Business Cycle

Introduction:

- Business cycle or trade cycle is a part of the capitalist system.
- Knowledge of business cycles is significant for companies, investors, and policymakers to be aligned with the prevailing economic conditions and to undertake appropriate decisions.
- It is a wave-like fluctuation in aggregate income, employment, output and price level.
- BCs are a type of fluctuation found in the aggregate economic activity of a nation - a cycle that consists of expansions or contractions occurring at about the same time in many economic activities.
- This sequence of changes is recurrent but not periodic.

Definitions:

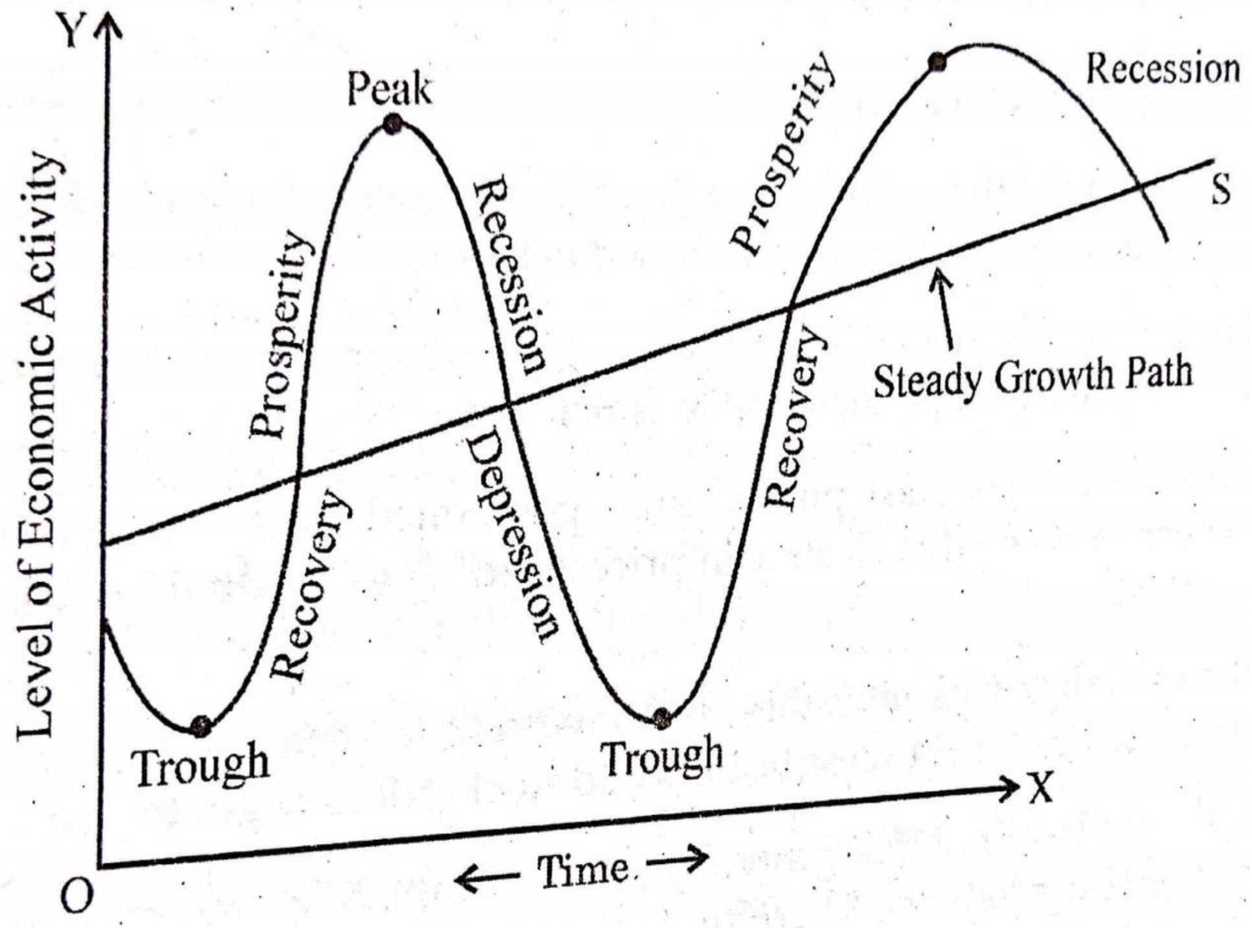
- It is defined in various ways by different economists.
- A trade cycle is composed of periods of good trade characterized by rising prices and low unemployment percentage, altering with periods of bad trade characterized by falling prices and high unemployment percentage.
- BCs consist of recurring alteration of expansion and contraction in aggregate economic activity, the altering movements in each direction being self-reinforcing and pervading virtually, all parts of the economy.
- Cyclical fluctuations are characterized by alternating waves of expansion and contractions. They do not have a fixed rhythm, but they are cycles in that the phases of contraction and expansion recur frequently and in fairly similar patterns.

Characteristics of Business cycles

- Cyclical fluctuations are wave-like movements
- Fluctuations are recurrent in nature
- They are non-periodic or irregular
- They occur in such aggregate variables as output, income, employment and prices.
- These variables move at about the same time in the same direction but at different rates.
- The durable goods industries experience relatively wide fluctuations in output and employment but relatively small fluctuations in prices.
- Non-durable goods industries experience relatively wide fluctuations in prices but relatively small fluctuations in output and employment.

Phases of a Business Cycle

- Business cycle is generally divided into four phases: recovery, prosperity, recession and depression.
- Each stage reflects different economic conditions and behaviors, influencing how businesses, consumer and policy maker respond.



Recovery

- In the lower turning point, there may be some exogenous or endogenous forces to put the economy on the revival path.
- *Suppose the semi-durable goods wear out, which necessitates their replacement in the economy. It leads to an increase in demand, investment and employment, which becomes cumulative.*
- *There is a lot of excess or idle capacity in the economy, so output increases without a proportionate increase in total costs. But the output becomes less elastic over time; bottlenecks appear as costs rise, deliveries become more difficult, and plants may have to be expanded.*
- Under these conditions, prices rise, profits increase, business expectations improve, and optimism prevails. Investment is encouraged, leading to increased demand for bank loans and credit expansion.
- The cumulative process of increase in investment, employment, output, income and price feeds upon itself and becomes self-reinforcing. Ultimately, revival enters the prosperity phase.

Prosperity

- This phase is characterized by economic expansion, rising incomes, low unemployment, and increased consumer spending, with businesses responding by increasing production and offering new products. They tend to raise prices, leading to an increase in profit margin. The economy is engulfed in waves of optimism.
- The expansionary process becomes cumulative and self-reinforcing until the economy reaches the peak.
- The prosperity may lead the economy to over-full employment and to an inflationary rise in prices, which is the symptom of the end of the prosperity phase and the beginning of the recession.

Prosperity (contd.)

- The seeds of the recessions are contained in the boom in the form of strains in the economic structure, acting as brakes to the expansionary path.
  - ✓ Scarcities of labour, raw materials, etc., leading to a rise in costs relative to prices, leading to a decline in profit margin.
  - ✓ Rise in the interest rate due to scarcity of capital, making investment costly.
  - ✓ Failure of consumption to rise due to rising prices and stable propensity to consume when income increases, leading to the piling up of inventories, indicating that sales lag behind production.
- These forces become cumulative and self-reinforcing.
- Entrepreneurs, businessmen and traders become over-cautious and over-optimism gives way to pessimism.

Recession

- Its outward signs are liquidation in the stock market, strain in the banking system and some liquidation of bank loans, and the beginning of the decline of prices and profit margins. Some firms close down and others reduce production and try to sell out accumulated stocks. Investment, employment, income and demand decline.
- Recession may be mild or severe. The latter might lead to a sudden explosive situation emanating from the banking system or the stock market and a panic or crisis occurs.
- A recession, once started, tends to build upon itself.

Depression

- Recession merges into depression when there is a general decline in economic activity.
- There is considerable reduction in the production, employment, income, demand and prices. The general decline in economic activity leads to a fall in bank deposits. Credit expansions stops as business community is not willing to borrow, Bank rate falls considerably.
- A depression is characterized by mass unemployment, general fall in the prices, profits, wages, interest rate, consumption, expenditure, investment, bank deposits and loans.

Causes of Business Cycle

- **External factors:**

  Sunspots, wars, revolutions, political events, gold discoveries, population growth rates, migrations, discoveries, and innovations.

- **Internal factors:**
  - ✓ Bank credits

    Expansion/contraction of bank credit leading to changes in demand for money.
  - ✓ Over-saving or under-consumption

    Income and wealth disparities
  - ✓ Overinvestment

    Easy bank loan without proportionate savings

Causes of Business Cycle (contd.)

- ✓ Competition

  Under competitive conditions, firms produce in anticipation of demand
- ✓ Psychological causes

  Over-optimism and over-pessimism
- ✓ Innovation

  Innovation in the structure of the economy)
- ✓ Marginal efficiency of capital (MEC)

  Fluctuations in the rate of investment caused by fluctuations in the MEC which depends on supply price of capital assets and their prospective yield which in turn depends on business expectation.

Theories of Business Cycle

1. Hawtrey’s Monetary Theory *(R. G. Hawtrey)*
2. Hayek’s Monetary Over-investment Theory *(F. A. Hayek)*
3. **Schumpeter’s Innovation Theory** *(Joseph Schumpeter)*
4. The Psychological Theory *(A. C. Pigou)*
5. The Cobweb Theory *(H. Schultz, J. Tinbergen, U. Ricci & N. Kaldor)*
6. Keynes’s Theory *(John Maynard Keynes)*
7. Samuelson’s Model of Business Cycle *(Paul Samuelson)*
8. Hicks’s Theory of business Cycle *(J. R. Hicks)*
9. Goodwin’s Trade Cycle Model *(R. M. Goodwin)*
10. Friedman’s Theory of Business Cycle/Money and Business Theory (*M. Friedman and A. W. Schwartz)*
11. Kaldor’s Model of the Trade Cycle *(Nicholas Kaldor)*

Schumpeter’s Innovation Theory

- Innovation in the structure of an economy. It is the outcome of economics development in a capitalist society.
- Innovations are not inventions. It is the introduction of a new product and the continual improvements in the existing ones that are the causes of business cycles.
- Innovation means;

  “such changes in the production of goods as cannot be affected by infinitesimal steps or variations on the margin.”
- Innovation consist of;

Schumpeter's Innovation Theory (contd.)

1. ***the introduction of a new product***
2. ***the introduction of a new method of production***
3. ***the opening up of a new market***
4. ***the conquest of a new source of raw materials or semi-manufactured goods***
5. ***the carrying out of the new organizations of an industry***

- Who is an innovator?

Schumpeter's Innovation Theory (contd.)

- **Entrepreneur – a man who introduces something entirely new. He does not provide funds but directs their use**
- To perform his economic function, the entrepreneur requires two things;
  1. *the existence of technical knowledge in order to produce new products*
  2. *the power of disposal over the factors of production in the form of bank credit.*
- Capitalist society is full of untapped technical knowledge. To make use of it credit is essential which help in braking the **circular flow** of economy.

Schumpeter’s Innovation Theory (contd.)

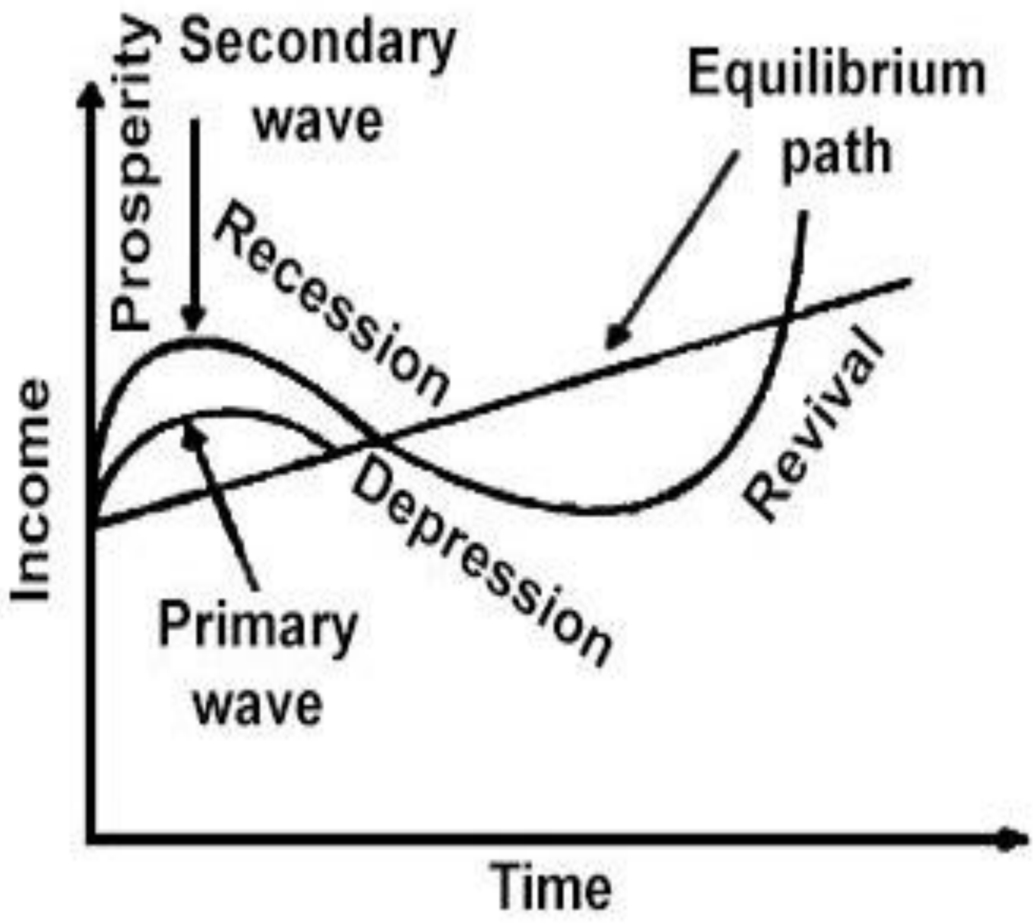
- Model has two stages. The first stage deals with the initial impact of innovation and the second stage follows through reactions to the original impact of innovation.
- The theory starts with the breaking up of the **circular flow** by an innovation.
- **First approximation** – Assuming equilibrium economic system with every factor fully employed. Every firm is producing efficiently with its costs equal to its receipts. Product prices are equal to both average and marginal costs. Profits and interest rates are zero. No savings and investments. This equilibrium is characterized as the **Circular Flow** which continues to repeat itself in the same manner year after year.

Schumpeter's Innovation Theory (contd.)

- *The innovating entrepreneur is financed by expansion of bank credit. With his newly acquired funds, the innovator starts bidding away resources from the other industries. Money income increase. Price begin to rise, thereby stimulating further investment. The new innovation starts producing goods and there is an increased flow of goods in the economy. Consequently, supply exceeds demand. Price and cost production of goods start declining until recession sets in. Because of the low prices of goods, producers are not willing to expand production. During this period of recession, credit, prices and interest rate decline but total output is likely to average larger than in the preceding prosperity.*

Schumpeter's Innovation Theory (contd.)

- The first approximation consists of a two-phase cycle. The economy starts at the equilibrium state, rises to a peak and then starts downward into a recession and continues till the new equilibrium reached. This new equilibrium will be at a higher level of income than the initial equilibrium because of the innovation which started the cycle (primary wave).



Schumpeter’s Innovation Theory (contd.)

- **Second Approximation:**
- Reaction of the impact of original innovation.
- *Once the original innovation become successful and profitable, other entrepreneurs follow it in “swam-like cluster.” Innovation in one field induces innovations in related fields. Consequently, money incomes and prices rise and help to create a cumulative expansion throughout the economy. With the increase in the purchasing power of customers, the demand for the products of old industries increases in relation to supply. Prices rise further. 0profits increase and old industries expand by borrowing from the banks. It induces a secondary wave of credit inflation which is superimposed on the primary wave of innovation. Overoptimism and speculation add further to the boom. After a period of gestation, the new product start appearing in the market displacing the old products and enforcing a process of liquidation, readjustment and absorption.*

Schumpeter's Innovation Theory (contd.)

- *The demand for the old products is decreased. Their prices fall. The old firm contract output and some are even forced to run into liquidation. As the innovators start repaying bank loans out of profits, the quantity of money is decreased and prices tend to fall. Profits decline. Uncertainty and risks increase. The impulse for innovation in reduced and eventually come to an end. Depression set in and the painful process of readjustment to the "point of previous neighbourhood of equilibrium" begins. Ultimately, the natural forces of recovery bring about a revival.*

Schumpeter’s Innovation Theory (contd.)

- The second approximation of Schumpeter’s theory of trade cycle develops into a four-phase cycle, with the recession, which was the second phase in the first approximation, continuing downward to give the depression phase. This extension of cycle is followed by a period of revival, which continues till the equilibrium level is reached (Secondary Wave).