

## Memorize your AS-AD Determinants! (Know the chart on the front of the Unit III packet)

**Determinants of Aggregate Demand** can be considered *aggregate demand shifters*. They are factors such as consumption spending, investment, government spending, and net exports. If they change, they shift the AD curve.

**Determinants of Aggregate Supply** can be considered *aggregate supply shifters*. They are factors such as input prices, productivity, and the legal-institutional environment. If they change, they shift the SRAS curve.

## THE AGGREGATE SUPPLY SIDE

### *Input Prices*

1. An increase in **Domestic Resource Prices** shifts SRAS to the left. A decrease in **Domestic Resources Prices** shifts SRAS to the right.
  - Labor Supply ↓ => wages ↑ => SRAS ↓ (curve shifts left)
  - Price of machinery ↓ => per-unit production cost ↓ => SRAS ↑ (curve shifts right)
2. An increase in **Prices of Imported Resources** shifts SRAS to the left. A decrease in **Prices of Imported Resources** shifts SRAS to the right.
  - OPEC raises oil prices => per-unit production cost ↑ => SRAS ↓ (curve shifts left)
  - Exchange Rates: If the dollar appreciates, domestic producers face a lower *dollar* price of imported resources. The resulting increase in imported resources will lower per-unit production costs and shift SRAS to the right.
3. Increases in **Market Power** for groups like OPEC gives them greater ability to set prices above competitive levels. This could result in increased production costs, thereby shifting SRAS to the left.

### *Productivity (Productivity = total output / total inputs)*

An increase in **Productivity** enables the economy to obtain more real output from its limited resources. This lowers per-unit production cost (total input cost / total output), and shifts SRAS to the right.

- Productivity ↑ => per unit-production cost ↓ => SRAS ↑ (curve shifts right)
- Improved production technology, a better-educated and better-trained workforce, and improved forms of business enterprises are sources of increased productivity.

### *Legal-Institutional Environment*

1. Higher **Business Taxes** increase per-unit production costs and shift SRAS to the left. **Business Subsidies** lower per-unit production costs and shifts SRAS to the right.
2. It is typically costly for businesses to comply with government regulations. More **Government Regulation** tends to increase per-unit production costs and shifts SRAS to the left.

### *LRAS shifts*

- A greater **Availability of Resources** (e.g. larger labor force, larger capital stock, more natural resources) can increase the level of full-employment output => LRAS shifts right.

- Improved **Technology and Productivity** can increase the level of full-employment output => LRAS shifts right. Better technology raises the productivity of both labor and capital, while a better-trained and educated workforce increases the productivity of the labor force.
- **Government Policy Incentives** can also provide incentives for the nation's labor force to work. Policies that provide incentives for firms to invest in capital or technology, or for individuals to find jobs quickly, can cause full-employment output to increase.

## THE AGGREGATE DEMAND SIDE

### *Consumption ( $C_a$ )*

1. Increases in consumer **Wealth** result in an increase in consumer spending, often called the "wealth effect". This shifts AD to the right.
  - Rising asset values, like stocks or real estate, are examples of how wealth could increase.
2. **Consumer Expectations** of higher real income and/or higher price levels in the future will increase current consumption. This shifts AD to the right.
3. Consumers can increase consumption spending by **Borrowing**. This shifts AD to the right.
4. A cut in **Personal Taxes** raises disposable income, and therefore consumer spending. This shifts AD to the right. On the other hand, tax increases reduce consumer spending and shift AD to the left.

### *Investment ( $I_g$ )*

1. Increasing **Real Interest Rates ( $i$ )**  $\uparrow$  borrowing costs => Investment spending  $\downarrow$  => AD  $\downarrow$  (curve shifts left). On the other hand, decreasing interest rates shift AD to the right.
2. Higher **Expected Rates of Return ( $r$ )** increase investment and shift AD to the right.
  - a. **New Technologies** =>  $r \uparrow$  => Investment spending  $\uparrow$  => AD  $\uparrow$  (curve shifts right)
  - b. Lower **Costs of Capital** =>  $r \uparrow$  => Investment spending  $\uparrow$  => AD  $\uparrow$  (curve shifts right)
  - c. Lower **Excess Capacity** =>  $r \uparrow$  => Investment spending  $\uparrow$  => AD  $\uparrow$  (curve shifts right)
  - d. Higher **Business Confidence** =>  $r \uparrow$  => Investment spending  $\uparrow$  => AD  $\uparrow$  (curve shifts right)
  - e. Lower **Business Taxes** =>  $r \uparrow$  => Investment spending  $\uparrow$  => AD  $\uparrow$  (curve shifts right)

### *Net Export Spending ( $X_n$ )*

1. Rising **National Income Abroad** causes foreigners to buy more products from the U.S. This increases U.S. net exports and shifts AD to the right.
2. **Exchange Rates:** If the U.S. dollar depreciates relative to the Euro (for example), U.S. exports rise, and U.S. imports fall. This increases U.S. net exports and shifts AD to the right.

### *Government Spending ( $G$ )*

1. Increase in **Government Spending** shifts AD to the right. A reduction, or cut, in Government Spending shifts AD to the left. This assumes that there are no other changes, like a change in tax collections, as a result.
  - Public works projects and defense spending are examples of government purchases that could increase or decrease.