

# Nominal terms

# Real terms

Multilateral basket of currencies

## Nominal Effective Exchange Rates (NEER)

$$NEER_{country\ i} =$$

$$\sum_{j=1}^N trade\ weight_{country\ j} \cdot bilateral\ exchange\ rate_{country\ j}$$

## Real Effective Exchange Rates (REER)

$$REER_{country\ i} =$$

$$\sum_{j=1}^N trade\ weight_{country\ j} \cdot real\ exchange\ rate_{country\ j}$$

$$trade\ weight_{country\ j} =$$

manufacturing trade flows or time  
– varying weighting pattern (three – year basis)

64 economies,  
since 1994

Broad  
Index

Narrow  
Index

26/27  
economies

Bilateral currencies

## Nominal Exchange Rates (NER)

$$NER_{country\ i} = \frac{Price_{country\ i}}{Price_{country\ j}}$$

Spot or Futures Markets (prices)

Nominal Energy commodity prices

Spot or Futures Markets (prices)

## Real Exchange Rates (RER)

$$RER_{country\ i} =$$

$$NER_{country\ i} \cdot \frac{Price_{country\ j}}{Price_{country\ i}}$$

## Price variables:

- GDP deflator
- Unit labor costs
- Consumer prices
- Producer prices
- Export prices

Real exchange rates in  
**external terms: CPI/PPI**

Real exchange rates in  
**internal terms/terms of  
trade: Ratio tradable and  
non-tradable goods**

Inflation/Relative Consumer Prices