

Topic 1(h) Exchanging currencies

Exchange rates

An **exchange rate** is the price of one currency in terms of another. For example: £1 = \$2.03. This means that for every pound that you change into US dollars, you get \$2.03.

Exchange rates between currencies are changing all the time. There are markets in currencies, and every day thousands of people sell one currency and buy another. The exchange rate between two currencies depends on how many people are buying and selling them – i.e. on demand and supply. Popular currencies have high exchange rates and less popular ones have low exchange rates.

When you go to a bank to sell pounds and buy a foreign currency, the bank tells you the current exchange rate; this might be a bit more or a bit less than it was the day before or than it will be tomorrow. You multiply the number of pounds you have exchanged by the exchange rate – this is the price of buying the currency.



Converting pounds into other currencies and other currencies into pounds

When you go abroad and change your pounds into the local currency, you have to calculate how much of that currency you should get.

Calculations

1. Suppose you change £50 into euros when the price of the euro is £1 = €1.44. Multiply £50 by 1.44 and this will give you the number of euros you will receive.

Answer: _____

2. You have €72 in your pocket and off you go to the shops. You want to buy some beach sandals and you see a pair you like that costs €7. You want to know how much this is in pounds. Now you need to do the calculation in reverse and divide €7 by 1.44.

Answer: _____



How did you do? The answers to the calculations are:

Answer 1: $£50 \times 1.44 = €72$

Answer 2: $€7 \div 1.44 = £4.86$

Paying commission

Banks charge a **commission** when you change currencies (both buying and selling back) and this reduces the amount of money you get. In the above example, where we changed £50 into euros, the bank might take 2% commission on the transaction. This would be 2% of your €72 ie €1.44 so you will only get €70.56. When you are abroad, be careful of **'Bureau de Change'** kiosks, because they usually charge a high commission and have a high minimum fee.

Using foreign currencies abroad

It feels strange the first time you use a foreign currency in another country. You don't recognise the notes and coins and, when you go into a shop, you find yourself fumbling through the money and looking at it very hard to choose the right notes and coins so you give the right amount. The shopkeeper might smile and help you by pointing to the ones you need to give.



Knowing the value of a currency



But it isn't just the appearance of the currency that's different, it's also the value. The unit of another currency won't be the same as the pound that you are used to. The pound is a larger unit than units of most other currencies so you will find that prices in other countries are big numbers. For example, at the time of writing, there are 1.44 euros to the pound, so for every pound you sell, you get 1 euro and 44 cents. This sounds as if you're making a profit but you're not because the prices of goods and services in the eurozone are in euros, and they are also higher. So if you buy an ice-cream that might have cost £1 in Britain, it will cost €1.44 in France or Spain. A currency is like a language – people who use it every day know it well and you have to learn it too when you visit another country.

Working out the value in pounds

At first, you find yourself converting the money back into pounds. In a shop you might see a pair of shoes you like that cost €50. This sounds very expensive, until you remember that this is not the same as £50. So you get out your calculator and you find that €50 is £34.72. After a while, you start getting used to the foreign currency – in other words, you begin to talk the money language.



Converting some currencies back into pounds can be a complicated calculation, depending on the exchange rate, but it's useful to work out a short cut for yourself. For example, £1 is equal to 2.20 Australian dollars so, if you are in Australia, you can make it easy by calling it 2 dollars. Then you can just multiply every local price by 2, add a little bit and there it is in pounds. This is not exactly correct but it's near enough to give yourself a good idea.



Currency chart

Here are the values of some currencies expressed in £ in July 2007.



| | |
|----------------------------------|-------------------------------|
| £1 = 1.44 euro | €1 = £ _____ |
| £1 = 1.85 US dollars | \$1 = £ _____ |
| £1 = 2.20 Australian dollars | 1 Australian dollar = £ _____ |
| £1 = 8.17 Israeli shekels | 1 Israeli shekel = £ _____ |
| £1 = 114.4 Pakistani rupees | 1 Pakistani rupee = £ _____ |
| £1 = 242.19 Japanese yen | 1 ¥ (Yen) = £ _____ |
| £1 = 17,385.52 Indonesian rupiah | 1 Indonesian rupiah = £ _____ |

Use your calculator to find out how many pounds and pence there are to 1 unit of each currency and write your answers in the spaces above.

How did you do? Answers to calculations:

- €1 = £0.69 ($1 \div 1.44$)
- \$1 = £0.54 ($1 \div 1.85$)
- 1 Australian dollar = £0.45 ($1 \div 2.20$)
- 1 Israeli shekel = £0.12 ($1 \div 8.17$)
- 1 Pakistani rupee = £0.0087 ($1 \div 114.4$) (This is less than 1 penny).
- 1 ¥ (Yen) = £0.0041 (This is about half a penny.)
- 1 Indonesian rupiah = £0.00005 (This is a small fraction of a penny.)

Notice how all these values are completely different; they are presented in order of size of unit, so one euro is smaller than one pound but much bigger than the Japanese yen. And one Indonesian rupiah is absolutely tiny!

You can use this table to work out exchange rates between any two of the currencies given because you know how much each is worth against the pound.

For example, to find out the euro value of 1 US dollar:

$\$1.85 = \text{€}1.44$ so $\$1$ in euros = $1.44 \div 1.85 = \text{€}0.78$.

To do it the other way round and find out the dollar value of 1 euro:

$\text{€}1$ in dollars = $1.85 \div 1.44 = \$1.28$

Purchasing power parity

Purchasing power parity (PPP) is a different exchange rate that works out how much things cost in relation to another currency. Some goods and services are more expensive in other countries and some are cheaper. You take a standard product that you might find in any country and find out how much this costs in different currencies.



For example, if you are in the USA and buy an 80 GB Apple iPod Video, it will cost around \$350.

If you buy the same iPod in the UK it will cost around **£215**.

To compare the prices we need to convert the \$350 US dollars into pounds (using an exchange rate of \$1.85 for £1):
 $\$350 \div 1.85 = \text{£}189.19$

So it is cheaper to buy an iPod in the US.

Prices vary all over the world. One of the standard products that is often used to compare prices in different countries is a Big Mac – you can buy these all over the

world, so it is a good product to compare. There is a **'Big Mac Index'** that compares the price of the burger all over the world.

Changes in exchange rates

Just to make things more difficult, the values of different currencies are changing all the time. Currencies are like fruit in a supermarket – their prices change day by day according to changes in **demand and supply**. If more people want to buy a currency and there is less of it around, its price will be higher. If fewer people want to buy the currency and there is lots of it around, then the price is cheaper.

So when you buy a currency, you need to know what its value is on the day you buy it. This might be slightly different from the value the day before or the day after.



Case study

William has saved £100 for his holiday in Luxembourg and he needs to buy euros. He looks in the newspaper and sees that the exchange rate is $£1 = €1.40$. He calculates that he will get €140 for his £100.

A few days later he goes to the post office to change his pounds into euros and he is given €150.

He asks the clerk if she has made a mistake and she tells him that the pound has gone up against the euro

and that the price is now $£1 = €1.50$. He has gained €10. At the end of his holiday, William has €15 left and when he gets back to Britain, he wants to change them back into pounds. He expects to get £10 for them ($€15 \div 1.50$) but, when he goes to the post office, the clerk only gives him £9.37. He thinks she has made a mistake but she tells him that the pound has gone up again to $£1 = €1.60$.



In this example, the pound went up twice against the euro. William gained when he was holding pounds and buying euros but he lost when he was holding euros and buying pounds.



Review questions

1. $£1 = 13.63$ Hong Kong dollars. How many pence is 1 HK dollar worth?
2. What two factors determine the price of one currency in terms of another?
3. If a lot of people are buying pounds and selling US dollars, what do you think will happen to the price of the pound against the US dollar?
4. Go to the currency chart on page 3 and calculate how many Israeli shekels there are in 1 Australian dollar.
5. Tina finds that a bottle of Coca-Cola costs £1 in London, 12 peso in Mexico and 15 kroner in Sweden. She concludes that it is cheapest to buy a bottle of Coca-Cola in Mexico. What economic idea is she using?

Learning activities



Internet

1. Go to a financial website (try the BBC news website www.bbc.co.uk or look in the financial pages of a newspaper like the *Financial Times*). Make a list of the currencies named in the currency chart on page 3 and find out the values of these currencies on the day you are reading this. How different are they from their values in July 2007?
2. Go to the website of the *Economist* magazine (www.economist.com) and find the most up-to-date Big Mac Index. Find out where you can buy the cheapest Big Mac in the world.



Group

1. Imagine that a group of six of you have won a round-the-world trip that will take you to six countries. Choose the countries you want to go to in the order you will visit them (use a map of the world to help you). Now find out the names and values of the currencies used in those countries. Your prize includes £100 worth of spending money per person in each place. Draw a currency chart of your own showing how much this is when expressed in terms of the local currencies.
2. Discuss and make notes about what is wrong with the following:
 - a. Misa is Japanese and she has just started working in an office in Tokyo. She earns 2,338,440 yen every year. She has a friend in England called Keith and she writes him a letter, telling him about her new job. Keith is very impressed with her large salary and writes back, asking her to marry him. Is Keith being a bit hasty?
 - b. One pound is bigger than one dollar so pounds must be better than dollars.
 - c. People use Big Macs as an international currency.
 - d. The government of each country decides on the value of its currency.



Individual

1. Andrew is going to the USA on holiday. He has saved £80. How many dollars will he get when he changes his money into the American currency? (Use £1 = \$2.03 as the exchange rate.)

Answer: _____

2. Andrew has now been on holiday and has come back with \$5. How many pounds will he get when he changes the dollars back into sterling? (Use £1 = \$2.03 as the exchange rate again.)

Answer: _____



Key points for Exchanging currencies

- An exchange rate is the price of one currency in terms of another.
- Because of demand and supply in the markets, the values of currencies are changing all the time.
- When you go abroad, you have to exchange your pounds for the foreign currency so you have to find out the exchange rate.
- Banks charge commission for changing currencies.
- Different currencies have different values and their units are different. In countries where the currency is a small unit, prices are high numbers; and where the unit is bigger, the prices sound smaller.
- Prices of the same product can vary all over the world.
- Purchasing power parity means that you take a standard product that is sold all over the world and you find out the price of this product in different countries. This gives you a guide to the value of the currencies of the countries.