1Maintaining Price Stability with Growth

1.1 Overview

Price stability, the primary objective of all central banks, was threatened by the one and a half year's developments in world's financial and commodity markets. During FY08, tremors of the subprime mortgage crises were felt in the financial institutions whereas commodity markets turmoil has pushed the prices to historical highs. In this scenario, inflation control, though in some cases at the cost of economic growth, was on the policy radar of central banks of both developed and developing countries alike. Central banks in the developed world were salvaging their financial systems through institutional bail outs and liquidity injections while developing world was grappling with inflationary pressures by direct and indirect policy measures.

State Bank of Pakistan was no exception. In continuation of its policy hardening measures at the beginning and at the midterm review of its MPS for fiscal year 2008, some further tightening steps were also announced through interim policy statement at the end of May 2008.

SBP's policy stance during FY07 had some visible denting impact on the aggregate demand in the economy and the inflationary pressures subdued to some extent in the subsequent period. The YoY core inflation, measured by non-food non-energy CPI, dropped to 5.1 percent by the end of FY07 from 6.3 percent at the end of FY06. However, thereafter the unexpected rise in food inflation muted most of the tight monetary policy gains. Had food inflation, in FY07, remained at the average level observed in FY06 (i.e. 6.9 percent), CPI inflation would have remained at the 6.5 percent target for the year.

The increase in food prices coupled with unforeseen developments in monetary aggregates including massive government borrowing, surge in foreign inflows and accommodation of exporters' demand through SBP refinancing schemes fuelled reserve money growth, which once again ignited inflationary pressures in the economy. With this backdrop, SBP announced some policy/administrative measures in July 2007 to ease price pressures. The measures included an increase in the policy rate by 50 bps to 10 percent with effect from August1, 2007 along-with fixation of CRR at 7 percent with the exemption of longer than one year deposits from this requirement. The subsequent macroeconomic developments, however, negated any positive outcome of these policy measures in defusing volatility. Core inflation rose to 7.2 percent year on year (YoY) basis by December 2007; 1.5 percentage points above the last year level and 2.0 percentage points above the trough reached in May 2007. Headline CPI inflation reached 8.8 percent by December 2007, reflecting the undercurrents of core inflation and the food inflation (which hit double-digits, reached 12.2 percent in December 2007). Accordingly, further policy tightening was announced through MPS for Jan-Jun 2008 and the policy rate was hiked by another 50 bps to 10.5 percent and the CRR (on liabilities of less than one year) by 100 bps in addition to changes in refinancing schemes.

1.2 Monetary Policy Statement

SBP issued two Monetary Policy Statements (MPS) during FY08. Moreover, a supplementary statement containing some interim policy measures was also issued in May 2008. In its monetary policy statement for H1-FY08, in addition to increasing policy rate by 50 bps to 10 percent and exempting all deposits of one-year and above maturity from CRR, SBP took some strategic decisions. It abandoned the preparation of Annual Credit Plan and adopted a more sustainable approach of framework based monetary policy. In accordance with this framework, for the first time section 9A of the State Bank of Pakistan Act 1956 was used, imposing limits on government budgetary borrowing from SBP. Steps were also taken to rationalize SBP's Export Refinance Scheme, a

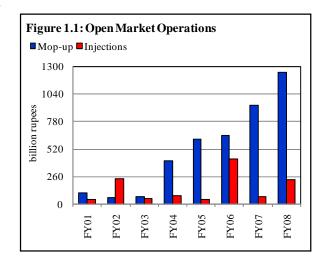
persistent source of reserve money growth, with gradual reduction in the quantum of scheduled banks recourse to SBP under the scheme. However, aggregate demand pressures in the economy did not abate albeit SBP's tightening measures and inflation gained further momentum on the back of increasing twin deficits (fiscal and current account) and rising commodity prices in the international markets. Hence, through MPS for Jan-Jun FY08 a further hike of 50 bps in policy rate to 10.5 percent was announced. However, the worsening of economic situation and particularly the inflation could not be subsided, especially since the beginning of CY08. The earlier monetary policy measures were largely diluted due to the fiscal softening stance. Fiscal and external current account deficits shot up significantly necessitating some immediate remedial measures, which were announced in May 2008. The policy rate was pushed up by 150 bps to 12 percent; CRR and SLR were hiked by 100 bps to 9 percent & 19 percent. These hikes were in addition to some administrative measures for the support of depositors as well as for stability of rupee/dollar parity.

1.3 Conduct of Monetary and Credit Policy

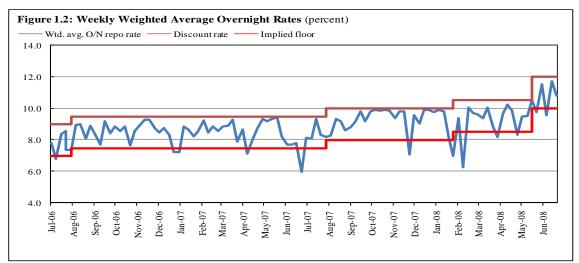
1.3.1 Open Market Operations (OMOs)

Open Market Operations (OMO) remained the main tool of monetary management during the year. The objective of liquidity management was to keep short term interest rates in line with the tight monetary policy stance. SBP further tightened the monetary policy by raising its discount rate in three steps in FY08. This was done to check the rising inflation and curb demand pressures.

Although a part of the excess liquidity was permanently drained by SBP through increase in CRR and SLR; the government's excessive borrowing from SBP remained a continuous



source of liquidity injection in the market. SBP continued to sterilize the excess liquidity through OMOs during the year; however monetary management was complicated on account of unpredictable nature of these inflows.



The liquidity management strategy pursued, mainly focused on the shorter end of the yield curve. SBP mopped up surplus liquidity through OMOs in order to keep the O/N Repo rates anchored within the

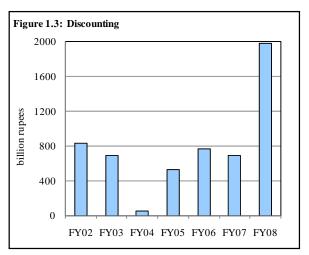
200 basis points wide implicit corridor (See **Figure 1.1**). A total of Rs.1, 265.6 billion were mopped up during FY08 which include nine outright OMOs. The outright OMOs were conducted with the objective of mopping up excess liquidity for a relatively longer period of time. The weekly weighted average Overnight Rate which is generally used to monitor the effectiveness of SBP's monetary management remained consistently within the targeted implicit corridor with only a few exceptions due to un-anticipated market inflows (See **Figure 1.2**).

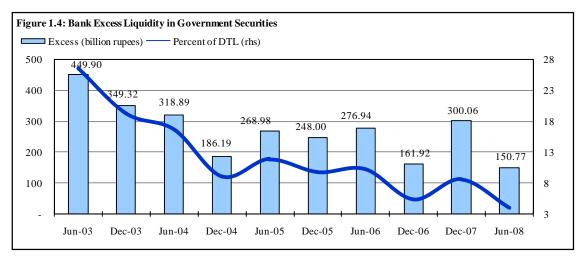
The weighted average O/N rate during FY08 remained at 9.35 percent i.e. within the desired level and in conformity with the monetary policy stance. The decline in volatility in O/N rates during FY08 shows effectiveness of monetary management as evident from reduced SD and CV compared with last three years. (See **Table 1.1**)

1.3.2 Discount Window Operations

With the continuation of tight monetary policy stance, pressure on discount window remained high with banks/DFI's borrowing record amounts through the discount window during FY08. Total discounting amounted to Rs. 1,973.0 billion as against Rs. 686.8 billion during FY07 (see **Figure1.3**). The number of visits at the discount window also increased to 137 in FY08 as against 74 in FY07. The quarterly data show that around 57 percent (Rs.1,129.4 billion) of the total discounting was availed during the second quarter of FY08. Main reasons behind the

Table 1.1: Overnight Rate										
O/N Rate	FY05	FY06	FY07	FY08						
Weighted average (percent).	3.95	8.07	8.46	9.35						
S.D.	2.33	1.14	1.1	1.0						
C.V.	0.59	0.14	0.13	0.11						





shortfall were the excess buying of MTBs, seasonal factors and tax outflows. However, in the last two quarters, discounting remained significantly lower at Rs. 300.0 billion and Rs. 241.9 billion respectively.

1.3.3 Statutory Liquidity Requirement (SLR) and Cash Reserve Requirement (CRR)

Government borrowing from SBP remained the main source of liquidity injection in the market. In line with tight monetary policy stance, SBP mopped up this excess liquidity permanently through revision in SLR on May 22, 2008 and CRR on three occasions¹. The objective of linking the required CRR with the maturity of the deposit was to encourage banks to mobilize long term deposits as deposits of 1-year and above maturities do not attract CRR requirements. Excess liquidity kept by banks during FY08 is shown in **Figure 1.4** (Excess Liquidity is defined as the surplus holdings of government securities / cash over and above the minimum CRR/SLR requirement).

Chronology of Changes in CRR & SLR during FY08:

Cash Reserve Requirement (CRR)

a) August 1, 2007: Weekly average of 7 percent (subject to daily minimum of 6 percent) of total Demand Liabilities (including Time Deposits with tenor of less than 1 year); and Time Liabilities (including Time Deposits with tenor of 1 year

(including Time Deposits with tenor of Tyear and above) will not require any CRR.
b) January 31, 2008: Weekly average of 8 percent (subject to daily minimum of 7 percent of total Demand Liabilities (including Time Deposits with tenor of less than 1 year) and Time Liabilities (including Time Deposits with tenor of 1 year and above) will not require any CRR.

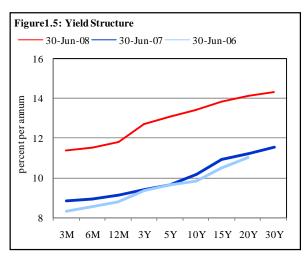
c) May 22, 2008: Weekly average of 9 percent (subject to daily minimum of 8 percent) of total Demand Liabilities (including Time Deposits with tenor of less than 1 year) and Time Liabilities (including Time Deposits with tenor of 1 year and above) will not require any CRR.

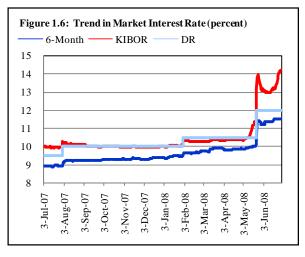
Statutory Liquidity Requirement (SLR)

Effective May 22, 2008 SLR was raised by 100 bps to 19% (excluding CRR) of total Time and Demand Liabilities.

1.4 Interest Rate Trends / Yield Curve

Concurrent with the increase in the discount rate thrice in FY08, cut off yields of MTBs increased for all tenors. Cumulative increase in cutoff rates amounted to 232 bps, 235 bps and 233bps for 3, 6 and 12 months MTBs. The entire yield curve shifted upward at the end-of FY08 which was almost unchanged during the previous two years. The movement in weighted average yield curves for different time periods and tenors is shown in **Figure 1.5**.





¹ Please refer to BSD circulars No. 4of 2007, No.3 & No. 10 of 2008 for details.

The secondary market government yield curve also followed the changes in discount rate and registered a cumulative increase of 253 bps, 257 bps and 268 bps for 3, 6 and 12 months tenors. The larger impact was witnessed after May 23, 2008 when SBP increased discount rate by 150 bps to tame the inflationary pressures. Effective transmission of the tight monetary policy stance to the lending rates in the market is reflected by the increase in different tenors of KIBOR e.g. KIBOR for 3, 6 and 12 months registered a consolidated increase of 423 bps, 408 bps and 398 bps during July 1, 2007 to June 30, 2008 (see **Figure 1.6**).

1.5 Government Bond Market

Since the introduction of PIBs in FY00, 37 PIB issues have been auctioned till the end of FY08. Except for the period June 2004 to May 2006 when no PIBs were issued it has been regularly issued though the issue sizes were relatively small (see **Table 1.2**).

In terms of issuance, the outstanding PIB volume is Rs. 411 billion and average issue size is (Rs. 11.1 billion) which is quite low compared with other emerging economies in the region. However, regular supply of PIBs since May 2006 has somewhat improved the liquidity in the market. Continuous reopenings of previous PIB issues coupled with regular auctions remained the main feature during FY08. The 30-Year PIB has not only provided a bench mark for the corporate sector but has also helped government in financing its long term developmental projects. The main beneficiaries of the 20 and 30 year PIBs are the life insurance companies which have a long term liability structure. Similarly the re-opening of previous issues has helped in developing sizable PIB issues which improved liquidity in the market.

In the seven PIB auctions conducted during FY08, a total of Rs 73.6 billion were raised through a mix of fresh issuance and reopening of previous issues. Banks showed interest in all PIB tenors, especially in the first half of the year with relatively higher concentration in 5, 10 and 30 year tenors. The increased share of PIBs in GoP domestic debt has not only facilitated in diversification of the portfolio but also assisted in increasing the duration of the portfolio. An encouraging trend in the ownership classification of the outstanding PIB portfolio is the growing interest of non-banking sector in PIB whose share in the total outstanding PIBs increased from 43% in FY04 to almost 60% in FY08.

Tenors	Face value amount issued							Total	Share by
	22-Aug-07	10-Oct-07	31-Oct-07	30-Nov-07	31-Jan-08	31-Mar-08	30-Jun-08	issued	tenor (percent)
3-year	1,273.0	1,291.5	1,887.0	-	216.0	285.0	216.5	5,169.0	7.0
5-year	4,652.5	3,550.3	1,650.0		726.4	197.7		10,776.9	14.7
10-year	4,260.0	6,540.0	7,465.0		4,162.5	610.2	837.7	23,875.4	32.5
15-year	536.0	2,024.0	3,007.9		1,762.0	470.7	812.5	8,613.1	11.7
20-year	1,800.0	2,000.0	500.0		2,600.0	950.0	1,200.0	9,050.0	12.3
30-year	4,000.0	2,000.0	1,000.0	2,000.0	2,600.0	2,800.0	1,700.0	16,100.0	21.9
Total	16,521.5	17,405.8	15,509.9	2,000.0	12,066.9	5,313.6	4,766.7	73,584.4	100.0

 Table 1.2: Snapshot of PIB Maturities and Issuance during FY08

Government debt should generally be issued on a regular basis and in a limited set of maturities (i.e. benchmark maturities) with relatively large sizes. Market fragmentation is minimized by these practices. Government should narrow the variety of debt instruments by consolidating and standardizing government securities issues with emphasis on the size of specific issues. By concentrating government bond issues in a relatively limited number of popular, standard maturities,

government can assist the development of liquidity in those securities and thereby lower their debt issuance costs.

1.6 Strengthening the process of Monetary Policy Formulation and Implementation

To institutionalize the process of formulation and implementation of monetary policy and make it more transparent and efficient, various structural changes were introduced. Notable developments in this regard are given below:

Monetary Policy Committee (MPC) held a number of meetings during FY08 and reviewed the macroeconomic developments of the economy focusing on inflation, monetary and credit developments and economic growth. The committee also discussed the issue of excessive government budgetary borrowing from SBP and its implications for monetary policy.

An important element of the monetary policy formulation process and conduct is the SBP's view on future economic developments and implications of current developments and policy changes. To have a better assessment of future, the emphasis is on how to improve the forecasting capacity in the Bank. To have reliable forecasts, SBP has developed a Macro Econometric Model of Pakistan economy based on annual data. Furthermore a Macroeconomic Framework based on Financial Programming Approach has also been developed in order to derive consistent forecasts for key macroeconomic variables. Forecasts derived from the Macro Econometric Model and Macroeconomic Framework are used as an input in policy decision making process. Moreover, SBP's Research Department is designing another macroeconomic model using an advance technique termed as Dynamic Stochastic General Equilibrium (DSGE) modeling.

Effective communication of monetary policy to the stakeholders and general public is crucial to achieve desired goals. SBP has been actively pursuing to improve this communication. In this regard, special attention is being given to the transmission of the monetary policy statement in such a manner that it reaches the masses and the stakeholders with clarity as much as possible. For that purpose hard copies of the statement are mailed to around 200 external stakeholders. The SBP governor and the senior officials discuss the policy at various forums including electronic media to explain the rationale of monetary policy decisions and promote healthy debate both before and after the issuance of monetary policy statements. Positive criticism on monetary policy is welcomed and suggestions are accepted for further improvement.

To ensure that all genuine needs of credit of private sector are met adequately and to discuss impediments in availability and disbursement of credit to various sectors, SBP arranged two meetings of Private Sector Credit Advisory Council (PSCAC) during FY08.

Government's heavy reliance on borrowing from SBP to finance its fiscal deficit, proved a major impediment in effective transmission of monetary policy. It had, to a large extent, diluted the impact of SBP's efforts to bring inflation down to desired level. Applying for the first time the subsection (b) of the Section 9A of the SBP Act 1956, which authorizes SBP's Central Board to determine and enforce the limits on borrowing by federal government, provincial governments and government agencies from the central bank, the SBP in July 2007 recommended the government to retire its borrowings from SBP by Rs 62.3 billion during FY08 and adopt quarterly ceilings on budgetary borrowings from SBP.

1.7 Framework for Monetary Policy

The monetary policy framework that was revisited last year (Monetary Policy Committee was established with a broader mandate (replacing the Monetary and Exchange Rate Policy Committee) has been functioning effectively. Monetary Policy Department serves as the secretariat for the internal Monetary Policy Committee (MPC), chaired by the Governor. MPC mandate is to formulate and

draft monetary policy for the approval of SBP Board, monitor economic conditions, and take necessary corrective actions to implement the approved monetary policy. Besides continuous monitoring, detailed reviews, discussions, and decisions regarding approved monetary policy are made in the regular six-weekly meetings of MPC. Bi-annual "Monetary Policy Statement" explains the rationale of policies in detail.

1.7.1 Macro Modeling and Forecasting

MPR cluster provides forecasts of key macroeconomic variables to the Central Board of Directors of SBP and to the members of MPC. These are based on reliable and consistent set of models ranging from Macroeconomic framework (based on Financial Programming) to a small Macro econometric model of Pakistan economy. These forecasts provide policy guidance in the formulation of appropriate monetary policy stance and are also used in explaining the SBP views on the future path of key macroeconomic variables through its various publications i.e., Annual Report, Quarterly Reports, and the Monetary Policy Statements, particularly with reference to inflation and real GDP growth. Further, to strengthen forecasting & modeling capabilities and to provide policy guidance in the decision making process, SBP has initiated the process for the development of a micro-founded Dynamic Stochastic General Equilibrium (DSGE) Model for Pakistan economy.

1.8 Strengthening of Research Functions

Monetary Policy and Research Cluster (MPRC) of departments in the SBP is playing an important role not only in monetary policy formulation, but also in providing key inputs for broader economic and financial policy formulation through its economic reports, research work, analytical and financial reviews and data compilation and dissemination.

In this back drop last year five departments were created/reorganized on the basis of their functions under MPR cluster. For the achievement of desired goals, further restructuring within the cluster was under taken, notably functions of Research Department were redefined and a new Financial Stability Department was created to take over all the related work of financial sector in addition to some new tasks. Financial Stability Review will now be the publication of this new department. In addition, the functioning of Macro Modeling and Forecasting Division, that was earlier part of the Monetary Policy Department, were divided into two separate divisions. Now Macro Modeling function will be under the supervision of Research department while that of Forecasting will remain under Monetary Policy Department. The reorganization is as below:

- 1. Research Department
- 2. Economic Analysis Department
- 3. Monetary Policy Department
- 4. Financial Stability Department
- 5. Statistics and Data Ware House Department

MPRC continued its capacity building and skills enhancement through trainings, exposure visits, induction of professionals, access to quality journals, research bulletins, and databases, etc.

1.8.1 SBP Research Bulletin

Research department of SBP has established its mark as a major research institution that brings out a peer reviewed journal SBP Research Bulletin, currently indexed in the Journal of Economic Literature of the American Economic Association. First SBP Research Bulletin was published during FY05 and by the end of FY08 five issues have been published and are available on SBP website. Out of these, three cover the recent research work on important topics relating to Pakistan's economy while two are the proceedings of SBP International conferences covering the issues related to central banking. During FY08 one regular issue was published and simultaneously released on SBP website while the other special issues could not be published due to unavoidable postponement of the SBP international conference that was supposed to be held in December 2007.

1.8.2 SBP Working Papers

SBP Working Papers are also contributing to strengthen the functioning of Monetary Policy & Research cluster. These internally peer reviewed papers are on different topics, but generally related to the core functioning of the central bank. Since its inception in September 2001 till end June 2008 twenty five working papers have been released and posted on SBP website (www.sbp.org.pk). Seven out of these, were written during FY08.

1.8.3 SBP International Conferences and Seminars

SBP has successfully organized two international conferences during FY06 and FY07 on "Monetarycum-Exchange Rate Regime: What Works Best for Emerging Market Economies?" and on "Fixed Income Market Development in Emerging Market Economies". Besides achieving its objectives, the conferences also produced thoughtful papers on the subjects that were published in the respective SBP Research Bulletins. The third conference that was planned in December 2007 postponed owing to unavoidable circumstances; however, SBP conducted two seminars during FY08 in which eminent economists presented their papers and exchanged views with SBP officers. In addition, SBP organized a seminar on "BASEL II Implementation in South Asia" in June 2008 at National Institute of Banking & Finance (NIBAF), Islamabad under the aegis of SAARCFINANCE- Network of SAARC central bank governors and finance secretaries. The delegates from member countries presented country papers and shared their experiences to generate a meaningful dialogue on the subject matter.

1.8.4 Disseminating SBP Analysis in National Language

With the transformation of SBP into a most vibrant and proactive institution, responsible for the most important aspect of economic management in the country, it has become imperative to create awareness among the masses, the main subject of all economic policies. The signals of monetary policy would only be effective when the community is able to receive these and correctly interpret them. For this purpose the SBP started Urdu translation of its key publications which are released simultaneously with English versions of these publications. A division in the Research Department was created with the induction of expert translators. A senior Economist is looking after the activities of this division.

During the year FY08, seven publications were translated in Urdu including:

Monetary Policy Statement, Jul-Dec FY08 Monetary Policy Statement, Jan-Jun FY08 Interim Monetary Policy Measures FY08

Financial Stability Review 2006

1st Quarterly Report FY08

2nd Quarterly Report FY08

3rd Quarterly Report FY08

1.8.5 SBP Annual/Quarterly Reports

In accordance with its statutory responsibility, SBP successfully publishes its annual and quarterly reports. These reports provide opportunity through which SBP accounts its policies to more transparent process, where an objective assessment of the state of the economy and meaningful review of economic policies with an extensive coverage of real and fiscal developments are provided. This helps a better public understanding of interaction between monetary and fiscal policies and their impact on the overall growth of the economy. Further, discourse generated by reports helps the people to become more objective in their views on monetary and banking policies of SBP. Similarly, publication of reports helps rationalize the market expectations by guiding public perceptions on important economic issues and consequently make the implementation of SBP policies easier.

1.8.6 Inflation Monitor

SBP continuously monitors and analyses inflation trends as maintaining price stability is a primary objective of the central bank. To make the general public more informed about the inflation developments, SBP regularly publishes a monthly document titled "Inflation Monitor" since 2005. More specifically, objective of the Inflation Monitor is to provide detailed analysis on price trends so that the economic agents are able to form an independent outlook for the emerging price situation and can make their economic decisions on the basis of a wider set of information. The Inflation Monitor is based on the price data meticulously compiled by Federal Bureau of Statistics. However, for global price developments price data sets compiled by International Monetary Fund (IMF) and World Bank are also used.

1.8.7 Publications from Statistics and Data Warehouse Department

Timely availability of quality economic data is the pre-requisite for research and policy formulation. To keep stakeholders updated on latest developments in various segments of economy, State Bank of Pakistan produces a variety of reports and statistical bulletins. The Statistics and Data Warehouse Department compiles authenticated and reliable statistics on a wide range of economic variables for usage in SBP reports and publishes data with different frequency (daily, weekly, monthly, bi-annual and annual) in the form of different publications. These publications are brought out in printed form and are also placed at SBP website for easy access. The Statistics and Data Warehouse Department is a primary source of data on money and banking and the Balance of Payments (BOP) for Pakistan. The department also carries out analysis for assessing performance of the country's stock markets and financial sector through balance sheet analysis of listed companies and financial institutions. The analysis is also published in the form of annual publications.