

Shamshad Akhtar: The effectiveness of monetary policy in Pakistan

Speech by Dr Shamshad Akhtar, Governor of the State Bank of Pakistan, at the convocation of the Institute of Business Management, Karachi, 6 December 2008.

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A. Introduction

Economic policies aim to increase the welfare of the general public, and monetary policy supports this broad objective by focusing its efforts to promote price stability. Embedded in this objective is the belief that persistent inflation would compromise the long term economic prospects of the country. The objective of monetary policy in Pakistan, as laid down in the SBP Act of 1956, is to achieve the targets of inflation and growth set annually by the government. In pursuit of this mandate, SBP formulates the country's monetary policy that is consistent with these announced targets. In my remarks today, I plan to provide perspective on:

- First, why central banks focus on price stability?
- Second, how the monetary policy transmission mechanisms work?
- Third, what are the principal features of Pakistan's monetary policy framework?
- Fourth, selected thoughts on effectiveness of Pakistan's monetary policy framework
- Finally, what measures are needed to improve the effectiveness of the monetary policy framework in Pakistan?

These questions have been a subject of much debate lately, as monetary tightening – an inevitable policy response for regaining macroeconomic stability – has aroused anxiety but better public understanding of this question will help them to appreciate central bank's monetary policy stance.

B. Why focus on price stability?

Before getting into other intricacies of monetary policy, it is useful to bring forth the importance of price stability as an overriding objective of monetary policy. Actual inflation outcome in the economy is driven largely by the level of output gap (the difference between what the economy is demanding and what it can potentially produce) and inflation expectations. When the output gap widens, the actual output is more than what the economy can sustain in the long run with stable inflation. This reflects excessive demand for available resources in the economy, which pushes up general prices. In order to stem the increase in resource cost and the general price level in the economy, this gap needs to be narrowed or stabilized. This can be achieved by either reducing the demand in the short run or increasing the productive capacity over the medium to long run. Reducing aggregate demand, however, entails reduction in current output and an increase in the unemployment level in the economy.

The famous classical Phillips curve that captures the trade-off between stabilizing inflation and controlling unemployment was criticized by Phelps and Friedman in the late 1960s. They argued that if inflation expectations react to changes in actual inflation, then any trade-off between inflation and unemployment would be short-lived at best. If wages are set once a year and for some reason the output prices increase, then the producers have an incentive to increase their output by hiring more workers. However it is only possible if workers' expectations of inflation remain unchanged during the period of increase in output prices. If workers adjust their expectations in accordance with actual inflation and demand higher nominal wages, it leaves relatively little incentive for firms to increase the output.

Therefore the focus has shifted away from this trade-off and new consensus has emerged in the literature that price stability is key to long run growth prospects. Both theory and evidence suggest that monetary stimulus can only affect real economic activity in the short-run. In the long run, however, there is no conflict between low inflation and full utilization of economic resources. Ensuring price stability, in turn, requires effective management and anchoring of inflation expectations.

With stable prices, economic decisions can be made with less uncertainty and therefore markets can function without concern about unpredictable fluctuations in the purchasing power of money. On the other hand, high and unanticipated inflation lowers the quality of the signals coming from the price system as producers and consumers find it difficult to distinguish price changes arising from changes in the supply and demand for products from changes arising from the high level of general inflation. In the market economy, prices represent basic means of transmission of information; the increased noise associated with high inflation lowers the effectiveness of the market system. High and unanticipated inflation makes it impossible to plan for relatively longer outlook, creating incentives for households and firms to shorten their decision horizons and to spend resources in managing inflation risks rather than focusing on the most productive activities.

Ben Bernanke argued that the Fed's mandated goals of price stability and maximum employment are almost entirely complementary: *"price stability is an end of monetary policy; it is also a means by which policy can achieve its other objectives"*.¹ This argument has also been supported by Kenneth Rogoff (1985) who advocated that the central bank should place larger weight on inflation stabilization, in order to increase the welfare of the society. Therefore, the competing goals of growth and price stability, which may seem to be at odds with each other, in fact boils down to a single objective i.e. price stability. In this backdrop, there is no surprise that most of the central banks aim at maintaining low and stable inflation.

Central banks place more weight and demonstrate increased willingness on controlling inflation relative to output growth, and financial and exchange rate stability. It is important to acknowledge, however, that in practical policy making, adhering to revealed preferences is rather difficult. The reason is that central banks do not operate in a vacuum and require coordination with other policy making institutions, in particular the fiscal authority. In addition, the social and cultural make-up of a country and political economy considerations often require central banks to accommodate conflicting policies. In other words, sticking to an announced rule-based monetary policy can be difficult in practice; "enlightened discretion" is preferred by most central banks. Thus, SBP's decision to focus on arresting the persistent inflationary trends is tantamount to a pro-growth policy, *not a growth retarding one*.

C. Monetary policy transmission mechanism

The monetary transmission mechanism refers to a process through which monetary policy decisions affect the level of economic activity in the economy and the inflation rate. Understanding the transmission mechanism of monetary policy is crucial for appropriate design and efficient conduct of monetary policy. As monetary policy actions affect policy variables with a considerable lag and with high degree of variability and uncertainty, it is important to predict the possible impact and extent of monetary policy actions on the real variables. Thus, by its very nature, monetary policy tends to be forward-looking.

It is also important to know which transmission channels are more effective in terms of transmitting changes in monetary policy actions to ultimate policy goals. Since various financial sector developments particularly regarding introduction of new financial products, technological changes, institutional strengthening, and expectations about future policy, etc.

¹ <http://www.federalreserve.gov/newsevents/speech/bernanke2006.02.24a.htm#f3#mainNav>

can potentially change economic effects of the monetary policy measures, there is a need to regularly update, empirically test and reinterpret monetary policy transmission channels.

The impact of monetary policy is perceived to transmit in to the real economic activity through five channels.

- The first channel and most widely studied and understood channel of monetary policy transmission relies on the link between changes in the **short-term nominal interest rate** (induced by changes in the policy rate) and the long-term real interest rate that ultimately affect components of aggregate demand such as consumption and investment in an economy. As such, *it is the changes in the long-term real interest rates that have its impact on aggregate consumption, business investment and other components of aggregate demand.*
- The second channel, known as the **credit channel**, involves changes in monetary policy that not only affects the ability of firms to borrow money (by affecting their net worth) but also affects the ability of banks to lend money. The strength of this channel depends on the degree to which the central bank has allowed banks to extend loans and the dependence of borrowers on bank loans. These factors are clearly influenced by the structure of the financial system and its regulation.
- The third channel of monetary policy transmission focuses on **asset prices** (other than the interest rate) such as the market value of securities (bonds and equities) and prices of real estate. A policy-induced change in the nominal interest rate affects the price of bonds and stocks that may change the market value of firms relative to the replacement cost of capital, affecting investment. Moreover, a change in the prices of securities entails a change in wealth which can affect the consumption of households.
- Fourth, a policy-induced change in the domestic interest rate also affects the exchange rate that in turn affects the foreign financial flows, net exports and thus aggregate demand. The strength of the exchange rate channel depends on the responsiveness of the exchange rate to monetary shocks, the degree of openness of the economy, sensitivity of foreign private inflows and net exports to exchange rate variations, and the net worth of firms and thus their borrowing capacity if they have taken exposure to foreign currency. Moreover, exchange rate changes lead to changes in the domestic price of imported consumption goods and imported production inputs affecting inflation directly.
- Since expectations influence the inflation dynamics, there is a fifth channel that is based on the economic agents' expectations of the future prospects of the economy and likely stance of the monetary policy. According to this "expectations channel", most economic variables are determined in a forward-looking manner and are affected by the expected monetary policy actions. Thus, a consistent, credible, and transparent monetary policy can potentially affect the likely path of the economy by simply affecting expectations.

D. Monetary policy framework in Pakistan

Considering the economic and financial market structure in Pakistan, SBP has for sometime pursued a monetary targeting regime with broad money supply (M2) as a nominal anchor to achieve the objective of controlling inflation without any prejudice to growth. The process of monetary policy formulation usually begins at the start of the fiscal year when SBP sets a target of M2 growth in line with government's targets of inflation and growth (usually in the month of May) and an estimation of money demand in the economy. The basic idea is to keep the money supply close to its estimated demand level, as both a significant excess and a shortfall may lead to considerable deviations in actual outcomes of inflation and real GDP

growth from their respective targets. Underlying this framework are two strong assumptions: first, there is a strong and reliable relationship between the goal variable (inflation or real GDP) and M2; and second, the SBP can control growth in M2.

While containing the M2 growth close to its target level is the key consideration in the current monetary framework, the composition of the money supply does matter and at times requires policy actions even if these actions lead to a deviation in monetary growth from its target level. To understand this point, it is necessary to know the major components of money supply and their relative importance. Net foreign Assets (NFA) and Net Domestic Assets (NDA) of the banking system are the two major components of money supply. The NFA is the excess of foreign exchange inflows over outflows to the banking system, or in other terms it is a reflection of underlying trends in the country's external Balance of Payment (BoP) position. It is estimated by the projected values of all major external transactions such as trade, workers' remittances, debt servicing, foreign investment, and debt flows etc. The NDA of the banking system, which primarily consists of credit to the government and the private sector, reflects changes in the fiscal and the real sectors of the economy. It is estimated as a residual of M2 and the NFA. Further breakup of NDA is estimated on the basis of projected credit needs of the government and the private sector.

Now coming to the importance of these components of the money supply, depletion in NFA is generally considered as an unhealthy development. Sharp NFA depletion reflects worsening BOP position and a pressure on exchange rate. In such a case, a higher NDA growth, though helps in expanding M2 to reach its target level, may further deteriorate external accounts, sharper depreciation of local currency, and higher depletion of country's foreign exchange reserves. Although since FY07, only the indicative M2 growth target is being announced, SBP also takes into consideration the causative factors for monetary expansion while pursuing this target.

Considering the changes in monetary aggregates and other economic variables, the changes in monetary policy are signaled through adjustments in the policy discount rate (3-day repo rate). Further, the changes in the policy rate are complemented by appropriate liquidity management mainly through Open Market Operations (OMOs) and if required changes in the Cash Reserve Requirement (CRR) and Statutory Liquid Reserve requirement (SLR) are also made.

E. Effectiveness of monetary policy in Pakistan

Significance of various channels that transmit the monetary policy shocks in Pakistan to the real economy has been analyzed by few economists. Ahmad et al. (2005) found that credit channel is the most important conduit for transmitting monetary policy actions to the real economic activity. Evidence confirms transmission through the active asset price channel and exchange rate channel. According to this study, monetary policy shocks impact real output after a lag of 7 to 11 months. Tasneem and Waheed (2006), on the other hand, investigated whether different sectors of the economy respond differently to monetary shocks. The presence of sector wise differences in the monetary transmission mechanism has profound implications for macroeconomic management as the central bank then has to weigh the varying consequences of its actions on different sectors. Investigating the transmission of changes in interest rate to seven sub sectors of the economy, the authors found evidence supporting sector-specific variation in the real effects of monetary policy. They found that the interest rate shock on manufacturing, wholesale and retail trade, and finance and insurance sectors transmit after a lag of 6 to 12 months. On the other hand, monetary policy shocks have negligible impact on agriculture, mining and quarrying, construction and ownership of dwelling sectors.

Generally, historical evidence does reflect that Pakistan has been a high inflation and high interest economy given its inherent structural weaknesses. The role and effectiveness of monetary policy appears more visible in the 2000s when financial sector reforms started

bearing fruits in terms of a more market based money and foreign exchange markets. Entering the 21st century, the loose monetary policy stance in the face of low inflation, low growth and low twin deficits, along with structural measures to open up the economy and alleviate some first round constraints, triggered the economy on a long term growth trajectory of above 7 percent.

Monetary policy stance was however altered as the inflationary pressures started to build up in 2005. At the end of the fiscal year, the economy, which had been showing sustained steady growth since FY01, registered a historically high level of growth (9 percent), average inflation rose sharply (9.3 percent) and the external current account balance turned into deficit (-1.4 percent of GDP). Coinciding with these developments, the fiscal module started to show signs of stress as the fiscal balance was converted into a deficit and the stock of external debt and liabilities, which had been declining since FY00 after the Paris Club rescheduling, began increasing. These indicators largely capture the high and growing aggregate demand in the economy on account of sustained increase in peoples' income.

With the emerging domestic and global price pressures, SBP tightened its monetary policy after a prolonged gap of a few years. The efforts to rein-in inflation, however, proved less effective due to a rebound in international commodity prices and a rise in domestic food prices later on. The rise in the international commodity prices, particularly oil, exacerbated the fight against inflation. The international oil prices (Arabian Light) rose from US\$27.1 at end 2004 to US\$50.9 at end 2006, whereas international food prices rose by 24, 24 and 21 percent during 2004, 2005 and 2006 respectively.²

Realizing the complications of monetary management and adverse global and domestic economic developments, the implementation of SBP monetary policy during FY06 varied significantly from the preceding fiscal years. In addition to the rise in the policy rate, the central bank focused on the short-end of the yield curve, draining excess liquidity from the inter-bank money market and pushing up short-tenor rates. Consequently, not only did the overnight rates remain close to the discount rate through most of the year, the volatility in these rates also declined.

These tight monetary conditions along with the Government's administrative measures to control food inflation helped in scaling down average inflation from 9.3 percent in FY05 to 7.9 percent in FY06, within the 8.0 percent annual target. This was certainly an encouraging development, particularly as it was achieved without affecting economic growth as the real GDP growth remained strong at 6.6 percent in FY06.

Monetary policy tightening was strengthened further. For FY07, the government set an inflation target of 6.5 percent. To achieve this, a further moderation in aggregate demand during FY07 was required as the core inflation witnessed a relatively smaller decline in FY06, indicating that demand-side inflationary pressures were strong. In this perspective, SBP further tightened its monetary policy in July 2006 raising the CRR and SLR for the scheduled banks; and its policy rate by 50 basis points (bps) to 9.5 percent. Moreover, proactive liquidity management helped in transmitting the monetary tightening signals to key interest rates in the economy. For instance, the Karachi Inter Bank Offer Rate (KIBOR) of 6 month tenor increased from 9.6 percent in June 2006 to 10.02 percent at end-June 2007 and the banks' weighted average lending and deposits rates (on outstanding amount) increased by 0.93 percentage points and 1.1 percentage points, respectively, during FY07.

In retrospect, it appears evident that monetary tightening in FY07 did not put any adverse impact on economic growth, as not only was the real GDP growth target of 7.0 percent for FY07 met, the growth was quite broad based. At the same time, the impact of the monetary tightening was most evident in the continued deceleration in core inflation during

² Changes in annual average food price index; source: IMF commodity price data.

FY07. One measure of core inflation, the non-food non-energy CPI, continued its downtrend from YoY high of 7.8 percent in October 2005, to 6.3 percent at end-FY06, and to 5.1 percent by the end of FY07. However, much of the gains from the tight monetary policy on overall CPI inflation were offset by the unexpected rise in food inflation.

On the downside, however, broad money supply (M2) grew by 19.3 percent during FY07, exceeding the annual target by 5.8 percentage points. Slippages in money supply growth largely stemmed from an expansion in NFA due to the higher than expected foreign exchange inflows.

Equally stressful was the impact of Government borrowings from the central bank during the course of the year. The pressure from the fiscal account was due to mismatch in its external budgetary inflows and expenditures. With the privatization inflows and the receipts from a sovereign debt offering at end-FY07, the Government managed to end the year with retirement of central bank borrowings, on the margin. By end-FY07, SBP holdings of government papers were still around Rs 452 billion, despite a net retirement of Rs 56.0 billion during the year. Another major aberration in FY07 emanated from the high level of SBP refinancing extended, for both working capital and long-term investment, to exporters. Aside from monetary management complexities, these schemes have been distorting the incentive structure in the economy.

FY08 and beginning of FY09 was even more challenging

FY08 was an exceptionally difficult year. The domestic macroeconomic and political vulnerabilities coupled with a very challenging global environment caused slippages in macroeconomic targets by a wide margin.

After a relatively long period of macroeconomic stability and prosperity, the global economy faced multifarious challenges: (i) hit by the sub prime mortgage crisis in U.S in 2007, the international financial markets had been in turmoil, the impact of which was felt across markets and continents; (ii) rising global commodity prices, with crude oil and food staples prices skyrocketing; and (iii) a gradual slide in the U.S dollar against major currencies. Combination of these events induced a degree of recessionary tendencies and inflationary pressures across developed and developing countries. Policy-makers were gripped with the dual challenge of slowdown in growth and unprecedented rising inflationary pressures. Central bankers faced a demanding task of weighing the trade-off between growth and price stability. With the exception of few developed countries, most central banks showed a strong bias towards addressing the risk of inflation and responded with tightening of monetary policies.

On the domestic front, the external current account deficit and fiscal deficit widened considerably to unsustainable level (8.4 and 7.4 percent of GDP). The subsidy payments worth Rs 407 billion by Government, which account for almost half of the fiscal deficit, shielded domestic consumers from high international POL and commodity prices and distorted the natural demand adjustment mechanism. While the government passed on price increase to consumers, the rising international oil and other importable prices continued to take a toll on the economy.

Rising demand has cost the country dearly in terms of foreign exchange spent on importing large volumes of these commodities. Rising fiscal deficit and lower than required financing flows resulted in exceptional recourse of the Government to the highly inflationary central bank borrowing for financing deficit. At the same time the surge in imports persisted.

As a result, inflation accelerated and its expectations strengthened due to pass through of international oil prices to the domestic market, increases in the electricity tariff and the general sales tax, and rising exchange rate depreciation. These developments resulted in a further rise in headline as well as core inflation (20 percent weighted trimmed measure) to 25 percent and 21.7 percent respectively in October 2008. Considering the size of

macroeconomic imbalances and the emerging inflationary pressures, SBP remained committed to achieve price stability over the medium term and thus had to launch steeper monetary tightening to tame the demand pressures and restore macroeconomic stability in FY09. SBP thus increased the policy rate from 13.5 to 15 percent.

F. What needs to be done to improve the effectiveness of monetary policy?

Apart from taking policy measures to address the emerging challenges, SBP also introduced structural changes in the process of monetary policy formulation and conduct to make the monetary policy formulation and implementation more transparent, efficient, and effective. Specifically, during the last couple of years, SBP focused on

- Institutionalizing the process of policy formulation and conduct,
- Stepping up movement towards a more market based credit allocation mechanism,
- Developing its analytical and operational capacity,
- Improving its capabilities to assess future developments to act proactively, and
- Improving upon the communication of policy stance to the general public.

However, the following areas need attention and are key for effective monetary management.

1. Effectiveness of monetary and fiscal coordination would be helpful. Section 9A and 9B of the SBP Act (amended in 1994) articulates the institutional mechanism for economic policy making and coordination and defines the ground rules for both the process and the policy making. However, the track record of the Monetary and Fiscal Policies Coordination Board (MFPCB), established in February 1994 that requires quarterly meetings of the SBP and the government, has been less than satisfactory. Furthermore, the sequencing of economy-wide projections is done in isolation of the budget and monetary policy making process, and the budget making process has not respected the monetary compulsions. With rising spending and stagnating revenues, the budget assumes at the start of the year certain recourse to the central bank rather than treat it as mere ways and means advances.
2. For effective analysis of developments and policy making, timely and quality information is extremely important. However, due to weaknesses in the data collection and reporting mechanism of the various agencies of the country, information is not available with desired frequency and timeliness. Also there are concerns over the quality of data. Unlike many developed and developing countries, data on quarterly GDP, employment and wages, etc. is not available in case of Pakistan. Moreover, the data on key macroeconomic variables (such as government expenditure and revenue, output of large-scale manufacturing, crop estimates, etc.) is usually available with substantial lags. This constrains an in-depth analysis of the current economic situation and evolving trends, and hinders the ability of the SBP to develop a forward-looking policy stance.
3. Unlike many countries, both developed and developing, there is no prescribed limit on government borrowing from SBP defined in the SBP Act or the Fiscal Responsibility and Debt Limitation (FRDL) Act 2005. Besides being highly inflationary, government borrowing from SBP also complicates liquidity management. Borrowing from the central bank injects liquidity in the system through increased currency in circulation and deposits of the government with the banks. In both cases, the impact of tight monetary stance is diluted as this automatic creation of money increases money supply without any prior notice. Moreover, access to potentially unlimited borrowings from the SBP provides little incentives to the government to put the fiscal accounts in order. Therefore, the foremost task to

improve the effectiveness of monetary policy is to prohibit the practice of government borrowings from the SBP. In this regard, appropriate provisions are required to cease or limit government recourse to central bank financing through amendments in the SBP Act and the FRDL Act 2005.

4. Another issue is to make a clear distinction between exchange rate management and monetary management. Currently, there is a general perception that the State Bank is bound to keep the exchange rate at some predefined level and any movement away from this level is then considered as an inefficiency of the SBP. There is a need to understand that for an open economy, it is impossible to pursue an independent monetary and exchange rate policy as well as allowing capital to move freely across the border. Since the SBP endeavors to achieve price stability through achieving monetary targets by changes in the policy rate, it is not possible to maintain exchange rates at some level with free capital mobility. This can only be achieved by putting complete restrictions on capital movements, which is not possible. SBPs responsibility is to ensure an environment where foreign exchange flows are driven by economic fundamental and are not mis-guided by rent seeking speculation.
5. Finally, based on experience particularly gained during the last two months is to differentiate between liquidity management and monetary policy stance. Recently, when the banking system experienced extraordinary stress due to shallow liquidity in the system, rumor mongering heightened the general public anxiety over few banks' sustainability. Consequently, the SBP had to intervene in the market by injecting ample liquidity through various measures. In some quarters, these changes were deemed as a change in the Bank's tight monetary policy stance. However, this was not the case and the Bank had to clearly and repeatedly communicate that the existing stance is being continued. Later on, the Bank further tightened its monetary policy. It must be understood that quite often, liquidity management can drive the market interest rates away from the direction desired under the monetary policy stance. However, this has to be temporary and the interest rates are bound to move in the policy stance direction. To resolve this issue, the SBP is studying various options, including the introduction of a "Standing Deposit Facility" to keep the inter-bank rate within a corridor.

In conclusion, it is imperative that above steps be taken urgently. Over the period, however, this needs to be complemented with much deeper structural reforms to synchronize and reform the medium term planning for the budget and monetary policy formulation process. Several studies and technical assistance have provided extensive guidance in this area, but the lack of capacities and short term compulsions have often withheld such reforms. What is important is to recognize that a medium term development strategy, independently worked out, would help minimize one agency interest which has often been a source of coordination difficulties. It would also help the budget making process more rule based than the incrementally driven process to satisfy conflicting demands.

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