# UNIT 3 AP MACROECONOMICS

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## **Unit 3 - National Income and Price Determination**

#### AGGREGATE DEMAND CURVE

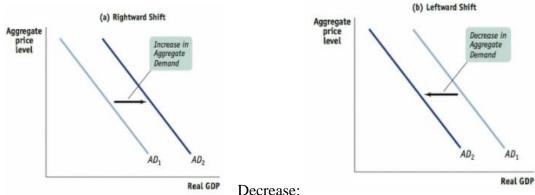
Shows relationship between aggregate price level & quantity of aggregate demand by households, firms, government, and the rest of the world.

#### DOWARDING SLOPE BECAUSE OF...

- Real-balance effect (increase in price level decreases the purchasing power of money)
- Interest rate effect (increase in interest rate decreases borrowing and spending)
- Open **economy effect** (higher price levels decreases net exports)
  - Made up of consumption, investment, government spending, and net exports
- Shifters
- Changes in expectations (optimistic beliefs increase demand)
- Changes in **wealth** (rise in asset value increase demand)
- Size of existing physical capital (small existing stock of physical capital increases demand)

Fiscal Policy: Government spending increase or tax cuts increase demand.

Monetary Policy: Quantity of money increases demand.



Increase:

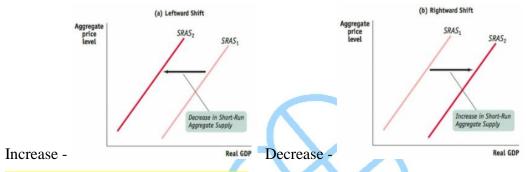
#### **Short-run Aggregate Supply (SRAS)**

When firms haven't made price changes in response to an economic shock (sticky prices).

#### Is upward sloping because of

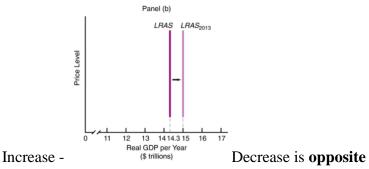
#### UPWARD SLOPE BECAUSE OF ...

- The **misperception theory** (producers mistaken price increase as greater profit)
- Sticky Price Theory (producers temporarily reduce quantity b/c of menu costs)
- Sticky Wage Theory (production costs can be higher from union contracts)
- Shifters
- Changes in **commodity prices** (lower commodity price increases SRAS)
- Changes in **nominal wages** (lower nominal wages increases SRAS)
- Changes in productivity (more productive workers increases SRAS)



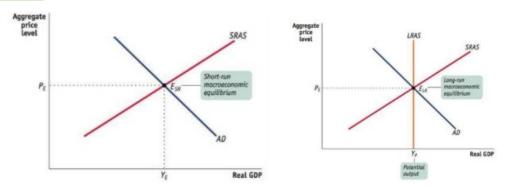
### Long-run aggregate supply (LRAS)

- After producers have adjusted their prices according to economic shocks
- All production costs are fully flexible
- It is an economy's potential output (represent the full-employment output)
- Shifters that cause and increase
- Increases in the quantity of resources (e.g., land, labor)
- Increases in the quality of resources (e.g., education)
- Technological progress can increase LRAS



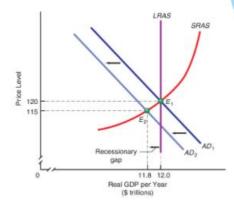
LRAS shifts indicate changes in full-employment level of **output & economic growth.** 

### **AD-AS MODEL**



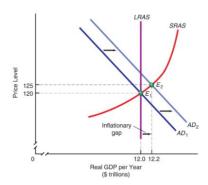
- If aggregate price level is above equilibrium, AS will exceed AD and cause the aggregate PL to **fall**, pushing it back to the equilibrium. If aggregate price level is below equilibrium, AD will exceed AS and cause the aggregate price level to **rise**, pushing it back to the equilibrium.
- Positive demand shock increases aggregate price and aggregate output (demand-pull).
  Negative demand shock decreases aggregate price and aggregate output.
- Positive supply shock decreases aggregate price and increases aggregate output. Negative supply shock increases aggregate price and decreases aggregate output (supply-push).

Recessionary gap: Exists when SRAS equilibrium is less than LRAS equilibrium.



If so, wages would fall and SRAS would shift to the right, bringing the economy back to LRAS equilibrium.

Inflationary gap: Exists when SRAS equilibrium is greater than LRAS equilibrium.



If so, wages would rise and **SRAS would shift to the right,** bringing the economy back to LRAS equilibrium.

• Economy self-corrects in the long-run

### **EQUILIBRIUM**

- Short-run equilibrium is when AD & SRAS are equal
- Long-run equilibrium is when AD & SRAS are equal and interest on LRAS

### FISCAL POLICIES (affect AD)

**Expansionary** Fiscal policies that **increase aggregate demand:** 

• Increase in government purchases (has greatest effect)

<mark>Multiplier =</mark>

$$\frac{1}{(1-MPC)} \times \Delta AAS$$

**MPC** = (Change in consumer spending) / change in disposable income

MPC+MPS = 1

• Cut in taxes

Multiplier = (MPC) / MPS

MPS = 1 - MPC

• Increase in **government transfers** 

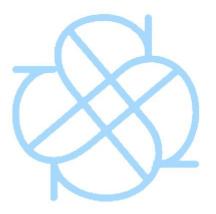
<u>Contractionary</u> Fiscal Policies that <u>decrease aggregate demand:</u>

- Decrease in government purchases
- Increase in taxes
- Decrease in government transfers

Expansionary policies are used in recessions and contractionary fiscal policies are used in expansions.

<u>Government spending and taxation rules</u> that cause fiscal policy to be automatically expansionary during recessions and contractionary during expansions are <u>automatic stabilizers</u>:

- Ex. Tax revenues automatically **decrease as GDP falls**, increasing consumption and preventing the economy falling into a greater recession.
- Ex. Tax revenues automatically **increase as GDP rises**, decreasing consumption and the economy from overheating.



## KEY:

UMP - Unemployment

PL - Price level

MB - Market basket

G&S - Goods and services

PV - Present value

FV - Future value

RGP - Real gross domestic product

AD - Aggregate demand

SRAS - Short-run aggregate supply

LRAS - Long-run aggregate supply

SRPC - Short-run phillip's curve

LRPC - Long-run phillip's curve

PPC - Production possibilities curve

### **SOURCES:**

- <a href="https://apcentral-stg.collegeboard.org/pdf/ap-macroeconomics-course-and-exam-description.pdf">https://apcentral-stg.collegeboard.org/pdf/ap-macroeconomics-course-and-exam-description.pdf</a>
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