Shahid H Kardar: Understanding inflation and SBP's monetary policy stance

Address by Mr Shahid H Kardar, Governor of the State Bank of Pakistan, to the Federation of Pakistan Chamber of Commerce and Industry, Karachi 13 December 2010.

* * *

The debate on the role of monetary policy in ensuring macroeconomic stability in general and price stability in particular has intensified after the global financial and economic crisis of 2008/2009. While it may take some time before a consensus emerges on the appropriate monetary policy strategy, almost all economists and central bankers in global policy circles, whether they favor or criticize the current monetary policy stance, still believe that containing inflation is and should be the fundamental objective of monetary policy.

In Pakistan, a similar debate, albeit with different backdrop and parameters, on the causes of inflation and role of monetary policy has intensified over the last few years. Most observers agree that inflation, which is persisting at a high level for almost three years now, is one of the major economic issues currently faced by the country. However, they are skeptical about the effectiveness of monetary policy in bringing it down. Some commentators believe that it is entirely a "supply-side" phenomenon and monetary policy cannot play any role in containing inflation. Others cite fiscal weaknesses and the large budgetary deficit as the main reason for inflation and point out that monetary policy cannot influence the behavior of the government.

In my remarks today, I would like to share with you my thoughts and perspectives on this important topic. We, at SBP, firmly believe that implementing a coherent strategy for monetary policy may not be enough if the elements of the strategy are not sufficiently well communicated or understood, and if the responsibility for the outcomes of the monetary policy stance is not clearly delineated. But, before I get into the specifics of inflationary phenomenon in Pakistan and discuss the rationale for SBP's current monetary policy stance, I would like to discuss three conceptual points. First, the process of price determination at the basic level. Second, the behavior of inflation. Third, understanding the trade-offs faced by policy makers. This discourse would not only help us in appreciating the scope and effectiveness of monetary policy but also the limits and constraints faced by the State Bank in achieving its objectives.

It is important to understand the relationship between the cost of producing a good and its price at the firm level before any discussion on the causes of inflation in an economy. Suppose it costs Rs10 to produce a good, which includes the wage bill, cost of raw-material, acquiring and installing machines, and all other expenses. To remain in the business and earn profits, the producer would like to sell it at Rs10 plus "x". The Rs"x" is generally termed as a mark up and depends on the degree of competition in the industry, nature of the product, overall administrative efficiency of producers and government authorities, adequate supply-chain infrastructure etc.

What is over-looked in this simplistic example is the role of productivity of the factors of production, be it workers or machines. If the productivity is low and declining, then the final price tends to be higher even if the cost of acquiring the factors of production remains the same. Put differently, the price can be kept stable or even reduced by increasing the productivity of workers and better and efficient use of technology. The monetary policy stance geared towards containment of overall inflation and thus stability of prices eases the pressures on the cost of production but cannot increase the productivity. Factors positively influencing productivity include stable law and order conditions, a healthy and skilled labor force, effective governance, and uninterrupted availability of energy.

A micro-level understanding of the price determination process is helpful, but a discussion on the behavior of prices or inflation at the aggregate level is also important. Three broad

BIS Review 171/2010 1

parameters are worth mentioning in this regard: i)- expectations about the continuation of inflationary trends; ii)- the output gap or the difference between aggregate domestic demand and the ability and capacity of the economy to meet that demand; and, iii)- cost push or supply shocks.

Expectations of likely inflation path have strong feedback effects on actual inflation. Such expectations could be based on past inflationary trends or may be formed by the expected impact of government policies, or lack thereof, on inflation. For example, if an economy experiences high and rising inflation for some time then people tend to expect that this trend would continue and seek higher wages to at least maintain their purchasing power. Typically, adjustment in wages tends to be slower than increases in the prices of goods and services that people consume. This leads to discontent and pressure on government authorities to control inflation and keep it stable.

Thus, managing the expectations of inflation by devising and implementing consistent and predictable economic policies is a critical task which is normally performed by central banks around the globe. However, the supporting role of other policies, such as fiscal policy, in assuring the public that the government is pursuing anti-inflationary policies should not be underestimated. Failure to do so in a credible manner creates uncertainty and distorts the decisions of the general public and businesses. In turn, this exacerbates inflationary pressures.

Regarding the impact of a "gap" in output on inflation, an important point is that aggregate demand alone cannot explain inflation. It should be compared to the ability of the economy to produce and supply that demand. Thus, inflationary pressure can exist in an economy even if the aggregate demand is relatively contained. In other words, if the productive capacity of the economy is decreasing, inflation can persist with the same level of aggregate demand.

However, assessing the prevailing output gap is a difficult task for economic mangers. It involves judging the capacity or potential of the economy, which is almost impossible to measure. Lack of timely availability of relevant data on aggregate demand, such as consumption and investment expenditures of the private and public sector, further complicates the task. The authorities, therefore, tend to rely on available indicators that help in assessing aggregate demand pressures and the productive capacity of the economy.

The behavior of monetary variables, such as credit demand of the private sector and fiscal authorities and trends in the foreign exchange reserve position of the country, serve as useful leading indicators of aggregate demand. The reason is that most transactions taking place in the economy involve the use of money, whether in the documented or undocumented parts of an economy. Not surprisingly, phrases like "inflation is always and everywhere a monetary phenomenon" and "too much money chasing too few goods" are used to describe inflationary pressures.

Supply shocks include unexpected shocks to the cost of production, natural disasters that affect the production and the supply chain, and intervention in markets through administrative measures. Such factors typically have a temporary effect on the level of prices but do not influence the rate of change of prices, that is, inflation. Importantly, if such shocks continue to hit the economy at regular intervals, as is the case with reduction in electricity and petroleum subsidies in Pakistan, then their effect filters into other prices and fuels inflationary expectations.

The last conceptual point that I want to highlight is that every economic policy decision entails a trade-off among desirable impact on key variables. We cannot have everything that we wish without paying a price. For example, we all understand that a rise in aggregate demand relative to the available productive capacity leads to inflation. An effort to contain inflation through a tight monetary policy stance tends to have a dampening effect on economic activity. In most instances, the adjustments that the private sector has to make are more pronounced compared to those made by the public sector.

2 BIS Review 171/2010

Similarly, deterioration in the external accounts, either because of a large gap between payments and receipts or lack of funds to finance it, cannot continue without an adjustment in the exchange rate. Attempts to maintain stability in the exchange rate by supplying the required foreign currency cannot be achieved on a sustained basis without interest rate increases. The reason is because injection of foreign currency by a central bank, when the outflow of foreign currency in the country is greater than the inflow, requires purchase of domestic currency in exchange. This reduces availability of liquidity of domestic currency, which pushes up market interest rates. To ease the liquidity pressures, the central bank can inject the domestic currency through its normal Open Market Operations. However, this strategy becomes difficult to maintain if the foreign currency outflows continue to remain higher than inflows and if the domestic inflation starts to increase because of ample availability of domestic currency.

The same principle applies to fiscal matters. The governments cannot for long periods continue to spend more than the revenues it mobilizes. The amount of borrowings required to close the gap comes with a cost – interest payments in the future. Failure to increase revenues in proportion to increases in expenditures compounds the problem as the interest expense continue to rise, leading to more borrowings and rising debt levels. Measures to raise revenues such as increases in taxes or cuts in expenditures such as reduction in subsidies tend to increase the cost of production and possibly inflation.

The point I am essentially trying to make is that for a policy decision to be effective adjustment in some area of the economy is required. If the required adjustment is not taking place or if there are other policies that are diluting or neutralizing it, then the credibility of decision makers suffers, leading to uncertainty. What is required is that policy makers articulate an agenda of priorities for the future of the economy, communicate it to the general public, develop political consensus, take timely and coordinated decisions, and implement the agenda over a number of years. Delays or uncertainty in any aspect of this strategy results in less than desirable outcomes making the trade-offs among key priorities tougher.

Against this conceptual backdrop, let's talk about the specifics of the current high inflation phenomenon in Pakistan and the role of monetary policy in dealing with the issue. In cumulative terms, Pakistan's economy has experienced an inflation of 66 percent between October 2010 and June 2007. This is almost twice the level of inflation seen during June 2003 and June 2007, which was 36 percent. What makes the last three years so different from the three years before that?

To begin, let's dissect the inflation data a bit to shed light on this issue, starting with food prices. The behavior of food group, which has a share of 40 percent in the overall Consumer Price Index (CPI), is not much different across these periods. It is true that food prices grew by 88 percent between June 2007 and October 2010 and by 47 percent between June 2003 and June 2007. But, their share in CPI inflation in both these periods is not much different; 56 and 51 percent respectively. Moreover, virtually the same items across these time periods are responsible for 80 percent of food inflation. Key among these are wheat flour, sugar, fresh milk, meat, and vegetables. So, is this food inflation entirely because of "supply shocks"? Is there anything different that can be highlighted?

Let's take the example of wheat and sugar. Between June 2003 and June 2007, the price of a 10 kg bag of wheat increased from Rs85 to Rs119; a cumulative price increase of 40 percent. In the next three years, it increased to Rs260; a cumulative price increase of 120 percent. But, the international price of wheat increased by only 22 percent. So, what happened? Did productivity collapse or input prices just shot up? We all know that the government increased the "support price" of wheat. Would we consider it a supply shock or a policy decision? Same is the case with sugar prices. After increasing by 46 percent during June 2003 and June 2007, the sugar prices increased by 184 percent in the next three years.

The point here is that such price increases cannot be considered as pure supply shocks. For instance, the government would not have been able to procure more than 10 million tons of

BIS Review 171/2010 3

wheat at higher than its international price without borrowing extensively from the banking system. Not surprisingly, the credit extended for "commodity operations", including both wheat and sugar, grew by 288 percent during the last three years compared to 33 percent in the three years before that. Borrowings of this scale would not have been possible without an upward pressure on market interest rates. Thus, the borrowings of government agencies for financing its wheat, urea, and sugar trading operations is Rs382 billion at just under 3 percentage points above KIBOR, indicating the interest rate regime that the private sector would have to face in competition with the sovereign. Further, this led to an injection of a lot of cash in the rural areas, which was used for higher expenditures on consumer durables and possibly other food items as well. Thus, an initial "supply shock" turned into a "demand shock" and adversely affected expectation of inflation remaining high.

To further understand the difference between price setting at the commodity level and the aggregate level, let's look at the evolution of prices of petroleum products, electricity and gas. Traditionally, these prices have been heavily subsidized by the government. So, one would expect that this approach would keep a lid on the prices of these products in the market. And when these subsidies are scaled back, the increase in their prices and the impact on overall inflation would become pronounced. A careful look at the data reveals that this is not necessarily the case. For example, the price of diesel increased from Rs20 per liter to Rs38 per liter during June 2003 and June 2007 – a cumulative increase of 90 percent – and has increased to Rs79 per liter by October 2010 – an increase of another 108 percent. The difference is not that large to claim that this is the main reason for a relatively higher rate of inflation in the last three years. In fact, in case of price of petrol the opposite is true. It grew by 37 percent between June 2007 and October 2010 and by 72 percent between June 2003 and June 2007. The increases in the price of electricity were, however, sharper in recent years; 62 percent on average compared to 5 percent respectively.

On the other hand, the borrowings of Public Sector Enterprises, which partially explains transfer of subsidies from the government's budgetary expenditures directly to the power sector entities, grew by 305 percent during October 2010 and June 2007 compared to only 17 percent during 2003 and June 2007. The contribution of this towards growth in money and thus overall inflation should not be discounted. However, even if we exclude the food and energy group prices from CPI, we observe substantial increase in inflationary pressures. Both non-food-non-energy (NFNE) and trimmed measures of core inflation validate this observation. For example, NFNE grew by 58 percent in the last three years compared to 28 percent in the three years before that.

Did the reduction in subsidies help in reducing the fiscal deficit and easing aggregate demand pressure? Unfortunately, it did not happen. In cumulative terms, the fiscal deficit grew by 146 percent in nominal terms during June 2007 and June 2010 compared to 113 percent during June 2003 and June 2007. If we take out the interest payments, which have been mentioned as a factor adding to the fiscal problems, and look at the primary deficit, the fiscal driven aggregate demand pressures look more pronounced. The primary deficit grew by 3182 percent in the last three years compared to an improvement of 140 percent in the three years before that. The same is the case with revenue deficit – the difference between current expenditures and total revenues. This deficit increased by 298 percent compared to only 27 percent respectively.

Thus, there is an unquestionable increase in aggregate demand pressure because of the public sector. What is more worrying is the trend in the financing pressures of this substantial fiscal expansion on the resources of the banking system. During June 2007 and November 2010, the cumulative borrowings from the banking system increased by 187 percent compared to 58 percent during June 2003 and June 2007. We all know that, within the banking system, the government has substantially increased its reliance on borrowing from the SBP. The stock of outstanding borrowings of the government from the SBP is in excess of Rs1500 billion today compared to only Rs53 billion at end-June 2003. Imagine the effect on market interest rate if the government had borrowed this amount from the scheduled

4 BIS Review 171/2010

banks. Undoubtedly, interest rates would have been much higher. Moreover, since the interest rate by definition is the price one has to pay to bring future resources into the present, the borrowings and the increase in debt of this scale is not possible without a corresponding increase in interest rates. The continuation of these trends is fueling expectations of inflation and, resultantly, in interest rates remaining high. Thus, if anything, the criticism on SBP's current monetary policy stance could be that it has not been tight enough.

The reason for the SBP pursuing a relatively "loose" monetary policy is our concern that it would further crowd out the private sector and negatively impact the growth rate. Faced with this trade-off, SBP has been trying to strike a very difficult balance between such considerations. There is no denying that private sector has borne the brunt of required adjustment in the economy and government has considerably crowded out the private sector both through reduced availability and price of credit. Between June 2003 and June 2007 private sector credit cumulatively grew by 162 percent, while it increased by only 24 percent between June 2007 and November 2010. In turn, this has negatively affected the future productive capacity of the economy, making it more difficult to meet the relatively lower aggregate demand and bring inflation down.

Another downside of the heavy presence of the government and its borrowings from the SBP has been the deterioration of the currency to deposit ratio of the banking system. During June 2007 and June 2003, currency in circulation grew by 70 percent and total deposits of the banking system, excluding government deposits, grew by 104 percent. In the following three years, currency in circulation increased by 82 percent while deposits increased by only 40 percent. While currency in circulation has a strong positive relationship with overall inflation, deposits represent the main funding source for the banking system. A decline in deposits tends to have a contractionary effect on market liquidity and puts an upward pressure on market interest rates.

How did the economy cope with these aggregate demand pressures? During 2003 and 2007, the contribution of the private sector and the government sector were "balanced". Nonetheless, aggregate demand pressures relative to the available productive capacity of the economy were substantial. This can be gauged by observing the cumulative growth of 2605 percent increase in the trade deficit. Which raises the obvious question of why inflation, interest rates, and even the exchange rate were relatively stable? The reason is because the economy was largely able to finance this demand from capital inflows from abroad, as can be seen in a growth of 1462 percent in foreign investments and 83 percent growth in Net Foreign Assets (NFA) of the banking system.

The situation looks totally different when we look at the period between June 2007 and November 2010. In response to growing demand pressures, SBP had started tightening its monetary policy stance and it did have an effect. Helped by a decline in international commodity prices, the trade deficit grew by only 18 percent during this period. And the reason SBP has continued with this stance is because foreign investments have contracted by 74 percent and NFA declined by 37 percent. In other words, while aggregate demand has declined but so has the ability of the economy to meet this demand and flow of resources from abroad to fill this gap.

Had SBP not responded, the inflation outlook and reserve position of the country would have been worse. For instance, the growth in broad money and thus inflation would have been much higher if the private sector had also continued to borrow unchecked from the banking system along with the public sector. Some observer can comment that availability of cheap credit to the private sector would have added to the productive capacity, helping reduce the output gap. However, given the deterioration in the law and order conditions and energy sector problems in the last three years, it is highly unlikely that investments in the country, by both local and foreign investors, would have grown rapidly. In any case, rising inflation would have made the businesses uncompetitive by increasing the cost of production.

BIS Review 171/2010 5

So, what have we learned about the dynamics of inflation in Pakistan? In broad terms, inflationary pressures have been a mix of upward adjustments in administrated prices, a persistence of output gap and inconsistent macroeconomic policies negatively influencing expectations of inflation. Monetary policy has played its part in correcting the macroeconomic imbalances, but other government policies have not been that supportive. The future strategy to control inflation must include coordinated and timely response to changing macroeconomic conditions along with a concerted effort to raise the productive capacity of the economy. Delays in implementing such a strategy would only make the policy trade-offs much more difficult resulting in continuing uncertainty regarding desirable economic outcomes.

BIS Review 171/2010