Company ABC, Inc. Transfer Pricing Benchmarking for Intercompany Loan

June 2024



1. Executive Summary

Company ABC, Inc. ("Company ABC") used tpFins to obtain a benchmarking analysis for arm's length interest rates for the financing transaction carried out between Lend Co. ABC Inc. ("Lend ABC"), and Borrow Co. ABC Inc ("Borrow ABC").

The table shown below summarizes the intercompany transaction under analysis.

Table 1. Summary of the intercompany transaction under analysis

Effective Date	Borrower	Borrower Credit Rating	Currency	Amount	Interest rate	Term
June 1, 2021	Borrow ABC	А	EUR	600,000,000	0.40% fixed	10 years (3,650 days)

Additional details on the intercompany transaction under analysis are presented in **Attachment 1.**

This document has been prepared to provide an analysis of comparable data that may be used as a benchmark for the intercompany financing transaction under analysis. The analysis presented herein is based on the principles as outlined in the OECD Guidelines and may be employed in the context of an application of the Comparable Uncontrolled Price ("CUP") Method. The analysis was performed by selecting corporate bonds that reflect similar market characteristics to the transaction under analysis, and their yield to maturity ("YTM")¹ was used in benchmarking the arm's length interest rate. Table 2 below presents the arm's length range of annual market interest rates resulting from the analysis.

Table 2. Arm's length range of interest rates (in %)²

	YTM information
Observations	47
Maximum	1.92
Upper Quartile	0.61
Median	0.20
Lower Quartile	0.13
Minimum	0.00

¹ The Yield to maturity (YTM) for each of the accepted instruments was used. The YTM is the total return anticipated on a bond if the bond is held until it matures. Yield to maturity is considered a long-term bond yield but is expressed as an annual rate. In other words, it is the internal rate of return (IRR) of an investment in a bond if the investor holds the bond until maturity, with all payments made as scheduled and reinvested at the same rate.

² Interquartile range was calculated using Excel Quartile formula.



The interquartile range of interest rates from the benchmarking analysis is between **0.13 percent** and **0.61 percent**, with a median of **0.20 percent**. The annual interest rate of **0.40** percent agreed between Lend ABC and Borrow ABC falls within the interquartile range of interest rates selected as comparables.



2. Analysis

2.1. Search for Comparable Bonds

A search was performed to find corporate bonds that can reasonably be used as benchmark for the intercompany financing transaction under analysis. The table shown below summarizes the search criteria applied.

Table 3. Summary of Search Criteria

Search Parameters	
Offering date	Between 1/1/2021 and 06/30/2021
Security Type	Corporate Bond
Currency	EUR
Coupon Type	Fixed
Credit Profile	Investment Grade (credit rating between BBB- and AAA)
YTM Information	Instruments with YTM information as of 06/01/2021

The search criteria presented above resulted in a set of 63 EUR-denominated bonds. To refine the search further, the following criteria was applied to reject instruments with terms that differ from the transaction under analysis:

- Different credit rating or no credit rating information available for the issuer: 14 instruments were rejected.
- Instruments with maturity of less than one year: 2 rejected instruments.

As a result, 47 instruments were selected as comparables for the benchmarking analysis. **Attachment 2** provides a complete listing of each of the selected bonds from the search. The accept reject matrix detailing the rejection criteria for each of the initial set of bonds is provided in **Attachment 3**.

2.2. Comparability Adjustments

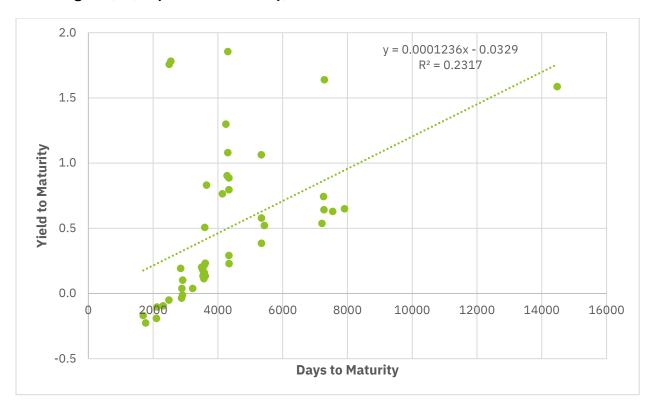
2.2.1. Term Adjustment

Since the bonds selected as comparables have different maturity terms (i.e., different remaining life until their maturity), a comparability adjustment was performed to align them to the maturity of the tested intercompany financing transaction (i.e., 3,650 days).

The following steps were followed to obtain an arm's length range of interest rates that can be used to benchmark the tested transaction:



Step 1: A linear regression was computed to create a yield curve, which reflects the correlation between each instrument's YTM as of the effective date of the loan (June 1, 2021) and its remaining life (i.e., days until its maturity). The result is shown in the chart below:



The formula of the yield curve is the following:

Y=0.0001236X - 0.0329

Where the 'X' axe reflects the maturity in days, and the 'Y" axe the YTM in % of each instrument.

Step 2: The yield curve was then used to calculate the YTM ("YTM_loan") for the term of the tested transaction (3,650 days). The calculated YTM is 0.42, as shown below:

 $YTM_{loan} = 0.0001236 \times 3,650 - 0.0329$

Where 3,650 is the life (in days) of the tested transaction, from the effective date of the transaction (June 1, 2021) to its maturity on May 30, 2031.

Step 3: Using the same estimated yield curve, the YTM of each comparable bond was calculated using their respective remaining life (i.e., days until maturity) as input.

Step 4: The difference between the actual YTM and the estimated YTM of each instrument using the regression as described in Step 3 ("YTM Delta") was calculated.



Step 5: The term adjusted YTM was obtained by adding to the calculated YTM (0.42) in Step 2, the YTM Delta calculated in Step 4.

The detailed calculation for each comparable bond is presented in **Attachment 2**.

2.3. Arm's Length Range

The table below presents the arm's length range of annual market interest rates resulting from the analysis.

Table 4. Arm's length range of interest rates (in %)3

	YTM information
Observations	47
Maximum	1.92
Upper Quartile	0.61
Median	0.20
Lower Quartile	0.13
Minimum	0.00

3. Conclusion

The interquartile range of interest rates from the benchmarking analysis is between **0.13 percent** and **0.61 percent**, with a median of **0.20 percent**. The annual interest rate of 0.40 percent agreed between Lend ABC and Borrow ABC falls within the interquartile range of interest rates selected as comparables.

³ Interquartile range was calculated using Excel Quartile formula.



Attachment 1: Details of the Tested Transaction

The table shown below summarizes the intercompany transaction under analysis.

Effective Date	Termination Date	Lender	Borrower	Industry		Country of Borrower	Currency	Amount	Interest rate Type	Interest Rate (%)	Term
June 1, 2021	May 30, 2031	Lend ABC	Borrow ABC	Both (Financial and non- Financial)	А	France	EUR	600,000,000	Fixed	0.40%	10years (3,650 days)



Attachment 2: List of Selected Bonds and calculation of results

		Α	В	С	D=B-C	E=YTM_Loan+D
Issuer Name	Maturity Date	Days to Maturity from 6/1/2021	Observed YTM	YTM per regression	YTM Delta	YTM adjusted to tested loan term (in %)
Société nationale SNCF, société anonyme	1/19/2061	14,477	1.59	1.76	(0.17)	0.25
La Poste S.A.	1/18/2036	5,344	1.06	0.63	0.44	0.85
E.ON SE	10/1/2032	4,140	0.76	0.48	0.28	0.70
Nationale-Nederlanden Bank N.V.	3/4/2041	7,216	0.54	0.86	(0.32)	0.10
Deutsche Bank Aktiengesellschaft	4/6/2028	2,501	1.76	0.28	1.48	1.90
Deutsche Bank Aktiengesellschaft	5/25/2028	2,550	1.78	0.28	1.50	1.92
Eurogrid GmbH	4/21/2033	4,342	0.80	0.50	0.29	0.71
Royal Schiphol Group N.V.	4/22/2033	4,343	0.89	0.50	0.38	0.80
Jyske Realkredit A/S	10/1/2027	2,313	(0.10)	0.25	(0.35)	0.07
Hypo Tirol Bank AG	3/11/2031	3,570	0.16	0.41	(0.25)	0.17
Euronext N.V.	5/17/2041	7,290	1.64	0.87	0.77	1.19
Nationwide Building Society	5/5/2041	7,278	0.64	0.87	(0.23)	0.19
DZ HYP AG	3/29/2030	3,223	0.04	0.37	(0.33)	0.09
DZ BANK AG Deutsche Zentral- Genossenschaftsbank, Frankfurt am Main	3/24/2027	2,122	(0.10)	0.23	(0.33)	0.09
DZ BANK AG Deutsche Zentral- Genossenschaftsbank, Frankfurt am Main	3/26/2031	3,585	0.22	0.41	(0.19)	0.23

		A	В	С	D=B-C	E=YTM_Loan+D
Issuer Name	Maturity Date	Days to Maturity from 6/1/2021	Observed YTM	YTM per regression	YTM Delta	YTM adjusted to tested loan term (in %)
DZ BANK AG Deutsche Zentral- Genossenschaftsbank, Frankfurt am Main	12/30/2030	3,499	0.20	0.40	(0.20)	0.22
DZ HYP AG	4/20/2029	2,880	(0.04)	0.32	(0.36)	0.06
Bausparkasse Schwäbisch Hall AG	4/27/2033	4,348	0.23	0.50	(0.28)	0.14
DekaBank Deutsche Girozentrale	4/21/2031	3,611	0.13	0.41	(0.28)	0.14
KBC Group NV	5/31/2031	3,651	0.83	0.42	0.41	0.83
Mediobanca Banca di Credito Finanziario S.p.A.	2/3/2031	3,534	0.18	0.40	(0.22)	0.20
UniCredit Bank GmbH	1/21/2036	5,347	0.39	0.63	(0.24)	0.18
UniCredit Bank GmbH	3/10/2031	3,569	0.11	0.41	(0.30)	0.12
UniCredit Bank GmbH	5/21/2029	2,911	(0.01)	0.33	(0.34)	0.08
UBS Group AG	1/18/2033	4,249	1.30	0.49	0.81	1.22
UBS Group AG	2/24/2033	4,286	0.90	0.50	0.41	0.82
The Goldman Sachs Group, Inc.	3/18/2033	4,308	1.08	0.50	0.58	1.00
Suomen Hypoteekkiyhdistys	3/24/2031	3,583	0.16	0.41	(0.25)	0.17
Deutsche Wohnen SE	4/7/2031	3,597	0.51	0.41	0.09	0.51
Coöperatieve Rabobank U.A.	3/8/2027	2,106	(0.19)	0.23	(0.42)	0.00
Coöperatieve Rabobank U.A.	3/24/2029	2,853	0.19	0.32	(0.13)	0.29
ING Bank N.V.	3/25/2031	3,584	0.13	0.41	(0.28)	0.14
ING Bank N.V.	4/21/2033	4,342	0.29	0.50	(0.21)	0.21
ING Bank N.V.	4/21/2036	5,438	0.52	0.64	(0.12)	0.30
ING Bank N.V.	4/21/2041	7,264	0.74	0.87	(0.12)	0.30
National Bank of Canada	3/25/2028	2,489	(0.05)	0.27	(0.33)	0.09
Komercní banka, a.s.	1/20/2026	1,694	(0.17)	0.18	(0.35)	0.07

		Α	В	C	D=B-C	E=YTM_Loan+D
Issuer Name	Maturity Date	Days to Maturity from 6/1/2021	Observed YTM	YTM per regression	YTM Delta	YTM adjusted to tested loan term (in %)
United Overseas Bank Limited	5/25/2029	2,915	0.10	0.33	(0.23)	0.19
Canadian Imperial Bank of Commerce	4/30/2029	2,890	0.04	0.32	(0.29)	0.13
Imperial Brands Finance Netherlands B.V.	3/18/2033	4,308	1.86	0.50	1.36	1.77
Royal Bank of Canada	1/27/2031	3,527	0.20	0.40	(0.21)	0.21
Wirtschafts- und Infrastrukturbank Hessen	1/22/2036	5,348	0.58	0.63	(0.05)	0.37
Wirtschafts- und Infrastrukturbank Hessen	1/28/2043	7,911	0.65	0.95	(0.30)	0.12
Wirtschafts- und Infrastrukturbank Hessen	1/28/2042	7,546	0.63	0.90	(0.27)	0.15
Argenta Spaarbank nv	2/11/2031	3,542	0.13	0.41	(0.27)	0.15
Fédération des caisses Desjardins du Québec	4/8/2026	1,772	(0.23)	0.19	(0.41)	0.01
NIBC Bank N.V.	4/21/2031	3,611	0.23	0.41	(0.18)	0.24

Count	47
Maximum	1.92
Upper Quartile	0.61
Median	0.20
Lower Quartile	0.13
Minimum	0.00

Issuer Name	Coupon Type	Offering Date	Maturity Date	Issuer Industry	Issuer Country	Security Currency	Payment Frequency	S&P Entity Credit Rating - Issuer Credit Rating	YTM as of June 1, 2021 (in %)	Accept / Reject Criteria
Société nationale SNCF, société anonyme	Fixed	1/19/2021	1/19/2061	Rail Transportation	France	EUR	Annual	A+	1.59	Accepted
La Poste S.A.	Fixed	1/18/2021	1/18/2036	Air Freight and Logistics	France	EUR	Annual	A	1.06	Accepted
E.ON SE	Fixed	4/1/2021	10/1/2032	Multi-Utilities	Germany	EUR	Annual	BBB+	0.76	Accepted
Cellnex Finance Company SA	Fixed	2/15/2021	2/15/2033	Specialized Finance	Spain	EUR	Annual	BBB-	2.29	Different Credit Rating
Nationale-Nederlanden Bank N.V.	Fixed	3/4/2021	3/4/2041	Regional Banks	Netherlands	EUR	Annual	A	0.54	Accepted
Deutsche Bank Aktiengesellschaft	Fixed	4/6/2021	4/6/2028	Diversified Capital Markets	Germany	EUR	Annual	A	1.76	Accepted
Deutsche Bank Aktiengesellschaft	Fixed	5/25/2021	5/25/2028	Diversified Capital Markets	Germany	EUR	Annual	A	1.78	Accepted
Eurogrid GmbH	Fixed	4/21/2021	4/21/2033	Electric Utilities	Germany	EUR	Annual	BBB	0.80	Accepted
International Consolidated Airlines Group S.A.	Fixed	3/25/2021	3/25/2025	Passenger Airlines	United Kingdom	EUR	Annual	BBB-	2.86	Different Credit Rating
International Consolidated Airlines Group S.A.	Fixed	3/25/2021	3/25/2029	Passenger Airlines	United Kingdom	EUR	Annual	BBB-	3.84	Different Credit Rating
Royal Schiphol Group N.V.	Fixed	4/22/2021	4/22/2033	Airport Services	Netherlands	EUR	Annual	A	0.89	Accepted
Jyske Realkredit A/S	Fixed	1/20/2021	10/1/2027	Commercial and Residential Mortgage Finance	Denmark	EUR	Annual	A+	(0.10)	Accepted
Hypo Tirol Bank AG	Fixed	3/11/2021	3/11/2031	Diversified Banks	Austria	EUR	Annual	A+	0.16	Accepted
Euronext N.V.	Fixed	5/17/2021	5/17/2041	Financial Exchanges and Data	Netherlands	EUR	Annual	BBB+	1.64	Accepted
Nationwide Building Society	Fixed	5/5/2021	5/5/2041	Commercial and Residential Mortgage Finance	United Kingdom	EUR	Annual	A+	0.64	Accepted
DZ HYP AG	Fixed	1/11/2021	10/20/2021	Commercial and Residential Mortgage Finance	Germany	EUR	Pays At Maturity	A+	(0.41)	Different Maturity (less than 1 year)
DZ HYP AG	Fixed	1/25/2021	11/3/2021	Commercial and Residential Mortgage Finance	Germany	EUR	Pays At Maturity	A+	(0.51)	Different Maturity (less than 1 year)
DZ HYP AG	Fixed	2/1/2021	3/29/2030	Commercial and Residential Mortgage Finance	Germany	EUR	Annual	A+	0.04	Accepted
DZ BANK AG Deutsche Zentral- Genossenschaftsbank, Frankfurt am Main	Fixed	2/3/2021	3/24/2027	Diversified Banks	Germany	EUR	Annual	A+	(0.10)	Accepted
DZ BANK AG Deutsche Zentral- Genossenschaftsbank, Frankfurt am Main	Fixed	2/3/2021	3/26/2031	Diversified Banks	Germany	EUR	Annual	A+	0.22	Accepted
DZ BANK AG Deutsche Zentral- Genossenschaftsbank, Frankfurt am Main	Fixed	2/16/2021	12/30/2030	Diversified Banks	Germany	EUR	Annual	A+	0.20	Accepted
DZ HYP AG	Fixed	4/20/2021	4/20/2029	Commercial and Residential Mortgage Finance	Germany	EUR	Annual	A+	(0.04)	Accepted



Issuer Name	Coupon Type	Offering Date	Maturity Date	Issuer Industry	Issuer Country	Security Currency	Payment Frequency	S&P Entity Credit Rating - Issuer Credit Rating	YTM as of June 1, 2021 (in %)	Accept / Reject Criteria
Bausparkasse Schwäbisch Hall AG	Fixed	4/27/2021	4/27/2033	Commercial and Residential Mortgage Finance	Germany	EUR	Annual	A+	0.23	Accepted
DekaBank Deutsche Girozentrale	Fixed	4/21/2021	4/21/2031	Asset Management and Custody Banks	Germany	EUR	Annual	A	0.13	Accepted
BMW Finance N.V.	Fixed	1/11/2021	1/11/2033	Specialized Finance	Netherlands	EUR	Annual	0	0.63	Different Credit Rating
DNB Boligkreditt AS	Fixed	1/21/2021	1/21/2031	Commercial and Residential Mortgage Finance	Norway	EUR	Annual	NR	0.14	Different Credit Rating
DNB Boligkreditt AS	Fixed	5/12/2021	5/12/2028	Commercial and Residential Mortgage Finance	Norway	EUR	Annual	NR	(0.06)	Different Credit Rating
KBC Group NV	Fixed	5/31/2021	5/31/2031	Diversified Banks	Belgium	EUR	Annual	A-	0.83	Accepted
Vseobecna uverova banka, a.s.	Fixed	3/24/2021	3/24/2026	Diversified Banks	Slovakia	EUR	Annual	NR	(0.17)	Different Credit Rating
Mediobanca Banca di Credito Finanziario S.p.A.	Fixed	1/20/2021	2/3/2031	Diversified Banks	Italy	EUR	Annual	ВВВ	0.18	Accepted
UniCredit Bank GmbH	Fixed	1/21/2021	1/21/2036	Diversified Banks	Germany	EUR	Annual	BBB+	0.39	Accepted
UniCredit Bank GmbH	Fixed	3/10/2021	3/10/2031	Diversified Banks	Germany	EUR	Annual	BBB+	0.11	Accepted
UniCredit Bank GmbH	Fixed	5/21/2021	5/21/2029	Diversified Banks	Germany	EUR	Annual	BBB+	(0.01)	Accepted
UBS Group AG	Fixed	1/18/2021	1/18/2033	Diversified Capital Markets	Switzerland	EUR	Annual	A-	1.30	Accepted
UBS Group AG	Fixed	2/24/2021	2/24/2033	Diversified Capital Markets	Switzerland	EUR	Annual	A-	0.90	Accepted
The Goldman Sachs Group, Inc.	Fixed	3/19/2021	3/18/2033	Investment Banking and Brokerage	United States	EUR	Annual	BBB+	1.08	Accepted
Red Eléctrica Financiaciones, S.A.U.	Fixed	5/24/2021	5/24/2033	Specialized Finance	Spain	EUR	Annual	О	0.65	Different Credit Rating
Suomen Hypoteekkiyhdistys	Fixed	3/24/2021	3/24/2031	Commercial and Residential Mortgage Finance	Finland	EUR	Annual	ввв	0.16	Accepted
Vonovia Finance B.V.	Fixed	1/28/2021	1/28/2041	Specialized Finance	Netherlands	EUR	Annual	NR	1.57	Different Credit Rating
Deutsche Wohnen SE	Fixed	4/7/2021	4/7/2031	Real Estate Operating Companies	Germany	EUR	Annual	BBB+	0.51	Accepted
Coöperatieve Rabobank U.A.	Fixed	3/8/2021	3/8/2027	Specialized Finance	Netherlands	EUR	Annual	A+	(0.19)	Accepted
Coöperatieve Rabobank U.A.	Fixed	3/24/2021	3/24/2029	Specialized Finance	Netherlands	EUR	Annual	A+	0.19	Accepted
ING Bank N.V.	Fixed	3/25/2021	3/25/2031	Diversified Banks	Netherlands	EUR	Annual	A+	0.13	Accepted
ING Bank N.V.	Fixed	4/21/2021	4/21/2033	Diversified Banks	Netherlands	EUR	Annual	A+	0.29	Accepted

Issuer Name	Coupon Type	Offering Date	Maturity Date	Issuer Industry	Issuer Country	Security Currency	Payment Frequency	S&P Entity Credit Rating - Issuer Credit Rating	YTM as of June 1, 2021 (in %)	Accept / Reject Criteria
ING Bank N.V.	Fixed	4/21/2021	4/21/2036	Diversified Banks	Netherlands	EUR	Annual	A+	0.52	Accepted
ING Bank N.V.	Fixed	4/21/2021	4/21/2041	Diversified Banks	Netherlands	EUR	Annual	A+	0.74	Accepted
National Bank of Canada	Fixed	3/25/2021	3/25/2028	Diversified Banks	Canada	EUR	Annual	A	(0.05)	Accepted
Komercní banka, a.s.	Fixed	1/20/2021	1/20/2026	Diversified Banks	Czech Republic	EUR	Annual	A	(0.17)	Accepted
Société Générale SFH Société Anonyme	Fixed	2/5/2021	2/5/2031	Commercial and Residential Mortgage Finance	France	EUR	Annual	NR	0.13	Different Credit Rating
Westpac Securities NZ Limited (London branch)	Fixed	6/8/2021	6/8/2028	Specialized Finance	United Kingdom	EUR	Annual	NR	0.02	Different Credit Rating
ASB Finance Ltd. (London Branch)	Fixed	5/21/2021	5/21/2031	Specialized Finance	United Kingdom	EUR	Annual	NR	0.28	Different Credit Rating
United Overseas Bank Limited	Fixed	5/25/2021	5/25/2029	Diversified Banks	Singapore	EUR	Annual	AA-	0.10	Accepted
EnBW International Finance B.V.	Fixed	3/1/2021	3/1/2033	Specialized Finance	Netherlands	EUR	Annual	NR	0.69	Different Credit Rating
Canadian Imperial Bank of Commerce	Fixed	4/30/2021	4/30/2029	Diversified Banks	Canada	EUR	Annual	A+	0.04	Accepted
Imperial Brands Finance Netherlands B.V.	Fixed	3/18/2021	3/18/2033	Specialized Finance	Netherlands	EUR	Annual	BBB	1.86	Accepted
Royal Bank of Canada	Fixed	1/27/2021	1/27/2031	Diversified Banks	Canada	EUR	Annual	AA-	0.20	Accepted
CPPIB Capital Inc.	Fixed	1/18/2021	1/18/2041	Specialized Finance	Canada	EUR	Annual	NR	0.74	Different Credit Rating
Wirtschafts- und Infrastrukturbank Hessen	Fixed	1/22/2021	1/22/2036	Specialized Finance	Germany	EUR	Annual	AA+	0.58	Accepted
Wirtschafts- und Infrastrukturbank Hessen	Fixed	1/28/2021	1/28/2043	Specialized Finance	Germany	EUR	Annual	AA+	0.65	Accepted
Wirtschafts- und Infrastrukturbank Hessen	Fixed	1/28/2021	1/28/2042	Specialized Finance	Germany	EUR	Annual	AA+	0.63	Accepted
Argenta Spaarbank nv	Fixed	2/11/2021	2/11/2031	Diversified Banks	Belgium	EUR	Annual	A	0.13	Accepted
Fédération des caisses Desjardins du Québec	Fixed	4/8/2021	4/8/2026	Regional Banks	Canada	EUR	Annual	A+	(0.23)	Accepted
NIBC Bank N.V.	Fixed	4/21/2021	4/21/2031	Diversified Banks	Netherlands	EUR	Annual	BBB	0.23	Accepted