



## **Indonesian Rupiah as viewed in terms of PPP**

**Yusuke Inoue**  
**Economist**

[inoue@iima.or.jp](mailto:inoue@iima.or.jp)

**Economic Research Department**  
**Institute for International Monetary Affairs (IIMA)**

### **1 . Sagging exchange rates despite favorable real economy**

Indonesia, with a population of about 240 million and rich endowment of natural resources, is one of the countries that are expected for the high growth in the world. Even in 2009 when the world economy was seriously hit by the impact of the Lehman Shock and most of the other ASEAN countries suffered from a negative growth, it achieved the highest growth in Asia after China and India, supported by robust domestic demand. Since 2010 Indonesian economy has been growing at an annual rate of more than 6%, led by strong private consumption and fixed capital investment. Entering in 2013, the economy started to show a sign of somewhat slowing, but Bank Indonesia, the central bank, still expects the economy will grow at least at a lower end of 6.2~6.6% range during the year in the statement of the Board of Governors Meeting in May.

Although the real economy shows a favorable growth, the exchange rate of the Indonesian rupiah has been on a softening trend since 2012. The rupiah fell against the US dollar to become the weakest currency in 2012 after the Japanese yen and the Brazilian real among the major and emerging currencies and it continues to fall since the start of 2013.

**Table 1 Ups and Downs of Major Emerging Currencies against the US Dollar(2012)**

| Currency         | Percentage change in 2012 | Currency           | Percentage change in 2012 |
|------------------|---------------------------|--------------------|---------------------------|
| Polish Zloty     | 10.3                      | Malaysian Ringgit  | 3.5                       |
| Korean Won       | 8.2                       | Thai Baht          | 3.1                       |
| Mexican Peso     | 7.8                       | Indian Rupee       | ▲ 3.7                     |
| Philippine Peso  | 6.3                       | South African Rand | ▲ 4.5                     |
| Singapore Dollar | 5.8                       | Indonesian Rupiah  | ▲ 6.3                     |
| Turkish Lira     | 5.4                       | Brazilian Real     | ▲ 9.9                     |

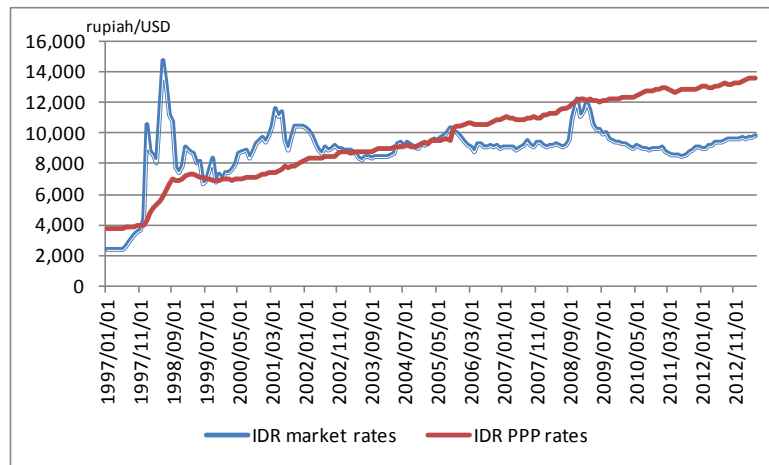
(Source) Compiled by the author from data of DataStream.

## **2. Overvalued Rupiah in view of PPP**

In this paper, I will discuss the present level of the market exchange rate of the rupiah in comparison with its purchasing power parity (PPP) with 2005 as a base year, which reflects inflation differentials between the US and Indonesia. The reasons why I chose 2005 as a base year are; the current account surplus of Indonesia was less than 1% of Indonesia's nominal GDP in that year; the exchange rate of the rupiah remained stable at a level of low volatility that reflected a relatively good supply and demand balance that developed in the several years after the financial turmoil caused by the Asian financial crisis and the burst of IT bubbles. In the analysis based on the PPP, the valuation of the current level, whether it is overvalued or undervalued, depends a lot on the choice of the base year. However, in the case of the Indonesian rupiah, its depreciating trend against the dollar does not change regardless the base year since the inflation rate of Indonesia always exceeds that of the US.

The current exchange rate of the rupiah against the US dollar is at an overvalued level as compared to the PPP (Chart 1). The PPP rates and market rates were more or less in line with each other for a while after the market rate plummeted by the Lehman shock, but the market rates have been appreciating significantly higher than those in PPP. In a longer term, the market rates were on an appreciating trend in the period of the latter half of 2005 to mid 2008 and from March 2009 to the first half of 2011.

**Chart 1 Market rates and PPP rates of the Rupiah/US dollar**



(Note) Consumer Price Indices for the US and Indonesia are used for inflation rate in computing the PPP.

(Source) Compiled by the author using the data from Bank Indonesia, Statistics Indonesia and U.S. Bureau of Labor Statistics.

### **3. Developments of the Balance of Payments and Monetary Policy that Affect the Rupiah's Exchange Rate**

The balance of payments development and the monetary policy of Indonesia are considered to be responsible for this wide differential between the market rate and PPP rate. The exchange rate of the rupiah tends to be highly influenced by the development of the international capital flows since Indonesian authorities restrict financial transactions with speculative purposes. As stated later, Bank Indonesia puts more emphasis on stabilizing the exchange rate of the rupiah and as its statements suggest, it has been intervening in the market, which also appears to have had an impact on the market exchange rates.

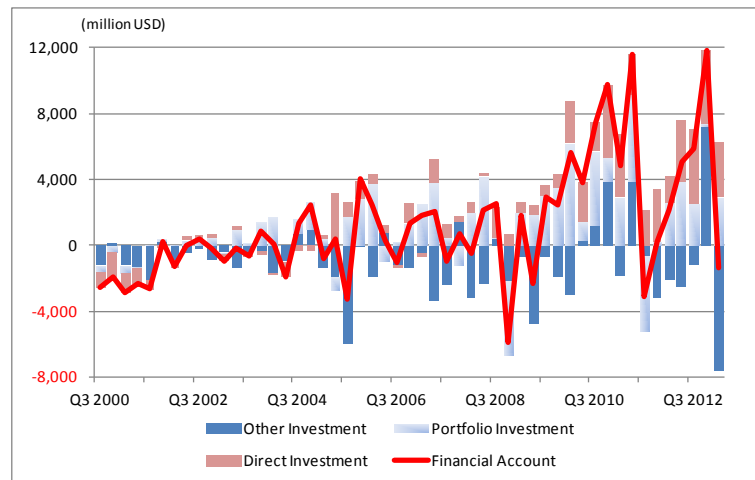
In the two periods when the market rates of the rupiah appreciated higher than the development of the PPP, it was a common factor that the financial accounts recorded a large surplus centering on the portfolio investments (Chart 1, Chart 2). The time when the rupiah rose against the US dollar largely overlapped the time when there was a rise in risk-taking sentiment by the investors against the background of stronger expectations for recovery in the world economy, inducing a big capital inflow into Indonesia seeking for higher investment returns in Indonesian assets. Particularly, in the recent phase of the recovery of the world economy, interest rates in major developed countries were reduced across the board to an historical low level, increasing the attractiveness of Indonesia as an investment destination. This accelerated

inflow of capital to Indonesia, pushing the rupiah's exchange rate to a higher level.

In 2012, however, the rupiah faltered despite the continued large surplus of financial accounts. This is accounted for by the fact that the current account balance turned into a deficit in October-December of 2011 from the surplus in general in previous years, caused by a rapid reduction of trade surplus. The trade surplus was reduced due to a high level of imports that reflected strong domestic demand and substitution of exports to domestic demand as well as falling prices of Indonesia's export commodities. The current account deficit offset the surplus on the financial account, thus weakening the pressure on the rupiah to appreciate. This is one reason why the rupiah tended to soften despite the globally rising tolerance for risk-taking and a large surplus of financial flows to Indonesia. (Chart 3)

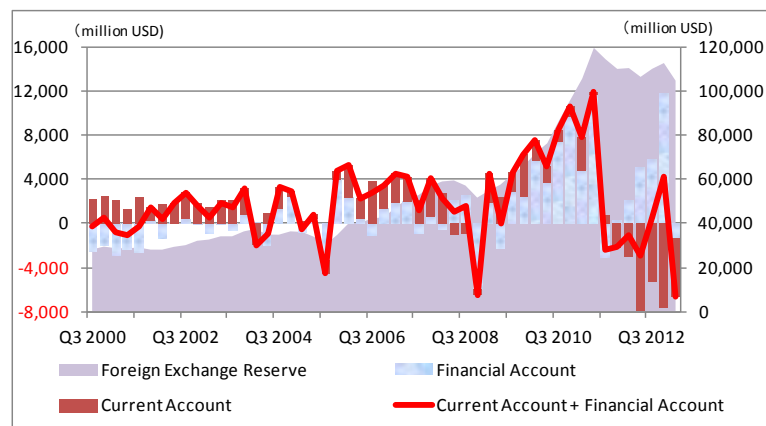
In addition, there will also be an influence of the intervention of the central bank which maneuvers to induce a modest depreciation of the rupiah to address the change trend of the current account. In August 2012, Bank Indonesia and the government jointly announced coordinated measures to cope with the rising current account deficit. According to the press release of the Bank, it said it would take steps to stabilize the rupiah in accordance with its fundamental conditions, raise the deposit facility rate and manage credit growth by strengthening the implementation of the loan to value. On the government side, it would aim to strengthen the competitiveness of domestic industries while curbing imports through deregulation of trade and change of taxation system. Even before the announcement, Bank Indonesia had suggested that it would intervene in the exchange market to stabilize the rupiah to a level in line with the economic fundamentals, and it still maintains that stance, using the similar expressions repeatedly in the statements issued after the Board of Governors Meetings. Although in Indonesia a floating exchange rate system has been adopted, there is actually a possibility that, in order to reduce the current account deficit, the Bank keeps intervening in the market when the rate moves up away from the gradual depreciation trend, while letting the rupiah depreciate along with the inflation rate that reflects the real economic activities.

**Chart 2 International Financial Flows of Indonesia**



(Source) Compiled by the author based on the data of Bank Indonesia

**Chart 3 Balance of Payments and Foreign Exchange Reserves in Indonesia**



(Source) Compiled by the author based on the data from Bank Indonesia

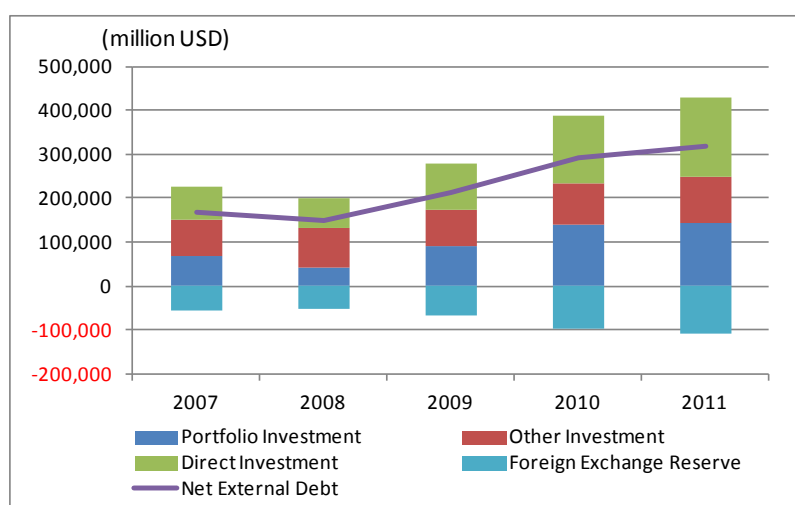
#### 4. Concerns over the Fragility of the Rupiah against External Shocks

A current account deficit means a dependence of its finance on external funds. Therefore, countries with current account deficits tend to have high risks on the possible external shocks. The efforts of Bank Indonesia together with the government to manage the problems of the current account deficit can be seen as representing its acknowledgment of the risks that the imbalance of those external flows implies. Looking back, the appreciation of a currency that was caused by large capital inflows, not to mention the case of the rupiah, was adjusted by an external shock. In Indonesia, not only the currency got a big adjustment after the transition to a

floating rate system triggered by the Asian financial crisis and the following political disturbances, but also its appreciation of late 2005 to early 2008 was adjusted in the aftermath of the Lehman shock. Current level of the exchange rate of the rupiah in PPP, however, suggests that the market rate tended to be largely overvalued especially in the period of March 2009 to the first half of 2011, reflecting the large capital inflows (surplus on the financial account) which were influenced by monetary easing in the developed countries. More recently, market was saddled in May-June 2013 with a triple plunge of shares, bonds and foreign exchanges, owing to the capital outflows triggered by an emerging prospect of winding-down of quantitative easing of the US monetary policies. These risks will continue to stay in the time to come.

Even in terms of stock analysis the rupiah is fragile in its tolerability to external shocks. Although its foreign exchange reserves increased as compared to the level at a time of the Lehman shock, its net external debts are also on a rise, with no noticeable improvement in the external position. (Chart 4) The foreign exchange reserve is again on a declining trend since late 2011, causing some anxiety to the authorities and market. (Chart 3)

**Chart 4 Indonesia's Net External Debts**



(Note) Net external debts are expressed in plus, and foreign exchange reserves in minus.

(Source) Compiled by the author from the IMF data.

## 5. Conclusions

In the economic recovery phase after the Lehman shock, the Indonesian rupiah's exchange rate significantly appreciated against the US dollar, influenced by large inflows of foreign

capital centering on portfolio investment. The appreciation caused the rupiah's differential against the Purchasing Power Parity to widen. Since October-December 2011, however, upward pressure on the rupiah has been somewhat mitigated as Indonesia shifted to a current account deficit country where the surplus on financial account was offset by the current account deficit. Reflecting this shift of the international flows, Bank Indonesia makes it clear that it has been intervening in the market to stabilize the rupiah's exchange rate at around the level in line with the fundamental development of its inflation rate and thus narrow the current account deficit. Therefore, if the depreciation of the rupiah proceeds at a moderate pace like now and within the range of the authorities' intention, there will be no need to apprehend much about its depreciation.

Taking into account the level of overvaluation of the market rates as compared to the PPP, however, there cannot be ruled out a possibility that the rate will depreciate more rapidly than the present moderate pace once an external shock were to happen. In order to avoid such an occasion, the government authorities should continue to strengthen the policy management directed toward inviting sound balance of payment flows including the reduction of the current account deficits. In this regards, it was a positive and welcome action that the government decided to cut the fuel subsidies which had been a factor to deteriorate the current account. It is strongly hoped that the government authorities will continue to take more adamant policies to improve the investors' confidence while managing inflation appropriately.

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Address: 3-2, Nihombashi Hongokucho 1-Chome, Chuo-ku, Tokyo 103-0021, Japan  
Telephone: 81-3-3245-6934, Facsimile: 81-3-3231-5422  
〒103-0021 東京都中央区日本橋本石町 1-3-2  
電話 : 03-3245-6934 (代) ファックス : 03-3231-5422  
e-mail: [admin@iima.or.jp](mailto:admin@iima.or.jp) URL: <http://www.iima.or.jp>