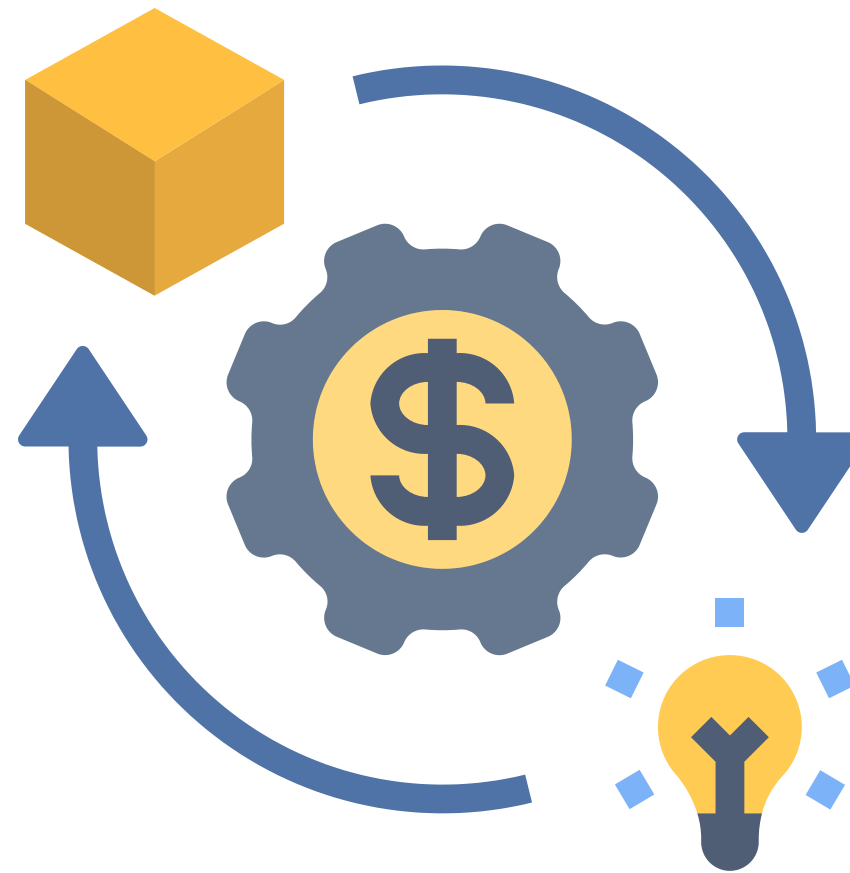


# Aggregate Demand and Aggregate Supply

3.2



# Aggregate Demand



# Definition

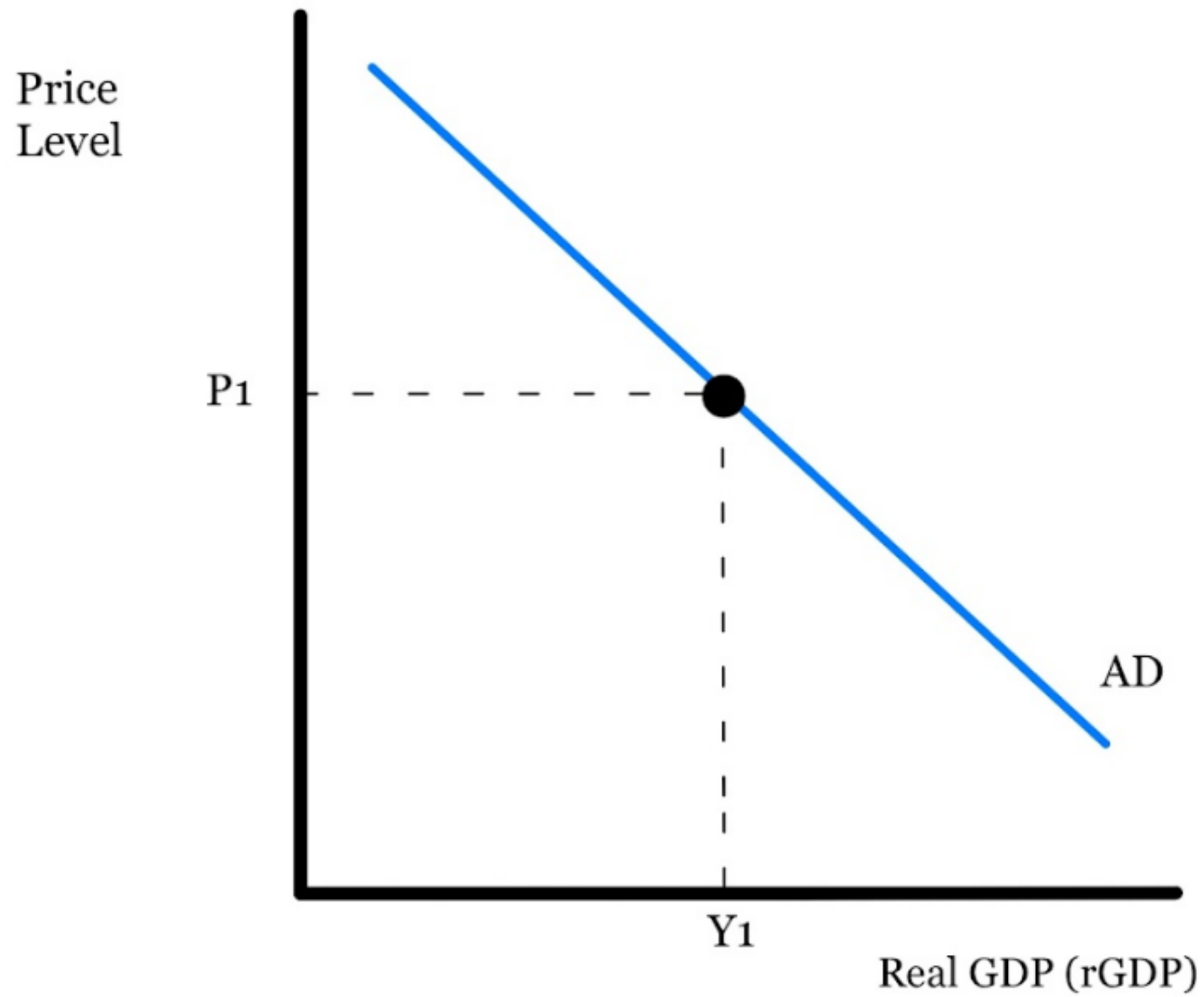
## Aggregate Demand

The total demand for goods and services produced in an economy. (The same quantity as GDP)

$$AD = C + I + G + (X - M)$$



# Graph



# Similarities Between AD and Demand

1. **Both Downward sloping**
2. **Both have non-price determinants that shift the curve**
3. **Price or Price Level changes simply move along the curve rather than shift the curve.**



# AD Non-Price Determinants

## Consumption

1. **Consumer Confidence**

2. **Unemployment**

3. **Taxes**

4. **Interest Rates**

5. **Wealth**

6. **Indebtedness**

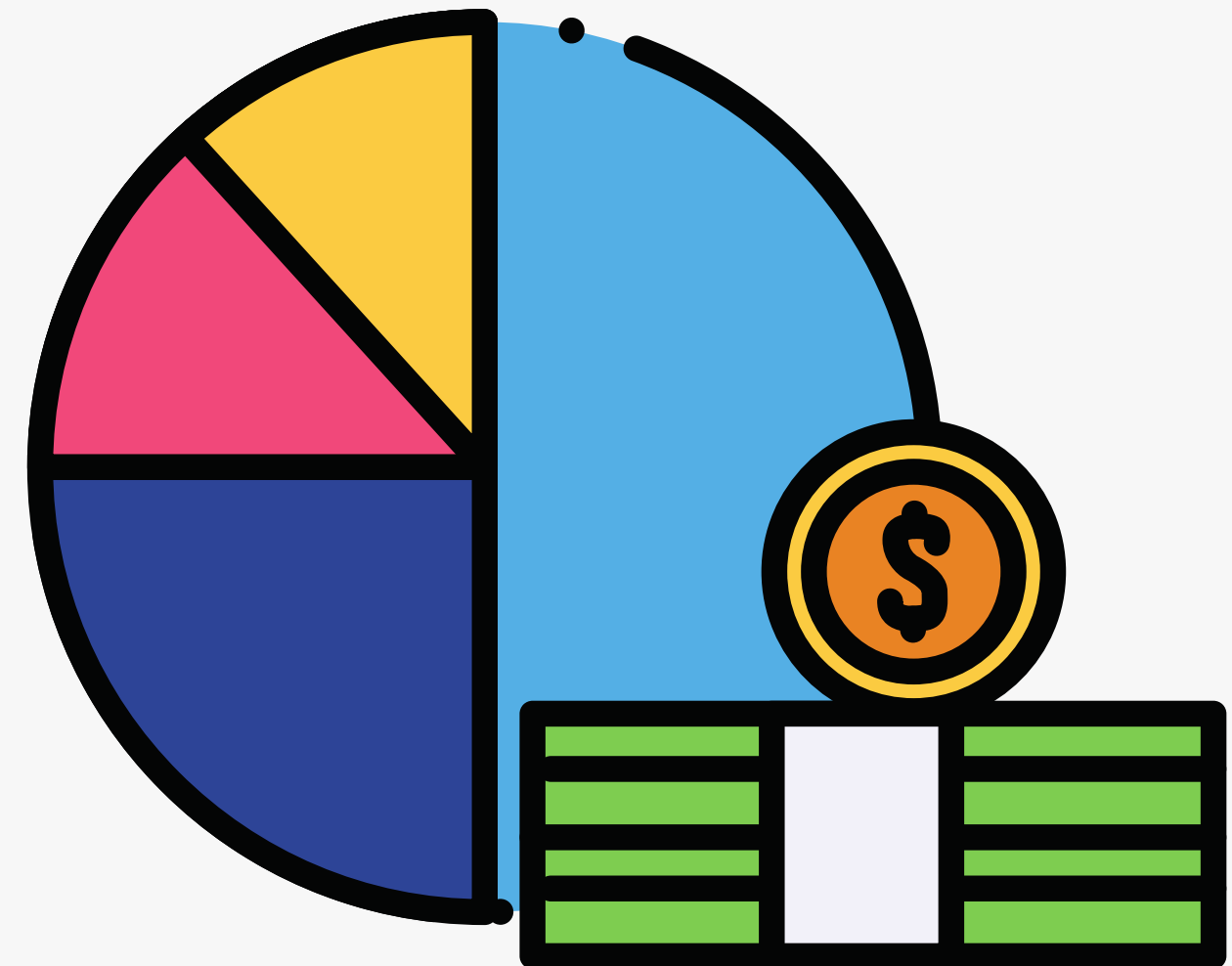
7. **Future Expectations**



# AD Non-Price Determinants

## Investment

1. **Interest Rates**
2. **Business Confidence**
3. **Technology**
4. **Business Taxes**
5. **Corporate Indebtedness**



# AD Non-Price Determinants

## Government

### 1. Government Spending





# AD Non-Price Determinants

## Net Exports

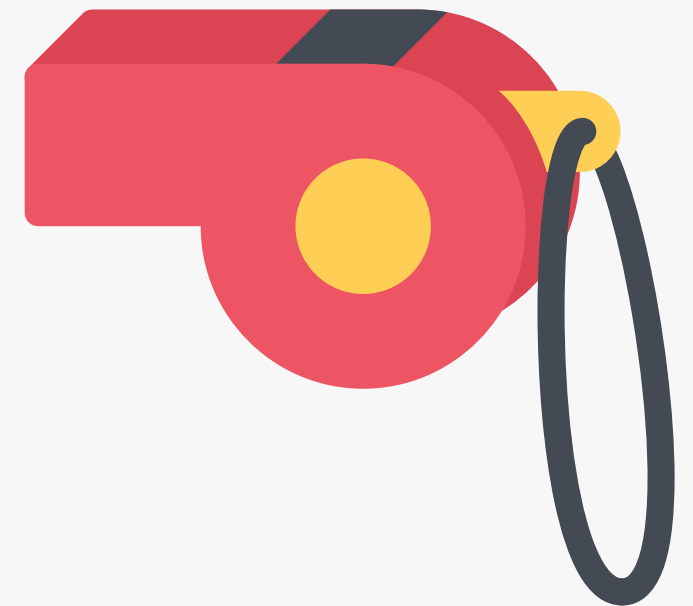
1. **Income of Trading Partners**
2. **Exchange Rates**
3. **Change in Trade Policies**
4. **Health and Safety Requirements**



# Practice

**Determine whether the following scenarios will have an impact on Chinese AD and if so, what.**

1. **Tax cuts, consumers decide to buy a new car**
2. **Worried about a budget deficit, the government decides to buy fewer military planes**
3. **Increasing prices result in consumers buying more foreign goods**
4. **Businesses are optimistic about the future**
5. **Interest rates have increased leading to a lack of spending on new machinery**
6. **To fight unemployment, the government hires more in national parks**
7. **A foreign government imposes a tariff that discourages its citizens from purchasing Chinese goods.**
8. **A large depression hits China, incomes fall drastically**
9. **Chinese prefer to buy German cars rather than Chinese cars**
10. **Income taxes decrease drastically for individuals.**



# Activity

**Find a real-world article that you believe would shift the Aggregate Demand Curve.**

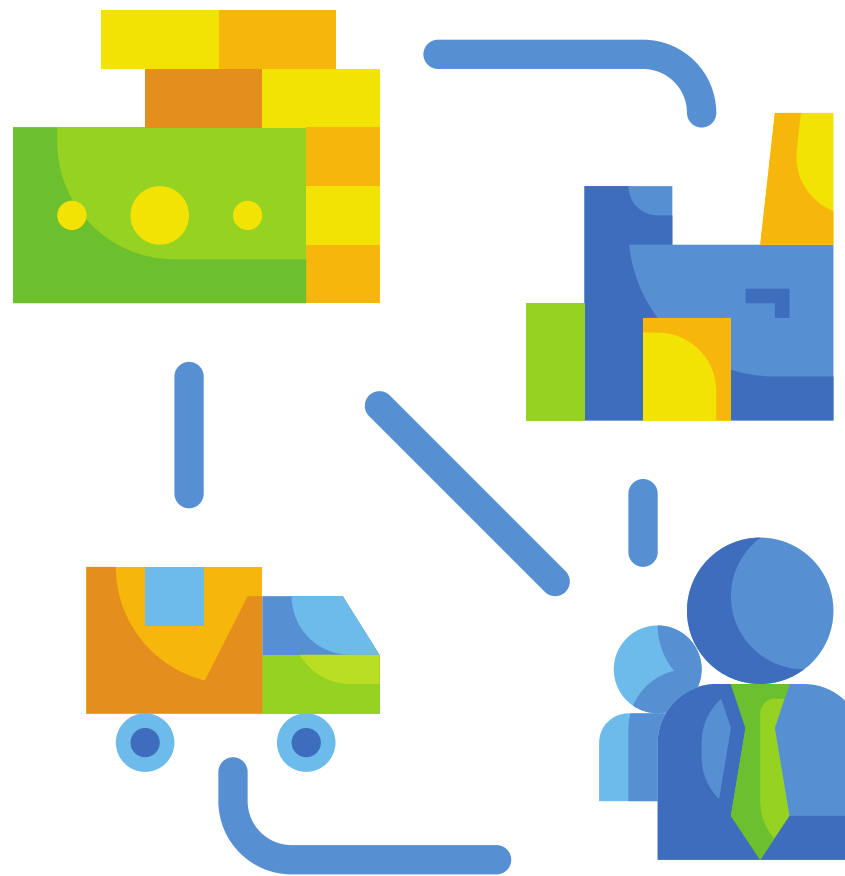
**1. Draw the AD Curve**

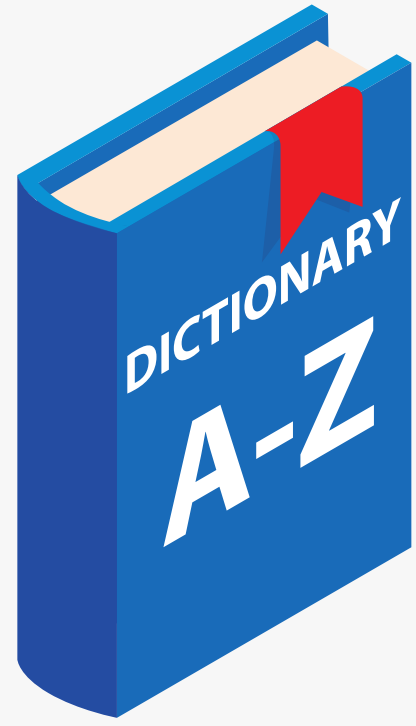
**2. Draw the change/shift in the curve**

**3. Explain the impact from this change on real GDP, inflation, and unemployment.**



# Short-Run Aggregate Supply





# Definition

## Aggregate Supply

Separated into two categories :

**Short-Run Aggregate Supply:** The total quantity of real output (real GDP) offered at different possible price levels in the short run.

**Long-Run Aggregate Supply:** Aggregate supply that is dependent upon the resources and technology in the economy, thus being independent of the price level. It is vertical at the level of potential output. It can only be increased by improvements in the quantity and/or quality of factors of production as well as improved technology.

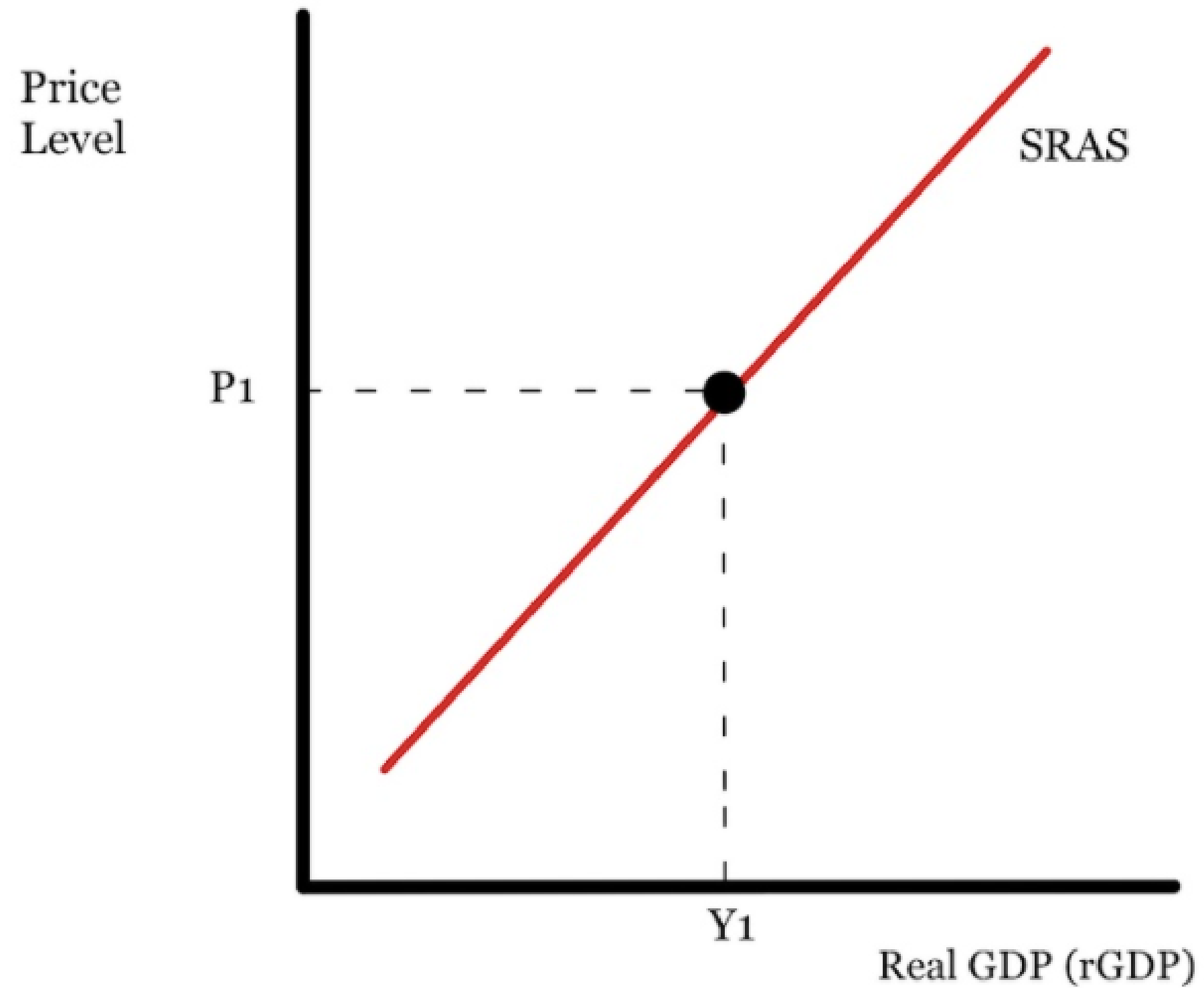
# Definition

## **Natural Rate of Unemployment (Full Employment)**

The rate of unemployment that occurs when the economy is producing at its potential output or full employment level of output.



# Graph



# SRAS Non-Price Determinants

**Cost and Availability of Resources**





# SRAS Non-Price Determinants

## Government Intervention

### Subsidy



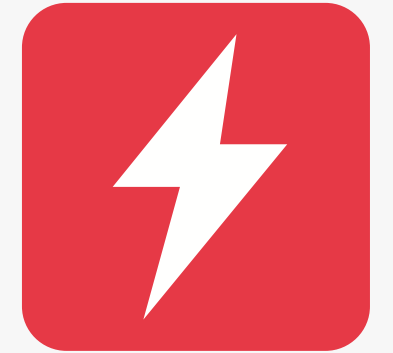
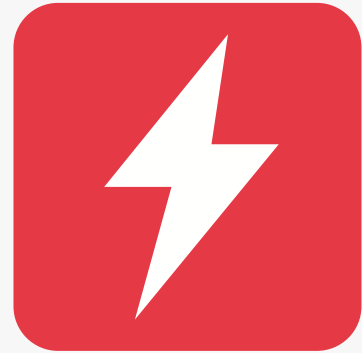
### Taxes



### Regulation

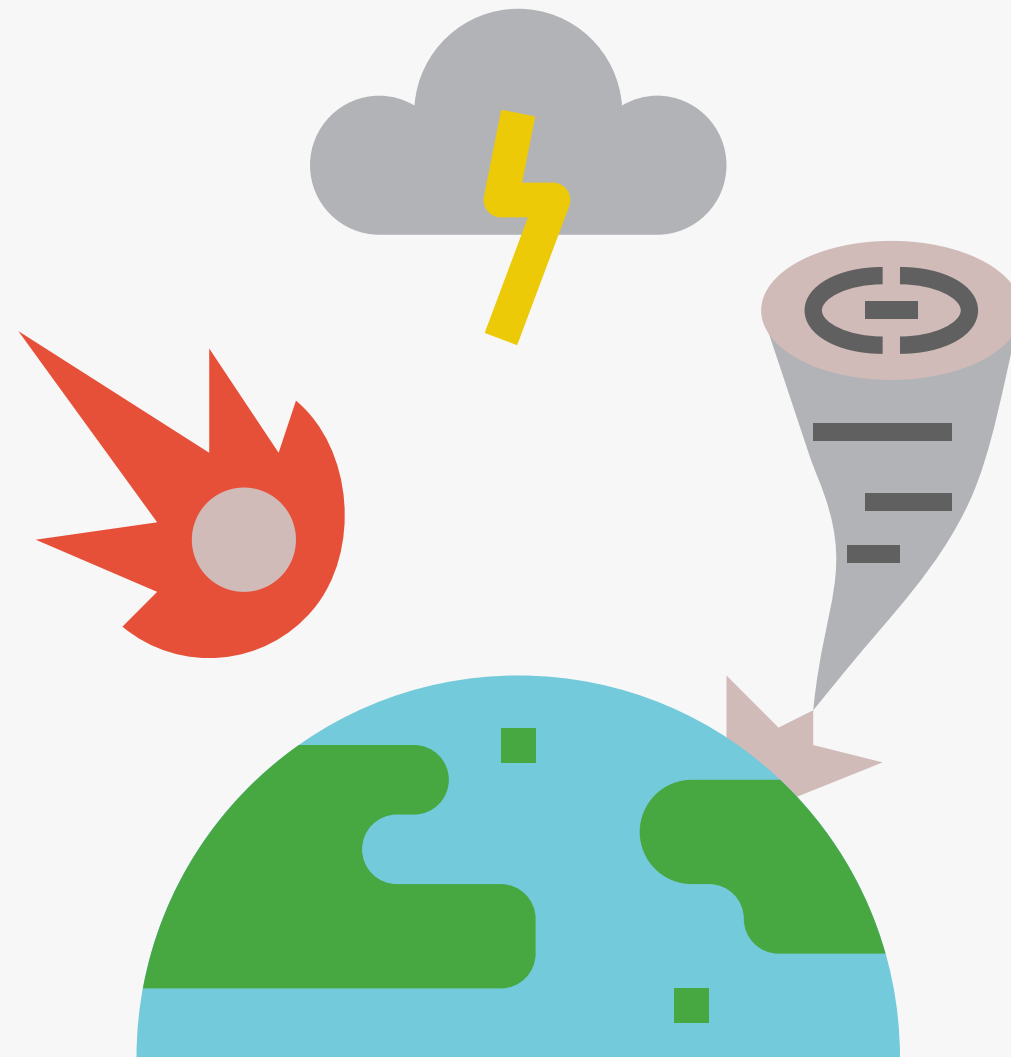


# SRAS Non-Price Determinants



## Supply Shocks

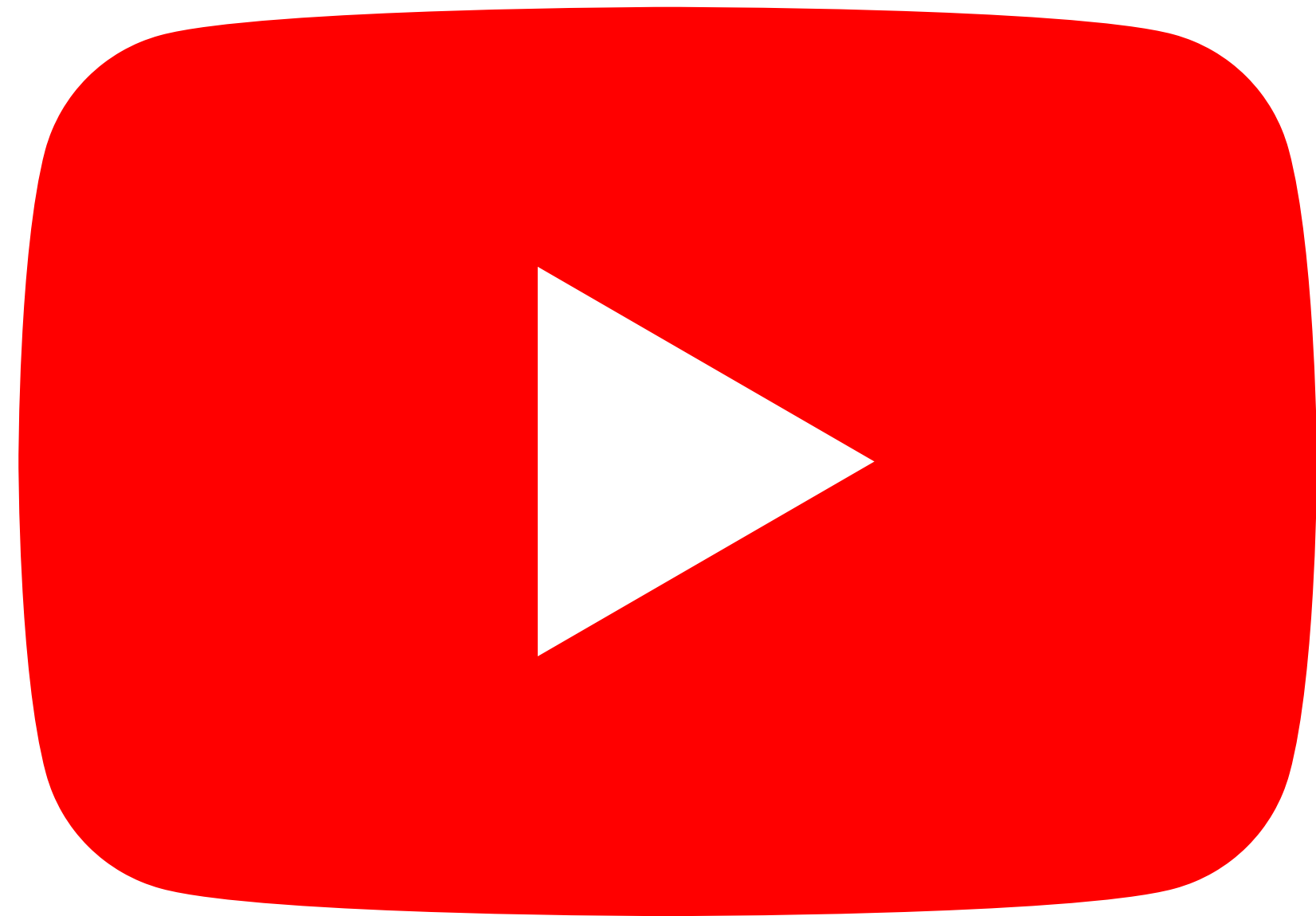
An event that drastically alters supply. Such as a natural disaster.



# Alternative *SRAS* Views

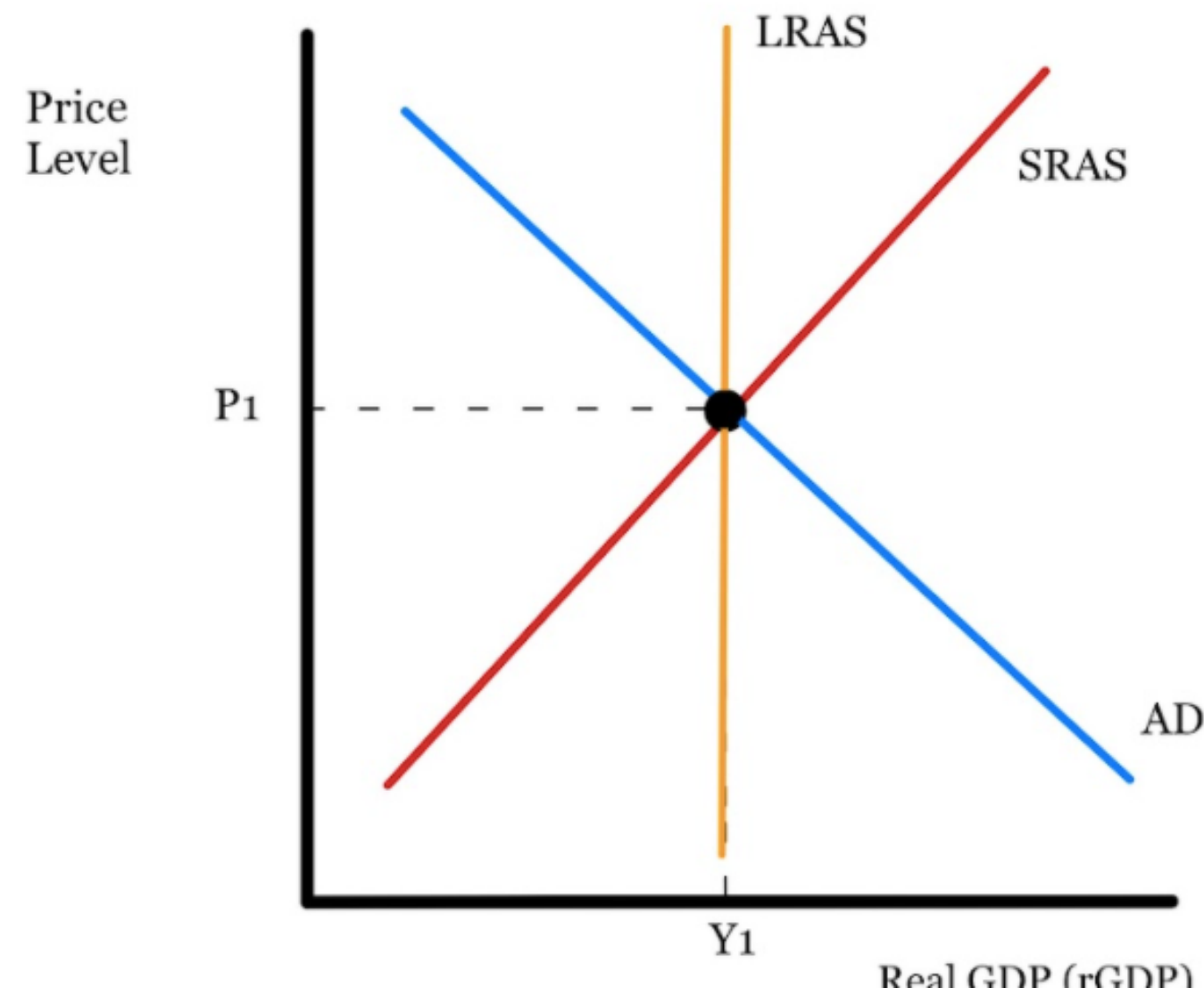
**Neo-Classical vs Keynesian**





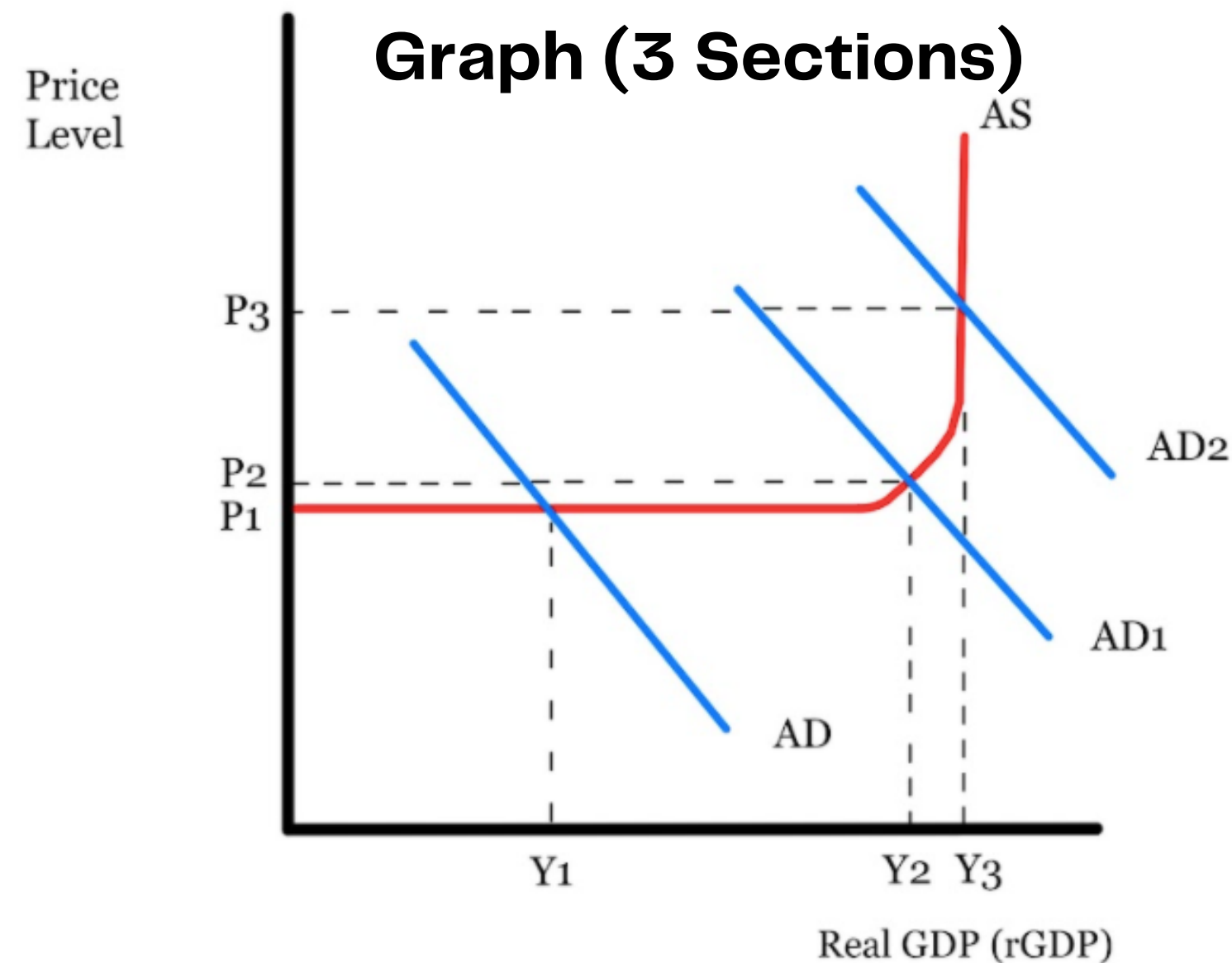
# New ("Neo") Classical

- Founded in 1970s
- General Equilibrium Approach
- Assumes prices are flexible in the long-run. Didn't do well at prediction as prices and wages tended to be "sticky"
- Enforces the idea that the market will fix itself and return to equilibrium (Full Employment).



# Keynesian Model

- Founded by John Maynard Keynes
- Founded this model when Neo-Classical Models were not fixing The Great Depression.
- States that wages are "sticky" meaning they are slow to change due to labor laws, contracts, salaries, etc.
- Argues the economy gets stuck in a short-run position. (Only one Aggregate Supply Curve)



# Keynesian Model

## Graph (3 Sections)

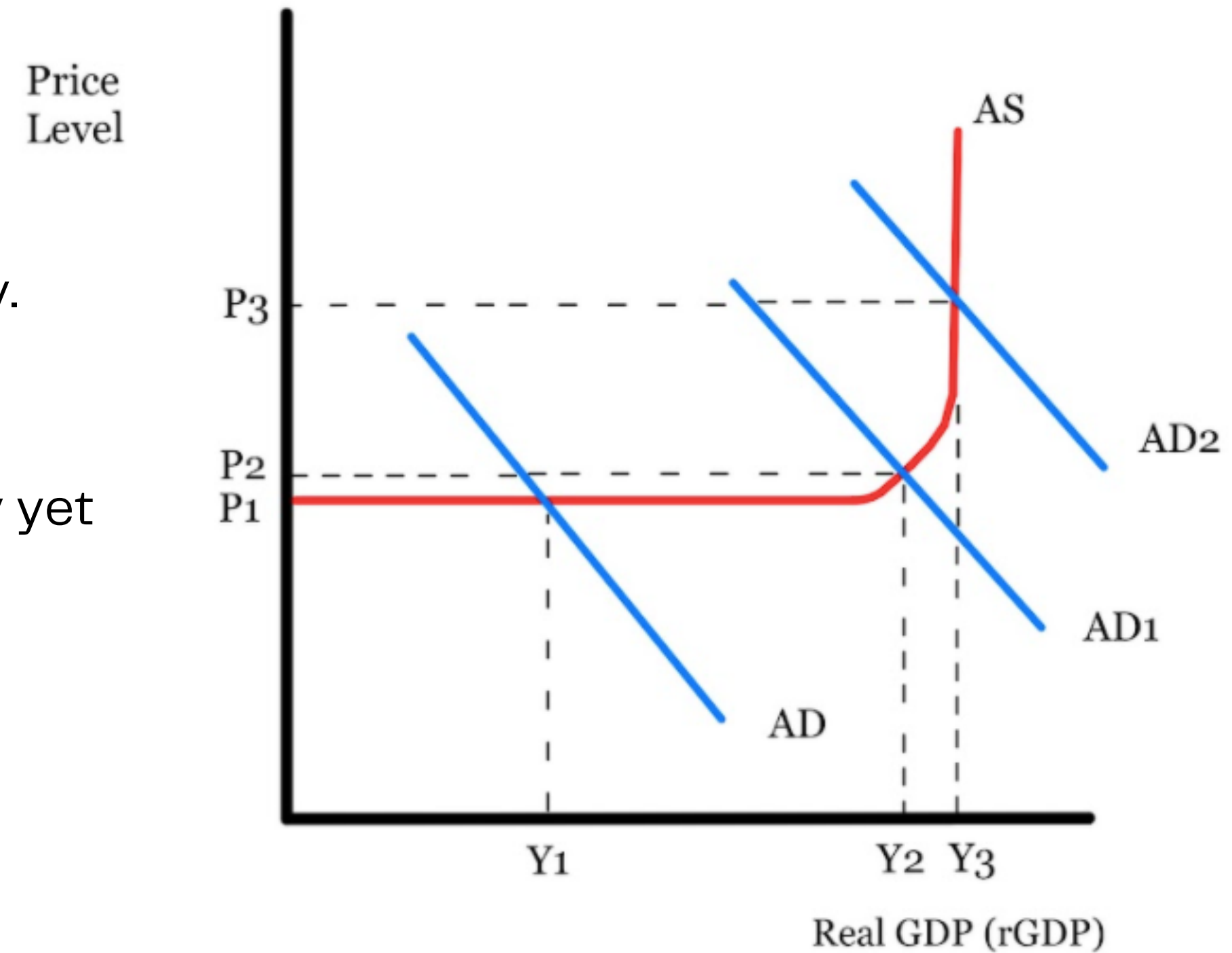
**Capacity:** Maximum Level of output possible

1. **Horizontal Section** – A fair amount of spare capacity.

Room to increase rGDP.

2. **Upward Sloping Section** – Still some spare capacity yet competition for scarce resources begin.

3. **Vertical Section** – Little/no spare capacity. Full Employment reached.

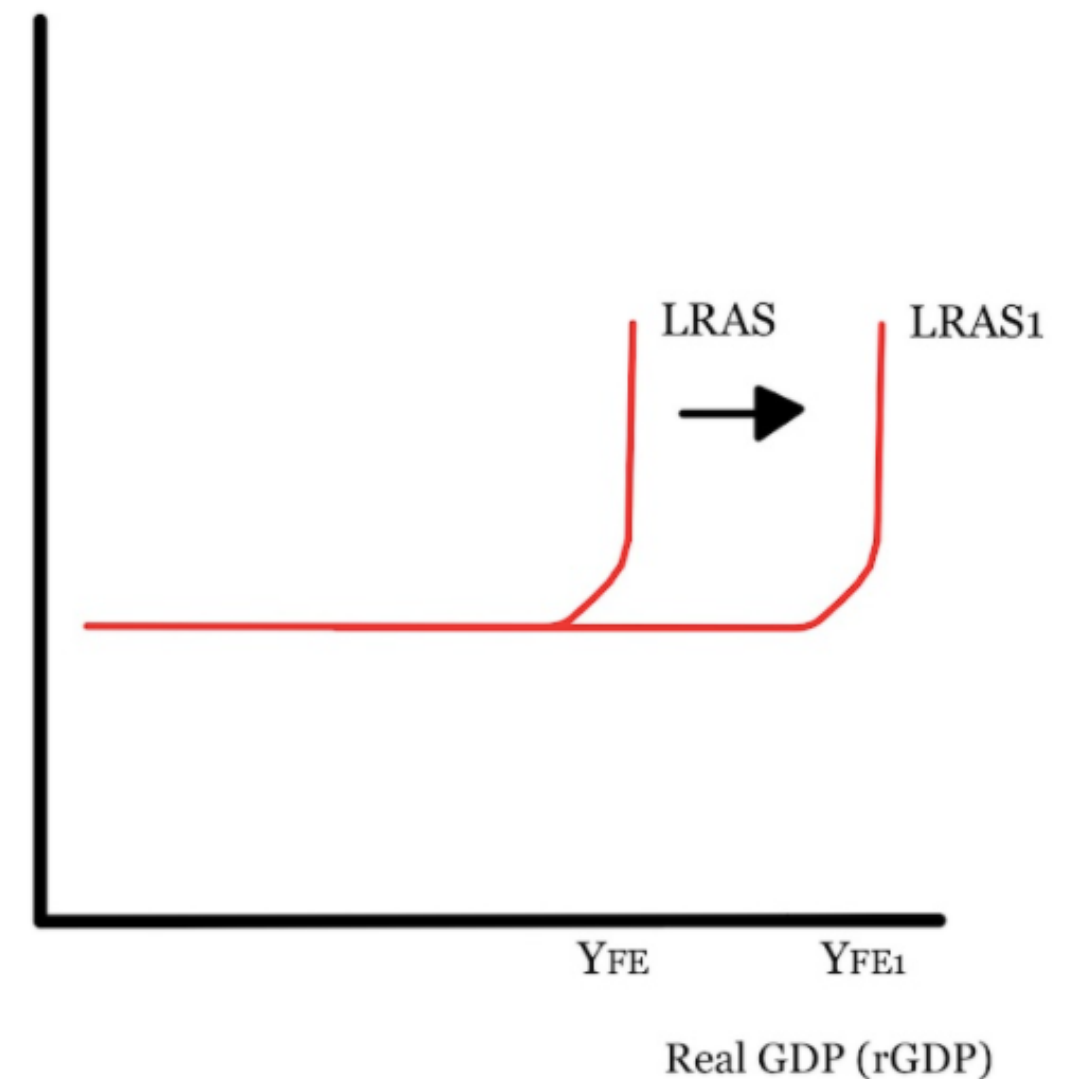
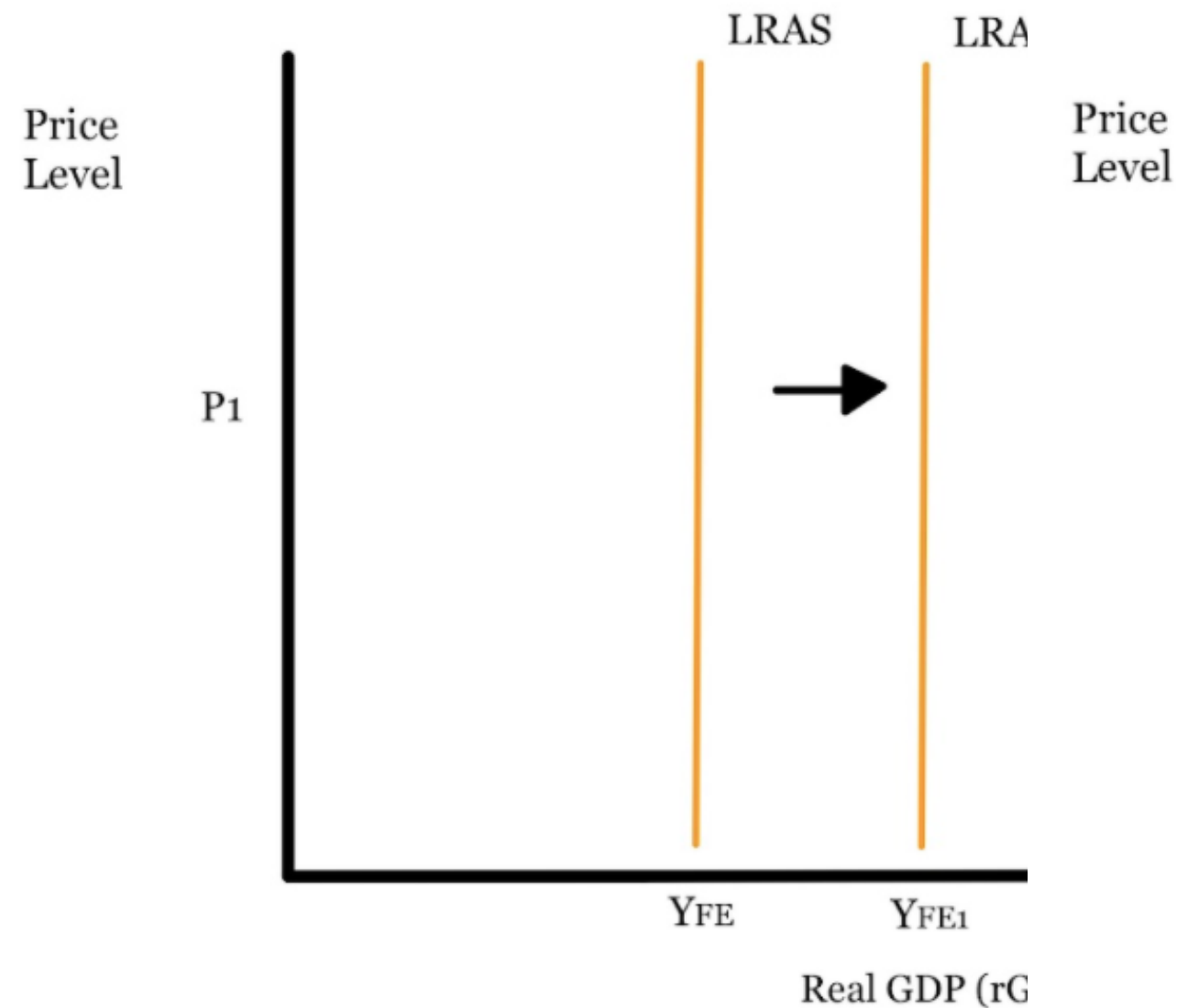


# Long Run Aggregate Supply (LRAS)

## Shifters

Similar to PPC Shifters

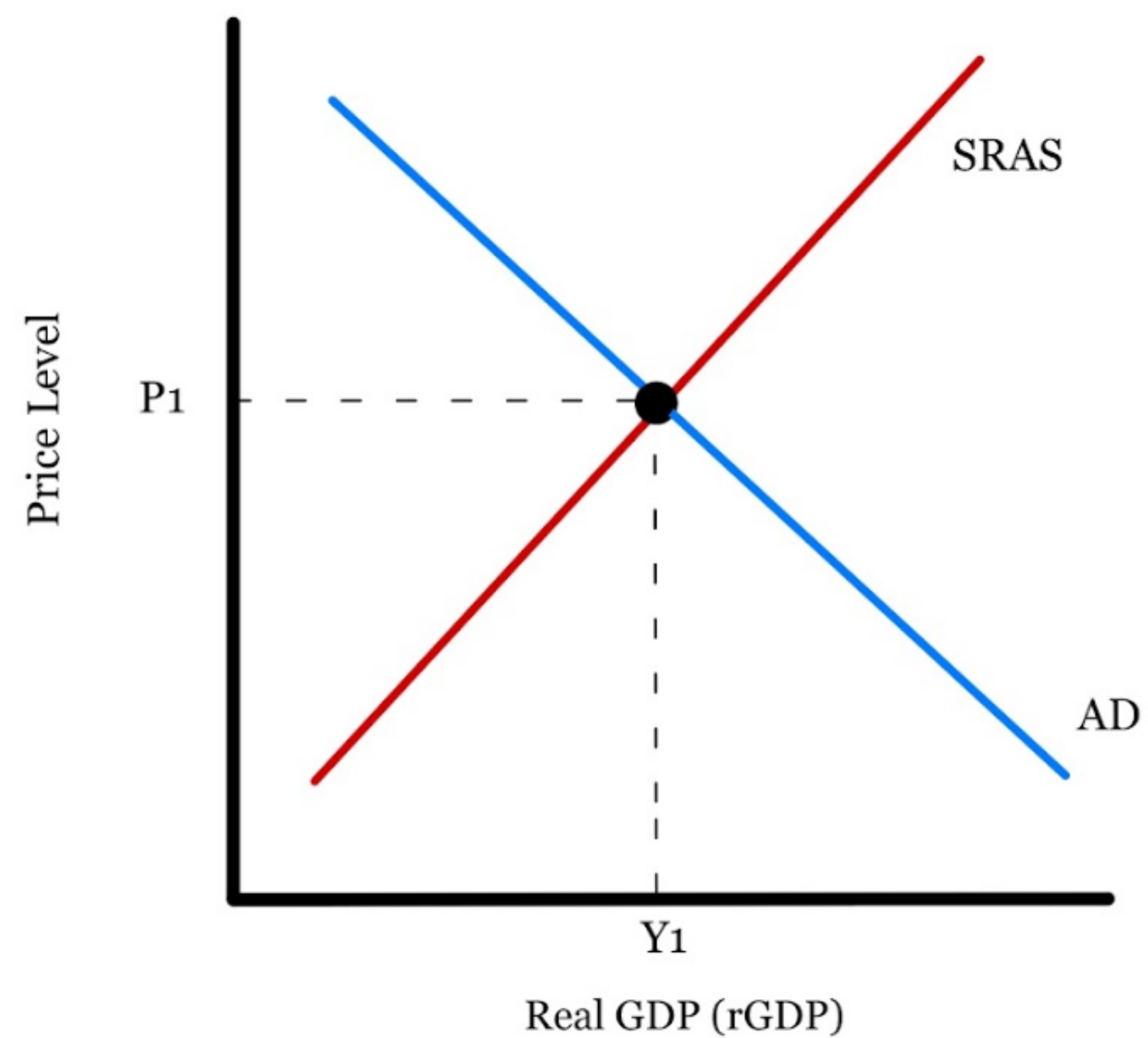
- Change in Quality or Quantities of Factors of Production
- Technological Improvements
- Increase in Efficiency
- Changes in Institutions





# Macroeconomic Equilibrium

# Short Run Equilibrium



# Review AD Shifters Discussion

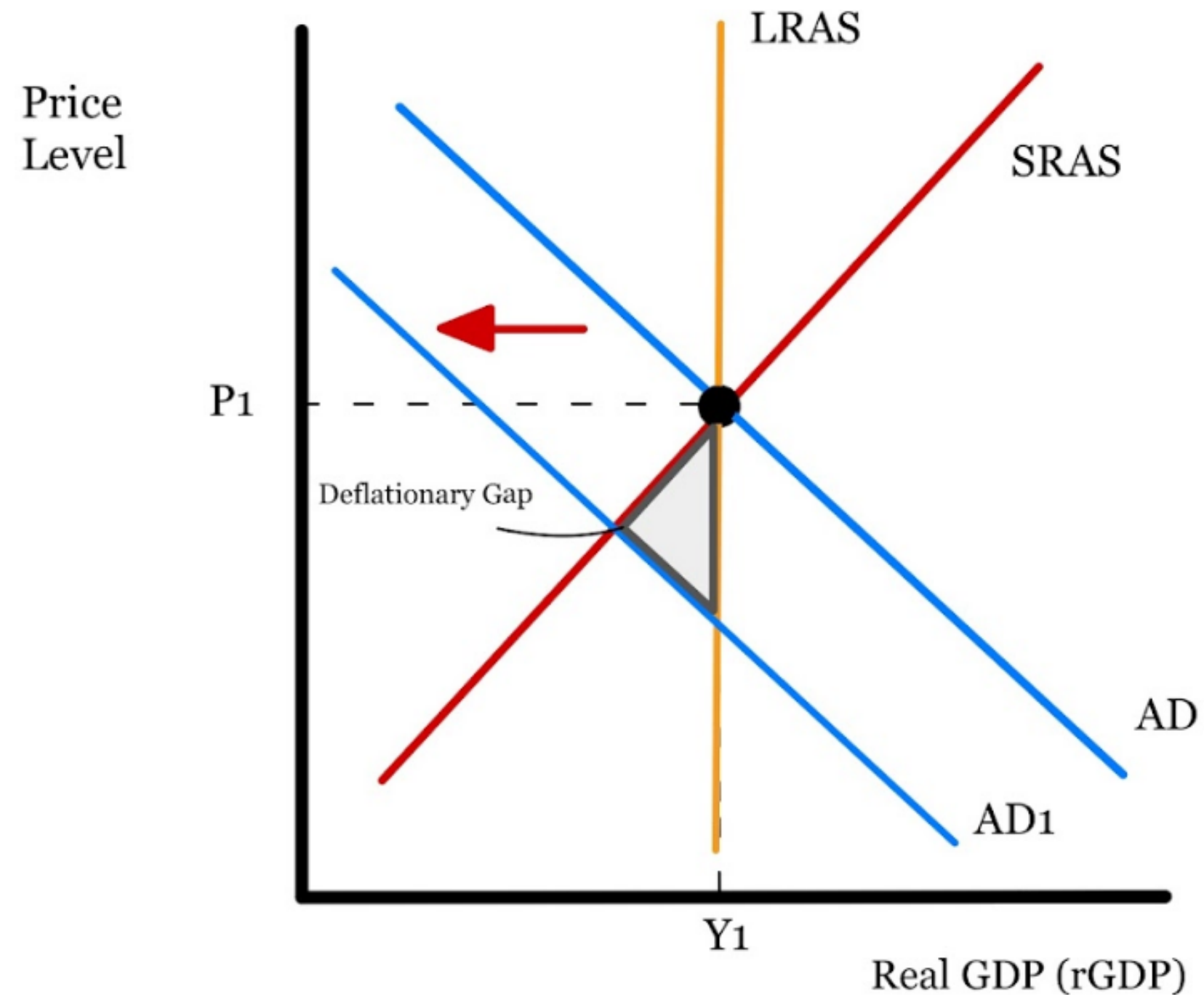
Discuss with a partner the non-price determinants (Shifters) of Aggregate Demand.



# AD Shifts

## Recessionary/Deflationary Gap

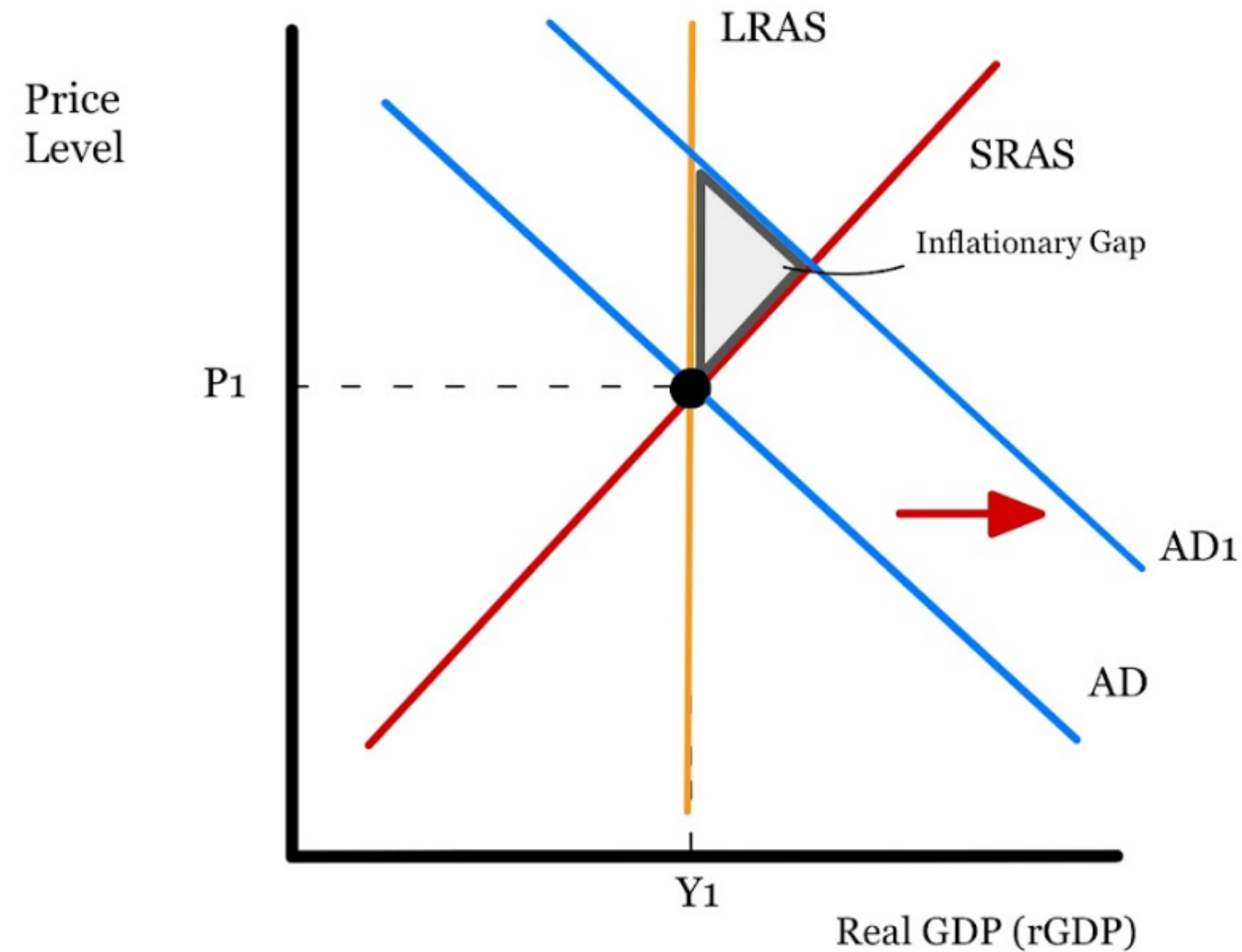
When the equilibrium level of real output is less than potential output as a result of a decrease in AD.



# AD Shifts

## Inflationary Gap

The case where equilibrium real output exceeds potential output as a result of an increase in AD.



# Review SRAS Shifters Discussion

Discuss with a partner the non-price determinants (Shifters) of Short-Run Aggregate Supply.



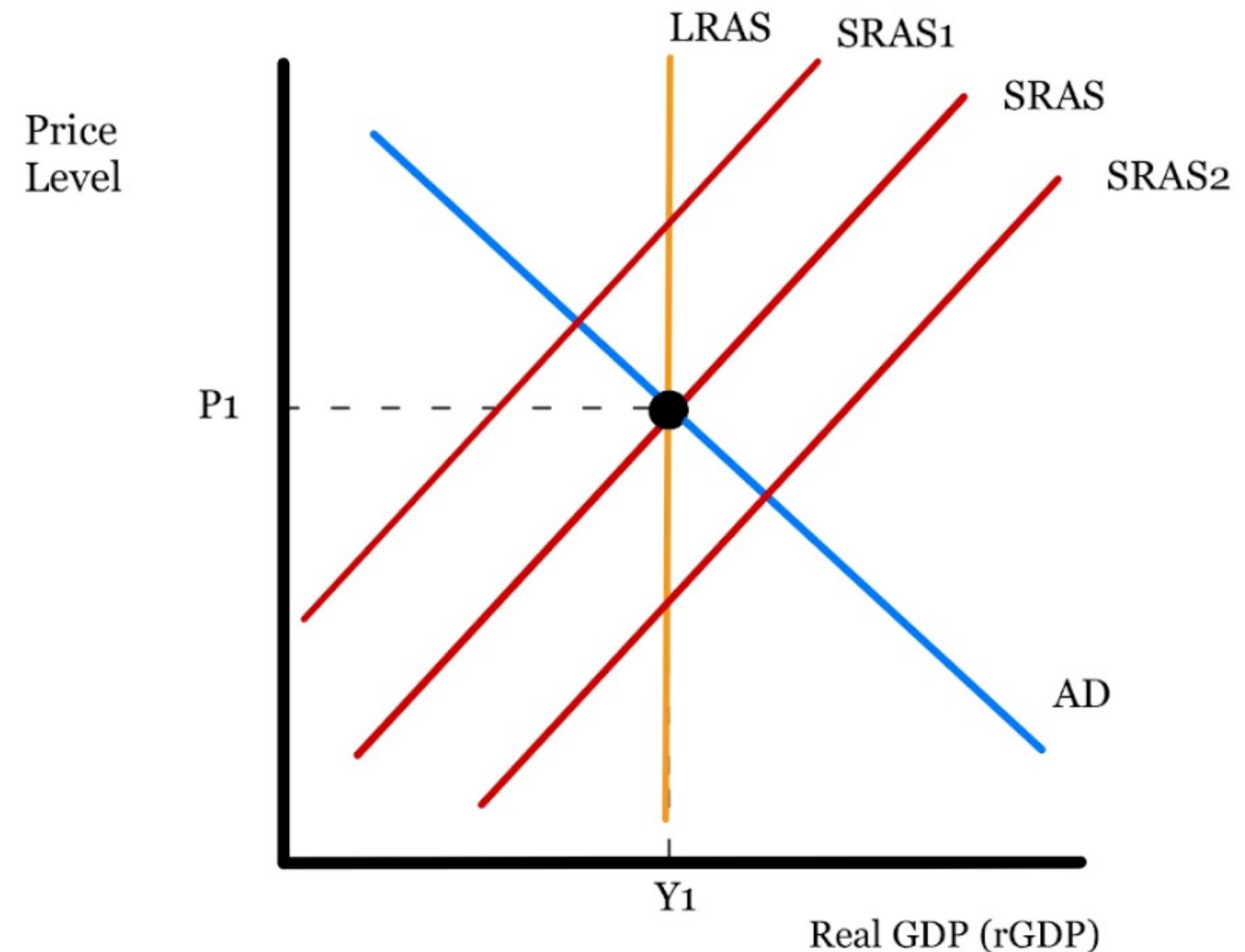
# SRAS Shifts

## Stagflation and Growth

**Stagflation:** Decrease in RealGDP and an Increase Unemployment Rate and Price Level (Inflation).

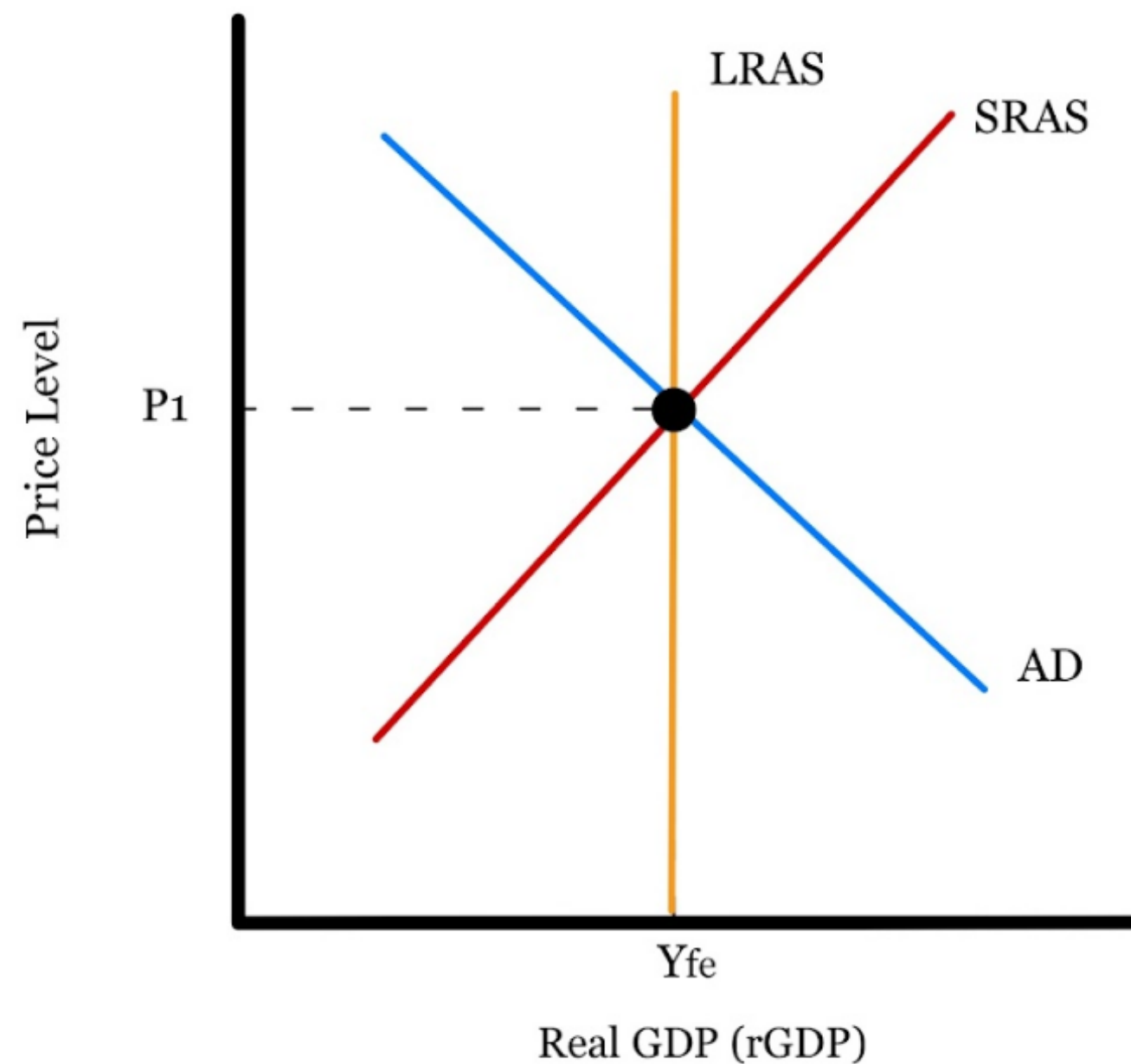
Stagflation is extremely undesirable for an economy. (SRAS1)

Typical growth may also occur in the short run. (SRAS2)



# Long Run Equilibrium

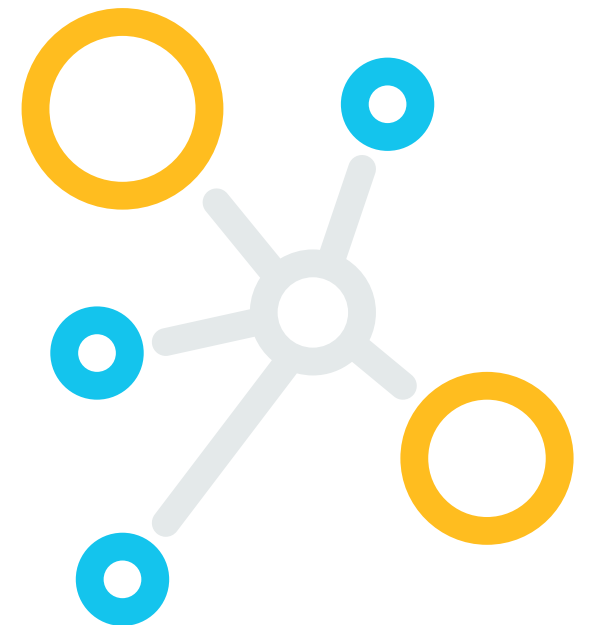
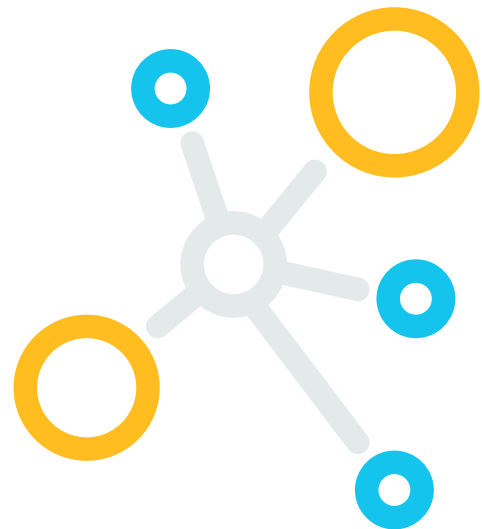
In the short run, inflationary and recessionary gaps exist. However, in the long run, the equilibrium point must return to the LRAS (Full Employment).





# Connections!

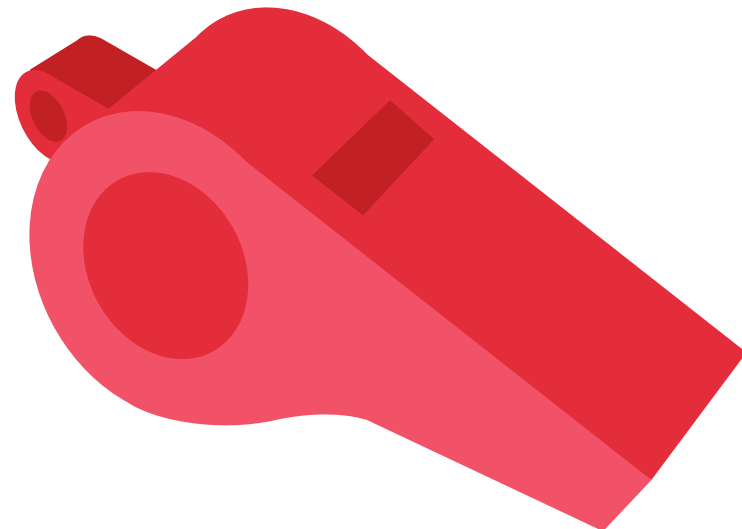
**Discuss the connections between deflationary and inflationary gaps with the business cycle**



# Long Run Equilibrium Adjustments

## Falling Aggregate Demand.

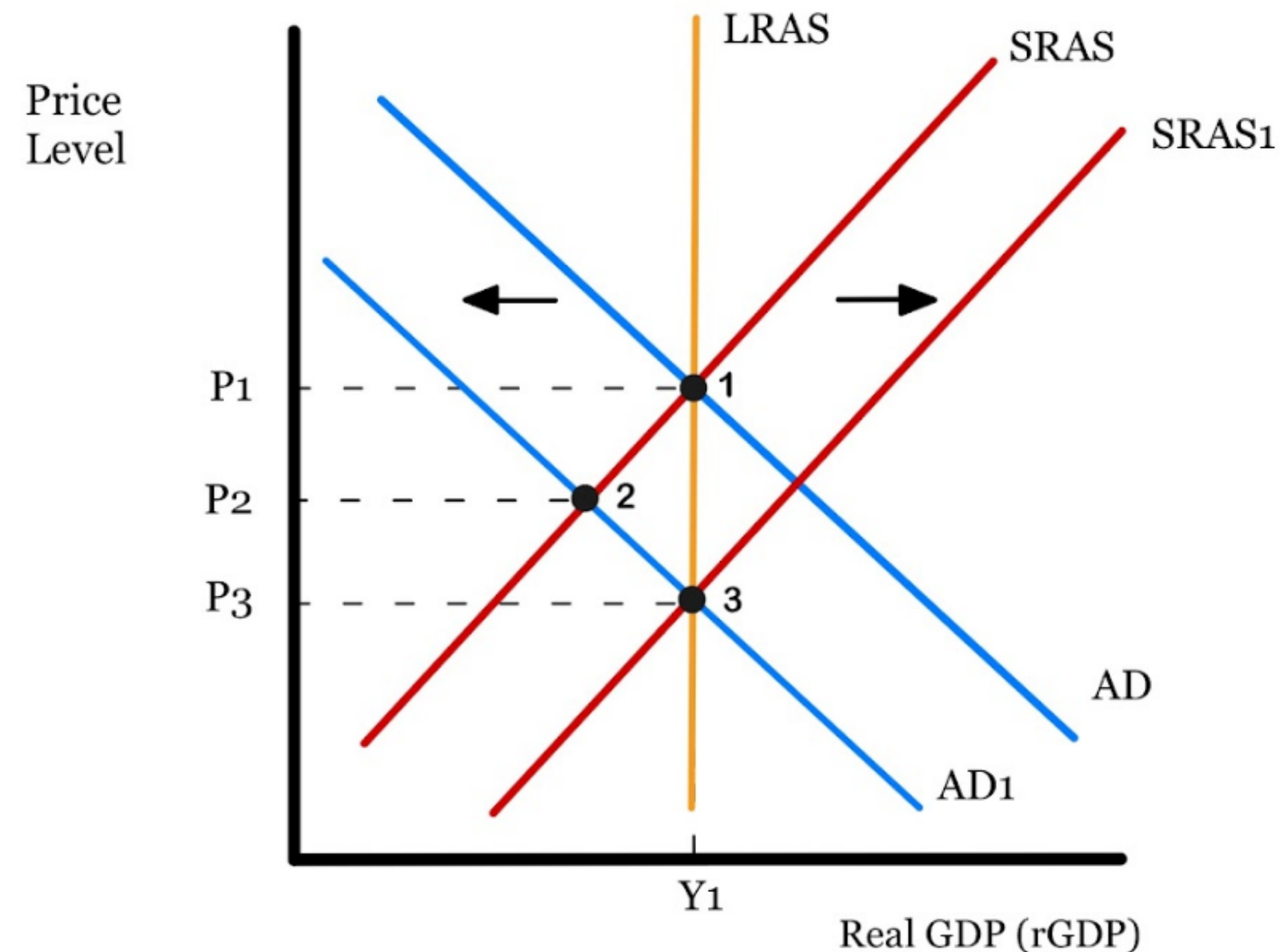
Practice drawing aggregate demand falling and attempt to analyze how the graph adjusts to the long run.



# Long Run Equilibrium Adjustments

## Falling Aggregate Demand.

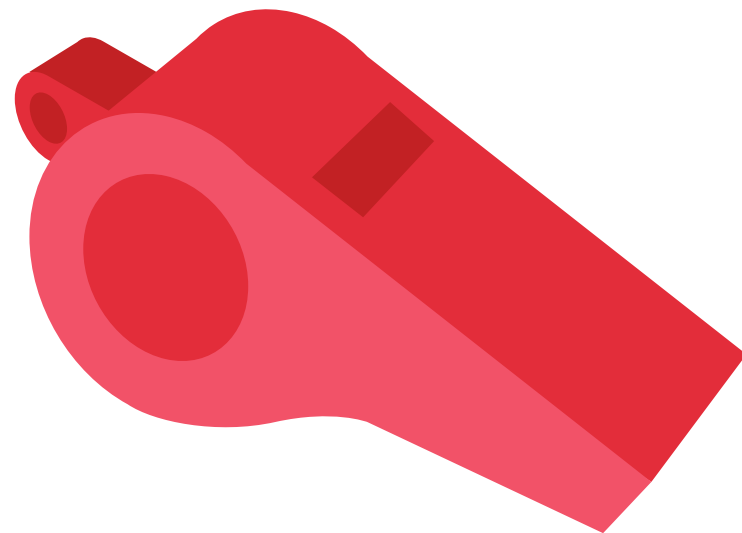
A decrease in AD results in a decrease in Price Level ( $P_1$ – $P_2$ ) across the economy. This results in the cost of inputs (wages) lowering, allowing companies to hire more workers, and therefore, increasing SRAS.



# Long Run Equilibrium Adjustments

## Rising Aggregate Demand.

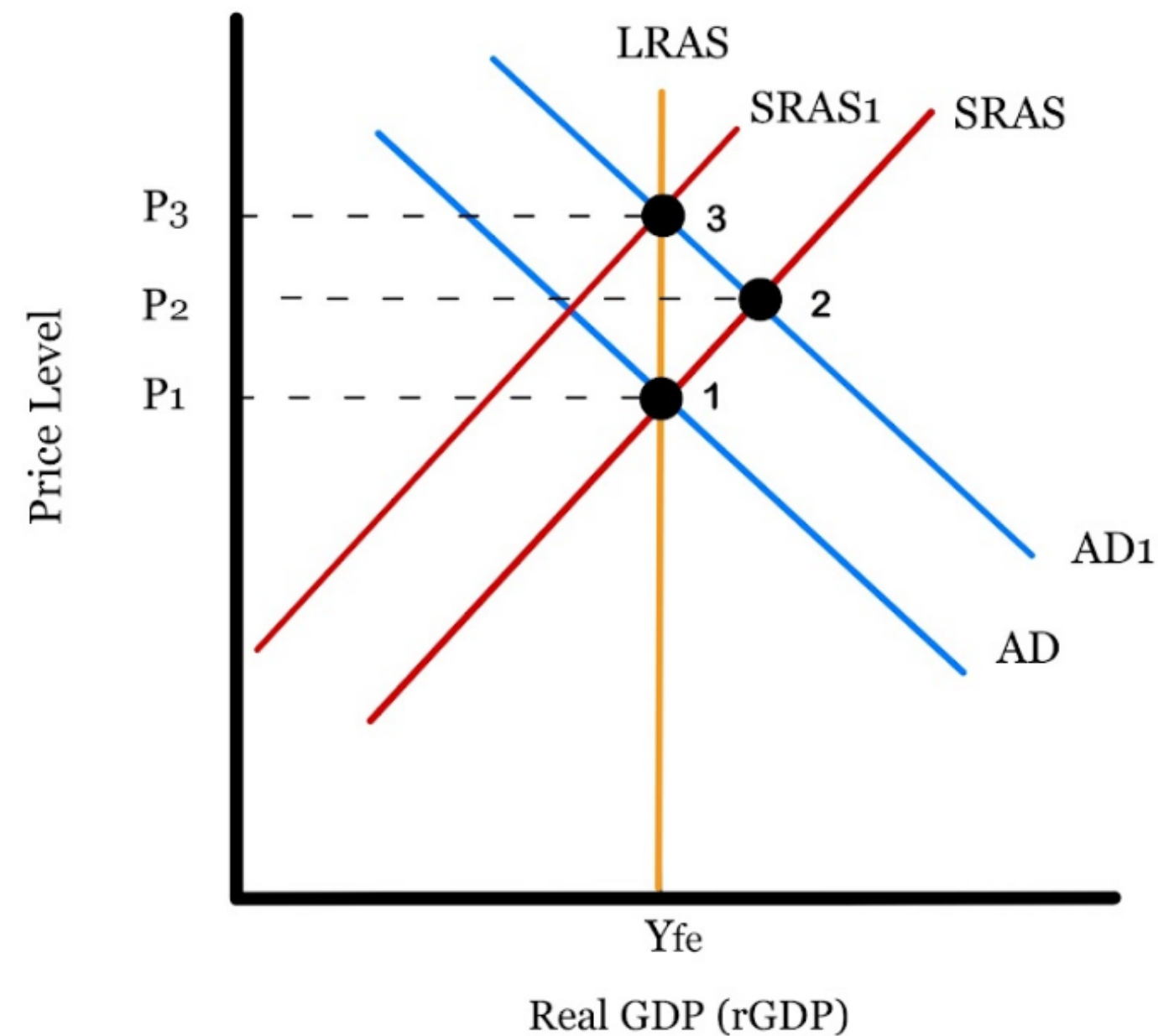
Practice drawing aggregate demand rising and attempt to analyze how the graph adjusts to the long run.



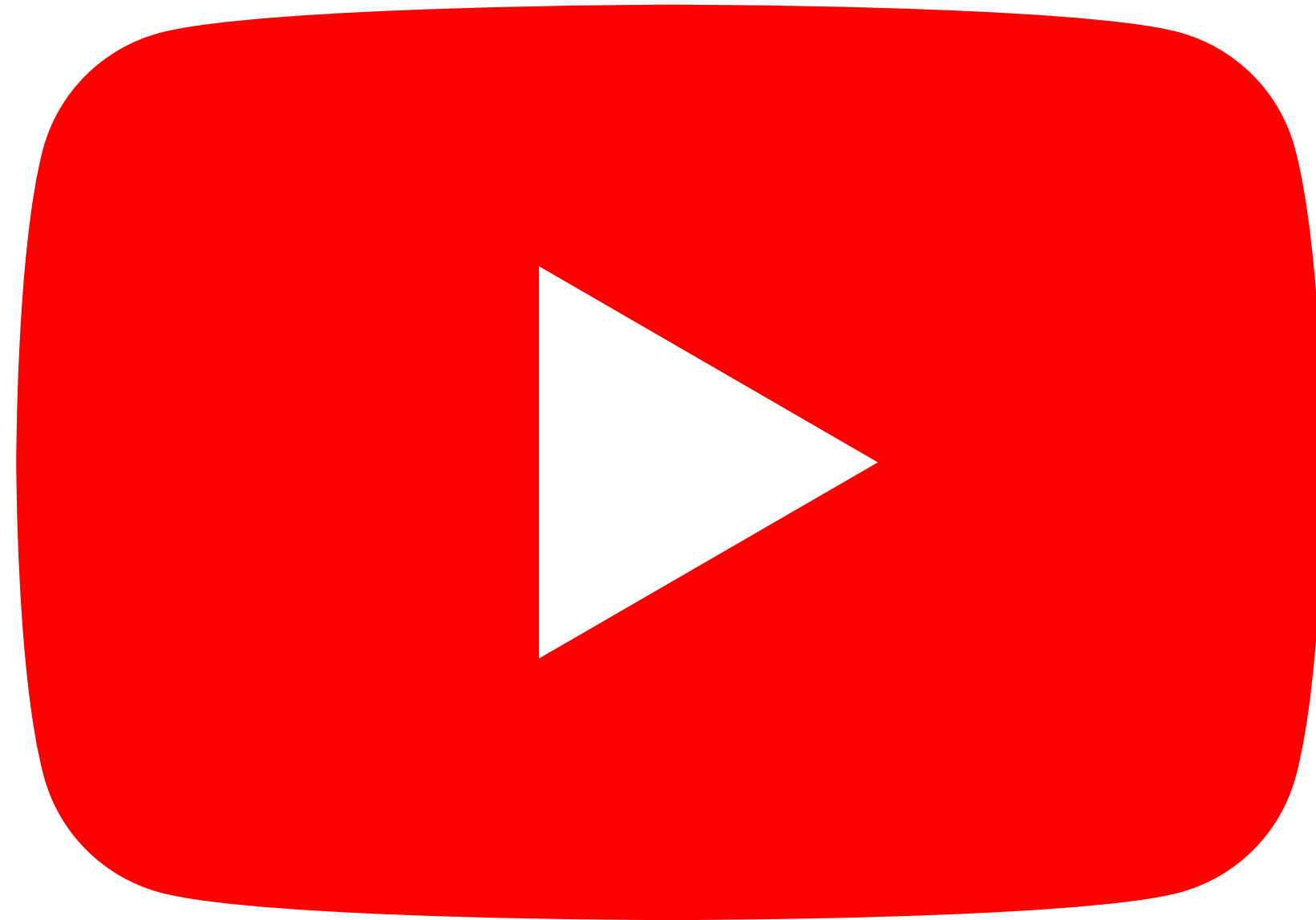
# Long Run Equilibrium Adjustments

## Rising Aggregate Demand.

An increase in AD results in an increase in Price Level. This results in the cost of inputs (Wages) increasing and therefore, SRAS decreasing.



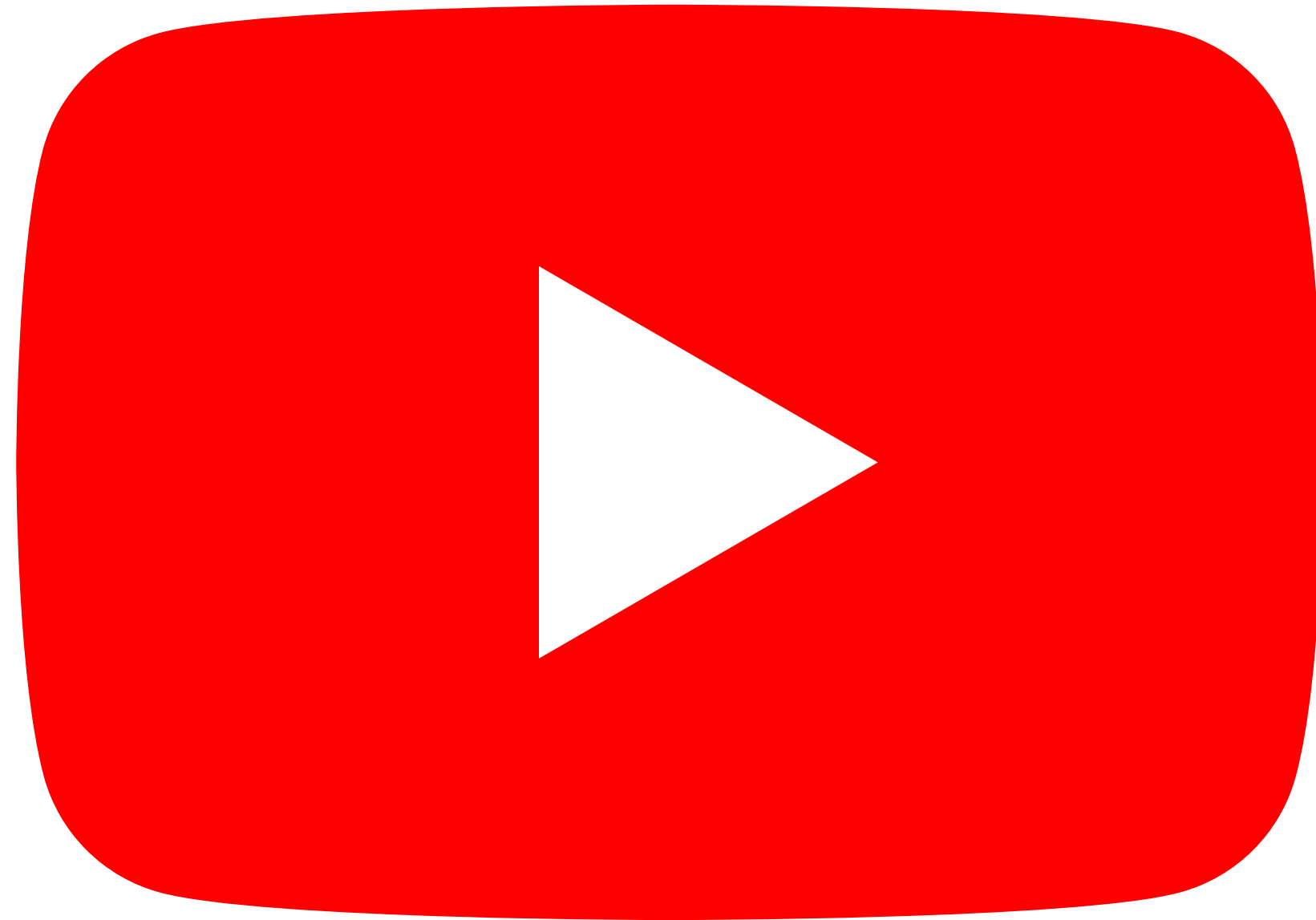
# Keynes vs Classical



# Assumptions

	<u>Neo-Classical</u>	Keynesian
Equilibrium	A market in disequilibrium will always correct naturally.	A market in disequilibrium may stay in disequilibrium for extended periods.
Wages	Flexible	Sticky
Intervention	Government supports the market to return to equilibrium.	During a recession, the government must use government spending to correct the recession, even if must borrow funds.

# Neo-Classical Practice



**For long run - skip to 10 minute mark**

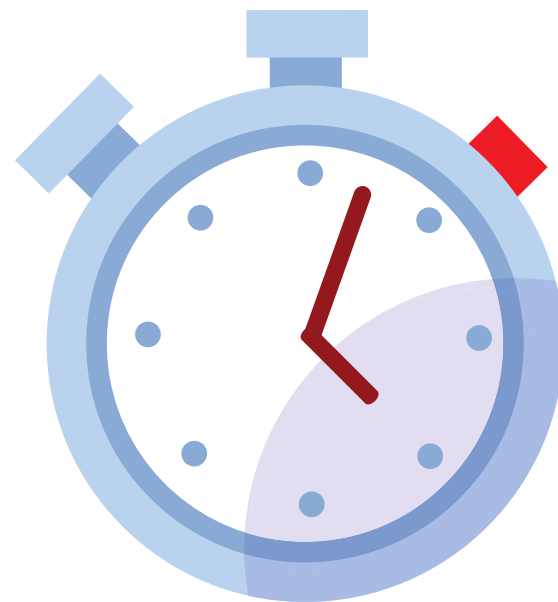


# Closing Activity

Use [this](#) random country generator to select a country.

Find 3 news articles that outline a reason for AD, SRAS, and LRAS to shift. Draw the shift and write a 2-3 sentence summary of the effects for each shift. Be sure to discuss things like Price Level, real GDP, Inflation, Unemployment, and the cause of the shift.

For AD and SRAS, draw the shift in the short run and a separate showing the long run adjustment.



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