INFLATION IN BANGLADESH: TRENDS, SOURCES AND POLICY OPTIONS

I. Recent Trends

Inflation in Bangladesh has increased from 1.9% in FY01 to 7.2% in FY06. The biggest increase was in food prices. Food price inflation increased from 1.4% in FY01 to 7.8% in FY06. By contrast, non-food price inflation only doubled during the same period. Food price inflation has been well above non-food inflation since FY04. The rise in food inflation could have resulted from developments in global commodity markets, particularly since FY05, increases in domestic production costs, and domestic demand.

Inflation increased in most major world economies during FY06 following a surge in international commodity, energy and related fuel prices. This has generally been the case in the South Asia region as well. For example, inflation in India increased from 3.1% in FY04 to 6.3% in FY06, and from 6.7% in FY04 to 17.8% in FY06 in Sri Lanka. In Pakistan, inflation increased from 1.8% in FY03 to 8.8% in FY05, but is projected to be at 7.5% in FY07.

Countries	FY01	FY02	FY03	FY04	FY05	FY06
Bangladesh	1.9	2.8	4.4	5.8	6.5	7.2
Food	1.4	1.6	3.5	6.9	7.9	7.8
Non-Food	3.0	4.6	5.7	4.4	4.3	6.2
India	3.7	4.2	4.4	3.1	4.1	6.3
Pakistan	3.1	4.8	1.8	8.5	8.8	7.6
Sri Lanka	14.2	9.8	12.4	6.7	9.4	17.8
Developing Countries	6.4	5.6	5.7	5.4	5.1	4.9
Industrial Countries	2.2	1.5	1.9	2.0	2.3	2.8
World	4.1	3.4	3.6	3.5	3.6	3.7

Table 1:	Recent Inflation Trends in Selected South Asian Countries
	(annual percentage change in Consumer Price Index)

Source: BBS and International Financial Statistics.

II. Factors that Cause Inflation

Economic theory gives two primary causes of inflation: (i) Demand-pull factors; and Costpush factors. Monetarists—the group of economists who believe money instruments and the credit mechanism play a major role in shaping the economy—believe inflation is always a monetary phenomenon.

(i) <u>Demand-pull Factors</u>

Money supply instruments and credit growth—both which are within the purview of a country's central bank—are strongly linked with inflation.

1. Money/Credit Growth in Bangladesh.

Broad money growth in FY01 to FY06 has consistently exceeded the growth of nominal GDP. Nominal GDP growth increased from 6.9% in FY01 to 12.3% in FY06 whereas broad

money growth, which behaved somewhat erratically, increased from 16.6% in FY01 to 19.5% in FY06. The high rate of broad money growth was largely driven by high rate of growth of credit to the private sector and this was strongly reinforced by a large spike in the growth of credit to the central government and state-owned enterprises (SOEs) during last three years. In recent years, domestic credit growth has exceeded the growth of deposits in the deposit money banks, which is a sign of excess demand. Moreover, both reserve and broad money are growing much more rapidly than envisaged in the Bangladesh Bank's (BB) own monetary policy statements.

The restrained monetary stance pursued by the BB since the second half of FY05 appears to have paid dividends in curbing inflationary pressure from excess demand. Year-on-year inflation peaked at 7.6% in May 06 and has since declined to 6.4% in November and further to 6.1% in December 2006. The expected easing of global commodity prices should help further easing of inflation in Bangladesh

2. Money/Credit Growth in Other South Asian Countries.

Demand pressures in Pakistan. The main source of inflation in Pakistan over the past few years has been due to rapid private sector growth, and more recently due to a rising fiscal deficit being financed partly through higher central bank borrowing. This loose monetary policy has fuelled aggregate demand beyond the economy's production capacity, and has translated in rapidly rising asset prices (land and real estate, stocks), and consumer goods—both durable and non-durable. The economy is basically overheating. Recent measures to reduce inflationary expectation were to increase reserve requirements of commercial banks—rather than letting the interest rate at which Government of Pakistan (GoP) borrows through treasury bills (T-bills) rise. In the interest of keeping a high GDP growth, the government wants to keep interest rates low; the 6-month T-Bill rates are currently near 0.5% in real terms. This has kept growth going, and GoP's interest bill low, but does not do much to reduce inflation. While core inflation has declined slightly this year, inflationary expectations are entrenched now, so it would take a bit more effort on monetary and to a lesser extent fiscal policies to bring it down.

Credit Expansion in Indian Economy. A similar situation seems to exist in India, where the economy appears to be overheating. The demand for goods and services is outpacing the supply, while capacity utilization is at a all-time high. Private sector credit has grown at more than 30 percent during FY07. Wholesale-price inflation has risen above 6 percent. India's central bank has recently (last month) raised its overnight lending rate by a quarter-point to 7.5%.

Sri Lanka's 17.8 percent inflation is also most likely a monetary phenomenon.

(ii) Cost-push Factors.

Inflation in an economy also results from external or internal shocks, typically in the form of shortages of goods. It could be as a result of a domestic crop failure or a general price increase of a commodity for which the country is a price-taker. There are several such factors:¹

Supply Shortage: Crops and fisheries production are still subject to the whims of nature. One of the main causes of the high food inflation throughout FY05 appear to have been the poor harvest of *aus*, *aman* and wheat crops, which declined by 18.1%, 14.8% and 22.1% respectively, in

¹ This section is based on the research reported in a recent paper "Inflation in Bangladesh: Supply Side Perspectives," by Md. Alauddin Majumder of the Bangladesh Bank.

FY05 relative to FY04. Price of *aman* increased from Tk 14-16 per kg in FY04 to Tk 16-19 per kg in FY05. The decreases in production are largely attributable to the devastating floods in July-September, 2004.

Import Cost: Bangladesh imports essential food items, machinery, intermediate goods and raw materials are imported in Bangladesh. The Import Price Index of Bangladesh increased by 9.4% during FY01-05. As reported by Majumder (2006) Simple correlation analysis reveals that while the relationship between import price index and categories of non-food inflation is insignificant, import price index is significantly associated with food inflation in both rural and urban areas. Food prices in international markets increased by 1.8% in FY05 and by 6.2% in FY06. During FY06 dollar price of Thai rice increased by 12.6% per MT, soybean oil increased by 4.3%, and sugar price increased by 69% in FY06 relative to FY05.

Exchange Rate: Given that Bangladesh is a major imported of food items, raw materials and intermediate goods, any appreciation of the exchange rate would lead to some pressure on the general price level. Bangladesh's currency, Taka, depreciated steadily. Recently, exchange rate depreciated by 14% during FY04-06 and by another 4.2% since June 2006 through mid-January 2007. Statistically, exchange rate is uniformly correlated with all categories of inflation in both urban and rural areas in Bangladesh (see Majumder [2006] for more details).

Oil Price: Notwithstanding the adjustments in the administered price of energy products in recent years, much of the increased cost of imported fuel is note reflected in the prices of diesel and kerosene. The latter two account for nearly 75% of total oil use in Bangladesh. However, there is evidence that an increase in diesel prices contributes to inflation via increases in both food and nonfood prices in both urban and rural areas. Therefore, the upward adjustment of diesel prices, while limited, did have the predicted pass-through effect on inflation.

There are other factors such as increasing labor cost which contribute to inflation. In Bangladesh, nominal wage growth has been fairly stable at above 5% per annum since FY03 and have had not much of an impact on inflation, unlike neighboring India, where wage costs, particularly for skilled employees have soared in recent years. Market capturing and price collusion could also create artificial shortages in the economy and contribute to inflation. There is no firm evidence on this in the case of Bangladesh though there is a need to keep a close watch on the movement of several food items such as onions, sugar, pulses and edible oil may have contributed to this.

Growth-Inflation Relationship

The relationship between inflation and growth remains controversial both in theory and in empirics. Mallik and Chowdhury² investigated the inflation-growth relationship for Bangladesh, India, Pakistan and Sri Lanka. None of these countries have had high inflation episodes in recent decades. Their analysis shows that growth rates and inflation rates for all four countries are cointegrated, implying that there is a long run relationship between inflation and growth in all four countries. The relationship between inflation and growth is positive and the estimated elasticities for inflation rates are larger than those for growth. This suggests that inflation is helpful rather than harmful for growth and that faster economic growth is likely to be inflationary. Therefore, caution is needed since higher inflation may trigger inflationary spirals beyond a safe level as implied by higher inflation elasticities.

² Mallik, Girijasankar and Anis Chowdhury, Inflation and economic Growth: Evidence from Four South Asian Countries, Acia-Pacific Development Journal, Vol. 8, No. 1, June 2001.

III. Policy Options to Check Inflation

Available evidence for Bangladesh seems to suggest that inflation has been mostly due to supply shocks, particularly due to rising international prices and the depreciating Taka. However, as the economy grows, it is quite possible that it could be become more money/credit induced in Bangladesh, just as the experience of Pakistan and India suggests. Therefore, the Bangladesh Bank needs to keep a tight watch on its monetary/credit expansion. More specifically,

- On the fiscal side, reducing indirect taxes on commodities only makes a temporary contribution (if that) to reducing inflation, while eroding the government exchequer. Nonetheless, several countries have adopted this option in the past.
- Government can effectively use its legal powers to break up monopolistic or cartel tendencies to ensure competitiveness of the food distribution framework. For some food products like edible oil, a few large importers (about 10 in number) seem to control the market. Bulk imports of edible oil require access to volume credit one barrier, among others, to entry for small importers. The challenge is to ensure that there are large numbers of importers of edible oil.
- BB's monetary policy should err on the side of caution. Growth of credit to private sector in the first half of FY07 has far exceeded BB's monetary program target and so did the government borrowing from the banking system. Government borrowing from the banking system will need to be severely restrained in the second half of FY07 in order to contain overall credit growth while ensuring that the growing credit needs in the private sector are adequately met. Attempts to achieve faster economic growth, like the case of Pakistan and India, may overheat the economy to the extent that the inflation rate becomes unstable. The key here is to channel private credit to growth generating activities (productive investments).
- BB should definitely maintain a very cautious monetary stance, especially since agricultural production does not look like it is performing well and we can expect a pick up in food price inflation over the next six months.

The bottom line is that, in Bangladesh, inflation has been mainly the result of supply shocks in the short run. In the long-term, inflation is a monetary phenomenon. As the economy matures, it has become more monetized than what it was say in the 1980s or 1990s. To keep inflation within moderate levels over the long-term, therefore, money supply growth must keep step with nominal GDP growth. Excessive government borrowing will have greater inflationary impact now than it was in the 1990s.

Reference

- Mallik, Girijasankar and Anis Chowdhury, Inflation and economic Growth: Evidence From Four South Asian Countries, Acia-Pacific Development Journal, Vol. 8, No. 1, June 2001.
- Majumder, Md. Alauddin, Inflation in Bangladesh, Policy Analysis Unit, Research Department, Bangladesh Bank, November 2006.