

Gross domestic product: Goods & Services.

Definition: the market value of all final goods and services produced in a country in a given time period.

1. Market Value: value at their market price.
2. Final goods & Service: bought by its final user  
intermediate good  $\rightarrow$  a component of good.  
the value of intermediate good should be excluded
3. Produce within a country: domestic production.
- 4 In a given time period.

Gross  $\Leftrightarrow$  Net.

before      after      conducting the depreciation of capital.

Depreciation: the decrease in the value of a firm's capital that result from wear and tear and obsolescence.

Gross investment: the total amount spent on purchases of new capital and on replacing depreciated capital.

Net investment = Gross investment - Depreciation.

1. Market value  $\Rightarrow$  household production (x).

$\Rightarrow$  something must trade in the market.

2. Final goods / service.  $\Rightarrow$  beans  $\rightarrow$  coffee  $\rightarrow$  Tim  
 $\uparrow$   
only consider about the final price.

3. Produced domestically.

4. In a given time period.

(GDP).  
expenditure. customers. government investments. (firms).

$$Y = C + G + I + X - M$$

exports. imports.  $\leftarrow$  a part of expenditure which is not GDP.

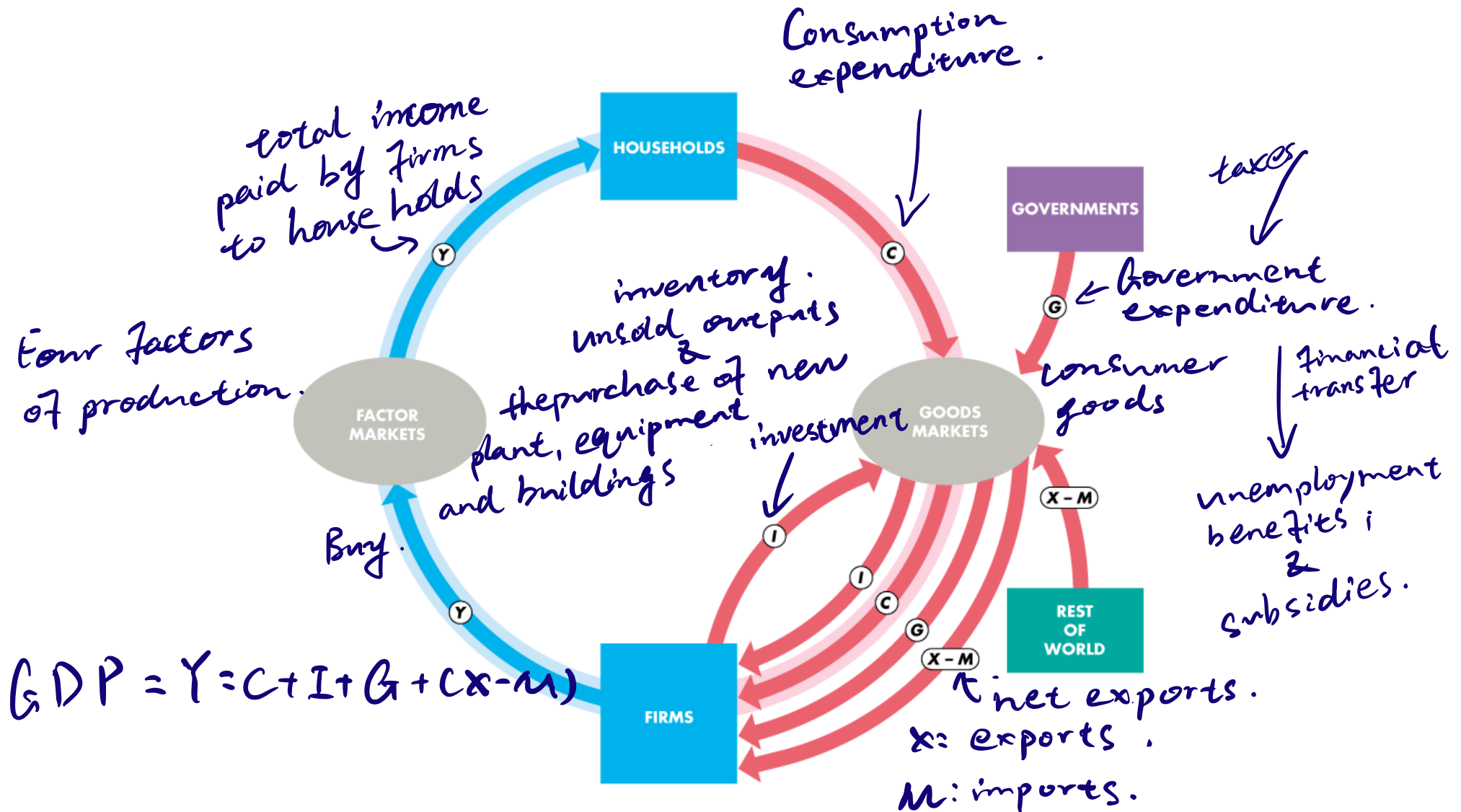
Capital - physical  
          - labour  
Gross investment  $\Rightarrow$  2001 2010.  
                          10  $\Rightarrow$  11  
 $\uparrow$   
before depreciation or subtracting.

GDP  $\rightarrow$  positive related with living quality of people.





# Gross Domestic Product



nominal GDP :  $P \cdot Q$ .

real GDP :  $P(\text{base year}) \cdot Q$ .

Chain-weighted real GDP.

Real GDP 1. To compare the standard of living over time.

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across the country

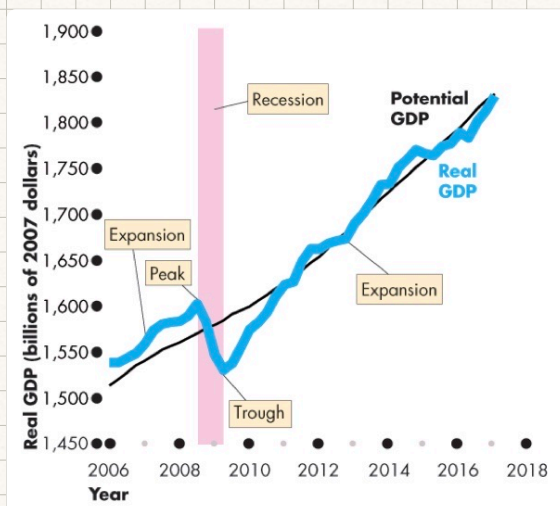
Features of our living standard

The value of real GDP when all the production factors are fully employed is potential GDP.

The growth of potential GDP per person.

Fluctuation of real GDP around potential GDP.

Lucas wage : the dollar value of the gap between the real GDP per person if the 1960's growth persisted and the current real GDP



GDP compares Across Countries.

1. same currency unit.

2. same price of goods and service.

GDP compares Across years.

Percent change :

$$\frac{\text{Nomial GDP in 2015}}{\text{2016 GDP in 2015 price}} + \frac{\text{2015 GDP in 2016 price}}{\text{GDP in 2016}}$$

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