Giving the BSP an Extra Mop: A Response to Short-Term Capital Inflows

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Introduction

A combination of low interest rates in advanced countries, relatively high domestic interest rates and a general perception of sound economic fundamentals—confirmed in early 2013 by a credit upgrade to investment grade—has led to a surge of short-term capital inflows or portfolio investments into the Philippines in the last three years, and a reasonable expectation of even more. The resulting upward pressure on the value of the peso has given rise to concerns regarding its inimical effects on output and resource allocation. While short-term inflows are asserted to generate an expenditure boom (in consumption and in real property and residential housing), this is expected to be temporary and highly vulnerable to “sudden reversals”, often leading to ruptured bubbles and financial crises. In contrast, the resulting erosion of the export sector’s competitiveness due to both actual and anticipated peso appreciation is expected to have lasting, adverse structural effects on the economy, particularly, on the composition of output, as current investment shun tradables in favor of non-tradables.
How then should monetary policy respond? The BSP has fittingly intervened in the foreign exchange market by dampening the peso appreciation brought about by such inflows, as evidenced by the rapid buildup of its international reserves. This action of the BSP suggests that it also places importance on the composition of output besides inflation, which we believe is the correct stance (see for example, Blanchard et al., 2010). However, this expansion of the BSP’s international reserves results in excess liquidity in the banking system, which could have resulted in higher inflation, had it not been for the “mopping up” of excess liquidity by the BSP—mainly through the special deposit account (SDA) and, to some extent, the reverse repo agreement (RRA).5 The SDA, in particular, has entailed a huge interest expense, which has run down the BSP’s capital, in view of a very high initial interest rate that far exceeds the interest earnings of reserve assets. As a consequence, the BSP has become highly leveraged in the last three years. This means that for as long as short-term capital inflows continue to buffet the economy, the BSP could be trapped in a Catch-22 position: without adequate capital in its balance sheet, the BSP would only be able to continue to conduct its “lean-against-the-wind” policy by further incurring even more debt liabilities. But surely, a heavily indebted monetary authority will be hard put to maintain its independence and credibility.

The BSP is in this present quandary because it has to counter the spillover effects of massive short-term capital financial inflows into the domestic financial system resulting from quantitative easing in advanced economies.6 The BSP’s monetary policy dilemma stems from the conflict between its commitment to inflation targeting, which it is striving to maintain through costly “mopping up activities” and the necessity of also safeguarding financial stability that is threatened by currency appreciation and potential asset price bubbles in the face of such inflows. The question then is: how can a satisfactory balance be struck between price stability and financial stability? In addition, what alternative monetary tools can the BSP use for an effective monetary policy in this current global financial environment?

In the succeeding discussion, we note one glaring fact: the BSP is facing a dwindling reservoir of capital. Thus, in order for it to conduct its normal monetary operations effectively and maintain its independence and credibility, the BSP needs a fresh injection of capital into its balance sheet. In more colorful terms: the BSP requires an extra mop!

5 The SDA is a special facility where banks can make deposits with the BSP; whereas the RRA is one in which the BSP sells securities with the agreement that it would repurchase them within a short period of time.

6 This phenomenon is not peculiar to the Philippine economy. Other Asian emerging market economies (EMEs) are also experiencing a similar upsurge of financial inflows.
Macroeconomic Effects of Short-Term Capital Inflows

The last three years have seen a surge of capital inflows, the bulk of which have been consistently channeled into portfolio investments. For instance, at its peak in 2010, portfolio inflows were recorded at $7.2 billion, whereas the corresponding foreign direct investment (FDI) inflows were only $1.3 billion. In 2012, while portfolio inflows reached $4.7 billion, FDI was only $2 billion. Since portfolio investments are volatile and subject to “sudden reversals,” this type of capital inflow renders the financial sector vulnerable to financial crises because of its effects on the exchange rate and other asset prices, which in turn, affect exports, aggregate consumption and investment.

On the Exchange Rate and the Exports Sector

The resulting buildup of foreign currency brought about by an increase in short-term capital inflows triggers a real peso appreciation. Indeed, in the left panel of Figure 1, we observe a declining real exchange rate (RER) beginning in 2004 between the Philippines and three of its biggest trading partners, namely, Japan, China and the U.S. This indicates a real peso appreciation vis-à-vis the corresponding currencies of these countries. We particularly note that in the last three years, there has been a steep peso appreciation against the US dollar. The same patterns of real appreciation can be observed in the bilateral RERs of the Philippines against S. Korea, Hong Kong, Singapore, Macau and the other Asian EMEs (see right panel of Figure 1).

Figure 1.
Bilateral RERs of the Philippines and Its Major Trading Partners, 1990 - 2012

Source: World Bank Database

9 The appreciation of the peso is also attributed to the upward trend of remittances and incomes earned from the business process outsourcing sector. However, the observed exchange rate volatility can be largely ascribed to the surge of portfolio investments in the last three years.
10 A reduction in the RER denotes a peso appreciation while an increase denotes peso depreciation.
The problem with an appreciating peso is that it erodes the competitiveness of the exports sector in the world market. As expected, the left-hand panel of Figure 2 shows a negative relationship between the cyclical components\textsuperscript{11} of net exports and the nominal effective exchange rate (NEER) of the Philippines during the period 1998-2011, indicating that a peso appreciation (an increase in NEER) reduces net exports. This is corroborated by the scatter diagram (see right panel), where a negatively-sloped regression line is fitted for the same period. The corresponding correlation coefficient between net exports and NEER is estimated to be -.40 for the sample period. These clearly suggest that a nominal appreciation hurts the exports sector as a whole, in spite of the presence of industries that tend to rely heavily on imported intermediate inputs, which are rendered cheaper by an appreciation.

\textit{Figure 2.}

\textbf{Cyclical Components of NEER and Net Exports of Goods, 1998-2011}

As the manufacturing sector contributes a large share to total goods exports, we expect the share of manufacturing in GDP to decline during periods of currency appreciation due to a loss of competitiveness. Indeed, Figure 3 shows that during the last three years of a steep peso appreciation, the average share of manufacturing has shrunk in relation to its average share before the global financial crisis in 2008. In contrast, the last three years have seen marked increases in real estate renting and business activities, while the percentage share of construction in GDP increased by 7.2 percent between 2011 and 2012. As is also expected, percentage shares of financial intermediation have been on an upward trend due to the continuous inflow of financial capital into the domestic financial market.\textsuperscript{12}

\textsuperscript{11} Cyclical components are derived using the Hodrik-Prescott filter.

\textsuperscript{12} Note: the peso appreciation is just one factor causing the decline of manufacturing. Others are market and institutional failures which affect manufacturing more adversely. See Rodrik (2008).
On Asset Prices

An increase in short-term financial inflows, which leads to an increase in the demand for peso assets—in particular, stocks and equities—by non-residents is expected to increase stock prices. Indeed, Figure 4 shows that following the global financial crisis in 2008, the Philippine Stock Exchange index (PSEI) has been on a steep rise to a height unprecedented in the last two decades. The correlation coefficient between financial inflows and PSEI is 0.55, suggesting that a large part of the inflows goes into the stock market.

Focusing on the monthly stock market index of the property sector, we observe that the series has been trending upward in the period following the 2008 global financial crisis (see Figure 5). The stock market property index increased by 64 percent between January 2012 and February 2013. We also note a very steep increase in the index beginning the latter part of 2012. This underscores the importance of constant vigilance against the onset of a housing price bubble, the bursting of which has potentially far-reaching and longer-lasting inimical effects. We believe that the BSP’s emphasis on macroprudential rules, such as a ceiling on exposure of banks to real estate is appropriate.
On Consumption and Investment Booms

An increase in short-term capital inflows—and thus, periods of peso appreciation especially in floating exchange rate regimes—is expected to be associated with a spending boom due to easier credit and the increase in wealth from higher stock and real estate prices. Figure 6 presents the cyclical components of private and public consumption, investment on capital formation and the peso-dollar exchange rate. We observe an interesting pattern: it seems that the periods when the exchange rate is above trend largely coincide with the periods when public consumption is below trend and vice-versa. This can be indicative of two things: one, an increase in public spending raises the domestic interest rates through increased borrowing and supports a stronger currency; or two, a stronger currency induces the government to borrow cheaply from the outside. We favor the latter interpretation that supports the negative correlation between the cyclical components of public consumption and the peso-dollar exchange rate. The pattern for private consumption is not as pronounced, as this might be largely driven by the inflow of remittances.

Focusing on the last three years, the peso-dollar exchange rate has been below trend, indicating currency overvaluation. Meanwhile, public consumption was above trend from 2009 to 2012, while private consumption was below trend in the same period. In 2012, public consumption was about 6.8 percent above trend, which is a harbinger of the onset of a government spending boom.

Figure 5. Philippine Stock Exchange Index (PSEI) and Financial Account Inflows, 1988-2012

Sources: BSP Database

Figure 6. Consumption, Investment and Exchange Rate Cycles, 1998-2012

Sources: PIDS Database and IFS
In contrast, investment in capital formation plunged from about 11 percent above trend in 2011 to a measly 1.6 percent above trend in 2012. The correlation coefficient between the cyclical components of investment in capital formation and the peso-dollar exchange rate is 0.39, corroborating the assertion that a peso appreciation diverts resources away from more productive, capacity-building activities. That investment has been on a downtrend since 2011 in spite of the huge influx of financial capital, suggests structural deficiencies and a lack of investment opportunities that prevent the use of the easy credit brought about by such substantial inflows.

Monetary Policy Implications

The BSP has been intervening in the foreign exchange market in order to dampen the appreciation of the peso and, consequently, its inimical effects on exports and growth. This is clearly observable in the precipitous rise in international reserves, especially during the last couple of years. The top left panel in Figure 7 shows that international reserves doubled from ₱1,782.75 billion in 2008 to ₱3,412.71 billion in 2012.

To abort any inflationary pressure due to excess liquidity generated by its own intervention in the forex market, the BSP has mainly exploited the SDA as a “mopping up” facility. The middle left panel in Figure 7 shows that the SDA has dominated the deposit liabilities of the BSP in the last four years. From 2008 to 2012, SDA liabilities more than quadrupled from ₱402.4 billion to ₱1,700.75 billion. Moreover, the left panel of Figure 8 illustrates that the BSP’s net interest loss has blown up in the last three years. For instance, the highest net interest income loss amounted to ₱50 billion in 2011, with a corresponding total interest expense of ₱95.63 billion. Even though interest expenses declined in 2012, it was still a huge amount at ₱83.70 billion—about ₱65 billion of which are interest expenses from SDA liabilities alone!

Lower the SDA rate further. Clearly, the SDA facility is causing the BSP to incur a huge amount of interest liabilities, which could become a huge bill for taxpayers. Moreover, it is effectively sopping up resources that should have been diverted to more productive endeavors, and is rewarding banks for abandoning their intermediation role. Indeed, because it offers a more secure and higher rate of return, SDA deposits increased from ₱1.8 trillion to ₱1.9 trillion between January and February even when the BSP reduced the SDA rate from 3.23 percent to 3 percent (see Table 1). Moreover, because commercial banks can also park excess reserves in the SDA, the BSP is essentially paying interest on excess reserves, which CB Circular No. 753 has declared to be non-remunerable. This constitutes a huge transfer of resources to the already very affluent members of society.
Figure 7.
Assets and Liabilities of the BSP, 2001-2012

Note: 2012 Figures from January to November
Source: BSP Database
As much as abolishing the SDA seems appealing, it does not seem prudent to do so at this time, for fear of a real estate bubble. It should thus suffice to lower the SDA rate to drastically reduce the BSP’s interest liabilities. This would also serve to discourage banks from accumulating “lazy assets”, which they can instead employ to increase loans to the more productive sectors in the economy. For it to be binding, the SDA rate would have to remain slightly above the T-bill rate of comparable maturity.

This then begs the question: what other recourse is available to the BSP to mop up excess liquidity? Three alternatives seem to fit: (1) issuance of central bank (CB) bills, which is an option favored in the IMF Country Report No. 13/102; (2) borrowing of T-bills from the Treasury; and (3) raising of the required reserve ratio. The first option, however, requires legislative reform, which could create its own political problems and impinge on the BSP’s independence. But even if it were allowed, there is no guarantee it will not result in a bailout using taxpayers’ money, as did the Jobo bills. The second option, while useful as a stopgap measure during emergencies, can create the same problems of monetary dependence and moral hazard. The third option appears to be more viable because it would be without the encumbrance of additional interest liabilities for the BSP.

Table 1.
SDA, RRP Rate, IBCL Rate and the SDA Rate

<table>
<thead>
<tr>
<th></th>
<th>SDA (in million pesos)</th>
<th>RRP Rate (in percent)</th>
<th>IBCL Rate (in percent)</th>
<th>SDA Rate (in percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 2012</td>
<td>1,718,097</td>
<td>4.4100</td>
<td>4.5395</td>
<td>4.5320</td>
</tr>
<tr>
<td>February 2012</td>
<td>1,705,495</td>
<td>4.2500</td>
<td>4.3924</td>
<td>4.3494</td>
</tr>
<tr>
<td>March 2012</td>
<td>1,574,656</td>
<td>4.0000</td>
<td>4.1882</td>
<td>4.1182</td>
</tr>
<tr>
<td>April 2012</td>
<td>1,587,307</td>
<td>4.0000</td>
<td>4.1809</td>
<td>4.1033</td>
</tr>
<tr>
<td>May 2012</td>
<td>1,627,458</td>
<td>4.0000</td>
<td>4.1156</td>
<td>4.0993</td>
</tr>
<tr>
<td>June 2012</td>
<td>1,570,203</td>
<td>4.0000</td>
<td>4.1405</td>
<td>4.0970</td>
</tr>
<tr>
<td>July 2012</td>
<td>1,774,815</td>
<td>3.9600</td>
<td>4.0700</td>
<td>4.0300</td>
</tr>
<tr>
<td>August 2012</td>
<td>1,778,074</td>
<td>3.7500</td>
<td>3.8828</td>
<td>3.7969</td>
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<tr>
<td>September 2012</td>
<td>1,824,353</td>
<td>3.7500</td>
<td>3.8464</td>
<td>3.8250</td>
</tr>
<tr>
<td>October 2012</td>
<td>1,654,256</td>
<td>3.5000</td>
<td>3.8215</td>
<td>3.7830</td>
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<tr>
<td>November 2012</td>
<td>1,699,246</td>
<td>3.5000</td>
<td>3.6144</td>
<td>3.5880</td>
</tr>
<tr>
<td>December 2012</td>
<td>1,638,489</td>
<td>3.5000</td>
<td>3.6200</td>
<td>3.5800</td>
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<tr>
<td>January 2013</td>
<td>1,803,042</td>
<td>3.5000</td>
<td>3.5700</td>
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<tr>
<td>February 2013</td>
<td>1,915,706</td>
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<td>3.2000</td>
<td>3.0000</td>
</tr>
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<td>March 2013</td>
<td>1,868,057</td>
<td>3.5000</td>
<td>2.7629</td>
<td>2.5900</td>
</tr>
</tbody>
</table>

13 The argument is that abolishing the SDA at this time would only divert investments into real estate.
14 As a case in point, the share of loans made by universal and commercial banks to manufacturing declined from 18.2% in January 2012 to 16.9% in January 2013 (see BSP SEFI 2013).
15 This is also done in other countries like the US. See, for instance, Blinder (2010).
16 Jobo bills are central bank bills similar to treasury bills issued during the term of the then Central Bank of the Philippines Governor Jacobo “Jobo” Fernandez.
Recapitalize the BSP. As an offshoot of its ballooning deposit and interest liabilities, the BSP has become highly leveraged, which means that it is largely acquiring assets (mainly international reserves) through borrowed funds. In the middle right panel of Figure 7, we observe that the BSP's leverage ratio—defined as the ratio of its total assets to net worth or capital—has risen sharply in the last three years. This is because the BSP's capital has dwindled sharply from ₱239 billion in 2009 to ₱58 billion in 2012 (see middle right panel of Figure 7). From 2011 to 2012 alone, the BSP's capital plummeted from ₱140 to ₱58 billion. The lack of capital implies that the BSP will be implementing policy and sterilizing liquidity by getting into deeper debt. A debtor central bank, however, does not bode well for an independent and credible monetary policy. Should there be a fresh infusion of capital into the BSP, in order to strengthen both monetary independence and its capacity to conduct open market operations? Although the national government transferred ₱20 billion in 2012 and ₱10 billion more is slated to be transferred to the BSP in accordance with its 1993 amended charter,\(^7\) we argue that given the rapid rate at which the BSP has been depleting its capital in the last four years, even more capital has to be transfused into the BSP's balance sheet. The problem here is the same as with a highly leveraged central bank: independence. Can a BSP that has to be periodically rescued by the Treasury be independent? Furthermore, would not this relationship create a moral hazard problem?

The BSP is thus in this costly predicament since it has to mop up excess liquidity in the financial system to prevent higher inflation. Excess liquidity in the financial sector is, in turn, due to the buildup of international reserves, which itself is an offshoot of the BSP's intervention in the forex market to prevent the peso from further appreciating and further harming exports and destabilizing the financial sector. In turn, a stronger peso is partly engendered by the influx of portfolio investments, which is a spillover effect of monetary policy in advanced economies.

\[\text{Figure 8.}\]
Income and Expenses of the BSP, 2001-2012

\(^7\) The 1993 amended charter of the BSP provided for a ₱50-billion transfer from the national government to be part of the BSP's capital reserves. ₱10 billion was turned over in 1993, while another ₱10 billion was transferred in 2011. In December 2012, another ₱20 billion was given. Thus, only ₱10 billion of the ₱50 billion in the charter's provision remains to be transferred.
What then can be done in order to stem the onslaught of short-term capital inflows?

**Exit towards an interest corridor.** An interest corridor has the central bank’s lending rate as the ceiling rate, its borrowing rate as the floor rate and the BSP’s key policy rate and other short-term market interest rates—such as the interbank call loan (IBCL) rate—floating in between. The following are some of its key advantages:

1. **Speculation deterrence.** Following the Turkish experience, the interest corridor can be used to discourage “hot money” or portfolio investments from flowing into the economy. This can be done by strategically widening the interest bandwidth downwards to create a “corridor of uncertainty,” within which there can be short-term interest rate volatility to deter speculators from coming in.

2. **Policy flexibility.** Adopting an interest corridor expands the BSP’s array of monetary tools to pursue other macroeconomic objectives, such as financial stability and exchange rate stability in an environment of global financial integration, while keeping its commitment to price stability.

There has been evidence that the BSP is already on the move towards an interest corridor. For one, as a supplement to the interest corridor, it has been streamlining reserve requirements in accordance with CB Circular No. 753. For another, the BSP has been reducing the SDA rate. This series of reductions has been taken as a signal that the BSP is planning to use the SDA rate as the floor rate. For the most part, however, SDA deposits have responded contrariwise to reductions in the SDA rate (see Table 1). Even as the SDA rate was reduced a number of times from March to November in 2012 and from January to February in 2013, SDA deposits still increased. Also, the SDA rate has a longer holding period—such as two weeks or a month—which can render monetary policy less flexible, when compared to an overnight borrowing rate that can be maneuvered on a daily basis. In line with our preceding arguments, the SDA rate would have to be lowered further with a corresponding shorter maturity option, if it were to become the effective floor rate.

Moreover, for the interest corridor to be operational, the BSP requires securities with which it can conduct open market operations to influence short-term interest rates. Going back to the bottom right panel in Figure 7, however, we note that domestic securities net of RRAs have been negative for the last three years. In order to keep the key policy rate within the interest corridor, the BSP would have to stand ready to either buy or sell securities—which it does not adequately have. Thus recapitalizing the BSP would go a long way in enabling the BSP to expand its domestic assets.

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18 For a more detailed discussion of the Turkish experience, see Kara (2012).
The Bottom Line

In its quest to safeguard financial stability and exchange rate stability (by keeping the peso from appreciating excessively) in the face of huge short-term capital inflows—the BSP has to pay an exorbitant price (in terms of interest expenses and income losses on forex fluctuations\textsuperscript{19}) to fulfill its commitment to price stability. Yet this is a price that has to be paid in order to help prevent the further erosion of the export sector’s competitiveness vis-à-vis the rest of the world. Preventing this is critical in light of the accounts on the exports-led growth of the Asian tigers in the 1990s. Moreover, keeping the peso from further appreciating will keep the peso value of remittances from further declining, which should be of primary concern, given the observation from the past decade on how remittances can drive investments in human capital and keep the economy afloat during times of crises.

The bottom line is that the BSP has done its level best within its self-imposed ambit of inflation targeting in keeping its inflation target and pushing back peso appreciation these past three years and, in so doing, has earned credibility and political goodwill. However, for it to continue conducting independent monetary policy and to effectively adapt to the ever-changing landscape of the global financial system, the BSP requires a fresh set of tools. One is just more money in the form of additional injection of capital—over and above the ₱10-billion mark that the national government still owes it. This has its own problems of independence erosion and presenting taxpayers with a huge bill. Meanwhile, some of these tools may carry it farther and farther away from orthodox inflation targeting. The BSP Governor has stated that BSP is not contemplating capital controls. He did not say it is ruled out. That is the right stance: no instruments even outside the usual toolbox should be summarily ruled out.

References


\textsuperscript{19} See the right panel of Figure 8.

