The cause of inflation in pakistan

Policymakers on one side argue that the current inflation in Pakistan is a result of cost push factors such as oil price increases and wheat procurement price (GOP 2005, 2006) whereas on the other side it is argued that accommodative monetary policy is accountable for current surge in inflation (Akhtar, 2006).

The Keynesian vs. monetarist debate regarding the causes of inflation has been one of oldest ones in the history of economics. The crux of this debate is whether fiscal or monetary policy is more effective as a tool in curbing inflation. Empirical evidence and a number of preceding studies have already recognized that excess money supply growth causes inflation in Pakistan (Qayyum, 2006). Therefore, the State Bank of Pakistan has been using M2 aggregate (i. e. currency + time deposits +demand deposits) as a tool to control accelerating inflation (Akhtar, 2006). Studies indicate that in order to curb inflation one of the significant and fundamental intermediate target variables used by the monetary authorities in Pakistan is money supply (Khan and Schimmelpfennig, 2006). However the key concern of monetary authorities is that how effective is their monetary policy in controlling the ever growing inflation.

A lot of research has previously been conducted to measure the feasibility of inflation targeting in Pakistan. Studies have been carried out to measure, the correlates of inflation specific to the economy of Pakistan (MA Chaudhry, 2005) and the usefulness of monetary policy in controlling inflation Pakistan (A. Qayyum, 2008) . Studies have also been conducted to measure the effectiveness of inflation targeting in emerging economies.

One such study carried out by Ather H. Akbari and Wimal Rankaduwa (2006) on Inflation Targeting in Emerging Market Economies explores the feasibility of inflation targeting in Pakistan. Based on an econometric analysis and experiences of other developing countries, the study raises certain issues that deserve policy-makers attention while considering the adoption of an inflation targeting monetary policy. A model of general price level was developed to analyse the impact of domestic and foreign economic variables on the domestic price level growth. Data for the year 1973-2005 was used to carry out a time series analysis of general price levels. The results of the study show that money supply is one of the statistically noteworthy variables affecting the general price level and hence, monetary policy can be an effective tool in controlling domestic inflation. However the study reveals that both Consumer price index and Wholesale price index remain inelastic with respect to money supply both in the short-run and in the long run. Consequently, a small change in inflation rate would require a substantial change in money supply growth rate. As a result, countries have to keep adjusting their monetary growth rate now and then depending on their economic condition. The study also demonstrates that large fluctuations in economic growth and money supply could take place for a prolonged period if the monetary authorities have to keep adjusting money supply growth rate, this would subsequently result in economic uncertainty and instability overpowering the key purpose of an inflation targeting policy.

A similar study conducted on the experience of inflation targeting in emerging economies by Ahmed M Khalid, 2005 examines some conceptual and speculative issues followed by a comprehensive analysis of the experience of some emerging economies that employ inflation targeting policies. The study uses a price equation in order to determine the factors leading to inflation. The dependent variable is taken to be the price index where as the independent variables include a set of indicators Output Gap (GDP); Rupee-US dollar exchange rate (FX); the government budget deficits (BD) Base Money (M1); the share price index (SP), Broad Money (M2); Broad Money Plus Foreign Currency Deposits (M3); the Call Money Rate (CMR); the government Bond Yield (GBY). The findings of the study demonstrate the viability of inflation targeting in emerging economies regardless of the fact that their complex economic and political environments may not meet all the pre-conditions recommended in the literature. The study points out that since 2000 there has been considerable improvement in the implementation of institutional and economic reforms in Pakistan. During this period Pakistan experienced rapid privatization of the banking system. Inflation was reduced to single digits along with accelerating economic growth. The role of the State Bank of Pakistan in influencing economic activity also increased. Thus given these characteristics within the economy of Pakistan, the study suggests that inflation targeting is seen as a viable.

A lot of studies conducted in the field of inflation focus on the role of monetary policy in controlling inflation. On study was carried out by A. Qayyum, 2008 the study examines the state of inflation, during the period from 1991 to 2008, which is the key objective of monetary policy in Pakistan. The target and actual rate of inflation was compared to examine percentage deviation of actual rate of inflation from the targeted rate of inflation. The study also carries out a trend analysis of actual M2 growth and targeted M2 growth during the period from 1991 to 2007 and compares it with inflation trends. The results showed that at the end of the FY 2007-08, actual inflation substantially (100% higher) surpassed the target level of inflation set by the federal government. The study concludes that monetary policy was successful in curbing inflation when it effectively controlled the money supply target. It purposes that the calculation of money supply target needs to be improved to get suitable target level of M2. It further demonstrates that SBP failed to control money supply and thus rate of inflation within the set target level in the recent years. Hence demonstrating that inflation targeting has not being effective in controlling the level of inflation.

Studies conducted on the current inflationary trend in Pakistan suggest that expansionary policies of the State Bank of Pakistan, which on one hand had an impact of stimulating economic growth and performance, resulted in accelerating price levels on the other hand, thus leading to the debate regarding the determinates of current inflation in Pakistan. Substantial amount of literature is available in this area of research and several studies including studies by Hasan et al. (1995) Naqvi et al. (1994), and Bokil and Axel Schimmelpfennig (2005) for Pakistan, Callen and Dangkoo Chang (1999) for India, Chauvet (2000) and IMF (2001) for Brazil, Sun (2004) for Thailand, Leigh and Rossi (2002) for Turkey, Simone(2000) for Chile, and Bailliu et al.(2003) for Mexico, have been conducted to address the causes of inflation for both developed and developing countries, including Pakistan. A study by AA Khan, Syed Kalim Hyder and Qazi Masood Ahmed (2007) uses econometric analysis to focus on and evaluate the primary determinants of current inflation trends. Data from the 1972-73 to 2005-06 period was collected and analysed using an ordinary least square method. The paper examines the role of different variables such as demand relative to supply, imported inflation, private sector credit, government sector borrowing, tax revenue of the government, exchange rate, adaptive inflation expectations and wheat support price in explaining inflation. The results of the quantitative analysis showed that the most imperative determinants of inflation between the years 2005-6 were private sector credit, adaptive inflation expectations and accelerating import prices.

A similar study by AH Khan and MA Qasim (1996) which highlights recent inflationary trends in Pakistan estimates overall inflation equation in the light of two broad components the first being CPI food price inflation equation and second being the CPI non food inflation equation. Using data from the period 1971-1972 to 1994-95 a time series analysis was conducted to test these equations. The findings of study reveal that higher monetary expansion to finance the fiscal deficit was the primary source of inflation in Pakistan. Also the adjustments in government administered prices including the electricity charges, fuel prices and support prices for wheat were amongst the major contributing factors of inflation.

In another study by MA Chaudhry , Munir A. S. Chowdry, 2005 they used ARDL approach to co integration to examine the determinants of inflation and output growth for Pakistan over the period of 1972-2004. The results of the paper indicate that growth rate of import prices is the most important determinant of inflation in Pakistan both in the short run and long run, which is followed by growth rate of output. The effect of monetary policy on inflation is negligible and statistically insignificant at the conventional 5%

level, both in the short run and the long run. Evidence illustrated in this paper proposes that Pakistan economy is functioning at a very horizontal segment of the output curve and the major cause of inflation is acceleration in import prices not the mismanagement of monetary policies. Therefore the study concludes that inflation targeting is not a feasible for Pakistan since any effort to trim down inflation through monetary policies will drive the economy into further recession.

Some recent studies conducted on inflation focus on the (FTPL). According to the Fiscal Theory of Price Level the use of monetary policy to target inflation puts certain restraints on the fiscal policy. Hence it is essential that the fiscal policy set by the government is in line with the monetary policy in order to control inflation. A study by Simon Wren Lewis (2002) uses the FTPL model to determine the role of fiscal policy in determining inflation and stabilisation in EMU (economic and monetary union of EU). The results of the study suggest that the impact of fiscal policy on inflation and output growth varies significantly among different fiscal instruments. Hence fiscal policy can make use of a diverse set of tools such as taxation etc in order to tackle demand imbalances and price levels within the macro economy.

Another study that sets to study the relationship between fiscal imbalances and inflation in Pakistan by AI Agha and MS Khan, 2006 carries out quantitative analysis using annual data from the period 1973-2003. The study uses CPI, WPI(wholesale price index) and GDP deflator to measure inflation, along with consolidated budget deficit which has been used to measure the relationship between fiscal sector and inflation. For measuring the relationship between money and inflation total bank borrowing (TTB) for budgetary support has been used. The empirical findings show that fiscal issues, such as government borrowing and financing of deficit through the banking system, result in fiscal dominance as these fiscal issues complicate the conduct of monetary policy. Hence in the case of Pakistan fiscal sector plays a dominant role in explaining price levels.

Studies conducted on inflation along with various economic theories regarding growth and inflation suggests that there is a trade off between achieving economic growth and reducing inflation. Hence research has been carried out to estimate the optimum threshold level of inflation. A study on the threshold level of inflation in Pakistan by YA Mubarik, (2005) uses annual data ranging from the period 1973 to 2000 applying a threshold model consisting of a four variable model consisting of inflation, population, economic growth and total investment to estimate the optimal level of inflation and growth. The result of the threshold model demonstrates that the monetary authorities should understand this trade off between economic growth and inflation when setting an optimal inflation target. The empirical analysis proposes that estimated level of inflation below 9 percent is favourable for economic growth. However the study fails to estimate inflation level that is too low for economic growth and there is a need for further research in this field.

Further studies conducted to illustrate the relationship between output growth, inflation and the effectiveness of monetary policy reflect that inflation in Pakistan is not only subjective to indigenous growth. Factors such as imported inflation play a much important role in influencing domestic price levels. A study conducted by Ahmed M. Khalid (2006) uses a VAR model to identify causal relationship between inflation and various economic indicators. The inflation equation includes factors such as inflation rate, output gap, exchange rate depreciation, US inflation rate, budget deficit to GDP ratio, M2 to GDP ratio and call money (proxy for interest rates). The result of the study concludes that output gap and share price index have a high degree of foretelling content on inflation and the use of expansionary monetary policy to achieve economic expansion could lead to accelerating inflation The study also indicate that, deficit-GDP ratio, imported inflation, exchange rate depreciation and domestic credit, money depth may be significant determinants of inflation in Pakistan. The study uses annual data on GDP for carrying out preliminary analysis due to the lack of availability of quarterly data on GDP in Pakistan. It is ideal to use quarterly data for inflation estimation hence the results of the study should be viewed with caution.

Through all the previous work that has been done in this field it is evident that monetary policy is a prevalent tool used by the SBP in controlling inflation in Pakistan and that its role as a regulatory tool has increased in the current years given the private sector credit growth and fiscal consolidation has also made way for the State Bank of Pakistan (SBP), to adopt independent monetary tools to conduct its monetary policy (Ather H. Akbari and Wimal Rankaduwa, 2006). However studies such as that conducted by M A Chaudhry, 2005, A I Agha and M S Khan , 2006, Abdul Qayyum, 2006, suggest that monetary policy is not effective in controlling inflation in Pakistan and hence purpose that inflation targeting is not a viable option. The literature however lacks the proposition and analysis of policy alternatives to recognize what policy will best suit Pakistan's economic setting.

Considering the importance of monetary policy in regulating price level and output growth in Pakistan the following study is set to measure the effectiveness of such money supply targeting/inflation targeting in Pakistan. Based on the literature analysis the most important variables influencing price levels in Pakistan and hence contributing to the recent inflationary trend are money supply (Ahmed M Khalid, 2005), level of output (Ahmed M. Khalid, 2006), foreign prices of imported goods (Chaudhry , Munir A. S. Chowdry, 2005), indirect taxes (AI Agha and MS Khan, 2006), effect of fuel prices (AH Khan and MA Qasim, 1996). These variables will hence be included in the following study as the determinants of inflation in Pakistan as to measure their correlation with changing price levels. This will enable us to draw a conclusion as to whether money supply is the most important determinant of inflation in Pakistan and how strong is this correlation.