Determinants oF Recent Inflation in Pakistan

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DETERMINANTS OF RECENT INFLATION IN PAKISTAN

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ACRONYMS

AIC	Akaike Information Criteria
CPI	Consumer Price Index
GDP	Gross Domestic Product
GNP	Gross National Product
IMF	International Monetary Fund
NFA	Net Foreign Assets
NGSB	Non-Government Sector Borrowing
OLS	Ordinary Least Square
SBP	State Bank of Pakistan
SIC	Schwartz Information Criteria
SPDC	Social Policy and Development Centre

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ABSTRACT

The expansionary economic policies of the government and of the central bank (State Bank of Pakistan – SBP), which on one side resulted in impressive economic performance, stimulated a rise in the Consumer Price Index (CPI) on the other. This initiated a debate on the determinants of the recent inflation. Some blamed fiscal policy or monetary policy, while others blamed imported inflation, administered prices or mismanagement and loose control of the government. This study, adopting an econometric framework, focuses on the identification of the main determinants of recent inflation trends. Using data from the 1972-73 to 2005-06 period, applying ordinary least square method and verifying results through Breusch-Godfrey Serial Correlation LM and Augmented Dickey-Fuller tests, it finds that the most important determinants of inflation in 2005-06 were adaptive expectations, private sector credit and rising import prices. Whereas, the fiscal policy's contribution to inflation was minimal.

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1. INTRODUCTION

The expansionary economic policies of the government and the SBP over the last few years resulted in improvement in various macroeconomic indicators including Gross Domestic Product (GDP) growth, which remained above 6 percent during 2004-06. Despite this impressive performance of the economy, some worrisome factors have also appeared on the scene. The most significant of these factors is inflation, which remained above 8 percent during the last two years. In 2004-05, average CPI inflation was 9.3 percent and on the basis of 12 month changes, inflation was recorded at 11 percent in April 2005.

Several supply side and demand side factors could be responsible for this surge in inflation. Inflation can be a result of shocks to the supply of certain food items and to world oil markets. Rising oil prices can pose risk of increase in prices of almost all other commodities of the consumer basket. Such supply-side shocks are very volatile and can cause large fluctuations in food and oil prices. The effects of this on overall inflation at times can be so excessive that these cannot be countered through demand management, including monetary policy. However, greater emphasis in the recent debate on inflation remained on the demand side factors.

The demand side pressures were often considered as an outcome of the September 11, 2001 incident in the United States of America (USA) and a combination of expansionary monetary and fiscal policies. First, increased domestic demand due to remittances from abroad and liberal demand-management policies outpaced the domestic production, creating a positive output gap, which in turn put upward pressure on prices. Growth in private consumption remained above 10 percent on average during FY04 and FY06, depicting signs of demand side pressures on price level.

Second, the growing gap between domestic demand and domestic production was filled by a sharp increase in net imports, which grew by over 40 percent in FY05 and by 24 percent in FY06. In comparison to imports, exports increased by only around 10 percent in FY05 and by 13 percent in FY06[2]. This resulted in a record increase in the trade deficit. A rising trade deficit can be a cause of expectation of high inflation in future. SPDC (2005) states that the 'financing of the current account deficit is not an issue in the short run, but a continuing trend

[2] Government of Pakistan (GoP), Economic Survey 2005-06.

of a widening current account deficit will have adverse effects on expectations that could threaten hard-earned credibility on the macroeconomic front.' The expectations effect is very important since there is a danger that the current high rate of inflation, whatever its source, can get locked into expectations of inflation. This can then become self-fulfilling through mechanisms such as wage contract renegotiations based on these expectations.

Third, fiscal policy has remained expansionary in the last few years. Expansionary fiscal policy fuels domestic demand and puts pressure on the current account deficit. In other words, it widens the investment-saving gap, which has to be financed externally. Moreover, financing of fiscal deficit through money creation adds to inflationary pressures. On the other hand, government borrowing from the SBP also increased, which again can have serious consequences on the general price level.

Fourth, the expansionary monetary policy through high growth in money supply and loose credit policy was also believed to be contributing to high inflation. Khan and Axel (2006), using monthly data from January 1998 to June 2005, conclude that the lagged growth of private sector credit and lagged growth of money supply (M2) are two significant causes of inflation in Pakistan in recent years.

Although expansion of credit is usual in expanding economies, the credit growth should not be allowed to reach unsustainable limits. The International Monetary Fund [IMF (2004)], through an extensive survey of developing countries, suggests that excessive credit growth in developing countries can have adverse effects on real variables.

Rising import prices were also considered as an important factor in creating inflation. The exchange rate, if depreciating, in this scenario can also put upward pressure on price levels. Similarly, some people blamed indirect taxes for being the main cause of inflation. The wheat support price has also been identified as an important determinant of inflation in Pakistan by Khan and Qasim (1996) and Hasan et al (1995).

The question now arises as to what were the most significant explanatory factors for recent inflation trends in Pakistan? This paper attempts to answer this question. To build up the discussion, the paper first presents trend analysis of dependent variable and the explanatory variables. It proceeds with a review of literature, including a discussion on the reasons of

why to worry about inflation, and touches on prominent theories of inflation. Then it presents the methodology and empirical results and finally concludes by giving some recommendations.

2. TREND ANALYSIS

It is necessary to highlight the trend in economic variables that have the potential to impact inflationary tendencies in the economy. The period from 1974 to 1980 (1970s in Table 1) witnessed the highest average inflation, of 15 percent. This high growth in CPI during this period was mainly attributed to the external oil price shock and structural changes in the domestic economy. Inflationary pressure slowed down somewhat and settled to 7.2 percent on average during the 1980s. During this period, growth of import prices and wheat prices were below the danger limits. The increase in inflationary tendencies during the 1990s may roughly be attributed to excessive increase in money supply (to both public and private sector), rising wheat prices and depreciation of the exchange rate.

TABLE 1
PATTERN OF INFLATION AND OTHER EXPLANATORY VARIABLES

	Growth					As % of GNP		As % of Value-Added of Manufacturing Sector
	Consumer Prices	GDP(fc)	Import Prices ($)	Exchange Rate	Wheat Prices	Government Sector + NFA + Others	Non-Government Sector	Taxes
1970s	15.0%	5.3%	18.8%	0.0%	14.0%	1.9%	2.4%	0.7%
1980s	7.2%	6.1%	2.5%	8.3%	6.9%	3.0%	6.2%	0.8%
1990s	9.6%	4.5%	1.3%	9.3%	12.7%	11.2%	15.4%	0.8%
2000s	5.5%	5.4%	8.0%	2.6%	5.8%	22.0%	29.5%	0.7%
2000-01	4.4%	2.0%	2.1%	12.9%	0.0%	16.2%	23.4%	0.7%
2001-02	3.5%	3.1%	-4.8%	5.1%	0.0%	20.8%	22.8%	0.7%
2002-03	3.1%	4.7%	8.9%	-4.8%	0.0%	23.8%	24.1%	0.7%
2003-04	4.6%	7.5%	16.7%	-1.6%	16.7%	24.3%	29.5%	0.6%
2004-05	9.3%	8.6%	6.4%	3.1%	14.3%	23.7%	35.7%	0.6%
2005-06	8.0%	6.6%	18.8%	0.8%	3.8%	23.1%	41.5%	0.6%

During the first four years of the new millennium, inflation remained under 5 percent and then jumped to 9.3 percent in 2004-05. It settled at 8 percent during 2005-06. The growth in wheat prices and strength of the exchange rate remained mixed. However, it seems that excessive money flows towards the public and private sector, along with the import price hike in 2003-04 and 2005-06, as well as the rise in price of wheat in 2003-04 and 2004-05 pulled inflationary pressure at an alarming level. At the same time, taxes as a percentage of

the Manufacturing Sector Value-Added, did not register any rise. It may also be noted that tax rates during the last few years have also not been increased.

Trend in variables alone do not provide a complete picture and further econometric analysis is required to find the role of these factors in affecting consumer prices.

3. REVIEW OF LITERATURE

Is inflation bad for the economy? Not always. A reasonable rate of inflation, around 3 to 6 percent for Pakistan (Khan, 2005 and Hussain, 2005) is often viewed to have positive effects on the economy, since it encourages investment and production and allows growth in wages. However, when inflation crosses reasonable limits, it produces negative effects. It reduces the value of money, which is the medium of exchange. This results in uncertainty of the value of gains and losses of borrowers and lenders as well as buyers and sellers. The increasing uncertainty discourages savings and investment. Savings are discouraged as inflation reduces the real rate of return on financial assets. This again leads to lower investment and lower economic growth.

Not only can high inflation erode the gains from growth, it also leaves the poor worse off (Easterly and Fischer, 2001) and increases the divide between the rich and the poor (SPDC, 2004). If much of the inflation comes from increase in food prices, it particularly hurts the poor more since more than half of the budget of low wage earners goes towards food. Also, it redistributes income from fixed income earners (for instance, pensioners) to owners of assets and earners of large and variable income, such as profits.

In the case of Pakistan, annual inflation was above 11 percent in 11 of the past 32 years. Not surprisingly, average real per capita income growth was 2.8 percent in years having less than 11 percent inflation, as compared to the years of high inflation which recorded an average of 1.5 percent growth in real per capita income.[3]

The above arguments suggest that for Pakistan's economy, inflation can be bad if it crosses the threshold of 6 percent, and can be extremely harmful if it crosses the double digit level.

[3] 'Inflationary risks to economic gains' by Dr. Shaghil Ahmed and Abdul Aleem Khan, DAWN, Economic & Business Review, September 19-25, 2005.

Hence, it becomes more important for policy makers to identify the real causes of inflation and design pro-active strategies accordingly. To identify the causes of inflation, as a first step it seems necessary to delve into the theories of inflation and then see what recent literature leads us to.

Determinants of Inflation: What does the economic literature tell?

Different schools of thought have presented their theories, which discuss the causes of inflation. Starting from the debate of quality theory of money (which stresses on expectations of the buyer of a currency about its value or purchasing power) and the quantity theory of money (which provides equation of money supply and emphasizes the role of excess money supply in explaining inflation), the focus of the economic literature on inflation moved to the demand-pull and cost-push factors of inflation. This is particularly true of the Keynesian era where inflation was believed to be caused by either an increase in aggregate demand or a decrease in aggregate supply. Inflation that was spurred by increase in aggregate demand was called 'demand-pull inflation' while supply shocks were supposed to cause 'cost-push inflation'. During the Keynesian era, fiscal policy was considered an important tool in controlling inflation.

During the 1950s, the issue of falling money wages led the Keynesian economists to investigate new explanations. One such investigation by A.W. Phillips resulted in the emergence of the Phillips Curve. This model was further modified by Lipsey (1960), Samuelson and Robert Solow (1960). The model presented the idea of a 'trade-off' between inflation and unemployment. In other words, the model suggests a negative relationship between inflation and unemployment. Later on, links between inflation and growth were also studied (Barro 1995). The trade-off between inflation and growth is a hot subject of discussion in Pakistan also.[4]

The modern extensions and interpretations of the famous Phillips Curve (Scheibe, J and D.Vines, 2005), suggest a positive relationship between inflation and the output gap, exchange rate and inflation expectations. In Pakistan also, inflation is estimated to have a strong positive correlation with the output gap (SPDC, 2006). The relationship between growth and inflation, however, depends on the state of the economy. High growth, without

[4] 'Inflationary risks to economic gains' by Dr. Shaghil Ahmed and Abdul Aleem Khan, DAWN, Economic & Business Review, September 19-25, 2005.

an increase in inflation, is possible if the productive capacity or potential output of the economy is growing well enough to keep pace with demand. This is also possible if the actual output is below the potential output (i.e. negative output gap) and there is sufficient spare capacity available to cope with the demand pressures. However, when the actual output catches up with the potential output, there remains no spare capacity and the economy is working on full employment level. In this case, any further gain in growth comes at the cost of rising inflation. If demand continues to grow at this stage, and the productive capacity does not expand, there is a serious threat of rapid inflation in the long run without any additional growth in the output. A prolonged phase of rising inflation in such a case can have severe consequences for the economy.

Coming back to the discussion on the theories of inflation, during the 1970s and the 1980s, when inflation became one of the most significant targets of macroeconomic policies, and classical economists were preparing to come up with new explanations to challenge Keynesian concepts, new competing models of inflation appeared in economic literature. One very important model among these was the Monetarist Model.

Monetarism has its roots in the classical economic theory. The theoretical foundation of this model, presented by Friedman (1968, 1970, 1971), and empirically tested by Schwartz (1973), is the quantity theory of money. The model avows that the past behavior of money supply to output ratio is the main determinant of current inflation. It emphasizes the role of monetary policy as against fiscal policy in controlling inflation. A famous statement of this theory is that 'inflation is always and everywhere a monetary phenomenon.'

Another competing model advocated by Sunkel (1958), Streeten (1962), Olivera (1964), Baumol (1967) and Maynard and Rijckeghem (1976) is the 'Structuralist Model'. This model emphasizes supply-side factors, such as food prices, administered prices, wages and import prices as determinants of inflation. It proposes that inflation in the long run can be explained by the differential rates in productivity growth, wages and elasticity of income and prices between the industrial and services sectors.

The recent and more complex issues of general price level that have emerged with the erosion of trade and other barriers call for more dynamic and pragmatic answers to the causes of inflation. None of the above discussed important theories alone can answer this question in a

developing country's volatile economic environment. The recent studies on inflation, however, do have some answers to this problem.

Recent economic literature on inflation[5] provide models that incorporate both demand side and supply side factors along with policy variables and adaptive expectations. The literature identifies the following main determinants of inflation: monetary shocks, inflation expectations, nominal exchange rate, price of imports, exogenous supply shocks and fiscal policy shocks. The methodology of this study has also been designed on modern dimensions by giving special emphasis to the impact of fiscal and monetary policies on prices and inflation.

4. METHODOLOGY

The data used for the analysis is from the 1972-73 to the 2005-06 period. The prime considerations in designing the methodology were to incorporate all important demand-side, supply-side and policy variables and keep it straight and effective in explaining the causes of inflation. Under these considerations, the following equation was estimated:

$$\ln(CPI) = \alpha + \beta_1 \ln(GB/YN) + \beta_2 \ln(YD/YS) + \beta_3 \ln(PB/YN) + \beta_4 \ln(I) + \beta_5 \ln(E) + \beta_6 \ln(T/YMS) + \beta_7 \ln(CPI_{-1}) + \beta_8 \ln(W)$$

In the equation, Government Sector Borrowing (*GB*) as a ratio of Real Gross National Product (*YN*), Real Demand relative to Real Supply (*YD/YS*), Private Sector Borrowing (*PB*) as a ratio of Real Gross National Product (*YN*), Import Prices in $ term (*I*), Exchange Rate (*E*), Government Taxes (*T*) relative to Nominal Value-Added in Manufacturing Sector GDP (*YMS*), Adaptive Expectations (CPI_{-1}), and Wheat Support/Procurement Price (*W*) are used to explain Consumer Prices (*CPI*).

All variables are taken in logarithmic form. In order to identify the problem of serial correlation, the Breusch-Godfrey Serial Correlation LM test is utilized. Further, residual series is examined by using Augmented Dickey Fuller Test. Ordinary Least Square (OLS) method of estimation has been used for this analysis.

[5] For instance, Naqvi et al. (1994), Hasan et al. (1995) and Bokil and Axel Schimmelpfennig (2005) for Pakistan, Callen and Dangkoo Chang (1999) for India, Leigh and Rossi (2002) for Turkey, Chauvet (2000) and IMF (2001) for Brazil, Sun (2004) for Thailand, Simone(2000) for Chile, and Bailliu et al.(2003) for Mexico.

Demand relative to supply pressures, represent the output gap. If the ratio is greater than one, it is supposed to have an upward pressure on prices. Thus, its coefficient is expected to have a positive sign while explaining prices.

Two main categories of the assets side of money supply are government sector borrowing and private sector borrowing [alternatively, Non-Government Sector Borrowing (NGSB)]. Instead of taking money supply as a whole (M2), we have taken the break-up to see a clearer picture of the role of government and private borrowing in explaining inflation. The variable '*GB*', representing government sector borrowing, also includes net foreign assets and other items. Similarly, private sector borrowing also includes borrowing of autonomous bodies. Both variables are supposed to have a positive coefficient since an increase in government and private borrowing can have an inflationary nature.

To capture the external price shock independent of movement in exchange rate, we have taken the index of import prices in dollars. Increase in prices of goods, such as petrol and raw material makes our imports costlier and hence increases the cost of production. The variable thus is expected to have a positive coefficient.

Exchange rate was expressed as rupees per dollar, which means that a depreciation of the Pakistani Rupee would mean more rupees for a dollar and hence increase in the number. More rupees for a dollar mean increasing cost of imports. The variable again is assumed to have a positive sign, indicating that the depreciation of the Pakistani Rupee would have an inflationary effect on prices.

Fiscal policy can be an important determinant of inflation. Indirect taxes, such as sales tax and excise duties raise the price of consumer goods. This creates inflationary pressure. On the other hand, direct taxes reduce the take-home income and thus have an anti-inflationary effect. If both taken together, coefficient's sign can partially depict which kind of tax has a more dominant role to play.

Rising prices create expectations for future inflation. The role of expectations is critical in the determination of future prices. People expect higher salaries to compensate for expected increase in prices, speculation in asset prices increases, credit meant for manufacturing sector diverts to real estate and stock markets, and hoarders, profit seekers and rentiers become

active in expectation of higher prices in the future. All this can have a devastating effect on prices. To incorporate these elements, we have included the variable 'lag of CPI' in the model. This variable ought to have a positive correlation with current consumer prices.

A substantial increase in support price of wheat is estimated to have an inflationary effect on consumer prices, particularly food prices (Hasan et al., 1995). This effect is due to the fact that wheat and wheat-related products account for 5.1 percent of the CPI basket. The variable is expected to have a positive coefficient. Estimation Results are provided in the next section.

TABLE 2
DEPENDENT VARIABLE CPI

Variable	Coefficient
Constant	2.71 (4.42)
Government Sector Borrowing (plus NFA and other items) as a ratio of Real GNP	0.10 (4.01)
Real Demand relative to Real Supply	1.23 (2.47)
Non-Government Sector Borrowing (plus borrowing of autonomous bodies) as a ratio of Real GNP	0.18 (3.92)
Price Index of Imports	0.12 (2.37)
Exchange Rate	0.14 (2.30)
Government Taxes as a ratio of Manufacturing Sector Value Added	0.22 (3.66)
Lagged CPI	0.40 (6.19)
Support Price of Wheat	0.10 (1.56)
Sample (adjusted): 1974 2006	
R-squared	0.999
Adjusted R-squared	0.999
Durbin-Watson stat	1.966
Durbin-Watson h-stat[6]	0.088

Breusch-Godfrey Serial Correlation LM Test	F-statistic	Probability	Obs*R-squared	Probability
First Degree Lag	0.006	0.94	0.009	0.926
Second Degree Lag	0.161	0.85	0.48	0.79

Augmented Dickey-Fuller Test of Residuals (optimal lag length is selected by AIC)	None	Intercept	Intercept and Trend
	-5.48	-5.39	-5.30
Probability	.0000	.0001	.001

All the variables are used in logarithmic form.
t-stats are reported in parenthesis.

IV RESULTS & POLICY IMPLICATIONS

The estimation results, presented in Table 2, are encouraging and show desired and theoretically correct signs of the coefficients. Government sector borrowing, non-government sector borrowing, government taxes and adaptive expectations are statistically significant at less than 1 percent level. Real demand relative to real supply, exchange rate, and import prices are significant at the level of 5 percent. Wheat prices are statistically insignificant at the conventional level of 10 percent but theoretical foundations along with the

[6] Durban Watson h stat is only valid for large sample, therefore LM test is conducted for more accuracy in the diagnostics

AIC (Akaike Information Criteria) and SIC (Schwartz Information Criteria) suggest keeping the variable in the model. The estimated equation is supported by the diagnostics presented in Table 2.

High R^2 and Durbin Watson test support the model specification whereas Breusch-Godfrey Serial Correlation LM Test and Augmented Dickey Fuller Test indicate the rejection of the presence of serial correlation in the model. Since the variables are in the log form, the estimated coefficients can be termed as elasticities. For instance, a 10 percent change in government sector borrowing as a ratio to Gross National Product (GNP) and import prices will cause CPI to change by 1 percent and 1.2 percent, respectively.

TABLE 3
CONTRIBUTION TO INFLATION

	Average CPI Inflation	Government Sector Borrowing (plus NFA and other items) as a ratio of Real GNP	Real Demand relative to Real Supply	Non-Government Sector Borrowing (plus borrowing of autonomous bodies) as a ratio of Real GNP	Price Index of Imports	Exchange Rate	Government Taxes as a ratio of Manufacturing Sector Value Added	Adaptive Expectations	Support Price of Wheat	Other Factors
1970s	**15.0%**	**1.8%**	**-0.2%**	**2.3%**	**1.9%**	**0.0%**	**0.8%**	**7.4%**	**1.3%**	**-0.2%**
1980s	**7.2%**	**0.4%**	**0.1%**	**1.9%**	**0.2%**	**2.1%**	**-0.2%**	**2.0%**	**0.7%**	**-0.1%**
1990s	**9.6%**	**1.5%**	**-0.2%**	**1.7%**	**0.1%**	**1.6%**	**-0.1%**	**2.9%**	**1.6%**	**0.5%**
2000-01	4.4%	0.3%	-0.3%	1.3%	0.3%	1.9%	-0.6%	1.4%	0.0%	0.2%
2001-02	3.5%	2.6%	0.2%	-0.3%	-0.6%	0.7%	0.2%	1.3%	0.0%	-0.5%
2002-03	3.1%	1.0%	-0.1%	1.1%	1.0%	-0.7%	0.3%	1.0%	0.0%	-0.6%
2003-04	4.6%	0.2%	1.2%	3.8%	1.9%	-0.2%	-3.0%	1.2%	1.6%	-2.1%
2004-05	**9.3%**	**1.7%**	**-0.1%**	**3.5%**	**1.3%**	**0.7%**	**-2.5%**	**2.9%**	**1.1%**	**0.7%**
2005-06	**8.0%**	**-0.3%**	**0.1%**	**2.8%**	**2.1%**	**0.1%**	**-0.3%**	**3.7%**	**0.4%**	**-0.6%**

Table 3 presents the contributions of the explanatory variables in the headline inflation. During the 1970s, seen as the period of great structural changes and uncertainty, the role of inertia is quite evident. Importance of inertia in prices is quite important in Pakistan as people do consider expected inflation while making their optimization decisions**.** Adaptive expectations phenomenon affects overall CPI, particularly through food prices. Hasan et al (1995) explains that '…because food is an essential item (wheat, rice, vegetable among others) in the consumer's basket and thus, any shortage in this commodity would result in speculation, people in this case would tend to believe the worst-case scenario'.

The 1980s was the decade of relatively low average inflation (7.2 percent). Private sector borrowing, exchange rate depreciation and adaptive expectations were the main factors

behind this growth in consumer prices. Contribution of adaptive expectations, however, declined from 49 percent during the 1970s to 28 percent in the 1980s. Reversal of nationalization policies resulted in a greater role for the private sector in the economy and as a consequence, private sector borrowing increased during this era.

The 1990s was the period when mainstream liberalization policies got their momentum in Pakistan. Frequent changes in government and inconsistency of policies, the nuclear explosion and many other dramatic political and economic factors put upward pressure on prices. Average inflation rate during the decade increased to 9.6 percent. Increase in procurement prices of wheat, government borrowing, private sector borrowing, exchange rate depreciation and adaptive expectations were the main factors behind the surge in the inflation rate.

During 2001-04, inflation was very low. Interestingly, support price of wheat was not raised during 2001-03. CPI shot up again in 2004-05 when inflation reached 9.3 percent. It dropped slightly to 8 percent in 2005-06. Adaptive expectations alone explain 45.73 percent of the inflation in 2005-06 and 31.1 percent in 2004-05. In terms of percentage points, this equals to 3.66 out of total 8 percent CPI growth in 2005-06 and 2.89 out of total 9.3 percent inflation in 2004-05. This critical role of inflation expectations, according to our understanding, can be explained by the emergence of phenomena like hoarding, asset price hikes and surge in house rents.

Non-government sector borrowing was the second most important factor. During 2004 and 2005, the growth in non-government sector borrowing was above 30 percent while it was 23 percent in 2006. This growth is reflected in the contribution of NGSB in inflation, which was 38 percent in 2004-05 and 35 percent in 2005-06. In terms of percentage points, it contributed 3.5 percentage points in total inflation of 9.3 percent in 2004-05 and 2.8 percentage points in total inflation of 8 percent in 2005-06.

The third important factor was import prices, which explains 26.7 percent (2.1 percentage points) of the inflation in 2005-06 and 13.6 percent (1.3 percentage points) of the inflation in 2004-05.

During 2004-05, two other factors that also played an important role were government sector borrowing and support/procurement price of wheat, which contributed, 17.6 percent (1.7 percentage points) and 11.8 percent (1.1 percentage points), respectively. Government taxes, due to greater role of direct taxes, seem to put downward pressure on consumer prices. This seems logical since there has been no increase in the tax rates over the last few years.

The policy of not depreciating the exchange rate paid off by not putting any further strong pressure on import costs. This policy, however, can not be sustained for a long period and a very sharp revision is expected in the time to come. Rising trade deficits are also indicating in the same direction.

V. CONCLUSION

This paper evaluates the role of different factors such as government sector borrowing, demand relative to supply, private sector credit, imported inflation, exchange rate, total tax revenue of the government, adaptive inflation expectations and wheat support price in explaining inflation.

The quantitative analysis reveals that the most significant factors which explain 8 percent inflation in 2005-06 were inflation expectations, private sector credit (a significant part of asset side of money supply) and imported inflation. Overall impact of fiscal policies on inflation was not significant and rather the direct part of taxes was dominant in putting downward pressure on prices. Government sector borrowing also did not contribute in the rise in prices in 2005-06, though it did contribute in 2004-05. The policy of keeping stability in the exchange rate was successful in holding the exchange rate from putting further pressure on prices. The role of wheat support/procurement price and the other unexplained factors were also insignificant.

It can be safely stated, on the basis of our analysis, that while the expansionary monetary policy did contribute in promising GDP growth, it also led to the rise in consumer prices. The phenomenal growth in the flow of 'loose credit' to the private sector had a significant role to play in disturbing the price mechanism. The availability of money at virtually no cost encouraged speculators and hoarders. The role of adaptive expectations then became prominent when people started expecting higher prices in future as land prices, house rents and food prices seemed to have no limits.

The main concern that emerges out of this scenario is whether it is possible for the economy to come out of this price spiral in the presence of high expectations for inflation in future and a rising trade deficit? Would the policy makers be able to control the flow of credit to non-productive sectors and to profit seeking activities? Would the policy of subsidizing food items through the government-run Utility Stores be successful or would it be another episode of mismanagement?

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