Aggregate Demand

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9:26 AM

The Short-Run Keynesian Policy Model: Demand-Side Policies

The Theory of Economics…is a method rather than a doctrine, an apparatus of the mind, a technique of thinking which helps its possessor to draw correct conclusions.

— J.M. Keynes

CHAPTER GOALS

- **Discuss the key insight of the AS/AD model and list both its assumptions and its components**
- **Describe the shape of the aggregate demand curve and what factors shift the curve**
- **Explain the shape of the short-run and long-run aggregate supply curves and what factors shift the curves**
- **Show the effects of shifts of the aggregate demand and aggregate supply curves on the price level and output in both the short run and long run**
- **Discuss the limitations of the macro policy model**

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KEY INSIGHT OF THE KEYNESIAN AS/AD MODEL

- **Short-run equilibrium output may differ from long-run potential output assuming a fixed price level**
    - **Equilibrium output** is the level of output toward which the economy gravitates in the short run because of the cumulative cycles of declining or increasing production
    - **Potential output** is the highest amount of output an economy can sustainably produce using existing production processes and resources
- **Market forces may not be strong enough to correct deviations from potential output**

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KEY INSIGHT OF THE KEYNESIAN AS/AD MODEL

- Paradox of thrift
  - In the long run, saving leads to investment and growth
  - In the short run, saving may lead to a decrease in spending, output, and employment
- **Aggregate demand management, which is government's attempt to control the aggregate level of spending, may be necessary**
- **Keynesian economists advocated an activist demand management policy**

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THE COMPONENTS OF THE AS/AD MODEL

Aggregate Demand Curve (AD)

- Is a curve that shows how a change in the price level will change aggregate expenditures on all goods and services in an economy

Short-Run Aggregate Supply Curve (SAS)

- Is a curve that specifies how a shift in the aggregate demand curve affects the price level and real output in the short run, other things constant

Long-Run Aggregate Supply Curve (LAS)

- Is a curve that shows the long-run relationship between output and the price level

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THE AS/AD MODEL

The AS/AD model is fundamentally different from the microeconomic supply/demand model.

Warning from your instructor!

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THE AS/AD MODEL

Microeconomic supply/demand curves concern the price and quantity of a single good.

Price of a single good is measured on the vertical axis and quantity of a single good is measured on the horizontal axis.
The shapes are based on the concepts of substitution and opportunity cost.

Warning from your instructor!

THE AS/AD MODEL

In the AS/AD model the price of everything is on the vertical axis and aggregate output is on the horizontal axis.

So there is no substitution

Warning from your instructor!

AGGREGATE DEMAND

The aggregate demand curve shows the relationship between the aggregate price level and the quantity of aggregate output demanded by households, businesses, and the government

Definition from another textbook.

THE AGGREGATE DEMAND CURVE

The *aggregate demand* (*AD*) *curve* shows how a change in the price level changes aggregate expenditures on all goods and services in an economy.

It shows the level of expenditures that would take place at every price level in the economy.

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THE SLOPE OF THE AD CURVE

The AD is a downward sloping curve.

Aggregate demand is composed of the sum of aggregate expenditures.

Expenditures = C + I + G +(X - M)

Do you remember this?

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THE SLOPE OF THE AD CURVE

The AD curve is *downward* sloping because of:

- **Interest rate effect,** the effect that a lower price level has on investment expenditures through the effect that a change in the price level has on interest rates
- **International effect,** as the price level falls (assuming the exchange rate does not change), net exports will rise
- **Money wealth effect,** a fall in the price level will make the holders of money richer, so they buy more
- **Multiplier effect,** the amplification of initial changes in expenditures

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THE INTEREST RATE EFFECT

Interest rate effect – the effect a lower price level has on investment expenditures through the effect that a change in the price level has on interest rates.

THE INTEREST RATE EFFECT

The interest rate effect works as follows:

a decrease in the price level ⇒
increase of real cash ⇒
banks have more money to lend ⇒
interest rates fall ⇒
investment expenditures increase

INTERNATIONAL EFFECT

Foreign Purchases Effect

- If prices rise in the US, exports decrease and imports increase, so X_n decreases.

Some other textbooks use Foreign purchase effect

MONEY WEALTH EFFECT IN DETAIL

- When Prices go up
- You feel poorer, so you spend less.
- Purchasing power declines with inflation

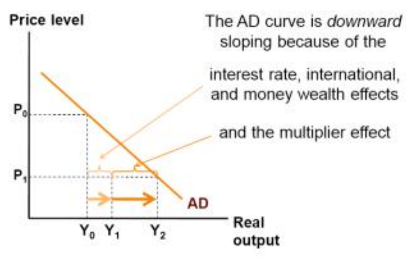
THE MONEY WEALTH EFFECT

Money Wealth Effect– a fall in the price level will make the holders of money and other financial assets richer, so they buy more.

Most economists accept the logic of the wealth effect, however, they do not see the effect as strong.

Just between you and me!

THE SLOPE OF THE AD CURVE



DYNAMIC PRICE LEVEL ADJUSTMENT FEEDBACK EFFECTS

- **Dynamic effects exist that can overwhelm the standard AD shift factors**
- **Especially important when aggregate demand is declining**
  - Expectations of falling aggregate demand
  - Lower asset prices (declining nominal wealth)
  - Financial panics
- **These forces counteract the standard shift factors**
- **If strong enough, dynamic forces can cause aggregate demand to fall (shift to the left) when the price level falls**

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SHIFTS IN THE AD CURVE

- **A shift in the AD curve means that at every price level, total expenditures have changed. Five important shift factors are:**
  - Foreign income
  - Exchange rates
  - Distribution of income
  - Expectations
  - Monetary and fiscal policy
- **Deliberate shifting of the AD curve is what most policy makers mean by macro policy**

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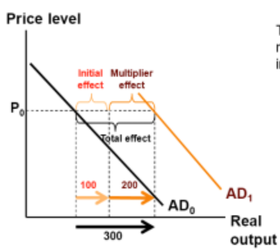
SHIFTS IN THE AD CURVE



The AD curve shifts out by more than the initial change in expenditures

- Exports increase by 100
- The multiplier magnifies this shift

AD curve shifts to the *right* by a multiple of 100, in this case by 300

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COMING SOON

IN FUTURE CHAPTERS YOU WILL SEE THE FOLLOWING PATTERNS

GOVERNMENT POLICIES

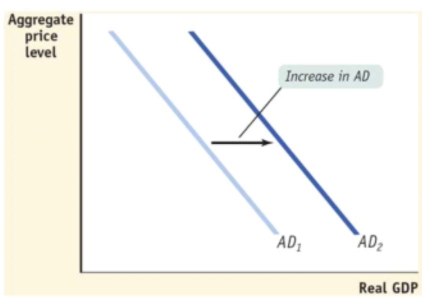
Fiscal policy

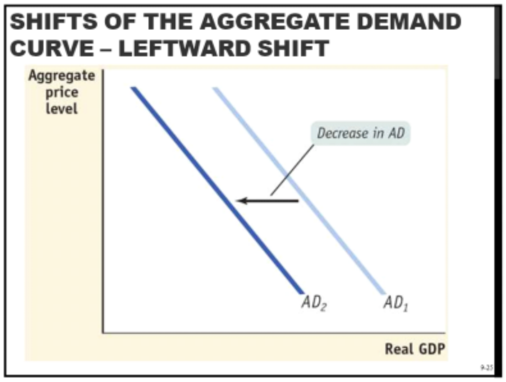
↓ Tax and/or ↑ government spending → ↑ AD

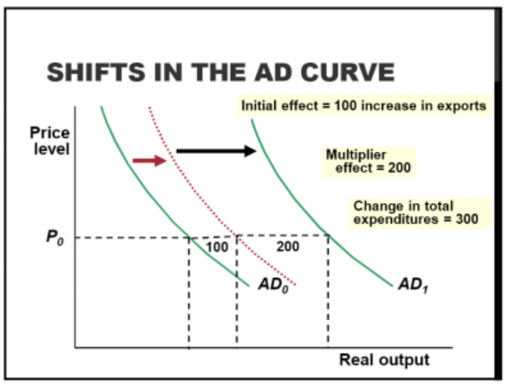
Monetary policy

Federal Reserve ↑ money supply → ↓ interest rates ↑ spending → ↑ AD

SHIFTS OF THE AGGREGATE DEMAND CURVE – RIGHTWARD SHIFT




SHIFTS OF THE AGGREGATE DEMAND CURVE – LEFTWARD SHIFT
Aggregate price level
Decrease in AD
AD_2
AD_1
Real GDP


SHIFTS IN THE AD CURVE
Initial effect = 100 increase in exports
Price level
Multiplier effect = 200
Change in total expenditures = 300
P_0
100
200
AD_0
AD_1
Real output