

外汇类

FX_Swap_Generic

Revision: 1

外汇掉期，指定 Near Leg 的日期、汇率和 BaseCurrency 的名义本金交易额度，以及 Far Leg 的日期、汇率和 BaseCurrency 的名义本金交易额度，计算价格、Delta、Pips Delta，计算本币利率和外币利率的 DV01，计算本币利率和外币利率对应 Far Leg 期限上的 Zero Rate（Day-Count 使用 30/360 惯例）。

交易参数列表（名称、举例、注释）

| | | |
|----------------------|--|--|
| ValuationDate | 18-Jun-19 | The date when valuation performs. |
| BaseCurrency | USD | The base currency name. |
| Currency | CNY | The currency name. |
| NearLegDate | 18-Jun-19 | The date of near leg forward exchange. |
| NearLegForwardRate | 7 | The forward price of near leg |
| NearLegNotional | 1000000 | The base currency <u>notional</u> of near leg. |
| FarLegDate | 8-Jan-20 | The date of far leg forward exchange. |
| FarLegForwardRate | 7.2 | The forward price of far leg |
| FarLegNotional | 1000000 | The base currency <u>notional</u> of far leg |
| BaseCcyDiscountCurve | CURVE_USD_IMPLIED_USDCNY#BLOOMBERG#MID | Module ID of the discount curve. |
| DiscountCurve | CURVE_CNY_REPO7D#BLOOMBERG#MID | Module ID of the base currency discount curve |
| FxSpot | FXSPOT_USD#BLOOMBERG#MID | Module ID of the <u>fx</u> spot matrix. |

实测案例（交易输入， csv 格式）：

ValuationDate,18-jun-2019

BaseCurrency,USD

Currency,CNY

NearLegDate,18-jun-2019

NearLegForwardRate,7

NearLegNotional,1000000

FarLegDate,08-jan-2020

FarLegForwardRate,7.2

FarLegNotional,1000000

BaseCcyDiscountCurve,CURVE_USD_IMPLIED_USDCNY#BLOOMBERG#MID

DiscountCurve,CURVE_CNY_REPO7D#BLOOMBERG#MID

FxSpot,FXSPOT_USD#BLOOMBERG#MID

实测案例（交易输出， csv 格式）：

```
2 Time calculate: 17.69ms
3 Price (CNY),-170948.250572291
4 Price (USD),-24763.624199254115
5 Spot Rate (CNY),6.9032
6 Market Quoted Forward Rate on Near Leg Date (CNY),6.9025
7 Market Quoted Forward Rate on Far Leg Date (CNY),6.92764747252747
8 Spot Delta (USD),-10743.2762470245
9 Forward Delta (USD),0.0
10 Futures Delta (USD),-14335.3797244679
11 Spot Delta of one-pips change (USD),-7.41554642950871
12 Forward Delta of one-pips change (USD),0.0
13 Futures Delta of one-pips change (USD),-9.89499585481394
14 USD_DV01 (CNY),98.5664620278403
15 CNY_DV01 (CNY),14.9063356928527
16 USD ZeroRate (%),0.01944450586137147
17 CNY ZeroRate (%),0.02599042310855792
18 Cash Flow:,
19 DATE FOREIGN PV FOREIGN ACTUAL DOMESTIC PV DOMESTIC ACTUAL SWAP PV SWAP ACTUAL
20 18-jun-2019 -6902500 -1000000 7000000 7000000 97500.0000000009 97500.0000000009
21 8-jan-2020 6828337.01541154 1000000 -7096785.26598383 -7200000 -268448.250572292 -272352.52747253
```