

AP Macroeconomics

Aggregate Supply

Aggregate Supply

- The level of Real GDP (GDP_R) that firms will produce at each Price Level (PL)

Long-Run v. Short-Run

- **Long-Run**

- Period of time where input prices are completely flexible and adjust to changes in the price-level
- In the long-run, the level of Real GDP supplied is independent of the price-level

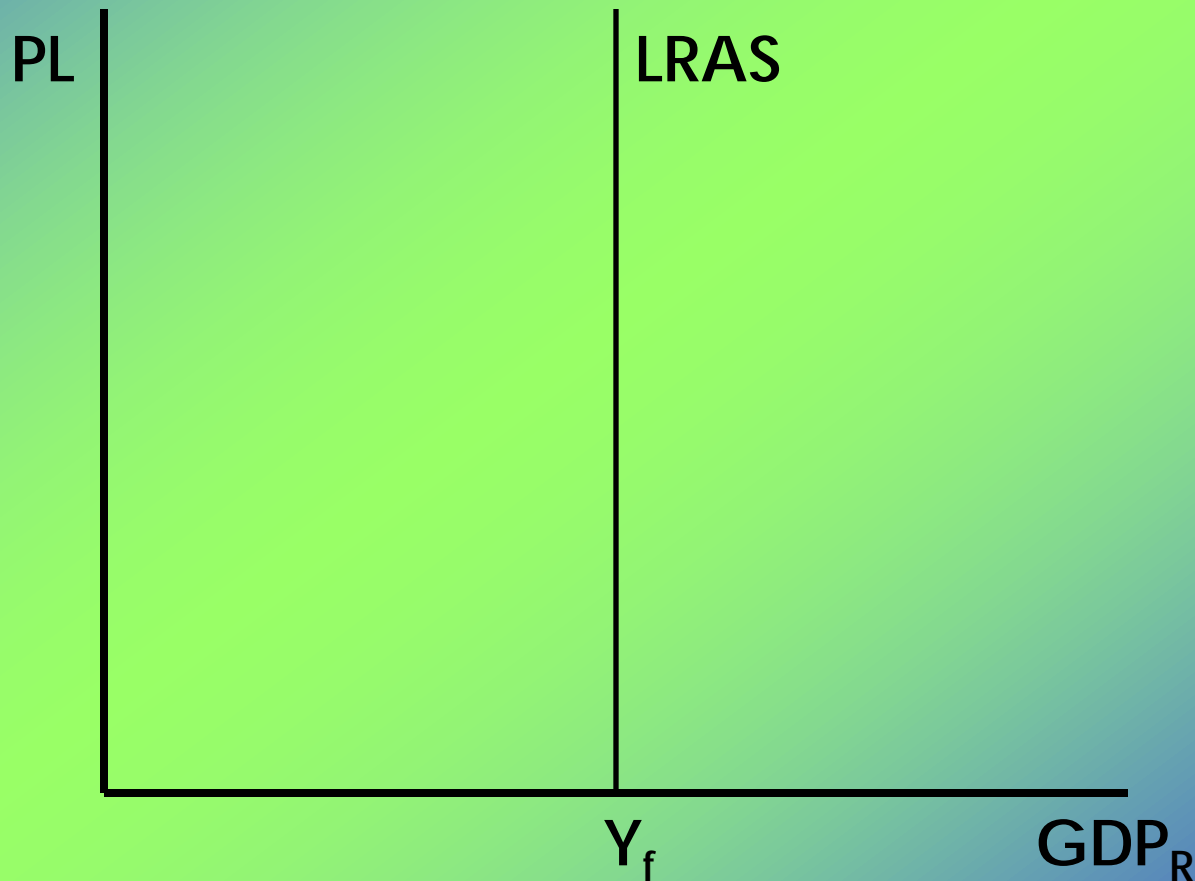
- **Short-Run**

- Period of time where input prices are sticky and do not adjust to changes in the price-level
- In the short-run, the level of Real GDP supplied is directly related to the price level

Long-Run Aggregate Supply (LRAS)

- The Long-Run Aggregate Supply or LRAS marks the level of full employment in the economy (analogous to PPC)
- Because input prices are completely flexible in the long-run, changes in price-level do not change firms' real profits and therefore do not change firms' level of output. This means that the LRAS is vertical at the economy's level of full employment

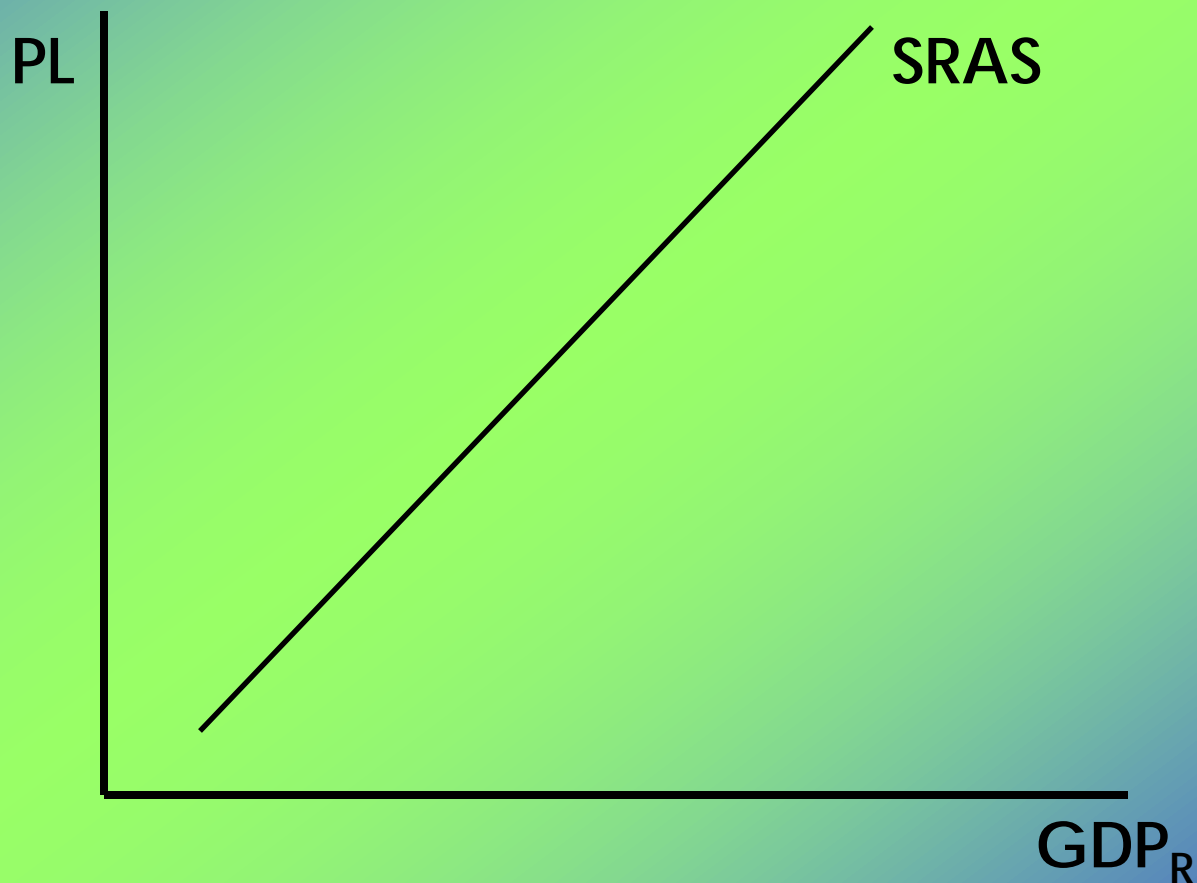
Long-Run Aggregate Supply (LRAS)



Short-Run Aggregate Supply (SRAS)

- Because input prices are sticky in the short-run, the SRAS is upward sloping. This reflects the fact that in the short-run, increases in the price-level increase firm's profits and create incentives to increase output. As the price-level falls, firm's profits drop and this creates an incentive to reduce output.

Short-Run Aggregate Supply (SRAS)

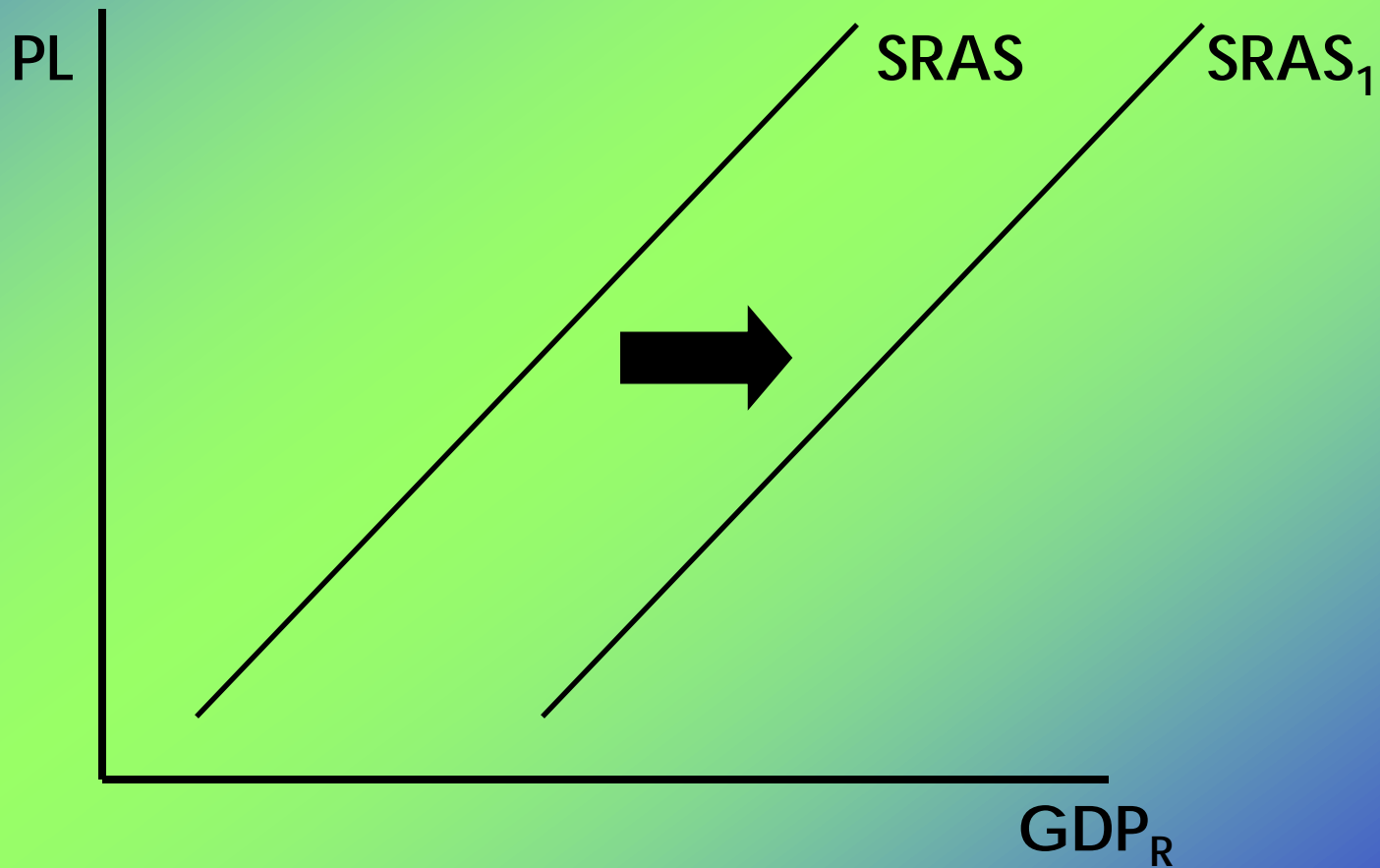


Changes in SRAS

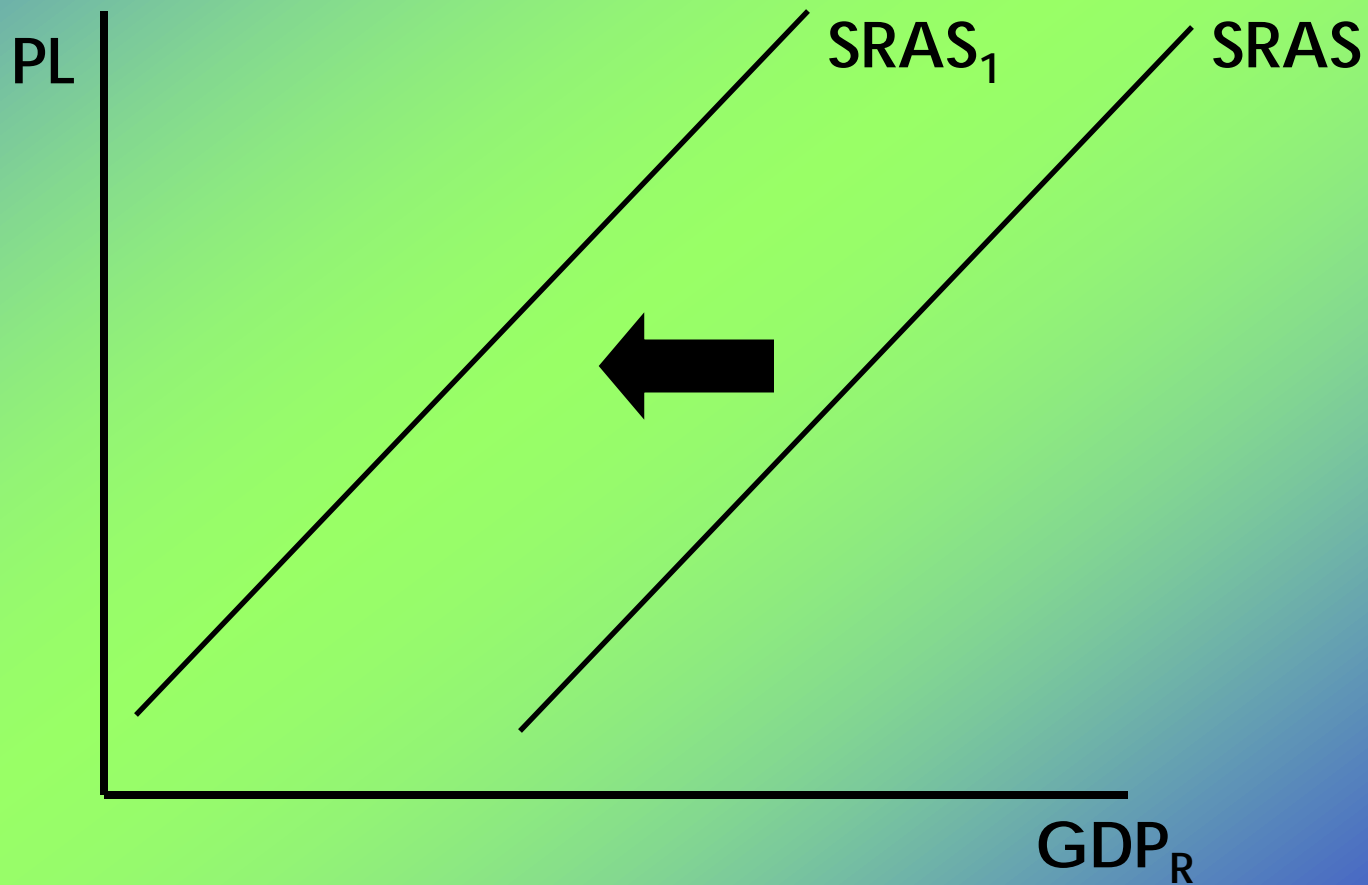
- An increase in SRAS is seen as a shift to the right. SRAS \rightarrow
- A decrease in SRAS is seen as a shift to the left. SRAS \leftarrow
- The key to understanding shifts in SRAS is per unit cost of production

$$\text{Per-unit production cost} = \frac{\text{total input cost}}{\text{total output}}$$

Changes in SRAS (Increase)



Changes in SRAS (Decrease)



Determinants of SRAS

(all of the following affect unit production cost)

- Input Prices
- Productivity
- Legal-Institutional Environment

Input Prices

- **Domestic Resource Prices**
 - Wages (75% of all business costs)
 - Cost of capital
 - Raw Materials (commodity prices)
- **Foreign Resource Prices**
 - Strong \$ = lower foreign resource prices
 - Weak \$ = higher foreign resource prices
- **Market Power**
 - Monopolies and cartels that control resources control the price of those resources
- **Increases in Resource Prices = SRAS ←**
- **Decreases in Resource Prices = SRAS →**

Productivity

- **Productivity** = $\frac{\text{total output}}{\text{total inputs}}$
- **More productivity = lower unit production cost = SRAS \rightarrow**
- **Lower productivity = higher unit production cost = SRAS \leftarrow**

Legal-Institutional Environment

- **Taxes and Subsidies**

- Taxes (\$ to gov't) on business increase per unit production cost = SRAS ←
- Subsidies (\$ from gov't) to business reduce per unit production cost = SRAS →

- **Government Regulation**

- Government regulation creates a cost of compliance = SRAS ←
- Deregulation reduces compliance costs = SRAS →