Aggregate Demand, the relationship between the price level and GDP

\[ Y = GDP = \text{Consumption} + \text{Investment} + \text{Government} + \text{Net Exports} = C + I + G + NX \]
The Circular Flow
The Relationship between Price and GDP

1. Real Balance Effect
   $\uparrow P_I \rightarrow \downarrow \text{Real Wealth} \rightarrow \downarrow C \rightarrow \downarrow \text{GDP}$

2. Interest Rate Effect
   $\uparrow P_I \rightarrow \downarrow \text{Real Wealth} \rightarrow \uparrow \text{interest rates} \rightarrow \downarrow I \rightarrow \downarrow \text{GDP}$

3. International Effect
   $\uparrow \text{Prices in the United States Relative to other countries} \rightarrow \downarrow \text{US Exports} \rightarrow \downarrow \text{GDP}$
The Real Balance, Interest Rate and International effects all reinforce a negative relationship between the price level and GDP. In other words, when the price level increases, the quantity of GDP decreases. When the price level decreases, the quantity of GDP increases.

i.e. The aggregate demand curve has a negative slope.
Things that shift the AD curve

   A. Income, +
   B. Wealth, +
   C. Taxes, -
   D. Interest Rates, -
   E. Expectation, +
Things that change AD, continued

2. Investment
   A. Interest rates
   B. Expected returns
   C. “Animal Spirits”

3. Government Expenditures

4. Exports
   A. Exchange rates, $\uparrow$ Exchange rates $\rightarrow \downarrow$ Exports
Shifting the Demand Curve
Short Run Aggregate Supply

Why does SAS have a positive slope?

\[ \uparrow P \rightarrow \text{Wages held constant} \rightarrow \uparrow \text{Profit} \rightarrow \uparrow \text{GDP} \]

Profit = Total Revenue - Total Cost

Total Revenue = Price X Quantity
Supply Depends On:

1. Price Level, +
2. Factor Prices
   A. Wages
   B. Oil
   C. Timber
3. Resources- Labor, Land, Capital
4. Technology
Shifting the Supply Curve
Long-Run Aggregate Supply

Long-run Aggregate Supply (LAS) does not depend on the price level, therefore, is a vertical line at potential or natural GDP.

LAS Depends on:
1. Resources: Labor, Land, Capital
2. Technology
LAS Shifts

1. Right when
   A. Labor, land, capital increase
   B. Technology is advanced

2. Left when
   A. Labor, land, capital
   B. Technology is destroyed