

**Note : A circular flow of income diagram, GDP and Economic well-being,
Consumption and its multiplier**

Since students have to do task 1, showing how the UK marginal propensity to consume has varied over time since 1970, compared with one of the four countries, France, Japan, Brazil and Czech Republic. I give you the rough idea for each economy as of 2005.

United Kingdom

GDP growth:1.6%
GDP: \$2.34 trn(at PPP:\$2.05 trn)
Inflation:1.7%
Population:60.3m
GDP per head:\$38,860

France

GDP growth:1.7%
GDP: \$2.28 trn(at PPP:\$1.99 trn)
Inflation:1.6%
Population:60.9m
GDP per head:\$37,500

Japan

GDP growth: 1.3%
GDP:\$4.96 trn(at PPP:\$4.17 trn)
Inflation:0.2%
Population:127.5m
GDP per head:\$38,890

Brazil

GDP growth:3.6%
GDP: \$819bn(at PPP:\$1.75 trn)
Inflation:4.7%
Population:183.7m
GDP per head:\$4,460

Czech Republic

GDP growth:4.4%
GDP:\$148bn(at PPP:\$197bn)
Inflation:2.0%
Population:10.2m
GDP per head:\$14,500

Source: The Economist, The world in 2006

I. GDP and Economic well-being

GDP is a reasonably accurate and extremely useful measure of domestic economic performance. It is not, and was never intended to be, an index of society's overall well-being or its total satisfaction. GDP is merely a measure of the annual volume of goods and services produced. Thus, we must understand some of the shortcomings of GDP-why it might understate or overstate real output, and why more output will not necessarily make society better off.

1. Non-market transaction

Certain production transactions do not take place in market. Thus, GDP as measure of the market value of output fails to include them.

2. Leisure

The workweek has declined significantly over the twentieth century. Thus, it has had a positive effect on our well-being.

3. Improved product quality

GDP is a quantitative, not a qualitative, measure. It does not accurately reflect improvements in product quality.

4. Composition and distribution of output

Changes in the composition of total output and its allocation among specific households may influence economic well-being. Distribution is also ignored by GDP.

5. Per capita output

Per capita output is defined by dividing real GDP by population. GDP may rise, but if population is also growing rapidly, the per person standard of living may be constant or even declining.

6. GDP and the environment

The costs of pollution reduce our economic well-being. These spillover costs are associated with production and hence with the GDP but are not deducted from total output.

7. The underground economy

Economists agree there is a large underground sector in our economy. Some participants in this sector engage in illegal activities.

See Figure 2.10 Estimates of underground economy (%GDP) IN Erste and Schneider (1998) "Increasing shadow economies all over the world?"

Available from <http://ideas.repec.org/p/iza/izadps/dp26.html> (when on University network)

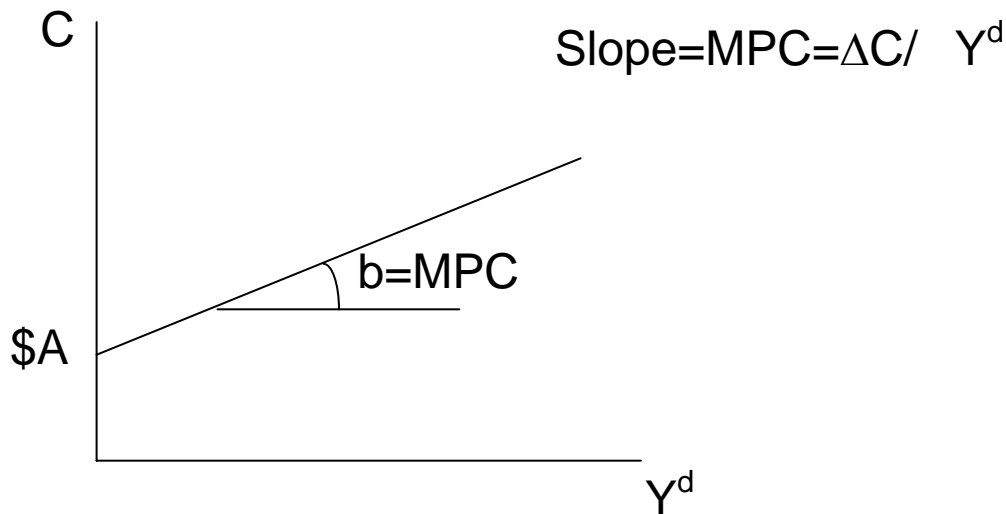
Question 1. Why is it difficult to compare the GDPs of say Mozambique with Norway?

Question 2. Why might GDP be less than a perfect guide to well-being or welfare?

Apparently, the reasons for the first question could be (1) and (7). The answer for the second should be (2), (3), (4), (5) and (6).

II. Consumption and its multiplier

Keynes stated that we should expect to see a very close relationship between current consumption and current income-both for an individual and for an economy. In Keynes' work an important concept is the **marginal propensity to consume (MPC)**. The MPC is the extra amount an individual will spend if you give them an extra \$1. If the MPC is 80%, then from every extra dollar of income, the individual spends 80 cents.



The Keynesian consumption function

Therefore consumption is given by $C = A + bY^d$. The MPC is b . Y^d is disposable income and $Y^d = (1-t)Y$.

However, we can also define the **average propensity to consume**-how much of an individual's total income he or she spends, C/Y .

For Keynes, the level of demand in the economy is key to understanding business cycle fluctuations and, in turn, the MPC is the key concept in influencing demand. Consider again the national accounts identity

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

As we know that income and output measure of GDP were equivalent, so using this fact and our expression of consumption we can rewrite this as

$$Y = A + bY + G + I + (X - M)$$

which can be rearranged as $Y - bY = A + G + I + (X - M)$

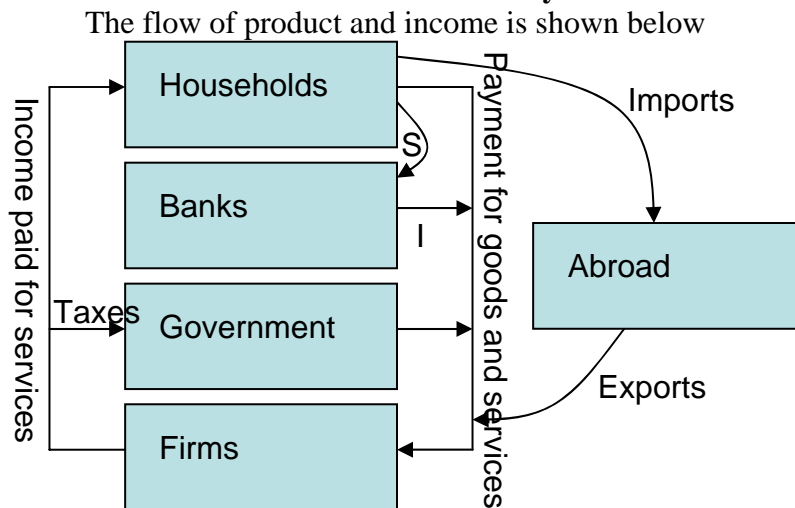
$$\text{or } Y = \frac{1}{1-b} \times [A + G + I + (X - M)]$$

The expression $\frac{1}{1-b}$ is called the **multiplier** and it represents the total impact on the economy of an initial increase in demand. The larger the MPC is, the bigger the multiplier. If G increases by \$100m, then according to this expression, GDP will increase by more than \$100m. The higher the MPC is, the greater the impact on consumption at every stage of the process and so the greater the ultimate increase in demand.

Question. If the MPC is 0.6 and let suppose that a 50 millions increase in GDP. What is the impact on consumer expenditure and GDP?

In this case, the multiplier is 2.5. Therefore, GDP is increased by 125 millions or by 2.5 times as much as GDP.

III. The circular flow of economic activity



The flows on the left have to be equal to the flows on the right. Any flow that generates spending also generates income.

National output (or national income) can be measured either from the spending side or on the income side. When we look at the product-side measure of GDP, we should remember that we are looking at final output; the income side measures value added (value of output-value of input).

On the product side of the accounts, GDP can be measured as total expenditure in final output. The accounts break down this expenditure by four major sectors-consumption expenditure, business investment, government purchases and net export. Or

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

It is crucial to note that the **injections** of spending from outside the circular flow are investment, government spending and exports. The **leakages** are taxes, saving and imports.

Question. What are the implications apparent from this for the effectiveness of fiscal policy within a single country as globalization-or the interactions between economies-increase?

Fiscal policy is the deliberate manipulation of taxes and government spending by the government to alter real GDP and employment and control inflation, and stimulate economic growth.

Since a cut in tax in country A will increase a disposable income in A, people in A has more disposable income so that they can buy more import goods from country B. Therefore, a cut in tax in country A will raise GDP in both country A and B.