Exercise 8

International Economics

1. What is the difference between "absolute" and "comparative" advantages? What are the main implications of these two theories? (i.e. what do they suggest?)

2. The table below shows the amount of production that <u>one worker</u> in each country can produce. Assume that each country has 5 workers. **<u>Draw a PPF and show</u>** that both countries will benefit from trade.

	Thailand	Malaysia
Beer	4	1
Wine	1	4

3. What do "current account surplus" and "capital account deficit" represent? What is the "Balance of Payment Identity"?

4. Suppose the current market exchange rate is \$0.3 / 1 Baht. Use the foreign exchange market diagram to explain how the Central Bank of Thailand can "devalue" Thai baht to \$0.2 / 1 Baht under the fixed exchange rate regime.

5. How does the floating exchange rate regime work? Under such regime, how does each of the following events affect Thai Baht (assumed to be a domestic currency)?
   - The rest of the world imports more from Thailand.
   - More Thai investors invest abroad.
   - Thailand will leave ASEAN (similar to the UK leaving the EU).

6. In the floating exchange rate regime, why might inflation cause a currency to appreciate and depreciate?

7. Suppose an iPhoneX is priced at 400 USD in the US and 300 GBP in the UK. Calculate the PPP exchange rate between USD and GBP.

8. Suppose the nominal exchange rate is 40 THB / 1 GBP. One apple costs 20 THB in Thailand, but costs 1 GBP in the UK. Calculate the real exchange rate.

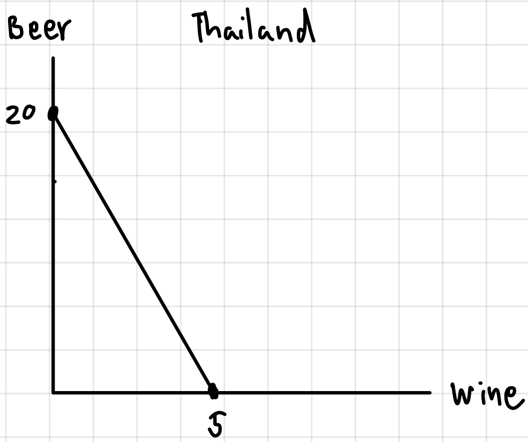
9. What assumptions are required for the Law of One Price to hold?

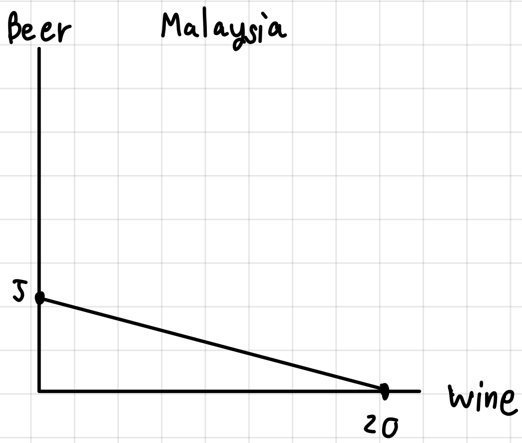
1. What is the difference between "absolute" and "comparative" advantages? What are the main implications of these two theories? (i.e. what do they suggest?)

- Absolute advantage is the advantage of one country when it uses fewer resources to produce a good than other country does.
- Comparative advantage is the advantage of one country when it produces a good at lower oppotunity cost than other country does.

2. The table below shows the amount of production that one worker in each country can produce. Assume that each country has 5 workers. **Draw a PPF and show** that both countries will benefit from trade.

	Thailand	Malaysia
Beer	4 20	1 5
Wine	1 5	4 20





- Thailand can produce beer better than Malaysia
So, Thailand has absolute advantage in beer

- Malaysia can produce wine better than Thailand.
So, Malaysia has absolute advantage in Wine.

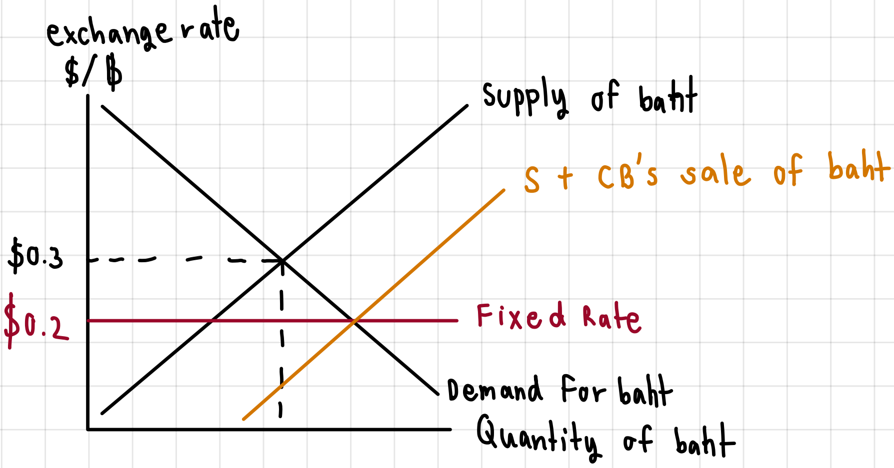
3. What do "current account surplus" and "capital account deficit" represent? What is the "Balance of Payment Identity"?

- Current account surplus means there is an inflow of money into the country.
- Capital account deficit means money is flowing out of the the country, and it suggests the nation is increasing its ownership of foreign assets.
- The balance of payment identity

$$CA + KA = 0$$

The sum of all transactions recorded in the balance of payments must be zero. The reason is that every inflow appearing in the current account has a corresponding outflow in the capital account, and vice-versa.

4. Suppose the current market exchange rate is \$0.3 / 1 Baht. Use the foreign exchange market diagram to explain how the Central Bank of Thailand can "devalue" Thai baht to \$0.2 / 1 Baht under the fixed exchange rate regime.



The central Bank of Thailand can devalue Thai baht from \$0.3/1 baht to \$0.2/1 baht by increasing the supply of baht. It can buy USD and sell baht from the foreign exchange market. This will lead to depreciation in THB.

5. How does the floating exchange rate regime work? Under such regime, how does each of the following events affect Thai Baht (assumed to be a domestic currency)?
   - The rest of the world imports more from Thailand.
   - More Thai investors invest abroad.
   - Thailand will leave ASEAN (similar to the UK leaving the EU).

- The floating exchange rate is the equilibrium exchange rate which is determined by the demand and supply of the currency.
  - When the demand for baht increases, the exchange rate also goes up. So, we will have appreciation of baht.
  - When the supply of baht increases, the exchange rate will fall. In this case, we will have depreciation of baht.

- The rest of the world imports more from Thailand.

When the rest of the world want to import more from Thailand, it means they demand more for Thai baht. Higher demand for Thai baht will drive up the exchange rate. So, we will have apprciation of Thai baht.

- More Thai investors invest abroad.

More Thai investors invest abroad, so the supply of baht will increase. So, thai baht will depreciate.

- Thailand will leave ASEAN (similar to the UK leaving the EU).

Thai baht depreciates

6. In the floating exchange rate regime, why might inflation cause a currency to appreciate and depreciate?

Inflation can affect a currency to appreciate because it is closely related to interest rate, which can influence exchange rate. Inflation will drive interest rate, and thus higher interest rate tends to attract foreign investment, which makes Thai baht appreciate.

However, inflation is two of the leading causes of currency depreciation. First, when we have inflation, the domestic goods become more expensive. Thus, export will decrease while raising import. When we want to import more, the supply of baht will increase which leads to depreciation of THB baht. Second, when we have inflation, it means that the purchasing power of currency will fall, which discourage anyone from holding the currency. So, THB baht will depreciate.

7. Suppose an iPhoneX is priced at 400 USD in the US and 300 GBP in the UK. Calculate the PPP exchange rate between USD and GBP.

$$\text{Purchashing Power parity exchange rate} = \frac{300}{400} = \frac{3}{4} = 0.75 \ \#$$

8. Suppose the nominal exchange rate is 40 THB / 1 GBP. One apple costs 20 THB in Thailand, but costs 1 GBP in the UK. Calculate the real exchange rate.

$$\text{Real exchange rate (THB/GBP)} = \text{NER (THB/GBP)} \times (P_{UK} / P_{TH})$$

$$= \frac{\cancel{40}^{2}\ \cancel{\text{THB}}}{1\ \cancel{\text{GBP}}} \times \frac{1\ \cancel{\text{GBP}}}{\cancel{20}_{1}\ \cancel{\text{THB}}}$$

$$= 2 \ \#$$

- RER means that, in terms of purchasing power, people are willing to exchange 2 thai apples with 1 UK apple.

9. What assumptions are required for the Law of One Price to hold?

- Assumptions that require for the Law of One Price are if there is no transportation cost, the price of the same good should be the same. If the price of the same good is not the same, there will be opportunities for Arbitrage. People will buy goods in the country that has cheaper goods and sell in other countries to make profit. So, because of this Arbitrage it will lead to the Law of One price