Chapter 5 Financial Markets

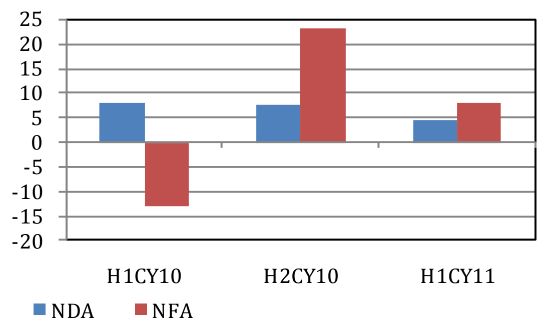
The domestic financial markets continued to effectively perform its functions during the half year under review. Notwithstanding bouts of mild strain in the market liquidity, stress was largely contained by the favorable developments in the NFA. Healthy inflows on the back of workers' remittances and price-led export earnings kept the value of domestic currency almost stable, in addition to buffeting banks' deposits and liquidity profiles and build up of central bank reserves. In the money market, the yield curve flattened during H1-CY11 as the short-term rates inched up with a subsequent decline in the longer term maturities. The capital market managed to post a marginal growth of 4 percent during the half year under review. However, the trading volumes and activities in the corporate debt market largely remained low. Finally, derivatives market experienced contraction, FX options in particular, as overall number of derivative contracts and outstanding amount dropped by 44 percent and 13.4 percent respectively. Cross currency swaps continued to dominate the derivatives business, followed by foreign currency denominated interest rate swaps.

Favorable developments in the external sector kept domestic markets generally stable

Stress to the liquidity profile of the financial markets – mainly imposed on account of rising government's borrowing needs was largely contained by 8 percent improvements in the NFA – Net Foreign Assets and the excess liquidity held by the commercial banks in H1-CY11 (*Figure 5.1*). Factors such as favorable movements of export prices coupled with robust growth in remittances improved the overall external balance as well as the deposit base of the banking system. Furthermore, the central bank's purchases of foreign currency from the open market to ensure stability of the exchange rate also injected liquidity in the markets, apart from buildup of reserves.

Figure 5.1

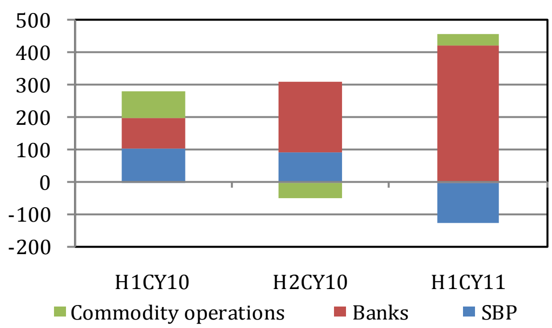
Trends in M2 (percent change)



On the other hand, NDA – Net Domestic Assets also witnessed a growth of 4.5 percent on account of government borrowings. With the initiation of phased retirement of central bank debt in H1-CY11, the government has been increasingly relying on the banking sector to finance its budgetary deficit (*Figure 5.2*).

Figure 5.2

Pattern of Government Borrowings (Rs. billions)



Short-term market rates remained somewhat volatile as banks become highly collateralized.

The money market in H1-CY11 witnessed a rather volatile liquidity condition mainly due to a surge in the short-term funding needs of the government and the subsequent constant rollover requirements. With a rise of 16.3 percent in first half of CY11 in the deposits, banks found prevailing money market scenario attractive enough to earn easy money by investing in

Figure 5.3

Trend of overnight Repo Rates (percent)

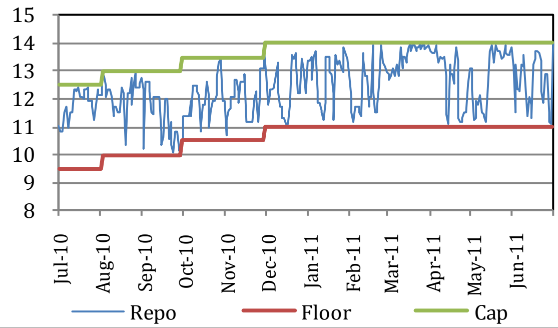


Figure 5.4

Profile of T-bill Auctions (Rs. billion)

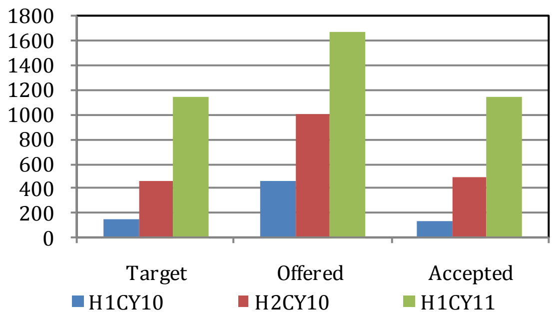


Figure 5.5

T-Bill Tenure offered (percent share)

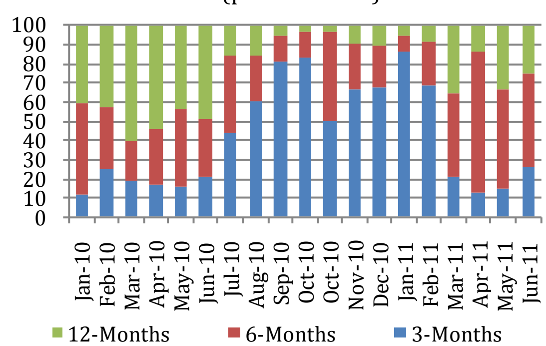
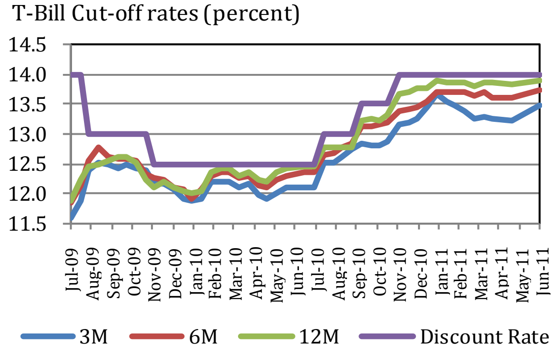


Figure 5.6

T-Bill Cut-off rates (percent)



short-term government papers and thus creating pressure on short-tem supply of funds.

In addition, the improvements in the inflation outlook that provided a strong rationale to keep the monetary policy stance unchanged throughout H1-CY11 period and the prevailing interest rate corridor, the overnight repo rates – a measure of short-term market liquidity reflected a higher volatility in H1-CY11. The average repo rates remained 12.84 percent in the period under consideration – higher than the 11.94 percent in H2-CY10, while the average spread between repo rate and the cap (discount rate) reduced from 131bps to 115 bps in H1-CY11 (*Figure 5.3*).

T-bills continue to cater to the growing government borrowings

The increased reliance on the banking channel to fund short-term government needs gathered considerable momentum in H1-CY11. The short-term debt instrument, the T-bill has been used by the government in a planned manner. The amount targeted in T-bills auctions has witnessed a considerable growth over the period as the government deficit widened and the lags in revenue generation tends to broaden as reflected by a surge in the target amounts (*Figure 5.4*). Similarly, the offered amount reflecting the banks and other market players' interest in investing this risk free and profitable source that also improves the maturity profile of its assets has also improved considerably in H1-CY11.

The holding of monetary policy stance in H1-CY11 and stable outlook for inflation has altogether changed the tenure distribution of the T-bills offered (*Figure 5.5*). The reversal in the distribution with 6M and 12M T-bills representing almost 42 and 20 percent of offerings in H1-CY11 as against 25 and 9 percent respectively in H2-CY10 signifies the stance of the banks' positions as the market perceived further monetary easing.

In line with the stable discount rate that prevailed throughout H1-CY11, the T-bill cut off rates also maintained the same trend throughout the period. Since the cut-off rates cannot go beyond the discount rate as it leads to arbitrage opportunities, the spreads between cut-off rates and the discount rate highlights the banks' preferences of investing in different tenures. For instance, the 3M rates that have showed a marginal decline in May-11 as banks preferred to invest in

Figure 5.7

Stock of T-bills outstanding (Rs. billion)

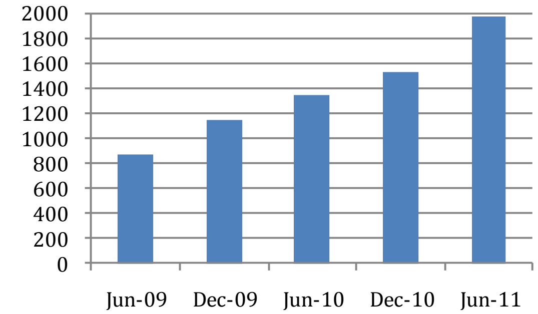


Figure 5.8

Accepted PIB Auction Profile (Rs. billion)

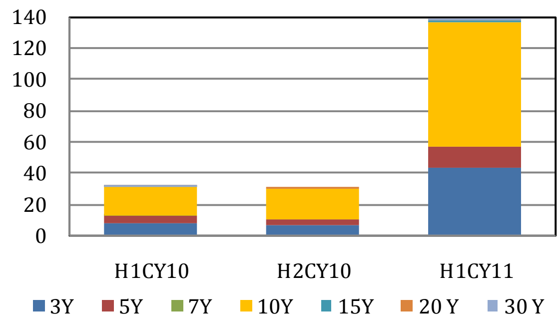


Figure 5.9

Auction Profile of Ijara Sukuk (Rs. billion)

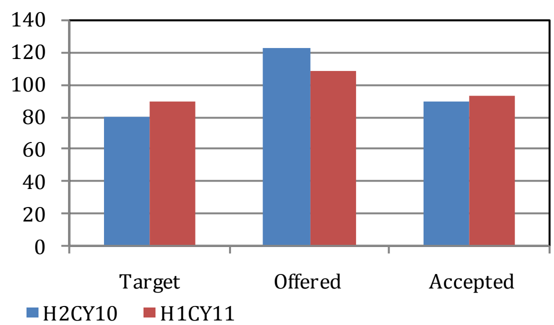
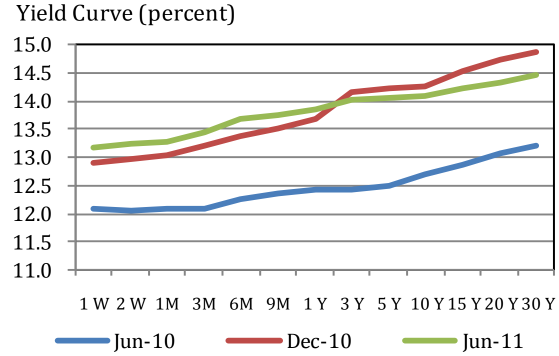


Figure 5.10

Yield Curve (percent)



longer term that resulted in the 6M and 12M rates to inch up closer to the discount rate (*Figure 5.6*).

While the government solely relied on money market instruments to fund its finances in H1-CY11, the consistent strain on government expenditures on account of governance issues coupled with huge cost of natural calamities and circular debt has amplified the stock of government debt and similarly the outstanding stocks of T-bills (*Figure 5.7*). During H1-CY11 alone, the stock grew by 28.1 percent as against 14.1 percent in H2-CY10. The rising stock, while generating income for the banks, also exposes them to a sharp cut in discount rate in future. From the macroeconomic perspectives, it limits the availability of funds to the private sector.

Activity in PIB market revived on attraction of higher returns

In addition to the T-bills, the government also borrowed heavily from the auction of long-term money market instruments, PIBs – Pakistan Investment Bonds (*Figure 5.8*). Investing in long term maturing assets has considerably improved in H1-CY11 by an overwhelming 345 percent in H1-CY11 as high returns are offered by the government. The YTM (Yield to maturity) also improved by 141bps YoY to 14.1 percent in Jun-11 and as the market expects further monetary easing during H2-CY11, the PIBs are expected to book capital gains for the investors. Tenure wise, the subscription pattern for 3 year (3Y) and 10 year (10Y) bonds dominated with the share of 31 and 58 percent respectively following the historical pattern. Whereas, the longer term maturities, 20Y and 30Y only attracted 1.6 percent share each. It is expected that with further monetary easing and some revival of the economy, the higher term maturing assets will attract considerable demand.

In addition to the PIBs in the primary market, the government also raised funds from Ijara sukuks. In H1-CY11, two sukuk auctions raised 93.3 billion rupees – a marginal growth of 4.8 percent on half yearly basis (*Figure 5.9*). The issuance of sukuks not only provided government an avenue of generating funds but also contributed towards supplying a shariah based investment instruments for the Islamic banks.

Higher government borrowings flattens the yield curve

The frequent episodes of monetary tightening throughout H2-CY10 led to an upward movement in the yield curve. However, with the stable monetary stance prevailing since Dec-10 coupled with an increase in demand for short-term debt

Figure 5.11

Developments in External Account

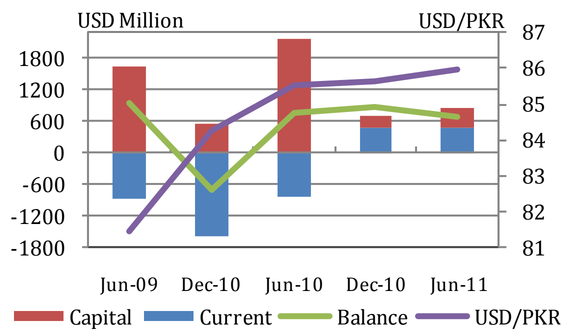


Figure 5.12

KERB Market Premium

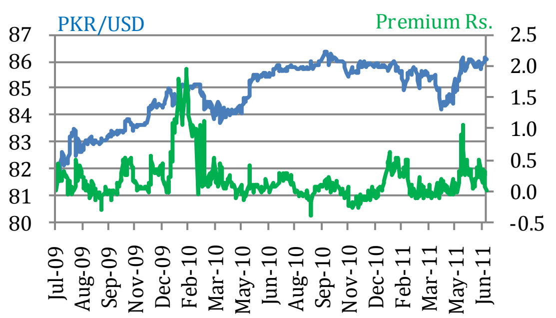
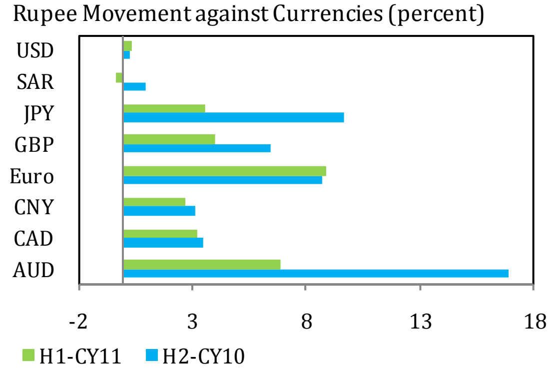


Figure 5.13

Rupee Movement against Currencies (percent)



instruments has flattened the yield curve (*Figure 5.10*). Further, the interest rates on longer term securities have dropped in anticipation of further monetary easing in H2-CY11.

Foreign Exchange Market

Strong external inflows kept value of local currency largely stable

The improvements in the external account, mostly influenced by rising export prices and stellar inflows of workers' remittances through the banking channel eased some pressure on the value of domestic currency, which was experiencing increased stress and volatility in H1-CY11 on account of sluggish macroeconomic performance. The value of the domestic currency against the dollar depreciated by a marginal 0.35 percent or 23 paisa in the period under consideration as against 0.29 percent or 25 paisa in the H2-CY10 (*Figure 5.11*).

Along with the exchange rate (PKR/USD) depreciation in the period under consideration, there has also been greater volatility compared to H2-CY10. Episodes of unexpected KERB (open) market movements in both directions were witnessed. An appreciation of exchange rate by 100 paisas in the first half of April-2011 as the central bank allowed export refinance in other leading currencies. Similarly, a steep depreciation that prevailed through most of May-2011 that depleted the value of domestic currency by 240 paisas on account of panic in the market had an effect on the KERB market premium (difference between interbank and KERB markets). The premium increased to an average of 0.18 paisas in H1-CY11 as against a meager 0.02 paisas in H2-CY10 (*Figure 5.12*).

While comparing the domestic rupee with a set of leading international currencies, the rupee generally witnessed a relatively lower depreciation in H1-CY11 as compared to H2-CY10 (*Figure 5.13*). However, in case of Euro, rupee fell by 8.9 percent as against 8.7 percent during H1-CY11. On the other hand, PKR did appreciate against Saudi Riyal (SAR) by 0.9 percent in H1-CY11. Perhaps, it has been the US Dollar (USD) against whom the rupee witnessed the least depreciation as USD was itself depreciating against other currencies in the same period.

Figure 5.14

Foreign Exchange Reserves and Import Coverage

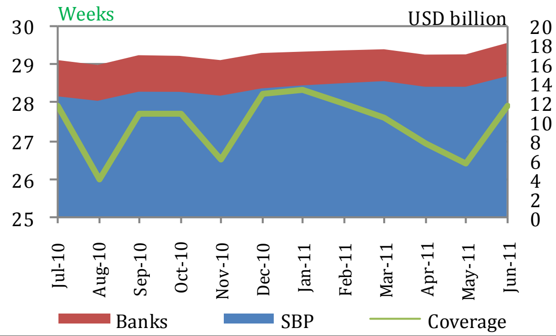


Figure 5.15

SBP FX Market Interventions (USD billion)

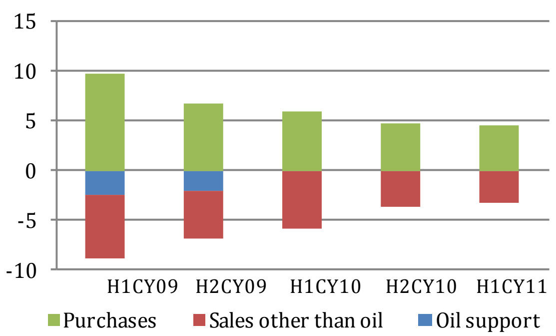
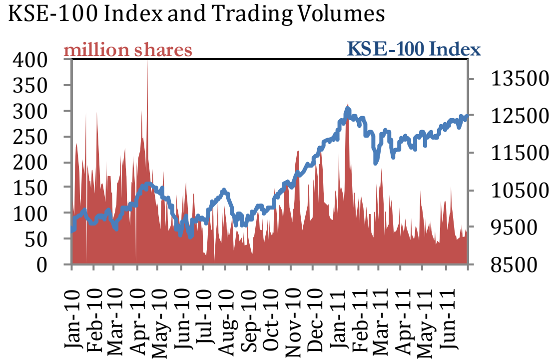


Figure 5.16

KSE-100 Index and Trading Volumes



Foreign exchange reserves reached at the highest level .....

Favorable developments in the external account in H1-CY11 also lent a boost to the foreign exchange reserves of the country by US 1 billion in H1-CY11 to a reserve of US 18.2 billion. The reserves held by the central bank (SBP) grew by 9.2 percent as against 6.4 percent during H1-CY11. However, the foreign exchange (FE) deposits held by the commercial banks accounting for almost 20 percent in total reserves faced a decline on account of large withdrawals in Jan-11 and Mar-11 period. In particular, FE deposits declined by 6.1 percent in H1-CY11 as against a decline of 2.2 percent in H2-CY10.

..... putting import coverage ratio at comfortable levels

With the buildup of reserves, the import coverage ratio also maintained comfortable levels of 27.6 week of imports throughout H1-CY11 (*Figure 5.14*). A higher import coverage ratio is desirable as it eases foreign exchange markets pressures and thus limits volatility of the currency.

In addition to the workers' remittances and export earnings, the foreign exchange reserves were also supported central bank's large purchases from the market (*Figure 5.15*). The purchases were also aimed to keep the open market rate at desirable levels.

Capital Market[1]

Equity market managed to retain its upward momentum amid high volatility

Stress in the domestic capital markets tend to ease marginally despite the continuous deterioration in the macroeconomic outlook and rising geo-political turmoil both internal and external. In the equity markets, the benchmark KSE-100 index gained by 4 percent or 473 points in the first half of CY11 mainly due to improvements in the market liquidity as the much anticipated margin trading facility was launched in March 2011

[1] Pakistan has three stock exchanges. However, the Karachi Stock Exchange (KSE) remains the largest accounting for almost 70 percent of trading volumes, listings and market capitalization. It is therefore the analysis pertains to the developments in the KSE.

(*Figure 5.16*). However, the possible down-grading of the country's ratings on account of rising fiscal deficit and issues in the imposition of capital value tax (CVT) on the stock market transactions kept the index volatile more profoundly in Jan-March period.

Similarly, the trading volumes sharply reduced over period, in particular during the second quarter of CY11 on account of outstanding economic problems like persistently high inflation and decline in industrial productivity with consequent drop in corporate earnings and payouts. This further exacerbated the volatility in the index and led to a reduction in the flow of net foreign investment from USD 249 millions in H1-CY10 to merely USD 45 millions in H1-CY11 in the equity market.

Table 5.1

MSCI Index (Growth Rates)

	CY 2010	FY 2011	H1-2011
Pakistan	20.89	20.53	-0.21
Indonesia	28.59	28.72	11.47
Thailand	59.27	38.84	0.29
India	26.11	6.60	-9.14
China	11.99	9.94	-0.80
Malaysia	33.76	30.83	6.55
Brazil	16.58	19.96	-3.43
EM-Asia	24.09	23.07	0.38
EM-BRIC	15.96	16.46	-1.90
Emerging	23.33	24.86	-0.45
U.K	10.55	29.72	3.54
U.S	17.41	28.91	5.17
Euro	0.89	33.78	9.97
World	14.34	27.84	3.99

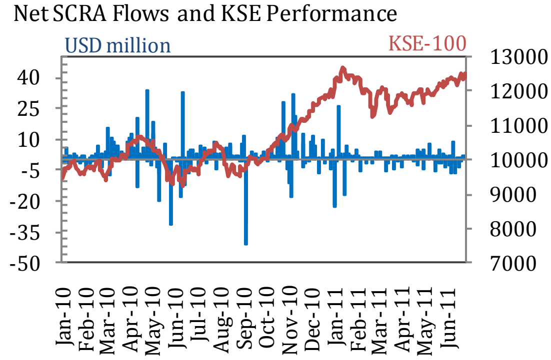
Source: Bloomberg

KSE performed in line with that of emerging markets

The domestic equity market index (KSE-100) exhibited a trend similar to other emerging markets as measured by MSCI (*Table 5.1*)[2]. During CY2010, KSE witnessed a robust growth of 20.89 percent, significantly better than China, though it fell short of growth registered by emerging markets' average. However, H1-CY11 proved a slack period for the emerging markets on account of rising inflation expectations and tight monetary stance from their respective central banks in the emerging economies. However, the markets in advanced economies showed a moderate growth despite rising unsustainable debt levels and growing sovereign and contagion risks.

Figure 5.17

Net SCRA Flows and KSE Performance



SCRA flows remained low and volatile[3]

With the growing risk of another financial turmoil in advanced economies and the sluggish recovery in post-flood scenario that aggravated domestic macroeconomic conditions, and a difficult political environment restricted the foreign interest and the KSE only managed to attract a net of USD 45 millions in H1-CY11 (*Figure 5.17*). It was in sharp contrast with H1-CY10 that saw a net SCRA investment of USD 249 millions.

Over the years, the KSE has been successful in attracting foreign portfolio investment as it has been offering a higher forward earning yield in comparison to regional markets[4]. The KSE

[2] The MSCI (Morgan Stanley Capital International) index calculates the market indices for leading equity markets of developed and developing countries. It is considered as a standard benchmark for comparing the performance of stock markets over a period of time.

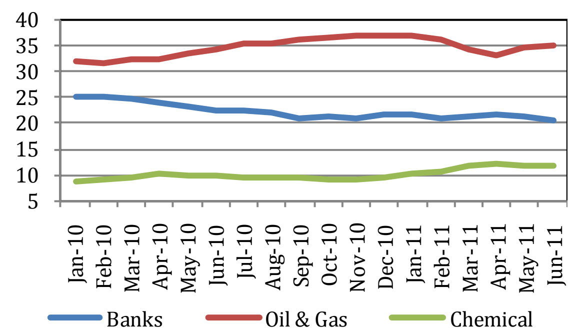
[3] SCRA (Special Convertible Rupee Account)

witnessed a net flow of USD 435 million in CY10 which provided impetus to the KSE specifically in the second half of CY10 coupled with the favorable developments in corporate profitability and expectations of a leveraged product to be implemented in the market.

Growth in KSE is highly concentrated in a few sectors

Figure 5.18

Sector-Wise Performance of KSE (percent)



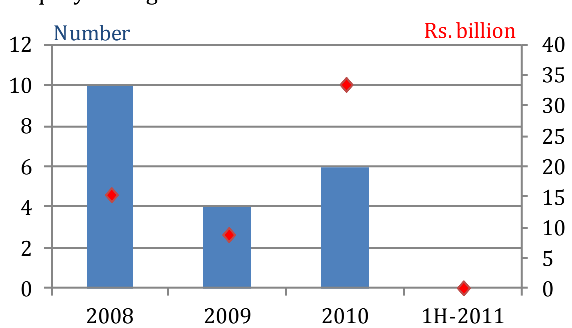
The growth in the KSE-100 index has been highly concentrated in a few leading sectors like Banks, Chemicals, and Oil & Gas. The banking sector capitalization has declined during FY 11 (*Figure 5.18*) as performance of most of the listed banks was severely affected by higher provisioning. Further, the inability to meet capital requirements by a number of banks and the expectations of higher losses in future also depressed the banking sector capitalization. The banks also found it hard to generate additional equity from the market as they had to issue shares largely at a discount. This led to underperformance of stocks of even otherwise profitable banks.

On the other hand, market capitalization in the oil & gas sector has surged largely on the back of movements in international oil prices. While higher oil prices aggravate the economic activity, it helps share prices of oil exploration and marketing companies. Investors perceive rising oil prices as greater profitability for oil exploration and marketing companies which in turn lead to higher payouts.

New equity listings came to a halt…

Figure 5.19

Equity Listings in KSE



In addition to low turnover and concentration in a few leading scrips, the KSE did not witness any new listing in H1-CY11 (*Figure 5.19*). With both the private sector credit and LSM index registering a contraction of 0.8 and 0.1 percent respectively in H1-CY11 the prevailing fragile macroeconomic stance and frequent social disorder led the investors to shun away from new listings. Similarly, the underperformance of equity market in which the shares are being traded at discount is largely responsible for depressed listings. It is because the firms are not able to generate enough equity, thus reducing offer prices. From the investors' perspective, a limited market participation and preference to invest in gold and NSS has also dampened demand for stocks and aggravated the illiquidity in the equity market.

[4] The KSE traded at a forward (FY12) Price-equity ratio of 7x (multiples). Whereas, the regional markets traded at 12x which enables the KSE to trade at a discount of 42 percent. A higher discount indicates that shares are undervalued and there is a tendency of stock prices to increase leading to capital gain.

Figure 5.20

Corporate Debt Market Performance

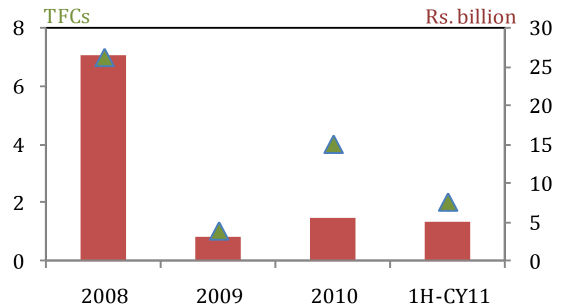
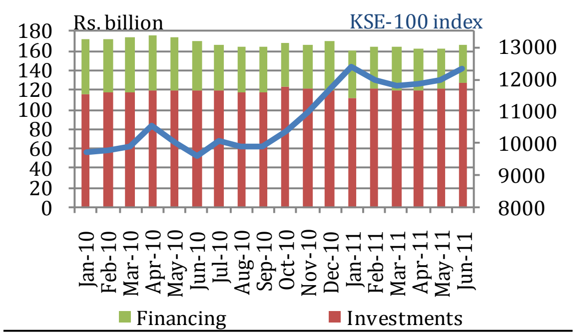


Figure 5.21

Stake of Banks in the KSE



…and corporate debt listings remained depressed

During the period under review, the corporate debt market witnessed a consistently declining trend in both the listings and in the amount of listed capital. With only two listings in H1-CY11, the debt market apparently lost its attraction despite offering rather stable returns and was perceived to be less risky than the equity market in 2002-08 period.

Similar to the stock exchanges, the corporate debt market has also been severely affected by the conventional saving behavior of the households and businesses that mainly rely on risk free avenues. Moreover, limited financial literacy of the prospective investors and a strong bank dependency by the corporates has also impeded the growth of the debt market. Similarly, the recent deterioration in the macroeconomic indicators has also left its mark on the sluggish performance of the corporate debt listings. Following the pattern of last two years, H1-CY11 has also witnessed only two listing that enhanced the listed capital of the debt market by Rupees 5 billion (*Figure 5.20*)[5].

Banks' exposure in capital market remained subdued

In a period of government's heavy reliance on borrowings from commercial banks amid dwindling external funding and dismal revenue generation, banks investment in government paper has grown considerably with a consequent fall in their stock market exposure[6]. The banks' exposures in the KSE in terms of financing have witnessed a declining trend since CY10 and it further lowered by 1.8 percent to Rupees 167 billion during H1-CY11 (*Figure 5.21*). However, the investments registered a larger decline by 6.8 percent in the same period

Besides the fact that banks have found a rather risk free and high yielding avenue of financing budget deficit, the rising volatility in KSE and proportional less payouts than government investments is also much to blame for not being able to attract institutional investors. Similarly, the regulatory structure of the banks also restricts their investments in the equity market[7].

[5] Out of the two listings, one is the commercial paper issuance amounting Rupees 1,000 millions for tenure of six months.

[6] Banks' capital market exposures are the sum of banks' investments and the financing against shares that are held as collateral with the bank.

[7] The Prudential Regulation 6 requires the banks not to exceed equity investments by more than 20 percent of its equity.

Derivative Markets

Derivative market continues to contract

During the first half of 2011, the overall number of derivative contracts[8] and outstanding amount dropped by 44 percent and 13.4 percent respectively. This decrease was particularly strong in FX option related contracts though both Interest Rate Swaps (IRS) and Cross Currency swaps (CCS) were also down as compared to Dec-10 (*Table 5.2*). Anemic growth in credit to private sector and stable interest rate regime[9] somewhat dampened the demand for derivative products. The drop in derivative activity was also on account of a sizeable number of contracts maturing during the H1-CY11. Noticeably, Forward Rate Agreements (FRAs) have seen no activity since FY08 (*Figure 5.22*).

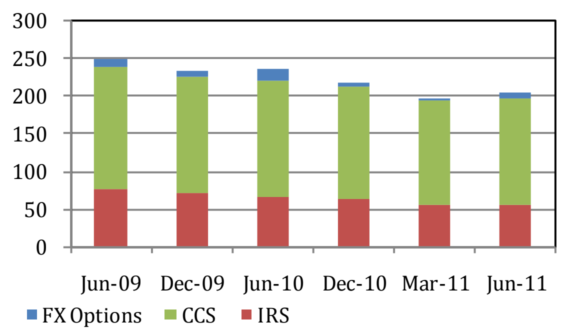
Table 5.2

Number of Derivatives Contract

	Jun-10	Sep-10	Dec-10	Jun-11	Growth YoY
IRS	50	43	40	37	-26.0%
FX	298	26	192	69	-76.8%
CCS	256	256	238	233	-9.0%
Total	604	325	470	339	-43.9%

Figure 5.22

Size of Derivatives Market (Rs. billion)

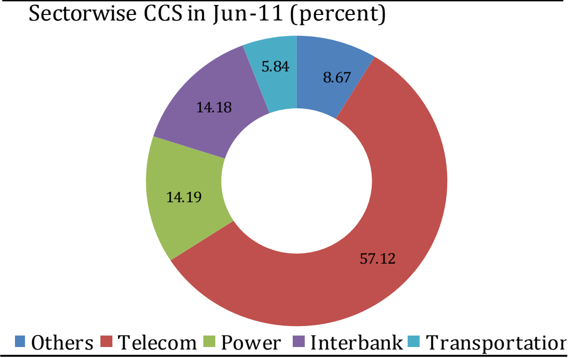


Cross currency swaps still dominate the derivative business …

The Stock of CCS - the most popular derivative product in domestic market dropped by 9 percent to Rs. 141 billion in June-2011 due to maturity of some contracts from telecom sector. Drop in loans from international financing agencies for capital expenditures, a key contributor in the growth of CCS, partially explains the fall in CCS during H1-CY11. However, due to a more pronounced decrease in FX options, share of CCS in total derivatives portfolio of banks further increased to 70.6 percent in June-11, from 65 percent in June-10.

Figure 5.23

Sectorwise CCS in Jun-11 (percent)



Currency-wise break of CCS reveals that US Dollar and Japanese Yen were the main currencies for domestic derivative transactions, in line with key trading partners of Pakistan. On the other hand, sector-wise usage highlights that CCS have been primarily used by telecom and power sectors (*Figure 5.23*). Exposure of the telecom sector can be traced back to the period of 2003-08 when telecom companies' acquired FCY denominated loans for capital expenditure[10]. Most of such lending arrangements required these entities to hedge their foreign currency exposures, creating a market for CCS. However, as these contracts continued to mature, share of telecom in CCS reduced from 62% in June-09 to 57% by June-11.

.....followed by foreign currency denominated interest rate swaps

[8] Due to risk-sensitivity of these products, only FX options, Interest Rate Swaps and Forward Rates Agreements are allowed by SBP vide BSD Circular No 17 of 2004. On the other hand, Cross Currency Swaps (CCS) transactions are approved by SBP on case to case basis.

[9] SBP policy rate remained unchanged in H1-CY11 at 14 percent.

[10] It was a time when investment in telecom sector peaked to US$ 4 billion.

Figure 5.24

Sectorwise Distribution of IRS -FCY (Jun-11)

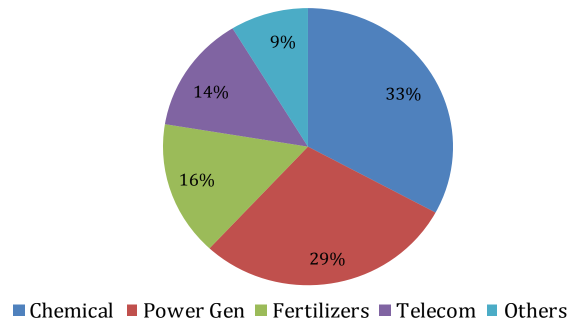


Table 5.3

Currency-wise Outstanding Derivatives (Rs. Billion)

	FX	IRS	CCS	Total
PKR		14.4	102.2	116.6
Euro	0.9			0.9
USD		42.3	38.4	80.7
CHF	0.0			0.0
JPY	6.6			6.6
Total	7.5	56.7	140.6	204.8

Currency-wise breakup of IRS, the second largest component with 29% share of overall derivatives portfolio, indicates historically higher share (74.6 percent) of foreign currency denominated IRS. Majority of these contracts were executed when some of the corporate entities acquired FCY loans for fixed investment. As stipulated in their lending arrangements, most of these loans were then ought to be hedged in order to cover interest rate risk. Sector-wise distribution of FCY denominated IRS was found to be concentrated in chemical and power generation sectors (*Figure 5.24*). Whereas, for Pak rupee denominated IRS, banking and transport sector had relatively higher share.

While most of IRS deals were obligatory upon different entities, market expectations and SBP's decision to keep discount rates unchanged in H1-CY11 also led to decrease in IRS's contracts and notional principal in overall derivative portfolio.

Demand from auto sector led FX options to bounce back

FX options posted a strong growth in H1-CY11 to reach at Rs 7.5 billion after plummeting to Rs 1.3 billion in Mar-11. Decline in Mar-11 quarter was associated with maturity of contracts between a local private bank and an auto firm. By June-11, the share of automobile sector accounted for 88 percent of total FX options, denominated in Japanese Yen (*Table 5.3*).