Equilibrium in Two Markets

The Y and M Curves

The Auctioneer’s Two Tasks

\[ Y = C + I + G + (X-M) \]

\[ M^D = M^S/P \]

The Y Curve

\[ Y = C + I + G + (X-M) \]

- Combinations of \( P \) and \( r \) that equate the demand and supply of output (Equilibrium in the Goods Market)
The Y Curve

\[ Y = C + I + G + (X-M) \]

- Combinations of \( P \) and \( r \) that equate the demand and supply of output (Equilibrium in the Goods Market)

This is not a demand curve

Consumption Demand

\[ Y = C + I + G + (X-M) \]

\[ Y = C(P, r) + I(r) + G + (X-M) \]

\( P \uparrow \Rightarrow C \downarrow \)

Investment Demand

\[ Y = C + I + G + (X-M) \]

\[ Y = C(P, r) + I(r) + G + (X-M) \]

\( P \uparrow \Rightarrow C \downarrow \)

\( r \downarrow \Rightarrow C \uparrow \)

Raising \( P \)

\[ Y = C + I + G + (X-M) \]

\[ Y = C(P, r) + I(r) + G + (X-M) \]

\( P \uparrow \Rightarrow C \downarrow \)

\( r \downarrow \Rightarrow C \uparrow \)

\( r \downarrow \Rightarrow I \uparrow \)
Equilibrium in Two Markets - Basics 1

Compensating

\[ Y = C + I + G + (X-M) \]

\[ Y = C(P, r) + I(r) + G + (X-M) \]

\[ P \uparrow \Rightarrow C \downarrow \]

\[ r \downarrow \Rightarrow I \uparrow \]

The Downward Sloping Y Curve

- The Auctioneer can raise P and still keep the goods market in balance. But, to do so, he must lower r.
- Ergo, the Y curve is downward sloping

The Downward Sloping Y Curve

Supply Changes

If P rises, demand falls. What about the supply response? Why does r have to decline to keep demand and supply in balance?

Supply Changes

If P rises, demand increases. What about the supply response? Why does r have to decline to keep demand and supply in balance?

Supply Changes

The supply response will be only partial

Supply Changes

Suppose the auctioneer is considering a hike in P which reduces demand by $100

Suppose the auctioneer is considering a hike in P which reduces demand by $100

Equilibrium in Two Markets - Basics 1
Suppose the auctioneer is considering a hike in P which reduces demand by $100. The actual decrease in output will only be (say) $50.

And the lower output will decrease wealth and hence demand by (say) $5.

Ergo he must still lower r: $100 > $50 - $5.

The M Curve

$M^D = M^S/P$

Combinations of P and r that equate the demand and supply of Money (Equilibrium in the Money Market)

This is not a demand curve

Raising P

$M^P = M^S/P$

$P \downarrow \Rightarrow (M^S/P) \downarrow$
Equilibrium in Two Markets - Basics 1

Raising \( r \)

\[ M^D = M^S/P \]

\[ P \uparrow \Rightarrow (M^S/P) \uparrow \]

\[ r \uparrow \Rightarrow M^D \uparrow \]

Raising \( P \)

\[ M^D = M^S/P \]

\[ P \uparrow \Rightarrow (M^S/P) \uparrow \]

\[ r \uparrow \Rightarrow M^D \uparrow \]

Compensating

\[ M^D = M^S/P \]

\[ P \uparrow \Rightarrow (M^S/P) \uparrow \]

\[ r \uparrow \Rightarrow M^D \uparrow \]

The Upward Sloping M Curve

• The Auctioneer can raise \( P \) and still keep the money market in balance. But, to do so, he must raise \( r \).

• The M curve is upward sloping

The Y and M Curves

End

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