

**Problem 1**

**Understand Balance of Payments**

Below are Thailand's Balance of Payment and its real GDP from 1995 to 1999.

<b>Bank of Thailand</b>						
<b>Balance of Payments (US\$)</b>						
<b>(Unit : Millions of US Dollars)</b>						
	<b>1999</b>	<b>1998</b>	<b>1997</b>	<b>1996</b>	<b>1995</b>	
1	<b>Current account</b>	12,466	14,291	-3,110	-14,350	-13,234
2	a. Goods and services	15,086	17,470	-130	-11,723	-11,607
3	1. Goods	9,272	12,235	-4,624	-16,148	-14,652
4	Exports (f.o.b.)	56,801	52,878	56,725	54,667	55,731
5	Imports (c.i.f.)	-47,529	-40,643	-61,349	-70,815	-70,383
6	2. Services	5,814	5,235	4,494	4,425	3,045
7	Services receipts	14,653	13,214	15,779	17,022	14,859
8	Services payments	-8,839	-7,979	-11,285	-12,597	-11,814
9	b. Income	-2,973	-3,594	-3,455	-3,388	-2,114
10	Income receipts	3,096	3,333	3,749	3,973	3,805
11	Income payments	-6,069	-6,927	-7,204	-7,361	-5,919
12	c. Current transfers	353	415	475	761	487
13	<b>Capital and financial account</b>	-7,908	-9,742	-4,343	19,504	21,949
14	a. Capital account	0	0	0	0	0
15	b. Financial account	-7,908	-9,742	-4,343	19,504	21,949
16	1. Direct investment	5,742	7,360	3,298	1,406	1,183
17	2. Portfolio investment	-106	331	4,558	3,701	4,116
18	3. Other investment	-13,544	-17,433	-12,199	14,397	16,650
19	Errors and omissions	26	-2,815	-3,196	-2,985	-1,479
20	<b>Overall balance</b>	4,584	1,734	-10,649	2,169	7,236
21	<b>Reserve assets</b>	-4,584	-1,734	10,649	-2,169	-7,236
22	a. Reserve position in the fund	0	0	455	-22	-139
23	b. Foreign exchange	-4,707	-1,842	10,625	-2,131	-7,084
24	c. Monetary gold	0	0	0	0	0
25	d. SDRs	123	108	-431	-16	-13

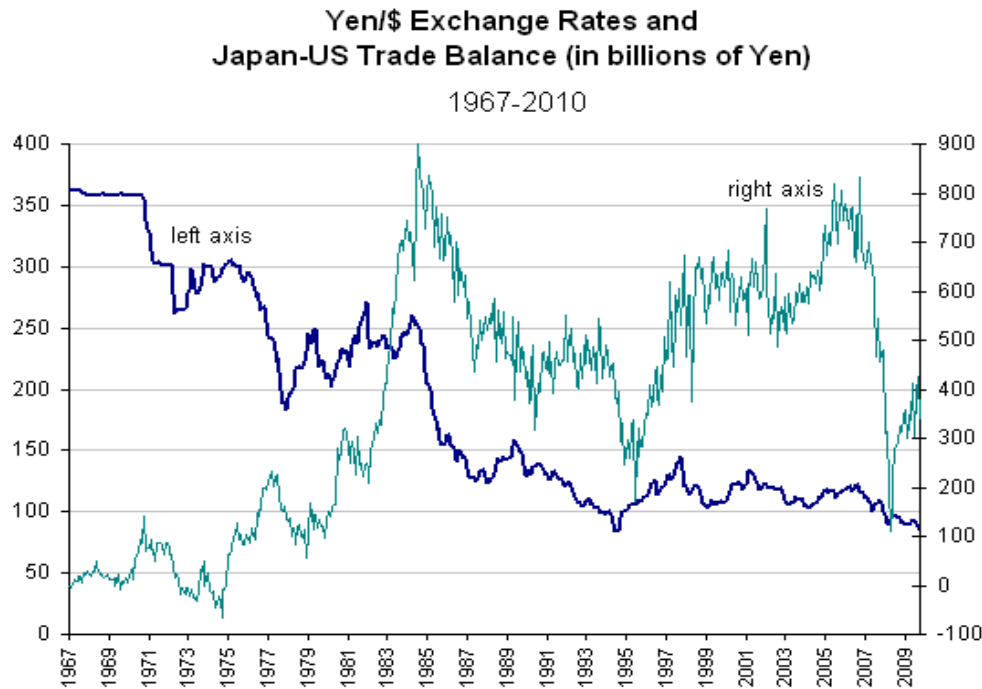
<b>Year</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>
<b>Real GDP ( in millions US \$)</b>	120,006	127,088	125,345	112,171	117,160

- 1) What was *balance of trade* (or BoT) of Thailand in 1995, 1996, and 1997, respectively? Show the numbers relative to GDP. (Hint: Balance of trade consists of both goods trade and services trade.)
- 2) In 1996, what percentage of the total capital inflow was foreign direct investment (or FDI)? What was the ratio in 1995?
- 3) In 1997, did Thailand have a net capital inflow or outflow? Were there capital inflows or outflows in the previous two years? Again show the numbers relative to GDP.
- 4) If we define Balance of Payment (BoP) as the sum of current account, capital and financial account, what was the BoP of Thailand in 1997? Did Thailand run a BoP deficit? How big was it relative to its GDP in 1997?

## Problem 2

### Exchange rate and trade balance

The following graph shows you the exchange rate between Japanese Yen and the US dollar (in blue), and the trade balance (in green) between the two countries during 1967-2010. The left axis is the Yen/Dollar exchange rate, and the right axis is Japan's trade balance with the US, in billions of Yen.



- 1) In 1967, the exchange rate was around 360 Yen per dollar. More recently, the rate was around 90. First calculate how much Japanese Yen had appreciated against the US dollar. Then briefly describe how the exchange rate movement was connected to the trade balance between the two countries, over the past four decades.
- 2) Is above observation contradictory to what you've learned? Why or why not?
- 3) Finally, explain why Japanese Yen had risen so much against the US dollar over time. (Hint - you may find this formula useful:  $q = EP^*/P$ )

### **Problem 3**

#### Exchange rate and trade balance

Denmark pegs its currency, Danish Kroner (or DKK), to the Euro, at roughly 7.45 DKK per euro. Denmark's neighboring country, Norway, does not.

- a) When European Central Bank (or ECB) lowered its interest rate sharply during the recent global recession, how did it affect the monetary policy in Denmark? And how did this monetary expansion by ECB further affect the output level in Denmark? Draw graph(s) to help you explain.
  
- b) To increase output and reduce unemployment, both Denmark and Norway engaged in expansionary fiscal policies during the recession. Compare and contrast the effects of fiscal policy on the output in both countries. Make sure you use diagram(s) to help you illustrate.
  
- c) During the recent recession, Nordic countries, including Denmark, have had much better economic performance when compared to other member countries in the EU. Let's assume that this diverging economic performance is likely to persist over time and the difference is largely due to the different economic structures between the Nordic countries and other EU countries. Given the information provided above, discuss the potential drawbacks of fixing DKK to the Euro.