

1 Maintaining Price Stability with Growth

1.1 Monetary Policy Formulation

The monetary policy easing, which started in FY12, continued in FY13 as well. SBP reduced its policy rate by 300 basis points (bps) in FY13, with a cumulative reduction of 500 bps in the last two years, bringing the *SBP reverse repo rate* to 9.0 percent. The key drivers of these policy decisions during FY13 were a sharper than anticipated decline in inflation and to promote dwindling private investment in the country. While taking these policy decisions, SBP did acknowledge the risks that emanate from the fiscal and external sectors of the economy.

In the first half of FY13, SBP lowered its policy rate by a cumulative 250 bps. The policy rate was initially lowered by 150 bps to 10.5 percent in August 2012 and then by 50 bps each in October and December 2012 to reach 9.5 percent. At the beginning of FY13, amid fiscal slippages and plummeting financial flows, SBP was wary of the high inflation and low economic growth equilibrium in the economy. However, SBP decided to assign a higher weight to growth considerations while taking its monetary policy decisions. Initially SBP was expecting CPI inflation to remain in the double digits for FY13. Later on, the likelihood of meeting the 9.5 percent inflation target for FY13 increased due to significant reduction in administered price of gas and decline in food inflation. The core inflation also declined, which provided further support to subsequent reduction in the policy rate.

During most of H2-FY13, SBP remained cautious in further easing of the monetary policy. In its policy decisions of February 2013 and April 2013, SBP kept the policy rate unchanged at 9.5 percent. The key determining factor in keeping the policy rate unchanged was the anticipated difficulties in managing the balance of payments position. However, a continuous decline in inflation had been increasing the real cost of borrowing which prompted SBP to further reduce its policy rate by 50 bps to bring it to 9.0 percent in June 2013.

1.2 Monetary Policy Department

Monetary Policy Department (MPD) is a core department of the State Bank of Pakistan which produces research based analysis for formulation of monetary policy. It provides intellectual, analytical, and information support to the SBP Central Board of Directors and senior management of SBP for taking monetary policy decisions. In this regard, the department is contributing by drafting monetary policy statements (MPS), compiling monetary policy information compendium and preparing forecasts of key macroeconomic indicators.

During FY13, MPD made significant progress in achieving the strategic goals of the SBP related to monetary policy. With respect to research on monetary policy transmission mechanism, its various channels such as the interest rate, exchange rate, and credit channels were explored further. The department initiated work on estimation of the interest rate pass through, testing the uncovered interest rate parity theory of exchange rate, role of subsidized lending and the balance sheet of corporate in the credit channel. These projects will help in further enhancing our understanding of the effectiveness of monetary policy in Pakistan.

MPD also achieved several improvements in its operational tasks. Updated econometric techniques and computing software were used to improve the forecasts of key macroeconomic variables. Inflation forecasting has been further enhanced by analyzing disaggregate CPI inflation data and

incorporation of Bayesian estimation for vector-auto-regression models. These additions have helped significantly in scenario analysis by exploring the impact of anticipated and un-anticipated shocks on CPI inflation.

Forecasts of credit to private sector businesses and credit to public sector enterprises have been added to the list of macroeconomic variables being projected. Based on extensive review of the financial statements of major listed companies, which represent key sectors of the economy, MPD aims at better understanding of corporate profitability and industry outlook. An assessment of financial sector is also carried out by specifically looking at (a) the lending behavior of the banks, (b) the behavior of deposits; and (c) the banking sector spreads. The purpose is to understand the dynamics of the supply of credit and the risk taking behavior of the banking sector, besides forecasting deposits of private sector and personal categories. Moreover, assessment of financial markets and liquidity conditions is also carried out to analyze the liquidity in the market and the movements in market interest rates.

These forecasts are combined into a macroeconomic framework for preparing consistent projections of key macroeconomic indicators. The quality of macroeconomic projections was improved by using simple time series models for forecasting real GDP and Large Scale Manufacturing Index. Going forward, the focus will be on investigating more behavioral aspects of key macroeconomic variables to improve the quality of projections. Moreover, debt sustainability analysis has been initiated to make it a regular component of medium-term macroeconomic framework projections.

Keeping in view the important role of communication in making monetary policy effective, the department dedicated significant effort for effective dissemination of its monetary policy stance. To provide timely direction to the stakeholders, SBP announced its monetary policy six times during FY13. The two monetary policy statements, produced in August 2012 and February 2013, provided detailed analytical and forward-looking assessment of the economy that shed light on factors determining the monetary policy stance. While brief statements were issued in October 2012, December 2012, April 2013, and June 2013. The department also participated in various forums, such as interviews and discussions on the electronic media, to explain the monetary policy decision; and attended to the queries of the various stakeholders.

During FY13 the department organized discussion forums for financial market analysts and banks' treasury heads to share knowledge on concepts, procedures, and issues relating to monetary policy implementation in Pakistan. The monetary policy information compendium was further improved by adding more data and historical trends. The monetary policy webpage is in final stages of review and is likely to be placed on the SBP website in FY14.

With the objective of strengthening the capabilities of SBP officers in applied economics research, and stimulating discussions on contemporary macroeconomic issues, SBP started a Working Paper (SBP WP) Series in September 2001. The then director of the Research Department served as Editor for this series since 2001. 52 papers were published by FY12 as SBP WPs. The Series is now open to all authors, including those from outside SBP, for submitting an economics research paper. The Director, MPD is now Editor of this SBP WP Series. As earlier, the submitted research paper is peer reviewed and is presented in a seminar. If recommended, the revised paper, in the light of comments received, is released on the SBP website. During FY13, 9 such papers (SBP WP No. 53 to 61) were released by the Bank.

1.3 Research Department

The idea behind current Research Department's (RD) agenda is to help the policy-maker study the economy in a structure that allows economic agents (households, firms, banks, government and the central bank) to interact with one another in a manner that incorporates backward and forward-looking behaviors of these agents. This customized structure would allow the policy maker to have a superior feel for the economy, help pin down likely movements in the economy when an unexpected change arrives and also understand how policy actions are likely to affect key variables that are of interest to the policy maker. Such a structure is important as it alleviates the limitations of information being presented in an isolated, disconnected and backward-looking manner.

There are two approaches to go about building economic structures to overcome the above limitations: (1) an off-the-shelf approach where one would borrow from the literature and try to fit their models to Pakistan's case assuming that the experiences of agents studied in the literature and our economic agents are similar; (2) build a structure which has internalized the micro economic features of economic agents in various segments of the Pakistan Economy - a micro-founded macro model. The latter approach necessitates developing complex model-based structures and their empirical testing and also requires collection and examination of micro data on the behavior of key agents. RD contributes to policy making using the latter approach and most contributions are internationally peer reviewed.

During FY13, RD established the annual stylized facts of Pakistani business cycle fluctuations as well as completed a simple and augmented Real Business Cycle model for Pakistan. Furthermore, in the second iteration the Dynamic Stochastic General Equilibrium (DSGE) model of Pakistan contained price and wage rigidities in a simple Bayesian DSGE model for both annual and quarterly frequency. In addition, a fresh DSGE model with households, firms, commercial banks, monetary authority and Government is developed. This model is used to explore/understand the implications of Government borrowing on the lending behavior of commercial banks (to private sector) as well as on the aggregate economy. Results from this model appeared in a special section of the quarterly report FY13.

Research Department continued its micro level research agenda with the objective to facilitate the management in forward-looking policy decision making. In this regard, consumer confidence and inflation expectations indices are built and are being used regularly by the management of the Bank in the monetary policy deliberations. These are also used by RD itself while contributing to write up on explaining inflation, in SBP's annual and quarterly reports on the state of Pakistan economy. For the benefit of external stakeholders since Dec 2013, State Bank of Pakistan publishes survey results relating to the indices of the consumer confidence and inflation expectations, and the background research on its website (<http://dsqx.sbp.org.pk/ccs/index.php>).

Research Department also initiated a credit assessment survey during FY13 through emails to selected senior officers of all domestic and foreign banks across Pakistan, to understand the dynamics of demand and supply channels of corporate as well as SME business loans in the country. This survey is in its developmental stage. We expect this would be a regular feature next year onwards. Furthermore, RD also launched a novel project to understand, in an experimental setup, issues relating to supply of and demand for credit by farmers. This special focus on agriculture credit is in view of its stagnant agricultural growth in Pakistan. The learning from this interesting experiment will be available in FY14.

This department has also contributed to the SBP WP Series during FY13. For example the work on 'Sticky Wages in a Developing Country: Lessons from Structured Interviews in Pakistan' is an

important contribution. The interviews for this research study were conducted from a sample of managers of formal sector manufacturing firms and it provided the basis for a comparison with studies performed in the developed countries and how relative wage-stickiness affects monetary policy transmission.

Research Department also publishes 'SBP Research Bulletin'. With the objective of making SBP Research Bulletin a journal of international quality, few changes were introduced in the review process and the editorial board during FY13. The journal is now open to contributions outside SBP. The manuscripts submitted to the Bulletin are first screened by the board itself. If the manuscript shows potential for the Bulletin, only then it is sent to the reviewers. Moreover, a short papers/notes section is also added in the Bulletin to encourage young economists to submit their research on recent macroeconomic issues. The Issue published during 2013 (i.e. Volume 9) contained two articles, two short notes, an opinion, and a review.

Last year RD estimated the overall quarterly GDP and its various subsectors on current prices and constant prices (1999-2000) from production as well as expenditures side for the period of FY73-FY10. During FY13, it extended its estimation coverage of said quarterly GDP series for the next two years (FY11-FY12) and an overall paper was published in SBP Research Bulletin, Volume 9. The quarterly GDP data was used in Pakistan's general equilibrium models.

Annual Report (on the Performance) of State Bank of Pakistan (and its subsidiaries) for the year FY12 was compiled by the Research Department. It was based upon the contributions from Bank's departments, SBP-BSC, and NIBAF.

During FY13, this department of the Bank organized the following events of international repute:

26th SAARCFINANCE Group Meeting

In pursuance of the decision of 24th Group Meeting held in Nepal on 16th May 2012, State Bank of Pakistan hosted the 26th SAARCFINANCE Group Meeting and SAARCFINANCE Governors' Symposium back-to-back with the Meeting of the Board of Directors of Asian Clearing Union at Islamabad during June 18-19, 2013.

Governors from SAARC member Central Banks/Monetary Authorities and Finance Secretaries of the SAARC countries participated in the 26th SAARCFINANCE Group Meeting held on June 18, 2013. Dr. Fazeel Najeeb, Governor and Chairman of the Maldives Monetary Authority, chaired the Meeting. Key decisions made during this Meeting, included the approval of amendment to Article 4 of the terms of reference of the SAARCFINANCE, launching of SAARCFINANCE 10-year history at SAARCFINANCE Portal, and the SAARCFINANCE scholarship scheme.

SAARCFINANCE Governors' Symposium

State Bank of Pakistan also hosted the 9th SAARCFINANCE Governors' Symposium on 18th June, 2013 at Islamabad. The focus of the Governors' Symposium was to gauge the impact of euro debt crisis on the SAARC region. Besides Pakistan, the delegates from SAARC member countries participated in the event. Mr. Yaseen Anwar, Governor, State Bank of Pakistan chaired the Governors' Symposium. Governors of SAARC central banks or their representatives presented their country papers on the subject issue. Dr. Ishrat Husain (former SBP Governor, currently Dean & Director of IBA, Karachi) and Dr. Ehtisham Ahmad (former IMF official, presently Senior Fellow at the LSE Asia Research Centre & ZEF University of Bonn, Germany) also presented their views as key note speakers at the occasion.

Meeting of SAARC Central Banks' Economists

State Bank of Pakistan organized the first (roundtable) meeting of senior officials of SAARC central banks at Islamabad on June 19, 2013. The main objective of this meeting was to have an informal discussion on the common challenges/issues being faced by the SAARC countries in the backdrop of current international economic developments. The participants of the meeting gained a lot from discussion and benefitted from country experiences on specific economic issues. Besides Pakistan, the delegates from Afghanistan, Bangladesh, Bhutan, India, Nepal and Sri Lanka participated in the meeting.

19th Zahid Husain Memorial Lecture¹

The 19th Zahid Hussain Memorial Lecture was delivered by the Cambridge University Prof. Ha-Joon Chang on 'Rethinking Role of the State in Economic Development'. The participants of the lecture included the prominent economists of the country, bankers, diplomats, Government officials, and the officers of SBP. Unlike previous years, SBP organized the memorial lecture alongside the ACU/SAARCFINANCE meetings in Islamabad.

1.4 Economic Policy Review Department

Economic Policy Review Department (EPRD) evaluates performance of the economy and disseminates its analysis through SBP flagship publications, i.e., Annual and Quarterly reports in accordance with the statutory provisions of the State Bank of Pakistan Act, 1956. It also actively participates in discussions related to monetary policy formulation. During FY13, it prepared the Annual Report on the state of the economy in FY12, and three Quarterly Reports on prevailing economic conditions during FY13. These reports were submitted to both Houses of Parliament.

In addition to regular functions of publishing reports and giving inputs in monetary policy formulation, EPRD also responded to a number of references/requests for information received from various Government agencies/ ministries; and prepared speeches for the Governor.

EPRD has been continuously improving the quality and depth of analysis of Pakistan's economy in its Annual and Quarterly reports. Like previous years, the SBP reports prepared in FY13 also initiated debates on key economic issues among academia, media persons, and the general public. The Annual Report highlighted issues like (a) constraints on growth due to energy shortages; security concerns; and floods in two consecutive years; (b) high growth in consumption supported by strong worker remittances, a vibrant informal economy, and higher fiscal spending; but low level of investment in the country; (c) unsustainable fiscal deficit which contributed to inflation, squeezed out private investment, impacted the balance sheet of commercial banks, and pushed the country into a debt trap; and (d) lack of decisive reforms to solve the energy problem, revitalize PSEs and to consolidate the fiscal situation.

SBP Quarterly reports for FY13 analyzed economic developments during respective quarters of the year and identified areas of reforms. A number of boxes and special sections were also included in these reports to spotlight key issues, in addition to regular assessment of the economy, as given below:

¹ State Bank of Pakistan has a tradition of organizing a prestigious series of Zahid Husain Memorial Lectures in the memory of its first Governor. Starting from the year 1975, 19 lectures have been organized so far.

- The first Quarterly Report had a box on consumption demand which explored possible factors behind high growth in consumption on the one hand (as was evident from imports of consumer durables, setting up of new food processing industries, and sustained growth in construction activity) and negative growth in production of home electronics and automobile – which are key metrics for consumer demand – on the other.
- The second Quarterly Report examined the declining trend in inflation over the past two years. It argued that the recent decline might be traced to a combination of favorable circumstances and policy decisions. It also explained the links of inflation trend with exchange rate, administered prices, and global commodity prices.
- The third Quarterly Report included four boxes on issues of (i) rebasing of national income accounts by Pakistan Bureau of Statistics (PBS) from the fiscal year 1999-2000 to 2005-06; (ii) tax amnesty schemes; (iii) sharp rise in public debt; and (iv) new hybrid indicators of reserves adequacy. Moreover, this report also included a special section on macroeconomic dynamics with a dominant borrower (Government). It highlighted a difficult trade-off faced by State Bank of Pakistan, i.e., with an insatiable Government appetite for credit, how does the central bank manage the quantum of inflationary finance and yet ensure adequate credit to the private sector.

Apart from the above mentioned boxes and special sections which were parts of the SBP flagship reports, this department also prepared a number of stand-alone papers on different macroeconomic issues during the year under review. For example, a note was prepared (for senior management of the Bank) on the solution to the natural gas crisis which focused on household consumption patterns, energy requirements and the energy mix; and suggested a possible gas allocation framework. Another paper was written on optimal liquidity for banks in Pakistan and was submitted to the Editor, SBP Working Paper series. A research paper (jointly written by officers of EPRD and RD) on price level convergence was published in *Pakistan Economic and Social Review*; 51:1 (2013).

EPRD is also playing its role in achieving key goals under Strategic Plan 2011-15 in collaboration of with other departments of the Bank. It provides its feedback to MPD in projections of key variables in macroeconomic framework. It also gives its input to RD in developing macro model, experimental economics studies on credit mechanism in rural areas of Pakistan, survey based research, etc. EPRD is currently undertaking a historical analysis of overall investment as well as its sectoral distribution. Once these trends are reviewed at a broader level, it will carry out micro surveys in collaboration with the RD to identify the binding constraints for low investment in Pakistan.

1.5 Statistics and Data Warehouse Department

Statistics and Data Warehouse Department (S&DWHD) is responsible for collection, compilation and dissemination of statistics on economic, financial and monetary aspects pertinent to the central banking. The department is primarily engaged in collecting and compiling data with different periodicities on money and banking, international trade, balance of payments, international investment position, exchange rate, foreign exchange reserves, foreign investment, private external debt, and flow of funds. Data in various formats/tabulations in these areas are disseminated through SBP website and also in form of publications. An ‘Advance Release Calendar’ is available on the Bank’s website. The department regularly brings out two monthly, two quarterly, one bi-annual and eight annual publications. Therefore, like statistics departments of central banks around the world, this department supports in formulation, implementation and surveillance of monetary, exchange rate and other policies of the Bank. S&DWD also provides statistical data to the other policymakers, Government, academia and other stakeholders for research/analysis, policy formulation and decision making.

Modern & state-of-the-art systems and well-defined procedures are in place for collection, compilation and timely dissemination of statistics on regular basis. The systems of data collection and processing have undergone major improvement over the past few years by making extensive and efficient use of information technology. Most of the data are collected electronically and processed using indigenously developed software. For automation of business processes of SBP, and effective use of information technology, this department also coordinates with other departments of the Bank like it assists ISTD in automation processes through Data Warehouse. One major achievement of this department is the utilization of its most important database, International Transactions Reporting System, in all field offices of SBP-BSC for verification of exporter performance also known as Export Earning Export Finance (EEEF) verification.

To follow recent developments taking place in the area of official statistics at global level, for harmonization and improvements of such statistics, this department implements the international standards² (**Box 1.1**).

Box 1.1: Major Steps taken by the S&DWH Department for Improvements in Data Management System

Statistics & Data Warehouse Department has brought many improvements in compilation of data, dissemination procedures, and adopting international standards by taking a number of steps during FY13 including:

- Implementation of the guidelines of IMF 6th Manual of Balance of Payments Statistics (BPM6).
- After adoption of latest classification systems such as Harmonized coding System (HS) for classification of trade data and International Standard Industrial Classification 3.1 for private sector business, S&DWD is working to implement ISIC 4.
- Acquisition and compilation of data from non-bank financial institutions.
- Compilation of International Investment Position (IIP) of Pakistan on quarterly basis.
- Updated metadata of Coordinated Direct Investment Survey (CIDS), Coordinated Portfolio Investment Survey (CPIS) and International Investment Position (IIP) on revised format of IMF.
- After Implementation of phase 1 of the System of National Accounts 2008 (SNA 2008) for compilation of Flow of Funds Accounts, the phase 2 is in progress.
- Report on Sources & Uses of Funds, for 'non financial public sector' for FY11 compiled and released.
- Compilation and dissemination of regional data on advances and deposits.
- Financial Statement Analysis of the financial sector of Pakistan.
- Implementation of the recommendations made by the ROSC missions of IMF.

² The S&DWD follows General Data Dissemination System (GDSD) of International Monetary Fund and fulfills the requirements of Special Data Dissemination Standard (SDDS) of the Fund.