
The *IS – LM* Model, Part 4

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Agenda

- Policy Analysis with the *IS – LM* Model

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Policy Analysis with the *IS – LM* Model

- Monetary policy:
 - Changes in the nominal money supply.
- Fiscal policy:
 - Changes in government purchases.
 - Changes in taxes.

15-3

Policy Analysis with the *IS – LM* Model

- Expansionary policies:
 - Increases in the nominal money supply.
 - Increases in government purchases.
 - Decreases in taxes (no Ricardian equivalence).
- Contractionary policies:
 - Decreases in the nominal money supply.
 - Decreases in government purchases.
 - Increases in taxes (no Ricardian equivalence).

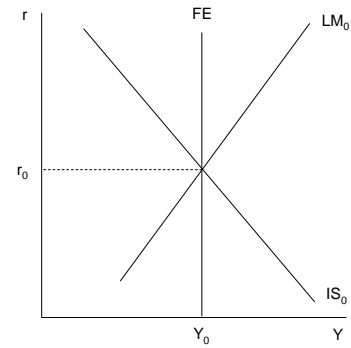
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Policy Analysis with the IS – LM Model

- Expansionary monetary policy:
 - Increases in the nominal money supply.

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Expansionary monetary policy



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Expansionary monetary policy

- An expansionary monetary policy shifts the LM curve to the right.
 - This increases M^s/P directly.
 - At the initial real interest rate (r_0), $M > L$, and r begins to fall.
 - A falling r decreases S^d and increases C^d and I^d , which increases Y , C^d , and M^d/P .
 - This process continues until general equilibrium is re-established.

15-7

Expansionary monetary policy

- Net result:
 - An increase in Y and a decrease in r .
 - Composition of spending has changed:
 - Consumption is higher,
 - Investment is higher,
 - Government spending is the same.

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Policy Analysis with the IS – LM Model

- Monetary policy objectives:
 - Money supply, M^s , targeting.
 - Interest rate, r , targeting.
 - Economic activity, Y , targeting.
 - A stabilizing central bank.

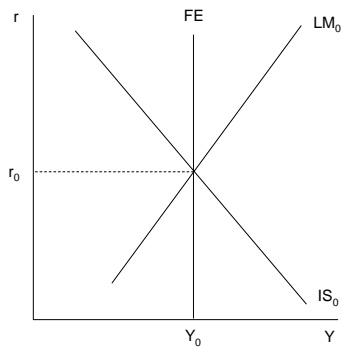
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Policy Analysis with the IS – LM Model

- Monetary policy objectives:
 - Money supply, M^s , targeting.
 - With a goods market shock.
 - With a demand for money shock.

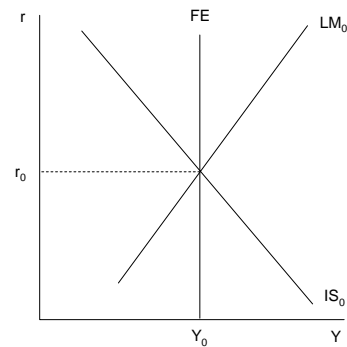
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M^s targeting, Goods market shock



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M^s targeting, M^d shock



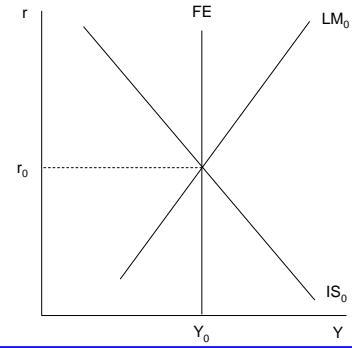
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Policy Analysis with the IS – LM Model

- Monetary policy objectives:
 - Interest rate, r , targeting.
 - With a goods market shock.
 - With a demand for money shock.

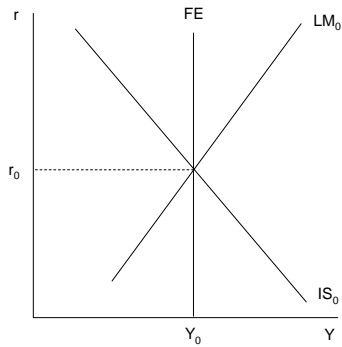
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Interest rate targeting, Goods market shock



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Interest rate targeting, M^d shock



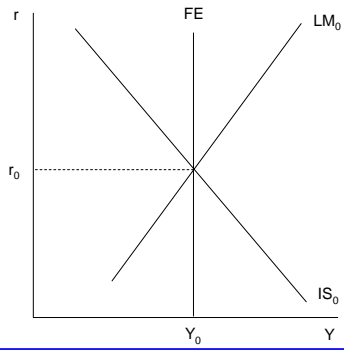
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Policy Analysis with the IS – LM Model

- Monetary policy objectives:
 - Economic activity, Y , targeting.
 - With a goods market shock.
 - With a demand for money shock.

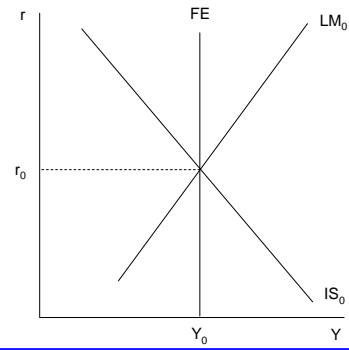
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Y targeting, Goods market shock



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Y targeting, M^d shock



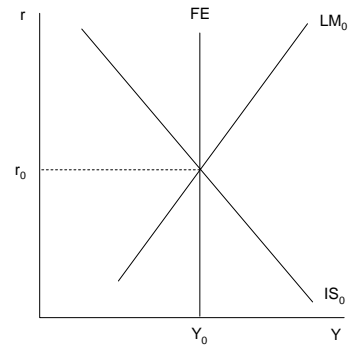
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Policy Analysis with the IS – LM Model

- Expansionary fiscal policy:
 - Increases in government purchases.

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Expansionary fiscal policy (gov't purchases)



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Expansionary fiscal policy (gov't purchases)

- An expansionary fiscal policy shifts the IS curve to the right.
 - This increases Y directly
 - and increases C^d by the marginal propensity to consume, which also increases M^d/P .
 - At the initial interest rate (r_0), $L > M$, and r begins to rise.
 - A rising r increases S^d and decreases C^d and I^d , which reduces Y and M^d/P .
 - This process continues until general equilibrium is re-established.

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Expansionary fiscal policy (gov't purchases)

- Net result:
 - An increase in both Y and r .
 - Composition of spending has changed:
 - Consumption is higher,
 - Investment is lower,
 - Government spending is higher.

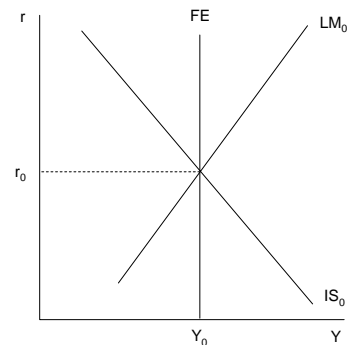
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Policy Analysis with the IS – LM Model

- Expansionary fiscal policy:
 - Decreases in taxes (no Ricardian equivalence).

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Expansionary fiscal policy (taxes)



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Expansionary fiscal policy (taxes)

- An expansionary fiscal policy shifts the IS curve to the right.
 - This increases YD directly
 - and increases C^d by the marginal propensity to consume, which also increases M^d/P .
 - At the initial interest rate (r_0), $L > M$, and r begins to rise.
 - A rising r increases S^d and decreases C^d and I^d , which reduces Y and M^d/P .
 - This process continues until general equilibrium is re-established.

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Expansionary fiscal policy (taxes)

- Net result:
 - An increase in both Y and r .
 - Composition of spending has changed:
 - Consumption is higher,
 - Investment is lower,
 - Government spending is constant.

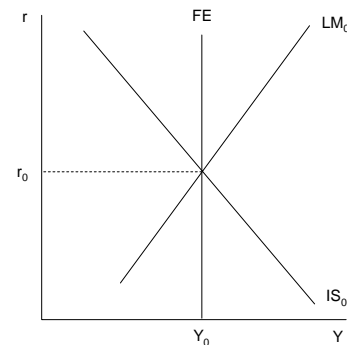
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Expansionary fiscal policy, Crowding out

- Expansionary fiscal policies lead to:
 - An increase in both Y and r .
 - Composition of spending has changed:
 - Consumption is higher,
 - Investment is lower,
 - Government spending is constant.
 - Higher interest rates have “crowded out” investment.

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Expansionary fiscal policy, Crowding out



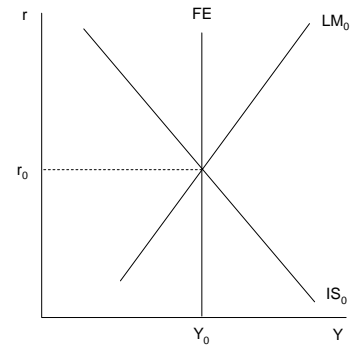
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Expansionary fiscal policy, Crowding out

- Can “crowding out” of investment be avoided when using an expansionary fiscal policy?

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Avoiding Crowding Out



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Expansionary fiscal policy, Crowding out

- “Crowding out” of investment can be avoided when using an expansionary fiscal policy by combining it with an expansionary monetary policy.
 - This is called “accommodating monetary policy.”

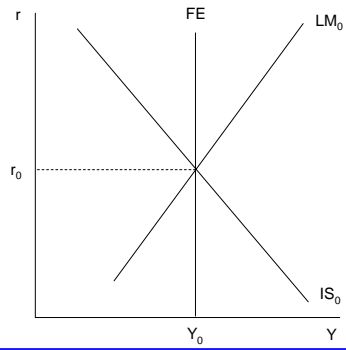
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Policy Analysis with the IS – LM Model

- By using monetary and fiscal policy in conjunction, any desired level of economic output can be achieved.
 - Depending on the policy combination used, different interest rates will result.
 - This also implies a different composition of output.

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Monetary Expansion, Fiscal Contraction



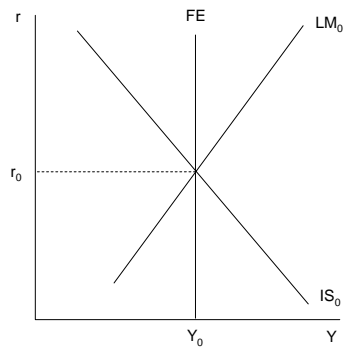
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Monetary Expansion, Fiscal Contraction

- A monetary expansion and fiscal contraction can maintain the same level of economic activity but with a lower real interest rate.
 - What happens to the composition of output?

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Monetary Contraction, Fiscal Expansion



15-35

Monetary Contraction, Fiscal Expansion

- A monetary contraction and fiscal expansion can maintain the same level of economic activity but with a higher real interest rate.
 - What happens to the composition of output?

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Policy Analysis with the IS – LM Model

- Which composition of output is better?
 - Higher or lower investment?
 - What kind of investment?
 - What kind of government purchases?
 - What kind of taxes?
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