

FIN 303 Hybrid - Professor Dow

Finance in a Global Context
Part I

Finance in a global context

- Most basic principles are the same
- Differences:
 - Different intuitions, laws and cultures
 - Different currencies
- We have an advanced course in international finance

For the most part, the basic principles you'll learn in this class apply to both domestic and international businesses. However, two important differences you'll find when doing business internationally are that other countries may have different laws, cultures and business institutions and they also may use different currencies, which will require you to convert between one currency and another when making transactions. The basics of currency exchange will be covered in this presentation.

Those who are interested in international business may wish to take FIN 430 which is our course on international financial management.

Currency Exchange

- Foreign exchange market
- Wholesale market is driven by large, international banks.
- There are also institutions that specialize in smaller transactions.

The market where one currency is exchanged for another is known as the foreign exchange market. Buyers and sellers in this market tend to be large international banks making exchanges involving millions of dollars in value.

Individuals or small companies that are exchanging currencies will often deal with a smaller financial institution that specializes in those kind of transactions. The exchange rate you get can vary significantly depending on the number of institutions that are competing for your business.

Countries and Currencies

- Canada - Canadian dollar
- Mexico - Peso
- Brazil - Real
- Japan - Yen
- China - Yuan
- Korea - Won
- European Union (Germany, France, Italy, Spain and others) – Euro
- United Kingdom - Pound

Here are the currencies of a number of major countries (you will need to be able to match the currency with the country)

Canada uses the Canadian dollar. Mexico uses the peso. Brazil uses the real. Japan uses the yen. China uses the yuan. Korea uses the won. Most of the countries that are part of the European Union, including Germany, France, Italy and Spain use the euro; however the United Kingdom uses the pound.

Exchange Rates

- The price of one currency in terms of another currency is called the exchange rate.
- Two ways to quote an exchange rate.
 - $\$1 = \text{€}0.91 \rightarrow 0.91\text{€}/\$$
 - $\text{€}1 = \$1.1 \rightarrow 1.1\text{\$/€}$
- $= 1/(0.91\text{€}/\$)$
- To convert \$1,000 to euros:
 - $(\$1,000)(0.91\text{€}/\$) = \text{€}910$
- To find out how many dollars you need to get €1,000:
 - $(\text{€}1,000)(1.1\text{\$/€}) = \$1,100$

The price of one currency in terms of another rate is called the exchange rate.

Since there are two currencies involved in the transaction, there are two ways to quote an exchange rate. In this example, 1 dollar equals 0.91 euros. Equivalently, 1 euro equals 1.1 dollar. You can get one exchange rate by taking the inverse of the other (but note that this only works for large transactions where the bid-ask spread is small and if we ignore rounding – see the next slide)

Sometimes exchange rates are quoted one way and sometimes the other and sometimes they'll give you both quotes so you need to pay attention to the terms you are being quoted.

If you have \$1,000 and you want to determine how many euros you can get, you multiply \$1,000 by the €/ \$ exchange rate. Notice that if applied algebra to the currency signs in the formula, the dollar signs would cancel out leaving only the euro sign. That shows that you've used the right exchange. The 1.1\$/€ would be the wrong exchange rate – try it.

To find out how many dollars you need to get €1,000 you multiply by dollars/euro. If you only have the euros/dollar exchange rate, you can divide by euros/dollar and this will give you the same answer if we are ignoring rounding and the bid-ask spread. In our example, you will see a slight difference. Do not worry about rounding on the exam; options on the multiple choice questions will not be that close.

Retail Currency Transactions

- Bid-ask spread
 - Buy dollars at \$1 = €0.85
 - Sell dollars at \$1 = €0.95

The effect of the bid-ask spread:

- Start with \$1,000
- Convert to euros:
 - $(\$1,000)(0.85\text{€}/\$) = \text{€}850$
- Convert back to dollars
 - $(\text{€}850)/(0.95\text{€}/\$) = \$894.74$

For very large transactions, the exchange rate quoted in one direction is a close approximation to the inverse of the exchange rate quoted in the other direction. However, if you were to exchange currency at a bank, for example, or an airport exchange, you would get worse exchange rates in both directions.

You will be quoted one exchange rate to buy your currency (the bid rate) and a different exchange rate to sell that same currency back to you (the ask rate). Because of this, if you convert your dollars to a foreign currency and then immediately convert the money back to dollars you will end up with fewer dollars than you started with. That difference is how currency exchanges generate revenue.

In this example, a currency exchange will buy your dollars giving you fewer euros than they charge you when they sell you dollars. If you start with \$1,000, you could exchange them for €850 and then turn around and exchange the euros for \$894.74. The currency exchange would earn around \$100 dollars on the set of transactions.