

BASE JUMPER



EXCHANGING FOREIGN CURRENCY IS AN ESSENTIAL PRACTICAL TASK, WHICH ALL TREASURERS NEED TO TACKLE WITH CONFIDENCE. DOUG WILLIAMSON SHARES A WINNING TECHNIQUE TO ENSURE YOU GET IT RIGHT EVERY TIME

FX is such an important part of a treasurer's responsibilities that it appears in most assessments for the ACT's qualifications.

Multiplying troubles

A recent Examiner's Report shows many candidates need to brush up their FX conversion skills.

The commonest error was to multiply by the exchange rate where division was required.

Examiner's Report, International Cash Management, October 2015

Back to basics

Exchanging one currency for another needs us to apply a quoted market price, known as the exchange rate. Sometimes we need to multiply by the rate. Sometimes we need to divide by it.

It all depends on how the rate has been quoted. And this won't always be the same.

Money for stuff

Pricing is easier when we're buying or selling physical stuff for money. We simply multiply the quantity by the money price per unit.

Let's say the oil price is \$50 per barrel, and we want to sell a million barrels. The money value for the exchange is simply:

$\$50 \text{ per barrel} \times 1 \text{ million barrels} = \50m

Why we multiplied

We multiply by commodity prices because of the way they're quoted. The commodity quote is a variable amount of money per fixed conventional unit of the commodity.

Oil prices are quoted in dollars per barrel. So, multiplying a number of barrels by dollars per barrel gives the dollar value for the exchange.

The oil is the basis, or the 'base' of the conventional oil-price quote.



Money for money

Currency dealing means exchanging money for money. Does simple multiplication work for currency deals? Sometimes, but not all the time. It depends which way round the rate is quoted.

For FX, we need to ask two separate questions:

- (i) Which is the base currency in the given quote?
- (ii) Are we converting from the base, or to the base?

Which is the base currency?

The base currency won't always be the same. For example, the rate between dollars and euros can be quoted as either:

- (i) A variable number of dollars per €1; or
- (ii) A variable number of euros per \$1.

€/\$1.25

The first-mentioned currency is conventionally the base. That's euros in this case. The euro is the currency that there's one fixed unit of.

This is quoted in the market as EUR/USD 1.25, meaning the base currency euro would be exchanged for dollars at a rate of €1 to \$1.25.

Best of order

Note the ordering of the currencies in the exchange-rate quote. We saw that the first-mentioned currency is the base.

This is a different convention from commodity prices, such as dollars per barrel = 50. For a commodity, it's the second-mentioned item that is the base. In our example, this is the barrel of oil.

Currencies are conventionally quoted the other way round. This can make FX tricky.

\$/€0.80

Taking another example: which is the base currency in the quote USD/EUR 0.80?

Exchange deal base = ?



Again, the base currency is the first mentioned. In this case it's the dollar. So the quote USD/EUR 0.80 means \$1 would be exchanged for €0.80.

Interestingly, $\$/\text{€}0.80$ is just an alternative way of expressing our earlier quote $\text{€}/\text{\$}1.25$. The base has jumped from euro to dollar, but it won't make any difference to the results. So long as we apply either of the quotes correctly, they will each produce exactly the same results, subject to any minor rounding differences. Base jumping is also an exciting extreme sport. But let's stay with FX just now.

Getting it right

Having identified the base currency in our exchange rate, we need to apply it the right way round. One reliable method is to follow the rule in the following:

Base conversion rule

When converting:

- From the base, multiply.
- To the base, divide.

From the base

To convert from the base currency, we multiply by the exchange rate. Just like multiplying to apply a commodity price. Indeed, our base currency can be viewed as the commodity in the quote.

Say we need to convert €8m into dollars, by applying the exchange rate EUR/USD 1.25.

The euro is the base currency. We're converting from the base.

So multiply:

$$\begin{aligned} \text{€}8\text{m} \times \text{\$}1.25 \text{ per euro} \\ = \text{\$}10\text{m} \end{aligned}$$

To the base

The recent exam question needed a conversion to the base currency. This caused difficulty for many candidates.

Simplifying the numbers in the exam, candidates needed to convert €8m into dollars, using an exchange rate of USD/EUR 0.80.

Try this example now, before reading the rest of the article.

Work it out

The base currency in the quote USD/EUR 0.80 is the dollar. The quote means $\text{\$}1 = \text{€}0.80$.

We're converting from €8m to dollars. So we're converting to the base currency dollars this time. So, we'll divide by the exchange rate of 0.80:

$$\begin{aligned} \text{€}8\text{m}/\text{€}0.80 \text{ per dollar} \\ = \text{\$}10\text{m} \end{aligned}$$

Congratulations if you got it right! If you didn't, don't be discouraged.

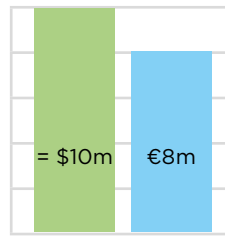
Perfect proportions

If we tabulate our results, we see that each currency stays beautifully in proportion with the other.

	\$	€
FX rate	1	0.80
Amounts	10m	8m

There are more dollars than euros in the rate $\text{\$}1/\text{€}0.80$. There are also more dollars than euros in the final money amounts, $\text{\$}10\text{m}$ exchanged for $\text{€}8\text{m}$.

Converted €8m to dollars



Why did candidates go wrong?

Possible reasons include:

- Not being familiar with the currency pair;
- Being more used to seeing it quoted the other way round, with euros as the base;
- Exchange rates of less than 1 are trickier; and
- Not practising enough.

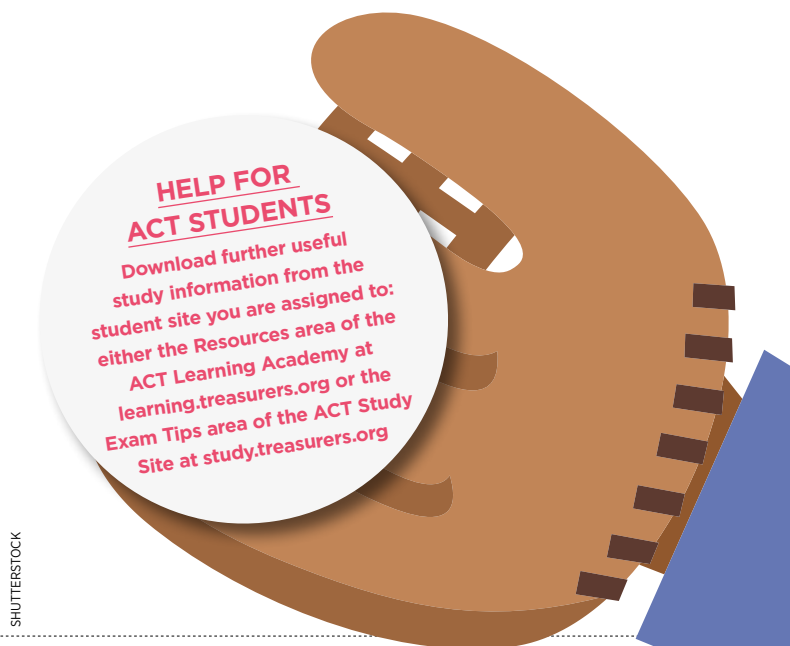
Don't be disheartened

Listen to this excellent advice from a successful student, George Worden:

1. Don't be disheartened if you get the wrong answers to start with.
2. First focus on getting right answers.
3. Once you're getting things right, only then work on speeding up.
4. Practice makes perfect.

Reap the rewards

If you follow Worden's advice you'll master FX and treasury, which are just as rewarding as base jumping. And less dangerous.



SHUTTERSTOCK

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