



Deutsche Bank Global Markets Ex-Ante Cost Disclosure 2018

This document provides you with key information about Corporate Investment Bank Services. It is not marketing material. The purpose of this document is to break down and illustrate the Costs and Charges associated with each type of service. This document provides examples of particular Products and services and the Costs and Charges associated with them. The Costs and Charges figures provided in this document are illustrative of the Costs and Charges associated with particular Products and services, but may not reflect the Costs and Charges associated with any actual transaction. If you have any questions in relation to the Costs and Charges associated with any particular Product or service, please raise these with your usual Deutsche Bank Representative. We will provide to you Annual information in relation to the Costs and Charges associated with the Services and Products actually provided to you.

What are the Costs?

Deutsche Bank charges Fees or Commission for the Services provided by it in relation to the relevant Products.

This disclosure provides an illustration of the Costs and Charges payable in connection with the provision of Global Prime Finance services.

Charges for Global Prime Finance services are calculated on an accruals basis by reference to a spread above an agreed benchmark. The relevant benchmark and spread for each market is agreed with you in a separate pricing letter.

The Costs and Charges figures provided in the tables below are illustrative of the Costs and Charges associated with Deutsche Bank's Global Prime Finance services. They are not intended to reflect the Costs and Charges associated with the Services actually provided to any particular Client.

If you have any questions in relation to the Costs and Charges associated with Global Prime Finance, please raise these with your usual Deutsche Bank Representative.



Global Prime Finance Services

Global Prime Finance Services offered by Deutsche Bank comprise:

- Cash financing of long securities positions
- Securities lending to facilitate short securities positions
- Synthetic equity financing by means of equity swaps

Clients' exposures are secured against cash and securities collateral held in custody by Deutsche Bank and cross margining is available across different types of exposure.

Costs and Charges Illustrations

The illustrations below are based on interest applied over a 365-day year, and show the daily accrual of Costs and Charges.

For the purpose of showing aggregated amounts in the illustrations, amounts in currencies other than US dollars have been converted into US dollars as at 1st November 2017 [using the WM/ Reuters closing spot rate].

Benchmark rates are shown as at 1st November 2017 [Using Bloomberg Ref Rates].

The illustrations below do not show any charges for:

- (a) Portfolio trading or other sales/ trading services provided by Deutsche Bank; or
- (b) General settlement and clearing services provided by Deutsche Bank.

Illustrations for these services are provided separately.

The Costs and Charges figures provided in the tables below are illustrative of the Costs and Charges associated with Deutsche Bank's Global Prime Finance services.



Debit and Credit Balances

Clients' can deposit and borrow funds to facilitate Investments. A 'Debit' balance for a client represents a loaned amount and a 'Credit' balance represents the clients' deposits.

- Debit and Credit financing benchmark and spreads are pre-agreed per currency.
- The relevant rates are then applied on an accrual basis to Debit / Credit balances.
- 'Debits' represent the rate at which the client pays Deutsche Bank and 'Credits' represent the rate Deutsche Bank pays the client on any cash deposits.

Example: Benchmarks and spreads for debit and credit balances per currency

CCY	Debits	Credits
EUR	1W LIBOR + 25	O/N LIBID - 10
GBP	1W LIBOR +20	O/N LIBID - 15
USD	OBFR + 10	OBFR - 20

Example: Assumed Cash Notional: 1,000,000 and 10% Margin

CCY	Debits (Monetary Value)	Credits (Monetary Value)	Debits (USD)	Credits (USD)
EUR	-3.95	-18.08	-4.58	-20.98
GBP	14.30	-1.37	19.02	-1.82
USD	31.07	26.30	31.07	26.30
		Total Cost USD (Note 6)	45.51	3.50
		*Total Cost %	0.0014	0.0001



Shorts

Securities or Stock Lending refers to the lending of securities by one party to another. The terms of the Loan will be governed by a 'Securities Lending Agreement', which requires that the borrower provide the Lender with collateral, in the form of Cash or Non-Cash Securities, of value equal to or greater than the loaned securities plus agreed upon margin.

- Pre agreed general collateral (GC) fees are agreed per market where the client is going short.
- Benchmark and spreads (where applicable) are agreed per market on the cash proceeds of any short sale undertaken by the client.
- 'Proceeds' represent the rate Deutsche Bank pays the client on any short sale proceeds.
- 'GC Fee' is the fee Deutsche Bank receives where the client is shorting a security.
- Rates and fees are applied on an accrual basis.

Example: Benchmarks and Spreads for cash proceeds and borrowing fees per currency

Market	CCY	Proceeds (BPS)	GC Fee (BPS) (Note 2)	Non-DB Fee (BPS) (Note 3)
Austria	EUR	O/N LIBID	25	5
United Kingdom	GBP	O/N LIBID	25	5
United States	USD	OBFR - 5	-	5

Example: Cash Notional of 1,000,000

Market	CCY	Proceeds (Monetary Value)	GC Fee (Note 2) (Monetary Value)	Non-DB Fee (USD) (Note 3)	Proceeds (USD)	GC Fee (USD)
Austria	EUR	-15.34	7	-	-17.80	7.95
United Kingdom	GBP	2.74	7	-	3.64	9.11
United States	USD	30.41	-	1	30.41	-
Total Cost (Note 6)				1	16.26	17.05
*Total Cost %				0.00003%	0.0005%	0.0005%



Other Fees

- Ticket fees [will/ may] be charged on trades executed with brokers other than Deutsche Bank. The fee is charged per ticket.
- Ticket fees cover any settlement and clearing costs associated with cash execution.
- Custody charges may also be applied if this has been agreed with the client.
- Other fees may be agreed with clients in particular cases.

Market	Fee Per Ticket (USD)	Custody Fee (BPS)
Switzerland	25	0
United Kingdom	25	0
United States	25	0

Example: The client trades three separate Swiss tickets

Market	Tickets	Ticket Fee (USD)	Custody Fee (BPS)
Switzerland	3	75	-
United Kingdom	-	-	-
United States	-	-	-
Total Cost	-	75	-



Equity Swaps

An equity swap is a derivative contract where a set of future Cash flows are exchanged between two counterparties at predetermined future payment intervals. Most equity swaps involve a notional principal and a specified duration. The two cash flows are referred to as 'legs' of the swap:

- One of the legs is pegged to a floating rate such as LIBOR. This leg is commonly referred to as the floating leg
- The other leg of the swap is based on the performance of either a share of stock or a stock market Index. This leg is commonly referred to as the equity leg

The Costs and Charges figures provided in the tables below are illustrative of the Costs and Charges associated with particular products but may not reflect the Costs and Charges associated with any actual transaction.

Equity Swaps

- Long and Short financing benchmark and spreads are pre-agreed per market.
- The relevant rates are then applied to the notional principal on an accrual basis, depending on whether the client is Long or Short in a particular market.
- The 'long' rate is the rate the client is charged on long swap positions.
- 'GC shorts' is the rate the client receives on short swaps positions.

Example: Benchmarks and spreads for long and short positions per currency

Market	CCY	Longs	GC Shorts (Note 2)
Austria	CHF	1M LIBOR + 25	1M LIBOR – 10
United Kingdom	GBP	1M LIBOR + 30	1M LIBOR – 5
United States	USD	1M LIBOR + 25	OBFR – 30

Example: An Equity Swap Notional of 2,000,000

Market	CCY	Longs (Monetary Value)	GC Shorts (Note 2) (Monetary Value)	Longs (USD)	GC Shorts (USD)
Austria	EUR	-29	-48	-33.69	-55.93
United Kingdom	GBP	39	20	52.47	26.96
United States	USD	82	47	81.64	47.12
Total Cost (Note 6)				100.43	18.15
*Total Cost %				0.0014%	0.0003%



Notes

- 1. Unless otherwise indicated, all Financing Spreads and Fees in the illustrations above are expressed in Basis Points (bps). All Benchmarks reset Daily and Debit/Credit Balances are calculated by Currency on a Gross Basis (i.e. excluding short sale proceeds).**
- 2. “GC” refers to the General Collateral rate. Hard-To-Borrow Rates are as negotiated.**
- 3. Non-DB Fee for shorts is the charge on Securities Borrowed from other Brokers and given up or “Put-through” to Deutsche Bank. Put-through Borrowings must not exceed 15% of the total of Stocks borrowed from Deutsche Bank. Deutsche Bank retains the right to accept or decline such Trades.**
- 4. Ticket fees will only be charged on trades executed with brokers other than Deutsche Bank.**
- 5. Currency conversion rates shall be determined by Deutsche Bank in good faith in a commercially reasonable manner using the methodology agreed in the relevant Client agreement.**
- 6. Deutsche Bank will assess its Costs and Charges on an ongoing basis. Deutsche Bank reserves the right to adjust pricing and, if necessary, to introduce new Fees based on additional services or added features. Deutsche Bank will promptly inform Clients of proposed Pricing changes.**
- 7. Without prejudice to Note 6 above, when periodically assessing the pricing of Positions within the Client’s Portfolio, factors Deutsche Bank will consider include, but are not limited to:**
 - (a) The Position size in relation to the percentage of the Free Float of the underlying Security;**
 - (b) The Position size in relation to the overall Market Capitalisation of the relevant underlying Security;**
 - (c) The Position size in relation to the rolling 3 month Average Daily Volume of the underlying Security; and**
 - (d) The Main Index in which the relevant underlying Security is a constituent.**



Illustrative Rates Used (as at 1st Nov 2017)

Benchmark	CCY	Ticker	Rate (%)
1W LIBOR	EUR	EE0001W	0.40914
1W LIBOR	GBP	BP0001W	0.38175
OBFR	USD	OBFR01	1.16
O/N LIBID	EUR	EE000/N	-0.55686
O/N LIBID	GBP	EE000/N	0.09905
1M LIBOR	CHF	SF0001M	-0.78455
1M LIBOR	GBP	BP0001M	0.42216
1M LIBOR	USD	US0001M	1.24333

Illustrative Rates Used (as at 1st Nov 2017)

CCY	USD (Rate)
EUR	1.16
GBP	1.33
USD	1