### **Chapter 18**

# **Open-Economy Macroeconomics: Adjustment Policies**

- 18.1 Introduction
- 18.2 Internal and External Balance with Expenditure-Changing and Expenditure- Switching Policies
- 18.3 Equilibrium in the Goods Market, in the Money Market, and in the Balance of Payments
- 18.4 Fiscal and Monetary Policies for Internal and External Balance with Fixed Exchange Rates
- 18.5 The IS-LM-BP Model with Flexible Exchange Rates

### **Adjustment Policies**

• Adjustment policies that are used to achieve full employment with price stability and equilibrium in the balance of payments.

Why we need Adjustment Policies?

 We already have Automatic Adjustment Mechanisms.

- The need for adjustment policies arises because the automatic adjustment mechanisms have serious unwanted side effects
- The economist most responsible for shifting the emphasis from automatic adjustment mechanisms to adjustment policies was *James Meade*

#### Most Important Economic Goals

- (1) Internal Balance
- (2) External Balance
- (3) Reasonable Rate of Growth
- (4) Equitable distribution of income
- (5) Adequate protection of the environment

■ Internal balance refers to full employment or a rate of unemployment of no more than, say, 4 to 5 percent per year (the so-called *frictional unemployment* arising in the process of changing jobs) and a rate of inflation of no more than 2 or 3 percent per year.

■ External balance refers to equilibrium in the balance of payments (or a desired temporary disequilibrium such as a surplus that a nation may want in order to replenish its depleted international reserves).

#### **Policy Instruments**

- (1) Expenditure-changing, or demand, Policies
- (2) Expenditure switching Policies
- (3) Direct Controls.

#### Expenditure-changing policies include

- Fiscal Policy
- Monetary Policy

**Expenditure-switching** policies refer to changes in the exchange rate (i.e., a devaluation or revaluation)

**Direct controls** consist of tariffs, quotas, and other restrictions on the flow of international trade and capital

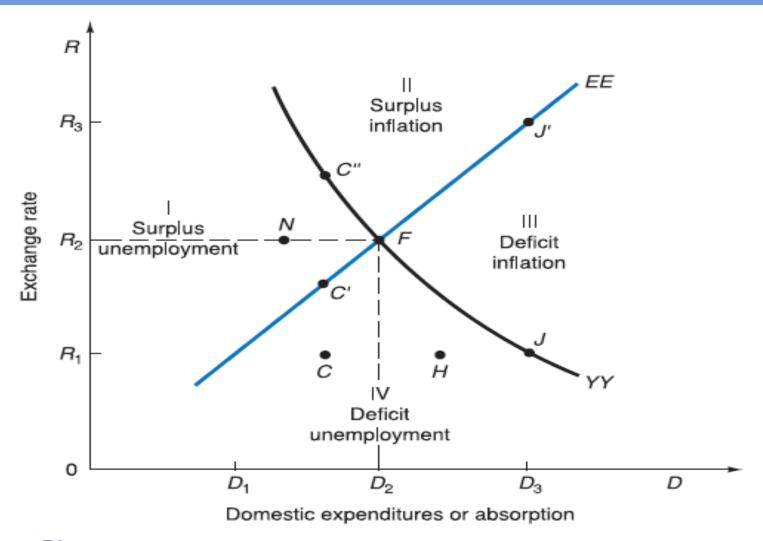
# 18.2 Internal and External Balance with Expenditure-Changing and Expenditure-Switching Policies

- For simplicity we assume a zero international capital flow (so that the balance of payments is equal to the nation's trade balance).
- We also assume that prices remain constant until aggregate demand begins to exceed the full-employment level of output.

### **Swan Diagram**

- *Trevor Swan*, an Australian economist, who introduced this framework.
- The *EE* curve shows the various combinations of exchange rates and real domestic expenditures, or absorption, that result in external balance.
- The *YY* curve shows the various combinations of exchange rates (*R*) and domestic absorption (*D*) that result in internal balance (i.e., full employment with price stability).

- Zone I: External surplus and internal unemployment
- Zone II: External surplus and internal inflation
- Zone III: External deficit and internal inflation
- Zone IV: External deficit and internal unemployment



Swan Diagram.

- Two policies are usually required to achieve two goals simultaneously.
- Only if the nation happens to be directly across from or directly above or below point *F* will the nation be able to reach point *F* with a single policy instrument.

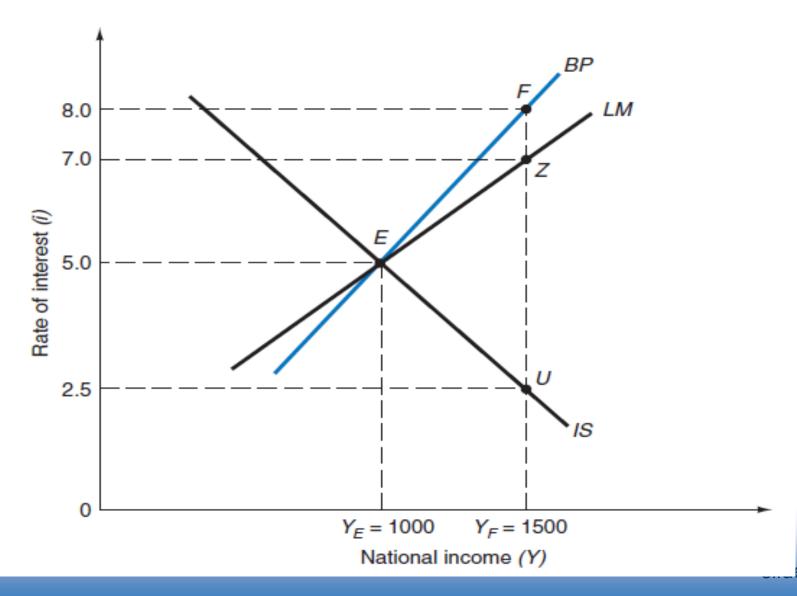
- Under the fixed exchange rate system that prevailed from the end of World War II until 1971, industrial nations were generally unwilling to devalue or revalue their currency even when they were in *fundamental* disequilibrium.
- Surplus nations enjoyed the prestige of the surplus and the accumulation of reserves.
- Deficit nations regarded devaluation as a sign of weakness and feared it might lead to *destabilizing* international capital movements

- As a result, nations were left with only expenditurechanging policies to achieve internal and external balance.
- This presented a serious theoretical problem until *Mundell* showed how to use fiscal policy to achieve internal balance and monetary policy to achieve external balance.
- Thus, even without an expenditure-switching policy, nations could theoretically achieve both internal and external balance simultaneously.

# Equilibrium in the Goods Market, in the Money Market, and in the Balance of Payments

- IS-LM-BP Model or Mundell—Fleming model [Robert Mundell (1963) and Marcus Fleming (1962)] to show how a nation can use fiscal and monetary policies to achieve both internal and external balance without any change in the exchange rate.
- Short-term capital is now assumed to be responsive to international interest rate differentials.

■ Indeed, it is this response that allows us to separate fiscal from monetary policies and direct fiscal policy to achieve internal balance and monetary policy to achieve external balance.



#### **Goods Market**

- The *IS* curve shows the various combinations of interest rates (*i*) and national income (*Y*) that result in equilibrium in the goods market.
- The goods market is in equilibrium whenever the quantity of goods and services demanded equals the quantity supplied, or when injections into the system equal leakages

### **Money Market**

- The *LM* curve shows the various combinations of interest rates (*i*) and national income (*Y*) at which the demand for money is equal to the given and fixed supply of money, so that the money market is in equilibrium.
- Ms=Md

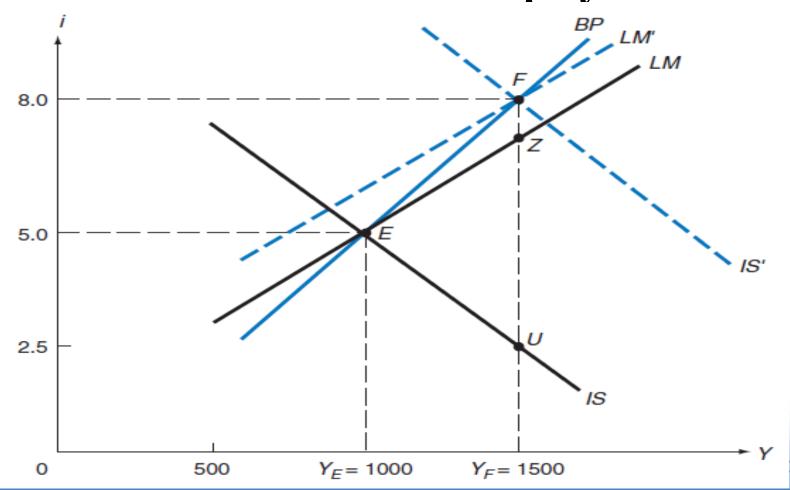
### **Balance of Payments**

- The *BP* curve shows the various combinations of interest rates (*i*) and national income (*Y*) at which the nation's balance of payments is in equilibrium *at a given exchange rate*.
- The more responsive international short-term capital flows are to changes in interest rates, the flatter is the *BP* curve.
- The *BP* curve is drawn on the assumption of a constant exchange rate.

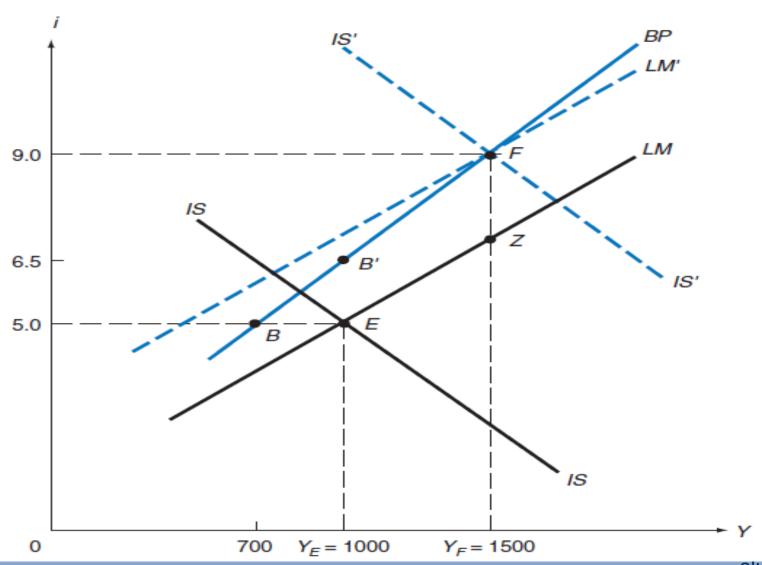
- A devaluation or depreciation of the nation's currency shifts the *BP* curve down since the nation's trade balance improves, and so a lower interest rate and smaller capital inflows (or greater capital outflows) are required to keep the balance of payments in equilibrium.
- On the other hand, a revaluation or appreciation of the nation's currency shifts the *BP* curve upward. Since we are here assuming that the exchange rate is fixed, the *BP* curve does not shift.

### 18.4 Fiscal and Monetary Policies for Internal and External Balance with Fixed Exchange Rates

### 18.4 A Fiscal and Monetary Policies from External Balance and Unemployment



### 18.4B Fiscal and Monetary Policies from External Deficit and Unemployment



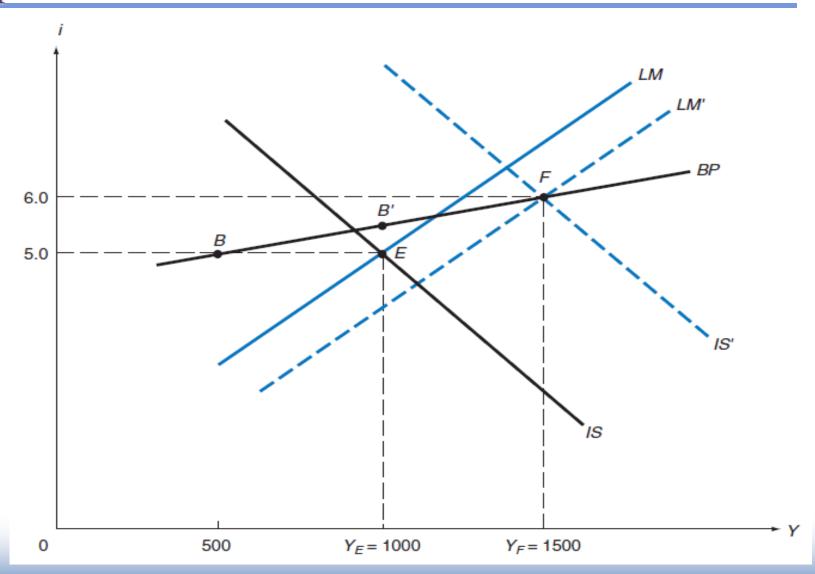
#### **Your Task**

Please Draw Following scenarios and send picture in Class WhatsApp Group

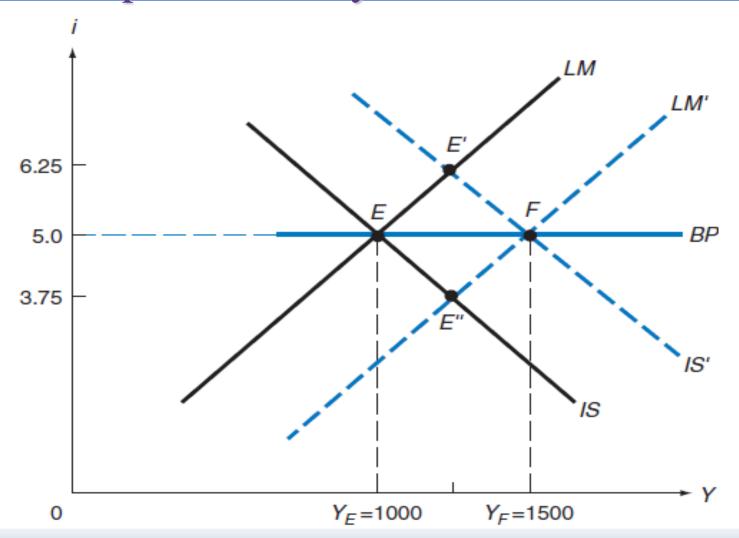
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 A Fiscal and Monetary Policies from External Surplus and Unemployment

### 18.4C Fiscal and Monetary Policies with Elastic Capital Flows

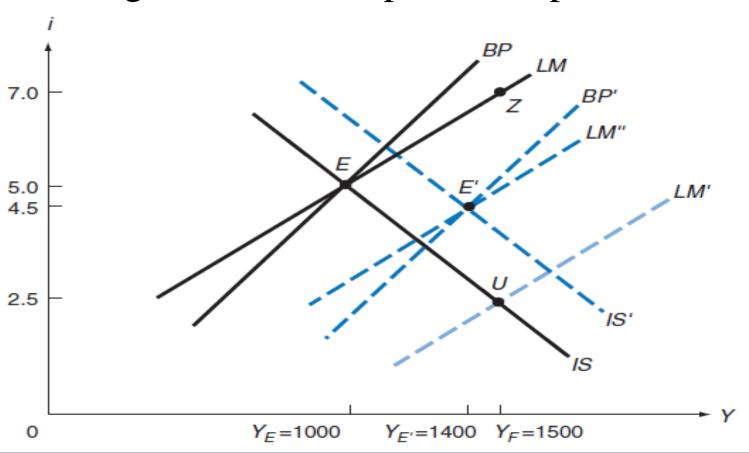


# 18.4D Fiscal and Monetary Policies with Perfect Capital Mobility



# 18.5 The IS–LM–BP Model with Flexible Exchange Rates

18.5A The IS–LM–BP Model with Flexible Exchange Rates and Imperfect Capital Mobility



## 18.5B The IS–LM–BP Model with Flexible Exchange Rates and Perfect Capital Mobility

