



# Transfer Pricing Report

IdeaBank  
ING

14 May 2020

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## Executive summary

According to OECD Transfer Pricing Guidelines, intercompany transactions must be priced at arm's length. This report consists of a credit rating assessment of ING and a transfer pricing analysis of an intercompany term loan transaction between IdeaBank and ING. The analysis has been performed using the Intercompany Rating & Pricing (ICRP) model, as developed by Zanders.

The following steps have been performed:

- **Step 1:** Functional analysis of the facility under review
- **Step 2:** Credit rating analysis of ING
- **Step 3:** Transfer pricing analysis

The credit rating methodology of the ICRP model combines a quantitative foundation with a qualitative overlay. The model is based on the Basel III Internal Ratings-Based (IRB) approach, IFRS 9/IFRS 16 and FASB CECL guidelines. The credit rating analysis consists of a financial assessment, in which a scoring approach is applied to key financial ratios. Overriding factors and group support are subsequently taken into account. Finally, the credit rating is capped by the rating of parent company, if applicable. The credit rating analysis of ING has resulted in a credit rating of BBB3, which is considered relatively adequate.

For the purpose of the transfer pricing analysis, the comparable uncontrolled price (CUP) method was selected as the appropriate transfer pricing method. Corporate bonds from the secondary bond market are used as comparable uncontrolled transactions.

The arm's length price is determined as the sum of a benchmark rate and the applicable premia for credit risk, sovereign risk and liquidity risk. The credit risk premium is based on option-adjusted spreads of corporate bonds in the secondary bond market. The bond spreads are applied after adjusting for the aggregate risk profile of the facility. The aggregate risk profile is expressed as the probability of default (PD) of ING and the exposure at default (EAD), loss given default (LGD) and maturity (M) of the facility. The sovereign risk premium, if applicable, is derived from the CDS market.

Based on a benchmark rate of -0.40%, a credit risk premium of 1.09%, a sovereign risk premium of 0.08% and a liquidity risk premium of 0.00%, it has been determined that an interest rate of 0.77% can be considered as an indicative arm's length price for the facility under review in a range of 0.64% - 0.90%. Finally, a user override of 0.00% was chosen to account for considerations that are not (fully) reflected in the pricing analysis.

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### Borrower credit rating



**BBB3**  
*relatively adequate*  
PD: 0.44%



### Arm's length price

**0.77%**

Benchmark rate: -0.40%  
Credit risk premium: 1.09%  
Sovereign risk premium: 0.08%  
Liquidity risk premium: 0.00%  
User override: 0.00%



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# Glossary

BCBS	Basel Committee on Banking Supervision
BEPS	Base Erosion and Profit Shifting
Bps	Basis Points
CDS	Credit Default Swap
CECL	Current Expected Credit Loss
CP	Cost Plus
CUP	Comparable Uncontrolled Price
EAD	Exposure at Default
EBIT	Earnings Before Interest and Taxation
EBITDA	Earnings Before Interest, Taxation, Depreciation and Amortization
ECL	Expected Credit Loss
EL	Expected Loss
FASB	Financial Accounting Standards Board
FY	Fiscal Year
ICRP	Intercompany Rating & Pricing
IFRS	International Financial Reporting Standards
IBOR	Interbank Offered Rates
IQR	Interquartile Range
IRB	Internal Ratings-Based
IRS	Interest Rate Swap
K	Capital Requirement
LGD	Loss Given Default
M	Maturity
OAS	Option Adjusted Spread
OECD	Organisation for Economic Co-operation and Development
OLS	Ordinary Least Squares
PD	Probability of Default
PS	Profit Split
R	Correlation
RP	Resale Price
RW	Risk Weight
RWA	Risk-Weighted Assets
S&P	Standard & Poor's
TNMM	Transactional Net Margin Method
UL	Unexpected Loss
YTM	Yield to Maturity

# Introduction

This report contains the results of the credit rating analysis of ING and the transfer pricing analysis for an intercompany transaction between IdeaBank and ING. The purpose of the analysis is to derive an arm's length price for the intercompany transaction.

The analysis in this report has been conducted in accordance with the Transfer Pricing Guidelines of the Organization for Economic Co-operation and Development (OECD), which are recognized by tax authorities worldwide as the leading guidelines on transfer pricing.<sup>1</sup> The OECD Transfer Pricing Guidelines adopt the arm's length principle as the standard for the evaluation of intercompany pricing. The arm's length principle is the international standard that OECD member countries have agreed should be used for tax purposes by multinational enterprises and tax administrations. The authoritative statement of the arm's length principle can be found in paragraph 1 of Article 9 of the OECD Model Tax Convention<sup>2</sup>, which states:

*"(Where) conditions are made or imposed between the two enterprises in their commercial or financial relations which differ from those which would be made between independent enterprises, then any profit which would, but for those conditions, have accrued to one of the enterprises, but, by reason of those conditions, have not so accrued, may be included in the profits of that enterprise and taxed accordingly."*

[OECD Model Tax Convention on Income and on Capital \(Art. 9\)](#)

According to the OECD Model Tax Convention, a transaction complies with the arm's length principle when the conditions imposed are comparable with the conditions of the commercial and financial relations that they would expect to find between independent enterprises in comparable transactions under comparable circumstances. In this report, an arm's length price is determined for the facility under review by applying the comparable uncontrolled price (CUP) method, using data from the secondary bond market and adjusting for the risk profile of the facility.

The analyses in this report are based on the Intercompany Rating & Pricing (ICRP) model. The ICRP model is a proprietary transfer pricing model that has been developed by Zanders B.V. Any financial information and other input that has been provided by the user of the model to derive the arm's length price is included in this report. Furthermore, the model methodology and underlying assumptions are included in the Appendix.

First, the facility characteristics are presented and a functional analysis of the transaction is performed. Next, the financial information of ING is presented and analyzed, and the credit rating of ING is determined using the ICRP model. After that, the five OECD recognized transfer pricing methods are introduced. The most appropriate transfer pricing method is subsequently selected, based on the nature of the transaction and available comparable transactions. In the final step of the transfer pricing analysis, the arm's length price for the facility is derived by applying the selected transfer pricing method to the facility under review, combined with a thorough analysis of sovereign and liquidity risk.

The Appendix includes a description of the ICRP model, the Zanders Rating Scale and definitions of financial ratios used in the ICRP model.

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<sup>1</sup> *Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations*, OECD (2017).

<sup>2</sup> *Model Tax Convention on Income and on Capital*, OECD (2017).

## Facility characteristics

The intercompany transaction under review in this report is a Term loan for a notional amount of EUR 5,000. The facility is provided by IdeaBank to ING. The table below summarizes the facility characteristics:

Facility characteristics	
	Value
Internal facility ID	
Currency	EUR
Amount	5,000
Type of credit facility	Term loan
Repayment schedule	Bullet
Structure	Subordinated (LGD 75%)
Fixed / floating	Floating
Reference rate	3M
Tenor (weeks)	29
Start date	12-09-2017
End date	31-03-2018

The table below provides the company information for IdeaBank and ING, respectively:

Company information		
	Lender	Borrower
Company (legal) name	IdeaBank	ING
Company ID	123321	987987
Legal form	sp. z.o.o	Inc
Headcount (FTE)	Headcount	Headcount
Industry	IT	Cars
Country of residence	New Zealand	Canada
State	podkarpackie	California
City	Rzeszow	Roswell
Street	Rejtana	Washington Street
House number & suffix	123a	6434
Website	http://test.local	http://test.local
Rating parent company	n.a.	BBB2

# Functional analysis

In the context of a transfer pricing analysis, the OECD Transfer Pricing Guidelines require that a functional analysis is performed. The functional analysis consists of an analysis of functions performed and risks assumed by the parties in the transaction. The OECD Transfer Pricing Guidelines describe the purpose of the functional analysis as follows:

*“In transactions between two independent enterprises, compensation usually will reflect the functions that each enterprise performs (taking into account assets used and risks assumed). Therefore, in delineating the controlled transaction and determining comparability between controlled and uncontrolled transactions or entities, a functional analysis is necessary. This functional analysis seeks to identify the economically significant activities and responsibilities undertaken, assets used or contributed, and risks assumed by the parties to the transactions.”*

OECD Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations (Art. 1.51)

This section includes a general analysis of the functions performed and risks assumed by IdeaBank and ING in the facility under review. The functional analysis provides the basis for the selection of an appropriate transfer pricing method, which is discussed further on in this report.

## Functions performed

The facility under review concerns an intercompany transaction between IdeaBank and ING. The functions performed in connection with the granting of loans or advances to related enterprises are, in substance, comparable to the functions performed by independent financial institutions. The functions assumed by independent financial institutions therefore provide a reasonable reference to the functions performed by IdeaBank and ING in the facility under review.

The functions that are typically undertaken by entities carrying out intercompany financing activities broadly consist of the origination and management of the transaction. The origination phase includes the following functions:

- **Marketing of the transaction:** identifying clients and proposing a product (e.g. term loan, lease, etc.);
- **Negotiation:** setting the contractual terms, and assessing the credit risks linked to granting the financing;
- **Decision on the financing:** identifying the financing structure related to the proposal and deciding on the financing; and
- **Evaluation of compliance:** evaluating the likely compliance with contractual commitments, prior to the conclusion of the financial transaction (e.g. by evaluating guarantees or analyzing solvency).

The management phase occurs after the execution of the transaction, and includes the following functions:

- **Administration of the transaction:** executing and administering the financial transaction;
- **Risk monitoring:** reviewing the transactions risks and guarantees; and
- **Management of refinancing:** managing the possible refinancing of the transaction.

In the next section, the risks related to the above functions are discussed.

## Risks assumed

The OECD Transfer Pricing Guidelines require that the material risks assumed by each party are identified and considered, since the assumption of risks would influence the prices and other conditions of the transaction. The OECD Transfer Pricing Guidelines define risk as follows:

*“In a transfer pricing context it is appropriate to consider risk as the effect of uncertainty on the objectives of the business. In all of a company’s operations, every step taken to exploit opportunities, every time a company spends money or generates income, uncertainty exists, and risk is assumed.”*

OECD Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations (Art. 1.71)

In Article 1.72 of the OECD Transfer Pricing Guidelines, the following non-exhaustive list of risk categories is provided:

- **Strategic or marketplace risks:** these are largely external risks caused by the economic environment, political and regulatory events, competition, technological advance, or social and environmental changes;
- **Infrastructure or operational risks:** these are likely to include uncertainties associated with the company’s business execution and may include the effectiveness of processes and operations;
- **Financial risks:** these are specific risks related to the company’s ability to manage liquidity and cash flow, financial capacity, and creditworthiness. The uncertainty can be externally driven, for example by economic shock or credit crisis. It can also be internally driven through controls, investment decisions, credit terms, and through outcomes of infrastructure or operational risks;
- **Transactional risks:** these are likely to include pricing and payment terms in a commercial transaction for the supply of goods, property, or services;
- **Hazard risks:** these are likely to include adverse external events that may cause damages or losses, including accidents and natural disasters. Such risks can often be mitigated through insurance, but insurance may not cover all the potential loss, particularly where there are significant impacts on operations or reputation.

Given the nature of the facility under review and the functions performed by the parties in the transaction, the primary risk related to the facility is financial risk and more specifically credit risk. IdeaBank assumes *credit risk* with respect to ING. Credit risk refers to the risk that a counterparty to a transaction may default on its obligations prior to the final settlement of the transaction’s cash flows. In the following section of this report, the creditworthiness of ING is further examined. Apart from credit risk, the lender is also exposed to liquidity risk and sovereign risk when granting the loan to ING. The size and impact of those will be assessed further on in this report.



# Financial information

In order to determine the credit risk assumed by IdeaBank in the facility under review, the creditworthiness of ING is assessed. The credit rating analysis is based on a review of the financial information of ING. This section presents the financial information of ING of the last three years.

## Balance sheet

The table below presents the balance sheet of ING of the last three years.

In EUR thousands	2020	2019	2018
<b>Assets</b>			
Fixed assets	1,492,704	1,225,415	1,391,296
Intangible assets	0	0	0
Tangible assets	703,047	828,803	1,129,757
Other assets	789,657	396,612	261,539
Current assets	33,514,929	32,177,893	32,177,777
Inventory	2,988,347	1,710,341	2,100,977
Accounts receivable – external	61,257	112,874	0
Accounts receivable – internal	30,299,938	30,179,643	29,901,610
Other current assets	52,016	57,075	45,496
Cash & cash equivalents	113,371	117,960	129,694
<b>Total assets</b>	<b>35,007,633</b>	<b>33,403,308</b>	<b>33,569,073</b>
<b>Liabilities</b>			
Shareholders' funds	27,351,921	29,271,290	30,420,745
Capital	31,788,795	31,788,795	353,078
Other shareholders' funds	-4,436,874	-2,517,505	30,067,667
Non-current liabilities	6,217,232	3,048,891	1,924,316
Long-term debt	0	0	0
Other non-current liabilities	6,217,232	3,048,891	1,924,316
Provisions	0	0	0
Current liabilities	1,438,480	1,083,127	1,224,012
Short-term debt	0	0	0
Accounts payable – external	419,446	284,326	260,104
Account payable – internal	94,347	129,906	359,589
Other current liabilities	924,687	668,895	604,319
<b>Total liabilities</b>	<b>35,007,633</b>	<b>33,403,308</b>	<b>33,569,073</b>

## Profit and loss account

The table below presents the profit and loss account of ING of the last three years.

In EUR thousands	2020	2019	2018
Operating revenue (turnover)	7,213,062	6,392,615	8,633,783
Costs of goods sold	6,259,356	6,303,459	7,426,510
<b>Gross profit</b>	<b>953,706</b>	<b>89,156</b>	<b>1,207,273</b>
Operating expenses	171,902	421,488	223,479
<b>EBITDA</b>	<b>781,804</b>	<b>-332,332</b>	<b>983,794</b>
Depreciation & amortization	295,770	325,324	387,633
<b>EBIT</b>	<b>486,034</b>	<b>-657,656</b>	<b>596,161</b>
Financial revenues	0	5,030	28,960
Financial expenses	31,550	0	35,524
<i>of which: interest paid</i>	0	0	0
<b>Result before tax</b>	<b>454,484</b>	<b>-652,626</b>	<b>589,597</b>
Taxation	68,735	-68,555	122,090
<b>Result after tax</b>	<b>385,749</b>	<b>-584,071</b>	<b>467,507</b>
Extraordinary and other revenue	0	0	0
Extraordinary and other expenses	0	0	0
<b>Net income</b>	<b>385,749</b>	<b>-584,071</b>	<b>467,507</b>
Dividends	0	0	0

# Credit rating assessment

This section contains the results of the credit rating assessment of ING, based on the ICRP model. The ICRP model has been developed in accordance with the internal ratings-based approach (IRB) of Basel III,<sup>3</sup> as well as the IFRS 9 requirements on expected credit loss (ECL)<sup>4</sup> and FASB requirements on current expected credit loss (CECL).<sup>5</sup> An overview of the rating methodology is provided in the Appendix.

To determine the credit rating of ING, the following factors are taken into account:

- **Financial assessment:** an initial credit rating is determined by analyzing the financial position of ING. The financial assessment is based on a combination of quantitative and qualitative variables;
- **Overriding factors:** the results of the financial assessment can be adjusted upwards or downwards due to overriding factors that are not (fully) reflected by the financial information, if applicable. Overriding factors may include country, industry and/or business risk;
- **Group support assessment:** the stand-alone credit rating can be adjusted upward in case of group support. The adjustment is based on the strength of the group support, as determined by the group support assessment. Both implicit as well as explicit support is taken into account;
- **Credit rating cap(s):** the final credit rating is capped by the rating of the parent company, parent name.

In the following sections, the results of each of the above steps are described.

## Financial assessment

The financial assessment of ING is based on a combination of quantitative and qualitative variables. ING is assessed in terms of operations and liquidity, debt service, capital structure, size and business.

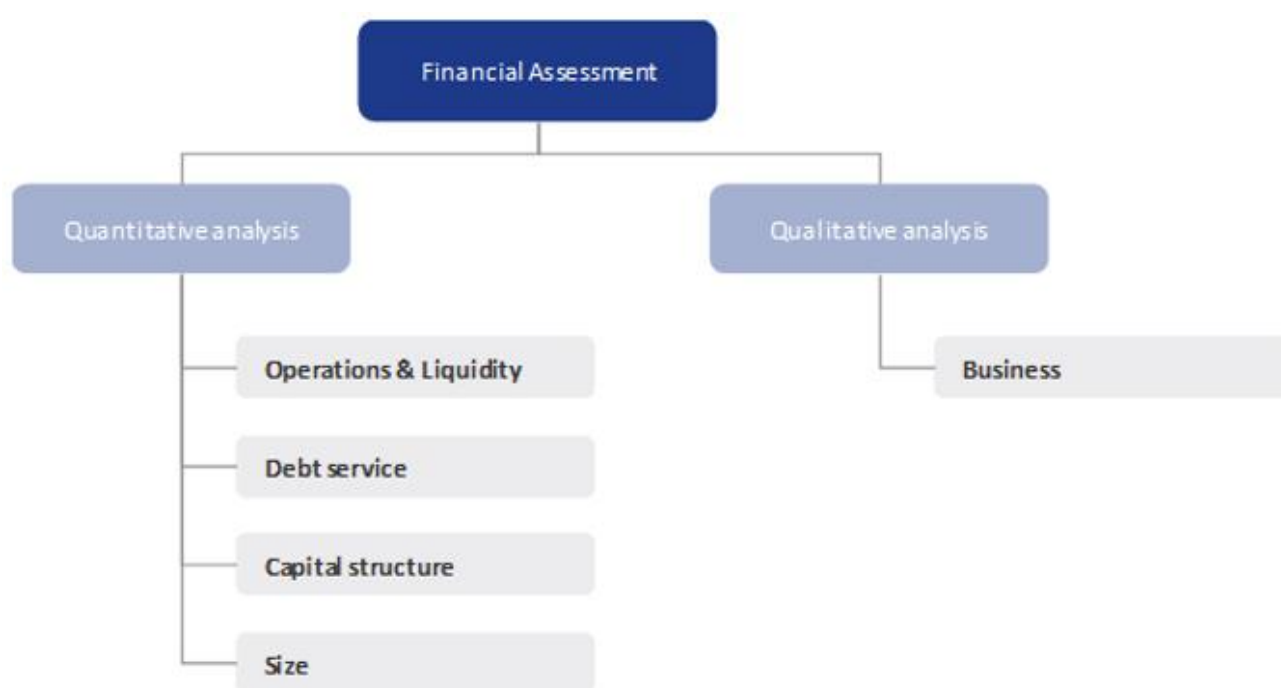
The figure below illustrates the key components of the financial assessment:

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<sup>3</sup> *Basel III: Finalising post-crisis reforms*, BCBS (2017).

<sup>4</sup> *IFRS 9 – Financial instruments*, IFRS (2014).

<sup>5</sup> *Financial Instruments – Credit Losses*, FASB (2016).



## Quantitative analysis

The quantitative part of the assessment consists of an analysis of key financial ratios, based on the financial statements of ING. Each variable is scored based on the relative strength of the ratio compared to peer group values and the historical trend of the ratio. Scores range between zero and 100, with 100 representing the strongest score.

The table below shows the financial variables that are used in the financial assessment and their corresponding scores. Definitions of the variables are presented in the Appendix.

Quantitative variables		
	Value	Score
Turnover growth	12.83%	82
Operating margin	6.74%	57
Return on capital	1.45%	16
Debt-to-EBITDA	7.95%	0
Interest coverage ratio	-	91
Gearing	22.73%	82
Solvency	78.13%	85
Current ratio	23.30%	80
Size (turnover)	EUR 7,213,062 mln	89

## Qualitative analysis

The qualitative part of the assessment focuses on the following two aspects:

- **Portfolio diversification:** a lack of customer portfolio diversification increases the credit risk of a counterparty and will result in a lower credit rating;
- **Reporting quality:** the decision-making process of a company relies on the availability of timely and accurate financial reports. Inaccurate or slow financial reporting reflects poorly on a company's business and will result in a lower credit rating.

The table below shows the assessment of the qualitative variables and the corresponding scores:

Qualitative variables		
	Assessment	Score
Portfolio diversification	Not applicable	-
Reporting quality	Not applicable	-

### Overall score

The financial assessment results in a final score of 70 for ING. The final score is determined as a weighted average of scores of the underlying variables. The final score of 70 results in an initial borrower rating of BBB3.

The table below presents the weighted average scores for each sub-component of the financial assessment, the final score and the initial borrower rating:

Financial assessment	
	Score
Operations & liquidity	51
Debt service	46
Capital structure	84
Size	89
Business	-
<b>Final score</b>	<b>70</b>
<b>Initial borrower rating</b>	<b>BBB3</b>



## Overriding factors

The results of the financial assessment may be adjusted upwards or downwards due to overriding factors that are not (full) reflected by the financial information. The following overriding factors are considered:

- **Country risk:** in case the country of residence of a counterparty is associated with significant risk, a rating downgrade may be applied. The ICRP model determines whether a country risk override is applicable based on the country's corresponding OECD country risk classification;
- **Industry risk:** a negative override may be applied in case risk factors have been identified that may negatively impact the industry's overall performance;
- **Business risk:** some financial outlooks may not be (fully) reflected in the latest financial statements. These should be taken into account by adjusting the rating upward or downward. Relevant business factors may include (among others): investment or acquisition plans, expected dividend or solvency targets, or short-term incidental financial results that are not indicative of the company's long-term outlook.

The table below contains the chosen values for each override and the resulting stand-alone credit rating of the borrower:

Overriding factors	
	Score
Country risk	0
Industry risk	0
Business risk	0
<b>Stand-alone borrower rating</b>	<b>BBB3</b>

## Group support assessment

In case a borrower is supported by a group entity, the stand-alone credit rating of the subsidiary should be adjusted upward to reflect the group support. The adjustment is based on the strength of the group support as determined by the group support assessment. Both implicit as well as explicit support is taken into account in the group support assessment. The credit rating of the parent company, parent name, is BBB2.

The table below contains the list of statements that have been answered to assess the presence of group support. Based on the group support assessment, the ICRP model indicates that there is Low group support, which results in a rating upgrade of 0 notches of the stand-alone borrower rating.

Group support assessment	
	Assessment
<b>Legally binding support</b>	
The supporting entity has provided an unconditional and irrevocable guarantee, covering all obligations of the subsidiary	No
The supporting entity has provided a net worth declaration, in which the supporting entity guarantees to maintain a minimum net worth in the subsidiary	No
<b>Non-binding written support</b>	
The supporting entity has provided a letter of comfort, covering all obligations of the subsidiary	No
<b>Implicit support</b>	
The supporting entity is a well reputed entity with a solid investment grade rating	No
The name of the supporting entity is in the name of the subsidiary	No
The subsidiary is owned for more than 90% by the supporting entity	No
The subsidiary holds assets of importance to the core business of the group	No
The subsidiary contributes a significant amount of turnover to the group	No
The supporting entity has already provided support to the subsidiary in the past	No
The subsidiary is in the same line of business as the supporting entity (which is of importance to the core business of the group)	No
<b>Ring-fencing</b>	
A portion of the assets or profits of the subsidiary are financially separated from the parent or other group entities	No
<b>Group support assessment</b>	<b>Low</b>
<b>Group support override</b>	<b>0</b>
<b>Borrower rating including group support</b>	<b>BBB3</b>

## Credit rating caps

The subsidiary credit rating is capped by the credit rating of the parent company, since the subsidiary may be negatively impacted by any credit events related to the parent company. Note that in case of ring-fencing of assets, the parent cap is not applied.

The table below shows the parent cap that is applied to the stand-alone subsidiary rating, and the final rating of the subsidiary. The parent cap of BBB2 results in a final credit rating of BBB3 for ING

Credit rating caps	
	Value
Parent rating	BBB2
Ring-fencing	No
<b>Final rating (incl. group support)</b>	<b>BBB3</b>

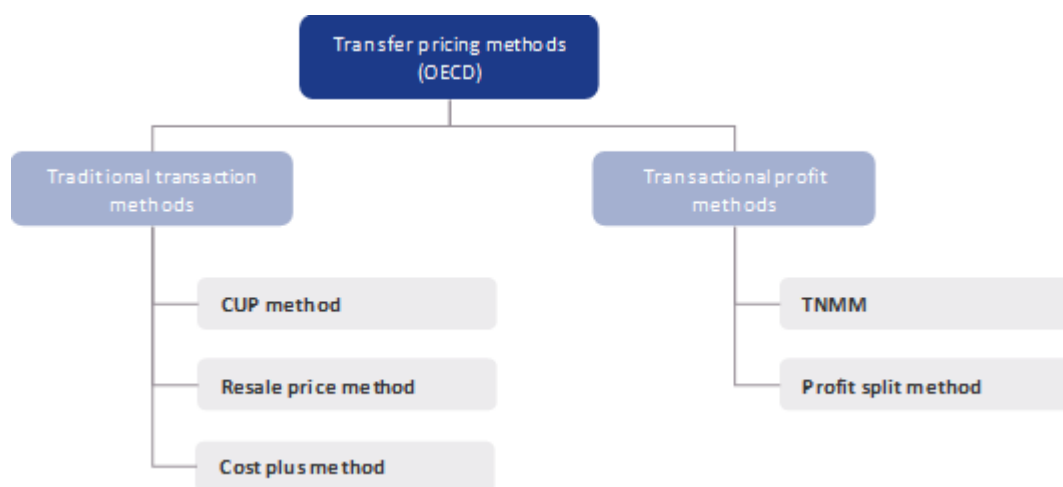
## Summary

The credit rating assessment has resulted in a final rating of BBB3 for ING. The credit rating corresponds to a probability of default (PD) of 0.44%. The table below summarizes the main results of the assessment. In the next section, the credit risk profile of ING. is used to determine an arm's length price for the facility under review.

Credit rating assessment	
	Value
Final score	70
<b>Initial borrower rating</b>	<b>BBB3</b>
Country risk	0
Industry risk	0
Business risk	0
<b>Stand-alone borrower rating</b>	<b>BBB3</b>
Group support assessment	Low
Group support override	0
Parent cap	BBB2
<b>Final rating</b>	<b>BBB3</b>
Definition	relatively adequate
Probability of default	0.44%

# Transfer pricing methods

Chapter II of the OECD Transfer Pricing Guidelines describes five transfer pricing methods that can be used to establish whether the conditions of controlled transactions are consistent with the arm's length principle. These five methods are categorized as either *traditional transaction methods* or *transactional profit methods*. The traditional transaction methods include the *comparable uncontrolled price* (CUP) method, the *resale price* (RP) method and the *cost plus* (CP) method. The transactional profit methods include the *transactional net margin method* (TNMM) and the *transactional profit split* (PS) method. The five methods are illustrated in the figure below.



## Comparable uncontrolled price method

The CUP method compares the price charged for property or services transferred in a controlled transaction to the price charged for property or services transferred in a comparable uncontrolled transaction in comparable circumstances. If there is any difference between the two prices, this may indicate that the conditions of the commercial and financial relations of the associated enterprises are not arm's length, and that the price in the uncontrolled transaction may need to be substituted for the price in the controlled transaction.

According to Article 2.15 of the OECD Transfer Pricing Guidelines, an uncontrolled transaction can be considered a *comparable uncontrolled transaction* for purposes of the CUP method if one of two conditions is met: (a) none of the differences (if any) between the transactions being compared or between the enterprises undertaking those transactions could materially affect the price in the open market; or (b) reasonably accurate adjustments can be made to eliminate the material effects of such differences. Article 2.16 further elaborates on the second condition:

*"It may be difficult to find a transaction between independent enterprises that is similar enough to a controlled transaction such that no differences have a material effect on price. For example, a minor difference in the property transferred in the controlled and uncontrolled transactions could materially affect the price even though the nature of the business activities undertaken may be sufficiently similar to generate the same overall profit margin. When this is the case, some adjustments will be appropriate."*

OECD Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations (Art. 2.16)

Thus, when uncontrolled transactions can be found that are similar but not identical, the CUP method can be applied on the condition that appropriate adjustments can be made to eliminate the material effect of differences between the transactions.

Article 2.15 of the OECD Transfer Pricing Guidelines states that the CUP method is the most direct and reliable way to apply the arm's length principle. Consequently, where it is possible to locate comparable uncontrolled transactions, the CUP method is preferable over all other methods.

### Resale price method

The RP method compares the resale price margins (i.e. the gross margins or commissions) earned on controlled transactions with those earned on uncontrolled transactions. The RP method is described in the OECD Transfer Pricing Guidelines as follows:

*"The resale price method begins with the price at which a product that has been purchased from an associated enterprise is resold to an independent enterprise. This price (the resale price) is then reduced by an appropriate gross margin on this price (the resale price margin), representing the amount out of which the reseller would seek to cover its selling and other operating expenses and, in light of the functions performed (taking into account assets used and risks assumed), make an appropriate profit. What is left after subtracting the gross margin can be regarded, after adjustment for other costs associated with the purchase of the product (e.g. customs duties), as an arm's length price for the original transfer of property between the associated enterprises."*

OECD Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations (Art. 2.27)

For the purpose of the RP method, the comparable uncontrolled transaction may be an internal or external comparable:

*"The resale price margin of the reseller in the controlled transaction may be determined by reference to the resale price margin that the same reseller earns on items purchased and sold in comparable uncontrolled transactions ("internal comparable"). Also, the resale price margin earned by an independent enterprise in comparable uncontrolled transactions may serve as a guide."*

OECD Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations (Art. 2.28)

Article 2.27 of the OECD Transfer Pricing Guidelines notes that the RP method is most useful where it is applied to sales and marketing operations, such as those typically carried out by a distributor.

### Cost plus method

The CP method begins with the costs incurred by the supplier of property or services in a controlled transaction for property transferred or services provided to an associated enterprise. An appropriate cost plus mark-up is then added to this cost, to make an appropriate profit in light of the functions performed and the market conditions. What is arrived at after adding the cost plus mark up to the above costs may be regarded as an arm's length price of the original controlled transaction. There may be some challenges involved when applying the CP method in practice, as noted in the OECD Transfer Pricing Guidelines:



*“The cost plus method presents some difficulties in proper application, particularly in the determination of costs. Although it is true that an enterprise must cover its costs over a period of time to remain in business, those costs may not be the determinant of the appropriate profit in a specific case for any one year. While in many cases companies are driven by competition to scale down prices by reference to the cost of creating the relevant goods or providing the relevant service, there are other circumstances where there is no discernible link between the level of costs incurred and a market price (e.g. where a valuable discovery has been made and the owner has incurred only small research costs in making it).”*

OECD Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations (Art. 2.49)

Article 2.45 of the OECD Transfer Pricing Guidelines notes that the CP method is most useful where semi-finished goods are sold between associated parties, where associated parties have concluded joint facility agreements or long-term buy-and-supply arrangements, or where the controlled transaction is the provision of services.

### Transactional net margin method

The TNMM examines the net profit relative to an appropriate base (e.g. costs, sales, assets) that a taxpayer realizes from a controlled transaction. The net profit indicator of the taxpayer from the controlled transaction should ideally be established by reference to internal comparable transactions. Where this is not possible, the net margin that would have been earned in an external comparable transaction may serve as a guide.

In cases where the net profit is weighed to costs or sales, the TNMM operates in a manner similar to the CP and RP methods respectively, except that it compares the net profit arising from controlled and uncontrolled transactions (after relevant operating expenses have been deducted) instead of comparing a gross profit on resale or gross mark up on costs. Most often, the net profit indicator that is tested in a TNMM is the operating profit (EBIT). In general, it is observed that in applying a TNMM, the net profit is weighted to costs for manufacturing and service activities; to sales for sales activities; and to assets for asset-intensive activities.

With respect to the applicability of the TNMM, Article 2.65 of the OECD Transfer Pricing Guidelines states the following:

*“A transactional net margin method is unlikely to be reliable if each party to a transaction makes unique and valuable contributions. In such a case, a transactional profit split method will generally be the most appropriate method. However, a one-sided method (traditional transaction method or transactional net margin method) may be applicable in cases where one of the parties makes all the unique and valuable contributions involved in the controlled transaction, while the other party does not make any unique and valuable contribution.”*

OECD Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations (Art. 2.65)

There are also many cases where a party to a transaction makes contributions that are not unique – e.g. uses non-unique intangibles such as non-unique business processes or market knowledge. In such cases, it may be possible to meet the comparability requirements to apply TNMM because the comparables would also be expected to use a comparable mix of non-unique contributions.

## Transactional profit split method

The PS method seeks to eliminate the effect on profits of special conditions made or imposed in a controlled transaction by determining the division of profit that independent enterprises would have expected to realize from engaging in the transaction or transactions. The transactional profit split method first identifies the combined profits to be split for the associated enterprises from the controlled transactions in which the associated enterprises are engaged. In some cases, the combined profits will be the total profits from the controlled transactions in question. In other cases, the combined profits will be a residual profit intended to represent the profit that cannot readily be assigned to one of the parties from the application of another transfer pricing method, such as the profit arising from valuable, unique intangibles. Note that the combined profits may be a loss in some circumstances.

The PS method then splits the combined profits between the associated enterprises on an economically valid basis that approximates the division of profits that would have been anticipated and reflected in an agreement made at arm's length. Where possible, this economically valid basis may be supported by independent market data (e.g. division of profits observed in uncontrolled joint venture agreements). Most often, however, it will be supported by internal data. The types of such internal data that may be relevant will depend on the facts and circumstances of the case and may include, for example, allocation keys relating to the respective sales, research and development expenses, operating expenses, assets or headcounts of the associated enterprises.

The splitting factor should reflect the respective contributions of the parties to the creation of income from the controlled transaction and be reasonably independent from transfer pricing formulation. This means that it should, to the greatest extent possible, be based on objective data (such as sales to unrelated parties), rather than on data relating to the remuneration of controlled transactions (such as sales to associated enterprises).

# Selection of transfer pricing method

Chapter II of the OECD Transfer Pricing Guidelines describes the process and requirements for selecting the most appropriate transfer pricing method. Regarding the selection of an appropriate transfer pricing method, Article 2.2 of the OECD Transfer Pricing Guidelines states the following:

*“The selection of a transfer pricing method always aims at finding the most appropriate method for a particular case. (...) No one method is suitable in every possible situation, nor is it necessary to prove that a particular method is not suitable under the circumstances.”*

OECD Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations (Art. 2.2)

When selecting a transfer pricing method under OECD guidelines, several factors must be considered:

- The respective **strengths and weaknesses** of the OECD recognized methods;
- The **nature of the controlled transaction**, determined in particular through a functional analysis;
- The **availability of reliable information** (in particular on uncontrolled comparables) needed to apply the selected method and/or other methods; and
- The **degree of comparability** between controlled and uncontrolled transactions, including the reliability of comparability adjustments that may be needed to eliminate material differences between them.

After an analysis of the above factors, the CUP method has been selected as the most appropriate transfer pricing method for the facility under review. Furthermore, it is concluded that corporate bond data is the most reliable source of information to determine the arm's length price of the transaction. To be able to compare the facility under review with the corporate bond data, the risk profiles of the facility under review and the corporate bonds are determined in a consistent and comparable manner. In the following sections, the motivations for selecting the CUP method using corporate bond data are further discussed.

## Strengths and weaknesses of the method

The CUP method is the most direct and reliable way to apply the arm's length principle. Moreover, Article 2.15 of the OECD Transfer Pricing Guidelines recognizes the CUP method as being preferable over all other methods, provided that it is possible to locate comparable uncontrolled transactions:

*“Where it is possible to locate comparable uncontrolled transactions, the CUP method is the most direct and reliable way to apply the arm's length principle. Consequently, in such cases the CUP method is preferable over all other methods.”*

OECD Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations (Art. 2.2)

A potential weakness of the CUP method is that it may be difficult to identify comparable uncontrolled transactions for the purpose of the CUP method. However, as discussed further on in this section, it is determined that comparable uncontrolled transactions can be found by considering corporate bond data. Such data is readily available for various geographic markets. In contrast, there is limited availability of (public) information about loan pricing by banks and other lenders.

## Nature of the controlled transaction

As determined in the functional analysis, the functions assumed by related parties when engaging in intercompany financing transactions are comparable to those assumed by independent financial institutions. Hence, for the determination of the arm's length price it is appropriate to follow the pricing methodology as applied by these institutions for comparable credits. Typically, banks perform an individual risk analysis of the borrower and take into account related costs in the pricing of the transaction. Related costs include the base costs of financing and a premium for additional costs, such as costs incurred due to solvency requirements, credit risk, sovereign risk or liquidity risk.

Following bank practices, it is therefore appropriate to determine the arm's length price for intercompany transactions as the sum of the base costs of financing (i.e. base or benchmark rate) and a spread or risk premium for additional costs. For the base costs of financing, Interbank Offered Rates (IBORs, for tenors up to one year) and interest rate swap (IRS, for tenors of more than one year) rates can be used. However, the question is what comparable transactions can be used to derive an arm's length risk premium. Bank pricing information is not publicly available, and therefore cannot be relied upon as a source for comparable transactions. Furthermore, bank prices often include various bank-specific components, which further limits the reliability of such information from a transfer pricing perspective. To determine an arm's length risk premium, other sources of information must therefore be considered.

In the next section, the use of corporate bond data is proposed as an alternative to bank loan pricing references for the purpose of transfer pricing.

## Availability of reliable information

There are two sources of corporate bond data: primary market data and secondary market data. Primary market data consists of new corporate bond issues, including other types of fixed-income securities, such as medium-term notes. Primary market data is usually concentrated in higher credit quality issuers and not readily available. From a transfer pricing perspective, primary market data does not qualify as a reliable source of information due to insufficient coverage and a low information frequency.

The second source of corporate bond data is the secondary bond market. This data consists of daily yields-to-maturity (YTM) for corporate bonds traded on that day with specific credit rating categories and is readily available. Similar to the prices of intercompany transactions, bond yields are driven by various credit risk factors, such as the creditworthiness of the counterparty, transaction characteristics and the value of underlying collateral. Furthermore, corporate bond prices are transparent, available at a regular frequency and less affected by idiosyncratic pricing components that may be present in the prices of bank loans.

Corporate bond yields and yield spreads are impacted by more than just the level of credit risk associated with the risk profile of the bond. For example, corporate bonds are usually issued with a fixed interest rate or coupon. This creates interest rate risk for the investor, since changes in the market interest rate relative to the corporate bond's fixed coupon rate will influence the price of the bond. Furthermore, some corporate bonds contain embedded options, which will affect the yields of these bonds. To account for these interest rate risk factors, the option-adjusted spread (OAS) of corporate bonds can be used instead of corporate bond yields.

It is noted that the OECD Transfer Pricing Guidelines allow for a broadening of the search for comparable transactions, provided that the effects of such broadening of scope on the reliability of the analysis are expected to be limited (see below).

*“The identification of potential comparables has to be made with the objective of finding the most reliable data, recognizing that they will not always be perfect. For instance, independent transactions may be scarce in certain markets and industries. A pragmatic solution may need to be found, on a case-by-case basis, such as broadening the search and using information on uncontrolled transactions taking place in the same industry and a comparable geographical market, but performed by third parties that may have different business strategies, business models or other slightly different economic circumstances; information on uncontrolled transactions taking place in the same industry but in other geographical markets; or information on uncontrolled transactions taking place in the same geographical market but in other industries. The choice among these various options will depend on the facts and circumstances of the case, and in particular on the significance of the expected effects of comparability defects on the reliability of the analysis.”*

[OECD Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations \(Art. 3.38\)](#)

It is concluded that corporate bond transactions in the secondary bond market provide a reliable source of information from a transfer pricing perspective. In particular, the OAS and corresponding risk profiles of corporate bonds are used. However, in order to compare data from the secondary bond market to specific intercompany transactions, comparability adjustments have to be made. These adjustments are discussed in the next section.

### Degree of comparability

When applying the CUP method, reasonably accurate adjustments must be made to eliminate any material effects that are caused by differences between the transactions being compared. The spreads of corporate bond transactions in the secondary bond market are primarily driven by Basel credit risk factors. To be able to compare the OASs of corporate bond transactions to the facility under review, the risk profiles of the corporate bonds and the facility under review must be assessed in a consistent manner and measured on the same scale.

It is determined that an accurate assessment of the risk profiles of corporate bond transactions and the facility under review can be made by considering commonly applied credit risk drivers: the probability of default (PD), loss given default (LGD), exposure at default (EAD) and maturity (M), i.e. the tenor of the transaction. The PD of a transaction is determined by the credit rating of the borrower. The LGD and EAD of a transaction are determined by the structure and type of facility, respectively. To accurately identify differences in these risk drivers, the effects of differences in expected loss (EL) as well as unexpected loss (UL) should be considered.

### Conclusion

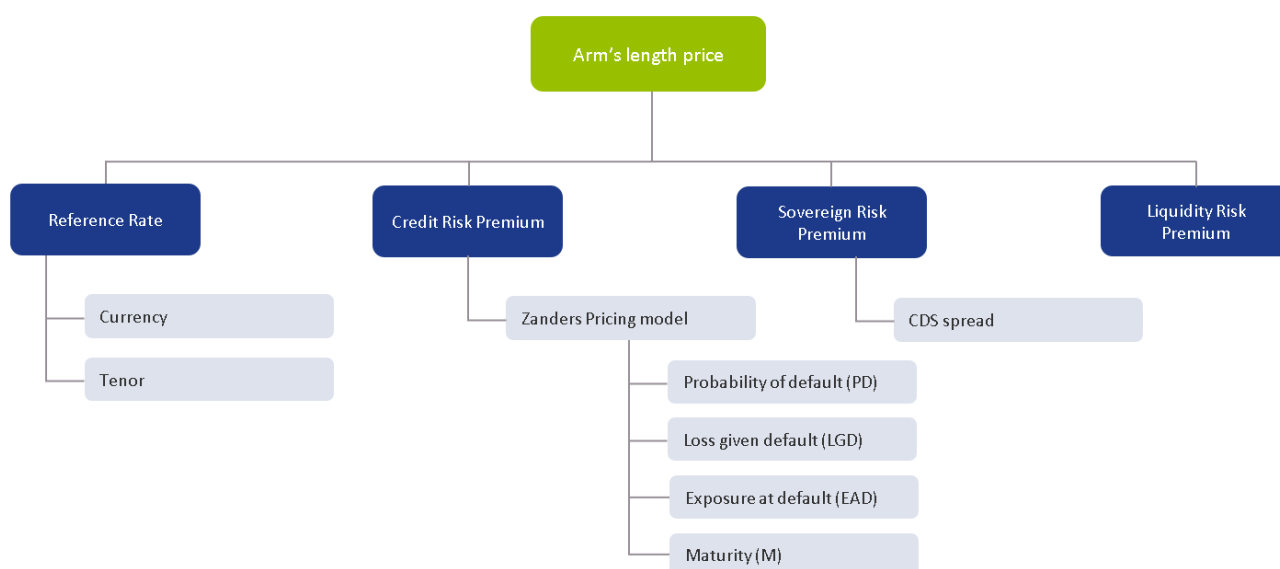
In summary, it is determined that the CUP method is the most appropriate transfer pricing method for the facility under review. In accordance with bank pricing practices, an arm's length price is determined by taking the sum of the base costs of financing, a credit risk premium derived from comparable uncontrolled transactions, a sovereign risk premium and a liquidity risk premium. Comparable uncontrolled transactions can be identified by analyzing corporate bond transactions in the secondary bond market. The spreads of corporate bond transactions should be adjusted to account for differences in the risk profile between the controlled and uncontrolled transactions. Thereafter, a sovereign risk premium and a liquidity risk premium are applied in order to account for differences in sovereign risk and liquidity risk respectively.



## Pricing assessment

This section contains the results of the pricing assessment for the intercompany transaction between IdeaBank and ING, based on the ICRP model. The ICRP model has been developed in accordance with the OECD Transfer Pricing Guidelines. Furthermore, the assessment of the credit risk premium is consistent with the Basel III IRB approach. An overview of the pricing methodology is provided in the Appendix.

Following bank practices, the arm's length price is determined by the ICRP model as the sum of an appropriate benchmark rate, a credit risk premium, a sovereign risk premium and a liquidity risk premium. The figure below illustrates the key components of the arm's length price:



In the following sections, the results for each of the above components are discussed.

## Benchmark rate

The benchmark rate represents the base costs of financing and is defined as the IBOR for maturities up to one year, or IRS for longer maturities. It is determined that the appropriate benchmark for the facility under review is Euribor. The corresponding benchmark rate is -0.40%.

The table below presents the facility characteristics and the corresponding benchmark rate:

Benchmark rate	
	Value
Fixed / floating	Floating
Benchmark <sup>6</sup>	Euribor
As per	30-12-2019
<b>Benchmark rate</b>	<b>-0.40%</b>

## Credit risk premium

The credit risk premium is determined by the ICRP model based on the CUP method, using corporate bond data from the secondary bond market. To eliminate the effects of differences between the selected corporate bonds and the facility under review, the corporate bond spreads are adjusted for the aggregate risk profile of the transaction. The aggregate risk profile is influenced by the following key components:

- **Risk profile of the borrower:** the credit risk premium depends in part on the creditworthiness of the borrower. The creditworthiness of the borrower is estimated in terms of PD, which is derived from the credit rating of the borrower;
- **Risk profile of the facility:** the risk profile of the facility is influenced by the facility characteristics. Key risk factors include the type of facility, tenor, repayment schedule and seniority of the transaction. The facility characteristics determine the EAD, LGD and M of the transaction.

The starting points for the credit risk premia are the spreads of corporate bonds in the secondary bond market. The ICRP model determines the relationship between the OAS and the aggregate risk profiles of the corporate bonds, based on the key risk drivers of the transactions (PD, LGD, EAD and M). Next, the ICRP model determines the aggregate risk profile of the facility under review and applies the estimated relationship between the risk profile and the bond market spread to determine the credit risk premium for the facility under review.

The table shows the values of PD, LGD, EAD and M that have been used to determine the credit risk premium for the facility. The aggregate risk profile of the facility results in an average credit risk premium of 1.09%, with a 90% confidence interval of 0.96% - 1.22%.

<sup>6</sup> Based on interpolation, using publicly available rates.

**Credit risk premium**

	<b>Value</b>
PD	0.44%
LGD	75.00%
EAD	100.00%
M (in weeks)	29
<b>Credit risk premium</b>	<b>1.09%</b>
<b>Credit risk premium   90% confidence interval</b>	<b>0.96%- 1.22%</b>

**Comparable uncontrolled transactions**

Based on the aggregate risk profiles of the corporate bonds, the ICRP model delivers an overview of the ten most comparable uncontrolled transactions. For this purpose, the corporate bonds from the secondary bond market are ranked by their distance from the facility under review, both in terms of OAS and their aggregated risk profile. Thereupon, the credit risk premium used for determining the arm's length price can be estimated by adjusting the spreads of the comparables.

Facility under review										
Issuer		Country	Type	Credit rating	Maturity	Currency	Structure	Repayment		OAS (bps)
IdeaBank		NZ	Term loan	BBB3	29	EUR	Subordinated	Bullet		109.17
Comparable transactions (as of 10-12-2019)										
ISIN	Issuer	Country	Type	Credit rating	Maturity	Currency	Structure	Repayment	Idiosyncratic	OAS (bps)
XS1232188257	FCE Bank PLC	GB	Bond	BBB3	22	EUR	Unsecured	Bullet		74.29
comparability adjustment		5	-	-	1	-	38	-	-2	40.3634386
XS1713466578	PerkinElmer Inc	US	Bond	BBB3	69	EUR	Unsecured	Bullet		81.53
comparability adjustment		3	-	-	-7	-	38	-	2	46.9153364
XS1317725726	FCE Bank PLC	GB	Bond	BBB3	48	EUR	Unsecured	Bullet		84.84
comparability adjustment		4	-	-	-4	-	38	-	-6	47.3073063
XS1214673722	ArcelorMittal SA	LU	Bond	BBB3	69	EUR	Unsecured	Bullet		81.93
comparability adjustment		6	-	-	-7	-	38	-	-1	46.1331027
XS1800194729	Ford Motor Credit Co	US	Bond	BBB3	1	EUR	Unsecured	Bullet		70.58
comparability adjustment		8	-	-	5	-	38	-	-4	46.7735221
XS1084568762	ArcelorMittal SA	LU	Bond	BBB3	30	EUR	Unsecured	Bullet		62.60
comparability adjustment		7	-	-	-	-	38	-	10	48.2211760
XS0677389347	Koninklijke KPN NV	NL	Bond	BBB3	95	EUR	Unsecured	Bullet		77.69
comparability adjustment		7	-	-	-12	-	38	-	7	7
XS0995380580	EDP Finance BV	NL	Bond	BBB3	58	EUR	Unsecured	Bullet		61.33
comparability adjustment		7	-	-	-5	-	38	-	17	59.6477034
XS1843449551	Takeda Pharmaceutical	JP	Bond	BBB2	50	EUR	Unsecured	Bullet		59.04
comparability adjustment		6	-	16	-4	-	38	-	2	59.2389180
FR0011769090	Renault SA	FR	Bond	BBB3	64	EUR	Unsecured	Bullet		64.56
comparability adjustment		6	-	-	-7	-	38	-	15	59.7145803

## Interquartile range

The list of comparables can also be summarized in an interquartile range (IQR). An interquartile range is defined as “the variate distance between the upper and lower quartiles. This range contains one half of the total frequency and provides a simple measure of dispersion which is useful in descriptive statistics.”<sup>7</sup> Paragraph 3.57 of the OECD guidelines states that the use of an interquartile range may enhance the reliability of a range in which non-quantifiable comparability defects remain as a result of the limitations in available information; however, it doesn’t state that an interquartile range must be used. Since it is often the case that comparability defects remain where comparables are extracted from a database, the interquartile range is determined below. It must be mentioned that the use of an interquartile range is most appropriate when the comparables being used are more or less equally valid. When the number of close comparables is limited, an IQR may be misleading. Therefore, the ICRP model only determines an IQR when the borrower is considered investment grade since there are less actual comparables in the bond market for non-investment graded issuers.

Interquartile ranges, being a measure of central tendency, are only statistically meaningful where there is a sufficiently large sample size. Therefore, we choose to determine an IQR from the 30 most comparable bonds, based on their aggregate risk profile. The 25<sup>th</sup> and the 75<sup>th</sup> percentile of this sample reflect the lower and upper bound for the IQR. An overview of the IQR and the median of the sample of comparables is provided in the table below.

Interquartile range	
	Value
Credit risk premium   median of sample of comparables	0.70%
Credit risk premium   IQR	0.63% - 0.79%

## Sovereign risk premium

The sovereign risk premium accounts for the risk associated with the funding risk of a specific country. Whereas country risk (see supra: credit rating assessment) is viewed from the perspective of the business under review, sovereign risk is approached from the investor’s perspective. The ICRP model determines this sovereign risk premium by using credit derivatives from the CDS market. The difference between the CDS spread of Canada and the CDS spread of a risk-free country is being used as a measure of sovereign risk. In line with market practice, Germany is being used as a proxy for the risk-free country. In some cases, the borrower is not subject to this sovereign risk because of the international character of the entity. In these cases, the sovereign risk premium remains zero.

Sovereign risk premium	
	Value
CDS spread Canada	0.10%
CDS spread Germany	0.02%
<b>Sovereign risk premium</b>	<b>0.08%</b>

<sup>7</sup> As defined in the OECD Statistics Portal, glossary of statistical terms, see: <http://stats.oecd.org/glossary/>



## Liquidity risk premium

As mentioned before, bond data from the secondary market is being used to find the comparable uncontrolled price (CUP). Whereas bonds can be sold at any time, this is not the case for loans. As a consequence, a liquidity risk premium has to be added to the credit spread, reflecting the higher risk from investing in instruments with a lower liquidity. By considering the issuer, type, structure and maturity of the contract, a premium of 0.00% was chosen.

## Summary

The pricing assessment has resulted in a benchmark rate of -0.40%, a credit risk premium of 1.09%, a sovereign risk premium of 0.08% and a liquidity risk premium of 0.00% for the facility under review. This results in an indicative arm's length price of 0.77%.

The indicative arm's length pricing of 0.77% may be adjusted upwards or downwards due to considerations that are not (fully) reflected by the above analysis. A pricing override of 0.00% was chosen to be applied to the indicative arm's length pricing, resulting in a final arm's length price of 0.77%. The reasoning behind the pricing override will be substantiated in a corroborative document, if applicable.

The table below summarizes the main results of the assessment:

Pricing assessment	
	Value
Benchmark rate	-0.40%
Credit risk premium	1.09%
Sovereign risk premium	0.08%
Liquidity risk premium	0.00%
<b>Arm's length interest rate   indicative ALP</b>	<b>0.77%</b>
<b>Arm's length interest rate   range<sup>8</sup></b>	<b>0.63% - 0.79%</b>
User override	0.00%
<b>Arm's length interest rate   final ALP</b>	<b>0.77%</b>

<sup>8</sup> Based on the 90% confidence interval determined for the credit risk premium.

# Conclusion

The purpose of this transfer pricing analysis is to determine an arm's length price for the facility under review. The OECD suggests five methods that can be used to derive an arm's length price. When selecting a transfer pricing method under OECD guidelines, several factors must be considered, including the nature of the transaction, the availability of reliable information and the reliability of comparability adjustments.

It has been determined that the CUP method is the most appropriate method for the facility under review. The OECD guidelines state that, in cases where it can be applied, the CUP method is preferable to all other methods. For the application of the CUP method, corporate bonds from the secondary bond market are used as uncontrolled comparable transactions. Following bank practices, the arm's length price is derived as the sum of an appropriate benchmark rate, a credit risk premium based on the uncontrolled comparable transactions, a sovereign risk premium derived from the CDS market and a liquidity risk premium.

To make corporate bonds comparable to the facility under review, a comparability adjustment is required. The adjustment is based on differences between the aggregate risk profiles of the corporate bonds and the facility under review. The comparability adjustment takes into account differences in EL as well as UL. The effect of differences in UL are assumed to be a function of a bank's cost of capital due to minimum capital requirements for credit risk.

EL and UL are a function of the aggregate risk profile of the facility, which is expressed in terms of PD, LGD, EAD and M. The PD of the facility is equal to the PD of the borrower. In the previous section of this report, it was determined that the PD of ING is 0.44%. Based on the facility characteristics, the LGD, EAD and M have been determined to be 75.00%, 100.00% and 29 weeks, respectively.

The transfer pricing analysis has resulted in a benchmark rate of -0.40% and a credit risk premium of 1.09%, a sovereign risk premium of 0.08% and a liquidity risk premium of 0.00%. Based on the benchmark rate and the premia, it has been determined that an interest rate of 0.77% can be considered as an arm's length price for the facility under review in a range of 0.64% - 0.90%. A pricing user override of 0.00% was chosen, resulting in a final interest rate of 0.77%.

# Credit rating methodology

The rating methodology of the ICRP model is founded in Basel III standards on the application of internal models for the measurement of credit risk. The purpose of the rating model is to estimate the PD of the counterparty. In the Basel III standards, the PD is defined as follows:

*“For corporate and bank exposures, the PD is the one-year PD associated with the internal borrower grade to which that exposure is assigned. The PD of borrowers assigned to a default grade(s), consistent with the reference definition of default, is 100%.”*

Basel III: Finalising post-crisis reforms (Art. 67)

For the purpose of estimating the PD, a default is considered to have occurred with regard to the borrower when either or both of the following events have taken place:

- The borrower is **unlikely to pay** its credit obligations in full, without recourse to actions such as realizing security;
- The borrower is **past due more than 90 days** on any material credit obligation to the debtor.

The credit rating methodology of the ICRP model combines a quantitative foundation with a qualitative overlay. This is supported by Basel III standards, which state that any mechanical application of a technique should be supported by additional analysis:

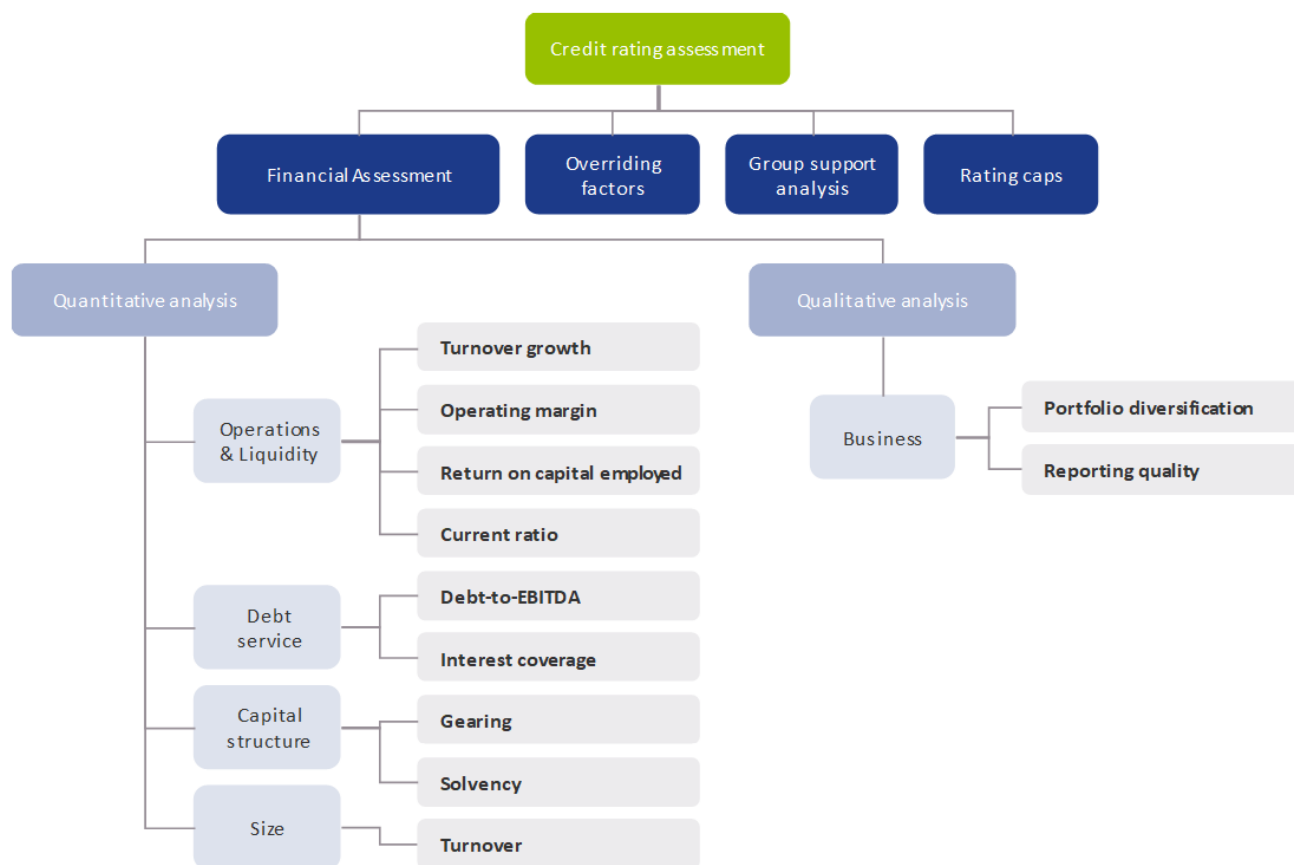
*“Banks may have a primary technique and use others as a point of comparison and potential adjustment. Supervisors will not be satisfied by mechanical application of a technique without supporting analysis. Banks must recognize the importance of judgmental considerations in combining results of techniques and in making adjustments for limitation of techniques and information.”*

Basel III: Finalising post-crisis reforms (Art. 230)

## Quantitative foundation

For the quantitative analysis, the model applies a scoring approach to key financial ratios, which are calculated based on recent financial statements of the borrower. Each ratio is scored on a bell curve by comparing the ratio value to peer group values. A high score indicates that the company is outperforming the peer group benchmark with respect to the financial ratio. In addition to the ratio value, the historic trend of the ratio is taken into account. The final score per ratio ranges from 0 to 100 and is determined as the weighted average of the value score and trend score. The financial ratios and corresponding definitions are provided further on in this Appendix.

Based on the ratio and trend scores, the ICRP model computes a weighted average of the underlying ratio scores to measure the company's performance on four key quantitative components: operations and liquidity, debt service, capital structure and size. The figure below illustrates the quantitative components and underlying ratios, as well as the qualitative components.



### Qualitative overlay

In addition to the quantitative analysis, judgmental considerations can be provided by the user. To measure the performance of the business and company management, two qualitative variables are taken into account: portfolio diversification and reporting quality. Similar to the quantitative variables, a score is assigned to each qualitative variable, depending on the assessment of the user. The weighted average score of the qualitative variables results in an aggregate score on 'business', as illustrated in the figure above. The quantitative and qualitative analyses together determine the final score of the company. The final score leads to an initial rating for the borrower.

In addition to the qualitative variables, overriding factors may be applied. The ICRP model takes the following overriding factors into account: country risk, industry risk and business risk. The country risk override is automatically applied by the ICRP model, based on the OECD country risk classification of the country of residence of the borrower. The business risk and industry risk overrides are based on user input. Industry risk relates to risk factors that negatively impact the industry's overall performance. Business risk relates to business factors or financial considerations that may not be fully reflected in the latest financial statements. The application of overriding factors results in the stand-alone borrower rating.

After establishing the stand-alone borrower rating, group support factors are taken into account to arrive at the final rating of the borrower. In accordance with Basel III standards, both group support as well as the potential adverse impact of problems in the group are taken into account:

*“For exposures to entities belonging to consolidated groups, due diligence should, to the extent possible, be performed at the solo entity level to which there is a credit exposure. In evaluating the repayment capacity of the solo entity, banks are expected to take into account the support of the group and the potential for it to be adversely impacted by problems in the group.”*

[Basel III: Finalising post-crisis reforms \(Art. 5\)](#)

The group support analysis consists of a questionnaire that is used to measure the strength of the relationship between the borrower and the group entity. The questionnaire verifies whether conditions for explicit or implicit group support are met. From a transfer pricing perspective, including group support in the assessment of the creditworthiness of a subsidiary is supported by case law on transfer pricing, such as the landmark transfer pricing case of Chevron.<sup>9</sup> In the Chevron case, the judge ruled that, for the purpose of applying the arm’s length principle, treating the parties to an intercompany transaction as independent enterprises does not entail that the subsidiary should be treated as a wholly standalone company:

*“While I accept the applicant's submission that one must consider the conditions that one might expect to see between a lender and a borrower who are independent, and are dealing wholly independently with one another, which is the language of Art 9, it by no means follows that where, as here, the entities in question are sister companies, also to be eliminated is the relationship between each of them and their common parent on the basis that, otherwise, it could not be said that the lender and borrower were independent or were dealing independently.”*

[Chevron Australia Holdings Pty Ltd v. Federal Commissioner of Taxation \(Art. 156\)](#)

In case a group support relationship is established by the ICRP model, the model may apply an upward adjustment to the stand-alone subsidiary rating to reflect the mitigating effect of the support on the credit risk profile of the borrower. Note that the upward adjustment is not applied in case of ring-fencing of assets of the borrower.

To account for the potential adverse impact of problems in the group on the repayment capacity of the subsidiary, the rating of the borrower is capped by the rating of the parent. An exception is made in case of ring-fencing of the assets of the subsidiary. After adjusting for group support and the rating of the parent, the final rating of the borrower is determined. The final rating follows the Zanders rating scale, as defined further on in this Appendix.

The figure below illustrates the various intermediate steps of the credit rating assessment:



<sup>9</sup> *Chevron Australia Holdings Pty Ltd v. Federal Commissioner of Taxation*, Federal Court, Sidney (2017).

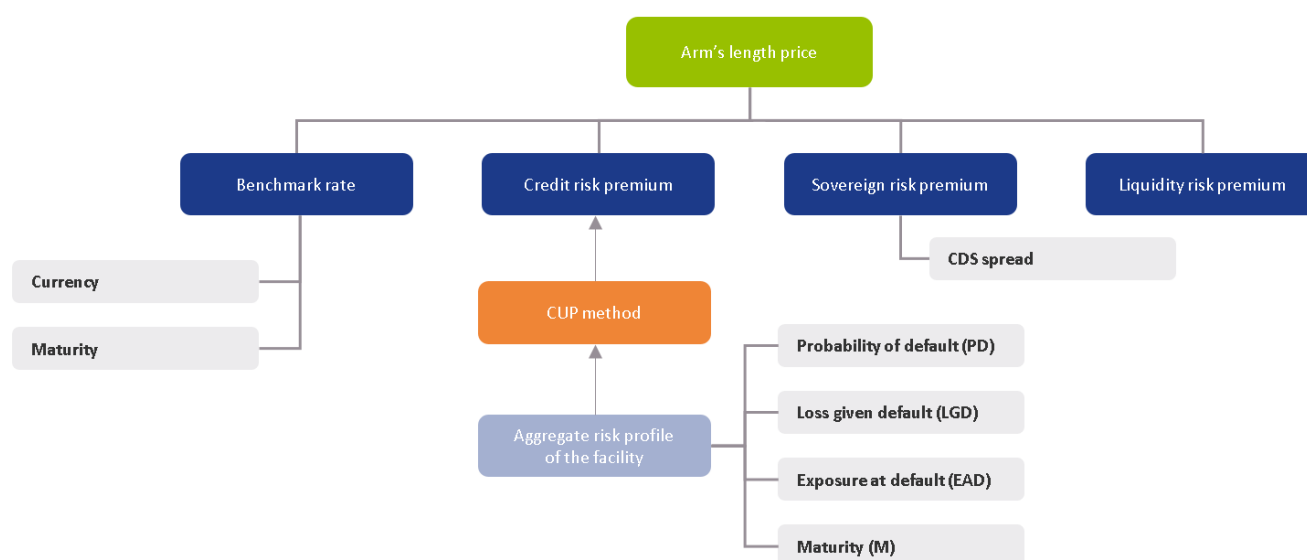
# Pricing methodology

The pricing methodology of the ICRP model applies the CUP method for determining the arm's length price of intercompany facilities, using corporate bonds from the secondary bond market as comparable uncontrolled transactions to derive an arm's length spread. Comparability adjustments are applied to eliminate differences between the corporate bonds and the facility under review, based on the aggregate risk profile of the facility. The determination of the aggregate risk profile of the facility is based on banking best practices for the measurement of credit risk.

The indicative arm's length price is based on the following components:

- **Benchmark rate:** represents the base costs of financing;
- **Credit risk premium:** a spread accounting for the counterparty credit risk combined with the aggregate risk profile of the facility under review;
- **Sovereign risk premium:** a spread accounting for the risk inherent to investing within a specific country;
- **Liquidity risk premium:** a spread accounting for the lower liquidity of loans compared to bonds.

The figure below illustrates the key components of the arm's length price of the facility.



## Benchmark rate

As mentioned above, the benchmark rate represents the base costs of financing. The benchmark rate is defined as the IBOR for maturities up to one year, or IRS for longer maturities. The benchmark rate is derived using publicly available rates for key maturities, where interpolation is applied for intermediate maturities. The key inputs for determining the benchmark rate are the currency and the maturity of the facility. In case of a floating-rate facility, the fixed term of the facility (i.e. the time until the next interest rate reset) is used as the reference maturity for the purpose of deriving the benchmark rate.

## Credit risk premium

The credit risk premium represents additional costs due to the credit risk profile of the transaction. The credit risk premium is derived by the ICRP model by applying the CUP method. For the purposes of the CUP method, corporate bond data from the secondary bond market is used to identify comparable uncontrolled transactions. In particular, the OAS of corporate bonds is used as a starting point for deriving the arm's length credit risk premium of the facility under review.

Article 2.15 of the OECD Transfer Pricing Guidelines states that an uncontrolled transaction can be considered a comparable uncontrolled transaction if reasonably accurate adjustments can be made to eliminate the material effects of differences (if any) between the transactions being compared. In order to make the corporate bond data comparable to the facility under review, the ICRP model applies a comparability adjustment based on differences in the aggregate risk profiles of the transactions.

## Aggregate risk profile

The aggregate risk profile is defined by the PD, LGD, EAD and M of the facility. The PD of the facility is derived from the credit rating of the borrower, based on the Zanders Rating Scale (see the next section in this Appendix). The LGD is determined based on the seniority of the transaction. For senior secured facilities, an LGD of 15% or 25% can be selected by the user, depending on the quality of the collateral. For senior unsecured facilities an LGD of 45% is applied, which is in accordance with the IRB Foundation approach under Basel II standards.<sup>10</sup> Note that in the Basel III standards, this percentage has been revised to 40%:

*“Under the foundation approach, senior claims on banks, securities firms and other financial institutions (including insurance companies and any financial institutions in the corporate asset class) that are not secured by recognized collateral will be assigned a 45% LGD. Senior claims on other corporates that are not secured by recognized collateral will be assigned a 40% LGD.”*

Basel III: Finalising post-crisis reforms (Art. 70)

For subordinated facilities, an LGD of 75% is applied in accordance with the IRB Foundation approach under Basel III standards:

*“All subordinated claims on corporates and banks will be assigned a 75% LGD. A subordinated loan is a facility that is expressly subordinated to another facility.”*

Basel III: Finalising post-crisis reforms (Art. 71)

For near-equity facilities, an LGD of 90% is applied.

For the purpose of deriving the credit risk premium, the EAD is defined in percentage terms relative to the current outstanding amount of the facility, and is derived from the type of facility. Finally, M represents the effective maturity of the facility.

<sup>10</sup> *International Convergence of Capital Measurement and Capital Standards*, BCBS (2006).



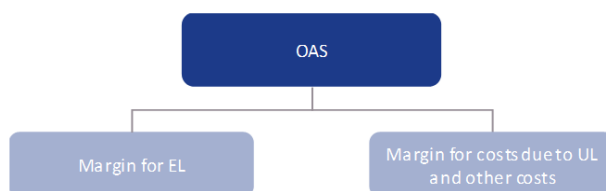
## Comparability adjustments

The OECD Transfer Pricing Guidelines point out the need to adjust comparables and the requirement for accuracy and reliability. Regarding the purpose of comparability adjustments, the OECD Transfer Pricing Guidelines state the following:

*“Comparability adjustments should be considered if (and only if) they are expected to increase the reliability of the results. Relevant considerations in this regard include the materiality of the difference for which an adjustment is being considered, the quality of the data subject to adjustment, the purpose of the adjustment and the reliability of the approach used to make the adjustment.”*

[OECD Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations \(Art. 3.50\)](#)

As discussed above, the key material differences between the uncontrolled transactions in the secondary bond market and the facility under review are differences in aggregate risk profiles. To make the OAS of corporate bonds comparable to the facility under review, adjustments are made to eliminate the effects of differences in aggregate risk profiles. The OAS can be decomposed into a premium for EL and a premium for costs due to UL and other costs. To eliminate the effect of differences in the aggregated risk profile, the effect on both EL and UL must be considered. The figure below illustrates the decomposition of the OAS:



It is assumed that market participants have similar views of EL for a specific transaction. When comparing the spreads of corporate bonds to intercompany facilities, the premium for EL is therefore considered a common factor. The premium for EL can be determined using the following formula:

$$EL = PD \cdot LGD \cdot EAD$$

For the purpose of this analysis, EAD in the formula above is applied in percentage terms. To adjust the premium for EL, the following steps are performed. First, EL is calculated separately for each uncontrolled transaction, as well as the facility under review. Next, the premium for EL is subtracted from the OAS of each uncontrolled transaction and replaced by the EL of the facility under review. Using this methodology, the EL of the facility under review is directly reflected in the resulting arm's length price and independent from the EL of the uncontrolled transactions. In the next section, it is discussed how to adjust the premium for costs due to UL for differences in the aggregated risk profiles of the transactions.

## Premium for unexpected loss

With respect to the premium for costs due to UL and other costs, several factors have to be considered. First, the corporate bond data consists of a large number of uncontrolled transactions that provide valuable reference points for the arm's length price of the facility under review. The information of these uncontrolled transactions must be incorporated in the arm's length price of the transaction in a reliable and accurate manner. Second, market participants might require a different premium for the same level of UL. For example, the estimate of costs due to UL might differ between companies

due to differences in cost of capital or regulations. This requires an unambiguous method for determining the premium for UL.

To provide a reliable estimate of the premium for UL that takes into account the information of multiple uncontrolled transactions in a consistent manner, a regression model is applied. The purpose of the regression model is to derive a reliable and unambiguous equation for the premium for UL, based on the spreads of comparable uncontrolled transactions. The regression model is based on the premise that the premiums for UL in the corporate bond market are proportional to the costs that would prevail for banks due to Basel minimum capital requirements for credit risk. The Basel Accords require banks to maintain capital based on the UL of corporate exposures. The Basel III IRB approach provides a consistent methodology for determining UL based on the PD, LGD, EAD and M of a transaction, which makes it a reliable method to adjust for the effects of differences in aggregate risk profiles.

To calculate the minimum capital requirements for UL that would prevail for a bank, the Basel III IRB approach is used. Capital requirements under Basel III are based on the risk-weighted assets (RWA) of an exposure. The derivation of RWA under the IRB approach is dependent on estimates of the PD, LGD, EAD and M of a given exposure. The IRB formula for calculating risk-weighted assets is as follows:

$$\begin{aligned} \text{Correlation } (R) &= 0.12 \cdot \frac{(1 - e^{-50 \cdot PD})}{(1 - e^{-50})} + 0.24 \cdot \left(1 - \frac{(1 - e^{-50 \cdot PD})}{(1 - e^{-50})}\right) \\ \text{Maturity adjustment } (b) &= [0.11852 - 0.05478 \cdot \ln(PD)]^2 \\ \text{Capital requirement } (K) &= \left[ LGD \cdot N \left[ \frac{G(PD)}{\sqrt{(1-R)}} + \sqrt{\frac{R}{1-R}} \cdot G(0.999) \right] - PD \cdot LGD \right] \cdot \frac{(1 + (M - 2.5) \cdot b)}{(1 - 1.5 \cdot b)} \\ RWA &= K \cdot 12.5 \cdot EAD \end{aligned}$$

Under Basel III standards, a capital requirement of 13% of RWA is applied. To determine the cost of capital for banks due to the capital requirement (K) for UL, a weighted average cost of capital (WACC) of 12% is assumed. The required spread for a bank to cover its costs due to UL under Basel standards subsequently follows from the following equation:

$$\text{Basel spread } (PD, LGD, EAD, M) = RWA \cdot 13\% \cdot 12\%$$

Using the above Basel formulas, the arm's length premium for UL is determined using regression analysis. To determine the premium for UL and derive the corresponding arm's length credit risk premium of the facility under review, the following steps are performed:

- **Step 1:** the EL of each comparable uncontrolled transaction is calculated;
- **Step 2:** the EL is subtracted from the OAS of each comparable uncontrolled transaction to determine the implicit premium for costs due to UL (and other costs);
- **Step 3:** for each comparable uncontrolled transaction, the spread is determined that banks would require to cover the cost of capital due to Basel minimum capital requirements for UL, based on the formulas above;
- **Step 4:** an ordinary least squares (OLS) regression analysis is performed, using the arm's length premium for UL as the dependent variable and the theoretical Basel spread as the independent variable;
- **Step 5:** the resulting equation is applied to the facility under review to derive an arm's length premium for UL, using the theoretical Basel spread of the facility as input; and

- **Final step:** the EL of the facility is added to the arm's length premium for UL to derive the arm's length credit risk premium of the facility.

### Sovereign and liquidity risk premium

The final step of the transfer pricing analysis consists of adding an appropriate premium for sovereign and liquidity risk. Credit derivatives from the CDS market are used as a measure for the difference in funding risk between different countries. By comparing the CDS spread of the country of the borrower with the CDS spread of a risk-free country (e.g. Germany), the arm's length rate can be expanded with the difference in basis points to compensate for the investor's exposure to sovereign risk. Additionally, a liquidity spread could be added to reflect the difference in liquidity between the bonds used for pricing and the facility under review.

### User override

The user can choose to apply a pricing override to the indicative arm's length price, when certain considerations are not (fully) reflected in the pricing analysis. If the company chooses to apply a pricing override, the reasoning behind it should be carefully documented in a corroborative report.

## Credit rating scale

The ICRP model follows the Zanders rating scale, with credit ratings ranging from C (weakest) to AA (strongest). Each Zanders rating class corresponds to a specific Probability of Default (PD). The Zanders ratings can be mapped to the rating scales of well-known credit rating agencies such as S&P, Fitch and Moody's, for comparison purposes.

The table below provides the Zanders rating classes, PDs and corresponding definitions:

Zanders rating scale				
Zanders	PD	Description	S&P/Fitch	Moody's
AA	0.03%	Excellent	AAA/AA-	Aaa/Aa3
A1	0.04%	Very Strong	A+	A1
A2	0.05%	Strong	A	A2
A3	0.10%	Relatively Strong	A-	A3
BBB1	0.19%	Very Adequate	BBB+	Baa1
BBB2	0.29%	Adequate	BBB	Baa2
BBB3	0.44%	Relatively Adequate	BBB-	Baa3
BB1	0.66%	Very Moderate	BB+	Ba1
BB2	1.01%	Moderate	BB	Ba2
BB3	1.61%	Relatively Moderate - Watch	BB-	Ba3
B1	2.75%	Somewhat Weak - Watch	B+	B1
B2	5.21%	Weak - Special Attention	B	B2
B3	11.25%	Very Weak - Special Attention	B-	B3
C	28.47%	Sub-Standard - Special Attention	CCC+/C	Caa1/C
D	n.a.	Default	-	-

# Definitions of financial ratios

## Current ratio

The current ratio is used to measure a company's ability to service its current obligations. The current ratio is calculated as the ratio of current assets over current liabilities:

$$\frac{\text{Current assets}}{\text{Current liabilities}}$$

## Debt-to-EBITDA

The debt-to-EBITDA ratio measures the total debt run-off period by calculating the number of years it would take to repay all of the company's interest-bearing debt from operating profit, adjusted for depreciation and amortization:

$$\frac{\text{Loans} + \text{Non-current liabilities}}{\text{EBITDA}}$$

## Gearing

Measures a company's reliance on interest bearing debt. Gearing is calculated as the ratio of total debt over tangible net worth:

$$\frac{\text{Loans} + \text{Non-current liabilities}}{\text{Shareholders' funds} - \text{Intangible assets}}$$

## Interest coverage ratio

The interest coverage ratio measures the company's ability to meet interest payments from earnings. The interest coverage ratio is calculated as the ratio of operating profit over interest paid:

$$\frac{\text{EBIT}}{\text{Interest paid}}$$

## Operating premium

The operating premium measures the profitability of the company, by determining what proportion of a company's revenue is left over after paying for variable costs of production. The operating premium is calculated as the ratio of operating profit over turnover:

$$\frac{\text{EBIT}}{\text{Turnover}}$$

## Return on capital employed

Return on capital employed is used to measure how successful a company has been in generating profits from capital funding. Return on capital employed is calculated as the ratio of operating profit over total capital:

$$\frac{\text{EBIT}}{\text{Total assets} - \text{current liabilities}}$$

## Solvency

The solvency ratio measures the financial leverage of a company, i.e. how much a company is relying on creditors to fund assets. The solvency ratio is calculated as the ratio of tangible net worth over total tangible assets:

$$\frac{\text{Shareholders' funds} - \text{Intangible assets}}{\text{Total assets} - \text{Intangible assets}}$$

## Turnover growth

The turnover growth is used to measure the growth rate of a firm. The turnover growth ratio compares current period growth to previous period growth:

$$\frac{\text{Turnover}_t - \text{Turnover}_{t-1}}{\text{Turnover}_{t-1}}$$

# General information

## About Zanders

Established in 1994, Zanders is recognized as a thought leader in treasury management, risk management and finance. From its offices in the Netherlands, Belgium, the United Kingdom, Switzerland and the United States, over 150 qualified professionals offer global services to corporates, central banks, financial institutions, public sector entities and non-governmental organizations.

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