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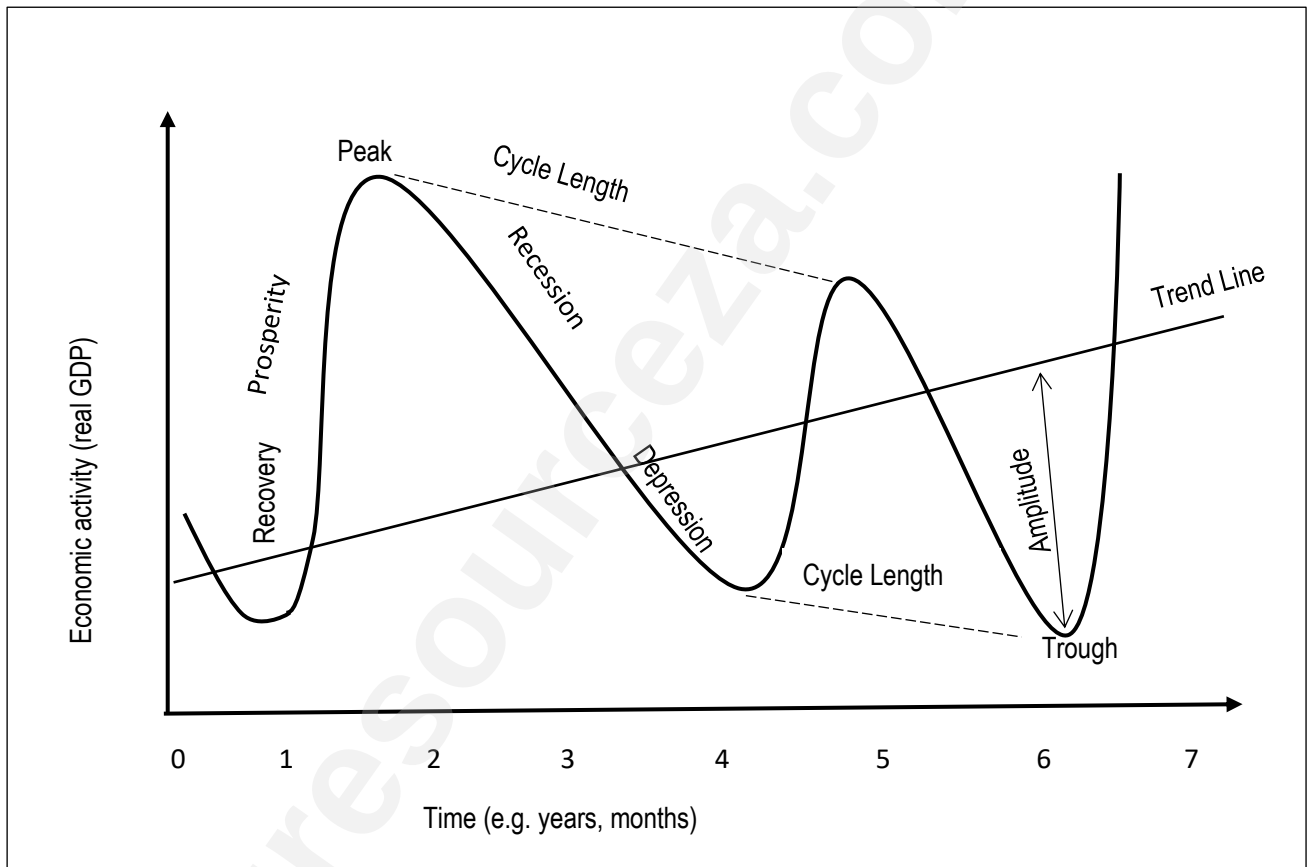
ECONOMICS NOTES
TOPIC 2: BUSINESS CYCLES
GRADE 12
YEAR 2024

TOPIC 2: BUSINESS CYCLES

THE COMPOSITION AND FEATURES OF A BUSINESS CYCLE

- Business cycle is successive periods of increasing and decreasing levels of economic activity.
- It is a period of expansion (upswing) and contraction (downswing) in the level of gross domestic product.

TYPICAL BUSINESS CYCLE



- There are two periods in every business cycle, namely: **contraction (downswing)** and **expansion (upswing)** which alternates
- Expansion (upswing) is the period during which the level of real GDP (economic activities) increases. It consists of two phases namely: recovery and prosperity.
- Contraction (downswing) is the period of the business cycle during which the level of real GDP (economic activities) decreases. It has two phases which are recession and depression.
- The two periods are separated by two turning points which are peak and trough.
- **Peak** is the upper turning point which indicate the highest level of the business cycle. After the peak the economy starts to contract.
- **Trough** is the lower turning point and represents the lowest level of economic activity. After trough the economy starts to improve.

PHASES OF BUSINESS CYCLES

Recovery: the first phase after the lower turning point of the cycle.

- The level of economic activity (GDP) starting to increase, slowly at first but gradually increasing in speed.
- There is an increase in employment and income
- Aggregate demand of goods and services increase (due to increase in jobs opportunities)
- Business confidence increases and this leads to more investment in the economy

Prosperity:

- The level of optimism in the economy is very high.
- Entrepreneurs invest more money than before in the economy
- Employment levels is high, and this result in an even more spending on goods and services
- The level of growth in production is very high.
- Inflation gets out of control especially at the boom which is the end of the prosperity phase

Recession

- A recession phase is when there is negative economic growth rate for two consecutive quarters.
- The level of economic activity (GDP) starts to decrease.
- The level of employment and production decrease, slowly at first but gradually increasing in speed
- As unemployment increases, a feeling of pessimism start to grow

Depression

- The level of economic activities is at very low.
- Money is in short supply, leading to a further decline in spending.
- Many businesses have closed down, impacting negative impact on production and spending.
- Cost of production eventually decreases
- This encourages foreign trade and leads to a recovery.

REAL (ACTUAL) BUSINESS CYCLE

- An actual business cycle is obtained when the effects of irregular events (e.g. Covid 19, wars,) are removed from the time series data. For e.g. during the Covid 19 many economies recorded negative growths/ very low growths, so to obtain the real growth of such economies, the growth data related to the time of Covid 19 are not considered.
- Real business cycle emphasizes the role of shocks affecting supply side of the economy.

UNIT 2.2: EXPLANATIONS OF A BUSINESS CYCLE

- **Exogenous /Monetarist explanation**

- Monetarists Economists believe that markets are **inherently (naturally) stable**.
- Any expansion or contraction in economic activities is due to **factors coming out of the market system** (exogenous factors).
- They believe that when disequilibrium exists in the economy, Market forces (supply and demand) kick in and bring the economy back to its natural state or equilibrium route.
- **Government interventions (policy)** are not part of the normal forces operating in the market (i.e. Government policy is regarded as an external factor)
- **Changes in weather** patterns influence mainly agriculture and affect the level of economic activity in general.
- **Technological innovation** can lead to an expansion of the level of production of goods and services

- **Endogenous/Keynesian explanations/ Interventionist approach**

- Keynesian Economists believe that the markets are **inherently (naturally) unstable**.
- Business cycles occur due to the **forces that arise inside the market**.
- Price mechanism fails to coordinate demand and supply in various markets.
- Prices are not flexible enough, that is they increase easily but are difficult to decrease.
- They believe that governments must intervene in the economic processes to smoothen the peaks and troughs as far as possible.
- During expansion governments should apply policy to improve growth without fuelling inflation.
- During contraction, **government policies** should be applied to shorten the period.
- Examples of endogenous factors are changes in the level of investment, changes in aggregate demand, changes in aggregate supply, and monetary policy.

UNIT 2.3: OTHER KINDS OF CYCLES

- **The Kitchin Cycle:**

- The shortest business cycle with a duration of 3 – 5 years.
- Caused by changes in inventory levels of businesses i.e. when firms adjust their stock levels.

- **The Juglar cycle**

- They have a duration of 7 to 11 years
- They are caused by changes in investment in equipment and machinery by firms and government

- **Kuznets Cycle**

- They have a duration of 15 to 20 years.
- They are caused by changes in the building and construction industries. Therefore they are also called building cycles.

- **Kondratieff Cycles**

- They are the longest cycles and have a duration of 50 years and longer.
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- They are caused by factors such as technological innovation, wars, and discoveries of new mineral deposits. For e.g. the introduction of computers (technological innovation) is still even today resulting in creation of new products, new skills and new occupations.

UNIT 3: GOVERNMENT POLICY (FOR SMOOTHING BUSINESS CYCLE)

- **Fiscal policy**

- Fiscal policy is the responsibility of the Minister of finance.
- The two main instruments of fiscal policy are taxation and government spending.
- Changes in taxation and government spending can influence aggregate spending and income distribution.

- **Monetary policy**

- This are the steps taken by the SARB to influence the economy
- Monetary policy consists of the following instruments
- **Interest rates:** the repurchase rate (repo rate) is used when the commercial banks borrow money from the SARB.
- **Cash reserve requirements:** the banks are required to maintain a certain amount of reserves in their accounts with the SARB.
- **Open market transaction:** SARB can influence the money in circulation by selling or buying of government bonds
- **Moral suasion:** SARB persuades the banks to act in the manner that is desirable for the current economic climate
- **Exchange rate policy:** the monetary authorities can use free floating or managed floating exchange rate system to influence the economy. SARB uses the free floating system where the value of the currency is determined by demand and supply (no SARB intervention)

UNIT 4: NEW ECONOMIC PARADIGM/ THE SMOOTHING OF BUSINESS CYCLE

(Possible essay: *Discuss in detail 'The new economic paradigm'/Explain the 'smoothing of cycles'*)

- New economic paradigm involves the simultaneous application of demand side policies and supply side policies to ensure economic growth without having inflation and supply constraints.
- This means the government should intervene in the markets to bring this balance between growth and inflation
- Demand and supply side policies are central in the new economic paradigm.

DEMAND SIDE POLICIES

They are aimed to increase aggregate demand of goods and services. It comprises of **monetary** and **fiscal policies**.

1. Monetary policies

- When the level of economic activity changes the SARB can use expansionary and contractionary (restrictive) measures reduce fluctuation of such economic activities

- An expansionary monetary policy is implemented when the economy is in recession in order to stimulate economic activities
- Interest rate
- Interest rates are used to influence credit creation by making credit more expensive or cheaper.
- **To expand credit creation**, during recession interest rates can be reduced.
- This can result in an increase in aggregate demand as more people are likely to apply for loans. Increased aggregate demand leads to increased total production of goods and services.
- **To reduce (restrict) credit creation**, during peak repo rate can be increased.
- This can lead to a decrease in the number of loans, aggregate demand and production of goods and services.

Open market transactions

- **To encourage (expand) credit creation**: the SARB buy securities from the banks.
- This result in money flowing into the banking system and aggregate demand and production increase.
- **To restrict credit**: the SARB sell securities to the banks.
- When banks buy these securities money flows from the banks to SARB.
- Banks will have less money to lend and cannot give as many loans as before.
- This can reduce aggregate demand and supply of goods and services.

Moral suasion

- The SARB consults with the banks and persuade them to act in a desirable manner suitable for prevailing economic conditions.
- **To increase (expand) demand for loans**, the SARB can encourage the banks to be less strict in their requirements for one to qualify for a loan. This can lead to an increase in both aggregate consumption and production of goods and services.
- **To reduce (restrict/ contract) demand for loans**, banks can be encouraged to be stricter with loan extension. This can result in aggregate demand and supply decreasing.

Cash Reserve Requirements

- Banks are required to hold a certain minimum cash reserve in the central bank.
- **To increase (expands) aggregate demand**, the SARB can reduce the amount of money needed as cash reserves in each bank's account with it. This will increase the amount to be given as credit.
- **To reduce (restrict) aggregate demand**, the amount of money needed as reserves in each bank's accounts with the SARB can be increased.
- This will result in banks having limited amounts of money to give out as credit.

2. Fiscal policy

- When the level of economic activity is low, the Minister of Finance can use **expansionary** measures to improve it,
- When the level of economic activity is too high, **contractionary** measures to slow down.

2.1. Expansionary fiscal policy

- The measures taken involve a **reduction in taxation** and **an increase in government expenditure**

Reduction in taxation

- If income tax decreases consumers' disposable income will increase
- Households will spend more on goods and services stimulating aggregate demand
- Level of production will increase to meet higher demand, resulting in employment of more factors production
- Income levels will increase as well as expenditure, turning the economy to an upswing

Increase in government expenditure

- Government can increase its expenditure for economic and social services.
- E.g. expenditure on social grants, education, healthcare services and infrastructure development projects
- This will increase aggregate demand and businesses will produce more to meet higher demand
- More factors of production will be employed resulting in higher income levels
- Aggregate expenditure will increase turning the economy to an upswing

2.2. Contractionary (restrictive) fiscal policy

- During prosperity phase if the **economy is over-heating/growing too fast**, contractionary Fiscal policy can be implemented to slow-down economic activity.
- The measures takes are: **increase in taxation** and **decrease in government spending**.

Increase in taxation

- Increase personal income tax leads to a decrease in consumers' disposable income
- Households will spend less on goods and services, reducing aggregate demand
- Production of goods and services will decrease resulting in less factors of production employed
- Income and expenditure levels will decrease further turning the economy to a downswing

Decrease in Government expenditure

- A reduction in government expenditure leads to a decrease in aggregate expenditure
- Less goods and services will be produced resulting in less factors of production employed.
- Income and expenditure levels will decrease further turning the economy to a downswing.

SUPPLY SIDE POLICIES

These are measures aimed at stimulating aggregate supply of goods and services.

1. Government measures that can reduce production costs

- Providing Infrastructural services like communication, transport and energy at reasonable costs can help to increase aggregate supply
- Administrative costs like inspections and regulations - add to overall costs, therefore reducing them can increase production.
- Cash incentives like subsidies and compensation to exporters can result in increased aggregate supply.

2. Measures to improve the efficiency of inputs (factors production)

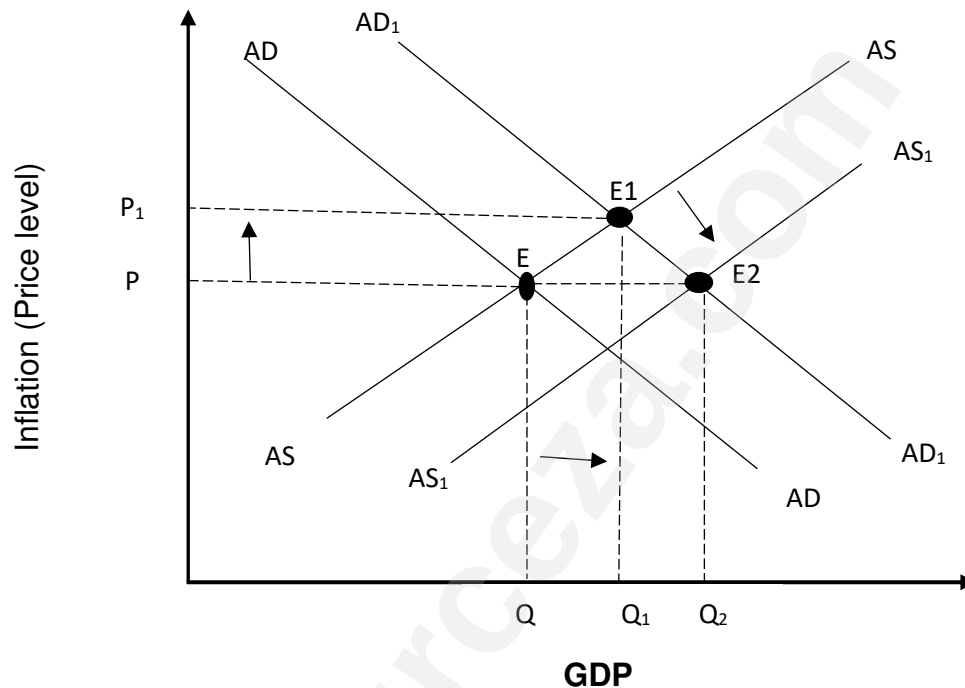
- Tax rates: A reduction in income tax rates can increase aggregate supply, as households will be encouraged to work harder to increase their disposable incomes
- Capital consumption: replacing capital goods regularly that will create opportunities for businesses to keep up with technological development.
- Human resources development: The quality of labour can be improved by improving health care, education and training. This can result in efficient workers and therefore increase in supply.
- Free advisory services: are offered by the government to promote opportunities to export and establish business activities in foreign countries e.g. weather forecasts, and research & development.

3. Measures to improve the efficiency of markets

Deregulation: Government can remove laws and regulations that hamper the operation of the market (to make markets free)

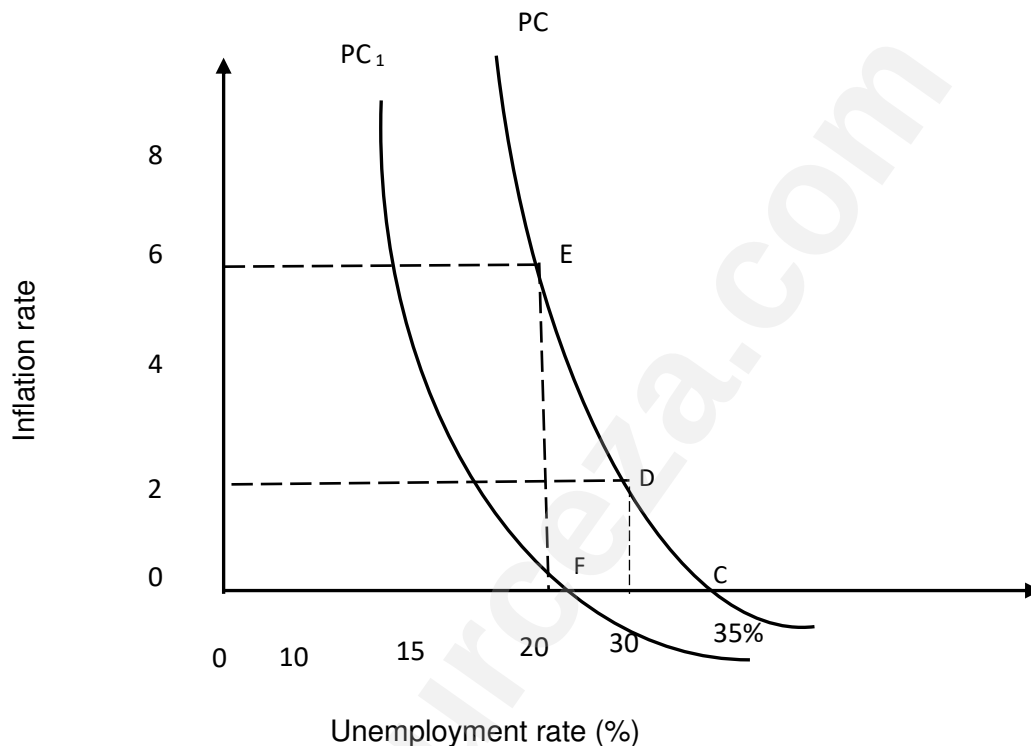
Competition is encouraged to establish new businesses, invite foreign direct investment and remove power imbalances such as monopolies and opportunities for collusion (oligopolies)

THE EFFECTS OF DEMAND SIDE AND SUPPLY SIDE POLICIES ON THE ECONOMY (NEW ECONOMIC PARADIGM/SMOOTHING OF BUSINESS CYCLE)



- Aggregate demand (AD) and Aggregate Supply (AS) are at equilibrium at point E where the level of GDP output is Q.
- If AD is stimulated using demand-side measures (monetary and fiscal policies), it would increase to AD₁
- This results in increased spending but inflation also increased (P₁) because AS is lower than AD. The output (GDP growth) achieved is Q₁. This means while the GDP has grown it also brought an increase in inflation.
- Government can use supply-side measures (reduction in costs, improving the efficiency of inputs and improving the efficiency of markets) to stimulate aggregate supply.
- This will result in the AS increasing as indicated by the AS₁ curve. At point E₂, the increased AS is achieved after prices have declined (from P₁ to P).
- In short, for the economy/GDP to grow without inflationary problem, both demand and supply side policies should be applied simultaneously.

PHILLIPS CURVE RELATING TO PEAK AND TROUGHS



- During a trough (lowest point of the business cycle) economic activity level is very low and unemployment level is often the highest (point C) at 35%. This is when operating on curve PC (original Phillips Curve)
- 35% is the natural unemployment rate which means the unemployment rate which has no effect on inflation (inflation is zero at this unemployment level).
- Government can implement expansionary demand side policies (e.g. reduction in income tax) to stimulate spending and investment.
- This will result in increase in economic growth (GDP growth) and reduction in unemployment from 35% to 30% (point D), then 20% (point E). On the other hand, spending will increase as more people are employed and they earn income. This will increase the inflation rate from 0 to 2% at Point D, and 6% at Point E.
- As the economy grows further, it will reach the peak where the inflation rate is at its highest. At this point contractionary demand side policies such as reduction in government expenditure and increase in direct taxation can help to reduce aggregate demand. This will however result in a decrease in production and employment.
- For the economy to operate on curve PC₁, supply side measures such as human resource development, decrease in production costs, deregulation can be implemented,

- At PC1 the natural unemployment is at 20% (Point F) which indicates that the supply side measures in addition to the demand side measures have improved the economy (and reduced natural unemployment by 15%)
- The trade –off between inflation and unemployment indicate that there is an inverse relationship between the two variables (As one increases the other decreases) .

UNIT 5: FEATURES UNDERPINNING BUSINESS CYCLE FORECASTING

(Possible essay: *Discuss in detail the features underpinning forecasting*)

3. Leading indicators

- They are indicators that change before the economy gets changed.
- They tell of how the economy will be in the coming months.
- When they rise, it means the economic activity will rise in the next few months.
- When they decline it also means the level of economic activity will decline in the coming months.
- Examples include number of residential plans passed, Number of job advertisements, number of new companies registered.

4. Coincident indicators

- They are indicators that change at the same time as the economy changes.
- A downturn is shown by a decrease in these indicators while an upswing is shown an increase in these indicators.
- Examples of coincident indicators are: usage of capacity in manufacturing, registered unemployment, Retail sales, real merchandise imports.

5. Lagging indicators

- They are indicators that change after the economy has already changed.
- They reach the turning point after the business cycle has already turned.
- They are used to confirm the changes predicted by the leading indicators.
- Examples of lagging indicators are: number of commercial vehicle sold, real investment in machinery, unit labour cost in manufacturing.

6. Composite indicator

- It is the summary of group of indicators of the same type into a single value.
- This means all the values of the leading indicators are summarised, the same is done with coincident and lagging indicators.

7. Extrapolation

- Means to estimate something unknown from facts or information that is known.
- For example, if it becomes clear that the business cycle has passed through a trough and has entered a boom phase, forecasters might predict that the economy will grow in the few months

8. Cycle length

- It is the time that the economy takes to move from one peak to another peak or one trough to another trough.

- Some business cycles last for a brief time while other can take up to 50 years.
- Shorter cycles represent a weaker cycle and longer lengths represent a stronger cycle.

9. Trend line

- It shows the general direction in which the economy is moving.
- It usually has a positive slope because the production capacity of a country increases over time.
- Economists look at the performance of the economy over the past few years and then predict a future trend

10. Amplitude

- It measures the vertical distance between a trough and the trend line or the vertical distance between the peak and the trend line. It indicates the intensity of the underlying forces and the size of a change.
- High amplitude shows the strong forces in the economy and severe expansion or contraction of economic activities.
- Low amplitude indicates weak forces in the economy and a more moderate expansion or contraction of economic activities

11. Moving averages

- This is a method of repeatedly calculating a series of different average values along a time series to produce a smooth curve.
- By using averages, the economists get a clearer picture of the general trends in the business cycle.