

Assessing Exchange Rate Risk

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When companies undertake international business, they take a risk because their investments and business operations may be affected by changes in the exchange rates for different currencies. This risk is known as exchange rate risk.

Increasingly, companies are fighting for a slice of global markets, particularly in developing nations, and putting money in foreign stocks (or in funds that invest abroad). But all economies, even the most established, go through downturns periodically. In the case of developing nations, economies (and currencies) may be quite volatile—political upheaval and factors like the price of oil adding to their instability. The effect on company balance sheets, cash flow, and earnings can be dramatic.

For this reason, doing business internationally is inherently risky. For example, when profits are exchanged for the domestic currency, there is a risk that they will be reduced or disappear completely. And here's another element to consider: sometimes companies struggle to compete with competitors from countries whose currencies are weaker because their costs are lower and they can consequently offer lower prices to customers.

What to Do

Companies could avoid exchange rate risk by doing business exclusively in their own countries—but for large businesses (and increasingly, for smaller ones) this is hardly a realistic proposition. Another not much more practical option is to insist on using one's own currency for all transactions. However, asking all customers to use dollars (for example) is inflexible, and forces them to take on all the risk—so it's not likely to go down well.

A more pragmatic approach is to learn about the fundamentals of exchange rate risk in order to reduce its negative impact. It's a complex subject, much of it best left to experts, but it's worth finding out enough to be able to act wisely on advice.

The main indicators of risk are the relationships between interest, inflation and exchange rates. The most significant relationships have been described as follows:

- *Purchasing Power Parity* (PPP). This is the idea that in a stable marketplace, the relationship between exchange rates of different countries should be in the same ratio as the price of a fixed basket of goods and services. In other words, there is parity between the purchasing power of currencies and their exchange rates. There are different ways of expressing this, but most commonly it is:

rate of change of exchange rate = difference in inflation rates

- *International Fisher Effect* (IFE). This theory suggests that differences in interest rates between countries are expected to be offset by future changes in exchange rates. For example, if an

investor earns a higher interest rate in another country, any gains are offset by an unfavorable exchange rate. The relationship is expressed as:

the expected rate of change of the exchange rate = the interest-rate differential

- *Unbiased Forward Rate.* This theory suggests that the forward exchange rate (the rate at which a forward transaction takes place) is the most accurate measure of expected future exchange rates. This is stated in simple terms:

the expected exchange rate = the forward exchange rate

These measures aside, protecting a company against exchange rate risk depends on careful monitoring. Currency exchange rates are affected by politics, inflation, the state of import and export markets, capital flow, consumer confidence, and many other economic and social factors. Moreover, individual governments often take action—often controversially—to control the volatility of currencies. These factors result in exposure to three main types of risk: *economic*, *translation* and *transaction*.

- *Economic exposure:* the risk that a company's profits will be eroded by exchange rate changes because of rising operating costs. Companies are very limited in the actions they can take to protect themselves in this situation.
- *Translation exposure:* the risk that exchange rate changes will diminish a company's income, assets, equity or liabilities. Their denomination is therefore significant—although some analysts believe that real assets (those that are physical and identifiable rather than financial) are hardly affected by currency movements at all. To insulate against this risk, fund managers undertake "currency hedging." This is a sophisticated technique involving keeping a close watch on exchange rate changes, and diversification of a company's holdings in different currencies.
- *Transaction exposure.* the risk that exchange rates will change after a contract is agreed, but before it is completed (or after borrowing/lending agreements are established but before repayments have been made), and that major losses will occur as a result. This is a problem frequently faced by companies working in international markets. It's not usually practical to demand advance payment from customers (and impossible to apply this in a borrowing/lending situation), so a technique called "factoring" is used to reduce the risk. This involves selling off a company's foreign accounts receivable to a "factoring house," which then takes on the responsibility for credit and collections. Factoring houses typically buy the accounts receivable at 90—95 % of their value, although the discount may be greater. Companies often recoup their losses through product price adjustment.

Exchange rates can be affected by risks associated with a particular country. For example, there may be political or military involvement, or restrictions may be imposed. There are also commercial factors, like a major foreign customer becoming bankrupt or defaulting. Of course, major customers at home can default too, but they are not operating under unfamiliar legal or regulatory systems. It is possible for companies to insure themselves against such risks, but this can be very expensive.

What You Need to Know

- There is no definitive model for clarifying or predicting fluctuations in exchange rates—perhaps because the world of international finance is so fast-moving.
- A forward transaction is the exchange of two currencies at agreed rate some time in the future (at least two business days ahead). It eliminates exchange rate risk by setting a fixed rate for a forthcoming transaction.
- A foreign exchange option (FX option) offers a guaranteed “worse-case” rate for a future currency exchange. It protects buyers against unfavorable currency fluctuations. The buyer is not obliged to exchange at the stated rate, but the option is there if they want to take it up.
- Currency contracts enable producers who are struggling to compete (because of unfavorable exchange rate changes) to try to match the cost and pricing structures of their competitors.
- By establishing offices in foreign countries, companies can undertake business transactions in the local currency—reducing the adverse effects of exchange rate changes.
- Companies can subscribe to services that monitor exchange rates and issue alerts. These services may use a scale to indicate the level of risk (for example, one in the U.S. has a scale from 100 – 200, with no risk at one end and crisis at the other).
- It is not possible to take out insurance specifically against exchange rate risks.
- Companies (particularly small and medium-sized enterprises) can get help and advice about selling to international markets from the U.S. Export-Import Bank (Eximbank).

Where to Learn More

Web Sites:

Dufey, Gunter, and Ian H. Giddy, “The Management of Foreign Exchange Risk”:
www.stern.nyu.edu/~igiddy/fxrisk.htm

Business Owners’ Toolkit: www.toolkit.cch.com/advice/248askalice.asp

Export-Import Bank of the United States (Eximbank): www.exim.gov