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Question 1

Explain how exchange rates are determined and discuss their implication on international trade.

1.0 Introduction

Exchange rates are merely a term used to define the situation where a currency competes with another currency. This comparison is required in international trade because as all of us are aware that all countries in the world are not using the same standard currency. Almost every country has their own currency. All these currency are different in a sense which we can mention as their value or their strong-ness. Just alike gold and silver has value but the value is different when both are compared. In these cases, we can see the usage of exchange rate who determines the rate that the two currencies and their value difference. For example Malaysian Ringgit exchanges with each US Dollars only when we have RM 3.80. This means the exchange rate is USD 1.0 = MYR 3.8. This exchange rate can be constant (fixed) or variable (floating).

Exchange rate is a must to know when companies are involving in international trading. This is because when Malaysia is about to export Proton cars to USA, we must know how much it could cost in US Dollars currencies and then set it's selling price in the USA. For example, if the latest Proton Saga car priced at RM 45,000 and exported to USA, they cannot sell at USD 45,000 there because it is not a correct value for the car in the US dollars. For this, the car price must be changed to USD based on the exchange rate, here we assume the exchange rate is 3.8, therefore the cost would be $RM\ 45,000 / 3.8 = USD\ 11,842$. Of course this is not the final price whereas the price in US Dollar would increase further because of the USA duty and other several factors.

2.0 Types of exchange rates

There are two types of exchange rates which are constant and variable. Constant rate are known as fixed exchange rates while variable rates are known as floating exchange rates.

2.1 Floating exchange rates

Floating exchange rates are preferred by most countries because it's the real rate that determines the exchange rate between countries. This exchange rate fluctuates up and down based on the supply and demand chain. The logic of the chain remains the same whereas when demand increase and supply remains then price would increase. The price here represents the value of the currency against its competitor currencies. Another scenario is when the supply increases and demand remain same, the price or value would decrease or drop. If both of the both supply and demand increases and balanced in same amount then the price would be same.

Understanding the demand and supply chain in the international would be easier when we apply it to an export and import scenario. When Malaysia export Electrical product to Indonesia, assume the total amount is RM 10 millions. The Indonesia must buy Malaysian currency for RM 10 millions and pay the Malaysian merchant in order to buy from us. That resulting to a demand of 10 millions of Ringgit Malaysia currency and assume the supply remains the same; therefore the rate would increase and be stronger. In most cases, the situation would not be this flexible or fast in term of change because Malaysia not only exports our products but we also import products from other countries. Generally there is a balance and only slight different results the exchange rates to fluctuate slowly.

2.2 Fixed exchange rates

On the other hand, fixed exchange rates are furthermore in place to secure the countries in term of stable trading. The governments are aware that floating currency is instable when it comes to trading because if we traded good with USA with exchange rate of 3.4 and later if the same good exchanged with 3.2, this would result us to poor trading situation as the exchange rates cannot be purely forecast. Most of the time the forecast of currency's exchange rate would not be correct because not only the supply and demand influences this rate, thus other several factors also contributes to this exchange rate and making it nearly impossible to forecast the rate. Using the experts to forecast the future rates accurate would be further cost consuming especially for small industry. Malaysia is

notable for the high number of Small Medium Enterprises, SME who contribute high to government in many ways including tax and import duties.

If those SME failed their operation, the government would feel the impact much visible and it is far better for countries to get into fixed exchange rate. In fixed exchange rate, the rate of MYR would be fixed to change with several currencies, for example US Dollars. Few years back, Malaysia was following this fixed exchange rate method because Malaysia had several impact in currency market resulting to huge loss in currency value and the government took its step to make the rate fixed and save the international trading to be further stable. The rate was fixed to MYR 3.80 = USD 1.00. Thus the trading among the countries was much stable and constant.

3.0 Influence over exchange rates

Both of the exchange rate methods have their own advantages and disadvantages. Furthermore the exchange rates are influenced by other factors as well. These influences often are indirect but impacting on the exchange rates directly.

3.1 Purchasing-Power Parity

Purchasing power is influenced by inflation rate in several countries. Inflation rate is the one determine how much the citizen in the country would be spending and the cost that they pay for the products. While purchasing power on the other hand focuses on how much they could purchase under the current inflation rate impact. The best example could be Malaysia itself, our current inflation rate is high. Therefore quite visible to see the price of the products is rising faster. Taking the Proton Saga car export example which was mentioned earlier in this text, although the Proton Saga car is priced at USD 11,842 in direct exchange rate, yet it would not be sold at that price because purchasing power plays its role here. Assume USA has higher purchasing power compared to Malaysia; the same Proton Saga product would be priced higher to match with their purchasing power in respect to the inflation rate. Just because USA had high purchasing power, the product would probably price at USD 15,000 which is over-valued when compared directly with Malaysia Ringgit at the pricing of MYR 45,000.

3.2 Interest Rate

Interest rate influences the exchange rates as well. This is quite visible in investment business. Countries are not only interested in selling and buying product with one and another, they also interested in investing in each others country to be benefited over the investment. Malaysia was a fast developing country in late 2000 and therefore the foreign investment was quite visible in Malaysia. This investment increase and decrease based on the interest rate in the local country. Interest rate will also represent the inflation rate. When the interest rate is high, the amount that received in investment would be lower in value as it was impacted by the high interest rate. While if the rate is lower, the investment would be slightly valued better. Interest rate in the country influences the investor's decision. In term of how it could impact the exchange rate? Again the demand and supply chain is the answer whereas when the interest rate in the country is higher than the nominal rate, then the investors would avoid investing in the country which means the demand reduces. When demand reduces and supply remains, the price reduces whereas the value of the currency would decrease or further weakened.

3.3 Other factors

Not only direct influence can impact the currency such as inflation, purchasing-power or interest rates. But indirect influence can also impact the exchange rate as well, for example is the forecast and season.

3.3.1 Forecasting

Forecasting exchange rate would result to increase or decrease of the demand for the currency and shows impact on the currency value. The example could be Malaysia who is first in exporting palm oil. If the economist forecasted that the palm oil price would increase, means Malaysia would make more in term of sales and profit the country and increase in the exchange rate. Then the Malaysia Ringgit currency would be bought in high quantity by the Forex market players who wish to buy the currency cheap now and once Malaysia sell the palm oil for high cost and causing the demand to be high, the price would be high, this would be preferred time for those Forex players to sell back the currency and earn the profit. If I buy MYR for USD 100, I would have MYR 340, assume

the rate is 3.4. Once Malaysia Ringgit value appreciate or revalue, assume the exchange rate is 3.0 and I sell it back MYR 340/3.0 = USD 113. This means I had made profit of USD 13. When the currency is bought by huge number of people in huge quantity, the impact is quite visible but still considered as indirect influence because forecasting can be wrong in any time.

3.3.2 Seasons

Believe it or not those seasons also impact over the exchange rate. The best example is the Costa Rica who is leading for their tourism activity. Therefore when vacation time comes around in summer season, many tourist would travel to Costa Rica and spending their currency their in large amount. This result in sudden increase in demand over the Costa Rica currency which is known as 'Colon' will result to appreciate and revalue the currency and increase its strength to compete with other countries. This is also an indirect influence because this only happens at several seasons and might change over the time if Costa Rica reduces their tourism activity.

4.0 Implication over international trade and businesses

Changes in something would impact to something else. This is a chain logic that cannot be ignored. This applies to all businesses who involved in international trading that change in exchange rates impacts the business activity in several ways and mostly decisions.

4.1 Marketing decision

Change in exchange rate would result the business to revise their marketing activity and therefore the international trading would highly impacted. Marketing here represents the exporting or importing over goods and selling it over to the buyers. When exchange rates change in favor, the marketing activity would be boosted up to ensure the business can grab all the changes to earn the profit over their sales. For example, when Malaysia currency have higher strength to compete with US Dollars, the exporting activity would be emphasized as the Proton Berhad could export the product to USA and sell it there more aggressively to earn more. The Proton would be competitive in term of setting price

and would get more sales. The other way around, if MYR weakened against USD, then Proton would avoid exporting much to USA and the marketing activity would be reduced as they cannot earn much from the sales and loss their competitiveness.

4.2 Production decision

Marketing plan would always be backed up by production plan. Thus, changes in marketing decision would result to change in production decision. Illustrating the same Proton example, if the product can be marketed widely in USA, then the production of the car would be boosted as well. The same way, if they aware that cannot push much sales then they will drop the production amount as well. This is reaction of the chain relationship between the marketing and production.

4.3 Financial decision

Financial decision can be related to the marketing and production activity or it can be independent as well. Taking the independent situation as example, a financial decision represents the investment decision. If there is a profiting project in Indonesia, the finance department must also consider how much they would be earning or losing in the exchange rate because the cash being transacted between the country to accomplish the project. For example, if Malaysian business wants to invest RM 100,000 in project at India, the profit they would earn from the project in India is 700,000 India Rupees, at the same time, if they invest the same amount in USA, they would earn only 20,000 US Dollars. The decision of which country they should invest is influenced by the exchange rate. The calculation is; $700,000 \text{ INR} = 50,000 \text{ MYR}$ (exchange rate 1 MYR = 14 INR) while $20,000 \text{ USD} = 68,000 \text{ MYR}$ (exchange rate 1 USD = 3.4 MYR). Therefore the financial decision would lay in favor of investing in USA. The figure must be ignored, only the value must be weighted and value of USD 20,000 is higher than INR 700,000.

5.0 Conclusion

There are two types of exchange rate which are fixed exchange rate and floating exchange rates. Both impact and influence on international trades as well as the business involved in the trading. They influence directly and indirectly in form of inflation rate, purchasing power, interest rate, seasons, and even forecasting. This influences results the exchange rates to change and therefore the business decision in term of marketing, production and financing would change over the time in respect of the exchange rate. The relationship over this cause-and-effect is visible and it is important for business to consider exchange rates as a serious factor in each and every of their international trading.

Question 2

Discuss how central banks intervene in currency markets and state their reasons for such action.

1.0 Introduction

Each country has their own central bank to take care of the domestic currency issues to ensure they are competitive in the foreign exchange market. For Malaysia, our central bank is known as Bank Negara. This text would be fully illustrated using Bank Negara and their activity that intervene the currency market. Intervene into currency market is a must for the central bank because a floating exchange rate would cause the rate to fluctuation high and down in huge amount. If this happens, our country would be seen or reviewed as very risky country. This can cause to poor foreign investment and pull down our trading strength. Therefore the Bank Negara intervenes to stabilize the fluctuation into a reasonable figure and helps the Malaysia to be seen as stable. Notable here that central bank will not fully manipulate the exchange market because the cost would be extremely high and it is the responsibility of Bank Negara itself to ensure they did not over-spend the reserve or internal funds.

2.0 Ways to intervene

The central bank has option to intervene and manipulate the currency market either directly or indirectly. In some cases, they might adopt the both ways to emphasize the advantage of each other methods.

2.1 Direct intervention

Direct intervention approach is quite visible and shows impacts immediately. The way to directly intervene is through manipulating the supply and demand stability. As discussed in question 1, the exchange rate relies and represents the values based on the demand and supply chain, central banks can make use of it as well. Central bank had the enough authority to trade the currency internally. The situation is explained as, when the supply is constant but the demand is low, the price would be low, means the currency would be devaluated and will be weakened. To overcome this, the Bank Negara can increase the

demand themselves by buying the currency for their own. And this would stabilize back the situation whereas now the supply remains and demand is also maintained the same and resulting the value of currency remains same. It is important to understand that Bank Negara is now holding the excessive cash as their reserve because they purchased the currency. When the currency is revaluated, whereas the demand is high and supply remains, central bank can sell back the currency to maintain the exchange rate from floating very high. This is because the stability must be assured, the currency must increase or decrease is small constant quantity instead of jumping high or down.

Advantage of this method is the exchange rate can be controlled quite faster and responsive over the time. On the other hand, the disadvantage is that the effect of this intervene is only visible for short-term. Besides it would cost a lot for the central bank to buy and sell the currency by themselves assume that the must buy and sell in large amount in order for the impact to be visible in the exchange rate.

2.2 Indirect intervention

Indirect intervention approach is undertaken when the country is about to run into serious problem. The method of doing this is again playing with the logic of the demand and supply chain whereas direct intervention was serious of manipulating the demand while indirect intervention on the other hand would manipulate the supply factor. The scenario is; when supply remains and demand reduce, it would cause the price to reduce and weaken the currency. Bank Negara can pull out certain amount of the currency from the market in order to reduce to the supply of currency, and now the scenario would change to more stabilized situation; when supply is low, and demand is low, it would cause the price and value to remain.

Advantage of this method is the impact of this intervention would be visible in long-term because the Forex market is quite aggressive over the demand and therefore once the supply is reduce or increase, the impact would be slightly sticking to the country for quite long. On the other hand, the disadvantage of this method is quite obvious as reduce in

currency supply would pull the country down to inflation, employment and production factors which will not be in favor of the nation.

2.3 Sterilized intervention

Sterilized intervention is another alternative method of approach under the indirect intervention. This method is in place because the disadvantage of indirect method of sucking down the currency supply would result to inflation, killing employment rate and even pull down the production or domestic product. Aware of this impact which can kill the nation's wealth, the sterilized intervention method was undertaken by most countries. The approach is still whereas they will reduce in the currency supply, but this would be done in term of bond. The central bank has its authority to announce bonds to the citizens and this can help them to freeze some cash flow in the country whereas Bank Negara would keep the cash and not release to the trading market. The same scene would happen as the supply of currency reduce striking back the currency value.

The advantage of this method is it would overcome the inflation problems and the change in the currency supply level would not impact the employment or the production. The disadvantage of this method is in some cases, the impact of bonds are not visible because it is the fact that the amount of money that being freeze in form of bond would later be released back to the currency market when they pay the bond owners and that time the supply would increase again.

3.0 Reasons to intervene

The central bank is responsible for the domestic money market to ensure the money can compete well in the foreign exchange as well as secure the wealth of the nation. The reason to intervene is to secure the wealth of the nation from several factors such as inflation rates, employment rates and gross domestic productions.

3.1 Inflation rate

Central bank would be blamed first when a nation come across unacceptable inflation. Inflation rate would cause the cost of living to increase whereas price of almost all

products would be increased dramatically. Inflation would happen if the country failed to buy goods from foreign countries for reasonable price. This situation will happen when our currency is weakened resulting we cannot buy foreign goods cheaper but the foreign countries would be strong enough to buy our domestic manufactured products for cheap. By intervening the currency market, central bank can help the currency from getting weakened and can help to avoid the inflation rate to rise.

3.2 Employment rate

Business that operates locally requires man power and raw material to run their fundamental operation. Assume that the raw materials are required to be imported from Singapore. When Malaysia currency got weakened over the Singapore Dollars then the cost of importing the raw material would increase and this will push the firm to a corner whereas they must reduce their manpower as they lack of investment. If this situation happens in large, the employment rate would reduce and resulting to high number of citizen left unemployed. As a result, the purchasing power rate would drop as well as gross domestic product rate would drop. Central bank intervenes to ensure the currency is strong and stable for the import activity to happen as usual although the supply or demand impacted.

3.3 Gross domestic production

Employment and production is inter-related. Taking the same example as above, when the manpower is reduced, the firm cannot product as much as they did earlier. The amount of production would decrease constantly if the currency weakened constantly and at a certain stage, it would kill the business as well. When businesses close down in Malaysia, it would reduce the production of the nation and would weak the country further. This factor also inter-related with inflation whereas the price of the product would increase if no product manufactured locally and all merely imported. Central bank intervenes to ensure no industry is killed due to currency factor and keeping the currency stable is important to ensure the country could productive.

4.0 Conclusion

Central bank plays an important role in the currency market to ensure the currency is not weakened in the foreign exchange because it would impact the country and the wealth of the nation. The direct and indirect intervention has its own advantages and disadvantages that the central bank considers strictly before taking the decision to intervene into the currency market. Beside it is not easy and not cheap for such intervention as the central bank is required to spend huge amount to keep the currency stable and strong enough. Appropriate intervention would save the nations wealth in term of inflation rate, employment rate and domestic production rate. The central bank intervention is important and a much for the country to keep stable and growing.

Bibliography

1. John D. Daniels, Lee H. Radebaugh, Daniel P. Sullivan, *International Business: Environments and Operations*, 11th Edition, Pearson Education International
2. SolveYourProblem Articles, *Central Bank Intervention: The Forex Market*, Launch 3, LLC, 2009
3. Moti Bassok, Hagai Amit and Dafna Maor, *Israel Bank intervenes in foreign currency market, buys dollars*, Haaretz Newspaper in Israel
4. Michael Duane Archer, Jim L. Bickford, James Lauren Bickford, *Getting started in currency trading: winning in today's hottest marketplace*, John Wiley and Sons, 2005
5. Boris Schlossberg, *Technical analysis of the currency market: classic techniques for profiting from market swings and trader sentiment*, John Wiley and Sons, 2006
6. Alex Cukierman, *Central Bank Strategy, Credibility, and Independence: Theory and Evidence*, 3rd Edition, MIT Press, 1995
7. Jeffrey A Frankel, *On Exchange Rates*, 3rd Edition, MIT Press, 1997
8. Jagdeep S. Bhandari, *Exchange Rate Management Under Uncertainty*, MIT Press, 1987
9. Shogo Ishii, International Monetary Fund, *Official foreign exchange intervention*, International Monetary Fund, 2006
10. Lucio Sarno, Mark P. Taylor, Jeffery A. Frankel, *The economics of exchange rates*, Cambridge University Press, 2002

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