Exchange Rate Movements

1. Sterling opens at 1.5409 and closes at 1.5425.

Sell 1MM GBP at open.

Rate	GBP		USD
1.5409	−£1,000,000	→	+$1,540,900
1.5425	+£998,963	←	−$1,542,500
	−£1,037		−$1,600

You'd make a loss of − $1,600, or − £1,037 converted back to Sterling.

2. Dollar-yen opens at 124.05 and closes at 123.50

You sell 1MM USD at the open.

Rate	USD	JPY
124.05	−$1,000,000	+¥124,050,000
123.50	+$1,004,453	−¥123,500,000
	+$4,453	+¥550,000

You'd make a profit of ¥550,000, converted to $4,453.

3. USD/CHF opens at 1.5030 and closes at 1.5035.

You sell 10MM CHF at the open.

Rate	CHF	USD
1.5030	−10,000,000	+6,653,360
1.5035	+10,003,327	−6,651,147
	+3,327 CHF	+$2,213

You'd make a profit of $2,213, or 3,327 CHF converted.

Shortcut

Base currency gain/loss = % change × base amount (% change = pip change / closing rate).

Terms currency gain / loss = pip change × base amount

e.g. Sterling case, opening rate was 1.5409, closing rate 1.5425, a 16-pip change.

Base gain/loss = (1.5425 − 1.5409) / 1.5425 × 1MM = £1,037.

Terms gain / loss = (1.5425 − 1.5409) × 1MM = $1,600.

1. USD/JPY opens @ 124.11 and closes @ 123.80.

You buy 1MM dollar's worth of JPY at the open and sold on the close.

Base (USD) gain/loss = (123.80 − 124.11) / 123.80 × −1MM = +2,497 USD

Terms (JPY) gain/loss = (123.80 − 124.11) × −1MM = +310,000 JPY.

2. USD/CHF opens @ 1.500 and closes @ 1.5035.

You sell 1MM USD at the open and bought it back at the close.

Base = (1.5035 − 1.500) / 1.5035 × +1MM = −2,328 USD.

Terms = (1.5035 − 1.500) × +1MM = −3,500 CHF

Left Bid / Right Offer.

1. You receive 1,000,000 GBP payment, convert to USD @ 1.5457/61.

Trader buys base on LHS, sells on RHS

Base is GBP

You sell GBP, trader buys GBP @ 1.5457.

2. Need to buy AUD to make a large payment @ 0.5533/37

AUD is base

You need to buy AUD, sell USD

Trader sells base on RHS 0.5537.

3. You need to make a SEK payment @ 9.3854/9.3934

USD is base

You need to sell USD and buy SEK.

Trader buys base (USD) on LHS 9.3854

4. Need to convert JPY payment to USD @ 123.19/23.

Need to buy USD, sell JPY.

Trader sells USD (base) on RHS @ 123.23.

5.

Client wants to:	Current bank quote	Client deals at:	Competition quote:	Client deals at:
Buy 5 GBP vs USD	1.5471/73	1.5473	1.5472/75	1.5473
Sell 10 USD vs JPY	125.06/12	125.06	125.01/05	125.06
Sell 7 NOK vs USD	7.5946/78	7.5978	7.5950/80	7.5978
Sell 1 USD vs CAD	1.5626/32	1.5632	1.5620/25	1.5625
Sell 5 EUR vs SEK	9.1268/9.1318	9.1268	9.1260/9.1300	9.1268.

Rules:

- client buys base ⇒ pick lower RHS
- client sells base ⇒ pick higher LHS.

Cross Rates.

- if two currencies quoted against USD on same terms $\Rightarrow$

  divide the base currency into the terms currency of the cross currency pair.

- if on different terms $\Rightarrow$ multiply rates

e.g. USDCHF @ 1.5029
USDJPY @ 125.22 } same terms $\Rightarrow$ $\frac{125.22}{1.5029} = \underline{\underline{83.3189}}$

Find CHFJPY.

note CHF is base, so divide that rate into JPY

e.g. USDJPY @ 125.06
GBPUSD @ 1.5467 } different terms $\Rightarrow$ $125.06 \times 1.5467 = \underline{\underline{193.4303}}$.

Find GBPJPY.

1. EUR/SEK given EURUSD @ 0.9772
   USDSEK @ 9.3622 } diffrent terms $\Rightarrow$ $0.9772 \times 9.3622 = \underline{\underline{9.1487}}$

2. EURGBP given EURUSD @ 0.9772
   GBPUSD @ 1.5465 } Same terms $\Rightarrow$ $\frac{0.9772}{1.5465} = \underline{\underline{0.6318}}$.

3. AUDNZD given AUDUSD @ 0.5535
   NZDUSD @ 0.4841 } same terms $\Rightarrow$ $\frac{0.5535}{0.4841} = \underline{\underline{1.1433}}$

CROSS RATES BID-OFFER SAME TERMS.

Bid-side of cross : buy the base, sell the terms of the cross.

Offered-side of cross: sell the base, buy the terms of the cross.

USDJPY	125.06/09
USDCHF	1.5026/31

CHFJPY bid, you buy the CHF and sell JPY.

- Buy CHF, sell USD on RHS @ 1.5031
- Sell JPY, buy USD on LHS @ 125.06.
- Same terms, divide base of cross into terms of cross = 125.06/1.5031 = 83.2013

CHFJPY offer, you sell the base and buy the terms

- Sell CHF, buy USD on LHS @ 1.5026
- Buy JPY, sell USD on RHS @ 125.09
- Same terms, divide base of cross into terms of cross = 125.09/1.5026 = 83.2490

Quote is 83.2013/2490

CROSS RATES BID-OFFER DIFFERENT TERMS

EURUSD	0.9791 / 0.9796
USDCHF	1.4984 / 1.4991

EURCHF bid, buy the base and sell the terms

- Buy EUR (base), at bid 0.9791 (LHS)
- Sell CHF (terms), buy USD on LHS @ 1.4984
- Multiply two rates = 0.9791 × 1.4984 = 1.4671

EURCHF offer, sell the base and buy the terms

- Sell EUR, buy USD, at offer 0.9796 (sell base on RHS)
- Buy CHF, sell USD, at offered 1.4991 (sell base on RHS)
- Multiply two rates = 0.9796 × 1.4991 = 1.4685.

Quote is 1.4671/1.4685.