Lesson Notes: The Business Cycle, Economic Indicators, and Aggregate Demand & Supply

Lesson Objective

By the end of this lesson, students will be able to:

- Explain the **phases of the business cycle**.
- Identify and understand **key economic indicators** (GDP, employment, and inflation).
- Use the **Aggregate Demand (AD) and Aggregate Supply (AS)** model to explain economic ups and downs.

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1. The Business Cycle

The **business cycle** shows how the economy grows and slows down over time.
It has **five main phases:**

a) Expansion

- The economy is growing.
- GDP increases, businesses produce more, and unemployment decreases.
- **Example:** A boom in the tech industry leads to more jobs and higher production.

b) Peak

- The economy is at its **highest level** of activity.
- Prices may rise quickly, and growth begins to slow down.
- **Example:** Housing prices reach their highest before a market crash.

c) Recession

- Economic activity starts to **fall**.
- GDP decreases and unemployment increases.
- **Example:** The 2008 financial crisis caused many people to lose jobs.

d) Trough

- The economy reaches its **lowest point**.
- Businesses and consumers start to slowly recover.
- **Example:** After a recession, companies begin hiring again.

e) Recovery

- The economy starts to **grow again**, leading to expansion.
- **Example:** Government spending and business investments increase, boosting growth.

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2. Key Economic Indicators

Economic indicators help us measure how healthy an economy is.

a) Gross Domestic Product (GDP)

- GDP = The total value of all goods and services produced in a country.

- **Why it's important:**
    - A rising GDP means the economy is growing.
    - A falling GDP means the economy is slowing down or in recession.
- **Example:** If GDP grows by 3% in one year, it means more production and spending.

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b) Employment

- Shows the percentage of working-age people who have jobs.
- **Not everyone is affected equally:**
    - Low-skilled workers often lose jobs faster during recessions.
    - High-skilled industries may recover more quickly.
- **Example:** During a slowdown, factory workers might lose jobs while tech workers keep theirs.

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c) Inflation

- Inflation = The rate at which prices of goods and services rise.
- **Why economists prefer low, steady inflation (around 2%):**
    - It encourages people to spend and invest.
    - Too high inflation reduces purchasing power.
    - Too low inflation (deflation) can stop spending and hurt the economy.
- **Example:** If prices rise too fast, people rush to buy now, which can make inflation worse.

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3. The Aggregate Demand (AD) and Aggregate Supply (AS) Model

This model helps us understand how total demand and total supply in an economy determine output (GDP) and price levels.

A. What is Aggregate Demand (AD)?

Definition:
Aggregate Demand is the total demand for all goods and services in an economy at a given price level.

Components of AD (Formula: AD = C + I + G + (X – M))

- C – Consumption: Household spending on goods and services.
- I – Investment: Business spending on equipment, factories, or buildings.
- G – Government Spending: Spending on public projects and services.
- X – M – Net Exports: Exports (X) minus Imports (M).

AD Curve:

- Slopes downward because as prices fall, people buy more goods and services.

Shift of AD curve
When consumer Income rises, households spend more → the AD curve shifts right → GDP increases and unemployment decreases.

B. What is Aggregate Supply (AS)?

Definition:

Aggregate Supply is the total amount of goods and services that businesses in an economy are willing and able to produce at different price levels.

Aggregate Supply has two time perspectives:

1. Short-Run Aggregate Supply (SRAS)
2. Long-Run Aggregate Supply (LRAS)

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1. Short-Run Aggregate Supply (SRAS)

Meaning:
In the short term, businesses can increase or decrease production when prices change, but some factors (like technology or capital) stay the same.

SRAS Curve:

- **Slopes upward:**
    - When prices rise, businesses want to produce and sell more (higher profits).
    - When prices fall, production and sales decrease.

Movement vs. Shift:

- A change in prices = movement along the SRAS curve.
- A change in costs or resources = shift of the SRAS curve.

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2. Long-Run Aggregate Supply (LRAS)

Meaning:
In the long run, the economy's output depends on its resources, technology, and workforce, **not prices.**

Shifts in LRAS:

- Right shift: When the economy can produce more (better technology, more skilled workers).
- Left shift: When the economy can produce less (natural disaster, resource loss).

Example:
If a country invests in new technology, its LRAS shifts right, meaning higher long-term economic growth.

Movements vs. Shifts in Aggregate Supply

Type	What Causes a Movement (Along the Curve)	What Causes a Shift (Curve Moves Left or Right)	Example of Shift
Short-Run Aggregate Supply (SRAS)	A **change in the overall price level** causes movement **along** the SRAS curve.	A **change in production costs, taxes, or resource availability** causes SRAS to **shift**.	🔹 Wages increase → SRAS **shifts left** (higher costs, less output). 🔹 Oil prices fall → SRAS **shifts right** (lower costs, more output).
Long-Run Aggregate Supply (LRAS)	In the long run, **price changes do not affect output**, so there is **no movement** along the curve (it's vertical).	A **change in productive capacity** (Technology, Growth in skilled labor or capital investment) causes LRAS to **shift**.	🔹 New technology → LRAS **shifts right** (more output). 🔹 Natural disaster destroys factories → LRAS **shifts left** (less output).

C. AD and AS Together: Finding Equilibrium

Equilibrium:

- The point where Aggregate Demand (AD) and Aggregate Supply (AS) meet.
- This determines the overall price level and real GDP in the economy.

Changes in Equilibrium:

- AD increases (shifts right): GDP ↑, prices ↑ (economic growth).
- AD decreases (shifts left): GDP ↓,prices decrease, unemployment ↑ (recession).
- AS increases (shifts right): GDP ↑, prices ↓ (growth without inflation).
- AS decreases (shifts left): GDP ↓, prices ↑ (stagflation).

Example:
If consumer spending increases, AD shifts right → new equilibrium → higher GDP and higher prices.

D. Summary Table

Curve	Meaning	Direction	Effect
AD	Total demand in the economy	Right → ↑ GDP & ↑ Prices	Left → ↓ GDP & ↓ Prices

SRAS	Short-run production	Right → ↑ GDP & ↓ Prices	Left → ↓ GDP & ↑ Prices
LRAS	Long-run capacity	Right → Higher potential output	Left → Lower potential output

Example:
During a recovery, consumer confidence increases → AD shifts right → higher GDP and prices (economic growth).

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4. Key Takeaways

Concept	Shift Direction	Result
AD Right	More demand	↑ GDP, ↑ Prices
AD Left	Less demand	↓ GDP, ↓ Prices
AS Right	More production	↑ GDP, ↓ Prices
AS Left	Less production	↓ GDP, ↑ Prices
Recession	AD shifts left	↓ GDP, ↑ Unemployment
Recovery	AD shifts right	↑ GDP, ↓ Unemployment

5. Practice Questions

Q1: Why is GDP used to measure the health of an economy?

A: It shows the total value of goods and services produced. A rising GDP means economic growth; a falling GDP shows slowdown or recession.

Q2: Why do economists prefer low and steady inflation?

A: It keeps prices stable, supports spending, and encourages investment.

Q3: What happens when the AD curve shifts right?

A: The economy grows — GDP and prices rise, and unemployment falls.

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6. Class Activity

- **Graph Analysis:** Look at an AD/AS graph and explain what happens when AD increases or decreases.
- **Scenario Discussion:** Discuss how a rise in oil prices affects AD/AS and the economy.

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7. Homework

1. Write a short essay:
   → *How does the business cycle affect workers, businesses, and governments?*
2. Use the AD/AS model to explain a real event (e.g., 2008 financial crisis).
