Chapter 18

The International Financial System
Unsterilized Foreign Exchange Intervention

- 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.
Unsterilized Intervention

• An unsterilized intervention in which domestic currency is sold to purchase foreign assets leads to a gain in international reserves, an increase in the money supply, and a depreciation of the domestic currency.
FIGURE 1 Effect of a Sale of Dollars and a Purchase of Foreign Assets
Sterilized Foreign Exchange Intervention

- 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.

<table>
<thead>
<tr>
<th>Federal Reserve System</th>
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<tbody>
<tr>
<td>Assets</td>
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<tr>
<td>Foreign Assets (International Reserves)</td>
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<td>-$1B</td>
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<tr>
<td>Government Bonds</td>
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Balance of Payments

• Current Account
  - International transactions that involve currently produced goods and services

• Trade Balance

• Capital Account
  - Net receipts from capital transactions

• Sum of these two is the official reserve transactions balance
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
Past 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)
Past Exchange Rate Regimes (cont’d)

• Bretton Woods System (cont’d)
  ✓ World Bank
  ✓ General Agreement on Tariffs and Trade (GATT)
    • World Trade Organization

• European Monetary System
  ✓ Exchange rate mechanism
FIGURE 2 Intervention in the Foreign Exchange Market Under a Fixed Exchange Rate Regime

(a) Intervention in the case of an overvalued exchange rate  (b) Intervention in the case of an undervalued exchange rate
FIGURE 3 Foreign Exchange Market for British Pounds in 1992

Exchange Rate, $E_t$
(DM/£)

$E_{par} = 2.778$

Quantity of British Pound Assets

$E_2$

$E_3$

$D_3$

$D_2$

$D_1$
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, but as a result, it loses international reserves.

• When the domestic currency is undervalued, the central bank must sell domestic currency to keep the exchange rate fixed, but as a result, it gains international reserves.
How Bretton Woods 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 encourages contractionary monetary policies
- Devaluation only if IMF loans are not sufficient
- No tools for surplus countries
- U.S. could not devalue currency
Managed Float

• 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
European Monetary System

- 8 members of EEC fixed exchange rates with one another and floated against the U.S. dollar
- ECU value was tied to a basket of specified amounts of European currencies
- Fluctuated within limits
- Led to foreign exchange crises involving speculative attack
Capital Controls

• 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

• Inflows
  - Lead to a lending boom and excessive risk taking by financial intermediaries
Capital Controls (cont’d)

• Inflows (cont’d)
  - Controls may block funds for productions uses
  - Produce substantial distortion and misallocation
  - Lead to corruption

• Strong case for improving bank regulation and supervision
The IMF: Lender of Last Resort

- Emerging market countries with poor central bank credibility and short-run debt contracts denominated in foreign currencies have limited ability to engage in this function.
- May be able to prevent contagion.
- The safety net may lead to excessive risk taking (moral hazard problem).
How Should the IMF Operate?

- May not be tough enough
- Austerity programs focus on tight macroeconomic policies rather than financial reform
- Too slow, which worsens crisis and increases costs
Direct Effects of the Foreign Exchange Market on the Money Supply

• Intervention in the foreign exchange market affects the monetary base

• U.S. dollar has been a reserve currency: monetary base and money supply is less affected by foreign exchange market
Balance-of-Payments 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
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
- Weakens the accountability of policymakers as the exchange rate loses value as signal
Exchange-Rate Targeting for Industrialized Countries

- Domestic monetary and political institutions are not conducive to good policy making
- Other important benefits such as integration
Exchange-Rate Targeting for Emerging Market Countries

• Political and monetary institutions are weak
• Stabilization policy of last resort
Currency Boards

- 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
Currency Boards (cont’d)

- 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
Dollarization (cont’d)

• Inability to create money and act as lender of last resort
• Loss of seignorage