

IFRS 16 Leases

Discount Rates

25 March 2019



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Overview



Overview

Discount rates are used to determine the lessee's lease liability.

IFRS 16 provides for the use of two discount rates:

- ▶ Rate implicit in the lease, if readily determinable, otherwise,
- ▶ Incremental borrowing rate (IBR)

IFRS 16:27 “The lease payments shall be discounted using the interest rate implicit in the lease, if that rate can be readily determined. If that rate cannot be readily determined, the lessee shall use the lessee’s incremental borrowing rate.”

Defining the discount rates



Defining the discount rates

Rate implicit in the lease

The rate implicit in the lease causes:

- ▶ The present value of (a) the lease payments and (b) the unguaranteed residual value to equal
- ▶ The sum of (i) the fair value of the underlying asset and (ii) any initial direct costs of the lessor

The interest rate implicit in the lease is not necessarily the rate stated in the contract and reflects, among other things, the lessor's initial direct costs and estimates of residual value.

Defining the discount rates

Incremental borrowing rate ('IBR')

The rate an **entity** would



Pay to borrow



In a similar **economic** environment



With a similar **security**



Over a similar **term**



IBR is:

1. Specific to **each** entity
2. Specific to the **jurisdiction** in which the entity operates

Lessee considers borrowings:

1. With a similar term
2. For a similar security

*To the right-of-use asset, **not** the underlying asset*

Transition approach



Transition approach

1. Fully retrospective

- Determine IBR as at the date of commencement of each lease
- IBR for full term of the lease

2. Modified retrospective

- Determine IBR for existing leases as at date of initial application (e.g. 1 January 2019)
- IBR for remaining term of the lease

Determining the IBR and worked examples



IBR composition

Maximize the use of observable inputs

Base Rate Component

- Risk-free rate:
 - Interbank borrowing rate
 - Gilt rates
- Reflective of economic environment
- Aligned to appropriate tenor



Financing Component

- Borrower specific considerations:
 - Credit rating
 - Industry in which it operates
 - Parental guarantees/letters of comfort
- Aligned to appropriate tenor



Security Component

- Generally only relate to:
 - Property
 - Land
- Aligned to appropriate tenor

Security component

Existence of security **reduces** the IBR

Appropriate for longer term leases (e.g. Property/land leases extending beyond +/-75 years)

Lack of observable data and subjectivity related to the security component, adjustments have not been recommended

Base rate component

Risk-free rate – UK lease



Base rate component

Risk-free rate – German lease



Financing component

Approaches

Potential sources:

1. Entity's listed CDS or close proxy's listed CDS
2. Indicative spread using borrower's credit rating
 - Bond yield curves
 - Quotes from bank counterparties

Financing component – approach 1

Entity's listed CDS or close proxy's listed CDS

- ▶ Factors to consider
 - ▶ Guarantees or letters of comfort from parent
 - ▶ Level of subordination of the leasing entity to the Group
- ▶ For entities not covered by parental guarantees:
 - ▶ Group CDS needs to be adjusted to account for the additional credit risk of the subsidiary
 - ▶ This adjustment is very subjective due to a lack of observable inputs
 - ▶ Recommendation is to follow Approach 2 instead

Financing component – approach 1 (...continued)

Listed CDS



Financing component – approach 1 (...continued)

Discount rate matrix – UK lease

Date	Tenor	Base Rate (GBP Sovereign Curve)	Financing Component (CDS)	Discount Rate (%)
		A	B	A + B = C
01/01/2019	1Y	0.76	0.15	0.91
01/01/2020	2Y	0.74	0.20	0.95
01/01/2021	3Y	0.74	0.27	1.00
01/01/2022	4Y	0.80	0.38	1.18
01/01/2023	5Y	0.90	0.49	1.39
01/01/2024	6Y	0.95	0.63	1.58
01/01/2025	7Y	1.00	0.76	1.76
01/01/2026	8Y	1.07	0.83	1.90
01/01/2027	9Y	1.17	0.90	2.08
01/01/2028	10Y	1.28	0.97	2.25

Financing component – approach 1 (...continued)

Discount rate matrix – German lease

Date	Tenor	Base Rate (DE Sovereign Curve)	Capped Base Rate	Financing Component (CDS)	Discount Rate (%)
		A	A* capped at zero	B	A* + B
01/01/2019	1Y	-0.65	0.00	0.15	0.15
01/01/2020	2Y	-0.62	0.00	0.20	0.20
01/01/2021	3Y	-0.58	0.00	0.27	0.27
01/01/2022	4Y	-0.46	0.00	0.38	0.38
01/01/2023	5Y	-0.32	0.00	0.49	0.49
01/01/2024	6Y	-0.23	0.00	0.63	0.63
01/01/2025	7Y	-0.12	0.00	0.76	0.76
01/01/2026	8Y	0.00	0.00	0.83	0.83
01/01/2027	9Y	0.11	0.11	0.90	1.01
01/01/2028	10Y	0.24	0.24	0.97	1.21

Financing component – approach 2

Indicative spread using borrower's credit rating

Determining the appropriate **borrower (entity) specific** charge:

1. Consider entity ultimately responsible for lease payments
2. Use borrower **specific credit rating**
 - Readily available
 - Key financial metrics to assign credit rating per entity
3. Apply an appropriate spread
 - Obtain bond yield curve aligned to:
 - Industry
 - Region
 - Credit rating
 - Remove the risk-free rate component
 - Residual is the indicative spread

Financing component – approach 2 (...continued)

Credit rating

Unlisted

91) Company Tree Ratings ▾ 92) Alert Page 1/1 Credit Rating Profile

1) Bloomberg Default Risk | DRSK »

Moody's

2) Outlook	STABLE
3) Issuer Rating	Baa3
4) Long Term Rating	Baa3
5) LT Corp Family Rating	WR
6) Senior Unsecured Debt	Baa3
7) Probability of Default	WR

Standard & Poor's ⓘ

9) Outlook	STABLE
10) LT Foreign Issuer Credit	BBB-
11) LT Local Issuer Credit	BBB-

Fitch

12) Outlook	STABLE
13) LT Issuer Default Rating	BBB-

Australia 61 2 9777 8600 Brazil 5511 2395 9000 Europe 44 20 7330 7500 Germany 49 69 9204 1210 Hong Kong 852 2977 6000
 Japan 81 3 3201 8900 Singapore 65 6212 1000 U.S. 1 212 318 2000 Copyright 2018 Bloomberg Finance L.P.
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Financing component – approach 2 (...continued)

Bond yield curves

EUR Europe Composite BBB+, BBB Index GC Related Functions Menu Message

Base Curve Selected: GBP Europe Composite BBB+, BBB, BBB- BV...

EUR Europe Composite BBB Actions 98) Chart Export Settings Graph Curves

X-Axis Tenor Currency None PCS BVAL

Specific 01/01/19 Relative Last 1D 1W 1M Modify

Curves & Relative Value

Values and Members Values Members Constituents

	Tenor	BS166 Mid Yld	EUR Europe Composite BBB+, BBB, BBB- BVAL Yield Curve	12/31/18
11)	3M			-0.128
12)	6M			-0.011
13)	1Y			0.048
14)	2Y			0.234
15)	3Y			0.460
16)	4Y			0.712
17)	5Y			0.962
18)	7Y			1.408
19)	8Y			1.593
20)	9Y			1.752
21)	10Y			1.892
22)	15Y			2.338
23)	20Y			2.535
24)	25Y			2.588
25)	30Y			2.615

Plot Curves

- <Add Curve> Browse | CRVF »
- GBP Europe Composite BBB+, B...
- + Add Field
- EUR Europe Composite BBB+, BB...
- Mid Yld
- + Add Field

Base Curve BS166 Mid Yld

- Show Constituents on Base Curve
- Recent Curves
 - + EUR German Sovereign Curve
 - + ZAR South African Sovereign Curve
 - Curves related to EUR Europe Compos...

Bond Spread to Curve

- <Add Security>

Plot New Issues / Points

Interpolate Curves

Suggested Functions

HP Analyze an index's historical levels

CRV Construct a custom fixed income curve

Financing component – approach 2 (...continued)

Risk-free rate in bond yield



Financing component – approach 2 (...continued)

Discount rate matrix – UK lease

Date	Tenor	Base Rate (GBP Sovereign Curve)	EUR Composite Rate (BBB+, BBB, BBB-)	6M EUR Libor	Risk Premium (Indicative Spread)	Discount Rate (%)
		A	B	C	D = B – C	A + D
01/01/2020	1Y	0.76	0.05	-0.22	0.27	1.03
01/01/2021	2Y	0.74	0.23	-0.19	0.42	1.16
01/01/2022	3Y	0.74	0.46	-0.12	0.58	1.31
01/01/2023	4Y	0.80	0.71	-0.03	0.75	1.54
01/01/2024	5Y	0.90	0.96	0.05	0.91	1.81
01/01/2025	6Y	0.95	1.19	0.15	1.04	1.99
01/01/2026	7Y	1.00	1.41	0.24	1.17	2.16
01/01/2027	8Y	1.07	1.59	0.34	1.25	2.32
01/01/2028	9Y	1.17	1.75	0.44	1.31	2.48
01/01/2029	10Y	1.28	1.89	0.54	1.36	2.63

Financing component – approach 2 (...continued)

Discount rate matrix – German lease

Date	Tenor	Base Rate (DE Sovereign Curve)	Capped Base Rate	EUR Composite Rate (BBB+, BBB, BBB-)	6M EUR Libor	Risk Premium	Discount Rate (%)
		A	A* capped at zero	B	C	D = B – C	A* + D
01/01/2020	1Y	-0.65	0.00	0.05	-0.22	0.27	0.27
01/01/2021	2Y	-0.62	0.00	0.23	-0.19	0.42	0.42
01/01/2022	3Y	-0.58	0.00	0.46	-0.12	0.58	0.58
01/01/2023	4Y	-0.46	0.00	0.71	-0.03	0.75	0.75
01/01/2024	5Y	-0.32	0.00	0.96	0.05	0.91	0.91
01/01/2025	6Y	-0.23	0.00	1.19	0.15	1.04	1.04
01/01/2026	7Y	-0.12	0.00	1.41	0.24	1.17	1.17
01/01/2027	8Y	0.00	0.00	1.59	0.34	1.25	1.25
01/01/2028	9Y	0.11	0.11	1.75	0.44	1.31	1.42
01/01/2029	10Y	0.24	0.24	1.89	0.54	1.36	1.60

Disclaimer

Disclaimer: this presentation is provided for general guidance and informational purposes, to assist in understanding the issues related to discount rates under IFRS 16. This presentation should not be relied upon to determine the discount rates in any particular case.

Questions



Thank you

FAAS Corporate Treasury, UKI

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