

1. Inventories - Stock

Change in inventories - flow variables

Money Supply - Stock

Change in money supply - flow variable

National Income - flow variable

Expenditure - flow variable

Wealth - Stock

Population - Stock

Capital - Stock

Interest - flow variable

2. GDP stands for gross domestic product, and GNP stands for gross national product. Gross domestic product shows goods that have been made both within the particular perimeter of the country, so within the borders of the country. It's the production of goods in a specific economy. GDP is seen as an important calculation, as this calculates how healthy a country's economy is. This can be divided into four stages: consumer goods/services, government goods, business goods/services, and services and net imports and exports of goods/services.

Whereas, gross national product, calculates the complete value of goods made by both a country (inside its borders) and outside of the country borders, this is calculated over a certain period of time, normally a year. This is calculated by citizens of those individuals who are currently living in that specific country, even if they're not a citizens of that country.

If looking at the GNP between the US and China, China would be expected to have a higher GNP. As the GNP product is calculated by its citizens (the population), China has 1.398 billion people, and the US has 3.282 million. As China has a higher population it would indicate that they're more likely to have a higher GNP.

3. Stages of production  
Brewing Apples

	<u>Value of sales</u>	<u>Value added</u>
Brewing Apples	12	12
Pickling	15	3
Canning	18	3
Shipping	20	2
Retail sale	22	2

Added value must add up to the retail sale. = 22

4. A typical form of 'payment' is an exchange of payment for goods or services. Transfer payment is a form of payment that is one sided, where you're making payment for no exchange to individuals goods or services. Abnormally, this term is used for governments, so they make payments to individuals without expecting goods or services in return. For example, retirement pension, student grants, social security you're receiving payment but there is no exchange of goods or services being given.

Gross domestic product, is the calculator of a country's economic growth and it's output. However, transfer payments, such as social security, pension, unemployment insurance, which the government provides are not added in the calculation of the gross domestic product of a country, instead it's added into the personal consumption expenditures instead of the gross domestic product. Gross domestic product calculates the final demand of a country, and transfer payments aren't payments made by goods or services which mean that they don't represent the final

4. demand of a country, which is why it's excluded from the calculator of a country's GDP

5. We are interested in real GDP because it gives us the information needed for us to see the size of our country's economy, and we are able to use such information to see how well our country's economy is doing. The real GDP calculates the total amount of deal with deflation and inflation, which the nominal GDP does not do as much; it uses the measurement of constant prices not of prices change. This makes real GDP more accurate when compared to the nominal GDP. Real GDP is important, as it influences any decision made on money supply, which affects the entire economy of the country as a whole.

One problem that can be seen with the real GDP is that as it measures the goods and services that are being produced so introduced to the market, it excludes production of goods or services from households as they are not exchanging market transactions. For example, taking care of children. It's a service, whatever it's a non-market transaction which means that it's not being added to the calculation of the GDP of the country. Individuals having less leisure time can also be affecting the GDP. For example, if individuals ~~having less leisure time can also be affecting the real GDP.~~ For example, if individuals do not have leisure time, they won't have time to spend money on goods and services not helping the economy. With the standard of living of individuals going higher, individuals don't have much leisure time meaning they don't have enough time to spend on goods or services. The real GDP also isn't accurate as it is missing certain production of goods and services. The real GDP also isn't accurate as it is missing certain production of goods and services other than household production, it's missing any production of goods and services being done in secret to avoid taxes which affects the accuracy of the real GDP.

6. ~~Q~~ Real GDP is the total of goods and services given in a single year, this shown in the form of a base year. Nominal GDP is using the current price to calculate the GDP of a country. GDP deflator calculates the inflation a country faces in a year.

Real GDP and nominal GDP are do the same thing they both calculate a country's total good and services on does it with a constant price and it adjust to inflation, the other does not account inflation. GDP deflator calculates the  $\Delta$  inflation in a year in a country. This is equal to 100.

7. ~~Q~~ GDP is used by many to calculate the national economy. However, there are limitations to this as there are factors that can effect the accuracy of the GDP. For example, there are other factors that effect the long-term well-being of a nations economy but is excluded from the calculation of the GDP making it not as accurate as it could be due to the excluded factors. Such as crime rates, terrorism, global warming). The environment has a big effect on our GDP but is excluded when calculating a nations GDP making it limited.

The GDP also excludes household production. For example, child care. This is a service that in generating services in a country but has been excluded from the calculation of the GDP. The exclusion of house hold product makes the calculation of the GDP inaccurate as it's limited for not recording the production of goods & services from households.

Another limitation to the use of GDP is that it does not take leisure into account. This effects the true calculation of the GDP. There could be a decrease in GDP and this is associate with living standards and health care.

8. The expenditure Approach:

C = consumption

I = Investment

G = Government Spending

(X-M) = Net exports

$$GDP = C + I + G + (X - M)$$

$$GDP = \cancel{\$ 1,250} 50 + 600 + 200 + 200 + (1000 - 800)$$

$$GDP = 1,250\$$$

C = The citizens bought 8 new cars, each worth 50\$  
= 400\$

I = The citizens bought 4 new houses, each worth 150\$  
= 600\$

Excluded

= The firms bought 6 used machines, each worth 50\$

= ~~200\$~~ excluded but that's because they were used parts

= The firms bought 8 cars parts, each worth 25\$  
= 200\$

G = The government bought 4 new computers, each worth 50\$  
= 200\$

M = The citizens bought 10 imported ships, each worth 100\$  
= 1000\$

X = The firms sold 4 planes abroad, each worth 200\$  
= 800\$

Excluded:

- The citizens grew rice for their own consumption. The rice was used
- The government paid 1000\$ to the poor as welfare payment

9. Year	Nominal GDP	Real GDP	GDP Deflator
2012 → 3 + 6 + 9	18	18	100
2013 → 3 + 8 + 4	15	17	88.3
2014 → 4 + 12 + 2	18	13	138.4
2015 → 16 + 1 + 8	25	12	208.2

$$\text{Inflation Rate} = \frac{208.2 - 138.4}{138.4} \times 100 = 50.4\%$$

10. GNP = 7,950

GNP = 7,950

800

$$\begin{array}{r} + 250 - \\ \hline 7,950 \end{array}$$

7950

$$\begin{array}{r} - 300 \\ \hline 7,650 \end{array}$$

11.1 Gross Domestic Investment  
net investment + depreciation  
= 784 + 168 = 952

11.4 NNP  
GNP - depreciation  
~~GNP~~ NNP = 3715.9 - 168 = 3547.9

11.2 GDP

C + I + G + (X - M)

$$= 2,203.2 + 952 + 716.8 + (212.8 - 235.2)$$

= 3849.5

11.5 National Income  
wage + rent + corporate prof

+ non-corporate + Interest

$$= 1467.7 + 34.1 + 257.6 + 182.2 + 173.9 + 593.6 - 44.8$$

= 2604.3

11.3 GNP

GDP + NFFI

$$= 3849.5 + 35.2 - 68.8$$

= ~~3815.9~~ 3715.9

## 12. GDP

$$\begin{aligned}\text{Expenditure Approach} = \text{GDP} &= C + I + G + (X - M) \\ &= 9,500 + 3,000 + 3,200 + (860 - 900) \\ &= \underline{15,650}\end{aligned}$$

$$\begin{aligned}\text{Income Approach} = \text{national income} &= 11,500 + 2400 \\ &= \underline{13,900}\end{aligned}$$

$$\begin{aligned}\text{GDP} &= \text{GNP} - \text{net foreign factor income} & \text{GNP} &= \text{NNP} + \text{Depreciation} \\ \text{GDP} &= 15,650 - 0 & \text{GNP} &= 13,900 + 17,50 \\ \text{GDP} &= \underline{15,650}\end{aligned}$$

Key:

$$\text{NFFI} = 0$$

$$\text{NI} = \text{NNP}$$

$$\text{GNP} = \text{NNP} + \text{Depreciation}$$