

THE MULTIPLIER

An initial change in AD can have a greater final impact on equilibrium national income. This is known as the multiplier effect and it comes about because an initial increase in expenditure (e.g. an increase in G or I) creates further spending.

The Multiplier Process

Consider a \$300 million increase in business investment. This will set off a chain reaction of increases in expenditures. Those who produce the capital goods that are ultimately purchased will experience an increase in their incomes. If they in turn, collectively spend about 3/5 of that additional income, then \$180m will be added to the incomes of others.

At this point, total income has grown by $(\$300m + (0.6 \times \$300m))$. The sum will continue to increase as the producers of the additional goods and services realize an increase in their incomes, of which they in turn spend 60% on even more goods and services. The increase in total income will then be $(\$300m + (0.6 \times \$300m) + (0.6 \times \$180m))$.

The process can continue indefinitely. But each time, the additional rise in spending and income is a fraction of the previous addition to the circular flow.

The Multiplier and Keynesian Economics

The concept of the multiplier process became important in the 1930s when Keynes suggested it as a means to achieving full employment. The private sector (consumers and businesses) were unlikely to spend more-so government intervention was needed and specifically increases in Government expenditure. The key point was how much government spending would be needed to reach a level of national income that would prevent unemployment?

The higher the propensity to consume, the greater is the multiplier effect.

A factor affecting the size of the multiplier effect is how much is passed on within the circular flow of income. If an individual does not pass on income it is known as a withdrawal (savings taxes and spending on imports are withdrawals). If, out of extra income, people spend money on imports, this demand is not passed on in the form of extra spending on domestically produced output. Also if extra income is taxed or saved, then it is not passed on, so the multiplier effect is reduced

A fall in aggregate demand

The multiplier effect works for falls in demand too. The loss of an export order or the cancellation of a planned investment project can have a negative multiplier effect on the regional or national economy. A good example to use is the closure of a local factory, perhaps the main employer in a town. The resulting loss of employment can have severe negative effects on average incomes and spending on the rest of the community with further "knock-on" effects on suppliers and retailers.

Supply-side capacity of the economy

We have assumed that an increase in aggregate demand does lead to a rise in real national output. This is the case when the economy has the spare capacity to meet the demand, but there are occasions when any further increase in demand will create an inflationary gap.

Formula for multiplier= $1/1-mpc$ or $1/MPW$ or $1/MPT+MPS+MPM$