

Homework for Session 15

Analytic Question

In 1997 Thailand had an official exchange rate of 25 Baht to 1 US\$. In addition, it had \$20 Billion dollars in reserves at the beginning of the year.

1. Exports, Imports, and Reserves

Silk Pillows, Inc., a pillow-case company in Houston, wants to buy 10,000 cubic meters of Thai silk from the World Group Corporation in Bangkok. The price of the silk is 50 Baht per cubic meter.

- a. Does this transaction represent exports or imports from Thailand's perspective?

Exports

- b. How many Baht does the Houston firm need to acquire for the purchase?

500,000 Baht

- c. Does this currency transaction cause an increase or decrease in Thailand's national dollar reserves? By how much?

*Increase: exports are good for your reserves
(500,000 Baht) / (25 Baht/\$) = \$20,000*

World Group Corporation wants to import 10 computers from Dell, at a cost of \$600 per computer.

- d. Does this transaction represent exports or imports from Thailand's perspective?

Imports

- e. How many dollars does the Thai silk company need to acquire for the purchase?

\$6,000

- f. Does this currency transaction cause an increase or decrease in Thailand's national dollar reserves? By how much?

*Decrease: imports are bad for your reserves
\$6,000*

2. Capital Flows and Reserves

The U.S. based equity firm, Short Term Investors, Inc., decides to pay 100 million Baht for a new issue of Thai government bonds in February 1997. The bonds mature at the end of June. On July 1st, the Thai government announces that its national reserves are \$17 Billion, and Short Term Investors decides to sell its Thai portfolio. Its initial 100 million Baht bond holding is now worth 75 million Baht, which it sells in its entirety.

- a. What is the change in Thailand's foreign reserves when Short Term Investors makes its initial investment in February?

$$(100 \text{ million Baht}) / (25 \text{ Baht}/\$) = + \$4 \text{ million}$$

- b. What is the change when Short Term Investors exits the country in June?

$$(- 75 \text{ million Baht}) / (25 \text{ Baht}/\$) = - \$3 \text{ million}$$

3. Onset of a Crisis

At the beginning of July, the Central Bank of Thailand has \$17 Billion in reserves on hand. It estimates that there are 500 Billion Baht in liquid assets held by Thai companies, Thai depositors, and foreign investors. In addition, the Central Bank is scheduled to pay out 500 Billion Baht on government bonds on the last day of July. Normally, the bondholders would simply roll-over their investment into new bonds issued by the Central Bank, but signals from the private sector suggest that no one is willing to buy new bonds, given fears of a devaluation.

- a. Does the Central Bank have enough dollars to satisfy all those who seek foreign exchange, should Thai companies, depositors, and foreign investors seek to move their funds out of the country prior to the end of July?

Liquid capital before end of July = 500 Billion Baht

In dollars: $(- 500 \text{ Billion Baht}) / (25 \text{ Baht}/\$) = -\$20 \text{ Billion}$

This is more than the \$17 Billion the Central Bank has on hand

No: Central Bank can't meet such a demand for foreign exchange

- b. If the Central Bank devalues the Baht to an exchange rate of 40 Baht to 1 US\$, would the Central Bank have enough dollars to satisfy the demand?

In dollars: $(-500 \text{ Billion Baht}) / (40 \text{ Baht}/\$) = -\$12.5 \text{ Billion}$

This is less than the \$17 Billion the Central Bank has on hand

Yes: Central Bank can meet such a demand for foreign exchange

- c. If the holders of Thai government bonds decide to take their money and run on July 31st, would the Central Bank still have enough dollars to satisfy the demand, even at the new exchange rate?

*No: Central Bank can't meet such a demand for foreign exchange
(-500 Billion Baht - 500 Billion Baht) / (40 Baht/\$) = -\$25 Billion*

- d. If you had money in Thai Baht and did these calculations at the beginning of July 1997, would you keep your money in Baht or exchange it for dollars?

Depends on whether you think other investors are going to flee the country...