrs	Eb3 +17 bps
2018	May	Total €1 bn dual-tranche, €500 mn each	7 yrs (fixed) 3 yrs (floating)	m/s +30 bps Eb3 +20 bps
2017	April	€500 mn	5.5 yrs	m/s +27 bps
2016	January	€500 mn	5 yrs	m/s +65 bps
2015	November	Total ¥30 bn (€228 mn), 2 issues	5 yrs (floating) 5 yrs (fixed)	m/s +59.9 bps m/s +66.1 bps
2015	May	GBP300 mn	3 yrs	Eb3 +16 bps
2015	May	GBP400 mn	7 yrs	Eb3 +58 bps
2015	March	€1 bn	7 yrs	m/s +33 bps

### OP Mortgage Bank's benchmark covered bonds 2015–18

Year	Month	Amount	Maturity	Interest rate
2018	June	€1 bn	7.25 yrs	m/s -2 bps
2017	November	€1 bn	5.25 yrs	m/s -13 bps
2017	June	€1 bn	10 yrs	m/s +1 bps
2017	March	€1 bn	7 yrs	m/s -4 bps
2016	May	€1.25 bn	7 yrs	m/s +4 bps
2015	November	€1.25 bn	5 yrs	m/s +5 bps
2015	September	€1 bn	7 yrs	m/s -1 bps



# OP Mortgage Bank

## Highlights of the Act on Mortgage Credit Bank Operations

- Segregation of assets in Covered Register
- Tight LTV restrictions on eligible assets (70% LTV on housing loans)
- Over-collateralisation requirement of 2%
- Continuity of Cover Pool and Covered Bonds in the event of liquidation and bankruptcy of the issuer
- Regulated by Finnish FSA and ECB
- Assets that must be booked as non-performing (over 90 days in arrears), according to FIN-FSA regulations, shall not be included in the Cover Pool
  - At OPMB, non-performing loans were €17.3 mn as of 31 December 2018

# OP Mortgage Bank (OPMB) in brief

## OPMB IN BRIEF

- Wholly-owned subsidiary of OP Cooperative
- Special-purpose bank operating under the Act on Mortgage Credit Bank Operations
  - OPMB's sole purpose is to raise funds for OP member cooperative banks by issuing covered bonds with mortgage collateral
- Outstanding covered bonds of OPMB are rated AAA by S&P and Aaa by Moody's

## OPMB & JOINT LIABILITY

- OPMB fully benefits from the joint liability among OP Cooperative and the member credit institutions, based on the Act on the Amalgamation of Deposit Banks
- However, since assets in OPMB's Cover Asset Pool are ring-fenced, the noteholders have the right to receive what is due to them before all other creditors

OP Mortgage Bank's covered bond programme qualifies for the European Covered Bond Council's (ECBC) Covered Bond Label.



Read more about ECBC's covered bond label at [www.coveredbondlabel.com](http://www.coveredbondlabel.com)

# OP Mortgage Bank's rating buffers

## Standard & Poor's: AAA (stable)

- 3 unused notches of jurisdictional support
- 2 unused notches of collateral based uplift
- Key scores (as of 30 June 2018)
  - Available Credit Enhancement: 14.27%
  - Target Credit Enhancement: 4.2%
  - Credit Enhancement (OC) commensurate with AAA rating: 2.5%
  - WAFF\*: 16.53%
  - WALs\*\*: 7.50%

\* Weighted-average foreclosure frequency

\*\* Weighted-average loss severity

## Moody's: Aaa (stable)

- TPI\*\*\* Leeway 5 notches
- Key scores (as of 30 Sept. 2018)
  - CR-A\*\*\*\*: Aa2(cr)
  - CB Anchor: CR-A + 1 notch = Aa1
  - TPI: Probable-High
  - Collateral score (post-haircut): 3.4% (cap 5.0%)

\*\*\* Timely payment indicator

\*\*\*\* Counterparty risk assessment

Source: Standard & Poor's Global Ratings Europe Limited, Transaction Update: OP Mortgage Bank, 14 September 2018

Source: Moody's Investors Service Ltd, Performance Overview, OP Mortgage Bank, Mortgage Covered Bonds 2, 20 December 2018

## OPMB operating model

OPMB is a funding vehicle for the member cooperative banks

- Subject to strict eligibility criteria
  - Collateral may be transferred to OPMB via intermediary loan process

OPMB utilises the structure of OP Financial Group through, for example,

- outsourcing
  - origination and servicing of assets to member cooperative banks, and
  - risk management, IT services, accounting etc. to OP Cooperative
- cooperatively organising
  - interest rate risk management with OP Corporate Bank plc



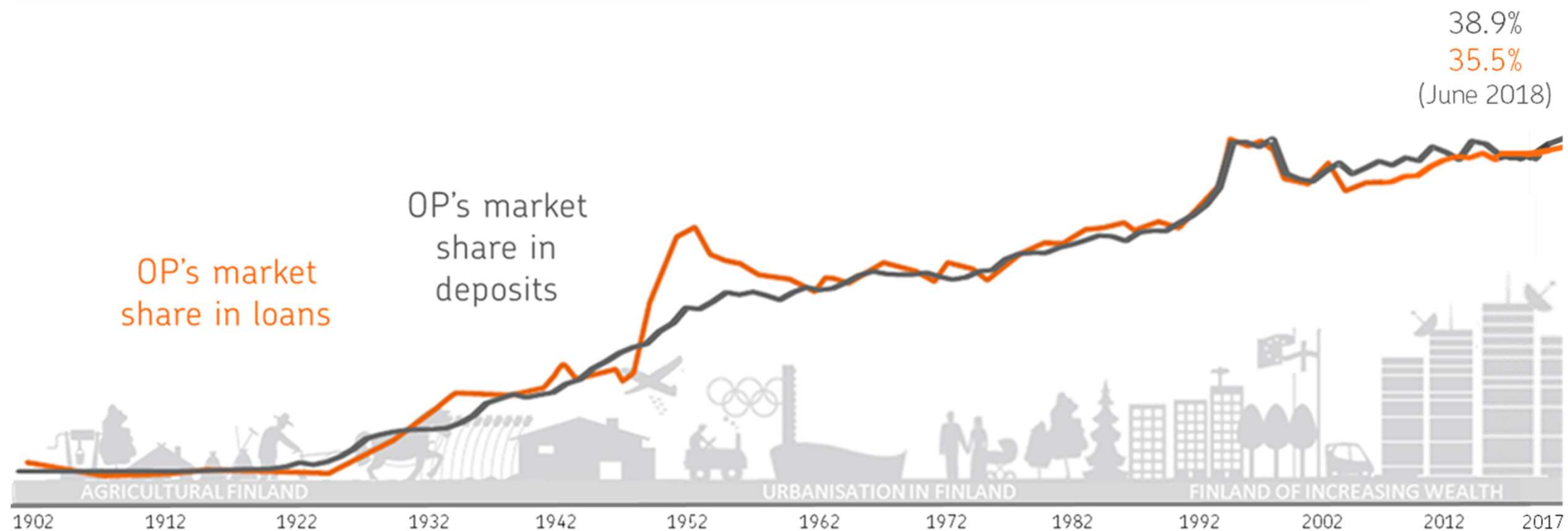
# Operating model and roles



\*) Basic lending criteria for the Group are set by OP Cooperative. OP Mortgage Bank can set additional limits.

# Intermediary loans

- The Finnish Covered Bond Act (2010) enables granting intermediary loans
  - The member cooperative banks are granted the opportunity to indirectly participate in the covered bond issuance process
- The intermediary loan contract is made between the member cooperative bank and OPMB
  - Intermediary loans are the way for the member cooperative banks to utilize OPMB
  - The amount of loan, interest margin/fixed interest rate and maturity of the loan are indicative during the contracting phase of the intermediary loan
  - The member cooperative bank commits to preserving adequate intermediary loan worthy loan portfolio for the maturity of the intermediary loans, and accepts that OPMB subscribes the mortgage loans as collateral in the cover pool
  - OPMB monitor's the adequacy of the loans daily
- Once the mortgage loans are registered in the OP MB Covered Bond Register via intermediary loan process, they serve as collateral for the covered bonds for the benefit of the noteholders as long as intermediary loan expires



## OPMB Cover Asset Pool Characteristics

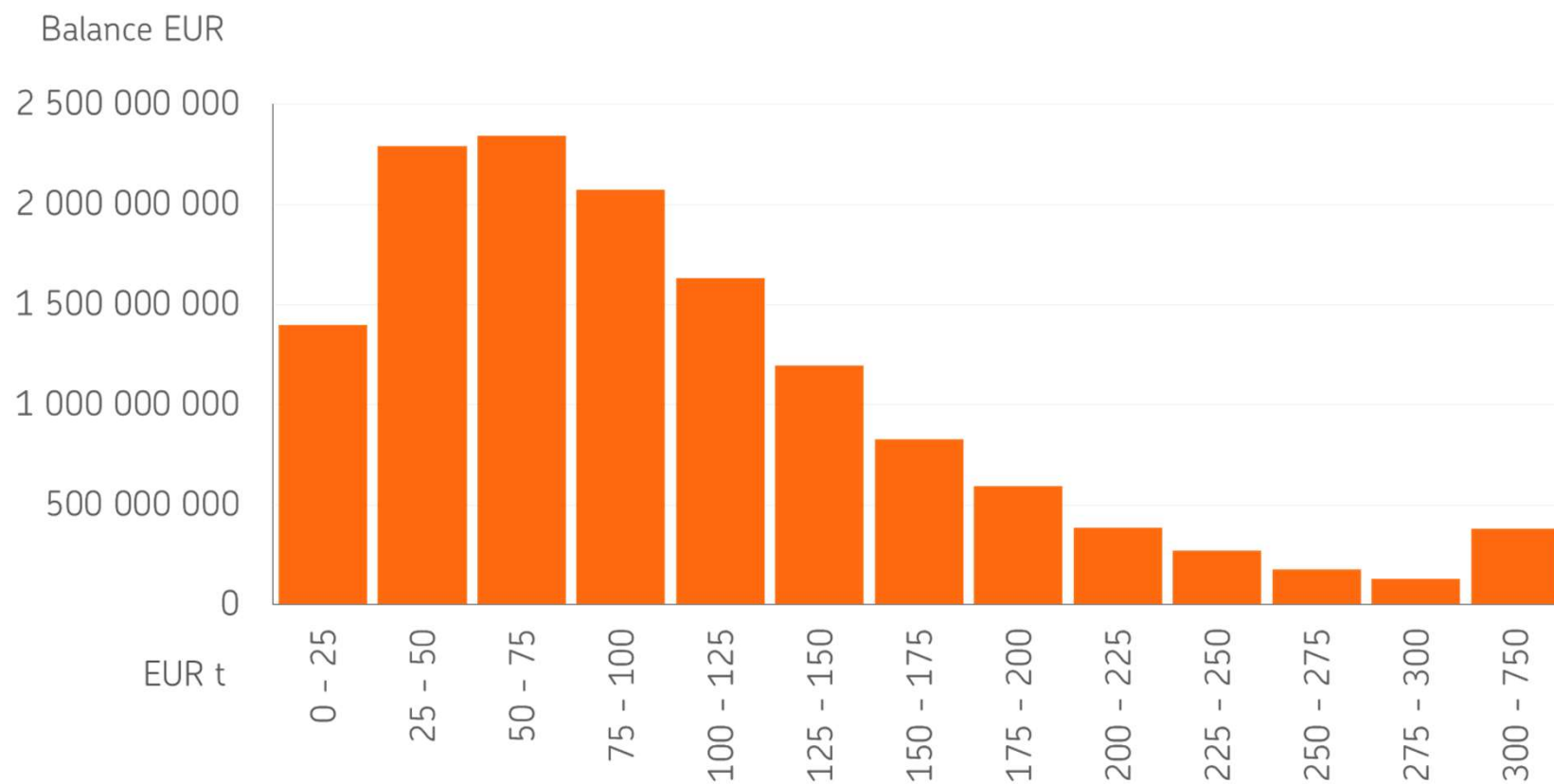
Covered bonds issued after 1 Aug. 2010,  
under the Finnish Act on Mortgage Credit Banks 680/2010

## Main Features of OP Mortgage Bank's Cover Asset Pool as of 31 December 2018

- Collateralized by Finnish mortgages
- Current balance EUR 13.70 billion
- Weighted Average indexed LTV of 45%
- Average loan size of approximately EUR 49,795
- No loans over 60 days in arrears ongoing
- Variable interest rates: over 97% of all loans
- Hedging agreements in place in order to mitigate interest rate risk
- Total amount of covered bonds issued EUR 10.635 billion

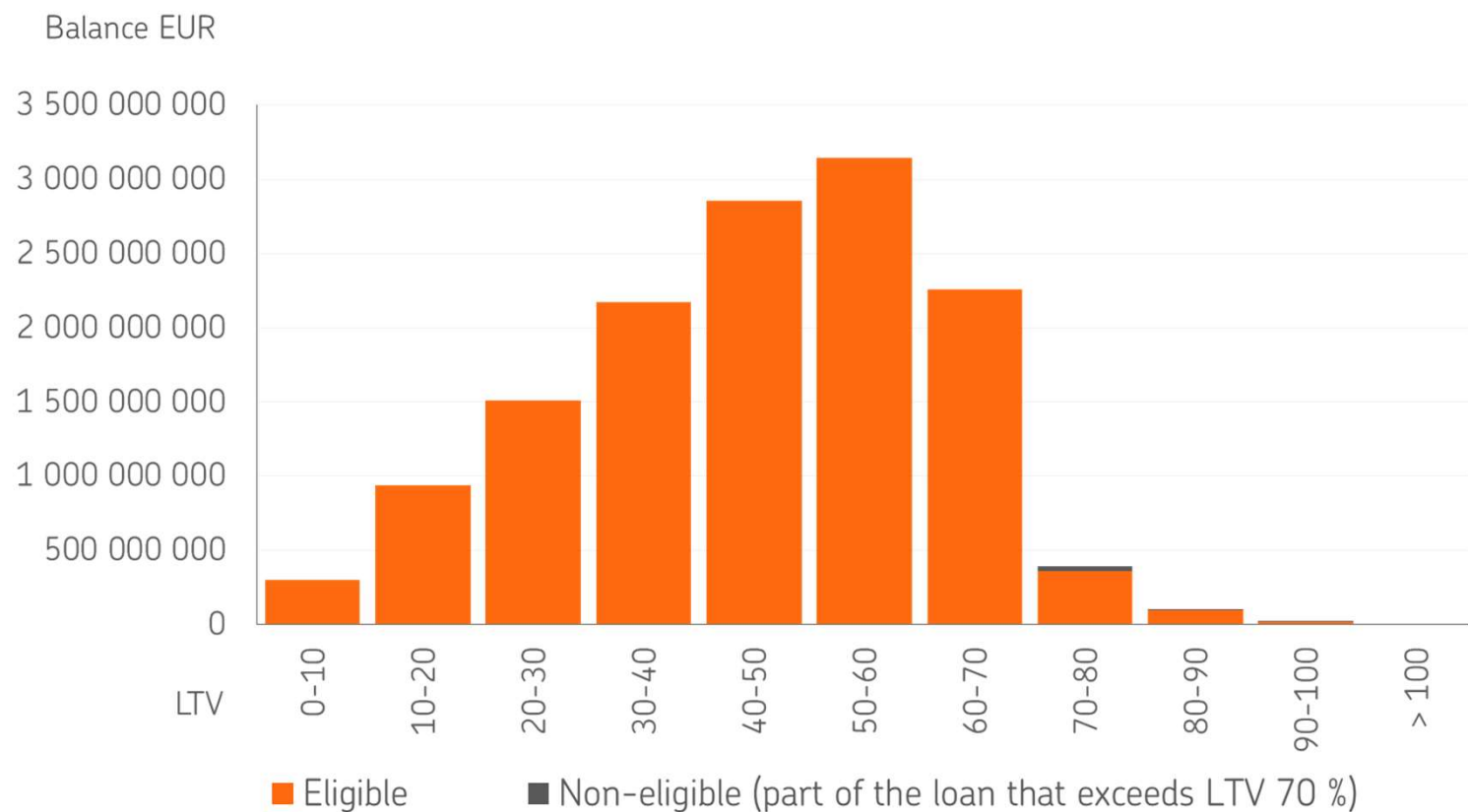
# OPMB Cover Asset Pool Characteristics

Loans by size



# OPMB Cover Asset Pool Characteristics

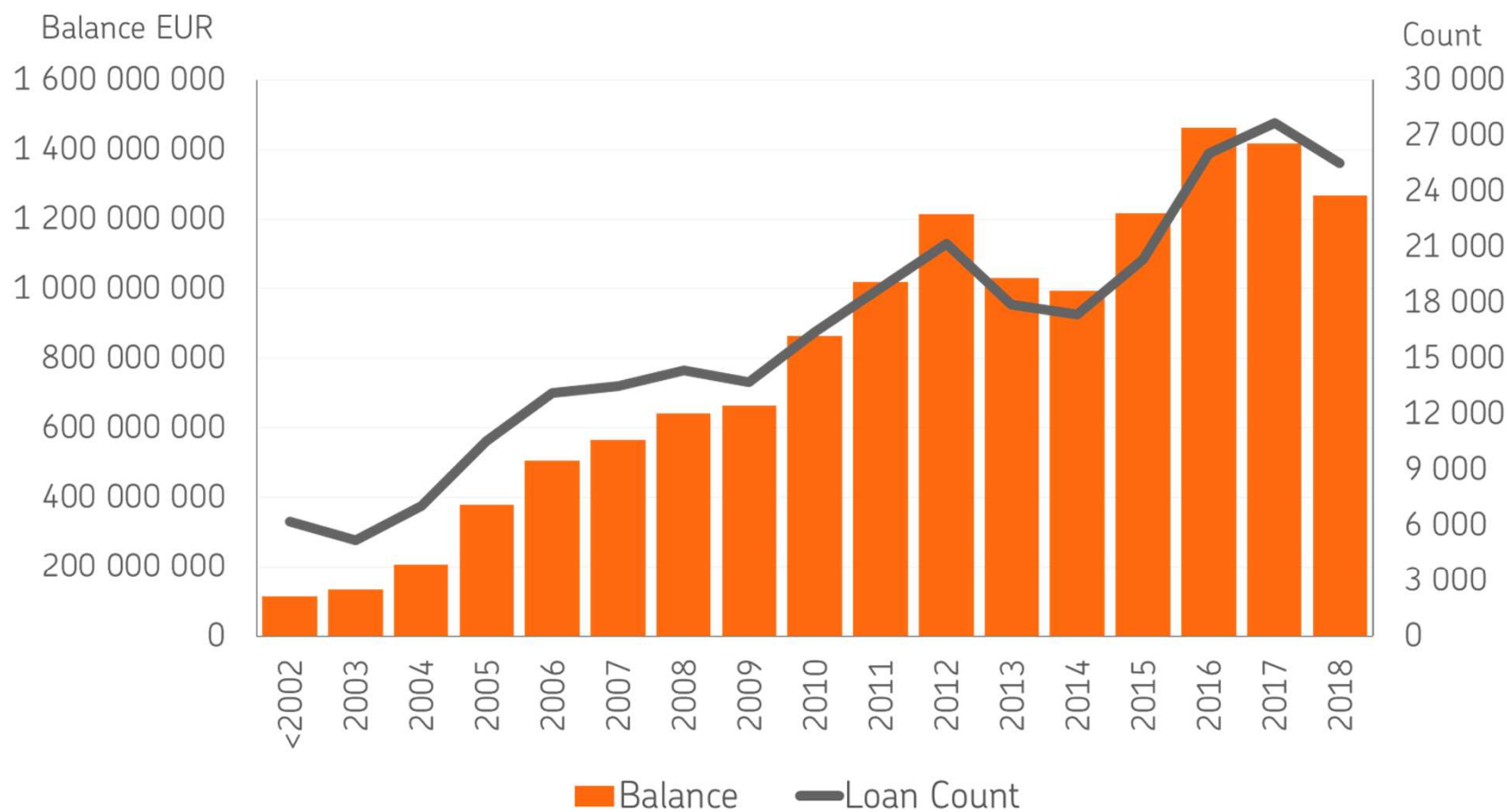
## Loans by LTV



- Total assets EUR 13.70 billion
- Eligible Cover Pool assets EUR 13.66 billion
- Weighted average indexed LTV of 45%
- Over-collateralisation 28.4% (eligible-only)

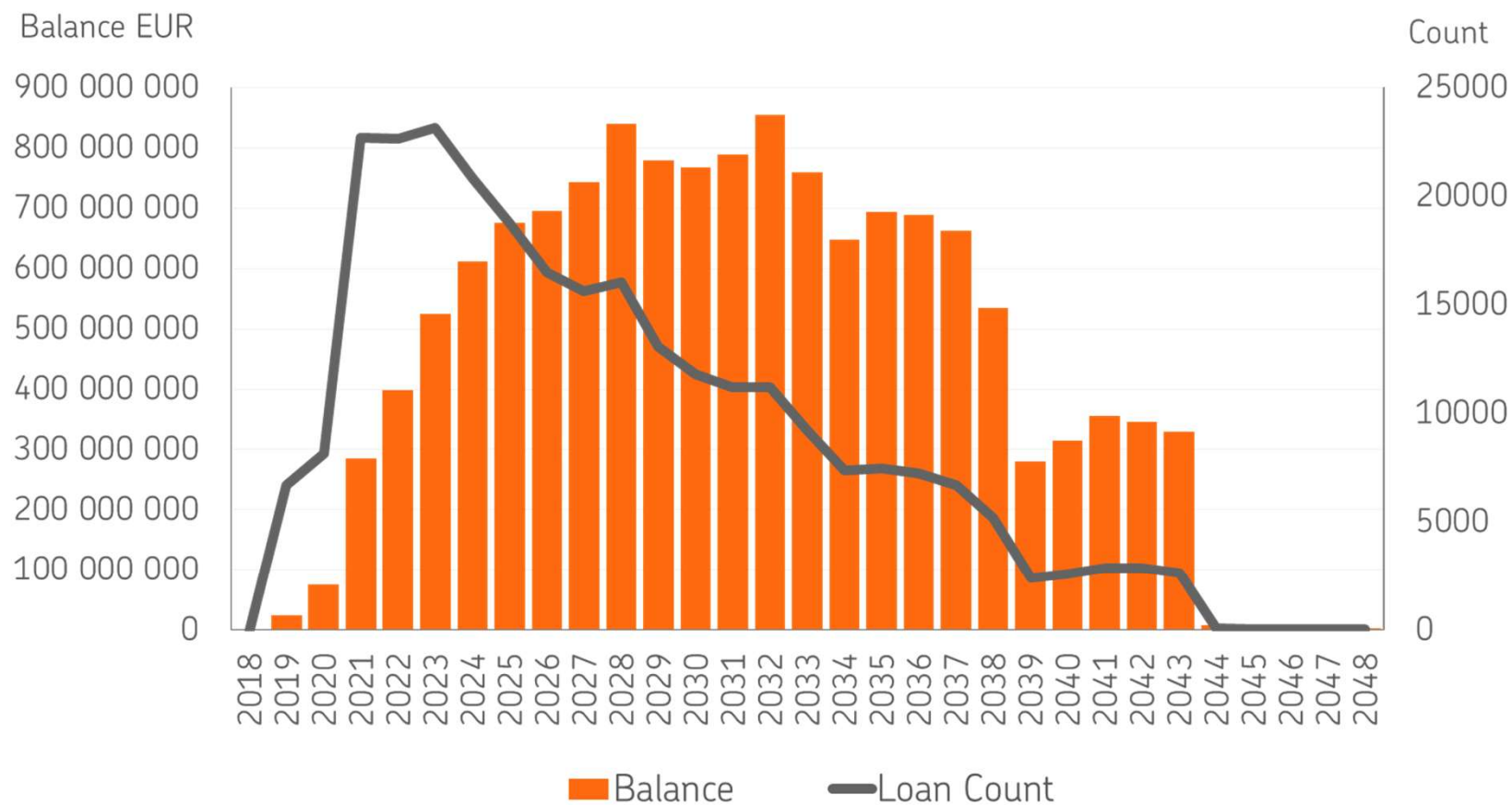
# OPMB Cover Asset Pool Characteristics

## Loans by origination year



# OPMB Cover Asset Pool Characteristics

## Loans by maturity



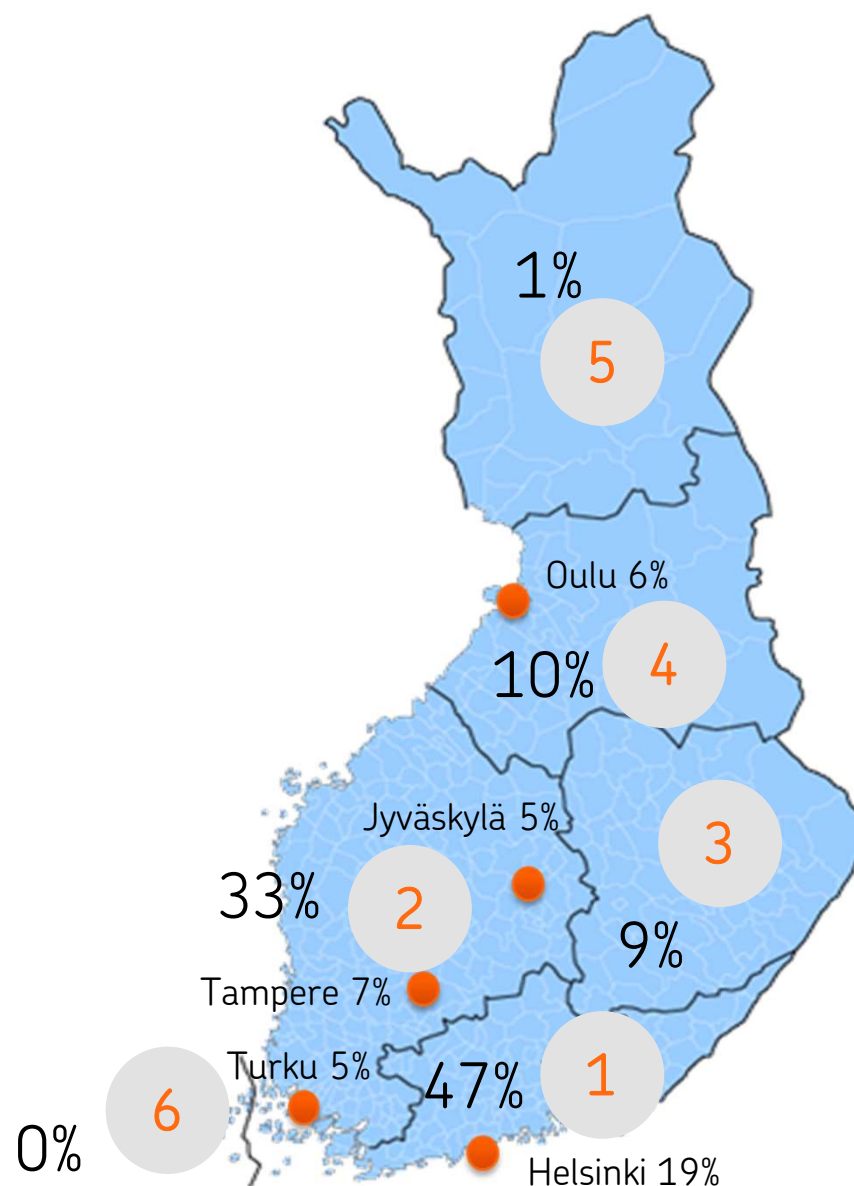


# OPMB Cover Asset Pool

## Characteristics

### Geographical distribution

- 1 Southern Finland
- 2 Western Finland
- 3 Eastern Finland
- 4 Oulu region
- 5 Lapland
- 6 Åland



A. Harmonised Transparency Template - General Information			HTT 2018		
	Reporting in Domestic Currency	EUR			
	CONTENT OF TAB A				
	1. Basic Facts				
	2. Regulatory Summary				
	3. General Cover Pool / Covered Bond Information				
	4. References to Capital Requirements Regulation (CRR) 123(7)				
	5. References to Capital Requirements Regulation (CRR) 123(1)				
	6. Other relevant information				
Field Number	1. Basic Facts				
G.1.11	Country	Finland			
G.1.12	Issuer Name	OP Mortgage Bank			
G.1.13	Link to Issuer's Website	<a href="https://www.op.fi/op-financial-group/debt-investors/op-as-investment">https://www.op.fi/op-financial-group/debt-investors/op-as-investment</a>			
G.1.14	Cut-off date	31/12/2018			
OG.1.11	Optional information e.g. Contact names				
OG.1.12	Optional information e.g. Parent name				
OG.1.13					
OG.1.14					
OG.1.15					
OG.1.16					
OG.1.17					
OG.1.18					
	2. Regulatory Summary				
G.2.11	UCITS Compliance (Y/N)	Y			
G.2.12	CRR Compliance (Y/N)	Y			
G.2.13	LCR status	<a href="https://www.coveredbondlabel.com/issuer/">https://www.coveredbondlabel.com/issuer/</a>			
OG.2.11					
OG.2.12					
OG.2.13					
OG.2.14					
OG.2.15					
OG.2.16					
	3. General Cover Pool / Covered Bond Information				
	1. General Information	Nominal (mn)			
G.3.11	Total Cover Assets	13693.92			
G.3.12	Outstanding Covered Bonds	10635.00			
OG.3.11	Cover Pool Size (NPV) (mn)	ND1			
OG.3.12	Outstanding Covered Bonds (NPV) (mn)	ND1			
OG.3.13					
OG.3.14					
	2. Over-collateralisation (OC)	Legal / Regulatory	Actual	Minimum Committed	Purpose
G.3.21	OC (%)	2%	23%	ND1	ND1
OG.3.21	Optional information e.g. Asset Coverage Test (ACT)				
OG.3.22	Optional information e.g. OC (NPV basis)				
OG.3.23					
OG.3.24					
OG.3.25					
OG.3.26					
	3. Cover Pool Composition	Nominal (mn)		% Cover Pool	
G.3.31	Mortgages	13697.58		99.98%	
G.3.32	Public Sector	0.00		0.00%	
G.3.33	Shipping	0.00		0.00%	
G.3.34	Substitute Assets	0.00		0.00%	
G.3.35	Other	2.33		0.02%	
G.3.36	Total	13,700		100%	
OG.3.31	or: (if relevant, please specify)			0.00%	
OG.3.32	or: (if relevant, please specify)			0.00%	
OG.3.33	or: (if relevant, please specify)			0.00%	
OG.3.34	or: (if relevant, please specify)			0.00%	
OG.3.35	or: (if relevant, please specify)			0.00%	
OG.3.36	or: (if relevant, please specify)			0.00%	

4. Cover Pool Amortisation Profile		Contractual	Expected Upon Prepayments	% Total Contractual	% Total Expected Upon Prepayments
G.3.4.1	Weighted Average Life (in years)	6.17	ND3		
	Residual Life (mn)				
	By buckets:				
G.3.4.2	0-1Y	1513.60	ND3	11.05%	
G.3.4.3	1-2Y	1420.70	ND3	10.37%	
G.3.4.4	2-3Y	1324.48	ND3	9.67%	
G.3.4.5	3-4Y	1178.31	ND3	8.60%	
G.3.4.6	4-5Y	1069.95	ND3	7.81%	
G.3.4.7	5-10Y	3819.88	ND3	27.88%	
G.3.4.8	10+Y	3373.01	ND3	24.62%	
G.3.4.9	Total	13,700	0	100%	0%
OG.3.4.1	or/ 0-1 day			0.00%	
OG.3.4.2	or/ 0-0.5y			0.00%	
OG.3.4.3	or/ 0.5-1y			0.00%	
OG.3.4.4	or/ 1-1.5y			0.00%	
OG.3.4.5	or/ 1.5-2y			0.00%	
OG.3.4.6					
OG.3.4.7					
OG.3.4.8				0.00%	
OG.3.4.9				0.00%	
OG.3.4.10					
5. Maturity of Covered Bonds		Initial Maturity	Extended Maturity	% Total Initial Maturity	% Total Extended Maturity
G.3.5.1	Weighted Average life (in years)	4.25	5.24		
	Maturity (mn)				
	By buckets:				
G.3.5.2	0-1Y	1000.00	0.00	9.40%	0.00%
G.3.5.3	1-2Y	1270.00	1000.00	11.94%	9.40%
G.3.5.4	2-3Y	1000.00	1270.00	9.40%	11.94%
G.3.5.5	3-4Y	1000.00	1000.00	9.40%	9.40%
G.3.5.6	4-5Y	2250.00	1000.00	21.16%	9.40%
G.3.5.7	5-10Y	4115.00	6365.00	38.63%	53.85%
G.3.5.8	10+Y	0.00	0.00	0.00%	0.00%
G.3.5.9	Total	10,635	10,635	100%	100%
OG.3.5.1	or/ 0-1 day			0.00%	0.00%
OG.3.5.2	or/ 0-0.5y			0.00%	0.00%
OG.3.5.3	or/ 0.5-1y			0.00%	0.00%
OG.3.5.4	or/ 1-1.5y			0.00%	0.00%
OG.3.5.5	or/ 1.5-2y			0.00%	0.00%
OG.3.5.6					
OG.3.5.7					
OG.3.5.8					
OG.3.5.9					
OG.3.5.10					
6. Covered Assets - Currency		Nominal [before hedging] (mn)	Nominal [after hedging] (mn)	% Total [before]	% Total [after]
G.3.6.1	EUR	10,635	0.00	100.00%	
G.3.6.2	USD	0.00	0.00	0.00%	
G.3.6.3	GBP	0.00	0.00	0.00%	
G.3.6.4	NOK	0.00	0.00	0.00%	
G.3.6.5	CHF	0.00	0.00	0.00%	
G.3.6.6	AUD	0.00	0.00	0.00%	
G.3.6.7	CAD	0.00	0.00	0.00%	
G.3.6.8	BRL	0.00	0.00	0.00%	
G.3.6.9	CZK	0.00	0.00	0.00%	
G.3.6.10	DKK	0.00	0.00	0.00%	
G.3.6.11	HKD	0.00	0.00	0.00%	
G.3.6.12	KRW	0.00	0.00	0.00%	
G.3.6.13	SEK	0.00	0.00	0.00%	
G.3.6.14	SGD	0.00	0.00	0.00%	
G.3.6.15	Other	0.00	0.00	0.00%	
G.3.6.16	Total	10635	0	100%	0%
OG.3.6.1	or/ (if relevant, please specify)			0.00%	
OG.3.6.2	or/ (if relevant, please specify)			0.00%	
OG.3.6.3	or/ (if relevant, please specify)			0.00%	
OG.3.6.4	or/ (if relevant, please specify)			0.00%	
OG.3.6.5	or/ (if relevant, please specify)			0.00%	
OG.3.6.6	or/ (if relevant, please specify)			0.00%	
OG.3.6.7	or/ (if relevant, please specify)			0.00%	
OG.3.6.8	or/ (if relevant, please specify)			0.00%	
OG.3.6.9	or/ (if relevant, please specify)			0.00%	

Source: OP Mortgage Bank Cover Asset Pool, ECBC Harmonised Transparency Template (HTT) as of 31 December 2018

7. Covered Bonds - Currency		Nominal [before hedging] (mn)	Nominal [after hedging] (mn)	% Total [before]	% Total [after]
G.3.7.1	EUR	10635.00	10635.00	100.00%	100.00%
G.3.7.2	USD	0.00	0.00	0.00%	0.00%
G.3.7.3	GBP	0.00	0.00	0.00%	0.00%
G.3.7.4	NOK	0.00	0.00	0.00%	0.00%
G.3.7.5	CHF	0.00	0.00	0.00%	0.00%
G.3.7.6	AUD	0.00	0.00	0.00%	0.00%
G.3.7.7	CAD	0.00	0.00	0.00%	0.00%
G.3.7.8	BRL	0.00	0.00	0.00%	0.00%
G.3.7.9	CZK	0.00	0.00	0.00%	0.00%
G.3.7.10	DKK	0.00	0.00	0.00%	0.00%
G.3.7.11	HKD	0.00	0.00	0.00%	0.00%
G.3.7.12	KRW	0.00	0.00	0.00%	0.00%
G.3.7.13	SEK	0.00	0.00	0.00%	0.00%
G.3.7.14	SGD	0.00	0.00	0.00%	0.00%
G.3.7.15	Other	0.00	0.00	0.00%	0.00%
G.3.7.16	Total	10635.00	10635.00	100%	100%
OG.3.7.1	o/v (if relevant, please specify)				
OG.3.7.2	o/v (if relevant, please specify)				
OG.3.7.3	o/v (if relevant, please specify)				
OG.3.7.4	o/v (if relevant, please specify)				
OG.3.7.5	o/v (if relevant, please specify)				
OG.3.7.6	o/v (if relevant, please specify)				
OG.3.7.7	o/v (if relevant, please specify)				
OG.3.7.8	o/v (if relevant, please specify)				
OG.3.7.9	o/v (if relevant, please specify)				
8. Covered Bonds - Breakdown by interest rate		Nominal [before hedging] (mn)	Nominal [after hedging] (mn)	% Total [before]	% Total [after]
G.3.8.1	Fixed coupon	10635.00	10635.00	100.00%	100.00%
G.3.8.2	Floating coupon	0.00	0.00	0.00%	0.00%
G.3.8.3	Other	0.00	0.00	0.00%	0.00%
G.3.8.4	Total	10635.00	10635.00	100%	100%
OG.3.8.1					
OG.3.8.2					
OG.3.8.3					
OG.3.8.4					
OG.3.8.5					
9. Substitute Assets - Type		Nominal (mn)	% Substitute Assets		
G.3.9.1	Cash	0.00			
G.3.9.2	Exposures to/guaranteed by Supranational, Sovereign, Agency (SSA)	0.00			
G.3.9.3	Exposures to central banks	0.00			
G.3.9.4	Exposures to credit institutions	0.00			
G.3.9.5	Other	0.00			
G.3.9.6	Total	0	0%		
OG.3.9.1	o/v EU/gvts or quasi gvts				
OG.3.9.2	o/v third-party countries Credit Quality Step 1 (CQS1) gvts or quasi gvts				
OG.3.9.3	o/v third-party countries Credit Quality Step 2 (CQS2) gvts or quasi gvts				
OG.3.9.4	o/v EU central banks				
OG.3.9.5	o/v third-party countries Credit Quality Step 1 (CQS1) central				
OG.3.9.6	o/v third-party countries Credit Quality Step 2 (CQS2) central				
OG.3.9.7	o/v CQS1 credit institutions				
OG.3.9.8	o/v CQS2 credit institutions				
OG.3.9.9					
OG.3.9.10					
OG.3.9.11					
OG.3.9.12					

10. Substitute Assets - Country		Nominal (mn)	% Substitute Assets	
G.3.10.1	Domestic (Country of Issuer)	0.00		
G.3.10.2	Eurozone	0.00		
G.3.10.3	Rest of European Union (EU)	0.00		
G.3.10.4	European Economic Area (not member of EU)	0.00		
G.3.10.5	Switzerland	0.00		
G.3.10.6	Australia	0.00		
G.3.10.7	Brazil	0.00		
G.3.10.8	Canada	0.00		
G.3.10.9	Japan	0.00		
G.3.10.10	Korea	0.00		
G.3.10.11	New Zealand	0.00		
G.3.10.12	Singapore	0.00		
G.3.10.13	US	0.00		
G.3.10.14	Other	0.00		
G.3.10.15	Total EU	0.00		
G.3.10.16	Total	0.00	0%	
OG.3.10.1	div (If relevant, please specify)			
OG.3.10.2	div (If relevant, please specify)			
OG.3.10.3	div (If relevant, please specify)			
OG.3.10.4	div (If relevant, please specify)			
OG.3.10.5	div (If relevant, please specify)			
OG.3.10.6	div (If relevant, please specify)			
OG.3.10.7	div (If relevant, please specify)			
11. Liquid Assets		Nominal (mn)	% Cover Pool	% Covered Bonds
G.3.11.1	Substitute and other marketable assets	13699.92	100.00%	128.82%
G.3.11.2	Central bank eligible assets	0.00	0.00%	0.00%
G.3.11.3	Other	0.00	0.00%	0.00%
G.3.11.4	Total	13699.92	100%	129%
OG.3.11.1	div (If relevant, please specify)			
OG.3.11.2	div (If relevant, please specify)			
OG.3.11.3	div (If relevant, please specify)			
OG.3.11.4	div (If relevant, please specify)			
OG.3.11.5	div (If relevant, please specify)			
OG.3.11.6	div (If relevant, please specify)			
OG.3.11.7	div (If relevant, please specify)			
12. Bond List				
G.3.12.1	Bond list	<a href="https://www.coveredbondlabel.com/issuer/">https://www.coveredbondlabel.com/issuer/</a>		
13. Derivatives & Swaps				
G.3.13.1	Derivatives in the register / cover pool (notional) (mn)	6953.46		
G.3.13.2	Type of interest rate swaps (intra-group, external or both)	intra-group		
G.3.13.3	Type of currency rate swaps (intra-group, external or both)	ND2		
OG.3.13.1	NPV of Derivatives in the cover pool (mn)			
OG.3.13.2	Derivatives outside the cover pool (notional) (mn)			
OG.3.13.3	NPV of Derivatives outside the cover pool (mn)			

B1. Harmonised Transparency Template - Mortgage Assets			HTT 2018	
Reporting in Domestic Currency		EUR		
CONTENT OF TAB B1				
7. Mortgage Assets				
7.A Residential Cover Pool				
7.B Commercial Cover Pool				
Field Number	7. Mortgage Assets			
1. Property Type Information		Nominal (mn)	% Total Mortgages	
M.7.1.1	Residential	13697.58		100.00%
M.7.1.2	Commercial	0.00		0.00%
M.7.1.3	Other	0.00		0.00%
M.7.1.4	Total	13697.58		100%
OM.7.1.1	<i>o/w Housing Cooperatives / Multi-family assets</i>			0.00%
OM.7.1.2	<i>o/w Forest &amp; Agriculture</i>			0.00%
OM.7.1.3	<i>o/w [if relevant, please specify]</i>			0.00%
OM.7.1.4	<i>o/w [if relevant, please specify]</i>			0.00%
OM.7.1.5	<i>o/w [if relevant, please specify]</i>			0.00%
OM.7.1.6	<i>o/w [if relevant, please specify]</i>			0.00%
OM.7.1.7	<i>o/w [if relevant, please specify]</i>			0.00%
OM.7.1.8	<i>o/w [if relevant, please specify]</i>			0.00%
OM.7.1.9	<i>o/w [if relevant, please specify]</i>			0.00%
OM.7.1.10	<i>o/w [if relevant, please specify]</i>			0.00%
OM.7.1.11	<i>o/w [if relevant, please specify]</i>			0.00%
2. General Information		Residential Loans	Commercial Loans	Total Mortgages
M.7.2.1	Number of mortgage loans	275071	0.00	275071
OM.7.2.1	<i>Optional information eg, Number of borrowers</i>			
OM.7.2.2	<i>Optional information eg, Number of guarantors</i>			
OM.7.2.3				
OM.7.2.4				
OM.7.2.5				
OM.7.2.6				
3. Concentration Risks		% Residential Loans	% Commercial Loans	% Total Mortgages
M.7.3.1	10 largest exposures	0.09	0.00	0.09
OM.7.3.1				
OM.7.3.2				
OM.7.3.3				
OM.7.3.4				
OM.7.3.5				
OM.7.3.6				



4. Breakdown by Geography		% Residential Loans	% Commercial Loans	% Total Mortgages	
M.7.4.1	European Union	100.0%	0.0%		100.0%
M.7.4.2	Austria				
M.7.4.3	Belgium				
M.7.4.4	Bulgaria				
M.7.4.5	Croatia				
M.7.4.6	Cyprus				
M.7.4.7	Czech Republic				
M.7.4.8	Denmark				
M.7.4.9	Estonia				
M.7.4.10	Finland	100.0%			100.0%
M.7.4.11	France				
M.7.4.12	Germany				
M.7.4.13	Greece				
M.7.4.14	Netherlands				
M.7.4.15	Hungary				
M.7.4.16	Ireland				
M.7.4.17	Italy				
M.7.4.18	Latvia				
M.7.4.19	Lithuania				
M.7.4.20	Luxembourg				
M.7.4.21	Malta				
M.7.4.22	Poland				
M.7.4.23	Portugal				
M.7.4.24	Romania				
M.7.4.25	Slovakia				
M.7.4.26	Slovenia				
M.7.4.27	Spain				
M.7.4.28	Sweden				
M.7.4.29	United Kingdom				
M.7.4.30	European Economic Area (not member of EU)	0.0%	0.0%		0.0%
M.7.4.31	Iceland				
M.7.4.32	Liechtenstein				
M.7.4.33	Norway				
M.7.4.34	Other	0.0%	0.0%		0.0%
M.7.4.35	Switzerland				
M.7.4.36	Australia				
M.7.4.37	Brazil				
M.7.4.38	Canada				
M.7.4.39	Japan				
M.7.4.40	Korea				
M.7.4.41	New Zealand				
M.7.4.42	Singapore				
M.7.4.43	US				
M.7.4.44	Other				
OM.7.4.1	<i>o/w [if relevant, please specify]</i>				
OM.7.4.2	<i>o/w [if relevant, please specify]</i>				
OM.7.4.3	<i>o/w [if relevant, please specify]</i>				
OM.7.4.4	<i>o/w [if relevant, please specify]</i>				
OM.7.4.5	<i>o/w [if relevant, please specify]</i>				
OM.7.4.6	<i>o/w [if relevant, please specify]</i>				
OM.7.4.7	<i>o/w [if relevant, please specify]</i>				
OM.7.4.8	<i>o/w [if relevant, please specify]</i>				
OM.7.4.9	<i>o/w [if relevant, please specify]</i>				
OM.7.4.10	<i>o/w [if relevant, please specify]</i>				

5. Breakdown by domestic regions		% Residential Loans	% Commercial Loans	% Total Mortgages
M.7.5.1	Aland Islands	0.20		0.20
M.7.5.2	Central Finland	5.08		5.08
M.7.5.3	Central Ostrobothnia	1.24		1.24
M.7.5.4	Etela-Savo	1.91		1.91
M.7.5.5	Ita-Uusimaa	0.00		0.00
M.7.5.6	Kainuu	0.75		0.75
M.7.5.7	Kanta-Hame	3.93		3.93
M.7.5.8	Kymenlaakso	2.33		2.33
M.7.5.9	Lapland	1.38		1.38
M.7.5.10	North Karelia	3.00		3.00
M.7.5.11	North Ostrobothnia	9.13		9.13
M.7.5.12	Ostrobothnia	2.16		2.16
M.7.5.13	Paijat-Hame	3.38		3.38
M.7.5.14	Pirkanmaa	9.49		9.49
M.7.5.15	Pohjois-Savo	4.20		4.20
M.7.5.16	Satakunta	3.75		3.75
M.7.5.17	South Karelia	2.38		2.38
M.7.5.18	South Ostrobothnia	1.78		1.78
M.7.5.19	Uusimaa	34.17		34.17
M.7.5.20	Varsinais-Suomi	9.75		9.75
6. Breakdown by interest rate		% Residential Loans	% Commercial Loans	% Total Mortgages
M.7.6.1	Fixed rate	2.13		2.13
M.7.6.2	Floating rate	97.87		97.87
M.7.6.3	Other			
OM.7.6.1				
OM.7.6.2				
OM.7.6.3				
OM.7.6.4				
OM.7.6.5				
OM.7.6.6				
7. Breakdown by Repayment Type		% Residential Loans	% Commercial Loans	% Total Mortgages
M.7.7.1	Bullet / interest only	0.00		0.00
M.7.7.2	Amortising	100.00		100.00
M.7.7.3	Other			
OM.7.7.1				
OM.7.7.2				
OM.7.7.3				
OM.7.7.4				
OM.7.7.5				
OM.7.7.6				
8. Loan Seasoning		% Residential Loans	% Commercial Loans	% Total Mortgages
M.7.8.1	Up to 12months	10.07		10.07
M.7.8.2	≥ 12 - ≤ 24 months	10.55		10.55
M.7.8.3	≥ 24 - ≤ 36 months	10.57		10.57
M.7.8.4	≥ 36 - ≤ 60 months	15.76		15.76
M.7.8.5	≥ 60 months	53.05		53.05
OM.7.8.1				
OM.7.8.2				
OM.7.8.3				
OM.7.8.4				
9. Non-Performing Loans (NPLs)		% Residential Loans	% Commercial Loans	% Total Mortgages
M.7.9.1	% NPLs			



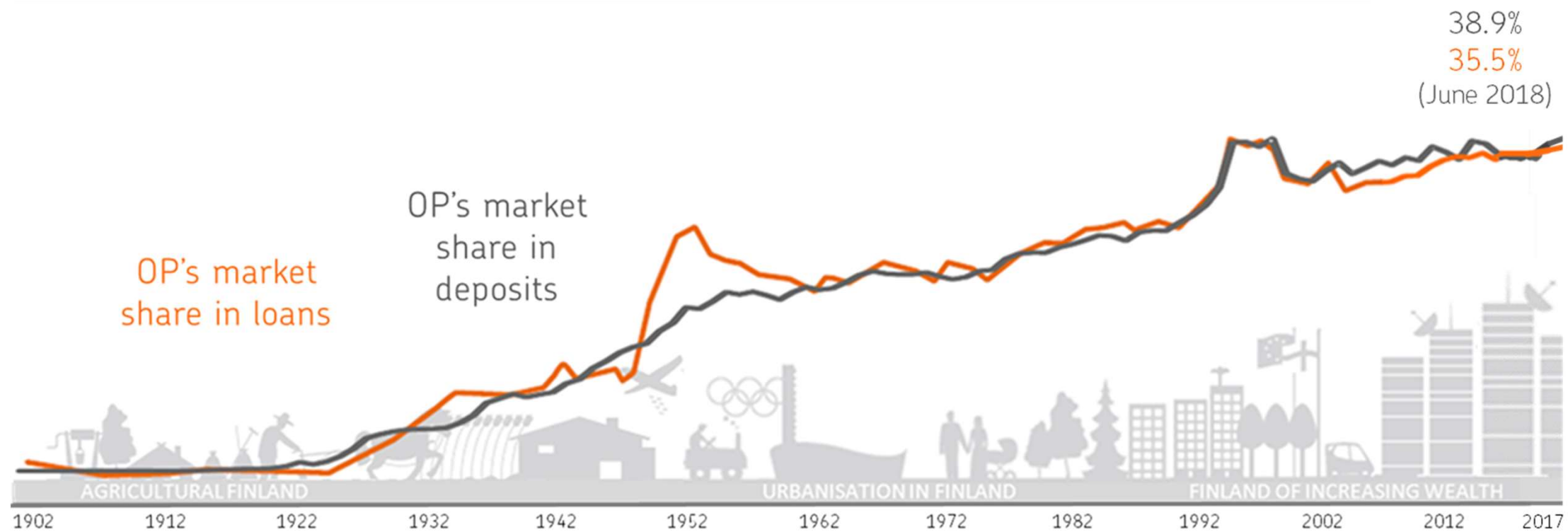
7.A Residential Cover Pool						
10. Loan Size Information		Nominal	Number of Loans	% Residential Loans		% No. of Loans
M.7A.10.1	Average loan size (000s)	49.80				
	By buckets (mn):					
M.7A.10.2	0 - 0,025000	1399.42	113140.00	10.22%		41.13%
M.7A.10.3	0,025001 - 0,050000	2294.89	63128.00	16.75%		22.95%
M.7A.10.4	0,050001 - 0,100000	4418.63	62053.00	32.26%		22.56%
M.7A.10.5	0,100001 - 0,150000	2826.80	23374.00	20.64%		8.50%
M.7A.10.6	0,150001 - 0,200 000	1421.20	8305.00	10.38%		3.02%
M.7A.10.7	0,200001 - 0,250000	655.45	2959.00	4.79%		1.08%
M.7A.10.8	0,250001 - 0,300000	302.46	1113.00	2.21%		0.40%
M.7A.10.9	0,300001 -	378.72	999.00	2.76%		0.36%
M.7A.10.10						
M.7A.10.11						
M.7A.10.12						
M.7A.10.13						
M.7A.10.14						
M.7A.10.15						
M.7A.10.16						
M.7A.10.17						
M.7A.10.18						
M.7A.10.19						
M.7A.10.20						
M.7A.10.21						
M.7A.10.22						
M.7A.10.23						
M.7A.10.24						
M.7A.10.25						
M.7A.10.26	Total	13697.58	275071.00	100%		100%
11. Loan to Value (LTV) Information - UNINDEXED		Nominal	Number of Loans	% Residential Loans		% No. of Loans
M.7A.11.1	Weighted Average LTV (%)	47.25				
	By LTV buckets (mn):					
M.7A.11.2	>0 - <=40 %	11138.54	274967.00	81.34%		51.80%
M.7A.11.3	>40 - <=50 %	1371.97	119515.00	10.02%		22.52%
M.7A.11.4	>50 - <=60 %	795.47	78445.00	5.81%		14.78%
M.7A.11.5	>60 - <=70 %	323.17	42425.00	2.36%		7.99%
M.7A.11.6	>70 - <=80 %	57.06	13261.00	0.42%		2.50%
M.7A.11.7	>80 - <=90 %	6.94	1772.00	0.05%		0.33%
M.7A.11.8	>90 - <=100 %	1.06	325.00	0.01%		0.06%
M.7A.11.9	>100 %	0.22	82.00	0.00%		0.02%
M.7A.11.10	Total	13694.42	530792.00	100%		100%
OM.7A.11.1	o/w >100 - <=110 %			0.00%		0.00%
OM.7A.11.2	o/w >110 - <=120 %			0.00%		0.00%
OM.7A.11.3	o/w >120 - <=130 %			0.00%		0.00%
OM.7A.11.4	o/w >130 - <=140 %			0.00%		0.00%
OM.7A.11.5	o/w >140 - <=150 %			0.00%		0.00%
OM.7A.11.6	o/w >150 %			0.00%		0.00%
OM.7A.11.7						
OM.7A.11.8						
OM.7A.11.9						

12. Loan to Value (LTV) Information - INDEXED		Nominal	Number of Loans	% Residential Loans	% No. of Loans
M.7A.12.1	Weighted Average LTV (%)	45.13			
	By LTV buckets (mn):				
M.7A.12.2	>0 - <=40 %	11436.12	275071.00	83.49%	56.30%
M.7A.12.3	>40 - <=50 %	1308.20	110033.00	9.55%	22.52%
M.7A.12.4	>50 - <=60 %	696.46	67123.00	5.08%	13.74%
M.7A.12.5	>60 - <=70 %	216.41	29138.00	1.58%	5.96%
M.7A.12.6	>70 - <=80 %	33.50	5624.00	0.24%	1.15%
M.7A.12.7	>80 - <=90 %	6.11	1357.00	0.04%	0.28%
M.7A.12.8	>90 - <=100 %	0.79	242.00	0.01%	0.05%
M.7A.12.9	>100%	0.00	0.00	0.00%	0.00%
M.7A.12.10	Total	13697.58	488588.00	100%	100%
OM.7A.12.1	<i>o/w &gt;100 - &lt;=110 %</i>			0.00%	0.00%
OM.7A.12.2	<i>o/w &gt;110 - &lt;=120 %</i>			0.00%	0.00%
OM.7A.12.3	<i>o/w &gt;120 - &lt;=130 %</i>			0.00%	0.00%
OM.7A.12.4	<i>o/w &gt;130 - &lt;=140 %</i>			0.00%	0.00%
OM.7A.12.5	<i>o/w &gt;140 - &lt;=150 %</i>			0.00%	0.00%
OM.7A.12.6	<i>o/w &gt;150 %</i>			0.00%	0.00%
OM.7A.12.7					
OM.7A.12.8					
OM.7A.12.9					
13. Breakdown by type		% Residential Loans			
M.7A.13.1	Owner occupied	96.20			
M.7A.13.2	Second home/Holiday houses	1.20			
M.7A.13.3	Buy-to-let/Non-owner occupied	0.55			
M.7A.13.4	Agricultural	2.05			
M.7A.13.5	Other				
OM.7A.13.1	<i>o/w Subsidised housing</i>				
OM.7A.13.2	<i>o/w Private rental</i>				
OM.7A.13.3	<i>o/w Multi-family housing</i>				
OM.7A.13.4	<i>o/w Buildings under construction</i>				
OM.7A.13.5	<i>o/w Buildings land</i>				
OM.7A.13.6	<i>o/w [if relevant, please specify]</i>				
OM.7A.13.7	<i>o/w [if relevant, please specify]</i>				
OM.7A.13.8	<i>o/w [if relevant, please specify]</i>				
OM.7A.13.9	<i>o/w [if relevant, please specify]</i>				
OM.7A.13.10	<i>o/w [if relevant, please specify]</i>				
OM.7A.13.11	<i>o/w [if relevant, please specify]</i>				
14. Loan by Ranking		% Residential Loans			
M.7A.14.1	1st lien / No prior ranks	100.00			
M.7A.14.2	Guaranteed	0.00			
M.7A.14.3	Other	0.00			

7B Commercial Cover Pool						
15. Loan Size Information		Nominal	Number of Loans	% Commercial Loans		% No. of Loans
M.7B.15.1	Average loan size (000s)					
	By buckets (mn):					
M.7B.15.2	0 - 0,100000	0.00	0.00			
M.7B.15.3	0,100001 - 0,200000	0.00	0.00			
M.7B.15.4	0,200001 - 0,300000	0.00	0.00			
M.7B.15.5	0,300001 - 0,400000	0.00	0.00			
M.7B.15.6	0,400001 - 0,500000	0.00	0.00			
M.7B.15.7	0,500001 - 0,600000	0.00	0.00			
M.7B.15.8	0,600001 - 0,700000	0.00	0.00			
M.7B.15.9	0,700001 - 0,800000	0.00	0.00			
M.7B.15.10	0,800001 - 0,900000	0.00	0.00			
M.7B.15.11	0,900001 - 1,000000	0.00	0.00			
M.7B.15.12	1,000001 -	0.00	0.00			
M.7B.15.13						
M.7B.15.14						
M.7B.15.15						
M.7B.15.16						
M.7B.15.17						
M.7B.15.18						
M.7B.15.19						
M.7B.15.20						
M.7B.15.21						
M.7B.15.22						
M.7B.15.23						
M.7B.15.24						
M.7B.15.25						
M.7B.15.26	Total	0.00	0.00	0%		0%
16. Loan to Value (LTV) Information - UNINDEXED		Nominal	Number of Loans	% Commercial Loans		% No. of Loans
M.7B.16.1	Weighted Average LTV (%)					
	By LTV buckets (mn):					
M.7B.16.2	>0 - <=40 %	0.00	0.00			
M.7B.16.3	>40 - <=50 %	0.00	0.00			
M.7B.16.4	>50 - <=60 %	0.00	0.00			
M.7B.16.5	>60 - <=70 %	0.00	0.00			
M.7B.16.6	>70 - <=80 %	0.00	0.00			
M.7B.16.7	>80 - <=90 %	0.00	0.00			
M.7B.16.8	>90 - <=100 %	0.00	0.00			
M.7B.16.9	>100%	0.00	0.00			
M.7B.16.10	Total	0.00	0.00	0%		0%
OM.7B.16.1	o/w >100 - <=110 %					
OM.7B.16.2	o/w >110 - <=120 %					
OM.7B.16.3	o/w >120 - <=130 %					
OM.7B.16.4	o/w >130 - <=140 %					
OM.7B.16.5	o/w >140 - <=150 %					
OM.7B.16.6	o/w >150 %					
OM.7B.16.7						
OM.7B.16.8						
OM.7B.16.9						

17. Loan to Value (LTV) Information - INDEXED		Nominal	Number of Loans	% Commercial Loans	% No. of Loans
M.7B.17.1	Weighted Average LTV (%)				
	By LTV buckets (mn):				
M.7B.17.2	>0 - <=40 %	0.00	0.00		
M.7B.17.3	>40 - <=50 %	0.00	0.00		
M.7B.17.4	>50 - <=60 %	0.00	0.00		
M.7B.17.5	>60 - <=70 %	0.00	0.00		
M.7B.17.6	>70 - <=80 %	0.00	0.00		
M.7B.17.7	>80 - <=90 %	0.00	0.00		
M.7B.17.8	>90 - <=100 %	0.00	0.00		
M.7B.17.9	>100 %	0.00	0.00		
M.7B.17.10	Total	0.00	0.00	0%	0%
OM.7B.17.1	o/w >100 - <=110 %				
OM.7B.17.2	o/w >110 - <=120 %				
OM.7B.17.3	o/w >120 - <=130 %				
OM.7B.17.4	o/w >130 - <=140 %				
OM.7B.17.5	o/w >140 - <=150 %				
OM.7B.17.6	o/w >150 %				
OM.7B.17.7					
OM.7B.17.8					
OM.7B.17.9					
18. Breakdown by Type		% Commercial loans			
M.7B.18.1	Retail				
M.7B.18.2	Office				
M.7B.18.3	Hotel/Tourism				
M.7B.18.4	Shopping malls				
M.7B.18.5	Industry				
M.7B.18.6	Agriculture				
M.7B.18.7	Other commercially used				
M.7B.18.8	Land				
M.7B.18.9	Property developers / Building under construction				
M.7B.18.10	Other				
OM.7B.18.1	o/w Social & Cultural purposes				
OM.7B.18.2	o/w [if relevant, please specify]				
OM.7B.18.3	o/w [if relevant, please specify]				
OM.7B.18.4	o/w [if relevant, please specify]				
OM.7B.18.5	o/w [if relevant, please specify]				
OM.7B.18.6	o/w [if relevant, please specify]				
OM.7B.18.7	o/w [if relevant, please specify]				
OM.7B.18.8	o/w [if relevant, please specify]				
OM.7B.18.9	o/w [if relevant, please specify]				
OM.7B.18.10	o/w [if relevant, please specify]				
OM.7B.18.11	o/w [if relevant, please specify]				
OM.7B.18.12	o/w [if relevant, please specify]				
OM.7B.18.13	o/w [if relevant, please specify]				
OM.7B.18.14	o/w [if relevant, please specify]				
OM.7B.18.15	o/w [if relevant, please specify]				
OM.7B.18.16	o/w [if relevant, please specify]				
OM.7B.18.17	o/w [if relevant, please specify]				





## Appendix

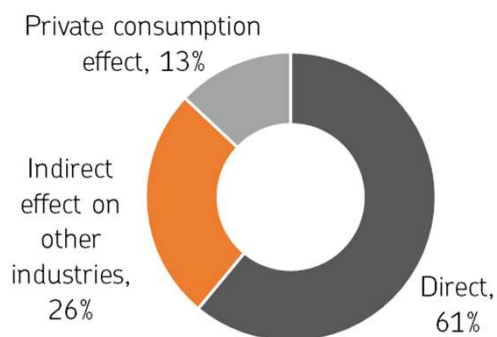


# Export industry impacting widely on the Finnish economy

Largest indirect effects seen on Transportation & storage, Wholesale & retail trade and Agriculture, forestry & fishery

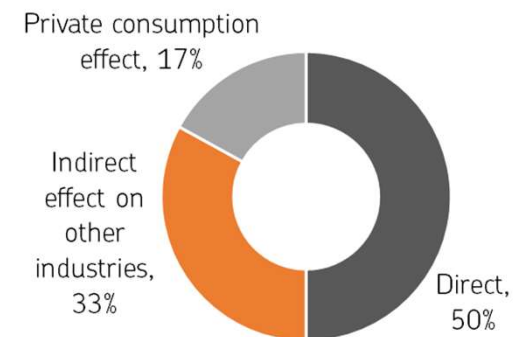
**Export industry turnover €219 bn in 2017**

*€213 bn continuing business operations, €6 bn investments*



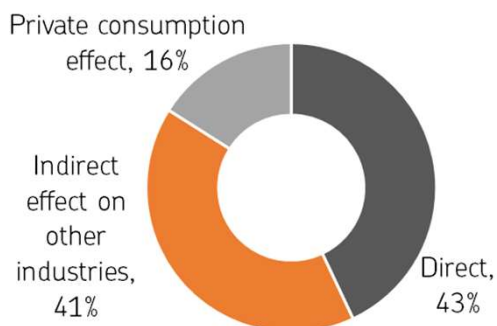
**Value increase in GDP €90 bn in 2017**

*Creating 46% of total GDP value increase*



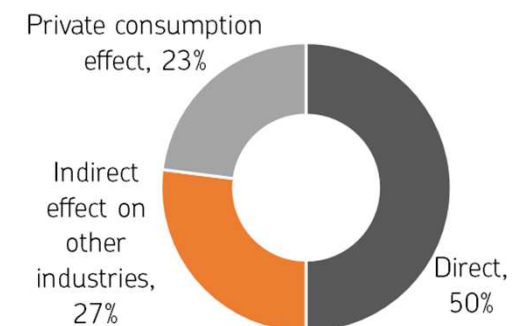
**Employment effect >1 mn in 2017**

*Impacting 43% of total employees*



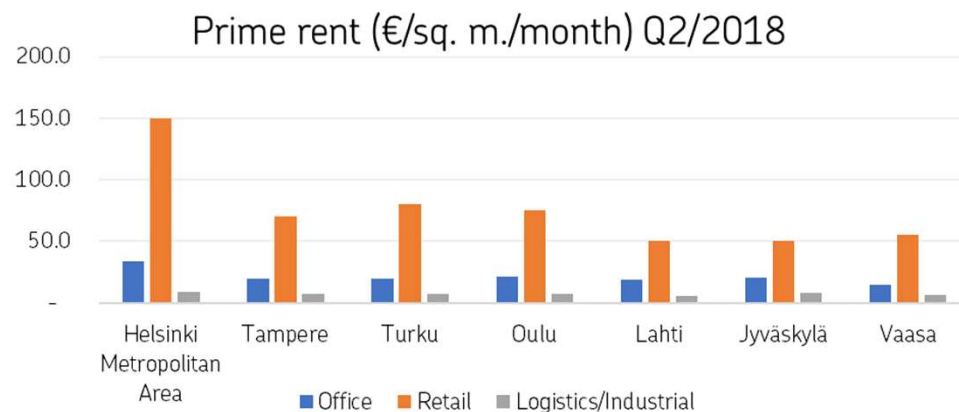
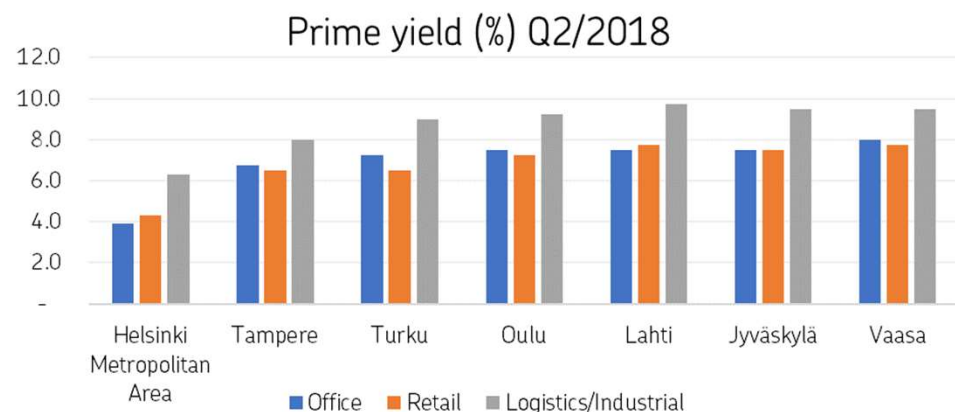
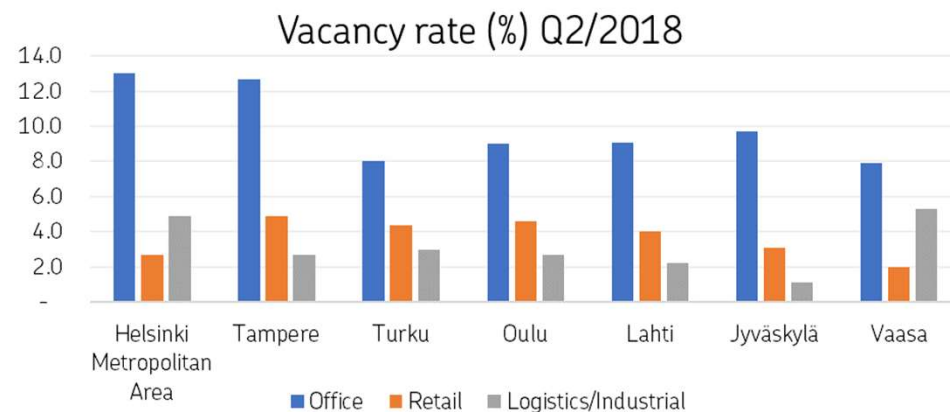
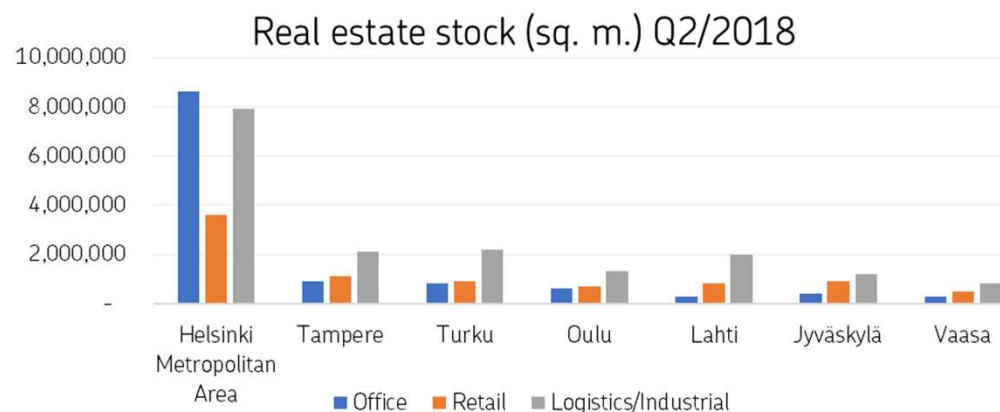
**Tax accrual effect €28 bn in 2017**

*Generating 29% of total tax accrual*



# Commercial real estate market in largest Finnish cities

Total value of direct property investments\* €63.7 bn at YE2017



Rental levels and yields are based on following criteria: Rents are gross rents. Retail premises: Street level retail premises in the central business district (CBD), well-known domestic or international tenant, 3–5-year lease agreement and initial yield without renovations. Office premises: Modern or renovated premises in the CBD with good rentability, stable anchor tenants, 3–5-year lease agreements and initial yield without renovations. Logistics/Industrial premises: Ordinary premises located in a good industrial area, newer medium-sized building without major renovations needed, one stable tenant, 5–7-year lease agreement and initial yield without renovations. Particularly long lease agreements currently decrease yields by approx. 0.1–0.5% points in the Helsinki CBD and 0.1–0.7% points in other submarkets.

Sources: Catella Property Oy, Real Estate Market Finland (Autumn 2018) & KTI

\* Including Office, Retail, Industrial, Residential (property investments), Hotel, Care and other



# Group structure (until YE2018) incl. major subsidiaries

1.9 million owner-customers, of which 90% households



156 OP Financial Group member cooperative banks

OP COOPERATIVE			
BANKING	NON-LIFE INSURANCE	WEALTH MANAGEMENT	OTHER OPERATIONS
<ul style="list-style-type: none"> <li>• OP Corporate Bank plc* (Corporate Banking)</li> <li>• Helsinki Area Cooperative Bank***</li> <li>• OP Mortgage Bank*</li> <li>• OP Card Company Plc*</li> <li>• Member cooperative banks</li> </ul>	<ul style="list-style-type: none"> <li>• OP Insurance Ltd**               <ul style="list-style-type: none"> <li>• Eurooppalainen Insurance Company Ltd</li> <li>• Pohjola Health Ltd</li> </ul> </li> <li>• A-Insurance Ltd</li> </ul>	<ul style="list-style-type: none"> <li>• OP Asset Management Ltd*</li> <li>• OP Property Management Ltd*</li> <li>• OP Life Assurance Company Ltd*</li> <li>• OP Fund Management Company Ltd*</li> <li>• OP Corporate Bank plc* (Markets Equities)</li> </ul>	<ul style="list-style-type: none"> <li>• OP Services Ltd*</li> <li>• OP Customer Services Ltd*</li> <li>• Pivo Wallet Oy*</li> <li>• Checkout Finland Oy*</li> <li>• OP Corporate Bank plc* (Group Treasury)</li> </ul>

Change in a company name:

As of 1 June 2019,

OP Insurance will become Pohjola Insurance as Pohjola is one of the most renowned brands in Finland and the brand among customers is strongly associated with insurance services

\* OP Cooperative's ownership 100%

\*\* Planned to be transferred with its subsidiaries from OP Corporate Bank plc to OP Cooperative's direct ownership in the future

\*\*\* OP Cooperative's control 2/3

# OP's group-level strategic targets

Main target: Above-market-average growth rate

INDICATOR	TARGET 2019	2018	2017	2016	2015
Customer experience (CX)*,	25	23	22	23	-
NPS for brand	70	61	58	53	-
NPS for service					
CET1 ratio	22%	20.5%	20.1%	20.1%	19.5%
Return on economic capital (12-month rolling)	22%	20.8%	20.4%	22.7%	21.5%
Expenses of present-day business (12-month rolling)	Expenses in 2020 at the same level as in 2015 (€1,500 mn)	€1,833 mn	€1,661 mn	€1,532 mn	€1,500 mn
Owner-customers, number	2.1 mn	1.9 mn	1.8 mn	1.7 mn	1.5 mn

\* OP's customer experience (CX) metric is based on the Net Promoter Score (NPS) that measures likelihood of recommendation. NPS for the brand gauges the overall customer experience of OP. The NPS for service measures what kind of customer experience OP manages to create in individual service encounters in all channels. NPS can range between -100 and +100.

# Health and wellbeing business

## 2013–15: Launching the hospital concept

- First Pohjola Health hospital was opened in Helsinki (early 2013)
- Innovative concept of basic healthcare and special healthcare services, examinations, surgery and rehabilitation services to private and occupational healthcare customers
- Faster care chain and more efficient claims handling process resulting to incomparable customer satisfaction (NPS among surgery customers 96 in 2018)

## 2016–18: Expansion to university hospital cities

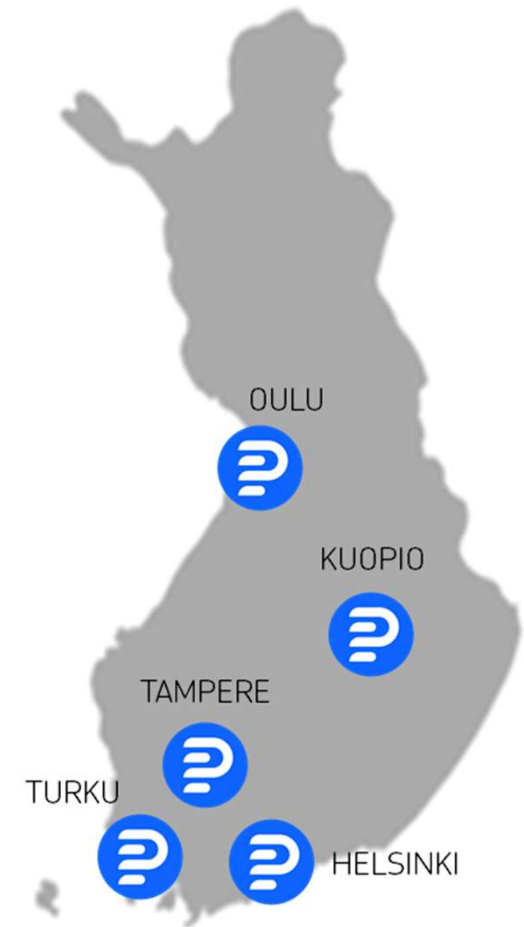
- 4 more Pohjola Health hospitals were opened in Tampere (August 2016), in Oulu (May 2017), in Kuopio (August 2017) and in Turku (May 2018)

## Strategy concerning health and wellbeing business updated as part of OP Financial Group's re-organisation process

- As part of the focus of health services business, Pohjola Health will change its name to Pohjola Hospital during 2019
- According to OP's new plan, Pohjola Health Ltd will in future focus on the development of its hospital business and will not open new medical centres as specified in its previous plan



Nationwide accessibility through digital services designed for health and wellbeing, eg. Pohjola Health App



# OP's ESG measures in 2015–18

## Group-level measures eg.

- Climate Leadership Coalition (CLC) membership
- LEED certificates of OP HQ premises and Pohjola Health hospitals
- Solar power stations in OP HQ premises, Pohjola Health hospitals and buildings of OP Property Management
- Electricity used in OP HQ premises 100% renewable
- WWF Finland Green Office system applied for environmentally-friendly premise management – eg. in OP HQ premises, carbon footprint of OP's employees is mitigated by remote work opportunity and incentives to use public transportation
- OP Code of Business Ethics & related online course to all OP employees

## Banking / Group Funding

- OP Green Bond Framework (2018) aiming to increase sustainable financing through issuing green bonds and allocating proceeds to green customer assets

## Non-life Insurance

- Promoting traffic safety, preventing losses and injuries, effective claims handling process for customers and predicting impacts caused by climate change

## Wealth Management

- ESG unit committed to responsible investment: Exclusion of high-carbon companies, Quarterly sustainability analyses on OP funds, Active proxy voting at AGMs etc.
- Membership in Climate Action 100+ (5yr investor engagement initiative) to impact on listed companies with the highest GHG emissions globally – thematic engagement projects on carbon, water and tax risks
- Signature of CDP's climate change, water and deforestation initiatives

## Customer openings

- Putting Finland on a new growth path (#suominousuun) initiatives
- SME financing programmes (€300 mn) guaranteed by EIF and guarantee programme (€300mn) with EIB for large and mid-sized companies to support future economic growth and employment
- Energy-saving improvement services for housing companies in cooperation with LeaseGreen – first case to cut a housing company's heating costs into a half and carbon footprint by approx. 60%
- 800 digital service introduction events for senior citizens in 2018

## Society efforts

- Donations of €6.3 mn to Finnish universities in 2017 and €1.3 mn to Finnish universities of applied sciences in 2018
- Subsidies of €1.2 mn for scientific research from OP's scientific foundations in 2018
- Donations of €500,000 to associations in Finland for providing summer jobs to 1,200 youngsters
- Donation of €50,000 to WWF Finland's climate change work in 2018
- 100 person-years of volunteering in honour of the centenary of Finland's independence (2017) project – totalling to 274 years (in cooperation with partners) and continuing at OP as part of CSR – Hiiop.fi volunteering platform was donated to a Finnish non-profit organisation in 2018

# OP is highly committed to ESG

## INTERNATIONAL ESG COMMITMENTS



UN Global Compact initiative – signed in 2011  
10 principles on human rights, labour standards, environment and anti-corruption



UN Principles for Responsible Investment (UNPRI) – signed in 2009  
Commitment by OP Asset Management Ltd, OP Fund Management Company Ltd and OP Property Management Ltd



Montréal Carbon Pledge – signed in 2015  
Measuring the carbon footprint of funds and complying with CDP's climate change, water and deforestation initiatives



Equator Principles – signed in 2016  
Project financing that manages risks related to environmental issues and social responsibility



OECD Guidelines for Multinational Enterprises  
Incl. voluntary CSR principles and standards

## PARTICIPATION IN ESG ORGANISATIONS AND INITIATIVES

- Finland's Sustainable Investment Forum (FINSIF)
- Climate Leadership Coalition (CLC)
- Global Compact Nordic Network
- CR network of the Finnish Business & Society association (FIBS)
- FIBS Diversity Charter Finland
- CSR Working Group of the European Association of Co-operative Banks (EACB)
- CSR Working Group of Finance Finland
- EeMAP (Energy efficiency Mortgages Action Plan) Initiative

OP Financial Group – CSR

# OP's and its issuing entities' performance in external ESG ratings

## OP Financial Group



16.3 /100 **Low** ESG Risk Rating Score



Source: Sustainalytics, September 2018



Source: Sustainalytics, 2018



Source: Oekom, June 2017



Environment  
Human Resources  
Human Rights  
Community Involvement  
Business Behaviour (C&S)  
Corporate Governance

Source: Vigeo, the most recent rating profile on above themes available as of April 2017



OP's CDP Survey  
Score in 2017:  
**B**

Company has taken  
actions to address environmental  
issues beyond initial  
screenings or assessments.

Source: CDP ([www.cdp.net/en](http://www.cdp.net/en))

## OP Corporate Bank



Source: Imug, August 2018



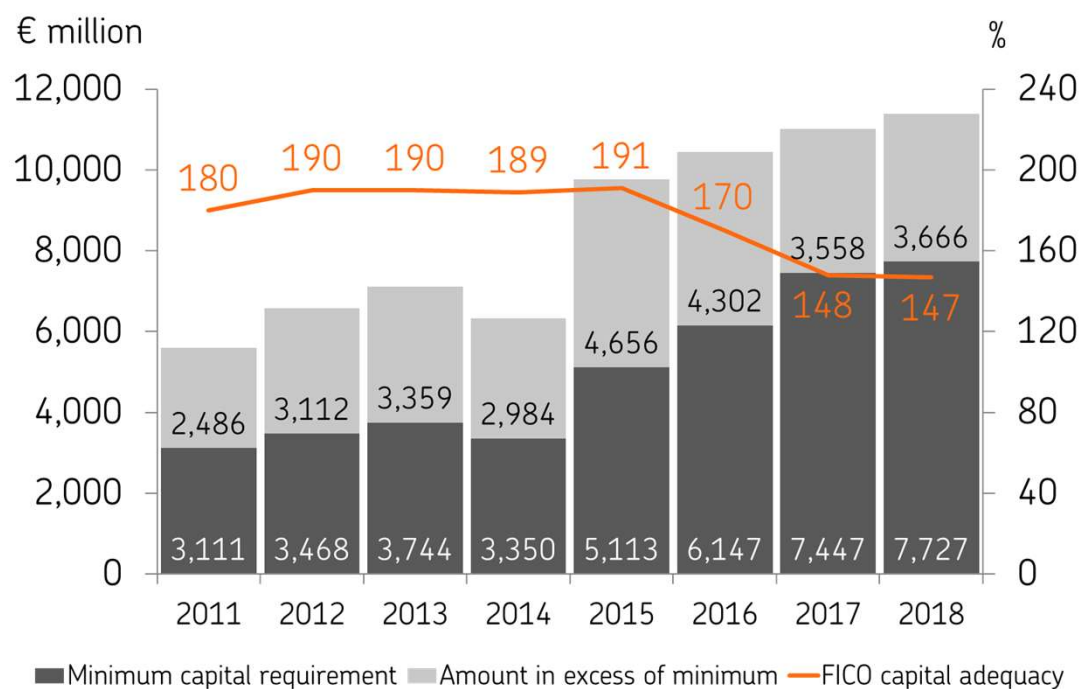
Source: MSCI, June 2018

## OP Mortgage Bank



Source: Imug, June 2016

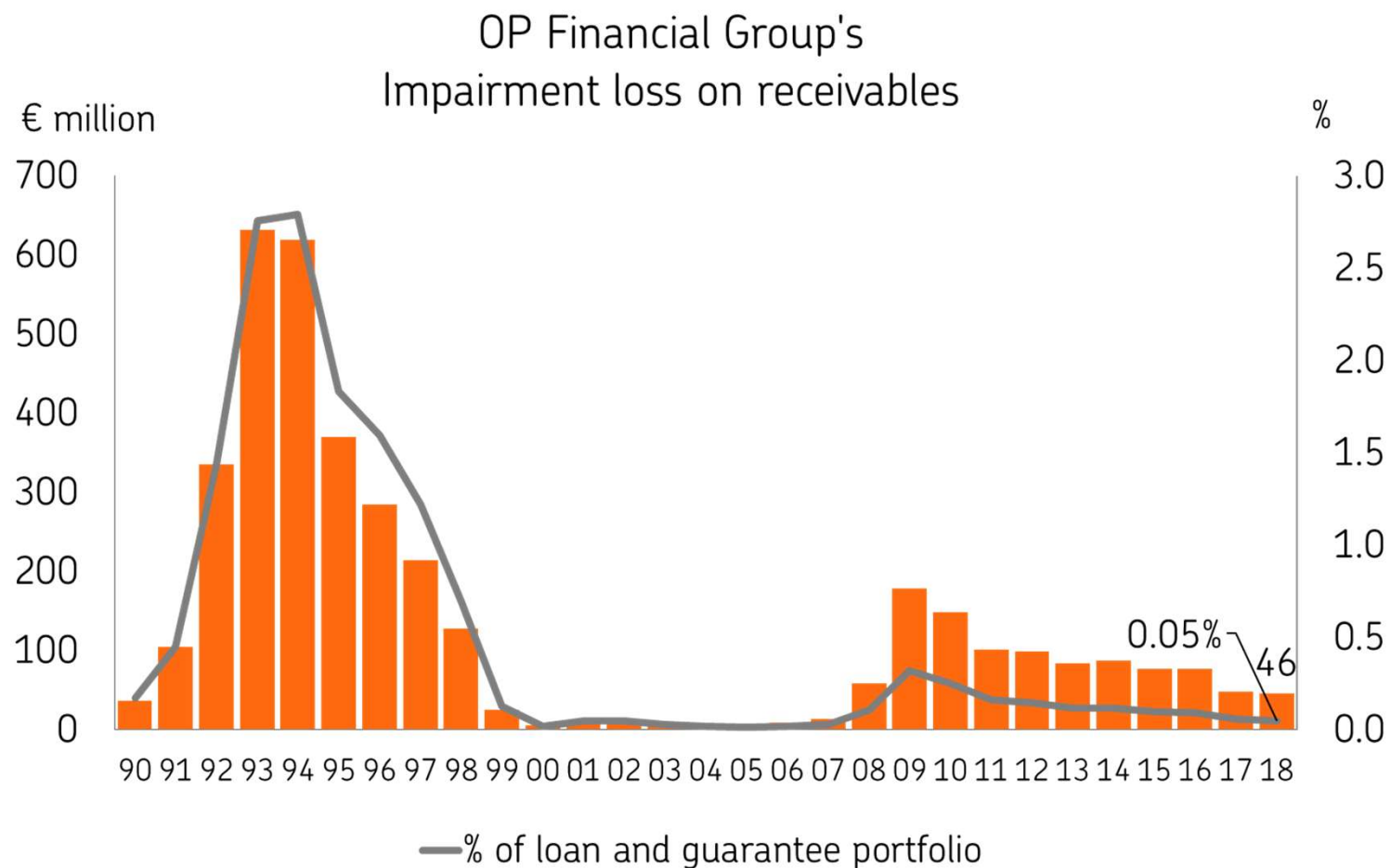
# Capital Adequacy under the Act on the Supervision of Financial and Insurance Conglomerates



## Statutory minimum requirement 100%

- At YE2018, capital adequacy buffer was decreased by 15 pps resulting from risk weight floors set by the ECB
- Banking capital requirement remained unchanged at 14.3%, calculated on RWA
- As a result of the buffer requirements for banking and solvency requirement for insurance companies, the minimum FiCo solvency of 100% reflects the level within which the group can operate without regulatory obligations resulting from buffers below the required level

# Impairment loss at a very moderate level





## OP Financial Group's earnings analysis

€ million	2018	2017*	2016	2015	
Net interest income	1 175	1 102	1 058	1 026	
Net insurance income	566	478	558	528	
Net commissions and fees	887	879	859	855	
Net investment income	254	522	390	432	
Other operating income	61	83	123	55	
<b>Total income</b>	<b>2 943</b>	<b>3 063</b>	<b>2 989</b>	<b>2 895</b>	
Personnel costs	516	758	762	781	
Depreciation/amortisation and impairment loss	325	246	160	162	
Other operating expenses	839	764	646	577	
<b>Total expenses</b>	<b>1 681</b>	<b>1 768</b>	<b>1 567</b>	<b>1 520</b>	
Impairment loss on receivables	-46	-48	-77	-78	
OP bonuses to owner-customers	-226	-217	-206	-196	
Overlay approach**	26				
<b>Earnings before tax</b>	<b>1 017</b>	<b>1 031</b>	<b>1 138</b>	<b>1 101</b>	Transfer of the portfolio of the statutory earnings-related pension insurance for OP Financial Group's personnel decreased personnel costs by €286 mn in 2018

\* 2017 comparatives have been changed as a result of entry into force of IFRS 15 and change in the recognition practice of loan service fees to correspond the current reporting approach.

\*\* A temporary exemption from IFRS9 (overlay approach) is applied to some equity instruments of insurance companies (reported according to IAS39), which improved earnings for the reporting period by EUR 26 million.

# OP Financial Group's key figures

	31 Dec. 2018	31 Dec. 2017**	31 Dec. 2016	31 Dec. 2015	31 Dec. 2014	31 Dec. 2013	31 Dec. 2012	31 Dec. 2011	31 Dec. 2010
Total assets, € million	140 382	137 205	133 747	124 455	110 427	100 991	99 769	91 905	83 969
Receivables from customers, € million	87 081	82 193	78 604	75 192	70 683	68 142	65 161	60 331	56 834
Liabilities to customers, € million	66 112	65 549	60 077	58 220	51 163	50 157	49 650	41 304	36 443
Equity capital, € million	11 832	11 084	10 237	9 324	7 213	7 724	7 134	6 242	6 726
CET1 ratio, %	20.5	20.1	20.1	19.5	15.1	17.1 <sup>a</sup>	14.1 <sup>b</sup>	14.0 <sup>b</sup>	12.6 <sup>b</sup>
Capital adequacy ratio, %	22.5	22.5	23.1	22.9	17.3	19.8 <sup>a</sup>	14.1	14.0	12.8
Over 90 days past due receivables*, € million	385	394	356	319	270	292	311	296	204
Ratio of over 90 days past due receivables* to loan and guarantee portfolio, %	0.43	0.46	0.44	0.41	0.37	0.41	0.46	0.47	0.34
Loan and guarantee portfolio, € billion	90.0	84.8	81.3	77.8	73.6	71.0	67.7	62.8	59.4
Impairment loss on receivables, € million	46 <sup>c</sup>	48 <sup>c</sup>	77 <sup>c</sup>	78 <sup>c</sup>	88 <sup>c</sup>	84 <sup>c</sup>	99 <sup>c</sup>	101 <sup>c</sup>	149 <sup>c</sup>
Impairment loss on receivables / loan and guarantee portfolio, %	0.05 <sup>c</sup>	0.06 <sup>c</sup>	0.09 <sup>c</sup>	0.10 <sup>c</sup>	0.12 <sup>c</sup>	0.12 <sup>c</sup>	0.15 <sup>c</sup>	0.16 <sup>c</sup>	0.25 <sup>c</sup>
Personnel	12 066	12 269	12 227	12 130	12 356	12 856	13 290	13 229	12 504

a) As of 1 January 2014

b) Core Tier 1 ratio

c) January–December

\* Until 31 Dec. 2012 over 90 days past due receivables and zero interest receivables, since 31 Dec. 2013 over 90 days past due receivables

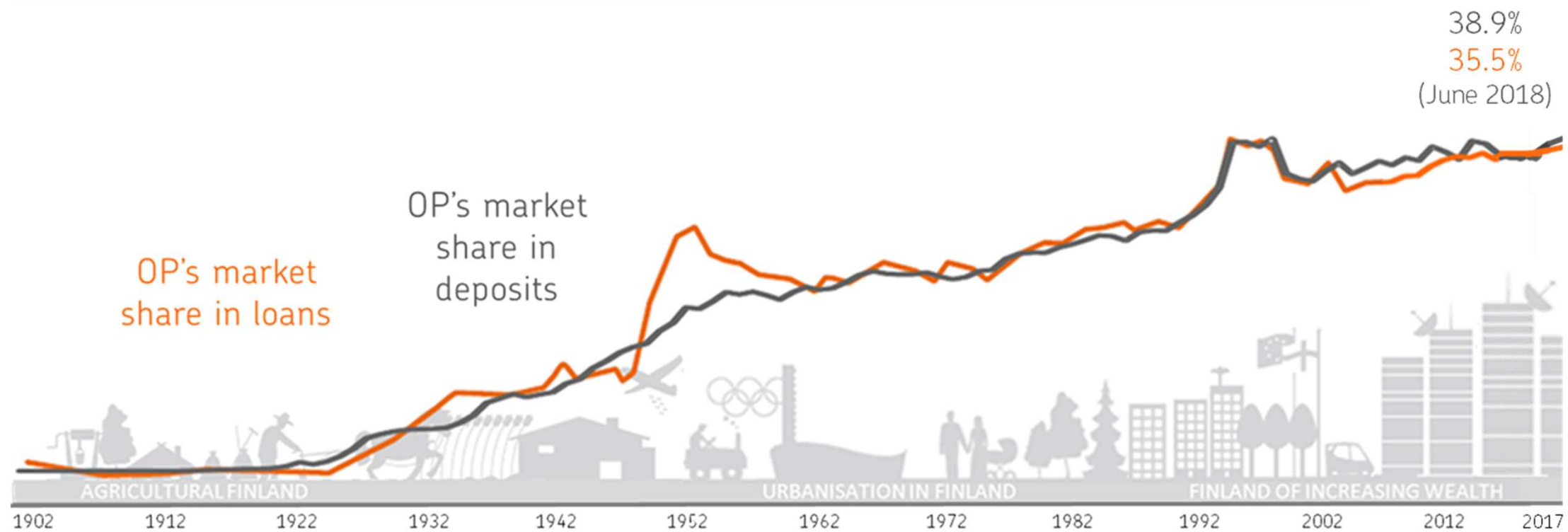
OP \*\* 2017 comparatives of balance sheet items have been changed as a result of entry into force of IFRS 15 and change in the recognition practice of loan service fees to correspond the  
 © current reporting approach.

## OP Financial Group's key ratios

	2018	2017	2016	2015	2014	2013	2012	2011	2010
Average corporate loan margin, % <sup>a</sup>	1.21	1.25	1.41	1.38	1.44	1.57	1.52	1.34	1.36
Cost/income ratio, % <sup>b</sup>	57	58	52	53	56	62	63	63	59
Return on equity (ROE), %	6.9	8.0	9.4	10.3	8.1	8.9	7.0	6.8	6.9
Return on assets (ROA), %	0.6	0.6	0.7	0.7	0.6	0.7	0.5	0.5	0.5

a) OP Corporate Bank's corporate loan portfolio

b) 2017 comparatives have been changed as a result of entry into force of IFRS 15 and change in the recognition practice of loan service fees to correspond the current reporting approach.



Debt IR contacts

## Debt IR contacts



Head of ALM and Group Treasury  
**Elina Ronkanen-Minogue**  
Tel. +358 10 252 8767  
elina.ronkanen-minogue(a)op.fi



Head of Group Funding & IR  
**Lauri Iloniemi**  
Tel. +358 10 252 3541  
lauri.iloniemi(a)op.fi



Senior Funding  
Manager  
**Tom Alanen**  
Tel. +358 10 252 4705  
tom.alanen(a)op.fi



IR Officer,  
Debt IR and Rating  
Agency Relations  
**Jaana Mauro**  
Tel. +358 10 252 8426  
jaana.mauro(a)op.fi

For OP Financial Group's and issuing entities' financial reports and other publications,  
please visit OP's Debt IR website at [www.op.fi/debtinvestors](http://www.op.fi/debtinvestors)