Business Plan

Name of the Writer

Name of the University

**Business Plan**

**Using Currency Futures and Options**

**Q1)**

In the case of MNC’s such Millennial IOT, which is involved in dealings in international countries such as Indonesia, it needs to consider the important role foreign exchange plays. The risk created by fluctuations in foreign exchange is integral to business decision making. So Millennial IOT can use futures to hedge the exchange rate risk as an MNC (Sun, et al, 2015). This can be done by forming a futures contract with their bank to buy and sell currencies at a future date on an agreed upon the exchange rate and which is fixed. This will easily eliminate or hedge the risk related to the exchange rate. As the futures contract is traded in a futures market, it makes it even more liquid and is easily able to be bought and sold off similar to how shares are sold and bought in the stock market. The futures contract will also help in negating any legal risks as well as it is a legal contract. So we will sell futures in order to hedge the risk of depreciation of value.

**Q2)**

Other than the use of futures contract to hedge exchange rate risk, our MNC (by the name of Millennial MNC) can use currency options to hedge exchange rate risk. Options are also a great tool to be used in order to adjust to the fluctuations in foreign exchange (in this case, Indonesian Rupiah) (Hatemi and El-Khatib, 2018). If Millennial IOT goes into a currency options contract with its bank it will have the opportunity to buy or sell a currency that is specified on a specified exchange rate. The MNC can buy or sell at or before the specified date but is under no obligation. Millennial IOT will be using a combination of call and put options where it will have the right to sell dollars in exchange for rupiah or buy dollars in exchange for rupiah at or before a specified time. But Millennial IOT would have to give the bank (the seller of the option) a premium of the option as a compensation to the bank for giving Millennial IOT the right to buy or sell the currency.

**Accessing Futures Quotes**

**Q1)**

As of May 20, 2019, the prevailing future price for the main foreign currency that our MNC (Millennial IOT), which is around 6856 Indonesian Rupiah. The prevailing spot rate for the foreign currency to which Millennial IOT is faced with, which is around 14525 Indonesian Rupiah. In normal future prices, there is seen to be a premium compared to the spot rate but sometimes this is not the case. In other times when the spot rate of a currency is higher than the future price than a discount is present. In this case, there is a comparison between the future rate of Indonesian Rupiah to the spot rate of Indonesian Rupiah. As we can see, there is a discount present between the spot rate of the Indonesian rupiah and the future price of the Indonesian Rupiah. The discount is as follows:

Discount = Spot rate - Future price

Discount = 14525 - 6856

Discount = 7669

So, in this case, the Indonesian Rupiah is trading at a discount of 7669 points.

**Monitoring Central Bank Intervention**

**Q1)**

If the dollar is strengthened in an attempt by the Feds, this will adversely affect large and small MNC’s, including Millennial IOT. Every multinational company hailing from the USA who is exporting products to international markets will see a loss in profit if the feds decide to strengthen the dollar. This will be very true for Millennial IOT as having a strong dollar against the weak currency of Indonesian Rupiah will negatively affect its earning and decrease its sales by a very large amount. This would lead the company to huge losses and will force the company to take harsh actions. The company will have to increase its prices on products to cover up the losses caused by the strong dollar. But this will also negatively affect the company because its consumers will not have the purchasing power or have even less purchasing power and this will cause even more losses to the company. Its consumers would look towards alternatives to fill their needs, which will decrease sales even further.

**Q2)**

Compared to the first scenario, if the feds decide to weaken the dollar, this will be very beneficial for not just large MNC’s but also small or fledgling MNC’s such as Millennial IOT. With a weak dollar, multinational companies such as Millennial IOT will see an influx in profit and revenue compared to when the dollar is strengthened. This concept of profitability from a weak dollar comes from the difference in the functional and reporting currency. As Millennial IOT has operations in Indonesia then its functional currency is Indonesian Rupiah, whereas its reporting currency is still dollars as it is domiciled in the USA. Millennial IOT’s main selling market is in Indonesia. So any profit earned from Indonesia will be in the Indonesian Rupiah and when this currency is exchanged for the weaker dollar amount would lead Millennial IOT in gaining a high amount of dollars. This would be a huge benefit to the bottom line of the company and also increase investor and shareholder confidence within the business itself.

**Q3)**

Most of the time central bank interventions are aimed at reducing the fluctuation in the exchange rates. This is because there are more fluctuations in the exchange rate than there are more hurdles to international trade and also cause a recession in countries that are dependent on international trade. As these nations cannot rely on market intervention solely to curb the losses sp the central banks have to step in and do something. In Millennial IOT’s case, if the central bank of the USA decides to indirectly intervene then the central bank would raise the interest rates. This will increase the demand of dollar in the foreign market and increase buying of securities with a high yield. This would help Millennial IOT as their securities would be able to be sold at a higher yield than before and they would lead to an influx of capital for Millennial IOT as its shares and securities would be sold at a higher value. This will also allow Millennial IOT to be able to enter even newer markets and will help in the growth of the company.

**Accessing Central Bank Information**

**Q1)**

The central bank of the target country (Indonesia) of Millennial IOT is the Bank of Indonesia. The Bank of Indonesia does intervene to control its currency in the foreign exchange market. This is visible from the fact that its mission is to first keep the rupiah stable for goods and services, which is reflected by the inflation rate of the country. Secondly, it wants to keep its currency (rupiah) stable against other currencies in the international exchange market. This is reflected by how the rupiah performs against other currencies in the international exchange market. To complete both above missions of the Bank of Indonesia, it is highly likely to think that the bank has been intervening to control its currency in the international exchange market.

**Assessing Spot and Forward Rates**

**Q1)**

The foreign currency in concern (Indonesian Rupiah) is trading at a discount of 20 points. This is because of its spot rate (14480) being higher than the forward rate which is around 14460. On the other hand, the Bank of Indonesia has kept the interest rate on its currency at around 6 percent till 16 May 2019. Whereas, the USA federal bank have decided on an interest rate of around 2.5% till 16 May 2019. As the interest rate set by the Bank of Indonesia is higher than the interest rate set by the USA federal bank, it is shown that the Indonesian rupiah is trading at a discount of 20 points. This is exactly according to what is suggested by the interest rate parity. When the interest rate of the functional currency is higher than the interest rate of the reporting currency than the forward trading will be at a discount.

**Determining Whether IFE Holds**

In the first quarter, the interest rate differential between the Indonesian rupiah and the US dollar is 3.5%. For the second quarter, the rate differential is around the same as the first one and is valued at 3.5%. For the third quarter the again the interest differential remained the same at the value of 3.5%. For the fourth quarter, the interest rate differential changed and the value fell from 3.5% to 1.62%. Lastly, for the fifth quarter, the interest rate differential rose back up to 2.77% compared to the fourth quarters 1.62%. The Fisher effect focuses on the relationship between the nominal interest rate and the inflation-adjusted rate of return (Puci and Mansaku, 2016). So in the case of MNC’s the rate they are concerned is with the real rate of return. If we take the example of Millennial IOT, the Indonesian government has put a high rate of nominal interest and would lead to an increase in dollar spending by the company. This would increase the foreign exchange reserves of Indonesia. So, in the end, it can be assumed that the Fisher effect is visible on the currency during those quarters.

**References**

Sun, B., Guo, H., Karimi, H. R., Ge, Y., & Xiong, S. (2015). Prediction of stock index futures prices based on fuzzy sets and multivariate fuzzy time series. *Neurocomputing*, *151*, 1528-1536.

Hatemi-J, A., & El-Khatib, Y. (2018). Valuation of currency options in markets with a crunch. *arXiv preprint arXiv:1801.08346*.

Puci, J., & Mansaku, S. (2016). An Empirical Evidence of the International Fisher Effect on the USD to CNY Exchange Rate. *Academic Journal of Interdisciplinary Studies*, *5*(1), 249.