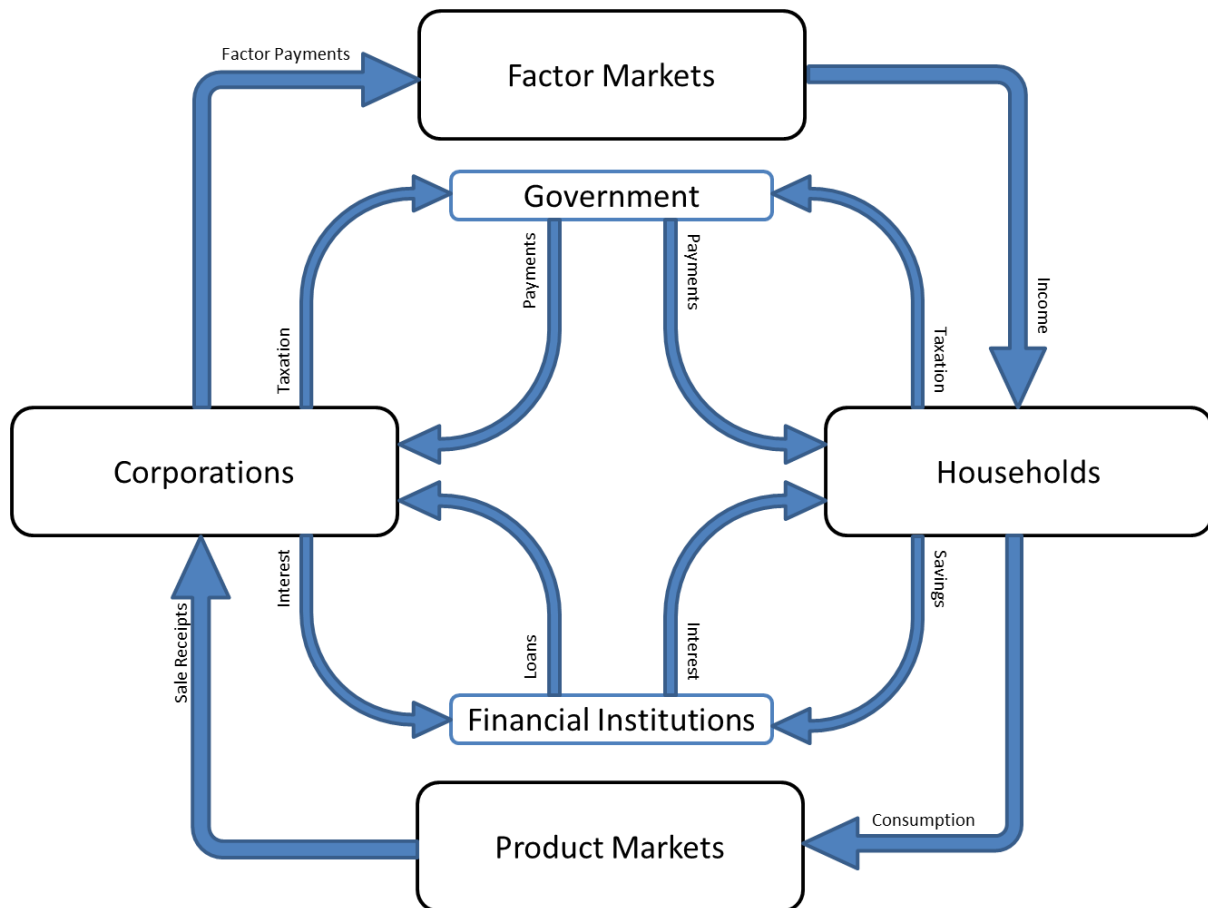


National Income

The circular flow of income is a neoclassical economic model that depicts transactions within an economy. It's a simplistic representation of an economy, one that aggregates the flows between households and corporations, one whereby units of labour are employed and receive an income for producing goods and services. In more complex models, multiple agents can be integrated such as financial institutions, the government, product markets (an intermediary whereby consumers can purchase goods and services produced by corporations) and factor markets (an intermediary whereby corporations can obtain the factors of production necessary). This is illustrated below.



To calculate the gross domestic product, we can utilise the circular income model by amalgamating provided values. One example is the expenditure approach, the formula utilised being

$$GDP \cong C + I + G + (X - M) \text{ whereby}$$

C= consumption

I= investment

G= government purchases

X= gross exports

M= gross imports

Furthermore, we may also utilise the income approach which is $GDP \cong NT + DI$ whereby

NT= net taxation

DI= disposable income

First, there are two uses for income that do not result directly in purchases of goods and services. These are net taxes, which flow to government rather than to product markets, and saving, which flows to financial markets rather than to product markets. These two uses of funds are termed leakages from the circular flow. Because saving is defined as whatever income is left over after households buy goods and services and pay net taxes, consumption plus the two leakages always add up to domestic income.

Second, there are two kinds of expenditures, namely investment and government purchases, which do not come directly from households. These are termed injections into the circular flow. Because investment includes unplanned inventory investment, total realized expenditures - consumption plus injections—always equal domestic income.

Investment into the economy may stimulate growth through the underlying principles of the multiplier effect. If capital is allocated towards the improvement or creation of goods and services that enhance the productivity of households or corporations, then the value created by that investment may exceed the original costs. It allows for the reallocation and saving of funds which could be utilised for the production of other goods and services, thus deriving extra utility.

Injections and withdrawals into the economy will change the rate of flow and possibly even direction of capital. An injection into the circular flow of income will lead to an increase in income, output and employment; this is an inflationary scenario. A leakage from the circular flow of income will lead to a fall in income, output and employment; this is a deflationary scenario. Therefore, injections are positively correlated with the flow of income whilst withdrawals are negatively correlated with the flow of income. We can use this mathematical principle to determine that any increase or decrease in the magnitude of injections and withdrawals may be substituted into this depiction. Consequently, if either the ratio of injections or withdrawals variables changes, the net flows of income will subsequently reflect the correlations.

GDP is the amalgamation of all revenues earned by corporations within domestic borders; however it does not factor foreign ownership of wealth. The calculation does not include British assets that are located overseas, nor does it incorporate the wealth that is transferred to foreign nations whose revenue generator is located in Britain. Therefore we may use alternative measures of income to gain a more accurate depiction of the economy. An example of this would be the Gross National Product (GNP) which is the market value of all goods and services produced by the factors of production owned by the citizens of a nation, regardless of geographical locality. National expenditure is a synonym for aggregated demand in an economy, which is subsequently defined as the entirety of spending on domestically produce goods and services measured at the market prices.

The aforementioned inaccuracies in calculating the national income are only exacerbated due to the exclusion of inflation statistics. Inflation is defined as the depreciation of monetary value due to a general increase in prices or an increase in the money supply. For this reason, economists generally calculate the value of an economy through *Real* GDP, which is the deduction of inflation from the gross domestic product.

The multiplier effect refers to the predicament whereby injections of demand into the circular flow of income stimulate further rounds of spending; an initial change in aggregate demand will have a greater final impact on equilibrium national income, thus describing the multiplier. The higher the propensity to consume, the greater is the multiplier effect. Multiplier effects can be seen when new investment and jobs are attracted into a particular town, city or region. The final increase in output and employment can be far greater than the initial injection of demand because of the inter-relationships within the circular flow.

The size of the multiplier depends upon household's marginal decisions to spend, called the marginal propensity to consume (mpc) or to save, called the marginal propensity to save (mps). It is important to remember that when income is spent, this spending becomes someone else's income, and so on. Marginal propensities show the proportion of extra income allocated to particular activities, such as investment spending by UK firms, saving by households, and spending on imports from abroad. A withdrawal of income from the circular flow will lead to a downward multiplier effect. Therefore, whenever there is an increased withdrawal, such as a rise in savings, import spending or taxation, there is a potential downward multiplier effect on the rest of the economy.

By James Edwards

"I must have a prodigious quantity of mind; it takes me as much as a week sometimes to make it up."

- Mark Twain -