

M.A. Economics (Semester-II)
Macroeconomics-II: ECON4007

BUSINESS CYCLE

(Part – A)

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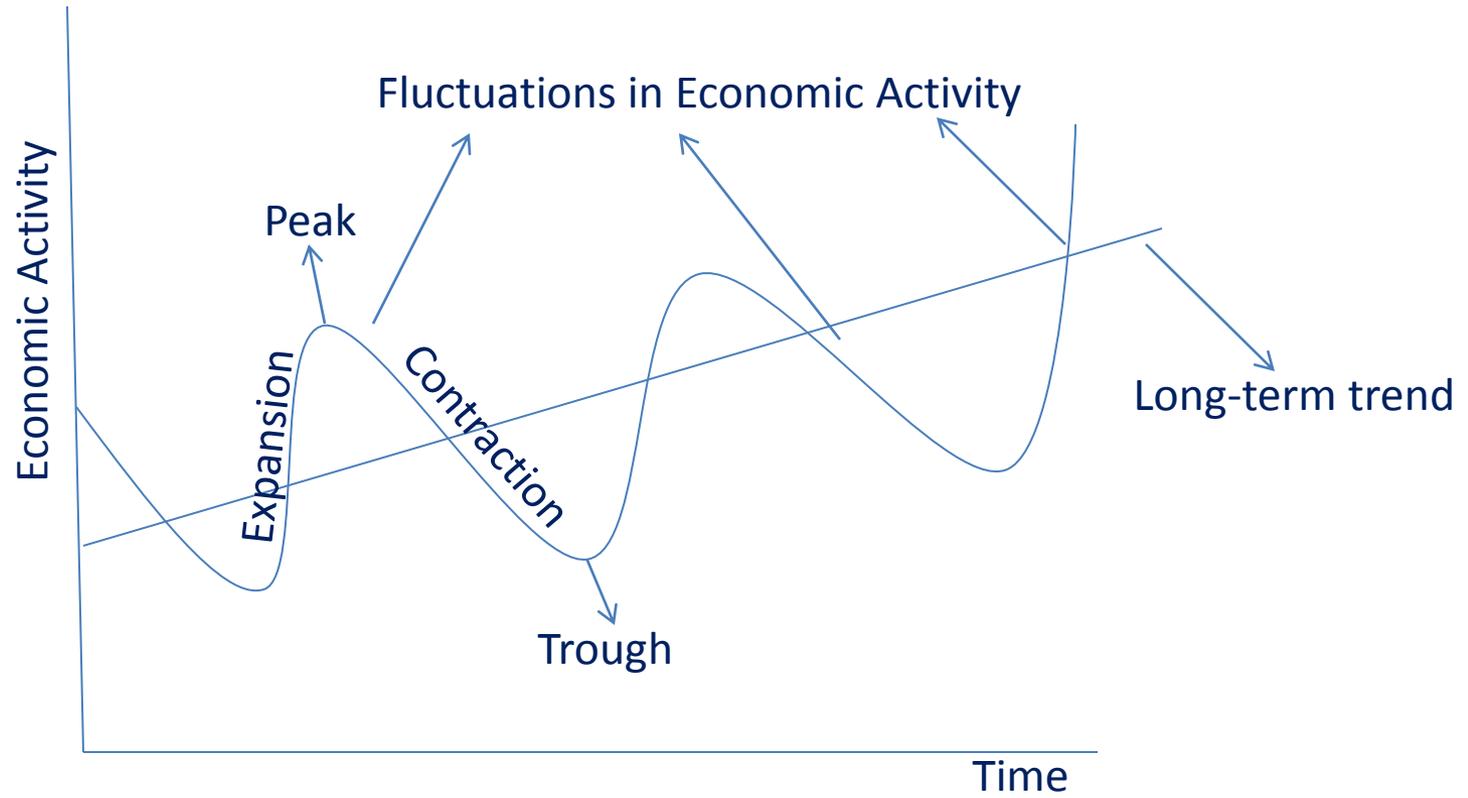
Business Cycle or Trade Cycle

Economies follow cycles of economic activity. Periods of expansion are followed by periods of contraction. Output and employment increase during periods of expansion. On the other hand, output and employment decrease during periods of contraction. This pattern of real GDP rising and then falling is called a business cycle or trade cycle.

This pattern, however, is not regular. The duration of business cycles and the rate at which real GDP rises or falls vary considerably.

A business cycle represents fluctuations in the level of economic activity (output or real GDP) over time around the economy's long-term trend rate of growth.

A typical business cycle has four phases: the **Peak**, the **Contraction**, the **Trough**, and the **Expansion** phase.



Peak: Peak is defined as a period when aggregate demand reaches a peak and output grows faster than its long-term trend. As output grows faster than its potential trend, it becomes unsustainable.

Contraction: During this phase the aggregate demand falls and it is accompanied by a decline in economic activity and rising unemployment. These factors lead to a recession.

Trough: It represents the phase when the level of economic activity is at its lowest point in the business cycle.

Expansion: It represents the phase after a trough when aggregate demand increases. It results in an expansion in output and falling unemployment.

These phases of a business cycle are often collectively referred to as a '**boom-bust**' cycle. The contraction phase of a business cycle leads to recession. A **recession** is commonly defined as a situation when the level of economic activity has **fallen for at least two consecutive quarters** (i.e. at least two three-month periods). The National Bureau of Economic Research (NBER) of USA defines recession as "a period of significant decline in total output, income, employment, and trade, usually lasting from six months to a year, and marked by widespread contractions in many sectors of the economy."

A prolonged and severe recession results into **depression** – a period of sustained trough in the economy accompanied by high unemployment levels and, usually falling prices resulting from a collapse in domestic and international demand.

Indicators of different phases of a business cycle

There are a number of other variables that move in a fairly regular manner over the business cycle. These variables may provide an early warning about a possible upturn or downturn in the economy. These are classified into the following categories:

Longer Leading Index : This index includes data concerning new construction orders, housing starts, orders for new plant and equipment, as well as measures of business confidence. A longer leading index will turn up or down well in advance of the economy's change of direction. It provides an early warning perhaps many months ahead of the actual change of direction of the economy.

Shorter Leading Index : This index is based on data relating to changes in new car orders, movements in consumer credit figures, as well as consumer confidence indicators. Such an index may provide an early warning but the warning may be only a few months or even weeks ahead of the actual upturns or downturns in economic activity.

Coincident Index : Such an index is based on data relating to cash withdrawals from bank accounts, payroll employment, industrial production, personal income, and manufacturing and trade sales, etc. This index does not provide an early warning because it coincides with upturns or downturns in the economy. However, it may be useful if the information can be quickly collected and analysed.

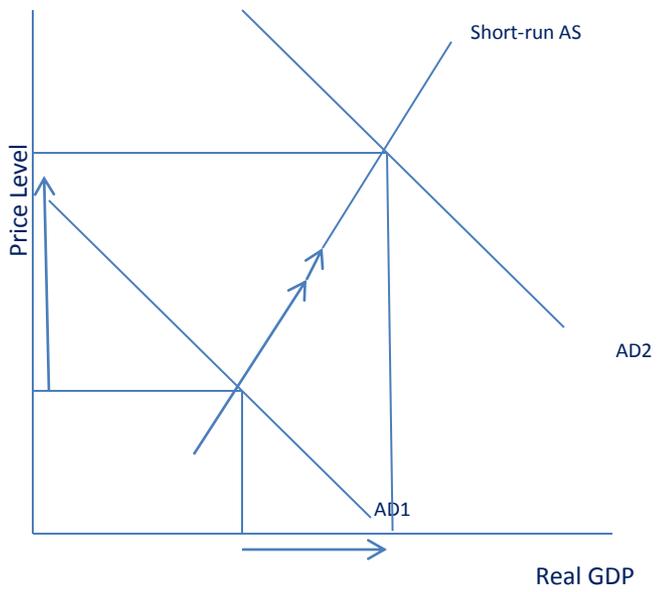
Lagging Index : Such an index is based on labour cost per unit of output, inventories to sales ratio, unemployment duration, consumer credit to personal income ratio, outstanding commercial loans, prime interest rate, inflation rate for services, etc. This index is of no value for forecasting purposes because it is one which turns up or down after the economy has changed its direction. Lagging indicators are used along with leading and coincident indicators to identify the peaks and troughs in business cycles.

Causes of Business Cycle

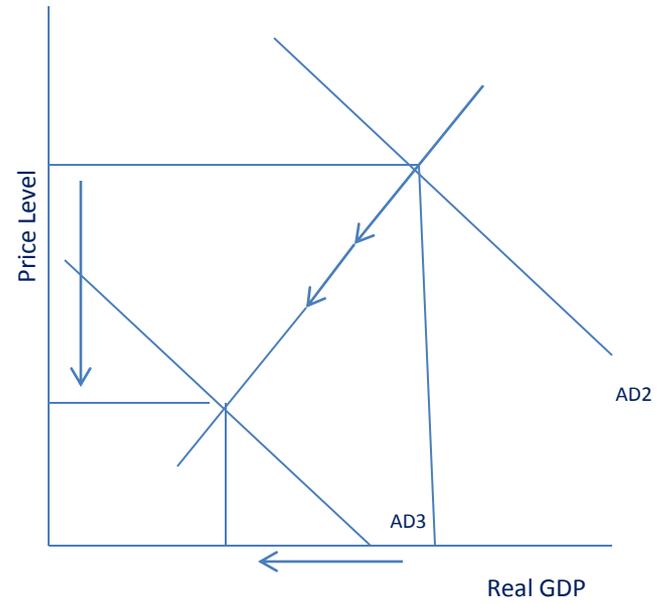
The possible factors that cause business cycles are generally grouped under following categories: political factors, international economic factors, and domestic economic factors.

Political Factors: There is some correlation between volatility in GDP and electoral cycles. Governments tend to adopt expansionary fiscal policy and easy monetary policy, if it has control over the monetary policy committee, before elections. On the other hand, in the face of rising prices and growing budget deficits, governments tend to adopt contractionary fiscal policy and tight monetary policy after elections.

Expansionary fiscal policy along with easy monetary policy leads to an economic boom. This results into increased output and an inflationary pressure in the economy, depending on the degree of spare capacity in the economy. On the other hand, contractionary policies may cause a slowdown in the economy, leading to a recession.



Effect of pre-election expansionary policy



Effect of post-election contractionary policy

International Economic Factors:

Globalisation has increased the interdependence between countries and there is an international transmission of volatility from one country to another.

In an era of ever increasing **financial integration**, it has become more and more difficult for a country to pursue an independent monetary policy with respect to interest rates and exchange rates.

Greater **product market integration** leads to international transmission of business cycles through exports and imports.

Though these international factors do explain the transmission mechanism, they fail to provide a convincing explanation of genesis of a business cycle in the first place.

Domestic Economic Factors:

Political or international economic factors produce some kind of economic 'shocks' within the economy. There is sluggish adjustment within the economy to these economic shocks. In the short run aggregate demand changes when prices, employment and wages adjust in a sluggish fashion.

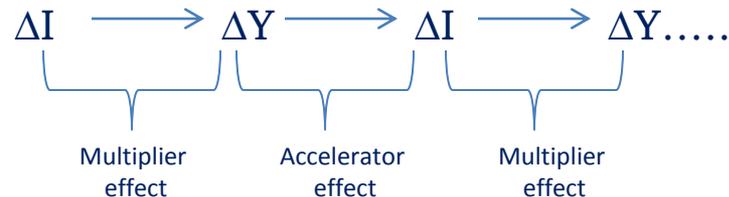
The most crucial component of the aggregate demand that could be a source of ‘shocks’ is **investment spending**.

Keynesians argue that changes in investment spending is a primary cause of business cycles. This argument gives rise to **multiplier-accelerator model**.

A **multiplier effect** – whereby a change in investment spending (ΔI) causes a multiple change in national output or national income (ΔY), i.e. $\Delta Y = m\Delta I$, where ‘m’ is the multiplier effect.

An **accelerator effect** – whereby a change in national output causes a further change in investment expenditure’ i.e. $\Delta I = a \Delta Y$, where ΔI is current net investment spending, ‘a’ is the accelerator effect, and ΔY is the change in national output between the current and the previous period.

A **combined multiplier-accelerator interaction** – whereby the multiplier and accelerator effects feed back on each other as follows:



These interactions between multiplier and accelerator effects give rise to peaks (booms) and troughs (bust) in economic activity.

An initial rise in investment spending causes an increase in income through the multiplier effect. This increase in national income leads to more consumer demand, which, in turn, leads to a further increase in the pace of investment spending through the accelerator effect. This process results in recovery, leading to peak in the business cycle.

A reduction in investment spending causes a fall in income through the multiplier effect. This fall in national income leads to a fall in consumer demand, which, in turn, leads to a further reduction in investment spending through the accelerator effect. This process results in recession, leading to trough in the business cycle.

The Turning Points:

A recession eventually does not result into total economic collapse. At the same time even a boom comes to an end. Economic bottlenecks and new opportunities cause turning points in the business cycle.

Shortages of labour and certain labour skills, raw materials and energy resources and increased cost of credit, leading to cost-push inflation, work as economic bottlenecks during the period of expansion. Eventually rate of growth of demand for goods and services falls. Governments also intervene to deflate demand through fiscal and monetary measures to prevent accelerating inflation. These deflationary pressures eventually decrease planned investment expenditure and the expansion phase comes to an end.

Even in the recession phase some investment expenditure must occur if production is to continue. There is a floor to the level of investment. After a period of economic contraction cost of credit and wage rates tend to ease, leading to new business opportunities. Eventually the economic decline is reversed.

Stock Adjustment:

Stock adjustment makes business cycles less pronounced.

Holding stocks allows firms to meet short-term fluctuations in aggregate demand without incurring the expense of short-run fluctuations in output.

If there are sufficient stocks additional demand can be met out of this stock; on the other hand, a fall in aggregate demand is accompanied by a gradual process of output reduction as the stock of unsold goods builds up.

‘Ceilings’ and ‘Floors’ to Economic Activity:

Inevitable existence of ‘ceiling’ and ‘floors’ to economic activity represents another fundamental cause of business cycles.

The real national income cannot expand indefinitely. This constraint to aggregate supply provides a ‘ceiling’ to the growth of real income. Thus expansion phase cannot continue for ever.

Similarly, the fact that the aggregate demand cannot fall indefinitely as people need to consume food and to have other essentials to stay alive provides a ‘floor’ to national income. Also, gross investment cannot become negative. This reverses the phase of economic decline.

Reading List

- i. Abel, A. B. & B. S. Bernanke (2006). Macroeconomics, Pearson, Delhi.
- ii. Begg, D., S. Fisher & R. Dornbusch (1994). Economics, McGraw-Hill, Berkshire.
- iii. Shapiro, E. (2005). Macroeconomic Analysis, Galgotia, New Delhi.