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Module 18
Aggregate Supply

Mr. Hess
AP Macroeconomics

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Aggregate Supply

- The level of Real GDP (GDP_R) that firms will produce at each Price Level (PL).
  - Think <u>suppliers</u> on an national scale
    - i.e. How much output will all the producers in a country collectively make.

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Long-run vs. Short-run

<u>Long-run</u>

- 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

<u>Short-run</u>

- 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

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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.

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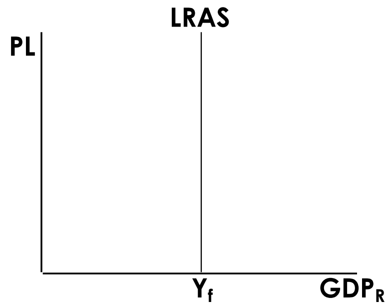
Long-run Aggregate Supply (LRAS)



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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.
- About 99.999999% of all the shifts in Aggregate Supply we will ever make in this class will be dealing with Short-run.

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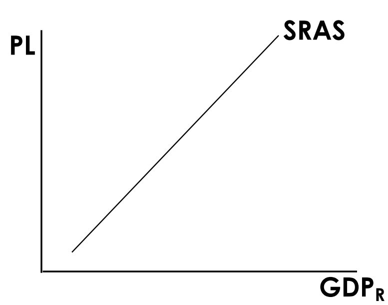
Short-run Aggregate Supply (SRAS)



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Changes in SRAS

- An increase in SRAS is seen as a shift to the right. SRAS →
- A decrease in SRAS is seen as a shift to the left. SRAS ←
- The key to understanding shifts in SRAS is per unit cost of production
  - **Per-unit production cost = total input cost / total output**

know this formula

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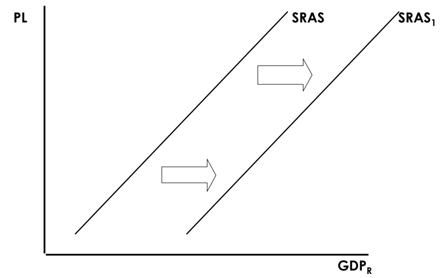
Changes in SRAS (Increase)



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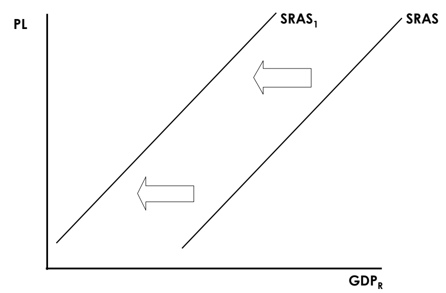
Changes in SRAS (Decrease)



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Determinants of SRAS

- Input Prices
- Productivity
- Legal-Institutional Environment

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Input Prices

- **Domestic Resource Prices**
  - –Wages (75% of all business costs)
  - –Cost of capital
  - –Raw Materials (commodity prices)
- **Foreign Resource Prices**
  - –Strong S = lower foreign resource prices
  - –Weak S = 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 →**

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Productivity

- Productivity = $^{\text{total output}}/_{\text{total inputs}}$
- More productivity = lower unit production cost = SRAS →
- Lower productivity = higher unit production cost = SRAS ←

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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 →

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Summary

- Aggregate Supply is looking at the level of Real GDP that firms will produce at each Price Level.
- Again, all increases are drawn to the right, and all decreases are drawn to the left.
- The key to understanding shifts in SRAS is per unit cost of production

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