

### CREDIT OPINION

31 January 2023

## Update



### RATINGS

### OP Corporate Bank plc

Domicile	Helsinki, Finland
Long Term CRR	Aa2
Туре	LT Counterparty Risk Rating - Fgn Curr
Outlook	Not Assigned
Long Term Debt	Aa3
Туре	Senior Unsecured - Fgn Curr
Outlook	Stable
Long Term Deposit	Aa3
Туре	LT Bank Deposits - Fgn Curr
Outlook	Stable

Please see the <u>ratings section</u> at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.

### Contacts

Mattias Eric Frithiof +46.8.5179.1264 AVP-Analyst mattias.frithiof@moodys.com

Juliana Cerenkova +46.8.5179.1254
Associate Analyst

juliana.cerenkova@moodys.com

Simon James Robin +44 207 772 5347 Ainsworth

Associate Managing Director simon.ainsworth@moodys.com

Carola Schuler +49.69.70730.766
MD-Banking

carola.schuler@moodys.com

## OP Corporate Bank plc

Update to credit analysis

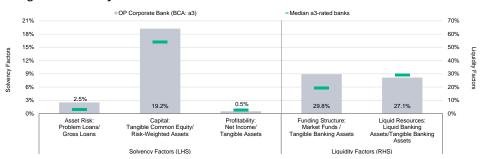
### Summary

OP Corporate Bank's (OP) ratings reflect its key role within the OP Financial Group (OPFG), which is an amalgamation of member banks, and credit institutions, bound by a joint liability. This credit opinion primarily reflects Moody's view on the creditworthiness of the OPFG, with OP Corporate Bank being the unsecured debt issuing entity within the group and acting as the group's treasury.

OP Corporate Bank's BCA and adjusted BCA of a3 reflects the group's: 1) strong capitalization with a Tangible Common Equity (TCE) ratio of 19.2% at the end of September 2022, 2) low asset risk, with a problem loan ratio at 2.5% at the end of September 2022; as well as 3) moderate earnings, and 4) modest reliance on market funding. The joint liability agreement effectively links the key credit institutions operating under the OPFG and align the BCA of the bank with that of the group.

OP Corporate Bank Plc's Aa3 deposit and senior unsecured debt ratings reflect: (1) the bank's baseline credit assessment (BCA) and the adjusted BCA of a3, (2) the results from our Advanced Loss Given Failure (LGF) analysis, which takes into account the severity of loss faced by the different liability classes in resolution, and which leads to two notches of rating uplift for OP Corporate Bank's deposit and senior unsecured ratings, and (3) our assumption of moderate likelihood of support from the Finnish Government (Aa1, stable) in case of need, which results in one notch of additional uplift.

Exhibit 1
Rating Scorecard - Key Financial Ratios



Note: The ratios represent the financials of OPFG. The group's asset risk and profitability ratios are the weaker out of the average of the latest three year-end ratios or the latest reported ratio. The capital ratio is the latest reported figure. The funding structure and liquid asset ratios are the latest year-end figures.

Source: Moody's Financial Metrics

## **Credit Strengths**

- » The group is a market leader in Finland within both bank and insurance with successful cross-selling
- » High capitalisation, with strong leverage ratio of the OPFG and good capital position
- » The joint liability amongst OP Cooperative and member credit institutions ensures that OP corporate bank's obligations are backed by all other credit institutions of the group

## **Credit Challenges**

- » Moderate efficiency with income under pressure from high investment
- » The group has a certain reliance on wholesale funding, although with extended maturity profile

### Outlook

The stable outlook on the long-term ratings reflects our view that OP Financial Group's credit fundamentals will remain robust over the next 12 to 18 months

## Factors that Could Lead to an Upgrade

Factors that could lead to an upgrade of the BCA include a combination of: (1) sustained improvements in asset risk; (2) stronger recurring profitability; (3) reduction in the overall wholesale funding dependence in favour of a higher proportion of deposit funding for the group. The deposit and senior ratings could also be upgraded due to significant issuances of more junior obligations resulting in additional buffers of loss absorbing liabilities in case of failure.

### Factors that Could Lead to a Downgrade

Factors that could lead to a downgrade of the BCA include: (1) a deterioration of the group's funding conditions; (2) a weakening of asset quality, with the problem loan ratio deteriorating; (3) a significant lower recurring profitability; or (4) a sustained weakening of capitalisation, both in terms of risk-based capital and leverage.

Furthermore, if the volumes of outstanding loss absorbing obligations protecting creditors and depositors in case of failure decline significantly in relation to tangible banking assets of the group, it could lead to a downgrade.

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the issuer/deal page on https://ratings.moodys.com for the most updated credit rating action information and rating history.

## **Key indicators**

Exhibit 2
OP Financial Group (Consolidated Financials) [1]

	09-22 <sup>2</sup>	12-21 <sup>2</sup>	12-20 <sup>2</sup>	12-19 <sup>2</sup>	12-18 <sup>2</sup>	CAGR/Avg. <sup>3</sup>
Total Assets (EUR Million)	169,797.0	174,110.0	157,103.0	143,516.0	137,278.0	5.8 <sup>4</sup>
Total Assets (USD Million)	166,342.1	197,285.1	192,224.3	161,096.5	156,928.6	1.64
Tangible Common Equity (EUR Million)	13,621.0	13,289.0	12,065.0	11,538.0	10,897.0	6.1 <sup>4</sup>
Tangible Common Equity (USD Million)	13,343.8	15,057.8	14,762.2	12,951.4	12,456.8	1.9 <sup>4</sup>
Problem Loans / Gross Loans (%)	2.5	2.7	2.7	1.6	1.6	2.25
Tangible Common Equity / Risk Weighted Assets (%)	19.2	20.2	20.2	20.8	20.9	20.3 <sup>6</sup>
Problem Loans / (Tangible Common Equity + Loan Loss Reserve) (%)	18.2	18.6	20.1	12.0	11.9	16.2 <sup>5</sup>
Net Interest Margin (%)	0.9	0.9	0.9	0.9	0.9	0.95
PPI / Average RWA (%)	1.5	2.2	1.5	2.0	1.5	1.7 <sup>6</sup>
Net Income / Tangible Assets (%)	0.6	0.6	0.4	0.5	0.4	0.55
Cost / Income Ratio (%)	67.2	61.1	70.2	66.4	72.8	67.6 <sup>5</sup>
Market Funds / Tangible Banking Assets (%)	31.3	29.8	26.8	25.7	26.8	28.1 <sup>5</sup>
Liquid Banking Assets / Tangible Banking Assets (%)	24.7	27.1	22.4	16.2	17.0	21.5 <sup>5</sup>
Gross Loans / Due to Customers (%)	129.9	125.4	128.4	134.7	132.4	130.2 <sup>5</sup>

<sup>[1]</sup> All figures and ratios are adjusted using Moody's standard adjustments. [2] Basel III - fully loaded or transitional phase-in; IFRS. [3] May include rounding differences because of the scale of reported amounts. [4] Compound annual growth rate (%) based on the periods for the latest accounting regime. [5] Simple average of periods for the latest accounting regime. [6] Simple average of Basel III periods.

Sources: Moody's Investors Service and company filings

### **Profile**

OP Financial Group is Finland's second largest banking and insurance group by assets, and largest by market share in Finland. The products and services by the group include retail banking, corporate- and investment banking, asset management, and insurance products to private individuals and corporate and institutional customers.

As of 30 September 2022, OPFG held Finnish market shares of 34% in terms of loans and 39% in terms of deposits. The bank mainly operates in Finland through a nationwide service network of 307 branches. As of 30 September 2022, the group reported a consolidated asset base of €169.8 billion.

The group originated in 1902 as the Central Lending Fund of the Cooperative Credit Societies Limited Company. In 1970, cooperative societies became cooperative banks. As of the end of September 2022, the OPFG comprised 115 independent cooperative banks, their central management body (OP Cooperative, or "the Central Cooperative") and its subsidiaries. As of that date, the cooperative member banks reported 2.1 million owner-customers, of which approximately 90% are households. Each member is entitled to one vote.

OP Corporate Bank Plc (formerly, Pohjola Bank Plc) is part of the OPFG and in addition to conducting corporate lending and capital markets activities it acts as the central treasury within the group and issuer of unsecured debt.

### **Recent developments**

Consolidation through mergers of OP cooperative Banks around Finland continues. We view this as credit positive as the OPFG aims to increase its efficiency and become more competitive in growth areas.

In 2022 OPFG received updated MREL and subordination targets – MREL requirement is 26.1% of REA, subordination requirement was set to 22% of REA and leverage requirement is 9.9% of LRE in 2022. The REA based subordination requirement was set to increase to 23% as of 1 January 2023 and to 24% in 2024.

In June 2022 FIN-FSA launched a recommendation that a maximum sum of monthly amortizations of mortgages, housing company loans and other debt should not be more than 60% of the net income of a mortgager. Banks take this recommendation into account in their mortgage negotiations as of January 2023.

In September 2022, the FIN-FSA reiterated its decision not to impose a countercyclical capital buffer requirement on banks. In connection with its macroprudential policy decision of June 2022, the FIN-FSA performed an annual review of banks' capital buffer requirements and decided to raise OP Financial Group's O-SII buffer by 0.5 percentage points to 1.5%, effective as of 1 January 2023.

### **Detailed Credit Considerations**

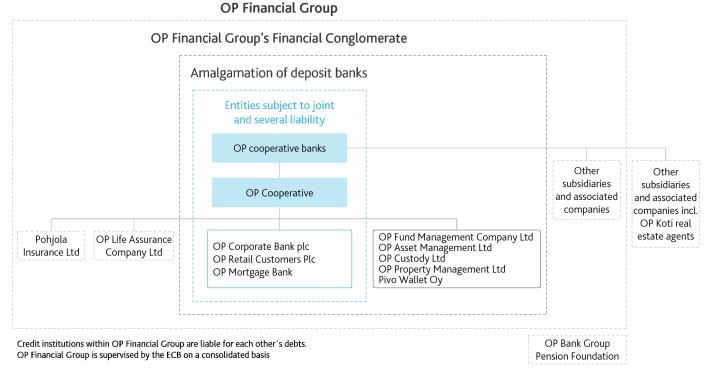
### OP Financial Group benefits from a joint liability amongst member credit institutions

Under Finland's Cooperative Bank Act, the OP Cooperative, OP Corporate Bank, Helsinki Area Cooperative Bank, OP Retail Customers Plc, OP Mortgage Bank and the member cooperative banks (combined, the bulk of OPFG's member credit institutions excluding insurance companies and other Group entities) are jointly responsible for each other's liabilities. Creditors can claim payment from the central cooperative if any member institution is unable to pay. Each member institution has an unlimited obligation to pay the debts of the central cooperative if the latter is unable to do so independently.

The central cooperative is under an obligation to supervise its member credit institutions, issue instructions to them on risk management, good corporate governance, and internal control to secure liquidity and capital adequacy, as well as instructions on compliance with standardised accounting policies in the preparation of the consolidated financial statements. Thus, we assess that it is very unlikely that a single entity within the joint liability would default on a payment before the group.

As OP Corporate Bank and other member credit institutions of OPFG are responsible for each other's liabilities OP Corporate Bank can issue debt at more advantageous interest rates, a credit positive.

Exhibit 3
Structure of OP Financial Group and the scope of the joint liability as of the end of September 2022
The group structure has changed since September 2021



<sup>\*</sup> OP Corporate Bank plc is the rated entity Sources: OP Financial Group, Moody's Investors Service

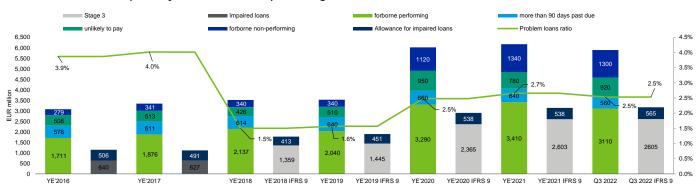
### Continued stable asset quality

We expect OPFG's asset risk to remain broadly stable over the next 12-18 months, as the Finnish economy benefits from comparatively strong social safety nets.

Uncertainty is still involved in the amount of expected credit losses arising from the effects of the increased geopolitical risks stemming from the war in Ukraine. OPGF has taken lower loan loss provisions, €70 million during the first nine months of 2022 compared to €95 million during the year earlier period. As of the end of September 2022 OPFG reported Stage 3 loans (on and off balance sheet) as 2.5% of gross loans, slightly down from 2.7% at year-end 2021. In 2020 both loans loss provisions and stage 3 loans were also affected somewhat negatively by the implementation of a new definition of default.

Since the implementation of IFRS 9 on 1 January 2018, the problem loan to gross loan ratio is based on Stage 3 exposures in order to increase peer comparability. We previously included the forborne performing loans in our asset risk ratio calculation, explaining the difference to the higher problem loan ratio in previous years (4.0% as of end of year 2017). The comparable figure at end of September 2022 was 5.7%.

The Group has a relatively low coverage with loan loss reserves over problem loans of 26.6% as of end of September 2022. However, the group has a large portfolio of housing loans (43% of loans) that we consider to be well covered by collateral.



Problem loan decrease is primarily due to decrease in performing forborne loans

Source: OPFG, Moody's Investors Service

The group is exposed to some concentration risks mainly owing to its large corporate lending book which also includes more volatile sectors. Exposure to the construction, renting and operating of residential or other real estate accounted for 23.3% of all corporate exposures as of September 2022. As a mitigating factor, we note the group's conservative borrower concentration limits which are well below regulatory requirements that no single customer exceeds 10% of the group's capital base after allowances and other credit risk mitigation.

The assigned asset risk score of a3 incorporates the above-mentioned constraints and sector concentration. An a3 score is equivalent to a problem loan ratio of below 4% under Finland's Macro Profile of Strong +.

### OP Financial Group has the strongest Tier 1 leverage ratio among Nordic peers

The bank's tangible common equity (TCE) to risk-weighted assets was 19.2% as of September 2022 and we expect OPFG to remain well capitalised going forward. The bank reported a solid CET1 of 17.7% at the end of September 2022 (the CET1 ratio captures the capitalisation of the amalgamation of credit institutions, excluding equity in the insurance companies). In addition, the group maintained a very strong reported Tier 1 leverage ratio of 7.8% as of end-September 2022, the highest among its Nordic peers.

As of the end of March 2022, the bank has decided to apply a risk-weighted assets floor based on the standardised approach, in the calculation of its capital adequacy ratios. The application of the floor decreased CET1 ratio by one percentage point. We expect the buffers to remain prudently high, a reflection of the co-operative nature of the group. OP Cooperative's Board of Directors has decided that the group's long-term CET1 ratio target should be at least the regulatory CET1 capital requirement including a 400 basis point management buffer, which was 15.8% as of the end September 2022.

Since March 2020 the Finnish Financial Supervisory Authority (FIN-FSA) has set a 0% systemic risk buffer on OP Financial Group. The O-SII buffer requirement was increased by 0.5 percentage points to 1.5%, as of 1 January 2023. In September 2022, the FIN-FSA

reiterated its decision not to impose a countercyclical capital buffer requirement on banks and performed an annual review of banks' capital buffer requirements. The current regulatory CET1 requirement is 11.8% and the total capital requirement is 13.8%, including a Pillar 2 requirement of 2.25% set by the European Central Bank (ECB).

The assigned capital score of aa2 reflects OPFG's strong capital position, especially considering its strong leverage ratio, as well as the expected trend.

# Improved profitability in 2022 as the effects of the pandemic eased, higher interest rates are expected to support profitability in 2023

OPFG has a track record of consistent profitability, 2021 and 2022 were strong years regarding improvements in profitability and cost efficiency, compared to 2020 where the expectation of a spike in pandemic-related credit losses drove a surge in loan loss provisions, straining profitability. In 2023 we expect OPFG's net interest income to be supported by the higher interest rates. Efforts to reduce costs and the repricing of loan portfolios will partly offset continued high investment needs.

The group's net income to tangible assets ratio improved to 0.60% for the first nine months of 2022, compared to 0.54% during the same period a year earlier. This was primarily driven by an improvement in net interest income due to swiftly rising interest rates. Net interest income increased by 15.5% to  $$\leq$1122$$  million compared to  $$\leq$971$$  million a year earlier, while net investment income decreased to  $$-\leq$73$$  million compared to  $$\leq$253$$  million a year earlier, driven mostly by uncertainty in financial market in 2022, which especially had a negative impact on insurance income. We expect this source of income to improve in 2023. Furthermore, lower loan loss provisions had a positive impact. Net commission and fee income, which is an important revenue driver, remained relatively stable.

We recognise that OPFG has well-diversified income streams, and has successfully increased the contribution of non-interest income from its insurance operations and asset management to the overall total income (see Exhibit 5).

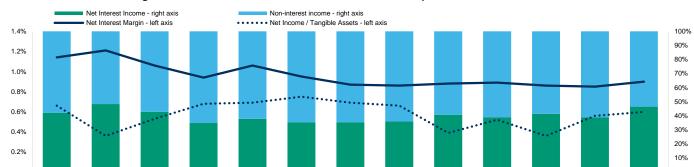


Exhibit 5
Non-interest income is a large contributor for the total income of OP Financial Group

Source: OPFG, Moody's Investors Service

2011

2012

2010

0.0%

Total expenses increased to €1436 million for the first nine months of 2022 compared to €1420 million in the same period previous year, because of a higher fee to the stability fund, while the ICT- and personnel costs remained stable. The bank's cost to income ratio increased to 67% for the first nine months of 2022, compared to 62% in the year-earlier period.

2016

2017

2018

2019

2020

2021

We expect the group's efficiency efforts, such as staff reductions at central functions and consolidating the number of branches, IT developments, higher NII and investment income to result in an improved OPFG's profitability and help it to stay sustainably above 0.5% of banking assets.

### High reliance on wholesale funding, although mitigated by liquidity buffer

2013

2014

2015

OP Corporate Bank currently has the role of central treasury for OPFG. Among other things, the bank is responsible for issuing senior unsecured debt and short-term debt as well as managing the group's liquidity buffer.

The group continues to be reliant on market funding, which exposes them to swings in investor sentiment. Market funding of the group amounted to approximately 31.1% of tangible banking assets at the end of September 2022. Covered bonds, which we deem a stable

0%

9M 2022

source of funding, issued via OP Mortgage Bank (a specialised group subsidiary), accounted for approximately 28% of all issued debt securities.

In February 2022 the EU's Single Resolution Board (SRB), OPFG's resolution authority, updated OPFG's Minimum Requirement for own funds and Eligible Liabilities (MREL) to 9.9% of total liabilities and own funds, equivalent to 26.1% of the total risk exposure amount.

According to current regulation, the subordination requirement supplementing the MREL accounted for 23% of the total risk exposure amount from the beginning of 2023 and for 9.9% of the leverage ratio exposure amount. From the beginning of 2024 the subordination requirement will account for 24% of the total risk exposure amount and for 9.9% of the leverage ratio exposure amount. The subordination requirement can be fulfilled with capital and senior non-preferred debt.

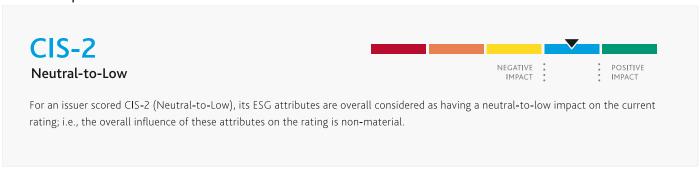
OPFG currently complies with both current and reduced requirements with high buffers.

OPFG's liquidity buffer at market value and after collateral haircuts amounted to €30.2 billion at end of September 2022, and was sufficient to cover the short-term funding needs and predictable payment flows in a liquidity stressed scenario. We calculate the liquid banking assets to tangible assets at 24.7% as of the end of September 2022. OPFG monitors its liquidity and the adequacy of its liquidity buffer using the LCR (Liquidity Coverage Ratio) and on 30 September 2022, OPFG's LCR stood at 210%.

### **ESG** considerations

OP Corporate Bank plc's ESG Credit Impact Score is Neutral-to-Low CIS-2





Source: Moody's Investors Service

OP's ESG Credit Impact Score is neutral-to-low (CIS-2). This reflects the limited credit impact of environmental and social risk factors on the rating to date, and the neutral-to-low governance risks. The bank's corporate governance framework is good, but there is some complexity in the group's structure that is mitigated by a low-risk appetite and a good track record.

Exhibit 7
ESG Issuer Profile Scores



Source: Moody's Investors Service

### **Environmental**

OP faces moderate environmental risks primarily because of its portfolio exposure to carbon transition risk as a diversified banking group. In line with its peers, the bank is facing mounting business risks and stakeholder pressure to meet broader carbon transition goals. In response, the bank is developing its climate risk and portfolio management capabilities.

#### Social

OP faces moderate social risks related to regulatory and litigation risks, requiring high compliance standards. The exposure to customer relation risks is lower than that of its peers, given the bank's untarnished customer conduct track record. Cyber and personal data risks are mitigated by a strong IT and cyber framework, supported by good cooperation with other domestic and Nordic organisations.

### Governance

OP has neutral-to-low governance risks. OP has a strong compliance and risk management function with generally conservative financial policies and a favorable track record. However, the group's cooperative structure is more complex than those of its peers, which creates opacity that makes oversight more difficult.

ESG Issuer Profile Scores and Credit Impact Scores for the rated entity/transaction are available on Moodys.com. In order to view the latest scores, please click <a href="https://example.com/here">here</a> to go to the landing page for the entity/transaction on MDC and view the ESG Scores section.

## **Notching Considerations**

### **Loss Given Failure**

Finland is subject to the EU Bank Recovery and Resolution Directive (BRRD), which we consider to be an Operational Resolution Regime. We assume residual tangible common equity of 3% and losses post-failure of 8% of tangible banking assets, a 25% run-off in "junior" wholesale deposits, a 5% run-off in preferred deposits, and assign a 25% probability to deposits being preferred to senior unsecured debt. In line with large European banks, we assume 26% of deposits are junior. These are in line with our standard assumptions.

Our advanced LGF analysis is based on the balance sheet of the entire OP Financial Group (excluding insurance assets), because all member credit institutions in OP Financial Group (excluding insurance companies and some other group companies) are liable for each other's obligations, in accordance with the Amalgamations Act.

Our LGF analysis, incorporating MREL requirements, results in a Preliminary Rating Assessment (PRA) of a1 for the deposits and senior unsecured debt, two notches above the Adjusted BCA, reflecting a very low loss-given failure. For the bank's junior senior debt our advanced LGF analysis result in a PRA of A3, in line with the adjusted BCA, reflecting a moderate loss-given failure.

For junior securities issued by OPFG, our LGF analysis confirms a high loss given failure, given the small volume of debt and limited protection from more subordinated instruments and residual equity. We also incorporate additional notching for junior subordinated instruments, reflecting the coupon suspension risk ahead of a potential failure.

### **Government Support**

Following the introduction of BRRD, we believe the probability of government support for OP Corporate Bank's long-term and deposits ratings to be moderate, translating into one notch of uplift from its unsupported rating level, reflecting OP Corporate Bank's profile as one of the leading financial institutions in Finland. This results in one notch of uplift for the deposit and senior unsecured debt ratings to Aa3.

For senior non-preferred, Tier 2 debt securities, and AT1 debt, we assume that potential government support is low and as such these ratings do not include any related uplift.

### Counterparty Risk (CR) Assessment

### OP Corporate Bank's CR Assessment is Aa2(cr)/P-1(cr).

The CR Assessment of OP Corporate Bank is Aa2(cr)/Prime-1(cr). Three of the notches above the adjusted BCA of a3 is based on the cushion against default provided to the senior obligations. In addition, the moderate probability of government support results in one notch uplift.

### Counterparty risk ratings (CRRs)

### OP Corporate Bank's CRRs are Aa2/P-1.

The counterparty risk rating of Aa2 reflects the adjusted BCA of a3, three notches of uplift reflecting the extremely low loss-given failure from the high volume of instruments that are subordinated to CRR liabilities and one notch of uplift due to moderate probability of government support. The short-term CRR is P-1.

### **About Moody's Bank Scorecard**

Our Scorecard is designed to capture, express and explain in summary form our rating committee's judgment. When read in conjunction with our research, a fulsome presentation of our judgment is expressed. As a result, the output of our Scorecard may materially differ from that suggested by raw data alone (though it has been calibrated to avoid the frequent need for strong divergence). The Scorecard output and the individual scores are discussed in rating committees and may be adjusted up or down to reflect conditions specific to each rated entity.

## Rating methodology and scorecard factors

Exhibit 8

**OP Financial Group** 

MACRO FACTORS WEIGHTED MACRO PROFILE S	TRONG +	100%					
WEIGHTED FIACKOT KOTIEE	TRONG I	10070					
FACTOR		HISTORIC RATIO	INITIAL SCORE	EXPECTED TREND	ASSIGNED SCORE	KEY DRIVER #1	KEY DRIVER #2
Solvency							
Asset Risk							
Problem Loans / Gross Loans		2.5%	a2	$\leftrightarrow$	a3	Sector concentration	
Capital							
Tangible Common Equity / Risk Weighted A	ssets	19.2%	aa2	$\leftrightarrow$	aa2	Risk-weighted	
(Basel III - transitional phase-in)						capitalisation	
Profitability						·	
Net Income / Tangible Assets		0.5%	baa2	$\leftrightarrow$	baa2	Expected trend	
Combined Solvency Score			a2		a2		
Liquidity							
Funding Structure							
Market Funds / Tangible Banking Assets		29.8%	baa2	$\leftrightarrow$	baa2	Extent of market	
-						funding reliance	
Liquid Resources							
Liquid Banking Assets / Tangible Banking As	sets	27.1%	a3	$\downarrow$	baa1	Expected trend	
Combined Liquidity Score			baa1		baa2		
Financial Profile					a3		
Qualitative Adjustments					Adjustment		
Business Diversification					0		
Opacity and Complexity					0		
Corporate Behavior					0		
Total Qualitative Adjustments					0		
Sovereign or Affiliate constraint					Aa1		
BCA Scorecard-indicated Outcome - Range	!				a2 - baa1		
Assigned BCA					a3		
Affiliate Support notching					0		
Adjusted BCA					a3		
BALANCE SHEET			IN-S	COPE	% IN-SCOPE	AT-FAILURE	% AT-FAILURE
				ILLION)	,	(EUR MILLION)	, ,,one
Other liabilities			45	856	31.4%	54 054	37.0%
Deposits			80	370	55.1%	72 172	49.5%
Preferred deposits			59	474	40.8%	56 500	38.7%
Junior deposits			20	896	14.3%	15 672	10.7%
Senior unsecured bank debt			9	627	6.6%	9 627	6.6%
Junior senior unsecured bank debt			4	316	3.0%	4 316	3.0%
Dated subordinated bank debt			1.	393	1.0%	1 393	1.0%
F 14				~~~		4.070	

4 378

145 940

3.0%

100.0%

4 378

145 940

Equity

Total Tangible Banking Assets

3.0%

100.0%

DEBT CLASS	DE JURE V	VATERFALL	L DE FACTO	WATERFALL	NOT	CHING	LGF	ASSIGNE	DADDITION	IAPRELIMINARY
	INSTRUMEN	IT SUB-	INSTRUMEN	T SUB-	DE JURE	DE FACTO	NOTCHING	G LGF	NOTCHIN	IG RATING
	VOLUME <b>⊀</b>	ORDINATIO	ONVOLUME 4	ORDINATION	1		GUIDANCI	NOTCHIN	IG	ASSESSMENT
	<b>SUBORDINATI</b>	ON S	UBORDINATI	ON			VS.			
							ADJUSTED	)		
							BCA			
Counterparty Risk Rating	24.2%	24.2%	24.2%	24.2%	3	3	3	3	0	aa3
Counterparty Risk Assessment	24.2%	24.2%	24.2%	24.2%	3	3	3	3	0	aa3 (cr)
Deposits	24.2%	6.9%	24.2%	13.5%	2	3	2	2	0	a1
Senior unsecured bank debt	24.2%	6.9%	13.5%	6.9%	2	1	2	2	0	a1
Junior senior unsecured bank debt	6.9%	4.0%	6.9%	4.0%	-1	-1	-1	0	0	a3
Dated subordinated bank debt	4.0%	3.0%	4.0%	3.0%	-1	-1	-1	-1	0	baa1
Non-cumulative bank preference share	s 3.0%	3.0%	3.0%	3.0%	-1	-1	-1	-1	-2	baa3

INSTRUMENT CLASS	LOSS GIVEN FAILURE NOTCHIN	ADDITIONAL NG NOTCHING R	PRELIMINARY ATING ASSESSMEN	GOVERNMENT IT SUPPORT NOTCHING	LOCAL CURRENCY RATING	FOREIGN CURRENCY RATING
Counterparty Risk Rating	3	0	aa3	1	Aa2	Aa2
Counterparty Risk Assessment	3	0	aa3 (cr)	1	Aa2(cr)	
Deposits	2	0	a1	1	Aa3	Aa3
Senior unsecured bank debt	2	0	a1	1	Aa3	Aa3
Junior senior unsecured bank debt	0	0	a3	0	A3	A3
Dated subordinated bank debt	-1	0	baa1	0	Baa1	Baa1
Non-cumulative bank preference shares	-1	-2	baa3	0	Baa3 (hyb)	Baa3 (hyb)

<sup>[1]</sup> Where dashes are shown for a particular factor (or sub-factor), the score is based on non-public information.

Source: Moody's Investors Service

## **Ratings**

Exhibit 9

Category	Moody's Rating
OP CORPORATE BANK PLC	
Outlook	Stable
Counterparty Risk Rating	Aa2/P-1
Bank Deposits	Aa3/P-1
Baseline Credit Assessment	a3
Adjusted Baseline Credit Assessment	a3
Counterparty Risk Assessment	Aa2(cr)/P-1(cr)
Issuer Rating	Aa3
Senior Unsecured	Aa3
Junior Senior Unsecured	A3
Junior Senior Unsecured MTN	(P)A3
Subordinate	Baa1
Pref. Stock Non-cumulative	Baa3 (hyb)
Commercial Paper	P-1
OP INSURANCE LTD	
Outlook	Stable
Insurance Financial Strength	A2
Source: Moody's Investors Service	

© 2023 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved. CREDIT RATINGS ISSUED BY MOODY'S CREDIT RATINGS AFFILIATES ARE THEIR CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MATERIALS, PRODUCTS, SERVICES AND INFORMATION PUBLISHED BY MOODY'S (COLLECTIVELY, "PUBLICATIONS") MAY INCLUDE SUCH CURRENT OPINIONS. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT OR IMPAIRMENT. SEE APPLICABLE MOODY'S RATING SYMBOLS AND DEFINITIONS PUBLICATION FOR INFORMATION ON THE TYPES OF CONTRACTUAL FINANCIAL OBLIGATIONS ADDRESSED BY MOODY'S CREDIT RATINGS. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS, NON-CREDIT ASSESSMENTS ("ASSESSMENTS"), AND OTHER OPINIONS INCLUDED IN MOODY'S PUBLICATIONS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S PUBLICATIONS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. AND/OR ITS AFFILIATES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS DO NOT COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS, ASSESSMENTS AND OTHER OPINIONS AND PUBLISHES ITS PUBLICATIONS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE,

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS, AND PUBLICATIONS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS OR PUBLICATIONS WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER.

ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT INTENDED FOR USE BY ANY PERSON AS A BENCHMARK AS THAT TERM IS DEFINED FOR REGULATORY PURPOSES AND MUST NOT BE USED IN ANY WAY THAT COULD RESULT IN THEM BEING CONSIDERED A BENCHMARK.

All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the credit rating process or in preparing its Publications.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded) on the part of, or any contingency within or beyond the control of, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information.

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY CREDIT

RATING, ASSESSMENT, OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any credit rating, agreed to pay to Moody's Investors Service, Inc. for credit ratings opinions and services rendered by it fees ranging from \$1,000 to approximately \$5,000,000. MCO and Moody's Investors Service also maintain policies and procedures to address the independence of Moody's Investors Service credit ratings and credit rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold credit ratings from Moody's Investors Service, Inc. and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at <a href="https://www.moodys.com">www.moodys.com</a> under the heading "Investor Relations — Corporate Governance

— Charter Documents - Director and Shareholder Affiliation Policy."

Additional terms for Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors.

Additional terms for Japan only: Moody's Japan K.K. ("MJKK") is a wholly-owned credit rating agency subsidiary of Moody's Group Japan G.K., which is wholly-owned by Moody's Overseas Holdings Inc., a wholly-owned subsidiary of MCO. Moody's SF Japan K.K. ("MSFJ") is a wholly-owned credit rating agency subsidiary of MJKK. MSFJ is not a Nationally Recognized Statistical Rating Organization ("NRSRO"). Therefore, credit ratings assigned by MSFJ are Non-NRSRO Credit Ratings. Non-NRSRO Credit Ratings are assigned by an entity that is not a NRSRO and, consequently, the rated obligation will not qualify for certain types of treatment under U.S. laws. MJKK and MSFJ are credit rating agencies registered with the Japan Financial Services Agency and their registration numbers are FSA Commissioner (Ratings) No. 2 and 3 respectively.

MJKK or MSFJ (as applicable) hereby disclose that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MJKK or MSFJ (as applicable) have, prior to assignment of any credit rating, agreed to pay to MJKK or MSFJ (as applicable) for credit ratings opinions and services rendered by it fees ranging from JPY100,000 to approximately JPY550,000,000.

MJKK and MSFJ also maintain policies and procedures to address Japanese regulatory requirements.

REPORT NUMBER

1348107

### **CLIENT SERVICES**

 Americas
 1-212-553-1653

 Asia Pacific
 852-3551-3077

 Japan
 81-3-5408-4100

 EMEA
 44-20-7772-5454

