

Appreciations and Depreciations

The rise in value of a currency against another is called an appreciation. Vice versa for a depreciation.

Note that not all currencies can appreciate at once since they are measured relative to one another, at least one must fall if all the others appreciate.

It is easier to understand appreciations and depreciations of currencies by focusing on the denominator currency in an FX quote. If the number increases, it's because the denominator currency is appreciating.

If the currency quote number rises, the denominator currency has appreciated

- If the Japanese exchange rate moves from 100 to 101 JPY per USD, then the USD has appreciated against the JPY since the USD is in the denominator:

$$100 \frac{\text{JPY (numerator)}}{\text{USD (denominator)}} \text{ to } 101 \frac{\text{JPY (numerator)}}{\text{USD (denominator)}}$$

- If the exchange rate moves from 0.8 to 0.9 USD per AUD, then the AUD has appreciated against the USD since the AUD is in the denominator:

$$0.8 \frac{\text{USD (numerator)}}{\text{AUD (denominator)}} \text{ to } 0.9 \frac{\text{USD (numerator)}}{\text{AUD (denominator)}}$$

Mathematics of Appreciations and Depreciations

So if the USD appreciates against the JPY, then:

- **100 JPY/USD** will **increase** since the USD is in the denominator of the fraction.
- **0.01 USD/JPY** will **decrease** since the JPY is in the denominator of the fraction and the JPY is depreciating against the USD.