



AN OVERVIEW OF FOREIGN CURRENCY EXPOSURE

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ABSTRACT

Foreign exchange exposure is defined as the assessment of potential of a firm's profitability, net cash flow, and market value to change due to unpredictable changes of foreign exchange rates, which can be financially unfavorable to the global firm. This paper discusses the three various types of major foreign exchange exposure which are, translation, transaction, and economic; the risks associated with each exposure, and how to minimize specific currency risks.

Keywords: Foreign exchange exposure, Translation, Transaction, Economic

INTRODUCTION

Foreign exchange exposure is defined as the assessment of potential of a firm's profitability, net cash flows, and market value to change due to unpredictable changes of foreign exchange rates, which can be financially unfavorable to the global firm. In today's ever growing global economies, ones should expect a great degree of foreign exchange risk, which if not addressed can have major negative repercussions to the operating firm. There are three various types of major foreign exchange exposure.

Translation exposure

Translation exposure refers to a "risk of loss" that perhaps will ascend because of the variations of revenue, assets, stock, or liabilities of a business because of the unexpected movement of the foreign exchange rate. A business undergoes "translation exposure" when a small portion of its revenue, assets, stock, and liabilities are denominated in a foreign rate and it becomes necessary to convert it back to the "base currency" due to accounting purposes. The "economic value" of translation exposure which is "put at risk by using cash transactions to hedge accounting valuations" is not completely understood. There are disadvantages and few complications associated with hedging the translation exposure. One example is an Australian company who

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bought a subsidiary in the United States. The subsidiary was bought for \$10 million US dollars and the exchange rate for Australia was \$0.65. The managing director wanted the chief financial officer to oversee the risks pertaining to new subsidiary. In this situation, the question that arises is what directions will the chief financial officer give to the treasurer? “There is no associated US dollar denominated debt to provide a natural hedge on consolidation”. The US GAAP rules and IFRS principles are in general agreement as to the handling of foreign currency accounting the “assets and liabilities of a self-sustaining operation to be re-valued/translated at the prevailing year end exchange rate, and the income statement items are translated at the average exchange rate for the year. The reconciling difference to the retained earnings account is recorded in the foreign currency translation reserve”. The question now remains are that should the Australian company “hedge the foreign currency translation exposure?

One reason that a company should hedge is to shield the “domestic value of the investment”. In this case, the value refers to the “accounting value as the balance date,” hence not the economic value of an asset. Basically it reflects the price which was paid for the asset that was adjusted for an “annual change in the exchange rate”. When hedging financial risks, it comes to mind that it means to protect the earnings and economic value of a company. However, in terms of an accounting valuation, it can’t be hedged. Hedge which affects the cash flow of a company without protection being provided is not protecting the firm’s economic value. The main purpose of hedging is to protect the “net investment from negative revaluations”. It is absolutely common that negative revaluations will be adjusted by positive revaluations in the long run. Another theory is that translation hedge also is capable of protecting the value of an “asset for future realization”. However, there are two major complications associated with this debate. First, it is said that very few companies have “future realization date” when it comes to their foreign assets. Second, the accounting value or historical cost does not affect the changes pertaining to economic company related conditions. Due to this reason, the accounting valuation has little similarity to the realizable value and the hedge is shielding a valuation which does not affect the “evolving economic worth of an investment”. Another foundation for hedging net foreign assets is that it disregards the effect of “exchange rate movements on share prices”.

There are two ways in which translation exposure can be reduced. First approach is to “raise debt in the equivalent currency to provide natural balance sheet hedge on consolidation”. Second approach is “entering into an offsetting currency derivative contract”. Thin capitalization can be considered as the rule in many countries that “limit the amount of debt a subsidiary can raise”. Therefore, equity exposure will always be there. To get around this conflict, the “group borrowings are denominated in the US dollars and the natural hedge is established on consolidation”.

Transaction exposure

Transaction exposure is defined as the “potential for a gain or loss in contracted for near term cash flows caused by foreign exchange rate-induced change in the value of amounts due to the multinational companies or amounts that the multinational companies owes to other parties”. In addition, it is an alternation in the value of the home currency of cash flows that are already “contracted”. Transaction exposure is used for measuring the changes in the value of “outstanding financial obligations incurred” before a change in exchange rate, however, which was not due to be settled after the alteration of the rate. Transaction exposure has to do with cash flow change which is the outcome of “existing contractual obligations”. Transaction exposure arises from four different types of transactions. First transaction is “purchasing or selling on credit goods or services when prices are stated in foreign currencies”. Second transaction is, “borrowing or lending funds when repayment is to be made in a foreign currency”. Third transaction is, “being a party to an unperformed foreign exchange forward contract”. Lastly, fourth transaction is, “acquiring assets or incurring liabilities denominated in foreign currencies.”

An important factor to consider is that transaction exposure is not created by foreign rate cash balances although the home currency value changes right away with exchange rate change. Transaction can be taken care of through operating, financial, and contractual hedges. The main contractual hedges encourage the use of “risk-sharing agreements, leads and lags in payment terms, swaps”. When managing transaction exposure, a treasurer must consider to decision factors. First, “is treasury a cost center or a profit center? Second, the risk tolerance should be considered. On the other hand, firms believe that chances of an exposure to occur are lower than 100% unless the transaction is on the firm’s accounting books. Exposures that are anticipated are transactions in which there is no contract or agreement between the parties. Management programs that are associated with transaction exposure are bordered with an “option-line”. The line divides those individuals who use options and for those who don’t use options. Companies that don’t use currency options heavily depend on money market hedges or forward contracts. Many of the global companies have developed strict transaction exposure risk management policies that indicate hedging. It is utmost necessary that these contracts use forward contract hedges on a “percentage of existing transaction exposures”. Rest of the remaining portion is hedged by evaluating the risk tolerance of the firm, confidence of the firm, and the exchange rate movement.

Economic exposure

Economic exposure refers to when a company’s anticipated net present value on a cash flow changes because of an unpredicted change of the foreign exchange rates, and is the result of the transaction exposure in the long run. This change can be negative or positive. When a firm encounters a positive economic exposure, the “use of home currency debt with currency swaps dominates both foreign currency debt financing and home currency debt financing”. When a firm encounters negative economic exposure, “foreign currency debt financing dominates”. When it

comes to currency risk, globalization has dramatically increased economic exposure of firms. There is less economic exposure for larger firms in comparison to smaller firms. The finance theory states that from an investor's point of view, they can measure economic exposure and indicate reasons in which the accounting rules do not grasp the "economic reality". That only takes place when accounting exposure fluctuates from economic exposure. However, the question is about if investors really have a deep understanding of economic exposure rather than viewing it from a broad accounting exposure perspective. An example provided is that if two individuals have a good understanding between the relationship between exchange rates and firm value is hard for investors, "who must rely on financial statements? In 1996, a man named Hu states that investors who are interviewed do not understand the methods used by firms in order to manage economic exposure, but are also puzzled by the reporting rules which are used to "measure and report accounting exposure".

In several cases, management has the desire to hedge economic exposure, but face away from what could be the result of accounting exposure. Forward exchange contracts and currency swaps are useless in this matter. SFAS No.52 compels that these "hedging vehicles be marked to market for reporting purposes," similar to that of foreign currency debt. Although using various preferences to hedge linear economic exposure is more complicated in comparison to using swaps and forwards, options have been depleted anyway. The reason being is that for some period of time, mark-to-market reporting rules were quite reserved when it came to options. This permitted them to use options without requiring reporting unrealized mark-to-market gains and losses under current earnings. However, rules changed in 1992 when the Securities and Exchange Commission stated that gains and losses pertaining to options have to be marked to market, which terminated the use of complicated option strategies to "hedge linear economic exposure, all while dodging accounting exposure. Another issue relating to the accounting exposure is "currency-indexed debt". Currency-indexed debt refers to "denominated in base currency, but interest payments are indexed on an exchange rate". After the Securities and Exchange Commission's 1992 option related rule, Disney offered "dollar-denominated" notes in which the coupon payments were "indexed on exchange rates". The idea was to hedge part of the projected future operating revenue stream that was "denominated in foreign currencies, but to account for the currency-indexed debt as U.S dollar debt". Disney sidestepped the "technical equivalence" along with a foreign currency note by not "indexing the principal". However, the index situation for coupon payments was "geared" so that it would result in the instrument to gain or lose U.S dollar "economic value".

CONCLUDING REMARKS

Foreign exchange exposure is very important to a business/firm, both domestic and global. Due to the rapid pace at which international businesses are growing, the three major foreign exchange exposures mentioned above are the result of the well-developed international businesses, which has

led to massive exposure, and will continue to do so for the long term. Familiarization and risk control measures are needed to ensure the health of any Multinational Corporation.

REFERENCES

- Risking Value by Hedging Translation Exposure. (2001). *Asia money*, Vol. 12, No. 9, pp. 38-39.
- Dumitrescu, D. (2009). Managing transaction exposure. *Annales Universitatis Apulensis: Series on economica*, Vol. 11, No. 1, pp. 359-367.
- Goswami, G. and Shrikhande, M. M. (2007). Economic exposure and currency swaps. *Journal of Applied Finance*, Vol. 17, No. 2, pp. 62-71.
- Brien, T. J. O. (1997). Accounting versus economic exposure to currency risk. *Journal of Financial Statement Analysis*, Vol. 2, No. 4, pp. 21-29.