Instituto Universitário de Lisboa (ISCTE-IUL) - Economics Department

Course: Macroeconomics | Program: Management

Week VIII: The Aggregate Demand and Supply Model

Luís Clemente-Casinhas

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These slides do not cover all the contents of the theoretical classes. They only provide a summary of the subjects which will be used in the practical exercises. This means you should attend theoretical classes as well.

Equilibrium in the AD-AS model

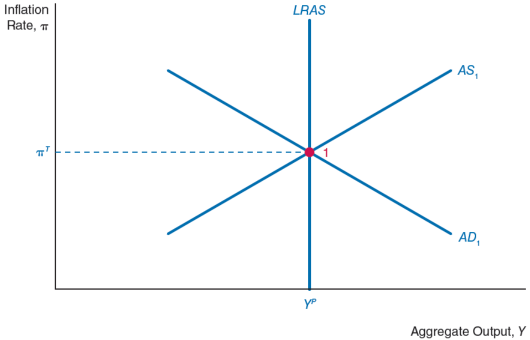
Concept and short and long-run definitions

- The general equilibrium in the economy occurs when the aggregate demand is equal to the aggregate supply.
- **Long-term equilibrium**: aggregate demand is equal to short-run aggregate supply which is equal to long-term aggregate supply, that is, $AD = AS = LRAS$.
- **Short-run equilibrium**: aggregate demand is equal to short-run aggregate supply, that is, $AD = AS$.

Equilibrium in the AD-AS model

Graphical representation

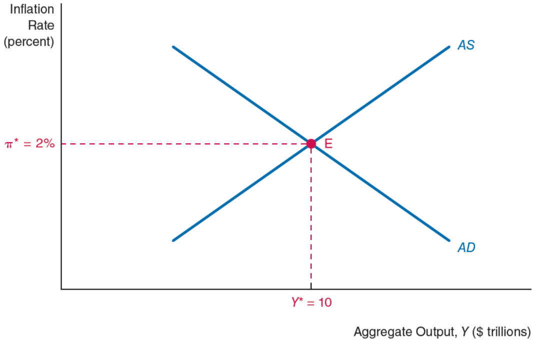
- Graphical representation of the long-term equilibrium, in which $AD = AS == LRAS$.



Equilibrium in the AD-AS model

Graphical representation

- Graphicalrepresentation of the short-run equilibrium, in which $AD = AS$.



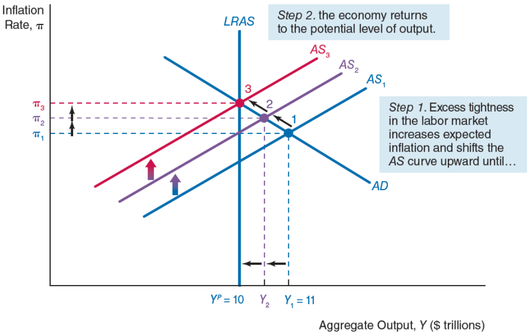
Self-correcting mechanism

- When the short-run and long-run equilibria **coincide**, the short-run equilibrium occurs **at the level** of the potential output $(Y - Y^p = 0)$.
- When the short-run and long-term equilibria **do not match**, the short-run equilibrium occurs **above or below** the potential output $(Y - Y^p \neq 0)$.
  - Causes that we will analyze in class: demand shocks and supply shocks.
- **Self-correcting mechanism**: whenever the short-run equilibrium is above/below potential output, the short-run aggregate supply (AS) moves up/down in order to drive the economy towards full employment (potential product), eliminating the output gap:
  - The mechanism takes place through the labor market.

Self-correcting mechanism

Graphical representation

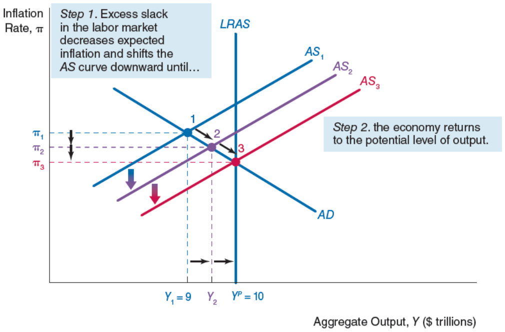
- Graphical representation of the self-correcting mechanism when $Y > Y^p$.



Self-correcting mechanism

Graphical representation

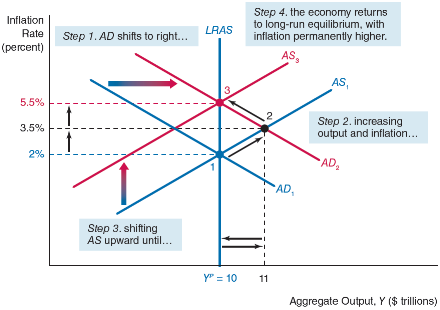
- Graphical representation of the self-correcting mechanism when $Y < Y^p$.



Aggregate demand shocks and the self-correcting mechanism

Graphical representation

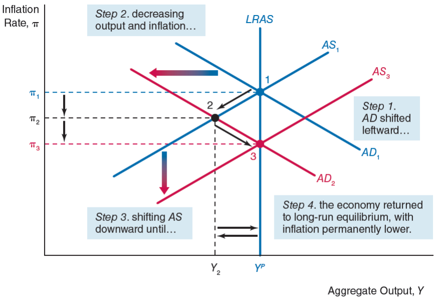
- Graphical representation of the self-correcting mechanism after a **positive shock** in the aggregate demand. We have that $\uparrow \pi$ and that $Y = Y^p$:



Aggregate demand shocks and the self-correcting mechanism

Graphical representation

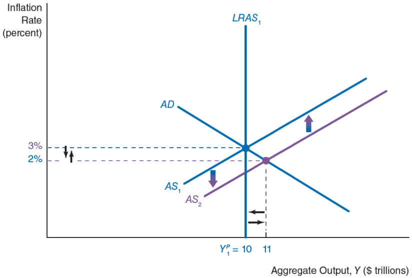
- Graphical representation of the self-correction mechanism after a **negative shock** in the aggregate demand. We have that $\downarrow \pi$ and that $Y = Y^p$:



Aggregate supply shocks and the self-correction mechanism

Graphical representation

- Graphical representation of the self-correcting mechanism after a **negative temporary shock in prices** $(\rho < 0)$ in the short-run supply. The final equilibrium is the same as the initial one:



Aggregate supply shocks and the self-correction mechanism

Graphical representation

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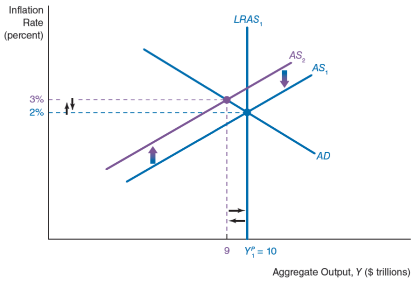
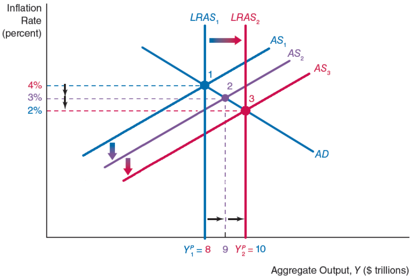


Aggregate supply shocks and the self-correction mechanism

Graphical representation

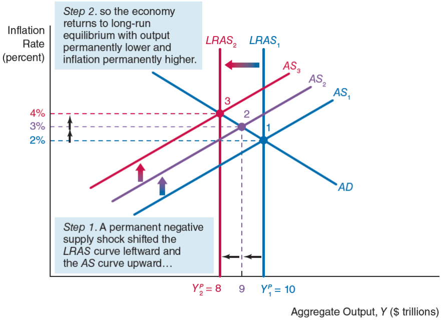
- Graphical representation of the self-correcting mechanism after a **positive permanent shock** in the supply, i.e., a **positive shock** in the long-term aggregate supply. We have that $\downarrow \pi$ and that $Y = Y^p$:



Aggregate supply shocks and the self-correction mechanism

Graphical representation

- Graphical representation of the self-correcting mechanism after a **negative permanent shock** in the supply, i.e., a **negative shock** in the long-term aggregate supply. We have that $\uparrow \pi$ and that $Y = Y^p$:



References

- Mishkin, F. S. (2014), *Macroeconomics: Policy and Practice*, 2nd Edition, Pearson, Addison-Wesley, New York.