Money and Banking

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Lecture 12 The International Financial System

- Intervention in the Foreign Exchange Market
- Balance of Payment
- Exchange Rates Regimes in the International Financial System
- Capital Control
- International Considerations and Monetary Policy

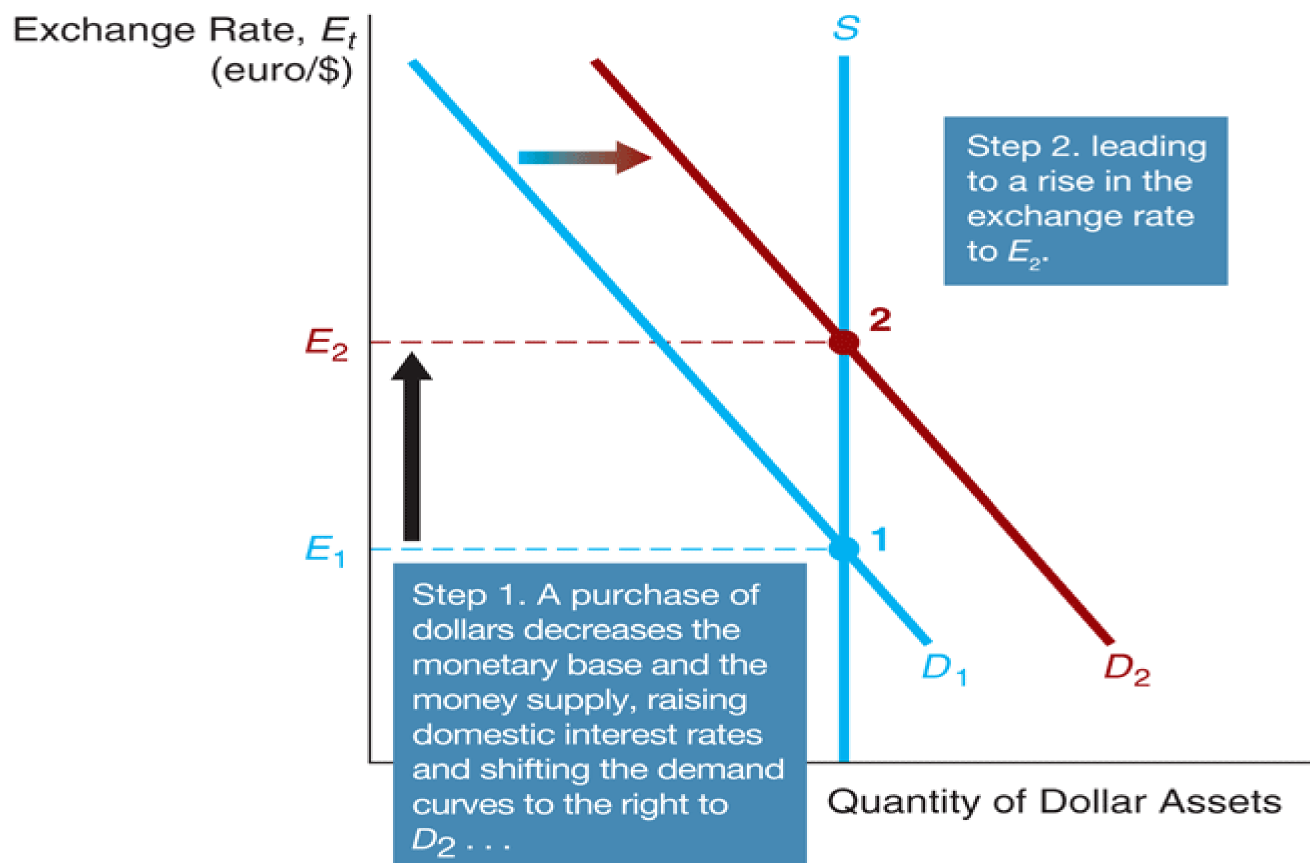
Foreign exchange intervention and the money supply

Federal Reserve System	
Assets	**Liabilities**
Foreign Assets (International Reserves) -$1B	Currency in circulation -$1B

Federal Reserve System	
Assets	**Liabilities**
Foreign Assets (International Reserves) -$1B	Deposits with the Fed (reserves) -$1B

- A central bank's purchase of domestic currency and corresponding sale of foreign assets in the foreign exchange market leads to an equal decline in its international reserves and the monetary base
- A central bank's sale of domestic currency to purchase foreign assets in the foreign exchange market results in an equal rise in its international reserves and the monetary base
- We call this as an **unsterilized foreign exchange intervention**

Effect of an Unsterilized Purchase of Dollars and Sale of Foreign Assets



Sterilized foreign exchange intervention

Federal Reserve System			
Assets		**Liabilities**	
Foreign Assets (International Reserves)	-$1B	Monetary Base (reserves)	0
Government Bonds	+$1B		

- To counter the effect of the foreign exchange intervention, conduct an offsetting open market operation
- There is no effect on the monetary base and no effect on the exchange rate

Balance of Payment

- current account
  - trade balance
  - net investment income
  - net unilateral transfers
- capital account
  - net receipt from capital flows

Current account + capital account = net change in government international reserves

Exchange Rate Regimes

- **Fixed exchange rate regime**
  - Value of a currency is pegged relative to the value of one other currency (anchor currency)
- **Floating exchange rate regime**
  - Value of a currency is allowed to fluctuate against all other currencies
- Managed float regime (dirty float)
  - Attempt to influence exchange rates by buying and selling currencies

Exchange Rate Regimes

- **Gold standard**
  - Fixed exchange rates
  - No control over monetary policy
  - Influenced heavily by production of gold and gold discoveries
- **Bretton Woods System**
  - Fixed exchange rates using U.S. dollar as reserve currency
  - International Monetary Fund (IMF)
  - World Bank
  - General Agreement on Tariffs and Trade (GATT)
    World Trade Organization

How a Fixed Exchange Rate Regime Works

- When the domestic currency is overvalued, the central bank must
  - purchase domestic currency to keep the exchange rate fixed (it loses international reserves), or
  - conduct a devaluation
- When the domestic currency is undervalued, the central bank must
  - sell domestic currency to keep the exchange rate fixed (it gains international reserves), or
  - conduct a revaluation

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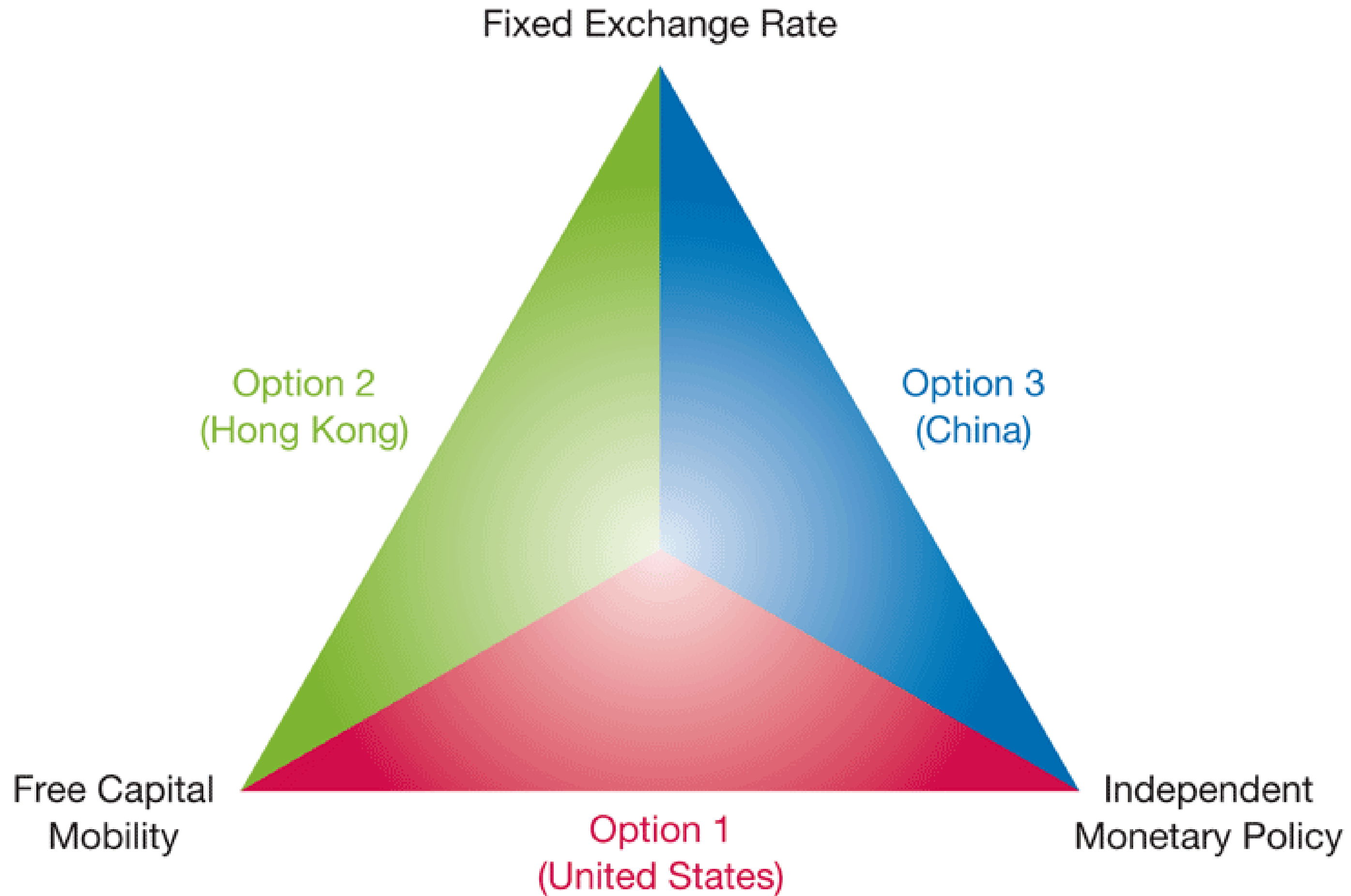
The Impossible Trilema



How the Bretton Woods System Worked

- Exchange rates adjusted only when experiencing a ‘fundamental disequilibrium’ (large persistent deficits in balance of payments)
- Loans from IMF to cover loss in international reserves
- IMF encouraged contractionary monetary policies
- Devaluation only if IMF loans were not sufficient
- No tools for surplus countries
- U.S. could not devalue currency

How the Managed Float Exchange Rate Regime Works

- Hybrid of fixed and flexible
  - Small daily changes in response to market
  - Interventions to prevent large fluctuations
- Appreciation hurts exporters and employment
- Depreciation hurts imports and stimulates inflation
- Special drawing rights as substitute for gold

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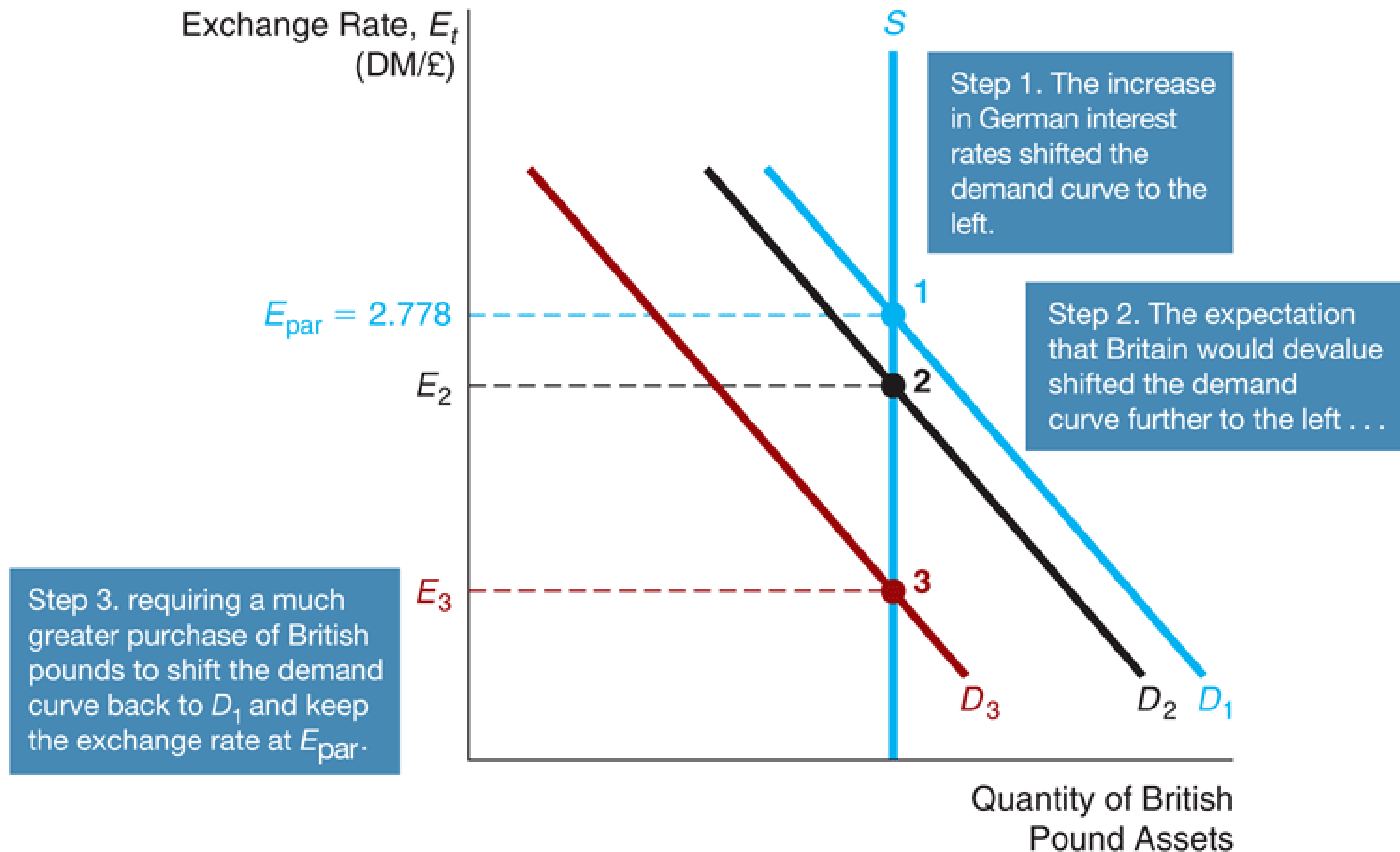
Foreign Exchange Market for British Pounds in 1992



Capital Control

- Controls on outflows
  - Promote financial instability by forcing a devaluation
  - Controls are seldom effective and may increase capital flight
  - Lead to corruption
  - Lose opportunity to improve the economy
- Controls on inflows
  - Lead to a lending boom and excessive risk taking by financial intermediaries
  - Controls may block funds for productions uses
  - Produce substantial distortion and misallocation
  - Lead to corruption
- Strong case for improving bank regulation and supervision

Exchange Rates Response to an Increase in the Domestic Interest Rate

- Balance of payment considerations:
  - Current account deficits in the U.S. suggest that American businesses may be losing ability to compete because the dollar is too strong
  - U.S. deficits mean surpluses in other countries⇒ large increases in their international reserve holdings⇒
    world inflation
- Exchange rate considerations:
  - A contractionary monetary policy will raise the domestic interest rate and strengthen the currency
  - An expansionary monetary policy will lower interest rates and weaken currency

Exchange-Rate Targeting

- Advantages of Exchange-Rate Targeting:
  - Contributes to keeping inflation under control
  - Automatic rule for conduct of monetary policy
  - Simplicity and clarity
- Disadvantages of exchange-rate targeting:
  - Cannot respond to domestic shocks and shocks to anchor country are transmitted
  - Open to speculative attacks on currency
  - eakens the accountability of policymakers as the exchange rate loses value as signal

Currency Board

- Solution to lack of transparency and commitment to target
- Domestic currency is backed 100% by a foreign currency
- Note issuing authority establishes a fixed exchange rate and stands ready to exchange currency at this rate
- Money supply can expand only when foreign currency is exchanged for domestic currency
- Stronger commitment by central bank
- Loss of independent monetary policy and increased exposure to shock from anchor country
- Loss of ability to create money and act as lender of last resort

Dollarization

- Another solution to lack of transparency and commitment
- Adoption of another country's money
- Even stronger commitment mechanism
- Completely avoids possibility of speculative attack on domestic currency
- Lost of independent monetary policy and increased exposure to shocks from anchor country
- Inability to create money and act as lender of last resort
- Loss of seignorage