**Second: Aggregate Supply**

Aggregate supply is showing the relationship between the level of real domestic output that firms will produce and the price level.

This relation varies depending on the time horizons as following:

1. In the short run, input prices are fixed, but output prices can vary.
2. In the long run, input prices as well as output prices can vary.

**Aggregate Supply in the Short Run:**

The short-run aggregate supply curve is upward sloping, as shown in the following figure. A rise in the price level increases real output; a fall in the price level reduces it.

![Aggregate Supply Curve](image)

The reasons listed below explaining the AS's upward sloping shape in the short run:

1. **Prices:** decreases in the general price level will negatively affect sales, profits, and output, causing producers to produce less.
2. **Rigid Wages:** When prices rise, but higher wages do not accompany them, producers' profits will rise temporarily, and the firm will produce more.
Changes in Aggregate Supply

A change in one or more of the listed determinants of aggregate supply will shift the aggregate supply curve. The rightward shift of the aggregate supply curve from AS1 to AS2 represents an increase in aggregate supply; the leftward shift of the curve from AS1 to AS3 shows a decrease in aggregate supply.

Aggregate Supply in the Long Run:
The long-run aggregate supply curve is vertical at the full-employment level of real GDP because in the long run wages and other input prices rise and fall to match changes in the price level.
So price-level changes do not affect firms’ profits and thus they create no incentive for firms to alter their output.
**Third: The Equilibrium Price Level and Equilibrium real GDP.**

The intersection of the aggregate demand curve and the aggregate supply curve determines the economy’s equilibrium price level.

<table>
<thead>
<tr>
<th>Real Output Demanded (Billions)</th>
<th>Price Level (Index Number)</th>
<th>Real Output Supplied (Billions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$506</td>
<td>108</td>
<td>$513</td>
</tr>
<tr>
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</tr>
<tr>
<td>514</td>
<td>92</td>
<td>502</td>
</tr>
</tbody>
</table>

At the equilibrium price level of 100 (in index-value terms) the $510 billion of real output demanded matches the $510 billion of real output supplied. So the equilibrium GDP is $510 billion.