4Money and Banking

4.1 Overview

The monetary environment remained challenging for the SBP through Jul-Apr FY05 as it sought to strike a balance between containing an excessive rise in interest rates (in support of the recent surge in short-term economic growth), and tightening monetary policy to quell rising inflationary pressures (so as to sustain the growth momentum in the long-term). The SBP's task was further complicated by the structural changes in the economy as well as in the credit cycle.

In the initial months therefore, the monetary response to a rise in inflationary pressures was muted. Economic activity had only begun to accelerate, and it was feared that too tight a monetary posture would seriously retard this momentum. This view also seemed prudent given that: (1) the bulk of the inflationary pressures in the earlier months stemmed from food inflation (which is typically not very responsive



to monetary policy); (2) it was anticipated that food inflation would significantly decline during H2-FY05; and (3) oil prices were expected to weaken late into Q3-FY05. SBP monetary policy therefore more closely tracked core inflation. Indeed, through most of Jul-Mar FY05, the *rise* in domestic interest rates remained higher than the *increase* in core inflation (see **Figure 4.1**)

Unfortunately, this calculus was disturbed by the government's decision to end the freeze on some key POL prices by mid-December 2004.¹ The sharp rise in domestic fuel prices December 2004 onwards was a significant cost-push factor for the aggregate economy and was instrumental in renewing inflationary expectations. The government was also in a bind as the continuation of the policy

¹ The government had initially sheltered the domestic economy from the full impact of the rise in international oil prices by not raising the domestic prices of key products such as petrol, diesel and kerosene oil. However, these price caps were removed by mid-December 2004.

not to pass on some of the price increase to the consumers, would have had a negative effect on fiscal balances.

This impact of increase in domestic fuel prices was most clearly reflected in SPI (and subsequently in CPI) food inflation, which rose immediately on the mid-December 2004 announcement and then strengthened further in the months ahead.² Specifically, the Jan-Feb period witnessed a sharp 5.0 percentage points rise in CPI food inflation, which partly offset the earlier gradual 7.0 percentage points slide during Jul-Dec FY05, to reach 12.9 percent YoY by



end-March 2005. As a result of this unanticipated strength of food inflation, and the steady increases in non-food inflation, aggregate CPI inflation jumped to 10.3 percent YoY by end-March 2005 (for details, see **Section 3.2**).

From the SBP's perspective, the renewal of inflationary pressures following the hike in oil prices, and the increasing risk of a hardening of inflationary expectations clearly indicated that the tightening of monetary policy was needed to be accelerated. Accordingly, successive 3month T-bill auctions on April 14 and May 12 saw a massive 138 and 99 basis points increase in the



² See Section 3.4 for details.

acceptance cut-off (see Figure 4.2).³

In fact, the exceptionally strong rise in the April auction was preceded by a steep 150 basis points hike in the discount rate. Since this was the first time the discount rate was changed since the rate was *cut* to 7.5 percent in mid-November 2002, it strongly signaled the SBP's intent to raise interest rates. This change in the discount rate was not unexpected, given that the gradual ascent of T-bill auction cut-offs had narrowed the difference between the two benchmark rates (see **Figure 4.3**). However, size of the change was probably unanticipated. Moreover, the rise in the acceptance cut-off in the immediately following T-bill auction also signaled that the discount rate rise was not simply to widen the difference, but more to tighten the monetary posture. A major comfort point for the SBP during this tightening of monetary stance was the above target growth of the economy.⁴

As a result of the more aggressive tightening, 6-month T-bill yields have now risen by a cumulative 495.7 basis points during Jul-Apr FY05, much faster than the rise in inflation during the period.^{5, 6} Moreover, while some real interest rates remain negative, it is unclear whether these will persist, given that lending rates will inevitably respond to the faster moves by the SBP (see **Figure 4.4**). This desirable movement needs to be



supported by effective liquidity management by the SBP to ensure the appropriate transmission of monetary policy signals. Specifically the SBP may need to conduct OMOs more frequently, in order to keep market liquidity in check. However, in tightening monetary posture to wring out inflationary pressures from

³ 3-month T-bills were the most popular government paper during Jul-May FY05 with total accepted bids of Rs 564.0 billion against Rs 194.4 billion and Rs 15.0 billion in 6 and 12-month T-bills auctions respectively.

⁴ Large scale manufacturing in particular grew by 15.0 percent YoY during Jul-Feb FY05, against the annual growth target of 12.0 percent.

⁵ 6-month T-bills auction data up-to April 27, 2005

⁶ 3-month cut-off increased by 563.0 basis points, during Jul-May FY05.

the economy, the SBP has also to remain vigilant against the risk of inducing an unnecessary slowdown in credit expansion to private sector for productive purposes through excessive tightening.

4.2 Monetary Developments During Jul-Apr FY05⁷

Money supply during Jul-Apr FY05 increased by 12.9 percent (Rs 321.0 billion) against the revised full year target of 14.5 percent (Rs 360 billion). This growth in M2 was driven largely by an extraordinary increase in the net domestic assets (NDA) of the banking system. As in Jul-Apr FY04, the growth in NDA in Jul-Apr FY05 was mainly driven by a record increase in credit to private sector (see **Table 4.1**). NFA's contribution to Jul-Apr FY05 monetary expansion was Rs 69.5 billion as against Rs 52.2 billion in the corresponding period last year. This growth in the NFA of the banking system was more than double the full year growth of Rs 30.0 billion

envisaged in the FY05 credit plan.

Reserve money after recording a seasonal peak growth of 19.0 percent in Jul-Jan FY05 declined to 17.2 percent by Jul-Apr FY05. This growth in reserve money was higher than the 14.8 percent growth in the corresponding period last year. The difference in the average money multipliers during the two periods was relatively small. Average money multiplier for Jul-Apr FY05 was 3.1 percent against Jul-Apr FY04 multiplier of 3.0 percent.

4.3 Net Domestic Assets

The NDA of the banking system increased by Rs 251.5 billion during Jul-Apr FY05



⁷ Data upto April 16, 2005

against an increase of Rs 212.1 billion in the corresponding period of FY04. This larger increase was due to an extraordinary growth in credit to private sector that increased by Rs 362.4 billion during Jul-Apr FY05 compared with Rs 254.1 billion in the corresponding period last year. Moreover, unlike Jul-Apr FY04 when increase in the overall NDA was dominated by a rise in the NDA of the commercial banks, in Jul-Apr FY05 the NDA growth was almost evenly distributed between the SBP and commercial banks.

This even distribution in Jul-Apr FY05 despite a record Rs 362.4 billion private sector credit expansion was due to higher retirement of government budgetary borrowings from the commercial banks (Rs 138.0 billion) and a substantial decline

Table 4.1: Monetary Survey	of the Banking System (ti	ll 16th April 2005)
billion Rupees		

	Credit Plan		Flows	
	Original	Revised	FY05	FY04
Government borrowing	47.0	65.0	7.2	25.3
Net budgetary borrowing	45.0	60.0	8.9	59.7
SBP			147.0	51.1
Scheduled banks			-138.0	8.6
Commodity operations	5.0	5.0	-4.0	-36.3
Others	-3.0		2.2	1.9
Non-Government Borrowing	190.0	330.0	344.5	222.2
Credit to private sector (incl. investments)	200.0	350.0	362.4	254.1
(a) Commercial banks			361.4	261.7
Of which :				
Export finance			22.3	23.6
(b) Specialized banks			1.0	-7.6
Credit to PSEs	-5.0	-15.0	-11.8	-27.5
Other financial institutions	-5.0	-5.0	-6.0	-4.3
Other items (net)	13.0	-65.0	-100.2	-35.4
SBP			-19.9	-7.0
Scheduled banks			-80.2	-28.4
Net domestic assets	250.0	330.0	251.5	212.1
SBP			122.1	39.8
Scheduled banks			129.4	172.3
Net foreign assets	30.0	30.0	69.5	52.2
SBP			-3.5	53.1
Scheduled banks			72.9	-0.9
M2	280.0	360.0	320.9	264.3
(in percent growth)	11.4	14.5	(12.9)	(12.7)

in the other items (net) of the scheduled banks (Rs 80.2 billion). SBP NDA on the other hand increased significantly due to higher budgetary borrowings of Rs 147.0 billion during Jul-Apr FY05 against Rs 51.1 billion in the corresponding period last year.

4.3.1 Government Borrowing

Government borrowings for budgetary support registered an increase of Rs 8.9 billion during Jul-Apr FY05 compared with an increase of Rs 59.7 billion in the corresponding period of FY04. In complete contrast to FY03, when government borrowings from the banking system were entirely funded by commercial banks in a declining interest rate scenario; during July-Apr FY05, government borrowings have entirely been funded by the SBP (see **Figure 4.5**).

This was because, on the one hand, commercial banks were reluctant to lock-in funds expecting an increase in interest rates; and on the other, SBP was accepting lower than the targeted (and offered) amounts to avoid sharp rise in interest rates.⁸ However, January 2005 onwards, there is a perceptible change in this trend. Specifically, during Jan-Apr FY05, net budgetary borrowings registered a net



retirement of Rs 58.4 billion from SBP⁹ and a decrease in net retirement (borrowing) of Rs 41.9 billion from commercial banks.

This shift can be explained by the fact that by January 2005, the return on government securities had increased enough to attract banks' investment. In particular, 6-month average T-bill yield had almost doubled from June 2004 level to reach at over 4 percent by January 2005. This is shown in **Figure 4.6**, where the amount offered by the commercial banks for the purchase of government securities increased significantly relative to the targeted amount (offered to target ratio) during Q3-FY05 compared with Q2-FY05. On the other hand, SBP also

⁸ For details please see SBP 2nd Quarterly Report for 2004-2005.

⁹ On account of receipt of the Islamic *Sukuk*.

increased the level of acceptance relative to amount offered by banks (acceptance ratio), reflecting its willingness to raise the interest rates close to market expectations.

4.3.2 Private Sector Credit

Private sector credit (including private sector investment) continued to grow unabated and registered a cumulative expansion of Rs 362.4 billion during Jul-Apr FY05 against Rs 254.1 billion in the corresponding period of FY04 (see **Figure 4.7**). Again, this remarkable growth was driven mainly by (1) persistent negative real lending rates in the economy; (2) increased activity in the



manufacturing sector; (3) easy availability of institutional credit to farmers; (4) continued increase in consumer credit; (5) increase in corporate credit demand in the expectation of a sharp rise in interest rates; and (6) the asset price effect on overall demand for credit (see **Box 4.1**).¹⁰

The distribution of credit among various sectors remained broad based. All the major sectors: (agriculture, manufacturing, telecommunications, household, domestic & external trade, and construction) shared this extraordinary expansion. Within the manufacturing sector, textiles sector was the largest recipient of the bank credit. The credit in the textiles mainly went into (1) BMR under Textile Vision 2005 amounting to Rs 35.4 billion; and (2) higher working capital requirements due to enhancement of the capacity. The credit demand in the telecommunications sector was brought about by one of the companies that started their business in Pakistan recently. In the agriculture sector, demand for credit remained high due to rising fertilizer prices and for the purchase of tractors and farm machinery.

¹⁰ The size of the loan depends on among other things, the value of the underlying collateral, which is usually property, bonds or other assets. Higher value of underlying collateral therefore means larger capacity to borrow.

Bank-wise distribution of the credit shows that all the bank groups contributed in this exceptional growth with domestic private banks leading once again. In fact, this huge increase in the volume of credit has improved the profitability of the banking industry without a significant rise in lending rates. More encouraging than profitability, however, is the asset quality of the banks that has not yet registered any deterioration despite the expanding loan portfolio.

As can be seen from **Figure 4.8**, net NPLs to net advances ratio (for domestic operations) has been declining continuously through the successive quarters and has reached to only 3.6 percent at end December 2004 (the most recent available

data). Besides a robust increase in net advances, this improvement is the outcome of better credit assessment by banks and the favorable economic conditions, as well as prudent and proactive SBP policies. In this regard, in order to further encourage banks to adopt international best risk management practices amid widening businesses, SBP has decided to implement Basel II in Pakistan (see **Box 4.2**).



4.4 Net Foreign Assets (NFA)

The NFA of the banking system increased by Rs 69.5 billion during Jul-Apr FY05. This increase was not only larger than the Jul-Apr FY04 NFA increase of Rs 52.2 billion; this was sizably higher than the Rs 30 billion increase envisaged in the FY05 annual credit plan.

All of the increase in the NFA was brought by an increase of Rs 72.9 billion in commercial banks' NFA that more than offset the Rs 3.5 billion decline in SBP NFA. Interestingly, month-wise data shows that, post H1-FY05 sources of NFA are in contrast with the cumulative trend. While, Jan-Apr 2005 NFA of SBP actually *increased* by Rs 71.7 billion, NFA of the commercial banks declined by Rs 5.6 billion. This seems to be an outcome of the continuous upward movement

in EFS rates and FE-25 loans (see **Figure 4.9**) and higher growth of remittances during the month.¹¹

During Jan-Mar 2005, FE-25 loans increased by Rs 8.0 billion compared with net retirements of Rs 20.1 billion and Rs 13.5 billion during O1-FY05 and O2-FY05, respectively. This has led to an increase in Dollar liquidity in the inter bank market and resulted in net SBP dollar purchases of US\$ 185 million during March 2005 from inter bank foreign exchange market after a period of 12 months. These SBP interventions had a positive impact on SBP NFA and a dampening impact on commercial banks' NFA growth.12

Besides the impact of SBP forex interventions, the inflow of logistic support, multilateral loans, *Sukuk* receipts and the



privatization proceeds of Habib Bank Limited played a dominant role in improving the NFA of SBP.

4.5 Bank Deposits¹³

Banks' total deposits (including those of the government) increased by Rs 206.6 billion during Jul-Mar FY05 compared with Rs 187.3 billion in the corresponding period of FY04. While this deposit growth remains quite strong compared to historical trends, it is distinctly weaker relative to the preceding year. After a relatively slow start during the first 5 months of FY05, deposit growth surged in

¹¹ During March 2005, there was an inflow of US\$ 443 million compared with US \$ 329.6 million in March 2004; exhibiting the YoY growth of 34.6 percent.

¹² For a more detailed discussion, please see SBP 2nd Quarterly Report for 2004-2005.

¹³ The data in this section is on end-March basis.

December 2005, pushing the H1-FY05 cumulative deposit growth to Rs 161.3 billion (up 7.9 percent year-to-date). This was slightly stronger than the Rs 116.6 billion (6.9 percent year-to-date) for the corresponding period of FY04. Thereafter, the deposits growth once again declined, although the trend closely paralleled that of the preceding year (see Figure 4.10).



The Q3-FY05 deposit mobilization was quite sluggish at 2.1 percent, compared with the 3.9 percent growth in Q3-FY04. This slowdown is mainly because of a stronger base effect in Q3-FY05 - during December 2004, the seasonal spike in deposits (at the end of banks' financial year) was much sharper compared with December 2003 (see Figure 4.10). As a result, the trend reversal in January 2005 was also much stronger compared with January 2004.¹⁴ In addition, the seasonal withdrawals on account of Eid were also observed in the last 10 days of January, 2005.15

The currency composition of total deposits has remained almost the same as in the preceding year, with a dominant contribution from Rupee deposits. However, the increase in Rupee deposits during Jul-Mar FY05 was slightly smaller compared with the same period of FY04, mainly due to significant withdrawals by



¹⁴ This trend is also observable in credit figures. During December 2004, total credit increased by Rs 125.9 billion compared with Rs 54.0 billion in December 2003. Later, in January 2005, the credit increased only by Rs 2.4 billion compared with Rs 25.1 billion in January 2004. ¹⁵ Eid effect during FY04 came in February 2004.

the PSEs from PSCB in Q1FY05.¹⁶

The major factor that contributed to the overall slowdown in Rupee deposit growth has been the rising upward pressures on the exchange rate during FY05 that increased the relative attractiveness of foreign currency deposits (FCDs). During Q1-FY05 and better part of Q2-FY05, Rupee was under considerable pressure due to deteriorating current account balance, and there were significant expectations of Rupee depreciation in future. However, in the ensuing months, SBP support for the Rupee weakened these expectations and the Rupee strengthened abruptly. These shifts in expectations are reflected in the changes in foreign currency deposits; after registering 6.7 and 10.9 percent growth in Q1-FY05 and Q2-FY05 respectively, FCD grew only by 1.6 percent in Q3-FY05 (see **Figure 4.11**). However, another factor that contributed in this varying growth of FCAs mobilization in different quarters is the one-off receipts and withdrawals in corporate sector deposits due to the inflow of either the foreign direct investment or the privatization proceeds that are placed with banks temporarily.

¹⁶ This is because during Q1-FY05, PSEs retired over Rs 12 billion to the banking sector. Since PSEs usually maintain their accounts in public sector banks, the deposit base of these banks declined during that period.

Box 4.1: Asset Prices in Monetary Policy Transmission Mechanism

Monetary policy is transmitted to the output and inflation through various channels, including money channel, the credit channel, exchange rate channel and the asset price channel. Following discussion will be made to explain the asset price channel and the role of this channel in the increase in credit expansion with relevance to Pakistan.

The literature on transmission mechanism of monetary policy explains two major categories of asset prices: (1) stock market prices; and (2) real estate price.

- Expansionary monetary policy or the fall in interest rates makes bonds less attractive relative to the stocks and thus the demand for and the price of stocks goes up. From here on, Tobin's theory explains the transmission of the stock price movements to overall economic activity. Specifically, Tobin's q is defined as the market value of firms divided by the replacement costs. Higher the q, the market price of firm is high relative to the replacement cost of capital. This means that firms can issue stocks at higher prices relative to the cost of equipment and capital they have to buy. This leads to an increase in investment spending as the firms can now buy new investment goods with small issue of stock. Thus a fall in interest rates that leads to higher stock prices, increases the q, which raises investment leading to an increase in the aggregate demand and output. Similarly, an expansionary monetary policy lowers the cost of housing finance and thus increases the demand and prices of real estate. Once again the Tobin's q comes into play when for construction industry the value of houses becomes higher relative to the construction cost. Thus it will be more profitable for this industry to increase the housing expenditure and will increase the aggregate demand in the economy.
- Besides Tobin's q, there is another channel through which higher stock/property prices leads to higher investment spending. This mechanism works through the firms' net worth and is often categorized in the credit channel. In this channel, a fall in interest rates leading to increase in stock/housing prices raises the net worth of the firms/household. Higher net worth, or effectively a higher value of collateral, lowers the banks' risk of adverse selection. This lower risk then leads to higher lending to finance investment spending/household financing.
- The third channel works through the household liquidity. This channel is based on the Keynesian liquidity preference theory of interest. When stock/house prices rise, the value of financial/real assets also increases. Consumers holding financial/real assets will be more willing to purchase consumer durables and other goods. This leads to higher aggregate demand and output in the economy.

An indicator that can be used to gauge the valuation impact on bank credit is the volume of total advances lent against real estate divided by the number of these loans. It is quite evident from **Figure 4.1.1** that average loan size against stocks and real estate in Pakistan has increased tremendously during FY04 that clearly indicates that the financing limit has been enhanced given the increased value of the underlying collateral.

Source: The transmission mechanism and the role of asset prices in monetary policy; Frederic S. Mishkin, NBER Working Paper 8617, December 2001.

Third Quarterly Report for FY05



Box 4.2: Towards Basel II

One of the aims of SBP associated with the implementation of prudential norms in the banking industry has been the convergence to international best practices while taking into account the country specific adjustments. To this end, it has started the exhaustive reform process that resulted in the formulation of a set of prudential norms for the conduct of banking operations. The focus of these norms has always remained to keep the banks vigilant of the banking risks and safeguard their business by adopting specific risk identification and management practices. Adoption of Basel II, commonly known as new capital accord, is a further step taken by SBP to ensure international best practices in Pakistan's banking industry.

How Basel II is different from Basel I

The 1988 Basel Capital Accord (Basel I) for the first time settled on an internationally accepted definition of 'capital' and also set minimum requirements for capital. However, due to some inherent weaknesses in the Accord and also with expanding business environment of the banking industry world over, the Basel Committee proposed a new 'Capital Adequacy' framework in June 1999. After a long series of discussion and debates among regulators all over the world, this Accord was finally endorsed in June 2004. Although Basel II is based on the basic capital structure provided by Basel I, it has certain improved and additional features:

- Basel I required banks to classify exposures in broad categories for capital requirement. Exposures to the same kind of borrowers were subject to similar requirements without taking into account the relative credit worthiness of individual borrowers. This 'one size fits all' approach has been eliminated in Basel II which is more flexible and permits the banks to assign the borrowers different risk weights according to their risk profiles and the nature of business.
- Basel II introduced a new capital charge for risk exposures caused by operational failures, i.e., the risks caused by the failures in systems and staff.

Basel II also discusses the supervisory review, risk management guidance and supervisory transparency and accountability with respect to banking risks, including that relating to: The treatment of interest rate risk in the banking books; operational risk and aspects of credit risk (stress testing, definition of default, residual risk, credit concentration risk and securitization).

Basel II also discusses the supervisory review risk in percent

Basel	Core Principle	Developing	Transition	Advanced
CP 6	Capital adequacy	48	27	8
CP 8	Loan evaluation and provisioning	39	27	25
CP 11	Country risk	55	60	25
CP 12	Market risk	66	53	0
CP 13	Other risk management	66	53	0
CP 20	Consolidated supervision	57	67	0
CP 21	Information/ accounting req	36	40	0
CP 22	Remedial powers	52	33	17
	Basel CP 6 CP 8 CP 11 CP 12 CP 13 CP 20 CP 21 CP 22	Basel Core PrincipleCP 6Capital adequacyCP 8Loan evaluation and provisioningCP 11Country riskCP 12Market riskCP 13Other risk managementCP 20Consolidated supervisionCP 21Information/ 	Basel Core PrincipleDevelopingCP 6Capital adequacy48CP 8Loan evaluation and provisioning39CP 11Country risk55CP 12Market risk66CP 13Other risk management66CP 20Consolidated supervision57CP 21Information/ accounting req36CP 22Remedial powers52	Basel Core PrincipleDevelopingTransitionCP 6Capital adequacy4827CP 8Loan evaluation and provisioning3927CP 11Country risk5560CP 12Market risk6653CP 13Other risk management6653CP 20Consolidated supervision5767CP 21Information/ accounting req3640CP 22Remedial powers5233

Compliance

Naturally, for the efficient and timely compliance with the Basel II framework, it is necessary to have a full compliance with the Basel Core Principles and Basel I beforehand. IMF staff conducted assessments under FSAP program of around 71 countries including 12 advanced, 15 transition and 44 developing economies. The results of the assessment indicated that there are many deficiencies in the areas of: Risk management; consolidated supervision, and corrective action for undercapitalized institutions (see **Table 4.3**) (all of which are crucial to sound supervision and the proper implementation of Basel II).

SBP, while considering the challenges that are ahead in the implementation of Basel II, has already conducted various assessments that were needed to build a road map for the implementation.

These included, an assessment of the implementation in various countries the feedback from the banks, and a quantitative impact study in Banking Supervision Department. Capacity building process has already been started at banks and SBP which will continue till 2008.

The key challenges for the banking industry in Pakistan are:

- Adequately trained staff especially in the area of risk management will be central.
- Upgrading the regulatory reporting and IT system.
- Legal and regulatory preconditions are central to be met to support the effective supervision.

SBP has advised the banks to assign one senior official who will supervise all the activities relating to Basel II and serve as a point of contact between SBP and the bank. June 2005 has been set as deadline for banks to submit their individual plans containing specific approach; SBP will finalize these plans till September 2005. By end December 2005, SBP will issue detailed instructions to banks for the implementation of Basel II and from July 2006 to December 2007, Basel II will be implemented.

Source: (1) IMF Staff Note on Basel II Guidance for Fund Staff, April 23, 2004

- (2) Basel II Norms Emerging Market Perspective with Indian Focus by Rupa Rege Nitsure, Economic and Political Weekly March 19, 2005
- (3) Roadmap for the implementation of Basel II in Pakistan, Banking Supervision Department, SBP vide BSD Circular No. 3 of 2005