**Effective Exchange Rate of Peso**

*Scope and Classification*

The effective exchange rate index measures the average changes in the exchange rate of the peso across a basket of currencies where an increase in the index indicates a peso appreciation while a decrease indicates a depreciation. There are two types of effective exchange rates: the nominal effective exchange rate (NEER), which is the weighted average value of the country’s exchange rate across a set or basket of other currencies, and the real effective exchange rate (REER), which is the weighted average value of the country’s exchange rate across a basket of other currencies adjusted for price differences between the country and those of other countries included in the basket.

The major trading partners of the Philippines are defined as those countries which accounted for at least one percent share of the total merchandise exports and imports of the Philippines for the past five years (2007-2011). Based on this criterion, fourteen major trading partners of the Philippines were identified: United States, Euro Area, Japan, Australia, China, Singapore, South Korea, Hong Kong, Malaysia, Taiwan, Indonesia, Saudi Arabia, United Arab Emirates, and Thailand.

*Scope of Data and Classification*

The Bangko Sentral ng Pilipinas (BSP) adopts a freely floating exchange rate regime. On a daily basis, a Reference Exchange Rate Bulletin (RERB) is released to the general public to serve as a guide on the prevailing spot exchange rates in the international and domestic currency markets. The RERB is divided into two sections. The first section lists the reference exchange rates for 18 currencies convertible with the BSP. Only commercial banks can go directly to the BSP for exchange of these currencies to Philippine Peso (PHP). The second section lists the reference exchange rates for 14 other currencies that are not convertible into PHP with the BSP. The official reference rates are expressed in terms of Euros, US dollars (USD), and Pesos per foreign currency unit.

The RERB contains the official spot reference exchange rates for the following currencies that are convertible to PHP with the BSP: US Dollar, Japanese Yen, British Pound, Hong Kong Dollar, Swiss Franc, Canadian Dollar, Singapore Dollar, Australian Dollar, Bahraini Dinar, Kuwait Dinar, Saudi Rial, Brunei Dollar, Indonesian Rupiah, Thai Baht, United Arab Emirates Dirham, Euro, Korean won and Chinese Yuan (Renminbi).

It also includes the official spot reference exchange rates for the following currencies that are not convertible to PHP with the BSP: Argentine Peso, Brazil Real, Danish Kroner, Indian Rupee, Malaysian Ringgit, Mexican New Peso, New Zealand Dollar, Norwegian Kroner, Pakistani Rupee, South African Rand, Swedish Kroner, Syrian Pound, New Taiwan Dollar and Venezuelan Bolivar.

The peso-dollar reference exchange rate is based on the daily weighted average rate of peso-dollar (USD/PHP) spot (trade date plus 1 day) transactions dealt through the Philippine Dealing System (PDS). Reference exchange rates for other currencies are based on closing bid rates as of the most recent New York close.

The data on inflation rates of major trading partners are sourced from country websites while the inflation rate data of the Philippines is sourced from the Philippine Statistics Authority (PSA).

The foreign currency exchange rate with the Philippine Peso, *X,* is computed as the reciprocal of the Philippine Peso-foreign currency exchange rate expressed as:

where: *Y* represents the PHP-foreign currency exchange rate.

The monthly foreign currency per peso rates are computed as the arithmetic average of the daily foreign currency-Philippine Peso exchange rates with the following formula:

where:

*Xi* represents daily foreign currency per peso exchange rate for *i*th day; and

*n* refers to total number of days with transactions.

The same formula applies in deriving the annual foreign currency per peso exchange rate with *Xi* representing monthly average foreign currency per peso exchange rate for *i*th month and *n* equals to12.

The Nominal Effective Exchange Rate Index (NEERI) makes use of the geometric chained formulation as shown below:

where:

*wij* is the trade weight of the *i*th partner country in the *j*th period; and *eij* is the *i*th trading partner’s currency rate per peso in the *j*th period.

The Real Effective Exchange Rate Index (REERI) uses the formula below:

where:

|  |  |
| --- | --- |
| *wij* | is the trade weight of the *i*th partner country in the *j*th period |
| *eij* | is the *i*th trading partner’s currency rate per peso in the *j*th period |
| *Pij* | is the *i*th trading partner’s price differential with the Philippines in the *j*th period |

The indices below are computed using the given formulas:

Trading Partners Index (TPI)

The TPI measures the average nominal and real effective exchange rates of the peso across the currencies of the 14 major trading partners of the Philippines, namely: United States, Japan, Euro Area, Australia, China, Singapore, South Korea, Hong Kong, Malaysia, Taiwan, Indonesia, Saudi Arabia, United Arab Emirates, and Thailand. It provides an indication of the net direction of the peso’s exchange rate against our major trading partners.

Trading Partners Index – Advanced Countries (TPI-A)

The TPI-A measures the effective exchange rates of the peso across currencies of advanced countries that are included among the major trading partners of the Philippines. These advanced countries consist of the United States, Japan, Euro Area and Australia. The TPI-A provides information on how the peso, as a whole, is faring against currencies of trading partners in highly industrialized economies.

Trading Partners Index – Developing Countries (TPI-D)

The TPI-D measures the effective exchange rates of the peso across 10 currencies of developing economies that are part of the major trading partners―China, Singapore, South Korea, Hong Kong, Malaysia, Taiwan, Indonesia, Saudi Arabia, United Arab Emirates, and Thailand. The TPI-D measures the overall value of the peso relative to the currencies of these developing countries.