

## Q&A ON HEDGING: MANAGING FOREIGN EXCHANGE RISKS BY HEDGING

---

Corporations and individuals with foreign exchange–denominated assets are exposed to fluctuations or adverse movements in all kinds of financial asset prices in their day-to-day transactions. These financial asset prices include foreign exchange (FX) rates, interest rates, commodity prices, and equity prices.<sup>1</sup> The effect of changes in these prices can be significant.

Movements in FX rates, in particular, may be favorable or unfavorable to a party dealing with foreign currencies. As defined, FX rate is the price of a unit of foreign currency in terms of the domestic currency. In the Philippines, the exchange rate is conventionally expressed as the value of one US dollar in peso equivalent. For example, US\$1 = ₱41.00. When the exchange rate of the peso vis-à-vis the dollar moves “downward”, say from ₱41/US\$1 to ₱40/US\$1 the value of the dollar in terms of the peso will tend to decrease; that is, it will cost less pesos to acquire one dollar. In the case of a peso depreciation, an “upward” movement takes place, say from ₱40/US\$1 to ₱41/US\$1 where the price of the dollar in terms of the peso will tend to increase; that is, it will cost more pesos to acquire one dollar.

The Philippine peso has been on an appreciating trend since 2006. It reached an 8-year high of ₱40.36/US\$1 on 28 February 2008 which generally was a welcome news, as it reflected positive developments in the country’s economic fundamentals.<sup>2</sup> However, a firm peso could adversely affect some sectors, including exporters as well as overseas Filipinos (OFs) and their dependents whose earnings are denominated in US dollars. The peso appreciation could lower the external price competitiveness of export commodities compared to the products of competitor countries whose currencies have not changed in value on whose currencies have appreciated by less than the Philippine peso. Similarly, beneficiaries of OF workers, who receive their remittances in US dollars, end up receiving less pesos for every dollar that was sent to them if the peso continues to appreciate.

This article gives an overview of the different ways in which Philippine exporters can hedge against exchange rate fluctuations through the use of various derivative products. The first part of this article explains some key concepts of hedging and hedging instruments, the second part discusses the developments in the hedging market in the Philippines, and the last part presents the measures implemented by the BSP as well as other initiatives to develop further the hedging market.

### I. Hedging and Hedging Instruments: Some key concepts

#### 1. What is a derivative?

A derivative can be defined as a financial instrument that primarily derives its value from the performance of an underlying variable such as interest rates, FX rates, or financial instrument prices.

A user of a derivatives instrument may enter into a derivatives transaction for several economic purposes such as **hedging**, managing capital or funding costs, and yield enhancement, among others. For a growing number of banking organizations, derivatives

---

<sup>1</sup> Sooran, Chad. “What is hedging? Why do companies hedge?.” <http://finpipe.com.hedge.htm>

<sup>2</sup> The figure was based on real-time transactions.

activities are becoming a direct source of revenue through "market-making" functions, position-taking and risk-arbitrage.

## **2. What is hedging?**

Hedging is similar to an insurance coverage that people acquire to protect themselves from incurring possible losses due to unfavorable event taking place in the future.<sup>3</sup> Hedging strategies are designed to reduce the volatility of earnings or to stabilize the value of a particular asset and liability.

As business operations and activities are generally exposed to a wide array of risks (e.g., adverse movements in financial asset prices such as foreign exchange rates, interest rates, commodity prices and equity prices), the practice of hedging has grown across various financial markets.

In the case of FX transactions, an FX hedge takes the form of a transaction entered into to reduce the risk of sharp movements in the prices of foreign currencies.

For example, an exporter who is vulnerable to an appreciation of the peso can partially create a "natural" hedge if it can pay off its expenses in dollars. Alternately, an exporter can borrow dollars, convert it to pesos at the current spot rate to meet current peso funding requirements and pay off future dollar obligations using its dollar export proceeds. In these scenarios, the exporter is able to minimize its FX risks such that future movements in foreign exchange rates will not have a significant impact on its cash flows.

## **3. What are the advantages of hedging?**

From a risk management perspective, hedging allows financial institutions, corporations and other entities to identify, isolate, and manage separately or on a portfolio basis, the risks in their balance sheets arising from financial instruments and commodities.<sup>4</sup>

When designed appropriately, hedging can offer economic agents efficient and effective methods for reducing certain risks as well as financing costs. In particular, a hedging strategy can be designed to minimize one's exposure to unwanted risks, while allowing the business to gain or profit from its core operations.

An exporter may not have the expertise, time and resources to manage unacceptable exposures to foreign exchange rate movements. Hedging strategies reduce these unwanted exposures so that an exporter can concentrate on its core business operations rather than on the volatility in the foreign exchange market. For instance, exporters can enter into derivatives transactions that allow them to sell dollars at a fixed price at a future date. In this case, hedging reduces cash flow uncertainties, improves financial decision-making, and facilitates cash conservation and planning for capital needs.

---

<sup>3</sup> Investopedia. "A beginner's guide to hedging." Available online.

<sup>4</sup> BIS Basel Committee: Risk management guidelines for derivatives (1994).

#### **4. What are the disadvantages of hedging?**

Designing hedging strategies requires careful planning and good understanding of the transactions involved. A poorly executed hedging strategy may result in incurring additional unacceptable risks. While hedging transactions are intended to reduce specific risks, e.g. FX risk, these transactions do not eliminate **all** risks.

In addition, hedging transactions may involve costs. Specifically for derivatives, costs may take the form of fees or reduced opportunity to gain from favorable movements. The fees may include premiums paid from transferring the risk of loss due to adverse movements in asset prices to a counterparty that is willing to carry the risk.

Costs can also be incurred from the reduced opportunity to gain from favorable movements. In the case of a forward transaction, an exporter that fixes the price of its dollar against a peso appreciation, say at ₱41/US\$1, foregoes the opportunity to gain if the peso depreciates to ₱42/US\$1 and would have been better off had he not entered into a hedging transaction. However, the loss of being on the disadvantaged side of the contract can be mitigated if an exporter buys insurance or an FX option to exercise the contract. The cost would only be limited to the premiums paid for the FX option.

#### **5. What are the basic hedging instruments?**

Basic hedging instruments include forwards/futures, swaps, and options. Forwards and options are widely used for hedging.<sup>5</sup>

#### **6. What is a forward agreement?**

A forward agreement is a contract that commits one party to buy (pay) and the other to sell (receive) a given quantity of an asset for a fixed price on a specified future date. When forwards are traded in an exchange, these forward agreements are called futures. In the Philippines, the most common forward contracts include:

- **FX Forward Contract.** This refers to an agreement for delayed delivery of a foreign currency in which the buyer agrees to purchase and the seller agrees to deliver a particular amount at a specified future date and at a pre-arranged exchange rate. It has the effect of “locking-in” the price of the dollar as of deal date to protect the investor against an appreciating peso. However, if the peso depreciates or the price of a dollar goes higher than the fixed price, the exporter will not be able to benefit from hedging the transaction.

For example, an exporter sells US\$100,000 to a local bank one year forward or one year from now. The forward rate is ₱41.00/US\$1 or the rate at which the dollar can be exchanged into pesos. One year after, the exporter shall deliver the US\$100,000 to the local bank and the local bank shall pay the exporter ₱4.1 million.

---

<sup>5</sup> The definitions for hedging instruments were lifted from BSP Circular 594, dated 8 January 2008.

- **Non-deliverable Forward (NDF).** It has the characteristics of a regular FX forward but the transaction is net-settled; i.e. there is no principal exchange of dollar versus the peso. The settlement will be just the net peso difference between the fixed forward rate and the spot rate at maturity date, multiplied by the agreed principal amount. Such transaction provides cash flow flexibility.

Using the previous example, if the peso-dollar exchange rate appreciates to ₱39.00/US\$1 one year after, the bank shall pay the exporter ₱200,000 or the difference between the forward rate of ₱41.00/US\$1 against the spot rate of ₱39.00/US\$1, multiplied by the US\$100,000 that the exporter agreed to sell one year forward. There is no actual delivery of the US dollars from the exporter and of the pesos from the banks.

On the other hand, if the peso depreciates to ₱42.00/US\$1 at maturity date, the exporter shall give the bank ₱100,000 which is equivalent to the difference between the forward rate of ₱41.00/US\$1 against the spot rate of ₱42.00/US\$1, multiplied by the US\$100,000 that the exporter agreed to sell one year forward. Meanwhile, the exporter can convert his dollar earnings at the depreciated rate of ₱42.00/US\$1 and offset the net difference in the NDF transaction that he paid to his bank.

## **7. What are FX swaps?**

FX swaps refer to an agreement involving an initial exchange of two currencies, usually at the prevailing spot rate, and a simultaneous commitment to reverse the exchange of the same two currencies at a date further in the future at a rate (different from the rate applied to the initial exchange) agreed on deal date.

For example, a company needs to acquire dollars and another company needs to acquire pesos for a certain period of time. These two companies could arrange to swap currencies by establishing an interest rate, an agreed-upon amount and a common maturity date for the exchange.

## **8. What is an FX option?**

An FX option is a financial derivatives contract that provides the holder the right, but not the obligation, to buy or sell foreign currency, for a fee or premium, at a specified exchange rate at a specified future date.

There are two types of options: 1) the call option or the right, not the obligation, to buy a currency; and 2) put option or the right, not the obligation, to sell a currency.

There are also two parties in an option transaction: 1) option buyer (also called the holder of the option) who enjoys the right to exercise and the right not to exercise the option (i.e., let the option lapse); and 2) option writer, has the obligation to deal at the strike price if the buyer elects to exercise the option (also known as option seller).

The strike price is the rate at which the purchaser may exercise or settle an option contract. In the case of an exporter, an FX option gives him the right but not the obligation to sell or buy a currency at a future date at a specified price. This has the potential for limited losses

and unlimited gains since the cost to exporters for protecting themselves from adverse movements in the FX market is only the option premium while giving the exporter the option not to exercise the transaction if market movement goes against it.

To illustrate, an exporter who wants to hedge against a possible strengthening of the peso can buy a “Put Option” with the following terms: 1) strike price of ₱41.00/US\$1; 2) spot rate at the start of transaction is ₱42.00/US\$1; 3) expiry of 1 month; and 4) premium of ₱0.50 per dollar hedged.

If upon maturity (a month from now), the peso appreciates to ₱41.50/US\$1 (the break-even rate which covers the premium paid by the option buyer), the exporter shall exercise his option to sell the dollars at the strike price. If the peso depreciates to ₱42.50/US\$1, the option expires and his loss is limited to the amount of the premium only.

## II. Developments in the Philippine Derivatives Market

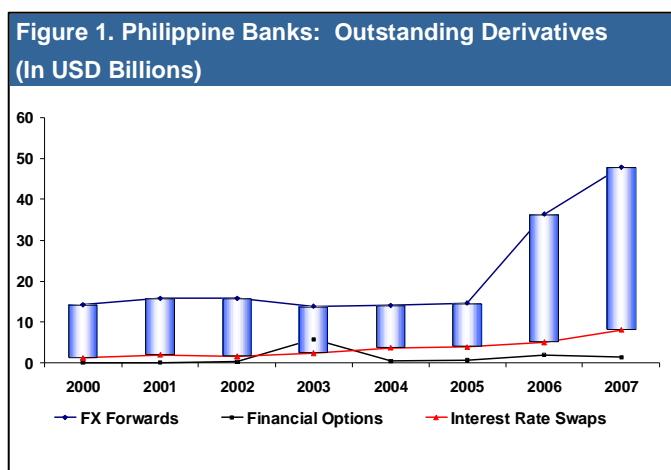
### 9. How do the recent Philippine derivatives market movements compare with past developments?

In the past, derivatives were not widely used in the Philippines, except for foreign exchange swaps and forwards. However, during the 1997 Asian crisis, expanded commercial banks increased their derivatives transactions to hedge against foreign exchange risks in response to a more volatile financial environment.

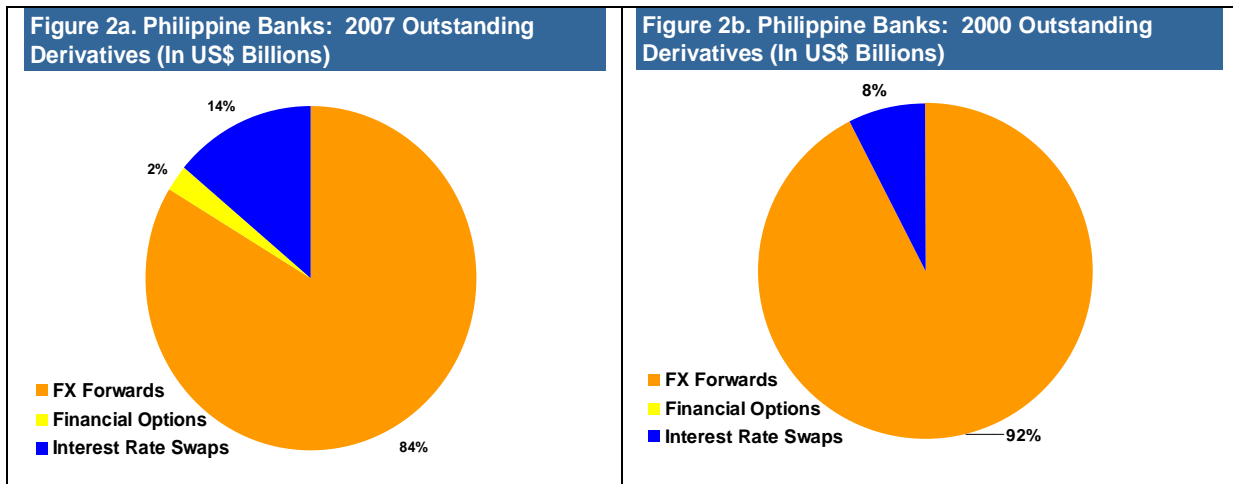
Foreign capital inflows to the Philippines have generally increased in recent years. This reflects the global integration of the Philippine economy as well as the improved economic fundamentals and reforms undertaken in the country to strengthen, develop and liberalize the financial system. The growth in capital flows are also driven, in part, by the deepening of local markets as well as the introduction of new instruments in the equity and derivatives markets. In turn, as foreign capital flows increased, the FX derivatives market in the Philippines has also grown significantly.

These developments in the capital and financial markets translated to a marked increase in the outstanding FX forwards, options and swaps, which stood at around US\$57.3 billion as of December 2007 compared to US\$15.3 billion in 2000 (Figure 1).

The bulk of the outstanding derivatives in 2007 are comprised of FX forwards at 83.6 percent (Figures 2.a and 2.b). Furthermore, the share of interest swaps almost doubled to 14.0 percent in 2007 from 7.6 percent



in 2000. Finally, the share of financial options also increased to 2.4 percent in 2007 from about 0.03 percent in 2000.



### III. Regulations and Guidelines

#### 10. What are the BSP regulations covering derivatives activities of banks?

The BSP supports the development of the Philippine financial market by providing banks and their clients with greater opportunities for financial risk management and investment diversification through the prudent use of derivatives. Consistent with this policy, the BSP has been continuously improving the regulatory framework for derivatives activities.

More recently, the BSP has adopted a comprehensive reform agenda for the liberalization of FX regulatory framework and regulations for derivatives activities undertaken by banks.

Specifically, the BSP issued Circular No. 594 on 8 January 2008, which revised the regulations on derivatives activities undertaken by banks.<sup>6</sup> This issuance superseded previous issuances on derivatives (e.g. Circular Nos. 102 and 297). The revised guidelines seek to:

- Promote the growth of the domestic capital markets by expanding the range of available derivatives products for banks and their clients and by providing a framework for organized derivatives market;
- Strengthen the supervisory framework for derivatives activities undertaken by banks;

<sup>6</sup> Circular No. 594 is consistent with Circular No. 561 dated 8 March 2007 and Circular No. 591 dated 27 December 2007 as part of the two-phase reform agenda for the FX regulatory framework. The first phase saw the increase in FX position limits and relaxation of allowable non-trade FX purchases without supporting documents. These measures were aimed at giving banks more flexibility to expand their FX holdings and thus, enhance their capability to service the increasing FX requirements of both the corporate and consumer sectors. The second phase focused largely on two objectives: first, to promote greater integration with international capital markets and risk diversification supportive of an expanding economy with global linkages; and second, to streamline the documentation and reporting requirements on the sale of foreign exchange by banks. In addition, the second phase also expanded the use of FX swaps involving the Philippine peso.

- Protect the investing public by providing sales and marketing guidelines, including client suitability procedures and risk disclosure requirements for banks offering derivatives products to clients.

**11. What are the BSP regulations that support the development of hedging products?**

To promote the growth of the domestic capital markets, current regulations on derivatives expanded the range of available derivatives products, including hedging products. In particular, universal banks and commercial banks are allowed, among others, to offer FX forwards, FX swaps and currency swaps with tenor of three years or less without need for prior BSP approval. Previous to the revised guidelines, only FX forwards and FX swaps with tenor of one year or less were allowed without prior BSP approval. For other hedging products such as options, banks need additional derivatives authority.

**12. What are the responsibilities of banks offering hedging facilities towards the end-users?**

The sales and marketing guidelines under BSP Circular No. 594 require banks to ensure that: (1) their clients understand the nature of the transaction; (2) the transaction meets the clients' objectives and risk tolerance and (3) there is sufficient, accurate and comprehensible information disclosure regarding the products offered.

Furthermore, banks offering hedging facilities should ensure that the derivatives are appropriate for their clients' hedging needs through a client suitability process. The banks are required to obtain client information about financial situation, experience, and objectives relevant to their desired hedging products.

**13. What are the initiatives to develop the hedging market in the Philippines?**

The Development Bank of the Philippines (DBP), the Department of Trade and Industry (DTI) and the Department of Finance (DOF) conceptualized a hedging program for exporters on 28 June 2007. The hedging program aims to shield exporters from further exchange rate losses through the provision of foreign exchange insurance and forward foreign exchange rate protection products. Total availment under the said program has increased from US\$113,000 as of end-September 2007 to US\$12.4 million as of 24 March 2008.

In support of the government's objective to help exporters cope with the more challenging global economic developments, the BSP hosted a conference on hedging facilities for exporters on 3 October 2007 to familiarize merchandise and service exporters with various hedging products available in the market as well as with the BSP's regulations on hedging transactions and relevant foreign exchange policies. The BSP has rolled out this hedging conference to the regions in the first semester of 2008 to provide information on hedging and other foreign exchange measures.

**14. What are the hedging products available to exporters?**

The DBP Hedging Facility offers the FX insurance and the Forward FX Rate Protection.

**FX insurance:** It provides exporters the ability to benefit from the peso depreciation or protect themselves from losses during a peso appreciation. Under this product, the exporter has the right but not the obligation to sell his dollars against the peso to DBP at a specified price on a specified date. Thus, in the event of a peso depreciation, the exporter can sell his dollars at a higher rate on maturity date. If the peso appreciates, the exporter may sell at the agreed protection rate to protect him from any loss. However, there will be an insurance fee to be charged for this particular product.

For example, on deal date, the Philippine Dealing System's (PDS) rate is ₱ 41.50/US\$1 and the exporter decides his protection rate at ₱41.00/US\$1 with the contract amount of US\$10,000 and term of 1 month. Under scenario 1, if the peso depreciates to ₱42.00/US\$1, the exporter sells at ₱42.00/US\$1 instead of selling at ₱41.00/US\$1 which is the protection rate. Under Scenario 2, if the peso appreciates to ₱ 40.00/US\$1, the exporter will sell at the protection rate of ₱41.00/US\$1 against the prevailing rate of ₱40.00/US\$1. Meanwhile, the FX insurance fee in dollars is computed by multiplying the FX insurance fee rate by the contract amount; while the FX insurance fee in pesos is computed by multiplying the FX insurance fee in dollars by the prevailing market exchange rate.

**Forward FX rate protection:** It is a forward foreign exchange contract where only the net difference between the agreed dollar/peso forward rate and the market rate shall be settled at maturity. Unlike the FX insurance, forward FX rate protection entails no charges and offers a fixed exchange rate at a specified future date, therefore protecting the exporter at a certain rate if the peso appreciates.

For example, supposing the PDS rate is ₱41.50/US\$1, the forward rate at ₱41.75/US\$1, with the contract amount of US\$10,000 and term of 2 months. Under scenario 1, if the peso depreciates to ₱42.00/US\$1 after 2 months, the exporter sells at ₱42.00/US\$1 and pays DBP ₱0.25/US\$1 (the difference between ₱42.00/US\$1 and ₱41.75/US\$1) multiplied by the contract amount. Under scenario 2, if the peso appreciates after 2 months to ₱41.00/US\$1, the exporter sells at ₱41.00/US\$1 and is paid ₱0.75/US\$1 by DBP (the difference between ₱41.75/US\$1 and ₱41.00/US\$1) multiplied by the contract amount.