

National Output and National Income

- | | |
|---------------------------------------------|----------------------------------|
| 1. 1.1 Inventories - stock variable | 1.6 Expenditure - stock variable |
| 1.2 Changing in inventories - flow variable | 1.7 Wealth - stock variable |
| 1.3 Money supply - stock variable | 1.8 Population - stock variable |
| 1.4 Changing in money - flow variable | 1.9 Capital - stock variable |
| 1.5 National income - flow variable | 1.10 Interest - flow variable |

2. • GDP is focus the product that create in Thailand, so everyone can produce. However, GNP focus on Thai people produce regardless of where the output produce.
 • When you compare between US and China, The higher GNP is China because China has larger citizen than US.

3.

| | Value of Sale | value added |
|-------------------------|---------------|-------------|
| stage 1 : Growing Apple | 12 | 12 |
| 2 : Pickling | 15 | 3 |
| 3 : Canning | 18 | 3 |
| 4 : Shipping | 20 | 2 |
| 5 : Retail Sale | 22 | 2 |
| total value added | | 22 |

∴ GDP value of the canned apple = sum of value added = 22

4. Transfer payment is a one-way payment to a person or organization. Transfer payment is not include in GDP because it's no goods & services. It's only transfer to the others.

5. Real GDP focus changes in quantity being produced but not focus change prices
 Problem ① supply shift, price changed → Real GDP will not implement
 ② structural change, price fluctuated → Real GDP will not be correct.

6. When we know the base year in 2015, Real GDP will use Price in base year 2015 but nominal GDP doesn't use base year because it'll should price and quantity in desired year. GDP inflation = $\frac{\text{Nominal GDP} - \text{Real GDP}}{\text{Real GDP}}$ that we use base year to calculate Price of Real GDP.

7. • Inequality : not tell anything about distribution of output in each person • Informal economy : don't count the unreport ex. Casino, black market
 • Externality : put it in the most simple term about pollution and environment cost

- | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> • The citizens bought 8 new cars, each worth 50\$ = 400\$ • The citizens bought 4 new houses, each worth 150\$ = 600\$ • The citizens grew rice for their own consumption. The rice was worth 500\$ = 500\$ • The firms bought 6 used machines, each worth 50\$ = 300\$ • The firms bought 5 cars part, each worth 25\$ = 200\$ • The Govt. bought 4 new computers, each worth 50\$ = 200\$ | <ul style="list-style-type: none"> • The Govt paid 1000\$ to poor as welfare payment = 1000\$ • The citizen bought 10 imported ship, each worth 100\$ = -1000\$ • The firms sold 4 planes aboard, each worth 200\$ = 800\$ <p style="text-align: right; margin-top: 10px;">Total GDP = 3000\$</p> |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

| 9. | nominal GDP | Real GDP | GDP Deflation |
|--------|-------------|----------|---------------|
| 2012 : | 18 | 18 | 100 |
| 2013 : | 15 | 17 | 88.24 |
| 2014 : | 18 | 12 | 150 |
| 2015 : | 25 | 13 | 192.31 |

$$\text{inflation rate} = \frac{192.31 - 150}{150} \cdot 100$$

$$\approx 28.206 = 28.2$$

10.

$$\begin{aligned} \text{GNP} &= 8000 + 250 - 300 \\ &= 7950 \\ \text{NNP} &= 7950 - 900 \\ &= 7050 \end{aligned}$$

11.

$$\begin{aligned} \text{GDI} &= \text{NDI} - \text{Depreciation} = 784 + 168 = 952 \\ \text{Gross domestic investment} &= \text{GDP} = C + I + G + (X - M) \\ &= 2203.2 + 952 + 716.8 + (212.8 - 235.2) \\ &= 3849.6 \end{aligned}$$

$$\begin{aligned} \text{GNP} &= \text{GDP} + \text{NFPI} \\ &= 3849.6 + 35.2 - 66.8 \\ &= 3816 \end{aligned}$$

$$\begin{aligned} \text{NNP} &= \text{GNP} - \text{Depreciation} \\ &= 3816 - 168 \\ &= 3648 \end{aligned}$$

$$\begin{aligned} \text{NI} &= 1407.7 + 257.6 + 593.6 + 182.2 + 173.9 + 34.1 + 44.8 \\ &= 2,604.3 \end{aligned}$$

12.

$$\begin{aligned} \text{Expenditure approach} &= C + I + G + (X - M) \\ &= 9500 + 3000 + 3200 + (850 - 900) \\ &= 15,650 \end{aligned}$$

$$\begin{aligned} \text{Income approach} &= \text{GDP} - \text{Depreciation} = \text{Profit Compensation} \\ \text{GDP} &= 2400 + 11,500 + 1750 \\ &= 15,650 \end{aligned}$$

