

8. International Economics (Part 2)

EE 212

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Outline

- 1 Introduction to international trade (Part 1)
- 2 Balance of Payments (Part 2)
- 3 Market for foreign exchange (Part 2)
- 4 (Part 2)

2. Balance of Payment

- The record of a country transactions in goods, services, and assets with the rest of the world.
- The record of a country's sources (supply) and uses (demand) of foreign exchange
- Composition of BOP account
 - ① Current Account : \$ flow in (+), \$ flow out (-)
 - ② Capital and Financial Account : \$ flow in (+), \$ flow out (-)
 - ③ International Reserve Account : change in international reserve

1. Current Account :

1.1 Trade in good account: record of foreign exchange receive and payment from the country's export and import of good

1.2 Trade in service account: record of foreign exchange receive and payment from the country's export and import of services (such as, transportation, travel, government service and other services)

1.3 Income Account: record of foreign exchange income receipts and income payments from compensation of employees and investment income (such as dividends, interest, rent, and profits)

1.4 Transfer Account: record of transfer receive and payment from private and government sectors (such as, parents transfer money to children staying abroad, donation from Thai government to other countries, and donation of other countries to Thailand)

$\text{Current Account Balance} = \text{Trade in Goods Acc. Bal.} + \text{Trade in Service Acc. Bal.} + \text{Income Acc. Bal.} + \text{Transfer Acc. Bal.}$
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2. Capital and Financial Account :

It records purchases and sales of foreign assets and purchases and sales of domestic assets by foreign residents (for example, a Thai resident that buys a US bond for \$100 will enter with a minus into the capital account (-\$100 converted into Bahts according to the exchange rate). A US resident that buys a Thai government bond for Bht.100 will enter with a plus into the capital account, and so on).

3. International Reserve Account :

- Shows changes of the country international reserve during one period resulting from the adjustment of difference between total receipt and payment of foreign exchange for current account and capital and financial account.
- International reserve consist of Gold, major foreign currency, foreign currency assets, special drawing right (SDR) and reserve with the IMF.
 - Note: SDRs are potential claims on the freely usable currencies of IMF members.
 - SDRs are used as a unit of account by the IMF and several other international organizations.

- $\text{Current Account} + \text{Capital and Financial Account} > 0 \Rightarrow \text{Surplus} \Rightarrow \text{International Reserve} \uparrow$
- $\text{Current Account} + \text{Capital and Financial Account} < 0 \Rightarrow \text{Deficit} \Rightarrow \text{International Reserve} \downarrow$

	2009	2010	2011 p	2012 p
Exports (f.o.b.)	150,818.62	191,647.19	219,118.43	226,155.85
Imports (f.o.b.)	118,198.94	161,896.63	202,129.67	217,818.93
Trade balance	32,619.69	29,750.57	16,988.76	8,336.91
Net services, primary income and secondary income	-10,723.90	-19,726.93	-11,100.16	-5,608.93
Current account balance	21,895.78	10,023.64	5,888.60	2,727.98
Capital account	67.61	244.59	-40.87	234.43
Financial account	-2,600.52	24,808.93	-5,192.24	11,540.75
Central Bank	1,481.11	2,709.10	-147.66	1,038.54
General government	587.92	3,562.10	3,809.93	5,873.58
Other depository corporations	8,342.49	10,320.36	-8,754.70	13,765.02
Other sectors	-13,012.04	8,217.37	-99.81	-9,136.39
Other financial corporations	-25,568.85	2,645.29	-1,238.65	-12,646.56
Nonfinancial corporations, households, and NPISHs	12,556.81	5,572.07	1,138.83	3,510.17
Net errors & omissions	4,763.73	-3,752.76	558.10	-9,238.46
Overall balance	24,126.60	31,324.40	1,213.60	5,264.70

3. Market for foreign exchange

- Meaning and importance of foreign exchange rate
 - Meaning: Foreign exchange rate is the price of foreign currency compared to domestic currency.
 - For example, amount of Baht per one dollar = 31 Baht per 1 US\$.
- There two ways to quote an exchange rate:
 - ① Indirect Quote : The relative price of domestic currency in terms of foreign currency: For example, 715 Vietnamese Dong per 1 Baht
 - ② Direct Quote : The relative price of foreign currency in terms of domestic currency. For example, 31 Baht per 1 US\$
- We consider only “**Direct quote**” .
- Appreciation : the currency is more expensive, Baht appreciates from 30 Baht to Baht per US\$, exchange rate (ER)
- Depreciation : the currency is cheaper, Baht depreciates from 30 Baht to Baht per US\$, exchange rate (ER)

- Why exchange rate is important?
 - ① Exchange rate is essential for payment of goods and services between trading partners in different countries
 - ② Changes in exchange rate affect the country export and import, international investment

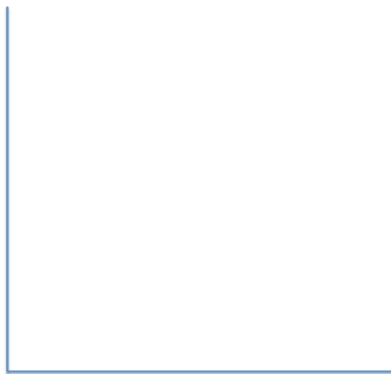
Then, can affect current A/C balance and capital and financial A/C balance, production, employment, and national income

Exchange rate system

- 1 Fixed (Pegged) Exchange rate System*: Exchange rates are determined by central bank (fix at a particular value)
- 2 Adjustable Peg System: Central bank fixes specific values for exchange rate, but explicitly recognizes that circumstances may arise in which it will change that value
- 3 Managed Floating Exchange Rate: The central bank seeks to have some stabilizing influence on the exchange rate, but does not try to fix it at some publicly announced value.
- 4 Floating (market-determined) Exchange Rate System*: Exchange rates are determined by the unregulated forces of supply and demand.

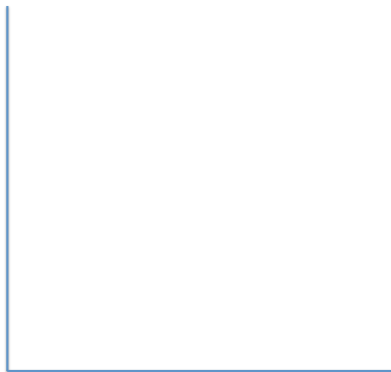
YEAR		
1963	Original float	
20 OCT 1973	Fixed or Pegged exchange rate system (with \$US)	20.80 Baht/ 1 \$
1978	Basket of currency	Effective rate
1984-1990	Revise basket twice	Effective rate
1984-1997	Exchange Rate Equalization Fund (EEF) defend Baht value against \$US	
2 July 1997	Managed float exchange rate regime	

Demand for Foreign Exchange	Supply for Foreign Exchange
Demand for goods, services and investments produced by	Demand for goods, services and investments produced by
<p>Exchange Rate = Price of Imported goods, services and investments</p> <p>Appreciation (ER ...) \Rightarrow D for \$</p> <p>....</p> <p>Depreciation (ER...) \Rightarrow D for \$</p> <p>....</p>	<p>Exchange Rate= Price of Exported goods, services and investments</p> <p>Appreciation (ER ...) \Rightarrow D for \$</p> <p>....</p> <p>Depreciation (ER ...) \Rightarrow D for \$</p> <p>....</p>
<p>Central Bank</p> <p>Buy more foreign currency reserves \Rightarrow D of \$ increases (shift to the right)</p>	<p>Central Bank</p> <p>Sell more foreign currency reserves \Rightarrow S of \$ increases (shift to the right)</p>

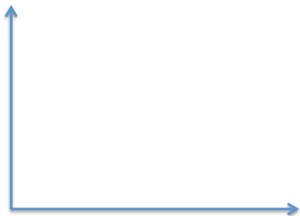
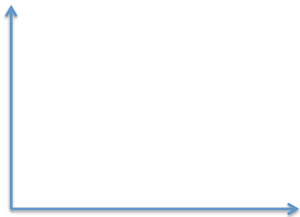


- Change in Exchange Rate
⇒ Movement Along D and S curve
- Exchange Rate \uparrow ⇒ Demand for \$
- Exchange Rate \downarrow ⇒ Demand for \$
- Exchange Rate \uparrow ⇒ Supply of \$
- Exchange Rate \downarrow ⇒ Supply of \$
- Equilibrium Exchange Rate
- Change in the other factors determining D and S for \$
⇒ Shift in D and S curve

1. Floating exchange rate system: the exchange rates that are determined by market



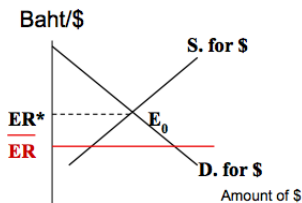
- Change in Exchange Rate
⇒ Movement Along D and S curve.
- Equilibrium Exchange Rate : ER^*
 - $ER < ER^*$: Excess Demand for \$
 - $ER > ER^*$: Excess Supply of \$
- Change in the other factors determining D and S for \$
⇒ Shift in D and S curve ⇒ Change in Equilibrium



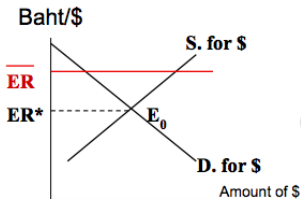
How does each of these situations affect Baht exchange rate?

- Thailand imports more US products
- Foreigners invest more in Thai stock market
- Domestic price of export goods (such as rice) decreases
- Foreign price of import goods (such as machine) decreases
- Changes in overall price level –please read Page 875 in Lipsey (2007)
 - Case of equal inflation in both countries
 - Case of inflation in only one country
 - Case of inflation at unequal rates
- Interest rate in Thailand increases so that it is more than interest rates in other ASEAN countries
- Interest rate in Thailand decreases so that it is more than interest rates in other ASEAN countries

2. Fixed exchange rate system: Exchange rates are determined by central bank (fix at a particular value)



- Exchange rate determined by BOT is than market rate
- At \bar{ER} , There is an excess



- Exchange rate determined by BOT is than market rate
- At \bar{ER} , There is an excess

Tools to control exchange rate

1. International Reserve :

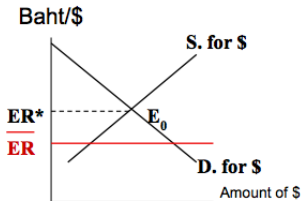
Excess Demand for \$ \Rightarrow Central Bank Foreign Currency

Excess Supply for \$ \Rightarrow Central Bank Foreign Currency

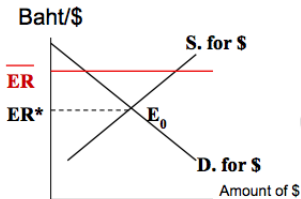
2. Trade policy

Excess Demand for \$ \Rightarrow Central Bank controls
promotes

Excess Supply for \$ \Rightarrow Central Bank controls
promotes



- Excess Demand for \$



- Excess Supply of \$

4. The effect of exchange rate on economy

- $Y = C + I + G + X - M$:
 - X = the level of Exports of goods and services
 - M = the level of Imports of goods and services
- Trade Balance = $NX = X - M$
 - a) If $X > M$, then $NX > 0$, a Trade Surplus, the economy is spending less than it produces and so it LENDS to the rest of the world.
 - b) If $X < M$, then $NX < 0$, a Trade Deficit, the economy is spending more than it produces and so it BORROWS from the rest of the world.
- NX increases \Rightarrow DAE shift up $\Rightarrow Y_E$ increases
- Baht depreciates $\Rightarrow NX$ \Rightarrow DAE shift $\Rightarrow Y_E$
- Baht appreciates $\Rightarrow NX$ \Rightarrow DAE shift $\Rightarrow Y_E$