

International Linkages

(Reference: Rudiger Dornbusch and Stanley Fischer, Macroeconomics)

Important Terminology and Points to Remember

- The Balance of Payments
- Exchange rates: Fixed, Flexible and Managed/Dirty Float
- Goods Market Equilibrium: IS Curve is now also impacted by NX (Y, Y_f, R)
- Currency Appreciation shifts IS to the left
- Currency Depreciation shifts IS to the Right
- Capital Mobility: Balance of Payment and Perfect Capital Mobility
- Mundell-Fleming Model: Perfect Capital Mobility under Flexible and Fixed Exchange Rates

Structure of Lecture:

Mundell Fleming Model: Initial Equilibrium and The Four Cases

Perfect Capital Mobility with Flexible Exchange Rates

Case 1: Expansionary Fiscal Policy: Totally Non-Effective

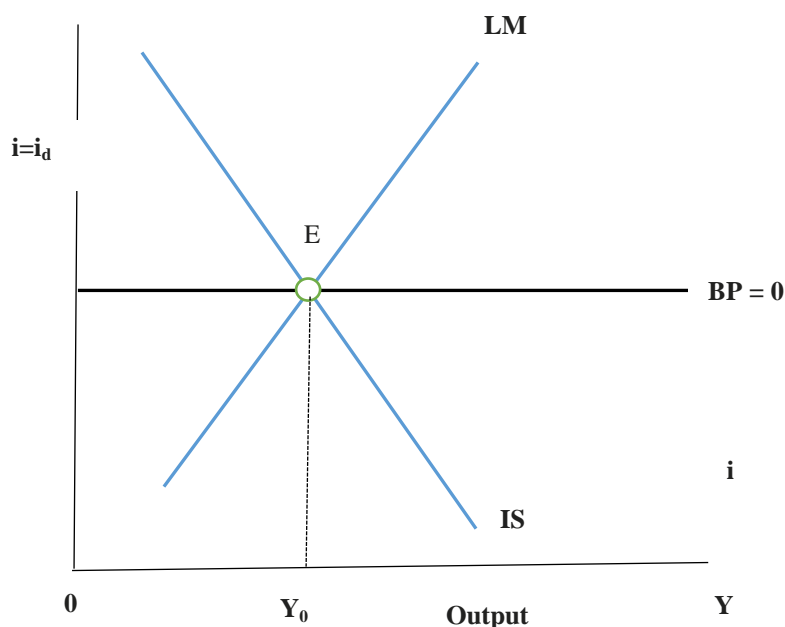
Case 2: Expansionary Monetary Policy: Fully Effective

Perfect Capital Mobility with Fixed Exchange Rates

Case 3: Expansionary Fiscal Policy: Fully Effective

Case 4: Expansionary Monetary Policy: Totally Non-Effective

Initial Equilibrium (IS=LM=BP): Simultaneous Equilibrium in Goods Market, Money Market and Balance of Payments

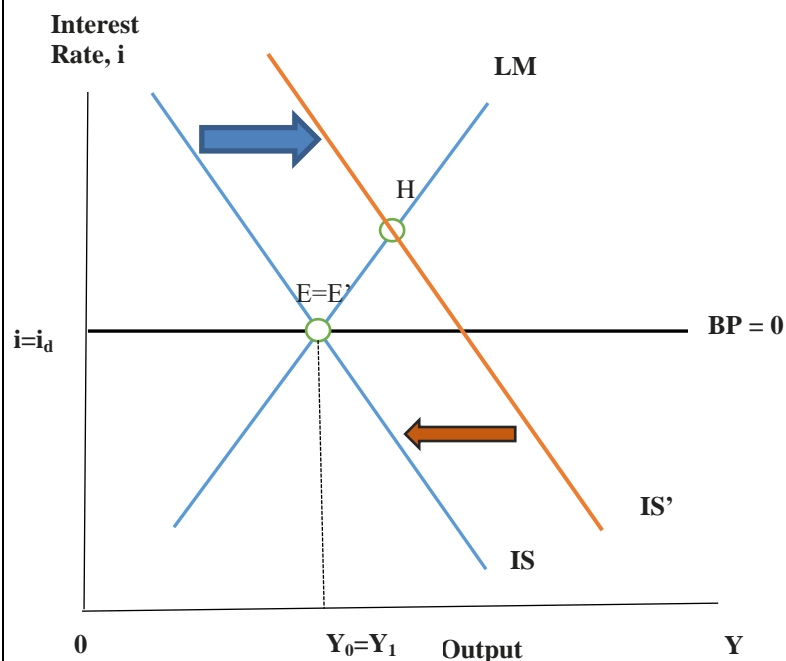


Mundell Fleming Model

Perfect Capital Mobility with Flexible Exchange Rates

Case 1: Expansionary Fiscal Policy: Totally Non-Effective

Figure 1: Fiscal Expansion under Flexible Exchange Rates



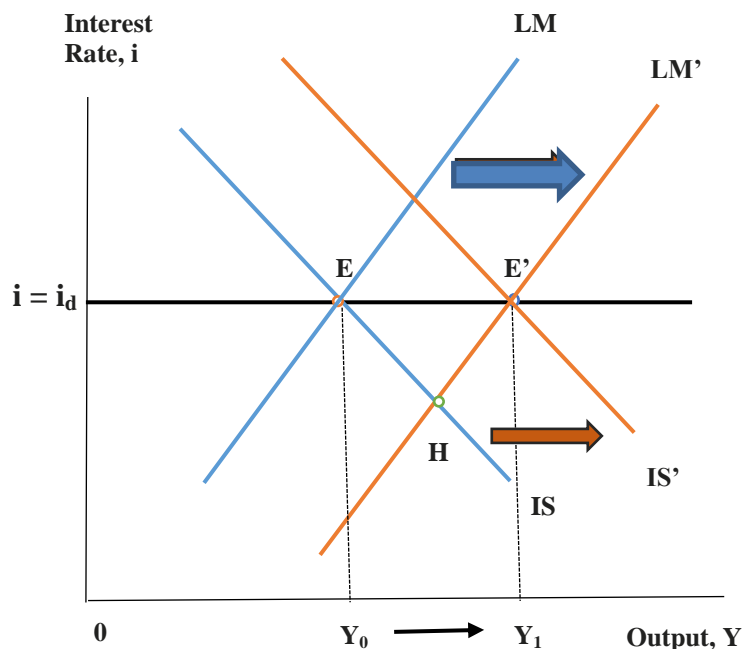
Let Original Equilibrium be at E.

- ➡ Domestic Interest equals International Rate of Interest
- ➡ Expansionary Fiscal Policy shifts IS to IS'
- ➡ Temporarily, $i_d > i$ (At Point H)
- ➡ Huge Capital Inflow to Domestic Country
- ➡ Demand for Domestic Currency Increases
- ➡ Domestic Currency Appreciates
- ➡ Exports Decrease; Imports Increase
- ➡ Net Exports Decline
- ➡ IS Shifts inwards until reaches IS'
- ➡ Income comes back to Y_0

Finally: No Change in Income; Currency has appreciated; NX has fallen; Current Account is Worse Off; and Interest returns to $i = i_d$

Case 2: Expansionary Monetary Policy: Fully Effective

Figure 2: A Monetary Expansion under Flexible Exchange Rates



Let Original Equilibrium be at E.

- ➡ Domestic Interest equals International Rate of Interest
- ➡ Expansionary Monetary Policy shifts LM to LM'
- ➡ Temporarily, $i_d < i$ (At Point H)
- ➡ Huge Capital Outflow from Domestic Country
- ➡ Demand for Foreign Currency Increases
- ➡ Domestic Currency Depreciates
- ➡ Exports Increase; Imports Decrease
- ➡ Net Exports Increase
- ➡ IS Shifts outwards until reaches IS'
- ➡ Income increases from Y_0 to Y_1

(So, shift in LM is followed by a shift in IS as well)

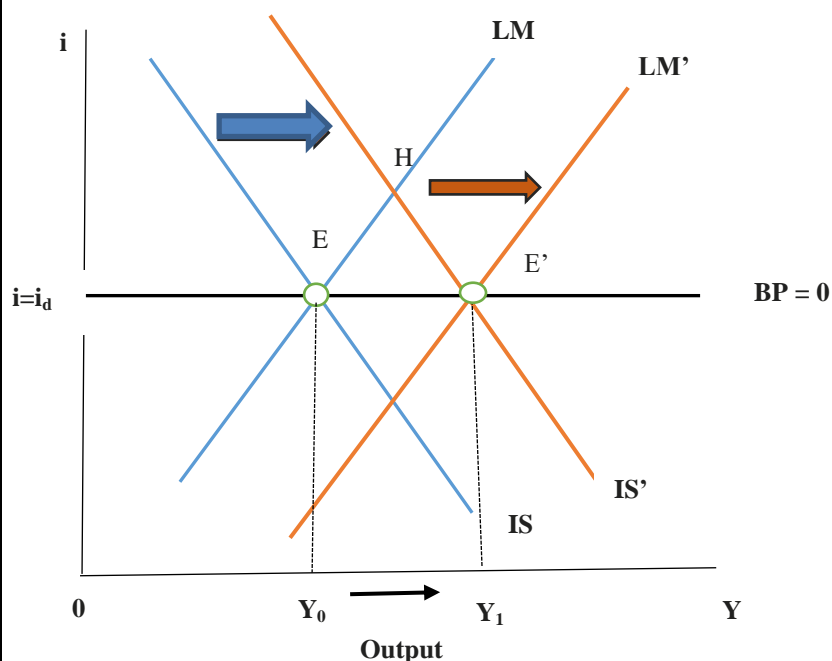
Finally:

Income increases to Y_1 ; Currency has depreciated; NX increases; Current Account Improves; and Interest returns to $i = i_d$

Perfect Capital Mobility with Fixed Exchange Rates

Case 3: Expansionary Fiscal Policy: Fully Effective

Figure 3: Fiscal Expansion under Fixed Exchange Rates



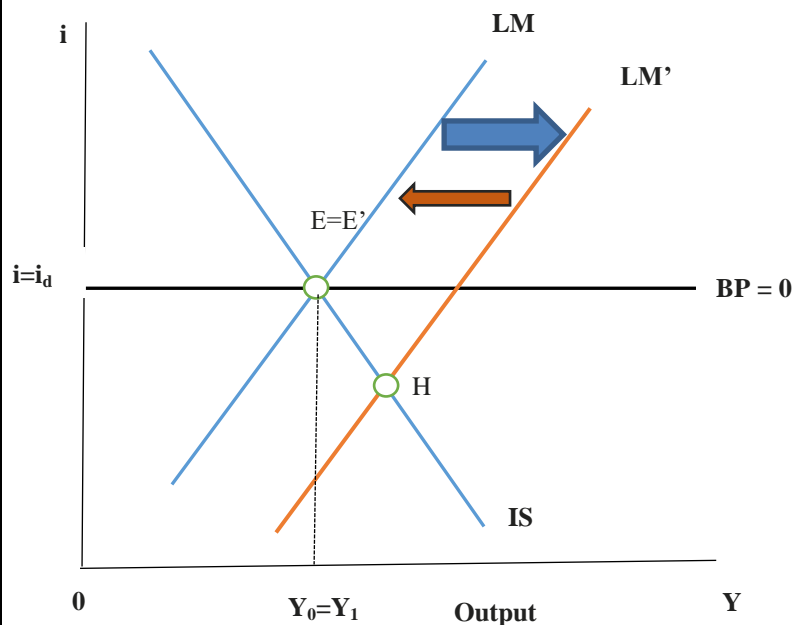
Let Original Equilibrium be at E.

- ➡ Domestic Interest equals International Rate of Interest
- ➡ Expansionary Fiscal Policy shifts IS to IS'
- ➡ Temporarily, $i_d > i$ (At Point H)
- ➡ Huge Capital Inflow to Domestic Country
- ➡ Demand for Domestic Currency Increases
- ➡ **Tendency for Domestic Currency to Appreciate**
- ➡ **But Domestic Currency cannot appreciate, as Fixed Exchange rate**
- ➡ To keep Exchange rate Unchanged, Government accepts foreign Currency and Releases Domestic Currency in exchange
- ➡ Money Supply Increases; LM shifts to LM'
- ➡ Income increases from Y_0 to Y_1

Finally: Income Increases; Currency Remains Fixed; Increase in Domestic Income from Y_0 to Y_1 increases Imports thereby NX falls; Current Account is Worse Off; and Interest returns to $i = i_d$

Case 4: Expansionary Monetary Policy: Totally Non- Effective

Figure 4: Monetary Expansion under Fixed Exchange Rates



Let Original Equilibrium be at E.

- ➡ Domestic Interest equals International Rate of Interest
- ➡ Expansionary Monetary Policy shifts LM to LM'
- ➡ Temporarily, $i_d < i$ (At Point H)
- ➡ Huge Capital Outflow from Domestic Country
- ➡ Demand for Foreign Currency Increases
- ➡ **Tendency for Domestic Currency to Depreciate**
- ➡ **But Domestic Currency cannot depreciate, as Fixed Exchange rate**
- ➡ To keep Exchange rate Unchanged, Government Buys Domestic Currency and releases Foreign Currency
- ➡ Money Supply Decreases; LM' shifts back to LM
- ➡ Income comes back to Y_0

Finally:

No Change in Income; Currency Remains Fixed; and Interest returns to $i = i_d$

Summary Effects: Monetary and Fiscal Policy under Perfect Capital Mobility

	Fixed Exchange Rates	Flexible Exchange Rates
Monetary Expansion	<ul style="list-style-type: none">• No Output Change• Reserve Losses Equal to Money Increase• No Change in Exchange Rate• $i = id$	<ul style="list-style-type: none">• Output Expansion• Trade Balance Improves• Exchange Depreciation• $i = id$
Fiscal Expansion	<ul style="list-style-type: none">• Output Expansion• Trade Balance Worsens• No Change in Exchange Rate• $i = id$	<ul style="list-style-type: none">• No Output Change• Reduced Net Exports• Exchange Appreciation• $i = id$

Concluding Remarks: Beggar Thy Neighbour Policy and Competitive Depreciation
