EE 452 International Monetary Economics

4. Government Policies towards the Foreign Exchange Market

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Outline

- Exchange rate policies
  - Rate flexibility
  - Restriction on use (Foreign exchange control)
- Floating exchange rate
- Fixed exchange rate
- Foreign exchange intervention
- Exchange control
- Past experiences
  - The Gold Standard Era
  - Interwar Instability
  - The Bretton Woods Era
  - The Worldwide Current Systems

Objectives

- Students should understand:
  - The variety of exchange rate policies countries have used.
  - How a country can respond to pressure on the value of its currency.
  - The implications of temporary versus permanent imbalances in exchange rates.
  - The benefits and costs of foreign exchange controls.
  - How fixed rates have performed in the past.
  - How flexible rates have performed in the past.

GOVERNMENT POLICIES

Reasons for government policies toward the foreign exchange market

- To reduce variability in exchange rates
- To keep the exchange rate value of its currency either high or low
- To raise national pride in a steady or strong currency

2 Major aspects of government policies toward the exchange rate

1. The exchange rate itself (What should be the exchange rate? Should the exchange rate be fixed or flexible?→ PRICE)
   - *Clean float*
   - *Managed/dirty float*
   - *Fixed/pegged*

2. To permit or restrict access to foreign exchange market. (Who may use the foreign exchange market and for what purposes → QUANTITY)
   - Government-imposed restrictions on the use of the foreign exchange market are called exchange controls.

In the Case of Fixed Exchange Rate:

- **What** to fix to?
  - Gold, US$, some other currency, or basket?
- **When** to change the fixed exchange rate?
  - Never (pegged exchange rate)
  - Occasionally (adjustable peg)
  - Often (crawling peg)).
  - How wide should the band around the central or par value chosen for the fix.
- **How** to defend the fixed rate?
  1. Official intervention in which the government buys and sells currencies
  2. Exchange controls in which the government tries to suppress excess demand or supply
  3. Altering domestic interest rates to influence short-term international capital flows
  4. Adjusting the country's macroeconomic position to make it fit the fixed exchange rate.
  5. Last option: to alter the fixed rate value or shift to a floating rate. (Surrender!)

DEFENSE THROUGH OFFICIAL INTERVENTION

Where does the monetary authority get the dollars to sell into the foreign exchange market?

- A country uses its official international reserve assets (or some other similar government assets) to obtain dollars from some foreign source, most likely the US monetary authority (Federal Reserves), or it borrows the dollars.
- There are 4 major components to a country's official reserve assets:
  - foreign exchange assets denominated in major currencies
  - Country's reserve position with the International Monetary Fund
  - Special Drawing Rights (SDRs)
  - Gold

Where does the monetary authority get the dollars to sell into the foreign exchange market?

- If our country has a reserve position in the IMF, then it can obtain dollars from the IMF request.
- If the country is holding SDR, then it can use these SDRs to obtain dollars from the US monetary authority or from IMF.
  - SDR is a reserve asset created by IMF. As of 2011, one SDR equaled the collection of US$0.66 plus 0.423 euro plus 12.1 Japanese yen plus British GBP 0.111. Market exchange rate can be used to compute SDR's value in terms of any specific single currency.

Where does the monetary authority get the dollars to sell into the foreign exchange market?

- Some countries maintain arrangements called swap lines with each other to facilitate official borrowing between countries.
- Special case: US, whose currency is readily held by the monetary authorities of other countries. US$ is called the reserve currency. In this case, the country can effectively borrow through official channels by issuing assets that will be held as reserves by the central banks of other countries.
  - This allowed US to run what Jacques Rueff called " Deficit in tears". In 1950 and 1960s, US was given leeway to finance its deficit.
  - Latin American countries cannot do that, of course.

Figure 20.2 Official Holdings of Reserve Assets, End of Year, 1970-2009 (Billions of US$)

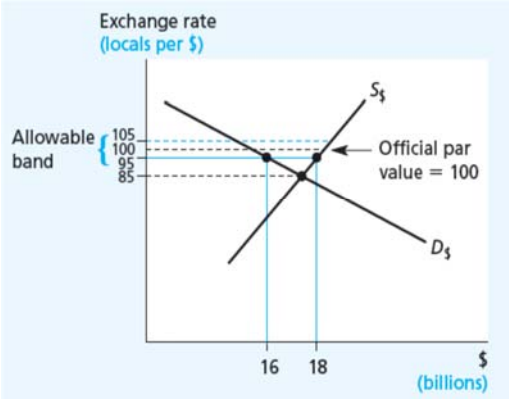
	1970	1980	1990	2000	2009
Foreign exchange assets	45	381	806	1,935	8,166
Special drawing rights	3	15	28	24	315
Reserve position in the IMF	8	22	32	62	61
Gold	40	573	345	261	945
(millions of ounces)	(1,057)	(953)	(940)	(952)	(869)
Total reserve assets	96	991	1,211	2,282	9,487

International Reserves in Thailand

		1976	1980	1990	2000	2010	2011	2012
(Millions of US Dollars)	(ล้านดอลลาร์ สรอ.)							
Gold	ทองคำ	95.20	1,466.00	968.00	645.40	4,598.56	7,734.63	8,281.74
SDRs	สิทธิพิเศษถอนเงิน	33.60	8.20	12.70	82.70	1,496.90	1,494.30	1,495.26
Reserve position in the IMF	สินทรัพย์ส่งสมทบกองทุนการเงินระหว่างประเทศและเงินให้กู้แก่กองทุนฯ	38.90	0.00	44.90	0.00	377.42	695.22	724.98
Foreign currency reserves	สินทรัพย์ต่างประเทศ	1,725.20	1,551.90	13,247.10	31,933.20	165,656.01	165,199.60	171,105.98
Total	รวม	1,892.90	3,026.10	14,272.70	32,661.30	172,128.90	175,123.77	181,607.96

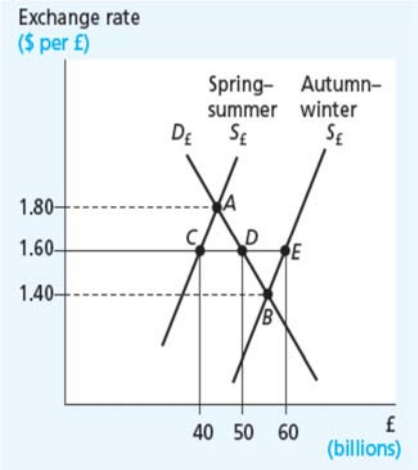
Source: www.bot.or.th

Figure 20.3 Intervention to Defend a Fixed Rate: Preventing Appreciation of the Country's Currency



Source: Pugel (2012), p. 484

Figure 20.4 A Successful Financing of Temporary Deficits and Surpluses at a Fixed Exchange Rate



Source: Pugel (2012), p. 485

Defending exchange rate through official intervention

- Official intervention in the foreign exchange market also changes the country's money supply.
- The authority can use sterilization of the intervention to reverse the effect on the domestic money supply by taking some other action to remove or add the domestic money back to the economy.

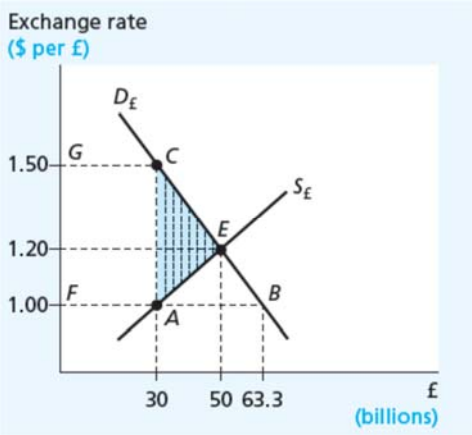
Sterilization

- Using monetary policy to offset the impact of official intervention on the domestic money supply.
- For example, government might purchase its own currency to support its exchange value, but then purchase domestic bonds to restore the domestic money supply. The intent is to manipulate currency values without affection the domestic economy.

Exchange Control

- Exchange controls are used by many countries, especially developing countries.
- Exchange controls cause economic inefficiency (deadweight loss) analogous to quantitative limits (quotas) on imports.
- They also incur substantial administrative costs. Efforts to evade them lead to bribery and parallel market.

Figure 20.5 The Best of the Worst: Welfare Losses from Well-Managed Exchange Controls



Source: Pugel (2012), p. 489

SURVEYS OF EXCHANGE RATE REGIMES IN THE PAST 140 YEARS

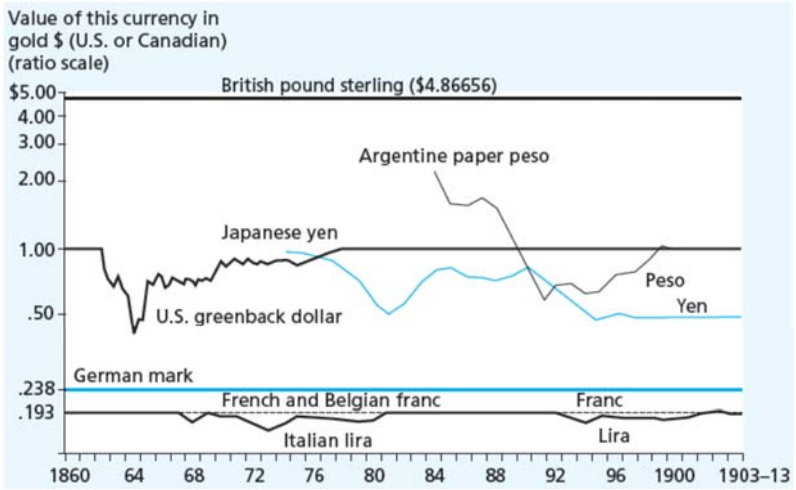
Regimes of the Past 140 years

- Gold Standard Era (1870-1914)
- Interwar Instability
- Bretton Woods (1944-1973)
- Current system

International Currency Experience

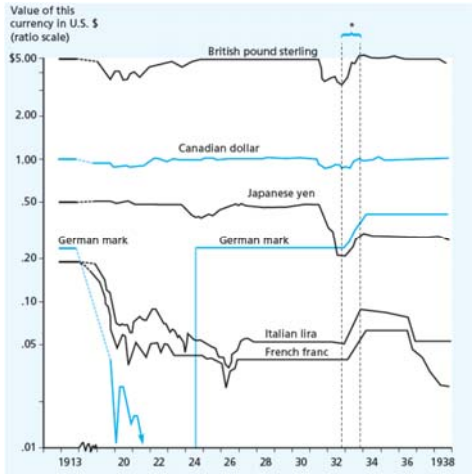
- Gold Standard, 1870-1914
  - Gold value of each currency was fixed
  - Britain was the central country
- Interwar Instability
- Bretton Woods System, 1944-1971
  - Adjustable pegged exchange rates
  - United States and U.S. dollar were at the center
  - Eventual dollar crisis
- Current System
  - A "nonsystem"—countries can choose almost any exchange rate policy
  - Many countries use managed floating exchange rates

Figure 20.6 Selected Exchange Rates, 1860-1913



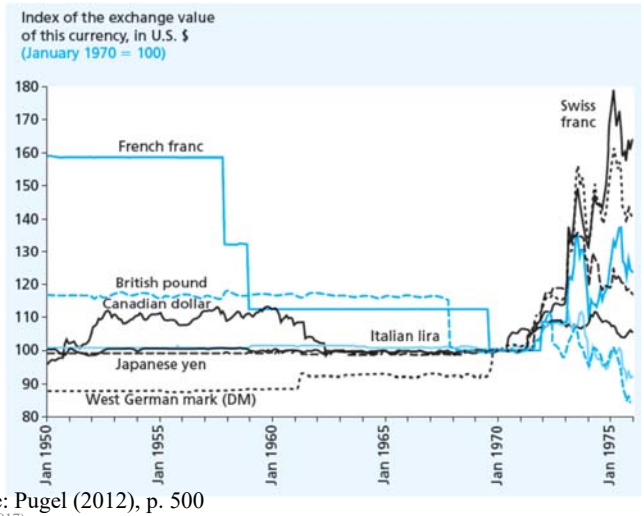
Source: Pugel (2012), p. 494

Figure 20.7 Selected Exchange Rates, 1913, 1919-1938 (Monthly)



Source: Pugel (2012), p. 496

Figure 20.8 Selected Exchange Rates, 1950-1975 (Monthly)



Source: Pugel (2012), p. 500

Figure 20.9 Exchange-Rate Arrangements, May 1, 2010

(1)	(2)	Currency Pegged To[1] (3)	(4)	(5)	(6)	(7)	(8)	(9)
Use Foreign Currency (no separate local currency)[2]	Euro Area (use euro as currency)[3]	Euro[3]	U.S. Dollar[4]	Other Currency	Currency Basket	Crawling Peg[4]	Managed Float	Free Float
Andorra	Austria	*ERM II:*	Antigua & Barbuda	Bhutan (Indian rupee)	Algeria	Botswana	Afghanistan	Australia
Ecuador	Belgium	Denmark	Aruba	Brunei Darussalam (Singapore dollar)	Belarus	Costa Rica	Albania	Canada
El Salvador	Cyprus	Estonia	Azerbaijan	Lesotho (S. African rand)	Fiji	Ethiopia	Angola	Chile
Kiribati	Finland	Latvia	Bahamas	Namibia (S. African rand)	Iran	Kazakhstan	Argentina	Czech Republic
Kosovo	France	Lithuania	Bahrain	Nepal (Indian rupee)	Kuwait	Nicaragua	Armenia	Japan
Liechtenstein	Germany	*CFA Franc Zone:*	Bangladesh	Swaziland (S. African rand)	Libya	Uzbekistan	Brazil	Mauritius
Marshall Islands	Greece	Benin	Barbados		Morocco		Colombia	New Zealand
Micronesia	Ireland	Burkina Faso	Belize		Myanmar		Congo, Dem. Rep. of	Norway
Monaco	Italy	Cameroon	Bolivia		Samoa		Egypt	Poland
Montenegro	Luxembourg	Central African Rep.	Burundi		Singapore		Gambia	Somalia
Nauru	Malta	Chad	Cambodia		Solomon Islands		Ghana	Sweden
Palau	Netherlands	Congo, Rep. of	China		Syria		Georgia	Turkey
Panama	Portugal	Cote d'Ivoire	Djibouti		Tonga		Guatemala	United Kingdom
San Marino	Slovak Republic	Equatorial Guinea	Dominica		Tunisia		Guinea	United States
Timor-Leste	Slovenia	Gabon	Dominican Republic		Vanuatu		Haiti	
Tuvalu	Spain	Guinea-Bissau	Eritrea				Hungary	
Zimbabwe		Mali	Grenada				Iceland	
		Niger	Guyana				India	
		Senegal	Honduras				Indonesia	
		Togo	Hong Kong				Israel	
		Other:	Iraq				Kenya	
		Bosnia and Herzegovina	Jamaica				Korea, South	
		Bulgaria	Jordan				Kyrgyz Republic	
		Cape Verde	Lao PDR				Liberia	
		Comoros	Lebanon				Madagascar	
		Croatia	Maldives				Malawi	
		Macedonia	Netherlands Antilles				Malaysia	
		São Tomé & Principe	Oman				Mauritania	
			Qatar				Mexico	
			Rwanda				Moldova	
			St. Kitts & Nevis				Mongolia	
			St. Lucia				Mozambique	
			St. Vincent & the Grenadines				Nigeria	
			Saudi Arabia				Pakistan	
			Sri Lanka				Papua New Guinea	
			Suriname				Paraguay	
			Tajikistan				Peru	
			Trinidad & Tobago				Philippines	
			Turkmenistan				Romania	
			United Arab Emirates				Russia	
			Venezuela				Serbia	
			Vietnam				Seychelles	
							Sierra Leone	
							South Africa	
							Sudan	
							Switzerland	
							Tanzania	
							Thailand	
							Uganda	
							Ukraine	
							Uruguay	
							Yemen	
							Zambia	

Source: Pugel (2012), p. 506