# DIFFERENT COUNTRIES, DIFFERENT MONEY. WE USE EURO



Image from Pixabay

## What is exchange rate?

Different countries use different currencies. An exchange rate is the rate at which one country's currency can be traded in exchange for another country's currency. The exchange rate expresses the price of one currency expressed in units of other currency. In expressing relationship between two currencies the location matters. We distinguish between the direct and indirect quotation of the exchange rates when talking about value.

The direct quote gives the quotation in terms of the number of units of home currency necessary to buy one unit of foreign currency. An example was the conversion rate between EUR and SKK in 2009 after adopting euro in Slovakia. That time Slovakia was using direct quotation and the conversion rate was 30,1260 SKK/EUR.

On the other hand, **the indirect quote** gives the quotation in terms of the number of units of foreign currency bought with one unit of home currency. With adopting euro in Slovakia we changed our quotation from direct to indirect. An example is current exchange rate of Czech crown which is around 25 CZK/EUR.



List of updated exchange rates for main currencies you can find on the official web page of European central bank

(https://www.ecb.europa.eu/stats/policy and exchange rates/euro reference exchange rates/html/i ndex.en.html).

In connection with the movements in exchange rates you should remember that exchange rates are relative prices. After the change in the exchange rate, it will always be true that it takes relatively less of one currency to purchase the other currency and relatively more of the latter currency to purchase the former. In theory and practice we use terms appreciation and depreciation to describe changes in exchange rates when exchange rates are allowed to be flexible - that is, to fluctuate freely in response to

changes in demand and supply. Suppose the exchange rate between the dollar and the euro changes from 1,35 USD/EUR to 1,25USD/EUR. Because it now takes fewer dollars to purchase the euro, the dollar is said to have strengthened, or appreciated, in value relative to the euro. The euro consequently is said to have weakened, or depreciated, in value relative to the dollar.

As we can see in the following figure that euro in 1999 started with the exchange rate to dollar 1,1789USD/EUR. The peak was reached in 2008 with 1,5990 USD/EUR. This figure shows huge movements in value of two important currencies. Why do the exchange rates change? What are the factors that influence exchange rates?



Source: http://www.ecb.int/stats/exchange/eurofxref/html/eurofxref-graph-usd.en.html

### Factors influencing the exchange rate

We should recognize between the factors which have a long-run and short-run impact on the exchange rates. The value of a currency adjusts to change in demand and supply conditions, moving toward equilibrium. In equilibrium there is no excess or deficiency of that currency. Supply and demand for a currency are influenced by a variety of factors. In the table factors with permanent (long-run) and short-run effect are listed:

Permanent impact	Short run
Inflation	Speculative movements of capital
Interest rate	Central bank
Exchange rate system	Short-run fluctuations in commercial and financial transactions
Balance of payments	Other factors: politics, natural disasters

## **Permanent impact**

#### Permanent impact means that these factors always have an impact on the exchange rate:

**Inflation** is the change in value of money (home and also foreign currency). The currency with higher inflation rate tends to depreciate. This is the fact also in connection with interest rate.

**Exchange rate systems** can be classified according to the degree by which exchange rates are controlled by the government. Exchange rate systems normally fall into one of the following categories:

Fixed exchange rates - are held constant or they can fluctuate only within very narrow boundaries. For exporters and importers this situation means that they can trade without concern about exchange rate movements of the currency to which their local currency is linked. The exchange rate risk in this case is very limited.

Freely floating – in this case the exchange rate values are determined only by market forces without intervention by governments. A freely floating exchange rate system allows complete flexibility and adjusts on a continual basis in response to demand and supply conditions for that currency. Exchange rate risk is very high.

Managed float — is the exchange rate system that lies somewhere between fixed and freely floating. It resembles the freely floating system in that exchange rates are allowed to fluctuate on a daily basis and there are no official boundaries. But governments can and sometimes do intervene to prevent their currencies from moving too far in a certain direction. This type of system is known as a managed float or "dirty" float (as opposed to a "clean" float where rates float freely without government intervention). This was the exchange rate system SKK used during the ERM 2.

Pegged – is the exchange rate system in which the home currency's value is pegged to a foreign currency or to some unit of account. While the home currency's value is fixed in terms of the foreign

currency (or unit of account) to which it is pegged, it moves in line with that currency against other currencies.

**Balance of payments** influences the exchange rate mainly through the exports and import of a country. Generally the currency of country with higher import than the export tends to devaluate.

#### **Short-run factors**

Short-run factors have a short-run effect and after a period of time the effect expires.

**Speculative movements of capital** can have a short-run- effect on currencies. An example is the situation with former Slovak koruna (SKK), when in 2007 two London banks decided to invest in SKK and the result was an increase in value of SKK by 2%.

**Central bank intervention** influences the exchange rate through instruments of the central bank, which can be direct or indirect. In a market economy the indirect are preferred. An example is the change in interest rates.

**Short-run fluctuations in commercial and financial transactions** have the same effect as the speculative movement of capital. An example was the situation in Slovakia with SKK when during the period of dividend payment the SKK tended to depreciate.

Other factors —natural disasters— as an example we can use— the situation with Japanese Jen after the tsunami on 11-th of March 2011 in following Figure.



Source: author, http://www.ecb.int/stats/exchange/eurofxref/html/eurofxref-graph-jpy.en.html

Predicting the future development of the exchange rate is very difficult. Former chairmen of The Federal Reserve (central bank in USA) and economist Mr. Allan Greenspan declared that The Federal Reserve did invest money into a model for predicting exchange rates. But the results are the same compared to a simple coin toss, with 50-50 chances of a currency rising or falling in value.

#### **Exchange rate risk**

Changing exchange rates are source of risk. Today's exchange rate is known. But what will be the exchange rate in one year? Therefore if you expect any cash flows in foreign currency in the future its value might change. If for example you own Apple shares which are denominated in USD, the depreciation of USD can decrease the value of Apple shares expressed in EUR. The exchange rate risk of households is mainly linked to investments made in foreign currencies. These investments are mainly financial investments linked to pension system or portfolio investments.

If you are a businessman, the exchange rate risk is more complex and well described in the literature. Generally, the exchange rate risk is the risk that a company will suffer losses because of fluctuations in exchange rates. Exchange rate risk is usually classified into following categories:

- 1. Translation exchange rate risk,
- 2. Transaction exchange rate risk and
- 3. Economic exchange rate risk.

**Translation exchange rate risk** is the risk of a multinational company with subsidiaries in several countries with several currencies. The total value of the company is affected by the value of individual subsidiaries which depends on the exchange rate. It is often called the accounting exposure.

**Transaction exchange rate risk** is the risk of a company connected with payables or receivables denominated in foreign currency. If the exchange rate changes, the company will receive/pay more or less in domestic currency. The difference how much more or less the company will pay or receive is expressing the transaction exchange rate risk.

**Economic exposure** refers to the possibility that the present value of future operating cash flows of a business, expressed in the domestic currency, may change because of a change in foreign exchange rates. It is the risk that all future transactions in foreign currencies will have negative effect on the company profit due to negative development in exchange rates.