

Monetary Policy Approaches and Implementation in Asia: The Philippines and Indonesia*

Roberto S. Mariano and Delano P. Villanueva**
Singapore Management University
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“For those emerging market economies that do not choose a policy of ‘permanently’ fixing the exchange rate—perhaps through a currency board or dollarization, the only sound monetary policy is one based on the *trinity of a flexible exchange rate, an inflation target, and a monetary rule.*” (italics in the original, Taylor, 2000)

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**Roberto S. Mariano is Vice-Provost for Research and Dean of the School of Economics and Social Sciences (SESS) at Singapore Management University (SMU). Delano P. Villanueva is Visiting Professor, SESS, SMU, and a former member of the faculty of the IMF Institute and former Research Director of the South East Asian Central Banks (SEACEN) Research and Training Centre. We thank Diwa Guinigundo, Deputy Governor and Dennis Lapid, Monetary Policy Research Group, Bangko Sentral ng Pilipinas, Halim Alamsyah, Office of the Governor and Wiwiek Sistowidayat, Monetary, Fiscal and Financial Sector Team, Bank Indonesia, and Peter Kriz for invaluable inputs. Remaining errors are our sole responsibility.

I. Introduction

The last fifteen years have seen extensive use of monetary policy approaches that are rules-based, but with considerable judgments factored in.¹ This invited paper is about current monetary policy approaches and implementation in the Philippines and Indonesia. For each of these two countries, the paper attempts to address the following list of issues:

- What are the objectives/intermediate targets/instruments?
- How are these determined? Are institutional arrangements appropriate to ensure that the stated objectives are achieved? Is the central bank independent? De facto as well as de jure?
- Do the deeds of the central banks correspond to their words? For instance, do estimates of reaction functions or other measures of the actual actions of the central bank correspond to what it claims to be doing?
- What provides the nominal anchor in the country? How are the issues of fiscal dominance and exchange rate dominance dealt with?
- How effectively does the central bank communicate with the public? By what means? Do readily available reports and a web site provide adequate information?

Section II describes recent trends in monetary policy. Section III addresses the five issues listed above. We describe for the Philippines and Indonesia the evolution of the monetary policy of the monetary policy transmission process as financial development progressed and external conditions changed over time. We also discuss the effects of these factors on the monetary policy implementation strategy. Section IV concludes.

¹ For a collection of references, see John Taylor's Monetary Policy Home Page (<http://www.stanford.edu/~johntayl/PolRulLink.htm>).

II. Preliminaries: Modern Monetary Policy

Taylor (1998) enumerates five broad macroeconomic principles that underpin modern monetary policy. This core of macroeconomic principles provides the rationale behind all the structural econometric models that have been estimated or calibrated to evaluate monetary policy.

The first principle is stated by the neoclassical growth theory: long-run per capita GDP growth is a function of capital intensity and technology, which are both endogenous functions of economic policy. The second and third principles, respectively, are that in the long run there is no trade-off between inflation and unemployment, but that in the short run, there is such a trade-off. Whether the short-run trade-off is due to sticky prices, cost shocks, or imperfect information is an open issue. The second and third principles imply that, although monetary policy is neutral in the long run, it can have powerful effects on unemployment in the short run. The quantitative effect is an open issue, depending on the theoretical reasoning behind the impact effect.

The fourth principle is that people's expectations about the economy affect the evaluation of monetary policy, and these expectations are endogenous to monetary policy changes (and to other policy changes). Optimal monetary policy is endogenous to underlying institutions and behavior of economic agents.

The fifth principle is implied by the first four: the central bank should announce a target inflation rate and describe a rule to be followed such that inflation will remain close to the target. It is not enough to target inflation or engage in inflation targeting.²

² This principle implies that nominal income targeting is not a policy rule in the absence of a process by which policy instruments are adjusted to achieve a nominal income target.

Research on monetary policy rules has focused on the United States and other developed countries, whose debt and foreign exchange markets are very deep and sophisticated. The use of rules-based monetary policy is now increasingly being used in emerging market economies, and the question is being raised as to what modifications need to be made for the effectiveness of modern monetary policy in those economies. Taylor (2000) lists 5 issues: (1) What is the appropriate instrument in the policy rule? (2) What is the appropriate specificity in the policy rule? (3) What is the relationship of the policy rule to inflation targeting? (4) What are the implications of underdeveloped long-term bond markets for the choice of a policy rule? and (5) What is the role of the exchange rate in the policy rule?

(1) What is the appropriate instrument in the policy rule?

Taylor (2000) mentions velocity uncertainty as ruling in favor of the interest rate instrument. While the interest rate is most commonly used by central banks of industrial countries, its usage is not universal. In the U.S. and other developed countries, a short-term interest rate (in the U.S. it is the federal funds rate; at the ECB it is the rate of the main refinancing operations, MROs). The Philippines uses the overnight repurchase rate (RP) and reverse repurchase rate (RRP), complemented by open market operations, reserve requirements, and rediscounting. He also lists the following factors favoring the use of a monetary aggregate instrument: (i) the measurement of the real interest rate is difficult; and (ii) there are large shocks to investment or net exports. If the interest rate is used under conditions of uncertainty about the equilibrium real interest rate, policy

errors are very likely.³ Indonesia used base money until July 2005, after which it shifted to the Bank Indonesia interest rate.⁴

(2) What is the appropriate specificity in the policy rule?

A common misconception is that policy rules are applied mechanically. True, such rules are often expressed as algebraic expressions; as such, they can be subject to econometric evaluation. Nevertheless, policy rules are generally used as policy frameworks or guidelines and in practice are not followed mechanically.⁵ Discretion is exercised when examining data on prices, industrial output and other variables in order to forecast the current inflation rate and the real output gap (real GDP measured as deviation from potential GDP). Likewise, there are special circumstances when a temporary departure from the policy rules is warranted.⁶ However, one important specificity of the policy rule is the size of the interest rate response to an increase in the inflation rate, as advocated by Taylor: changing the interest rate by more than one for one with the inflation rate is consistent with both theoretical and empirical research in the United States.⁷ The stable inflation episode in the U.S. in the 80s and 90s when the interest rate response was greater than one for one contrasts sharply with the high inflation episode in

³In countries with very high inflation rates and high and variable risk premia, the real interest rate is hard to measure. In addition, at any moment of time, emerging market economies are unlikely to be in their steady-state, being continuously buffeted by exogenous shocks of all sorts; accordingly, the steady-state or equilibrium real interest rate is difficult to determine and measure.

⁴ Singapore uses the trade-weighted nominal exchange rate index (TWI) as the policy instrument, reflecting the argument “that in the small and open Singapore economy, the exchange rate is the most effective tool in maintaining price stability.” Monetary Authority of Singapore (2001). For an estimate of the policy reaction function for Singapore, see Parrado (2004).

⁵ See Bernanke (2004) for a discussion on forecast-based and simple policy rules.

⁶ For example, the 1987 stock market tumble prompted the U.S. Federal Reserve to temporarily lower interest rates by providing liquidity, at a time when the pre-1987 monetary policy was one of raising interest rates, to which the Fed returned following the resolution of the liquidity crisis. This framework is consistent with the risk-management approach espoused by Greenspan (2005). The challenge is to reconcile a forecast-based targeting regime with the risk-management approach. One can argue that Singapore’s approach is such an example.

⁷ The Taylor response coefficient is 1.5.

the late 60s and 70s when the interest rate response was less than one. The response coefficient may be 1.4 or 1.6 and not exactly 1.5, but the general point is that, to be an effective policy rule, the response coefficient must be greater than one.

(3) What is the relationship of the policy rule to inflation targeting?

An inflation target embedded in a good policy rule means an average value for inflation over several years.⁸ Achieving such an inflation target, however, may be achieved with several policy rules that involve larger fluctuations in other important variables such as the exchange rate and/or real output. Therefore, one needs to specify a monetary rule and to choose one that minimizes the standard deviation of real output and inflation from their desired values. Whether there should be weights placed on exchange rate stabilization, interest rate stabilization, or something else is open to debate. Tradeoff exists among these deviations, and a good policy rule assists the policymaker in choosing the point on this tradeoff.⁹

(4) What are the implications of underdeveloped long-term bond markets for the choice of a policy rule?

Inflation targeting is an alternative to a currency board or to dollarization. Some discussions on inflation targeting (e.g., in Indonesia) suggest that inflation targeting is an alternative framework to monetary targeting. In Indonesia, with difficulties associated with the interest rate as an instrument, the previous practice of using reserve money as a policy instrument to achieve the inflation target may be more appropriate.¹⁰

⁸ For example, a target mean value of 2% with a 1% standard deviation anywhere from 6 quarters to 3 years.

⁹ This variance tradeoff replaces the old Phillips curve.

¹⁰ Refer to footnote 3 for reasons why reserve money may be superior to the interest rate as a policy instrument in Indonesia.

(5) What is the role of the exchange rate in the policy rule?

Inflation forecast targeting requires a good econometric model and an experienced staff (e.g., Bank of England) to enable the policymakers to determine the consistency between their interest rate decisions in influencing the forecast inflation and thus to see how close (or far) such an inflation forecast from the target value in the future (say, in 4 or 8 quarters). Owing to the difficulties in implementing inflation forecast targeting in many emerging markets, simple monetary policy rules using current inflation rates may be the practical alternative to inflation-forecast targeting.¹¹ Simple targeting can also be a stepping stone to inflation-forecast targeting.

Expectations of future changes in the policy instrument affect financial markets and the rest of the economy. For those monetary policy approaches that use the interest rate as the policy instrument, expectations of future short rates influence long rates right away via term structure effects. Thus, because monetary policy rules affect expectations, the explicit use of a monetary policy rule is the single, critical decision than any change in any of the policy instruments.¹² The other implication of expectations effects is the inertial response of the policy instrument to the inflation and output gap; such a slow adjustment of the policy instrument increases the responsiveness of forward-looking variables such as long-term bonds and exchange rates.

In countries without liquid and deep financial markets and where term structure effects are absent or weak, changes in the exchange rate or land price may influence the

¹¹ This assessment, however, is a bit exaggerated. In the real world, monetary policy rules involving the current quarter (year) requires at least a one-quarter (one-year) ahead forecast for inflation.

¹² The 1999 Bank of Japan's zero interest rate policy 'rule' brought expectations of future short rates to zero and was consistent with the BoJ's expansionary thrust of monetary policy.

private sector's future expectations.¹³ Moreover, in countries (such as the Philippines) where the interest rate is used as the policy instrument, and in sharp contrast to situations (such as the U.S.) where term-structure effects are strong, more adjustment in the short-term markets must take place. Thus, larger adjustments in the short-term interest rate are called for.¹⁴

While research on developed countries appears to suggest that omitting the exchange rate in the policy rule is not such a big deal, it is an important consideration in the policy rule applied to the developing countries or in countries that are highly open (such as Singapore). An explicit manner in which the exchange rate enters the policy rule is its use as the policy instrument in the policy reaction function.¹⁵ Another way is that the instrument explicitly places weight on the exchange rate when trying to achieve the objectives. The inertial response of the exchange rate to the inflation and output gap can be captured by the inclusion of the lagged value of the exchange rate on the right-hand side of the policy reaction function.¹⁶

III. The Main Issues

A. The Philippines

The Evolution of the Monetary Policy Approach and Implementation

From the birth of the Bangko Sentral ng Pilipinas (BSP) in 1993 until the adoption of formal inflation targeting (IT) in 2002, BSP employed the IMF monetary

¹³ In Singapore, the development of the government securities market is fairly recent. Singapore being a small and highly open economy in which the exchange rate has quantitatively larger effects than the interest rate, the policy instrument used is the trade-weighted nominal exchange rate.

¹⁴ Meaning that the response coefficients of the inflation and output gaps should be higher. Herein lies the danger when the banking system is fragile—a large increase in the interest rate may lead to financial collapse.

¹⁵ The exchange rate affects both inflation and output gap via effects on net exports, on domestic prices through import price pass-through, and on interest rates (through interest rate parity).

¹⁶ See Parrado (2004) for the estimation of such a policy reaction function for Singapore.

programming framework. Actually, monetary programming had been used since 1984 when the then Central Bank of the Philippines (CBP) shifted to a floating exchange rate regime. More precisely, the monetary policy framework revolved around base or reserve money programming. This monetary policy approach was consistent with the International Monetary Fund (IMF) financial programming module of a tight linkage among money, real GDP, and inflation, given forecasts of income velocity or the demand for real money balances.¹⁷ As Guinigundo (2005) suggests, the shift from monetary programming to IT can be explained more in terms of instability in the income velocity of money and the structural break in the positive relationship between money and inflation, particularly in short periods of time, such as in 1994 and 1995 when historically rapid growth rates of money supply and a deceleration of inflation were observed.

In the second half of 1995, rigid observance of money targets gave way to inflation targets. As long as inflation was below or at the target level, BSP tolerated money supply in excess of the programmed level. At the same time, BSP looked at a wide array of economic and financial variables in making monetary-policy decisions. Nonetheless, the semi-IT framework was based on current inflation, as opposed to forecast inflation.¹⁸

¹⁷ The IMF financial programming and policy (FPP) is under revision, beginning with the 1998 program with Brazil following that country's adoption of IT and a flexible exchange rate regime. Note that the standard IMF FPP assumes a fixed exchange rate, exogenous capital flows, and a prominent role of the money supply in the inflation process. The standard ceiling on net domestic assets (NDA) of the banking system and a floor on net international reserves (NIR) are typical quantitative performance criteria in any IMF-supported adjustment program. In the case of the 1998 Brazilian arrangement, in the 6th review of November 2000, the ceiling on NDA was dropped. With direct inflation targeting, a value of NDA in excess of the ceiling did not present any difficulties as long as the inflation outcome is on target and the understanding on the NIR is met. Included in the policy understandings was a consultation clause on the implementation of the IT framework, with a specific numerical path for the inflation rate.

¹⁸ Refer, however, to footnote 9.

In addition, the new Central Bank Act of 1993 (Republic Act No. 7653) assigned price stability as the objective of monetary policy and empowered the BSP as the sole formulator and executor of monetary policy. The new Act also imposed limits on the amount and maturity of BSP credits to the National Government, with the intended effect of minimizing fiscal dominance.

The Monetary Board, the monetary policy-making body of the BSP, formally adopted IT in January 2000, and its formal implementation came two years later in January 2002. The average inflation targets (in percent), respectively, for 2002-2007 are:

<u>Year</u>	<u>Targets</u>	<u>Actual</u>
2002	3-4	3.0
2003	3-4	3.5
2004	4-5	6.0
2005	5-6	
2006	4-5	
2007	3-4 ¹⁹	

The actual inflation rates for the first two years of IT (2002-2003) were lower than the targets, reflecting falling food prices and restrained monetary policy. However, for exactly the opposite reasons, rising food and energy prices contributed 4 percentage points of the 6 percent average inflation rate in 2004. When inflation forecasts of the BSP suggested higher than targeted inflation in 2004 and 2005 owing mainly to supply-side factors, the BSP informed the public via press releases, the Quarterly Inflation Report, press conferences and public briefings the reasons for those breaches of the

¹⁹ Indicative target taken from the Medium-Term Development Plan. The BSP Governor has not formally announced a target for 2007.

targets as well as the policy measures undertaken by the BSP in light of its forecast of subdued inflation by 2006, downside risks to economic activity, and long and variable lags (15-21 months) in the effects of monetary policy on inflation.²⁰

The Issues

1. What are the objectives/intermediate targets/instruments?

The BSP's main responsibility is to formulate and implement policy in money, banking and credit, with the primary objective of maintaining stable prices conducive to balanced and sustainable economic growth. The BSP also aims at promoting and preserving monetary stability and the convertibility of the Philippine peso.

The BSP uses the consumer price index (CPI) or headline inflation, published by the National Statistics Office, as its monetary policy target, expressed as a range for a given year and set by the National Government in coordination with the BSP.

The BSP uses the overnight repurchase rate (RP) and reverse repurchase rate (RRP) as the main instrument of monetary policy. This is complemented by open market operations, the minimum legal reserve requirements, and rediscounting.

2. How are the objectives determined? Are institutional arrangements appropriate to ensure that the stated objectives are achieved? Is the central bank independent?

De facto as well as de jure?

The inflation target is set by the National Government (NG), and the target-setting process is based largely on the existing framework for coordination among economic agencies under the Development Budget Coordinating Committee (DBCC), an inter-agency body tasked mainly to oversee the overall budgetary thrusts of the NG. The

²⁰ Although the policy rates were kept unchanged, the liquidity reserve requirements were raised by 2 percentage points in February 2004 to neutralize the inflationary impact of exchange rate depreciation.

DBCC, in coordination with BSP, sets the annual targets for macroeconomic variables, particularly GNP and GDP growth and inflation, which are important inputs in the formulation of the revenue, expenditure and financing programs of the NG. The BSP announces the inflation target and is accountable for conducting monetary policy consistent with the target.

Although the BSP does not have goal independence (the inflation target is set by the NG), it does have operational and instrument independence. BSP solely decides on the setting of the policy instrument. The BSP also enjoys both fiscal and administrative autonomy under Republic Act No. 7653, which specifies very clearly limits on the amount and tenor of any liquidity assistance by the BSP to the National Government. The BSP may provide assistance to the NG in the form of provisional advances but the amount of such advances is limited in terms of both duration and amount. Section 89 of R.A. No. 7653 states that “the BSP may make direct provisional advances with or without interest to the National Government to finance expenditures authorized in the annual appropriation: provided that such provisional advances shall not, in their aggregate, exceed 20 percent of the average annual income of the National Government for the last three (3) preceding fiscal years”. These advances must be repaid “before the end of three (3) months, extendable by another three (3) months as may be allowed by the Monetary Board following the date the National Government received such provisional advances.”

R. A. No. 7653 focuses on price stability as the overriding objective of BSP and makes no mention of growth or any other objective pertaining to the real sector. In addition, BSP’s administrative autonomy is guaranteed by the Philippine Constitution. In

contrast to the old Monetary Board that was dominated by public sector representatives, the new and current Monetary Board is composed of the Governor, one Cabinet member, and five private sector representatives.

An Advisory Committee (AC) was created by the BSP to make recommendations to the Monetary Board on monetary policy. The AC consists of: (1) BSP Governor (Chairman); (2) Deputy Governor of the Monetary Stability Sector; (3) Deputy Governor of the Supervision and Examination Sector; (4) Director of the Treasury Department; and (5) Director of the Department of Economic Research. The AC meets every four weeks and held its first meeting on 15 January 2002, when it recommended reductions in BSP policy interest rates and in the liquidity reserve requirement ratio.

3. Do the deeds of the central bank correspond to its words? For instance, do estimates of reaction functions or other measures of the actual actions of the central bank correspond to what it claims to be doing?

There are no estimates of the reaction functions. It appears that the policy rule is based on forecast inflation and the output gap. The decisions of the Monetary Board concerning the stance of monetary policy have been primarily based on the forecast for inflation, along with information on the conditions for output and aggregate demand.²¹ However, there have been instances where excessive volatility in the foreign exchange market has compelled the BSP to take action in order to prevent adverse effects on

²¹ The BSP currently employs two inflation-forecasting models, one a single equation and the other a multiple equation. These models produce monthly forecasts of inflation up to 24 months. The single equation model is based on Mariano (1998). To complement these two models, the BSP is developing an annual structural macroeconomic model incorporating the BSP's view of monetary policy transmission.

inflation expectations. This has led some observers to ask whether the central bank is pursuing dual goals of price and exchange rate stability.²²

For the BSP, however, its mandate is clearly price stability and under the inflation-targeting framework, it pursues only an inflation target. Inasmuch as exchange rate movements generate imported inflation, the BSP believes that policy actions to address exchange rate volatility are not inconsistent with the goal of achieving the inflation target. Exchange rates figure more prominently in emerging economies given the greater sensitivity of their domestic prices to exchange rate movements.

Monetary action (e.g., changes in BSP policy interest rates or reserve requirements) to address volatility in the foreign exchange market is considered only in cases where the BSP believes there is a significant prospective threat to the inflation target and to inflation expectations. In all cases, the primary concern of authorities is the future path of inflation, not the value of the currency against the US dollar.

4. What provides the nominal anchor in the country? How are the issues of fiscal dominance and exchange rate dominance dealt with?

Republic Act No. 7653 provides safeguards against fiscal dominance in the form of prescribed limits to the extent of financial assistance National Government.²³

Exchange rate stabilization posed some problems for the conduct of monetary policy under inflation targeting, given the extent of exchange rate volatility observed over the past few years and the need to guide inflation expectations in the face of such volatility. In the end, monetary authorities relied on both their judgment as well as on the information at hand.

²² See Gochoco-Bautista (2001).

²³ See preceding paragraph.

Generally speaking, however, the BSP supports a market-determined level for the exchange rate and does not target a specific spot exchange rate against the US dollar. On a day-to-day basis, intervention in the spot market is done only to smooth out sharp fluctuations in the exchange rate and ensure orderly conditions in the foreign exchange market at all times.

5. How effectively does the central bank communicate with the public? By what means? Do readily available reports and a web site provide adequate information?²⁴

The BSP also publicly documents and explains any breaches of the inflation target. In instances when average annual inflation deviates from the targeted band, the BSP Governor issues an *Open Letter* addressed to the President of the Philippines. The *Open Letter* explains the sources of deviation of actual inflation from the target inflation path and measures that will be undertaken to help achieve the desired inflation path over the policy horizon. Open Letters to the President have been issued on 16 January 2004 and 18 January 2005.

The BSP has a number of disclosure and reporting mechanisms to help the public monitor better its commitment to achieving the inflation target.

- Quarterly Inflation Report (which serves as a monetary policy statement)
- Press releases at time of interest rate voting (done every four weeks)
- The Highlights of the Meeting of the Monetary Board on Monetary Policy (lag of six weeks).

²⁴ Eichengreen (2005, Ch. 8) describes the features of transparency: (i) announce the inflation target; (ii) publish inflation forecast and (iii) describe model linking central bank policy instruments to inflation outcomes. If target is missed, central bank explains why in its Inflation Report. Central bank and government have discretion over inflation targets, but such discretion is constrained by the targets, forecasts, and model that central bank announces and publishes.

– Speeches by Governor and other senior BSP officials through public presentations and information campaign. The BSP conducts regular public information presentations on inflation targeting in various Philippine cities every month. The BSP also holds regular press conferences as additional venue to explain its inflation outlook and its monetary policy response. The Quarterly Inflation Report is launched with a press conference, usually at the last Friday of the month following the reference quarter.

In its web site, <http://www.bsp.gov.ph/news/2005-10/news-10202005a.htm>, the BSP made this announcement:

“20 October 2005

BSP Raises Key Policy Rates

At its meeting today, the Monetary Board decided to increase the BSP’s policy interest rates by 25 basis points to 7.5 percent for the overnight borrowing or reverse repurchase (RRP) rate and 9.75 percent for the overnight lending or repurchase (RP) rate.

The Monetary Board noted that the latest BSP forecasts, which incorporate more recent data on inflation, output and other key variables, indicate a possible breach of the inflation target in 2007, due to possible second-round effects coming from supply-side pressures. Equally important, the possibility of a sustained deviation of the forecast from the target over the policy horizon poses a considerable risk to inflation expectations, in that the public may begin to expect inflation to remain persistently well above announced government targets. Because monetary action normally requires 15-21 months to take full effect on inflation, policy measures undertaken now will help address the risks to inflation and inflation expectations in the coming year and in 2007.

An added concern is the continued rapid growth in domestic liquidity. Available data suggest that the financial system remains very liquid despite the recent increase in the policy rate and the reserve requirements, and that the additional liquidity in recent months has been fueled by both foreign exchange inflows and by the deposit generation activities of banks.

In summary, the Monetary Board believes that the need for a timely response to expected pressures, the risk of a sustained breach of the inflation target and the continued presence of excess liquidity in the financial system, provide the impetus for monetary action. Recent policy moves have contributed to making the overall policy stance less accommodative. However, the evidence suggests that this action was necessary. This monetary action will not only address the risks to inflation and inflation expectations but also clearly demonstrate the BSP’s commitment to its price stability mandate.”

Clearly, the BSP's exercise of transparency is commendable. In addition to policy change announcements, the BSP web site that we accessed on 24 October 2005 includes descriptions and analyses of IT, highlights of Monetary Board meetings on monetary policy issues (25/08/2005), An Official Core Inflation Measure for the Philippines, Primer on Core Inflation, and the BSP Inflation Report (2nd quarter, 2005).

Fiscal Dominance and other Issues

There remains the issue of fiscal dominance. The problem lies in the excessively large stocks of public debt and fiscal deficits (e.g., see Mariano and Villanueva (2005)), the non-performing loans of the banking system, and the potential or near insolvency of important state enterprises. The latter involves contingent fiscal liabilities that may be difficult to quantify but nevertheless may be fairly substantial. In the event, the effectiveness of monetary policy is reduced.²⁵ In this context, Walsh's (2003) summary presentation of the fiscal theory of the price level is worth mentioning. This controversial theory says that the government outstanding nominal debt is a major determinant of the price level, however independent and committed a central bank may be to price stability as the primary goal. The fiscal theory of the price level basically argues that the price level is endogenously determined by the fiscal solvency constraint: A widening of the fiscal deficit lowers the present value of future government surpluses. Just as a company's stock price falls when future profits are expected to decrease, the real

²⁵ The three prerequisites for a successful inflation targeting are: (i) central bank independence; (ii) absence of fiscal dominance; and (iii) presence of clear transmission channels from monetary policy instruments to market-determined interest rates. In the Philippine case, (i) and (iii) are satisfied. However, (ii) is problematic, particularly the large contingent fiscal liabilities implied by nonperforming loans in the banking system, and the ongoing large fiscal deficits that the central bank might be pressured to finance (despite the legal prohibition or limits).

value of government debt would decrease when the revenue flows to repay government bond holders are expected to decline. For the government's real debt to decrease, the price level has to go up. According to the fiscal theory of the price level, it is not the non-interest bearing money but the total nominal liabilities including interest-bearing notes and future fiscal surpluses that matter for price-level determination. In the absence of fiscal discipline, an independent central bank such as the BSP cannot guarantee a stable nominal anchor. In other words, for BSP to successfully focus on price stability there must be a credible commitment by the National Government to reduce total fiscal deficits by a meaningful amount.²⁶

The whole idea behind inflation targeting is that by committing credibly to a low and stable inflation target, a central bank could lower inflationary expectations for the future. Fiscal dominance makes this impossible, by not allowing the central bank much control over those expectations. In simple terms, why would firms lower their inflationary expectations when they know that large fiscal deficits and borderline unsustainable external debt positions essentially corner the monetary authority into an untenable position? Knowledge of such a cornered monetary policy will result in one-sided bets. Remove the twin dangers of monetization the debt and the risk of creating inflation through devaluation, and inflation targeting has a shot. Fiscal authorities can do a lot by signaling on deficit reductions in the future, especially if backed up by certain institutional moves that can engender credibility.

The other relevant issue is the health of the domestic banking system. Here, there remains a relatively high level of non-performing loans, and the practice of risk-

²⁶ For the European central bank to focus on price stability, the EMU's Growth and Stability Pact restricts member countries' fiscal deficits. Of course, breaches of the fiscal understandings by France and Germany underscore the difficulties enforcing fiscal commitments.

management in commercial banking and in bank oversight is not yet widespread. Even in a textbook model with a redundant banking sector, price stability should not be the only target for central banks. The literature is clear on this. What is unclear is how economic microstructure suggests other variables to have in the loss function. But clearly, jacking up interest rates without regard to the damage it may cause to financial intermediaries or the big firms that may control the economy may lead to perverse effects as described by Blanchard (2004). Also, hiking interest rates when the fiscal side is out of control may generate stagflation.

The combination of weak financial systems, high and "threatening fiscal issues" and problems along institutional dimensions means that higher interest rate moves may actually increase inflation (a perverse effect), as higher interest rates might actually precipitate a currency crisis by way of causing financial collapse. Here, our feeling is that U.S. Federal Reserve Chairman Alan Greenspan, a long time champion of the risk management approach, or his successor Ben Bernanke, a long time champion of formal inflation targeting, would demand fiscal and structural reforms. Without such reforms, monetary policy can only do so much--much like a good jockey on a bad horse.

While the BSP may be perceived as successful in their IT now, it should be (a) sending a clear signal that the fiscal imbalances must be taken care of, (b) that structural reforms should continue, and (c) that financial sector reforms should be pushed ahead aggressively. Without these, and with the return of global inflation, the BSP may find that their apparent successes were a mirage.²⁷ For inflation-targeting emerging market economies, given (i) the deflationary force of China's recent developments, (ii)

²⁷ Philippine domestic interest rates are much higher than foreign (U.S.) interest rates, reflecting expected exchange rate depreciation and risk premia. We conjecture that the expected exchange rate depreciation is closely related to the unsustainable fiscal and external debt positions.

globalization and (iii) increased sophistication of modern monetary policy in controlling inflation, the efficacy of IT used in small open economies is an open question, i.e., how to decompose the fall inflation—how much is due to global prices and interest rates.

Inflationary Expectations

What matters for inflation expectations have to do with forecasts of productivity, the exchange rate, competitiveness, and future government spending. If the Philippines were growing at a fast clip with inflation under control, high productivity, strong peso, and structural and institutional reforms all moving along nicely, then the degree to which fiscal deficits and large debts would limit the effectiveness of inflation targeting or any other rule-based approach could be reasonably small. If those spigots dry up, we could expect to see something like a repeat of 1997-1998 (when all the skeletons got exposed).

The U.S. can run fiscal deficits of 4-5% of GDP right now. Why? This is perceived as temporary. Productivity is very high. The U.S. dollar is used as reserve and invoicing currency, and is gaining value against the euro and yen. The U.S. has both credible monetary policy and a super-sound financial system. Even so, many top monetary economists think that the U.S. is approaching dangerous levels of current accounts and fiscal deficits. If this much can be said of the US, what can be said about the Philippines? We argue that the large fiscal deficits and unsustainable external debt levels pose far riskier scenarios for the Philippines.

BSP's concern with the exchange rate pass-through effects on inflation makes the Philippines closer to Singapore. But the procedure and the mechanics are quite different. Whereas the Philippines uses the policy interest rates as instruments, Singapore uses a trade-weighted basket of currencies and adjusts the nominal exchange rates based on

what the Monetary Authority of Singapore thinks it should achieve in terms of external competitiveness and inflation (Monetary Authority of Singapore, 2001).²⁸

B. Indonesia

The Evolution of the Monetary Policy Approach and Implementation²⁹

In the past, the framework for conducting monetary policy was based on monetary programming using base money as the operational target. This was in conjunction with past IMF-supported adjustment programs wherein base money targets were used as indicative targets or as performance criteria, together with the other monetary targets set for the Net International Reserves (NIR) and the Net Domestic Assets (NDA).

In the mid to late 1990s, and for similar reasons as in the Philippines, i.e., instability in velocity resulting from global financial innovations and deregulation, the tight link between reserve money on the one hand, and inflation and growth on the other became very tenuous. Thus, a gradual shift to IT was launched *pari passu* greater flexibility in the exchange rate (widening the band), with more attention since July 2005 to interest rates as policy instruments replacing changes in reserve money.

During the crisis of 1997, the crawling band exchange rate regime was abandoned, and the rupiah was floated. The massive depreciation of the rupiah had dramatic adverse effects on the real economy, shrinking real GDP by 13.2 percent in 1998, collapsing the banking system, and leading to corporate bankruptcies and high rates of unemployment. Following this massive rupiah depreciation, BI raised short-term interest rates sharply. This combination proved fatal to the banking and real sectors, resulting in more corporate bankruptcies and increased non-performing loans in the banking system.

²⁸ In fact, it would be interesting to estimate a policy reaction function for the Philippines using the nominal exchange rate instead of the RP or RRP rate as the policy instrument.

²⁹ This section draws heavily from Alamsyah (2001).

Reacting to these developments, BI exercised its lender-of-last resort function and injected massive liquidity into the banking system to prevent bank runs. Reserve money and broad money, respectively, increased by 115 percent and 68 percent from November 1997 to July 1998. The excessive money creation exerted further pressure on the exchange rate, and thus on prices. The inflationary impact of money supply expansion and of the rupiah depreciation created a vicious cycle that, if left unchecked, threatened to lead to hyperinflation (which Indonesia had experienced in the distant past). Therefore, BI decided to reabsorb the excess liquidity in the financial system through the active deployment of all the policy instruments at its disposal. Net domestic assets of the BI were to be frozen, and a floor on net international reserves was established as performance criteria under an IMF-supported stabilization program. In addition, large penalties were imposed on the use of the BI discount facility. To minimize adverse selection and moral hazard problems, BI imposed ceilings on bank deposit and interbank rates (with the effect of placing ceilings on bank lending rates).³⁰ The 1999 Central Bank Law provided the legal groundwork for BI to adopt IT as an alternative monetary policy framework. When the rupiah was floated, Taylor's trinity kicked in, and inflation-targeting with a monetary rule was adopted.

³⁰ In the presence of asymmetric information, a rise in the lending rate leads to a contraction in the volume of bank loans. The low-credit risk customers withdraw from the credit market, leaving the high-credit risk clients on the demand side. On the supply side, owing to the higher probability of default when interest rates rise, banks would refuse to extend loans to these high-credit risk customers, resulting in a dramatic shrinkage of bank credit with the consequent adverse effects on investment and growth.

The Issues

1. What are the objectives/intermediate targets/instruments?

A major change in the conduct of monetary policy in the aftermath of the crisis was the new Bank Indonesia Act (No. 23/1999 as amended by Act No 3/2004) that gave full autonomy to BI in the formulation and implementation of monetary and banking policies. As stipulated in the new Act, the main objectives of BI are to achieve and maintain the stability of the rupiah--meaning low and stable inflation, and stable exchange rates. Since the beginning of 2000, BI has adopted inflation targeting as the monetary policy framework. The monetary policy framework is not a formal inflation targeting (IT) framework, but rather one with an explicit inflation target. To achieve this target, Bank Indonesia is still using the base money as the operational target (policy instrument), at the same time monitoring various aggregates as well as interest rates.

The BI inflation target is based on a 'core' CPI. For 2000 and 2001, the target was set for the CPI excluding the impacts of government administered prices and incomes policy. The inflation targets were 3-5 percent for 2000 and 4-6 percent for 2001. BI produced forecasts of the impacts of administered prices and incomes policy on inflation in the order of 2 percent and 2-2.5 percent, respectively for 2000 and 2001. Adding these two, the BI forecasts for the headline CPI inflation were 5-7 percent and 6-8 percent, respectively for 2000 and 2001. For 2002, in light of difficulties in communicating 'core' inflation with the public, the (headline) inflation target was set in the range of 9-10 percent. In addition to this annual target, since 2002 BI has announced its commitment to bring inflation down to 6-7 percent within five years as a medium-term target.

With an amendment to the BI act in early 2004 and upon BI recommendation, the Government has set annual and medium term targets for CPI inflation for 2005, 2006, and 2007 of 6% (plus or minus 1%), 5.5% (plus or minus 1%), and 5% (plus or minus 1%), respectively. These targets were formulated in the context of a gradual disinflation process with the objective of achieving over the long term a target of 3% that is deemed competitive with rates prevailing in other emerging market economies.

Through July 2005 the policy instrument used by BI was base money. Owing to the difficulties of controlling base money, from July 2005 BI began to use the BI Rate as the policy instrument.

2. How are these determined? Are institutional arrangements appropriate to ensure that the stated objectives are achieved? Is the central bank independent? De facto as well as de jure?

Act No. 23/1999 gave the BI independence in both setting the inflation target (goal independence) and in conducting its monetary policy (instrument independence). But since 2004, the new central bank Act No. 3/2004 empowered the government to set the inflation target upon taking into account BI's recommendation.

A clear mechanism for accountability and transparency of monetary policy is outlined in the new Act. BI is required to announce its inflation target and plan of monetary policy in the beginning of the year and to provide a quarterly report to the Parliament on its conduct of monetary policy.

Nevertheless, the road towards a credible monetary policy has not always been easy for BI. Conditions in Indonesia make monetary policy a complex task. The economy and the financial system are undergoing difficult restructuring processes.

Inflation has been affected mostly by higher administered prices, exchange rate depreciation and heightened inflationary expectations. The exchange rate has been driven by the level of market confidence toward sociopolitical developments and the slow progress of the economic and financial restructuring programs. Monetary policy has been made more difficult by the lack of a smooth-functioning transmission mechanism arising from problems faced by financial intermediaries. With these problems and challenges, Indonesia's experience in recent years offers valuable lessons on how to enhance the credibility of monetary policy as well as on what the proper role of the central bank should be in nurturing the economic recovery.

3. Do the deeds of central banks correspond to their words? For instance, do estimates of reaction functions or other measures of the actual actions of the central bank correspond to what it claims to be doing?

There are no estimates of the policy reaction function. The experience of Bank Indonesia using inflation targeting with base money as operational target is less than favorable, owing to difficulties in controlling base money. There are at two preconditions for a successful use of base money as policy instrument. First, Bank Indonesia has the capacity to control base money with its own instruments. Second, public demand for base money is well predictable, and the relation between base money and inflation is stable; thus targeting base money means that Bank Indonesia is able to target inflation.

The unfavorable performance of base money control was largely attributable to the difficulty in predicting public behavior towards currency holding. After the crisis, there was a structural shift in the public demand for currency, making it difficult to view it solely in terms of the transactions and precautionary motives. Base money control

became more difficult under the fragile banking structure. Under such circumstances, raising the monetary instrument interest rate (SBI) to absorb currency into the banking system was often hampered by the low response of the deposit interest rate, so that the required interest rate increase must be quantitative larger.

This reality often posed a dilemma to BI in the implementation of monetary policy. On one hand, BI had to raise the interest rate to reduce the demand for base money. On the other hand, the high interest rate environment exacerbated the fragility of the banking system and the corporate sector, with consequent adverse effects on the real economy. Facing such a dilemma, it was difficult for BI to achieve the pre-determined base money target (Table 1).

Base money control was also difficult, when base money was far below the pre-determined target, as the experience in year 2002 showed. The attempt to stimulate base money growth was not effective when the banking sector was in a weak condition and the risks in the real sector were high. For as long as banks were not sound, additional economic liquidity through banks would just return to the central bank. Therefore, base money performance was largely affected more by demand conditions than by monetary policy.

The inflation record has been far from perfect. Inflation was above the target in 2000-2002 even though it could be maintained within the target in 2003 and 2004. For 2005 and 2006, inflation is forecast to be above the target. The recent inflationary pressures stem mainly from the increase in administered prices, depreciation of exchange rate, and rising inflation expectations. Bank Indonesia has responded with further tightening of monetary policy since the third quarter of last year, accompanied by direct

measures to stabilize the exchange rate and strengthen policy coordination with the Government to mitigate the impacts of administered prices and prices of volatile foods.

Table 1. Monetary policy framework performance

Year	CPI Target	Economic Growth Assumption	Base Money Growth Target	Rupiah Exchange Rate per USD (average)	Actual Base Money Growth	Actual CPI Inflation
2000	5.0 - 7.0%	3.0 - 4.0%	8.30%	8,238	23.40%	9.53%
2001	6.0 - 8.5%	5%	11.0 - 12.0%	10,255	18.30%	12.53%
2002	9.0 - 10.0%	3.5 - 4.0%	14.0 - 15.0%	9,353	9.30%	10.03%
2003	8.0 - 10.0%	3.5 - 4.0%	13%	8,593	10.30%	5.06%
2004	4.5 - 6.5%	4.0 - 5.0%	13.0 - 14.5%	8,940	15.14%	6.40%

Faced with difficulties in controlling base money, but with continued improvements in financial and economic conditions that are reinforced by significant progress in strengthening the monetary policy framework, BI is determined to take further steps to improve its monetary policy making consistent with the implementation of the Inflation Targeting Framework (ITF). The move is intended to strengthen the effectiveness and governance of monetary policy to achieve price stability under conditions of sustainable economic growth.

Key measures of the enhanced monetary policy framework focus on four main areas: (i) the move from base money to the BI Rate as operational target for monetary operations (policy instrument); (ii) enhanced decision making process consistent with forward looking strategy of directing current monetary policy response to achieve the inflation target; (iii) more transparent communication strategy to signal the stance of monetary policy and to guide private sector expectations; and (iv) strengthened policy coordination with Government to mitigate inflationary pressures stemming from

increased in administered prices and volatile food prices, as well as for better and concerted management of the overall economy.

4. What provides the nominal anchor in the country? How are the issues of fiscal dominance and exchange rate dominance deal with?

The nominal anchor for monetary policy is the medium term inflation target (Consumer Price Index = CPI) set by the government in September 2004. Based on the Ministry of Finance decree, the inflation targets for 2005–2007 are set in the ranges of $6.0\% \pm 1\%$, $5.5\% \pm 1\%$ and $5.0\% \pm 1\%$, respectively.

Article 56 of BI Act legally prohibits BI from extending credit to the government. In the meantime, similar to the Philippines, indirect fiscal dominance does exist, owing to fiscal deficits and the large stocks government external and domestic debt. Furthermore, the large stock of government domestic debt, with a coupon rate equal to the three-month SBI discount rate (Variable Rate Bond), has the effect of reducing BI independence in determining the SBI discount rate, particularly when the monetary policy stance requires an increase in the interest rate. Rupiah exchange rate depreciation, given the large stock government foreign debt, should also be minimized to avoid onerous local currency debt-servicing burden to the government. As in our commentary on the fiscal dominance issue in the Philippines, the current and future fiscal deficits that appear to remain heavy as measured by the large budget allocations for external and domestic debt services will indirectly limit BI independence in monetary policy implementation.

For an open economy such as Indonesia, the exchange rate affects inflation in a substantial way. For example, exchange rate depreciation raises inflation, reflecting the pass-through-effect of higher import price as well as expanded aggregate demand via

higher net exports. Besides, the public monitors exchange rate movements every day, so that the behavior of the exchange rate could simply be regarded as a key indicator of central bank performance.

Furthermore, owing to the large outstanding stocks of external obligations of the Indonesian banking and corporate sectors, exchange rate movements have magnified effects—not only on inflation and export competitiveness, but also on the servicing of external debt and thus on the future fiscal position, which could easily lead to another currency crisis, like in Mexico in 1994-95 and in Asia in 1997-1998.

According to BI, the IT framework still focuses on inflation, and meeting the inflation target is a priority. Exchange rate movements and their determinants are closely monitored. If an exchange rate depreciation is the result of changing portfolios, tighter monetary policy is implemented to prevent higher inflation. But if the depreciation is the result of a terms-of-trade shock, an easier monetary policy is implemented.³¹

Thus, Indonesians argue that it is difficult to include the exchange rate in the policy rule, without reviewing the factors behind the changes in the exchange rate. In this respect, BI excludes the exchange rate from its monetary policy response, but regards the exchange rate as one variable in the information set to monitor and evaluate before decisions are made on the required interest rate response.

5. How effectively does the central bank communicate with the public? By what means? Do readily available reports and a web site provide adequate information?

Communication and transparency are important in Indonesia where inflation expectations constitute a dominant determinant of inflation, along with the effects of

³¹ Communication with the BI Monetary, Fiscal, and Financial Sector Team.

administered prices, prices of volatile foods, and direct exchange rate pass-through. Moreover, inflation expectations in Indonesia have been mostly adaptive in nature, reflecting substantial inertia. The BI Act prescribes the mechanisms for BI to regularly convey its inflation targets and policy evaluation to the public. The single target of inflation is published at the beginning of each year and policy evaluation is regularly published.

The current communication strategy and transparency are implemented in press releases, speeches and Bank Indonesia officers' discussions with the public and economic observers, and quarterly reports to the House of Representatives (DPR). There are also several publications available such as monthly reports, quarterly reports, annual reports, financial stability reports, and research bulletins.

In addition, to enhance its communication strategy BI has introduced its 'Monetary Policy Report' since August 2005. This report contains an overall assessment of the quarterly Monetary Board meeting on recent economic and financial developments, inflation forecasts, and monetary policy responses required to bring inflation within target. Furthermore, BI intends to publish the decisions of Monetary Board meetings, its economic forecasting models, and a primer on monetary policy.

The BI web site <http://www.bi.go.id> is also available to the public. Although the web site remains in a developmental stage, the public can access all information relating to monetary policy, banking supervision and regulation, and payments system. There are future plans to improve the website to conform to those of other central banks that implement the IT framework. In enhancing its communication strategy, coverage and media, BI hopes to guide public expectations towards the inflation

target as well as improve BI credibility. However, the single objective has been focused on inflation.

The impact on the Philippine and Indonesian economies of the recent change in the exchange rate regime in China is considered to be minimal, owing to the small weight of the yuan to the currency basket used in calculating the Real Effective Exchange Rate (REER). The present course of both countries' monetary policy frameworks and their implementation will continue. However, with several estimates of undervaluation of the yuan ranging from 18% to 35% (Obstfeld and Rogoff, 2004), and should China revalue accordingly, it is an open question as to the impact on other countries in the region (likely appreciations, albeit considerably less than the Chinese appreciation).

Fiscal Dominance and other Issues

Much like in the Philippines, the large stocks of total (domestic and external) government debt in Indonesia make fiscal dominance an issue, despite outright prohibition of BI credits to the government (a stricter legal condition than in the Philippines).

Besides, there are unfavorable institutional and other issues. First, as Alamsyah et al (2001, p. 327) admit, "BI feels unable totally to ignore pressures from outside—for example, urging it to avoid raising interest rates too far." The BI budget is discussed and approved by Parliament. The Governor and Deputy Governor have to be confirmed by Parliament. These institutional procedures may at times hamper the ability of the BI to pursue an independent monetary policy and select its own reaction coefficients in its policy rule (e.g., the relative weights of the inflation vs. output gaps). Second, working

models for forecasting inflation remain in their infancy and “conclusive studies of the costs and benefits of choosing certain channels (the short-term interest rate) in preference to others still need to be undertaken in order to decide on the optimal operational (policy) instrument.” (Alamsyah, 2001, p. 328, parentheses ours). Third, there is confusion of monetary instruments. BI handles both its own instrument (SBI) and that of the government (bonds). Fourth, there may still be a need for instilling consistent monetary discipline, disclosure and transparency. And finally, until bank restructuring is totally completed and the banking system’s intermediary function fully restored, a full-fledged IT may have to wait.

IV. Conclusion

This paper has reviewed the monetary policy approaches and implementation in the Philippines and Indonesia. We addressed several issues relating to the objectives/intermediate targets/instruments, how these are determined, central bank independence, nominal anchor, fiscal dominance and other issues, and communication strategy and transparency.

The fiscal dominance remains an unresolved issue in both the Philippines and Indonesia. In the absence of fiscal discipline, an independent central bank such as the BSP cannot guarantee a stable nominal anchor. For BSP to successfully focus on price stability (and exchange rate stability) there must be a credible commitment by the National Government to reduce fiscal deficits and ultimately to achieve fiscal surpluses. The Indonesian case is even more unfavorable. Besides outside pressure on BI, the large stocks of domestic and external debt of the government exert relentless pressure on the

exchange rate and since the exchange rate figures prominently in price level determination, BI cannot guarantee a stable nominal anchor either.

The other issue relates to the health of the banking system. Here, the Philippines fares better than Indonesia. Nevertheless, interest rate actions could have perverse effects on inflation and output when non-performing loans are high and the practice of risk management in commercial banking and in bank oversight has not taken root.

Since expectations are crucial in the monetary policy transmission, the elimination of the fiscal deficits and a substantial reduction in the stocks of government debt are critical to influencing private sector's expectations.

We conclude that the top policy priority for both the Philippines and Indonesia is to implement without delay fiscal reforms (elimination of the budget deficits and move towards sustainable levels of government external and domestic debts) and financial sector reforms (particularly with regard to non-performing loans).³² Without such reforms, monetary policy can only do so much, and these two countries may find that their apparent successes in inflation-targeting were a mirage.

³² See Kriz (2004) and Chow, Mariano, and Tan (2005) on their recommendation for 'cascading liberalization'—joint financial and capital account reforms together with exchange rate flexibility.

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