ANNUAL REPORT

2010 – 2011

THE STATE OF PAKISTAN'S ECONOMY

STATE BANK OF PAKISTAN

CENTRAL BOARD OF DIRECTORS

Mr. Yaseen Anwar	Governor & Chairman
Dr. Waqar Masood Khan	Member
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Mr. Waqar A. Malik	Member
Ms. Sahar Z. Babar	Corporate Secretary

LETTER OF TRANSMITTAL

December 19, 2011

Dear Mr. Chairman,

As required by Section 9A(f) of the State Bank of Pakistan Act, 1956, I am pleased to submit the Annual Report of the Central Board of Directors of the State Bank of Pakistan on the State of the Economy for the year 2010-11.

Yours sincerely,

Sd/-

(Yaseen Anwar)

Mr. Farooq H. Naek
Chairman
Senate
ISLAMABAD

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Dr. Fehmida Mirza
Speaker
National Assembly
ISLAMABAD

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of the Central Board of Directors
of the State Bank of Pakistan for
the year ended 30th June 2011.

Acknowledgment

The efforts of Dr. Mushtaq A. Khan and officers of the Economic Policy Review Department of State Bank of Pakistan in preparing this report are highly appreciated.

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1 Economic Outlook

1.1 Overview

Pakistan's economy managed to grow by 2.4 percent in FY11, despite devastating floods in the early part of the fiscal year. One-fifth of the country's agricultural heartland was inundated, which interrupted production processes and disrupted the subsequent supply of both labor and capital. It is estimated that 6.6 million of Pakistan's labor force was out of work for 2 to 3 months, and capital stock worth US$ 2.6 billion (1.2 percent of GDP) was lost.[1]

While the international response to the devastation was below expectations, it is commendable that the government was able to address these challenges despite severe fiscal constraints.[2] Furthermore, the inherent resilience of the agri sector allowed it to post a bumper wheat crop in the *rabi* season and sizable production of minor crops (potato, onion, pulses, etc.), which spearheaded the revival. A spontaneous community effort towards rehabilitation and government support in the form of cash payments to flood affectees and providing free seeds and fertilizers, allowed the country to overcome this natural disaster.

However, the 2010 floods cannot mask the structural deficiencies in Pakistan's economy. For simplicity, we would identify four inter-related issues that need urgent policy attention to break out of Pakistan's current stagflation. First and foremost is the fiscal problem, specifically the lack of tax revenues; then is the spillover of fiscal slippages on domestic debt and the crowding out of the private sector; then, the acute shortage of power; and finally, the external sector.

The real sector

Although the agriculture sector managed to overcome the floods and posted real growth of 1.2 percent (double what had been posted in FY10), the manufacturing sector suffered a serious setback. Industrial growth was *negative* 0.1 percent in FY11, due to flood-driven supply chain interruptions; prolonged power outages; and reduction in gas supplies. Services, on the other hand, supported growth on the back of a rise in government salaries and defense spending. The overall growth in services was 4.1 percent in FY11, which was lower than the target 4.7 percent, but this still accounted for 90 percent of real GDP growth. Having said this, Pakistan fared poorly when compared to its neighbors in South Asia (**Table 1.1**). Both domestic and global factors are responsible, but we

Table 1.1: Real GDP Growth (percent)

	China	India	Sri Lanka	Bangladesh	Pakistan
2005	11.3	9.0	6.2	6.3	9.0
2006	12.7	9.5	7.7	6.5	5.8
2007	14.2	10.0	6.8	6.3	6.8
2008	9.6	6.2	6.0	6.0	3.7
2009	9.2	6.8	3.5	5.9	1.7
2010	10.3	10.1	8.0	6.4	3.8
2011p	9.5	7.8	7.0	6.3	2.4*

P = projected
* Actual growth taken from Pakistan Economic Survey
Source: IMF, WEO, September 2011

[1] The floods displaced over 20 million people. Taking the labor force participation rate at 33 percent, the labor force displaced worked out at 6.6 million. Damage to capital stock including public and residential buildings, commercial structure and contents, roads and railroads, have been estimated at US$ 2.6 billion (Hicks, M. J. and Burton, M. L. (2010); Preliminary Damage Estimates for Pakistani Flood Events, 2010; Center for Business and Economic Research, Ball State University).

[2] However, IMF provided support of US$ 453 million under its Emergency National Disaster Assistance on the request of Pakistan.

believe the domestic issues are more decisive and chronic. These include the collapse of fixed investment; acute energy shortages; urban violence and lawlessness; poor physical infrastructure; and institutional fragility.[3] The issue of fixed investment merits special mention; Pakistan's investment rate was only 13.4 percent in FY11, which is the lowest since FY74.[4] Since this is a leading indicator for economic growth and employment, the uncertain business climate (demand for loans) and the hesitation of banks to lend (supply) are jointly responsible for this state of affairs. Going forward, policymakers must focus on such basics if Pakistan's economy is to move forward.

Fiscal

Pakistan's fiscal position remained under stress during FY11, with a budget deficit of 6.6 percent of GDP, compared to a target of 4.0 percent (**Table 1.2**).[5] While a portion of this excess could be attributed to the floods, the real issue is the government's inability to implement fiscal reforms, and in some cases, not even being able to secure the required legislation.[6]

The implementation of the reformed general sales tax; the broadening of the income tax net to include agriculture and services; the phasing out of subsidies in a timely manner; and the restructuring of loss-making public sector enterprises – were either delayed, or not implemented. Ad-hoc measures, including a surcharge on income tax and an increase in federal excise duty, were no substitute for required reforms. These measures simply put a heavier burden on existing taxpayers, which could incentivize them to slip beneath the tax net. Realized tax revenues of Rs 1.7 trillion, fell short of the annual target by Rs 160 billion. The year-on-year increase in taxes could not even keep pace with nominal GDP (the base for taxation), which means tax revenues actually fell in real terms.

On a positive note, the government was able to contain its spending compared to FY10. Budgetary expenditure in FY11 was 18.9 percent of GDP, against 20.5 percent in the preceding year. While this is a welcome development, the details merit a word of caution. First, a portion of public sector *development* spending was utilized to rehabilitate flood affectees, and to revive agricultural activities. In our view, the sharp reduction in development spending will continue to dampen fixed investment, which lowers future growth prospects. Second, federal subsidies were three times higher than envisaged in the budget, which implies resource misallocation. And finally, loss-making PSEs continue to hemorrhage and drain scarce fiscal resources – Pakistan Railway, PIA and Pakistan Steel are classical examples of the heavy cost of poor governance to the economy (see Boxes 2.4 & 2.5 in Chapter 2).

Domestic debt & crowding out

The large fiscal deficit directly impacted Pakistan's debt burden, as the stock of public debt and liabilities (accumulated deficits) posted an increase of Rs 1,763 billion in FY11, to Rs 11.0 trillion (60.9 percent of GDP). Interest payments alone accounted for 32.8 percent of government revenues last fiscal year, which means a further squeeze on the government's ability to use fiscal policy to promote economic growth.

[3] Institutional fragility stems from non-merit based appointments, frequent transfers and postings, short-lived top positions in key institutions, and external interferences in the functioning of public institutions.
[4] For detail discussion on this issue, see Chapter 4.
[5] This includes the payment to settle the circular debt.
[6] At the start of FY11, the government had committed to implement the Value Added Tax (VAT) during the year. After opposition from businessmen and some Parliamentarians, this was renamed as the Reformed GST. The RGST Bill was formulated in H2-FY11, and approved by the Standing Committees of both the Senate and the National Assembly. The RGST Bill was tabled in the National Assembly in May 2011, but there has been no follow up since.

However, Pakistan's external debt remains comfortable, especially within the context of the acute problems facing the Eurozone. During FY11, most of the increase was on account of currency revaluation, as the dollar lost value against other hard currencies. The funding that Pakistan actually received during FY11 was largely utilized for the servicing of external debt.

The financing of the fiscal deficit was, and still remains, challenging. With a decline in external funding following the suspension of the IMF Stand-By Arrangement (SBA), the government had little choice but to rely increasingly on domestic sources. During FY11, the government borrowed Rs 1.1 trillion from domestic resources, which accounted for 91.0 percent of the fiscal deficit. Within domestic sources, the heavy reliance on commercial banks not only crowded-out the private sector, but also complicated monetary management, as banks focused increasingly on short-term T-bills to place their surplus liquidity.

Table 1.2: Selected Macroeconomic Indicators

	FY08	FY09	FY10	FY11	
				Targets	Actual
% Growth					
Real GDP (at factor cost)	3.7	1.7	3.8	4.5	2.4
Agriculture	1.0	4.0	0.6	3.8	1.2
Large-scale manufacturing	4.0	-8.1	4.9	4.9	1.0
Services	6.0	1.7	2.9	4.7	4.1
Consumer price index (FY01 =100)	12.0	20.8	11.7	9.5	13.9
Sensitive price indicator (FY01 = 100)	14.2	22.7	13.2		17.8
Monetary assets (M2)	15.4	9.6	12.5		15.9
Private sector credit	16.5	0.6	3.9		4.0
Exports (f.o.b.)	12.2	-7.2	9.1		28.6
Imports (c.i.f.)	30.9	-12.9	-0.3		16.4
Million US $					
Remittances	6,451.2	7,811.4	8,905.9		11,201.0
Official liquid Foreign exchange reserves	11,398.7	12,425.2	16,750.4		18,243.8
% of GDP					
Total investment	22.1	18.2	15.4	15.4	13.4
National savings	13.6	12.5	13.1	13.2	13.6
Total revenue	13.7	13.2	13.8	15.2	12.5
Tax revenue	9.9	9.8	10.0	11.0	9.4
Current expenditure	14.8	12.9	13.6	14.8	16.1
Development expenditure	2.5	1.9	2.1	4.3	2.8
Budgetary deficit	7.6	5.3	6.3	4.0	6.6
Current account balance	-8.5	-5.7	-2.2		0.1
Public debt	60.7	61.6	62.2		60.9
Domestic debt	32.0	30.3	31.4		33.3
Foreign debt	29.9	32.6	31.6		28.2
External liabilities	0.9	0.8	1.5		1.2

As a result, private sector credit only grew by 4.0 percent in FY11, as compared to an increase of 74.5 percent in government borrowing from commercial banks. In our view, since commercial banks were lending to the government at attractive rates, this left little incentive to fund private businesses. This suited commercial banks as investments in government securities are risk-free and carry no capital requirements for credit risk. Having said this, it is important to note that

demand for private sector credit was also low, as borrowing was limited to running finance, with little interest in fixed investment.

Unfortunately, this crowding-out was to be expected, as the government shifted away from central bank financing during the second half of FY11. This shift towards commercial bank financing was required to manage inflationary expectations, as SBP and MoF came to an understanding (in late 2010) to keep government borrowing below September 2010 levels. Nevertheless, the delayed impact of central bank financing in the first half of FY11 persisted to keep inflationary pressures high throughout the year.

More importantly, retail prices also increased because of supply side factors, including the impact of floods and the rise in international commodity prices. Food inflation was particularly hard hit, posting a sharp 21.3 percent year-on-year increase in September 2010, compared with 10.4 percent in the same month a year earlier – food inflation remained about 19 percent in the first half of FY11. With headline CPI inflation also in double-digits throughout the year (it averaged 13.7 percent for the year[7]), SBP resorted to monetary tightening with an increase in the policy rate from 12.5 percent in end-FY10, to 14.0 percent in November 2010 – for the remaining part of FY11, the policy rate was kept unchanged.

Energy

Acknowledging the importance of energy as a key factor of production, this *Annual Report* will devote a full chapter to assess Pakistan's energy shortage.[8] Estimates from the Planning Commission claim that about 3-4 percent of GDP may have been lost because of power outages in FY11, with a concentrated impact on the manufacturing sector. The government's response to this energy shortfall was threefold: (1) rental power projects (RPPs) were commissioned to increase generation capacity; (2) the government released Rs 120 billion to resolve the inter-agency circular debt problem, which was undermining energy production; and (3) electricity tariffs were increased to pass on the higher cost of production. In spite of these measures, the overall situation remained largely unchanged.

In our view, commissioning RPPs to increase generation capacity was misplaced, as Pakistan is operating well below its installed capacity due to the circular debt problem.[9] One must also note that the Rs 120 billion injected by the government (to restart the funding of furnace oil) only happened in May 2011. In effect, for most of FY11, the acute problems in the power sector went unaddressed.

Governance

In the final analysis, all the economic problems highlighted above can be traced to poor governance (**Box 1.1**). Economic

Box 1.1: Governance

Governance consists of the traditions and institutions by which authority in a country is exercised. This includes the process by which governments are selected, monitored and replaced; the capacity of the government to effectively formulate and implement sound policies; and the respect of citizens and the state for the institutions that govern economic and social interactions among them.

The World Bank prepares six indicators of governance for over 200 economies. These are: (1) voice and accountability; (2) political stability and absence of violence; (3) government effectiveness; (4) regulatory quality; (5) rule of law and; (6) control of corruption.

World Bank
[http://info.worldbank.org/governance/wgi/index.asp]

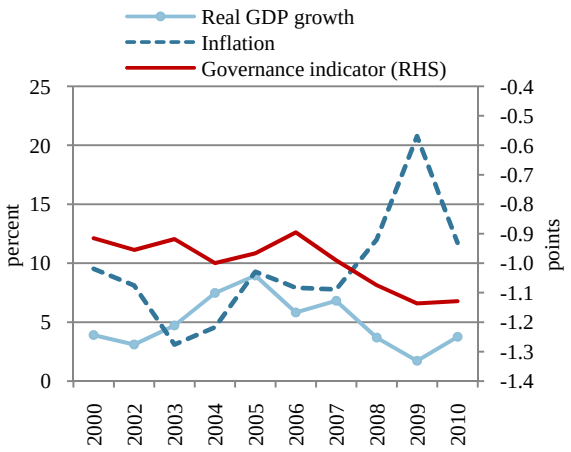
[7] The inflation numbers are based on new CPI data (FY08=100). And food inflation is calculated from weighted average of indices of three groups: (a) Food & Non-Alcoholic Beverages; (b) Alcoholic Beverages & Tobacco; and (c) Restaurants and hotels.
[8] See Chapter 3.
[9] If looking at GENCOs, we believe that the capacity utilization could be as low as 50-60 percent of installed capacity.

policies will be ineffective unless they are supported by strong institutions and are consistent with other government policies.[10]

A cross-country comparison shows that institutional weakness at all levels of government; the judiciary; civil services; law enforcement; regulatory bodies; and agencies for oversight and accountability, are directly responsible for poor economic growth.[11] These institutions put together make up the governance structure of an economy.

In the case of Pakistan, most governance indicators have weakened in recent years (**Figure 1.1**).[12] The business environment has also been undermined by institutional weakness. In a recent study on the ease of *doing business* released by the World Bank, Pakistan slipped from 96 to 105, out of 183 countries evaluated. Out of the ten specific topical criteria, Pakistan scored poorly for the availability of electricity (at 166), followed by citizens who actually pay their taxes (at 158).[13] Pakistan's political leadership must take credible steps to stop the slide.

Figure 1.1: Governance and Economic Performance



Note: Governance indicator is average of World Bank's six indicators of governance.

Source: World Bank

1.2 Global Economic Conditions

As this document is being prepared, the global economy is at the precipice of another recession. This recession could be even more severe than the sub-prime mortgage crisis, as the underlying cause is market borrowing by many OECD countries to finance unsustainable fiscal deficits. The current problem has been triggered in the European periphery, with the market pricing in the real possibility that Greece, Italy, Spain, Portugal and Ireland, may be pushed into sovereign default.

As shown in **Figure 1.2**, GDP growth is down across-the-board in the OECD, while inflation continues to edge up. With interest rates at near-zero levels already, central banks in the US and UK continue with quantitative easing (printing currency notes) to encourage banks to lend and consumers to spend. However, as individuals emulate sovereigns to reduce debt levels, much of this additional liquidity is not having the desired effect, as households prefer to pay down their debts rather than spend.

A credible solution for Europe has still not been hammered out. It appears that Germany is at odds with the rest of Europe (and the US) regarding the role of the central bank in financing the government. The quantitative easing undertaken by the US and the UK has been politely rejected by the ECB, primarily because of German discomfort with inflationary finance and the bitter memories with the hyper-inflation after WWI. Furthermore, although commercial banks have agreed to write-off 50 percent of Greek commercial debt, getting the fiscal austerity in place

[10] Hall, R.E. and C. I. Jones (1999); Why Do Some Countries Produce So Much More Output per Worker than Others? *Quarterly Journal of Economics*; 114:1.
[11] Planning Commission of Pakistan (2011); Annual Plan 2011-12, Chapter 1, page 3.
[12] Kaufmann, D., A. Kraay and M. Mastruzzi (2010); The Worldwide Governance Indicators: A Summary of Methodology, Data and Analytical Issues; World Bank Policy Research Working Paper No. 5430.
[13] http://www.doingbusiness.org/data/exploreeconomies/pakistan/

is proving to be much more difficult. The recent resignation of the leadership of Greece and Italy reveals the political cost of the austerity, and the almost impossible balancing act of keeping commercial lenders from increasing the risk premium, against the fiscal austerity that people are willing to accept.

In view of this, central banks in the OECD have adopted unorthodox policy prescription – both the Fed and the Bank of England have disclosed their commitment to keep interest rates at near-zero levels till 2013, with little thought about what could happen to inflation with the waves of quantitative easing. Furthermore, with unemployment rates refusing to fall, and the disenfranchised viewing this as a class struggle (e.g. the Occupy Wall Street movement), OECD governments are under tremendous pressure to push growth (and job creation) even at the expense of inflation. In our view, the Eurozone and the US may have little choice but to be more restrained with fiscal austerity, and accept rising domestic inflation for the next several years.

Figure 1.2: (A) Real GDP Growth

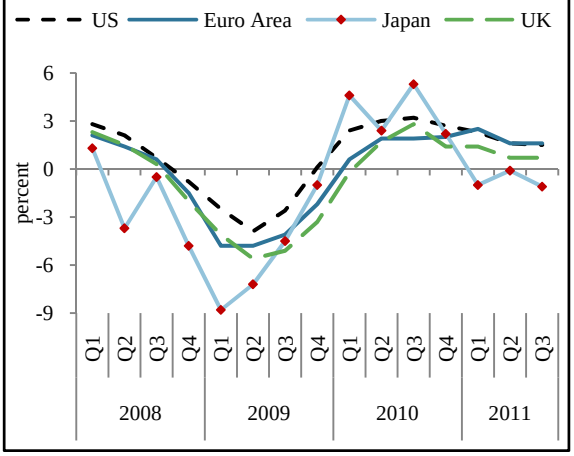
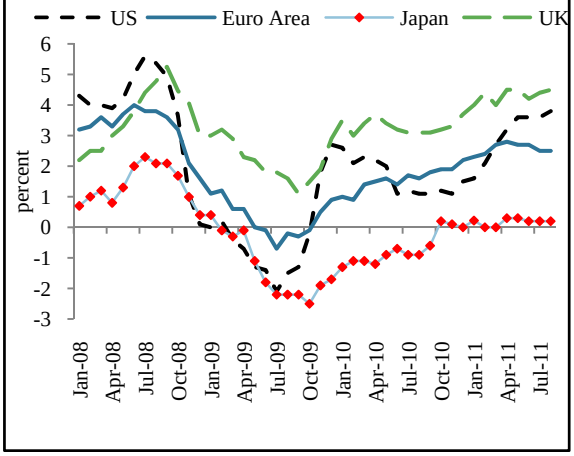


Figure 1.2: (B) Inflationary Trends



Asia on the other hand, continues to power ahead. With China and India leading the charge (see **Figure 1.3**), there is some hope that perhaps Asia has created some distance from the OECD, and has, so far, not been dragged down. However, if the downward slide in the OECD continues (which is likely), the export-led Asian Giants could see their growth prospects diminish.

A comparison with the 2008 recession is instructive. While the exposure to toxic mortgages created extreme risk averseness amongst banks in 2008/09, sovereign bonds issued by the European periphery is now beginning to create the same level of weariness. In our view, the spillovers in this crisis could be worse – analysts are not just looking at *insolvent* countries, but also those which are facing a liquidity problem. The latter are seeing lending rates increase that is pushing them into a debt-trap, which in turn is further increasing borrowing costs.

Figure 1.3: Real GDP Growth

Worse still, the huge contingent liabilities from entitlement programs (e.g. health insurance, pensions, state-funded medical support and higher education, etc.) have also appeared

on the radar. Policymakers and opinion-makers in the West are grappling with the sheer size of sovereign, corporate, bank and household debt accumulated in the past, and its dynamics going forward. This has sparked a bitter debate between Republicans and Democrats in the US, which resulted in a downgrade of US sovereign debt in September 2011. This fundamental issue regarding the government's role in providing a minimal level of economic/social services, goes to the very heart of a democratic system – an increasingly older OECD population is trying to protect its claims on future financial assistance. These issues were largely absent in 2008, which perhaps allowed for a rapid policy response. The point to be made is that resolving the current issue will not be easy, and this will delay the rescue plan.

Having said this, the similarities with the 2008 Credit Crunch are also disconcerting. The largest global banks are vulnerable; their creditworthiness is being downgraded by rating agencies; they need urgent recapitalization to pacify an increasingly jittery market; and there is a fear that if Greece stumbles into a disorderly default, banks will stop lending to each other, triggering another credit crunch on both sides of the Atlantic.

The root of the problem in the Eurozone, is the monetary union. In a monetary union, a common monetary policy is just the most tangible manifestation of the union – monetary union also requires a coordinated fiscal policy amongst member countries, which goes beyond simply setting annual fiscal deficit ceilings. This fiscal coordination was glaringly omitted since the Euro was first introduced, and subsequent fiscal deficit ceilings were blatantly breached. The current crisis took time to manifest, but did not elicit a credible response till a market panic firmly took hold.

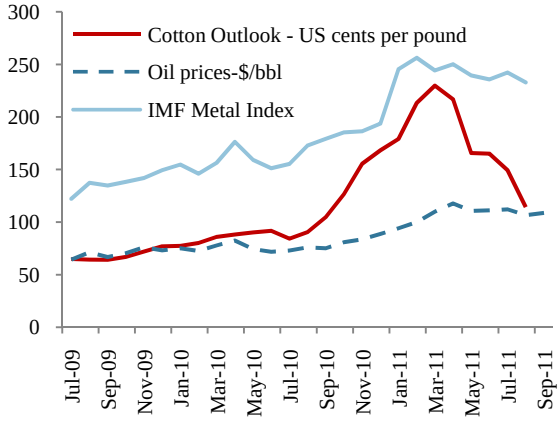
Going forward, the public hesitation of the fiscally conservative (e.g. Germany) to bailout the others (e.g. Greece), is understandably undermining Europe's ability to take decisive action. Unlike 2008, when the Fed and the US Government took immediate and customized (and sometimes controversial) steps to give comfort to the market, Europe's leadership is already late with a credible rescue plan, and all the indications suggest this hesitation will continue. In view of this, the outlook for OECD remains bleak.

External sector

With such a global outlook, analysts in Pakistan are understandably concerned. The immediate worry is the possible slowdown in our exports, as the US and EU are the primary destination for Pakistani goods. We cannot deny this risk, but would suggest the outlook is not as worrying as may appear at first glance. Given Pakistan's track record of precarious external deficits, perhaps analysts and market participants tend to expect the worst.

One must realize that Pakistan's current account balance in FY11 was positive for the first time in six years, and import coverage is still a healthy 26.6 weeks. The trade deficit narrowed to US$ 10.5 billion, which was largely financed by strong growth in worker remittances that reached a record US$ 11.2 billion. In terms of what to expect in FY12, especially within the context of a global recession, the following points should be considered.

Figure 1.4: International Commodity Prices



Source: IMF, EIA

The bulk of Pakistan's exports are low-end textiles, which are not likely to experience a fall in demand as they are income inelastic. If anything, Pakistan's export receipts may be hit harder by the price effect if cotton prices continue to soften. However, as shown in **Figure 1.4**, the negative price effect may not be as pronounced going forward, as current international prices are where they were before the spike started in mid-2010.

With the US Dollar viewed universally as the safest currency (despite serious economic challenges facing the US), we are of the view that the Dollar will not lose ground against other hard currencies. This means if the OECD goes into another recession, there is a possibility that oil prices (denominated in US$) may fall, which will give some comfort to Pakistan's BoP in the remaining part of FY12.

Worker remittances have been strong in recent months, which some claim will be undermined by another global recession. In our view, a key reason for the growth in official remittances is the increasing use of banking channels compared to informal avenues – this was given a boost with US sanctions against Iran in late 2010, which focused on capital flows in and out of the GCC. To attract a greater share of worker remittances via commercial banks, the parallel FX market will have to be closely monitored to ensure the kerb premium remains low.

A more uncertain issue is the fate of expat Pakistanis as the global recession takes hold. With growing concern about job losses as developed countries retrench, and the specific vulnerability of global banks and financial institutions, there is some concern that expat Pakistanis may return. This carries an upside in terms of the savings they will bring with them; this short-term boost may however be neutralized by lower remittances in the future.

Having said all this, Pakistan's economic outlook is not totally counter-cyclical with the global economy. A recession in the OECD will hurt FDI, and the recent cut in domestic interest rates may discourage fixed income inflows. The only consolation is these amounts are likely to be small and should not have a serious impact on Pakistan's external sector.

Of greater concern is Pakistan's relationship with the international financial institutions (IFIs), since official flows are larger than private capital flows. As discussed in the next section, SBP's projections for the current account balance show a deficit of 1.5 to 2.5 percent of GDP. The issue is not the size of the current account deficit (which is small by comparison to previous years), but the drying up of external inflows to fund the gap.

To summarize, while the outlook on the global economy is worrisome, we have reason to believe that Pakistan will largely be insulated from the negative spillover. The downsides for Pakistan are well known and discussed by the media, but the possible upsides are understated and perhaps not properly understood.

1.3 Looking Ahead

Before the start of FY12, policymakers forecast 4.2 percent economic growth on the basis of a positive outlook for cotton; a recovery in the manufacturing sector; and policy measures to address the energy shortage. However, the agricultural outlook has once again been adversely impacted by the floods in Sindh, which has damaged half of its area under cultivation. There is also some uncertainty about the supply of fertilizer for the wheat crop.[14]

[14] With the gas demand pressure in winter, it may be difficult to switch gas to domestic production of fertilizers. Thus the government has to import urea. However, given the logistic facilities at Pakistani ports, there is a risk that availability of urea at farm land could be delayed. Thus wheat production can be adversely affected.

In view of this, we project GDP growth to be in the range of 3-4 percent; we take some comfort from how the 2010 floods were managed (**Table 1.3**).

Table 1.3: Major Economic Indicators

	FY11[P]	FY12 Targets	FY12 SBP Projections
		percent growth	
GDP	2.4	4.2	3.0 – 4.0
CPI	13.7	12.0	11.5 – 12.5
Monetary assets	15.9	-	12.0 – 13.0
		billion US dollars	
Remittances	11.2	12.0	12.0– 13.0
Exports (fob)	25.4	25.8	24.6 – 25.1
Imports (fob)	35.7	38.0	40.3 – 41.0
		percent of GDP	
Fiscal deficit	6.6	4.0	5.5 – 6.5
Current account Deficit	-0.1	0.6	1.5 – 2.5

Note: Targets of fiscal and current account deficit to GDP ratios are based on Nominal GDP in the budget document for FY12, while their projections are based on projected (higher) nominal GDP for the year.

[P] Provisional

Having said this, we feel the government will again miss the 4 percent fiscal deficit target in FY12, with doubts on both expenditure and revenue targets. The floods in Sindh and a prolonged wave of dengue fever in Punjab, have created an unanticipated fiscal burden. Moreover, both provincial and federal governments are less likely to be frugal this fiscal year, not just as elections get closer, but also as provincial governments take greater responsibility for their fiscal affairs. In our view, the absence of an IMF program may also allow expenditures to stray off course, while prospects for additional revenue measures are dim.

The likelihood of achieving the non-tax revenue target (as shown in Federal Budget) is also low for several reasons: (a) the expected US$ 1250 million Coalition Support Fund is more uncertain as Pakistan's relations with the US are strained; (b) with the recent cut in the discount rate, SBP's profit could be less than the budgeted Rs 200 billion; and (c) there is little progress on the auction of 3-G telecom licenses, which had been budgeted to raise Rs 75 billion revenue in FY12. In view of this, SBP projects a fiscal deficit of 5.5 to 6.5 percent of GDP, with a bias on the upside.

All concerned parties realize the need to push broad-based fiscal reforms if sustainable growth is to be achieved. The main ingredients remain the same: (a) the political will to widen the tax base to include untaxed or under-taxed segments (agriculture and services); (b) plugging leakages in the collection machinery; (c) removing subsidies on electricity, fuel, and agricultural commodities, while targeting subsidies to underprivileged groups;[15] and (d) restructuring public sector enterprises, with a specific focus to reduce the monthly hemorrhaging that is adding to the government's fiscal burden.

The political dimension of these issues cannot be denied, which reinforces our view that difficult political decisions are required to get Pakistan's fiscal house in order. The current level of over-staffing; corruption and wastage; and politicized unions in the PSEs, makes for a very challenging environment. However, these precise issues plagued the nationalized commercial banks in the 1990s, yet they were successfully restructured and eventually privatized. In our view, PSEs need to be put back on the policy agenda; at the very least, credible management teams and a phased reform agenda must be formulated and made public.

In our view, policymakers may consider formulating a comprehensive medium-term fiscal reform *masterplan*, which is staggered and sequenced on the basis of the hard lessons of the recent past. Coordinated documentation; transparent collection with oversight; an equitable plan to capture all commercial businesses and institutions into the tax net; a restructuring agenda for loss-making PSEs; and a credible enforcement mechanism, must anchor this masterplan. These

[15] Subsidies, once given, are very hard to remove without multi-partisan consensus. The role of media is also very important to differentiate between the elite and poor beneficiaries of subsidies.

reforms will not be easy to implement, but prioritizing this initiative, and having the policy *will* to overcome the more vocal (and latent) resistance, will signal intent and give this effort a better chance of succeeding. In the current state of Pakistan's economy, there is no wiggle room left.

Even if preliminary steps are taken soon, the magnitude of the task is such that results will not be forthcoming in the near future; hence, financing the fiscal deficit gap in FY12 will be very challenging. The IMF has still not issued a Letter of Comfort to help Pakistan negotiate with the ADB and the World Bank. With dim prospects for external funding, the burden will once again fall on domestic sources. Despite the recent cut in the policy rate, SBP will continue to rely on the government to respect its borrowing ceiling from the central bank. Being realistic, we expect occasional breaches, but would urge the government to preemptively secure additional non-bank financing and also explore non-traditional avenues of external financing.

Although international oil and commodities prices may soften with sluggish OECD growth, we believe inflationary pressures are likely to persist because of several factors: (1) food inflation has been the driver behind headline CPI, and monetary policy may not be an appropriate tool for managing this problem; (2) the *diffusion* of inflation (the number of items in the CPI basket showing double-digit price rises) has increased and moved from food and energy to other items;[16] and (3) the recent increase in POL prices will hit food and non-food items across the board. Therefore, SBP expects inflation to be within a band of 11.5 – 12.5 percent in FY12, which is broadly in line with the Annual Plan target of 12 percent.

What we are less comfortable with, is the absence of a medium-to-long term strategy for the energy sector. We appreciate the government's recent effort to resolve the circular debt problem, and are optimistic this may help unlock financing and improve capacity utilization. However, given Pakistan's growing dependency on imported furnace oil, and the higher cost of base-load energy generation, the government must go beyond fire-fighting measures.

We also believe the economic costs of the energy shortage are understated. The primary impact is on small and medium size manufacturing units and service providers, which are not properly documented and therefore do not show up in our GDP numbers. Furthermore, the loss of employment is more severe, as these units tend to be labor intensive. The socio-political unrest triggered by the energy shortage in many parts of the country, is ominous. Large-scale projects that focus on alternative energy sources (like hydel and coal) must be launched.

On the monetary policy side, the sharp cut in the discount rate in FY12, has surprised the market. With inflation easing somewhat and banks increasingly inclined to place funds with the government, the degree of crowding out of the private sector required policy intervention. Although SBP is still watchful to ensure that lending rates do not become negative in real terms, we share global concerns about stagnant growth and rising unemployment. SBP identified a window of opportunity, whereby private investment and employment generation would be given due importance. There was also a need to halt the growing dominance of debt servicing in the federal budget.

Finally, the outlook for Pakistan's current account balance remains a source of concern, but we remain hopeful of some upside on strong worker remittances and a possible recession in the global economy. Although data for the first four months of FY12 shows a current account deficit of $1.6 billion, we attribute this to temporary events (bulky oil payments and a seasonal pause in remittances in September 2011, and an engineered shortage of hard currency in the parallel FX

[16] The possible upside is that a pass-through from non-food-non-energy items to the rest of the basket, is limited.

market).[17] Going forward, we expect a current account deficit of 1.5 to 2.5 percent of GDP, which is relatively small given our past performance. However, the financing of this current account deficit could be challenging.

We also think the market is over-reacting to Pakistan's FX debt payments in FY12. One must realize that while repayments on the IMF's US$ 8.9 billion SBA will start this fiscal year, outflows are only US$ 1.4 billion and are scheduled for the latter half of the fiscal year.

[17] Usually after Eid, there is a downturn in remittances inflows, which was witnessed in September this year. Moreover, the temporary rise in the *kerb* premium in September may also have diverted some remittances away from banking channels.

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2 Aggregate Supply

[The aggregate supply is the total value of goods and services produced in an economy during a year. It is represented by the Gross Domestic Product (GDP). Growth in GDP is a commonly used measure of economic performance of a country. It is first time that supply side and demand side of the economy are being discussed in separate chapters of the SBP Annual Report.

This division allows the readers to have a better handle on output gap and excess demand that have important implications for inflationary expectations and overall macroeconomic stability. While this chapter reviews the developments in commodity producing and services sector, the next chapter is also on supply side as it analyzes in detail the key constraint to production process in Pakistan, i.e., energy. The demand side dynamics and output gap have been discussed in Chapter 4.]

2.1 Overview

The economy showed modest performance during FY11 as real GDP recorded a growth of 2.4 percent. However, most of this growth was contributed by the services sector while the commodity producing sector could not pick up as expected. The agriculture was badly affected by floods in July-August 2010 and the industrial production was constrained by severe energy crisis during FY11.

Throughout the year, gas supply shortages led firms to cut-back on production, particularly in the textile and fertilizer industries, and also forced power producers to operate below capacity. The resulting energy shortfall deepened further, as the circular debt increased to unsustainable levels.[1]

Although the country's energy problems intensified during FY11, temporary supply interruptions to the economy in the form of floods also played a significant role in disrupting economic activity. In particular, the agriculture sector suffered damages of about US$ 5.0 billion; of that 89 percent were of crops. The total area under *kharif* crops – cotton, rice, sugarcane and maize – was 6.98 million hectare of which around 2.10 million hectare was directly damaged by floods.[2] In order to address this challenge, the government was forced to divert funds towards disaster-management and rehabilitation programs at the expense of several public sector development projects.

The reallocation of funds from development activities to address temporary shock is likely to adversely affect productive capacity in the future. However, resulting increase in current expenditure led to substantial growth in value addition of Public administration and defence (13.2 percent) which, in turn, helped services sector to contribute by about 90 percent to real GDP growth in FY11 (**Table 2.1**).

[1] See **Chapter 3** for further detail on energy.
[2] Source: Pakistan Floods 2010: Preliminary Damage and Needs Assessment' by the Government of Pakistan, the World Bank, and Asian Development Bank, November 2010.

Table 2.1: Gross Domestic Product (at constant prices of 1999-2000)

	Growth (percent)			Contribution to growth	
	FY10 R	**FY11 T**	**FY11 P**	**FY10**	**FY11**
Commodity producing sectors	**4.7**	**4.4**	**0.5**	**2.2**	**0.2**
Agriculture	**0.6**	**3.8**	**1.2**	**0.1**	**0.3**
Major crops	-2.4	3.7	-4.0	-0.2	-0.3
Minor crops	-7.8	3.0	4.8	-0.2	0.1
Livestock	4.3	4.2	3.7	0.5	0.4
Fishery	1.4	2.0	1.9	0.0	0.0
Forestry	2.2	2.5	-0.4	0.0	0.0
Industry	**8.3**	**4.9**	**-0.1**	**2.1**	**0.0**
Mining & quarrying	2.2	2.1	0.4	0.1	0.0
Manufacturing	5.5	5.6	3.0	1.0	0.5
Large scale manufacturing	4.9	4.9	1.0	0.6	0.1
Small & household	7.5	7.5	7.5	0.4	0.4
Others	4.3	4.5	4.4	0.1	0.1
Construction	28.4	3.8	0.8	0.6	0.0
Electricity and gas distribution	17.7	3.2	-21.1	0.4	-0.6
Services sector	**2.9**	**4.7**	**4.1**	**1.5**	**2.2**
Transport, storage & communication	2.8	4.6	1.3	0.3	0.1
Wholesale & retail trade	4.6	5.1	3.9	0.8	0.7
Finance & insurance	-11.3	3.0	-6.3	-0.6	-0.3
Ownership of dwellings	3.5	3.6	1.8	0.1	0.0
Public administration & defense	2.5	5.0	13.2	0.2	0.8
Social and community services	7.8	5.0	7.1	0.9	0.8
GDP (at factor cost)	**3.8**	**4.5**	**2.4**	**3.8**	**2.4**

R = revised; P = Provisional; T = Annual Plan Target

Source: Pakistan's Economic Survey 2010-11, Annual Plan 2010-11

2.2 Agriculture

Despite experiencing substantial flood-related losses particularly in the cotton and rice crops,[3] the agriculture sector recorded a growth of 1.2 percent during the year. This growth exceeded the previous year's level, and was mainly led by the livestock sub-sector, followed by minor crops and two major crops (namely sugarcane and wheat).

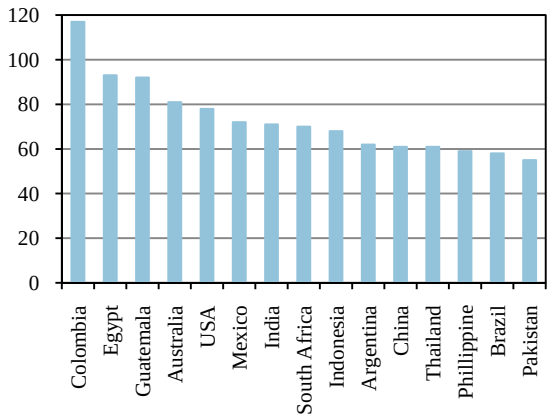
A higher price for the previous sugarcane crop, favorable weather conditions and timely availability of inputs, helped enhance sugarcane production to 55.3 million tons – a growth of 12 percent over the 2010 crop size. Encouragingly, the crop yield increased to a record level of 56 tons per hectare. However, even at this level, last year's yield is very low as compared to other sugarcane producing countries (**Figure 2.1**).

The record wheat crop of 24.2 million tons shows a growth of 3.9 percent in FY11 against a decline of 3.0 percent a year earlier. Increase in wheat production is attributable to: (a) improved water availability; (b) supportive weather conditions; (c) increased use of fertilizer; and (d) provision of free-of-cost seeds in flood affected areas.

[3] Both crops account for more than 1/3rd of the total value addition by major crops.

The livestock sub-sector also suffered losses due to floods. This sector accounts for 55 percent of value addition in overall agriculture, and includes the value of livestock and its products (milk, meat, hides and skins, eggs, wool & hair). Estimates suggest weaker growth within this sub-sector compared to last year,[4] but this was nonetheless sufficient to provide much needed support to sector's overall performance.

Figure 2.1: Yield Comparison of Sugarcane (tons/hectare)



Source: Annual Report 2010, Pakistan Sugar Mill Association

Minor crops (with a share of 11 percent in agricultural value added) showed some recovery in FY11. This development was expected, since cultivating minor crops (vegetable, pulses etc.) after the floods is very cost-effective as compared to established major crops.

Some of the key developments during FY11 that helped shape the overall performance of the agriculture sector are as follows:

The most significant development was the floods of early FY11. Apart from becoming a humanitarian crisis,[5] these floods affected livelihoods and assets. The challenge for the agriculture sector was more demanding beyond the standing crops for rice and cotton that were badly affected (in some cases completely destroyed), there were fears that the damage would extend to the next cropping season, as affected lands became waterlogged, and in those lands that did dried up, timely availability of seeds was uncertain.[6] With active support from donor agencies, the government was able to limit the damage, and farmers also responded strongly to this challenge, particularly in preparing the food-affected lands for cropping. The positive results of their efforts were evident in terms of significant gains both in wheat and sugarcane.

Table 2.2: Performance of Major Crops

	FY10	FY11^{T}	FY11^{P}	YoY growth in FY11
Area ('000 hectares)				
Cotton	3,106	3,200	2,627	-15.4
Rice	2,883	2,708	2,335	-19.0
Sugarcane	943	1,070	988	4.8
Wheat	9,132	9,045	8,804	-3.6
Production ('000 tons; cotton in '000 bales of 170.09 kg)				
Cotton	12,913	14,010	11,600	-10.2
Rice	6,883	6,176	4,823	-29.9
Sugarcane	49,373	53,690	55,309	12.0
Wheat	23,311	25,000	24,214	3.9
Yield (Kgs/hec)				
Cotton	707	745	725	2.5
Rice	2,387	2,228	2,039	-14.6
Sugarcane	52,357	50,200	55,981	6.9
Wheat	2,553	2,764	2,750	7.7

Source: Pakistan's Economic Survey 2010-11, Annual Plan 2010-11

[4] The output estimates of livestock and their products are based on inter-census growth rates of livestock censuses. The last census was conducted in 2006.

[5] According to Economic Survey of Pakistan 2010-11, the flood has taken away more than 1,700 human lives; displaced 20 million people; affecting over 20 percent of the land area. The flood resulted in the loss of billions of dollars through damages to infrastructure, housing, agriculture, livestock and other assets of rural households.

[6] Floods also destroyed seeds which farmers generally store for the next planting season of wheat. Furthermore, due to the shortage of alternative foods, people were compelled to use their seeds as food.

The floods, however, left medium to large landlords in an unusual social dilemma: their crops worth million of rupees had been destroyed, but due to their white-collar standing in the community, it was difficult for them to align with landless workers and small farmers, or secure in-kind support (free seed and fertilizer) from the government and other non-government organizations.

Another key development is the surge in prices of cotton during most of FY11, which more than compensated farmers for production losses due to the floods.[7, 8] One possible downside of higher commodity prices is the increase in disparity between rural incomes. Large farmers and traders who have greater presence in the commodity market reaped more benefits from the increase in commodity prices, as compared to small farmers. Furthermore, there are also questions regarding the extent of the trickle down to the land-less labor class, which was the worst affected.

Looking ahead, the government has set an agri-growth target of 3.4 percent for FY12 – significantly higher than the realized growth of 1.2 percent in FY11.[9] A number of developments could adversely impact this growth forecast:

Sharp rise in input prices

While farmers were still recovering from the floods, input prices rose steeply, particularly for urea, pesticides and diesel. Diesel prices rose from Rs 75.7 per liter in June last year to Rs 94.1 per liter in June 2011. The rise in urea prices was more pronounced, since a 50 kg bag of urea (priced at Rs 850 in November 2010) was selling at roughly Rs 1,800 in the informal market by August 2011, and Rs 1,500 in November 2011.[10] Compounding this problem was a concern about the timely availability of urea. [11]

Facing a squeeze in their income, farmers were calling for higher support prices for wheat before the next sowing season. In response, the government decided to increase the wheat support price by Rs 100 to Rs 1,050/40 Kg for the current crop.

Recurrence of floods

Unfortunately, the country has been hit yet again by another flood in the current year; this time the damage has been concentrated in central and lower Sindh. This flood has caused significant loss of life, infrastructure, livestock and crops. More importantly, these flood-related losses are concentrated in the cotton crop.

It may be pointed out that the cotton crop outlook was quite promising prior to the flood for several reasons: (a) farmers in both Sindh and Punjab had cultivated more land in response to higher cotton prices;[12] (b) the cotton leaf curl virus (CLCV) that damaged the Punjab crop last season did not affect this year's harvest; and (c) the government has encouraged the use of BT cotton to enhance yields (**Box 2.1**).[13] So while the initial estimate for cotton production in FY12

[7] According to the Economic Survey of Pakistan (2010-11), higher prices of major crops led to income transfers of Rs 342 billion to rural areas during 2010-11 alone. By contrast, estimates for crop damages due to floods stand at around Rs 282 billion.

[8] The prices of seed cotton reached over Rs 5,200 per 40 Kg in March 2011 compared to Rs 2,300 in the corresponding month of 2010.

[9] See Pakistan Annual Plan 2011-12, Planning Commission, Government of Pakistan.

[10] In March 2011, the government also imposed sales tax on agri inputs e.g., fertilizer, pesticides and tractors.

[11] While severe gas shortages to fertilizer plants led to a substantial under-utilization of their capacity, the timely availability of urea became a major concern following considerable delays in urea imports and incentives to hoard the commodity in anticipation of price increase (see Section on Fertilizer in Chapter 9 for further details).

[12] Cotton sowing in both Punjab and Sindh exceeded the target in FY12. In contrast, cotton sowing in Sindh during FY11 was 80 percent of the target.

[13] Bt cotton yields are 35-40 percent higher than traditional cotton varieties.

was around 15 million bales,[14] the floods have dented this positive outlook with the result that the marginal increase expected in the bumper crop has been lost to the floods, leaving a balanced outlook compared to the pre-flood target.

Box 2.1: Bt Cotton in Pakistan

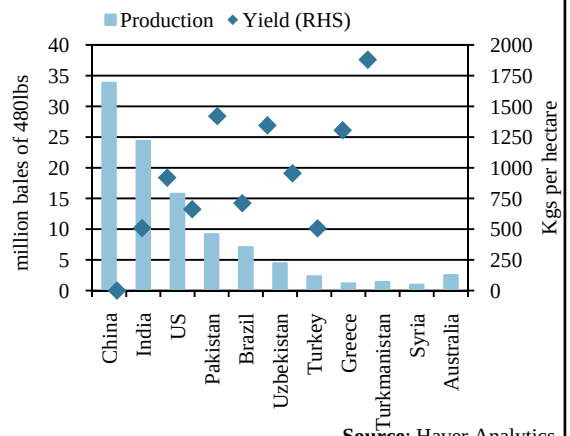
Bt cotton has been developed through the transfer of a gene, *Bacillus thuringiensis*, from a soil bacterium.[15] This gene enhances crop resistance against three bollworms: spotted, pink, and American bollworm.[16]

The government of Pakistan introduced genetically modified (GM) cotton seeds from 2010 *kharif* season. Accordingly, certified seeds for 10 varieties of Bt cotton and one hybrid variety were released.[17]

Although the work on developing GM seeds started in 1997,[18] delays in commercial use of certified GM seeds resulted in unregulated adoption of different varieties of Bt cotton as early as the year 2000.[19] Over time, use of the uncertified Bt-type seeds expanded exponentially, and by 2009, around 70 percent of cotton growing area was under these varieties of cotton.[20]

Controlling these pests is important since cotton yields in Pakistan are very low compared to other countries (e.g., China, Brazil, Turkey) – Pakistan is the 4th largest cotton producer in the world (**Figure 2.2**). Since higher intensity of insects and pests attacks and poor quality of seeds are the key reasons for low yields,[21] introduction of pest resistive seeds is likely to have substantial impact on cotton production going forward.

Figure 2.2: Cotton Production and Yield (5-year Average)



Source: Haver Analytics

The use of Bt cotton has an immediate bearing on farmers: it reduces expense on pesticides and crops gain resistance against the incidence of bollworm, but seeds are costlier and require more water and urea. A number of studies compared the performance of the Bt-type varieties with non-Bt varieties in Pakistan, and their findings provide a mixed picture. Hayee (2005) observed that Bt cotton performed poorly compared to the conventional varieties. On the contrary, studies by Nazli, *et al*. (2010) and Abdullah (2010) suggest a better performance of the existing unapproved varieties of Bt cotton. These studies, however, acknowledge that farmers in Pakistan are not making the most of Bt cotton because:

The Bt varieties were developed by various private sector plant breeders by transferring Bt trait to locally developed cotton varieties. These varieties are distributed without a formal regulatory framework which raises several concerns about seed quality.

Cotton leaf curl virus (CLCV) is still a major threat to Pakistani cotton along with sucking pests (mealy-bug, Jassid and White-fly). Presently, no resistant cotton variety is available against these diseases.[22]

[14] The previous peak was realized in 2004-05 season when cotton output was 14.26 million bales.
[15] *Bacillus thuringiensis* gene produces Cry protein, which is harmful to the larvae of moths, butterflies, beetles, and flies. When insects feed on the plant, the toxin enters the body and binds to the insect's gut. Hence, it disrupts its feeding and digestion process and eventually leads to the death of the insect.
[16] The transfer of Bt gene does not increase crop yield *directly*, rather the enhanced resistance from insect attack leads to more production.
[17] Source: Pakistan Economic Survey 2010-11, p 33.
[18] Source: Nazli H., Sarker R., *et al.*. (2010).
[19] Hayee A. (2005) reports that Bt cotton was for the very first time cultivated in Umerkot (Sindh) in 2000.
[20] See Carroll (2009).
[21] While analyzing trends in cotton yields for Pakistan during 1991-2005, Salam (2008) has identified susceptibility to a number of pest attacks as one of the key factors that resulted in wide fluctuations in yield and potential output loss. Estimated losses vary from 10-5 percent a in a typical year to 30-40 percent in a bad crop year.
[22] See Carroll (2009).

There is no resistance management plan. Farmers are encouraged to maintain a refuge area (with conventional cotton varieties or with some other crop) alongside Bt cotton crop so that resistance in pests may not rekindle over a period of time.

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More specifically, the major cotton growing areas in Sindh (e.g., Sanghar, Mirpurkhas, Benazirabad, Tando Muhamamd Khan and Tando Allayar) have been badly affected by the floods (**Box 2.2**). In addition, there are also reported losses in southern Punjab due to heavy rains. However, in some areas of southern Sindh, farmers were able to complete the first cotton picking before the monsoon rains. As cotton production target for FY12 was already very conservative,[23] it can still be realized despite damages.

After the unprecedented floods in 2010, Pakistan is now more vulnerable to the risk of flooding even if rainfall is not so heavy. Flood protection infrastructure (river embankments, protection walls and water-courses) was seriously damaged during last year's flood, and still needs to be repaired. Given the significant spillover of the agriculture sector on rural employment, poverty reduction, development indicators and the potential for growth, restoring rural infrastructure is critical.

Box 2.2: Recent Floods in Sind and its Impact on Agriculture

While Pakistan was recovering from the impact of the unprecedented floods of 2010, it was hit by another flood in August 2011. Unlike the previous year, when over flooding of river caused havoc, this disaster was triggered by exceptional rainfall in localized areas within Sindh.

Whereas Khyber Pukhtunkhwa and Punjab also received widespread rainfall, the devastation was more pronounced in middle and southern parts of the Sindh province. Specifically, Mithi, Mirpurkhas, Diplo, Chhachhro, Nagar Parkar, Benazirabad, Badin, Chhor, Padidan, Sanghar, Nausheroferoz, Dadu received record rainfall during August and September 2011.

Due to the relatively flat land gradient in southern Sindh, rain water inundated large areas in Tando Mohammad Khan and Badin. The situation became more serious due to breaches in Left Bank Outfall Drain (LBOD),[24] and caused loss of life and extensive damage to property, agricultural produce and livestock. The widespread rains even affected the Tharparkar district which is mainly dessert, where the rain water was fortunately contained within the soil.

[23] The agri-growth target of 3.4 percent for FY12 surprisingly assumes very low cotton crop of 12.8 million bales for the current season.

[24] Major breaches in protective bunds of canals were reported in Badin, Mirpurkhan, Umerkot, Tando Muhammad Khan, Thatta, Tando Allayar and Sanghar.

In terms of losses to agricultural produce, it will be too early to provide any firm estimate at this stage. However, a snapshot of the main *kharif* crops in Sindh (**Table 2.3**) provides some pointers on the likely impact of the floods. It may be noted that the months of August and September are generally harvesting season for cotton, rice and vegetative crops. In some areas of southern Sindh, farmers were able to complete the first cotton picking before the monsoon rains.[25] Similarly, in other areas *kharif* vegetables have already been harvested, and it was time to sow *rabi* vegetables.

The cotton crop is most vulnerable to floods so far. Major damages have been reported in Mirpurkhas, Benazirabad, Sanghar, Ghotki, Tando Muhamamd Khan and Tando Allayar.

Damages to the rice crop are limited to Badin and Thatta in the lower Sindh region. However, most of the rice crop (around 70 percent of output in Sindh) is produced in the upper region (e.g., Kashmore, Jacobabad, Shikarpur, Larkana) where precipitation was lower. It is expected that rains at this stage may result in higher crop yields in these regions, which may partially offset losses in lower Sindh.

In the case of sugarcane, almost all major sugarcane producing districts[26] were affected due to floods. However, losses to sugarcane are expected to remain low as the crop is relatively resilient to flooding. Furthermore, rains may improve water contents of the crop thereby increasing its weight.

Extensive losses in some minor crops (e.g., Onion, Tomato, chilies) have been reported in Sindh. It may be noted that Mirpurkhas, Badin and Umerkot together account for more than 65 percent of chilies produced in Pakistan.[27] Although the major share of vegetable produce was already harvested before rains, these floods have damaged the crop, and sowing of *rabi* vegetables is expected to be delayed. Finally, nearly 70 percent of the country's banana produce comes from Khairpur, Thatta, Benazirabad, Matiari, Nausheroferoz and Sanghar – all affected by the flood.

Apart from crops, these floods have led to significant losses to livestock as according to NDMA, over 15,000 cattle heads have been lost in Sindh due to floods. However, its impact on overall GDP will be minimal as the value addition by the livestock subsector is computed on the basis of inter-census growth rate and the last census was completed in 2006.

Table 2.3: Main Crops in Sindh (5-year average)

		Sindh	Total	*(share in total)*
Cotton				
Production	000' bales	2,966	12,453	*23.8*
Area	000' hectare	602	3,032	*19.9*
Sugarcane				
Production	000' tonnes	13,875	52,549	*26.4*
Area	000' hectare	241	1,030	*23.4*
Rice				
Production	000' tonnes	2,052	6,077	*33.8*
Area	000' hectare	645	2,713	*23.8*
Onion				
Production	000' tonnes	688	1,859	*37.0*
Area	000' hectare	53	138	*38.3*
Chilies				
Production	000' tonnes	123	137	*89.7*
Area	000' hectare	55	65	*85.2*
Tomato				
Production	000' tonnes	80	509	*15.8*
Area	000' hectare	11	50	*21.4*

Source: Pakistan Agriculture Statistics, 2009-10

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Collapse of cotton prices

In addition to flood-related damages, cotton growers are also facing a sharp fall in cotton prices since March 2011, both in the international and the domestic market.[28] There are fears that farmers may not be able to recover their cost of production.[29] Though reports of damages to the cotton crop have triggered a surge in cotton prices in both the domestic and international markets, the weak state of the world economy is keeping commodity prices down. However,

[25] This means farmers have already harvested 15-20 percent of the crop.
[26] Badin, Thatta, Mirpurkhas, Tando Muhammad Khan, Tando Allayar, Nausheroferoz, and Benazirabad.
[27] Kunri, a small town of Umerkot district is home to production of red chilies.
[28] The sharp decline in cotton prices took place as record prices in 2010 encouraged farmers to increase production. The International Cotton Advisory Committee (ICAC) estimates that global cotton production in 2011-2012 will rise by 8 percent probably resulting in the biggest crop since the 2004-2005 season. Meanwhile, cotton consumption by mills will grow at a much slower rate of roughly 1.5 percent.
[29] The sharp increase in urea prices is adversely affecting cotton growers.

looking at international prices, we feel that a further sharp decline is unlikely, as prices appear to have reached a plateau.

2.3 Large-Scale Manufacturing

The nascent economic recovery witnessed in FY10 turned out to be short-lived, and the manufacturing sector has had to face yet another bad year in FY11. While the floods damaged industrial supply networks and rural demand, severe power and natural gas shortages meant that a number of key industries (e.g. textiles, fertilizer, steel, glass etc.) could not operate as planned. As shown in **Table 2.4**, capacity utilization has been declining for the past three years in succession.[30]

Table 2.4: Capacity Utilization in Selected Industries (percent)

	adj.wt.	FY08	FY09	FY10	FY11		*adj. wt.*	FY08	FY09	FY10	FY11
Food	***19.1***					***Metal***	***4.7***				
Edible oil & ghee		46.9	44.6	45.6	46.3	Coke		30.0	43.7	35.3	31.1
Sugar		61.9	41.7	41.1	54.5	Pig iron		80.8	64.3	39.3	35.2
Milling		17.0	17.0	16.6	18.0	Billets/ingots		67.5	45.6	39.1	38.2
POL	***7.0***	88.7	82.2	74.6	67.8	***Chemicals***	***3.8***				
Cement	***5.5***	81.5	75.0	76.3	76.2	Caustic soda		75.5	74.6	41.9	39.5
Automobile	***5.3***					Soda ash		82.4	82.5	80.6	74.4
Cars		59.9	30.7	44.2	48.7	***Electronics***	***3.3***				
LCVs/Jeeps		57.4	42.7	42.4	50.1	Air conditioner		45.6	21.6	33.9	24.9
Buses		22.9	13.1	12.6	9.8	Deep freezer		21.8	19.8	24.4	10.5
Trucks		17.5	11.0	12.0	9.9	Refrigerator		33.7	31.3	35.6	34.7
Tractors		82.5	92.5	110.4	109.0	TV sets		28.6	16.1	13.7	17.6
2-3/wheelers		58.8	51.0	77.2	91.0						
Fertilizer	***4.5***	116.3	117.2	99.7	93.6	**Average**		**55.6**	**48.2**	**47.2**	**46.4**

Sources: PVMA (oil & ghee), PSMA (sugar), PFMA (milling), OCAC (POL), APCMA (cement), Economic Survey of Pakistan (auto), NFDC and cos. (fertilizer), PSM and EDB (metal), companies (chemicals, fertilizer, MM yarn), and PEMA (electronics).

Moreover, higher taxes on the manufacturing sector and liquidity constraints in POL distribution and steel production, constrained economic activity. In addition, some industries lost market share due to stiffer competition in both the export and domestic markets. Lastly, with declining investment demand, the production of capital goods faced a major setback this year. In overall terms, large-scale manufacturing (LSM) growth dropped to 1.0 percent – substantially below the average of over 7 percent for FY01-08.

Some industries are growing stronger

Despite these challenges, LSM production began to revive by H2-FY11 (**Table 2.5**) as the impact of floods began to subside and the *rabi* crop set off a strong recovery. In the meanwhile, improvement in some factors on the external front (higher textile export demand and larger refining margins for POL products), better marketing strategies (especially in smaller food processing industries), and supportive policies for wheat milling and the pharmaceutical industry, helped LSM.

[30] The commissioning of new production capacities (e.g., in cement, fertilizer and POL) led to further decline in capacity utilization.

Interestingly, despite the floods, industries based on agricultural inputs actually performed better than other industries. For example, the two largest – textiles and food processing – posted strong positive growth in FY11, after two consecutive years of negative growth. In the case of textiles, growth was largely led by higher export demand for fabrics.[31]

For the food processing industry, severe monsoon rains turned out to be a boon. The heavy rainfall and subsequent floods increased the sucrose level in sugarcane, while the alluvial soil helped the wheat crop, which ultimately led to more milling activity.

Furthermore, allowing wheat export to Afghanistan opened up more opportunities for millers: around 16 percent of wheat flour milled in FY11 was exported to Afghanistan, compared to less than one percent a year before. Moreover, duty reduction on crude palm oil imports, helped oil and ghee manufacturers maintain their margins even when international prices sharply increased in H2-FY11.

The growth in tea and cigarette sales is largely the result of innovative marketing. Of late, these industries were having difficulty dealing with competition from the informal market – both commodities are heavily taxed. Informal manufacturers and those who smuggle these products do not pay these duties (which are over 20 percent of their value), and hence have a considerable price edge over formal producers. However, by introducing new brands, improving distribution networks, and active advertising, the formal sector was finally able to hit back at the informal sector. Not only does this helps government generate revenues, but also enhances documentation.

Table 2.5: Sector-wise LSM Growth during H1 and H2 (percent)

	Adj. wts.	H1-FY11	H2-FY11	pp. Δ over H1
Overall LSM	**100**	**-1.2**	**3.1**	**4.4**
Industries showing major improvement in H2				
Textile	32.6	-6.5	10.9	17.3
Food	19.1	3.2	14.0	10.9
POL	7.0	-8.3	4.1	12.4
Pharmaceuticals	6.7	-1.1	8.9	10.0
Leather	3.0	26.4	30.6	4.3
Rubber	0.4	-9.0	7.2	16.2
Industries showing relative improvement				
Non-metallic mineral	5.6	-10.4	-6.5	3.9
Metal	4.7	-15.4	-2.8	12.6
Wood	0.0	-10.3	-2.6	7.7
Industries showing growth deterioration				
Chemicals	6.4	2.8	0.9	-1.9
Automobile	5.3	14.1	7.1	-7.0
Fertilizers	4.5	4.0	-4.1	-8.2
Electronics	3.3	-5.6	-30.1	-24.5
Paper& Board	0.8	5.2	-22.0	-27.2
Engineering	0.6	5.9	-45.4	-51.4

Source: Federal Bureau of Statistics

Others are suffering due to loss of competitiveness

In the export oriented segment, textile and electric fans were the only noticeable industries which managed to register increases in export volumes; export demand fell for other industries such as pharmaceutical, leather footwear, cement, and soda ash. The persistent energy shortfall and resulting underutilization of production capacities is affecting export potential, particularly in the weaving industry.[32] In other cases, high transportation costs are rendering exports uncompetitive. This is particularly true for bulky commodities like cement and soda ash with a low value-to-weight ratio. Although global shipping freights reached a nadir this year, these commodities were still unable to compete in the global market because high diesel prices

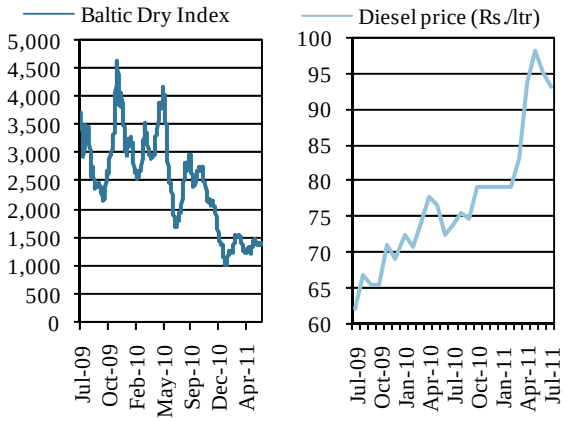
[31] Textile manufacturers were able to meet the higher demand despite a decline in cotton production this year and no significant increase in imports. This was made possible due to available cotton inventories and decline in yarn exports (see **Chapter 9** for more on textiles).

[32] While large weaving (or composite) firms performed better given their direct involvement in fabric exports at a time when the global demand for fabrics was strong and unit prices were high, some of the exporters had to cancel a large number of booked orders, speculating a failure of on-time delivery.

significantly added to inland cost of transportation from the factories to ports (**Figure 2.3**). In addition to this, there is the inability of Pakistan Railways to provide a relatively cheaper inland transport mode.

In the case of import-competing industries, most of them performed poorly (**Table 2.6**). Competition increased in FY11, especially as low priced goods from China (exempted under a Free Trade Agreement) continued to make their way into the local markets. Industries particularly affected by this influx include rubber, glass, and electric fans. Interestingly, while Pakistan's fans continue to expand their market share abroad, the home market is rapidly being captured by imports.

Figure 2.3: Shipping and Inland Freight Cost Trends



Source: Bloomberg

Table 2.6: Import Competing Industries (percent)

		Production		Import	
	Adj. wt.	FY10	FY11	FY10	FY11
POL	*6.97*	-7.7	-2.3	24.7	-15.2
Fertilizers	*4.51*	9.4	0.1	113.2	-52.9
Cars*	*3.37*	44.1	9.8	25.9	41.5
Synthetic resins	*2.55*	1.3	2.9	27.4	25.3
Paper& board	*0.8*	2.7	-8.7	-0.6	21.4
Steel products	*0.6*	-11	-5.4	-2.9	-24.2
Tyres/tubes	*0.4*	24.6	-0.8	-7.7	61.8
Buses, trucks*	*0.19*	7.1	-18.5	18.2	-32.5
Electric fans**	*0.18*	24.7	-10.2	25.7	59.2
Glass plates/ sheets**	*0.07*	-13.7	-15.9	-40.4	26.8
Bicycles**	*0.06*	6.5	-23.4	176.1	112.8
Plywood	*0.04*	-40.4	-6.7	-4.9	17.4

* Import growth is computed on the basis of value in dollars. ** Import growth is for Jul-May. Fan HS codes: 8415, glass HS-codes 7003-7009.

Source: Federal Bureau of Statistics

In FY09, locally manufactured fans catered to over 60 percent of Pakistan's domestic fan demand. Today, the share is now less than five percent. Over 80 percent of these fans are of Chinese origin, and are often very cheap compared to the domestic alternative (**Table 2.7**).

Table 2.7: Import Competition Heating up for Electric Fans

	(Jul-May)			Growth	
	FY09	**FY10**	**FY11**	**FY10**	**FY11**
Production	1,552	1,950	1,723	25.7	-11.6
Imports	245	308	491	25.7	59.2
Exports	1,122	1,531	1,714	36.5	12.0

Source: Federal Bureau of Statistics

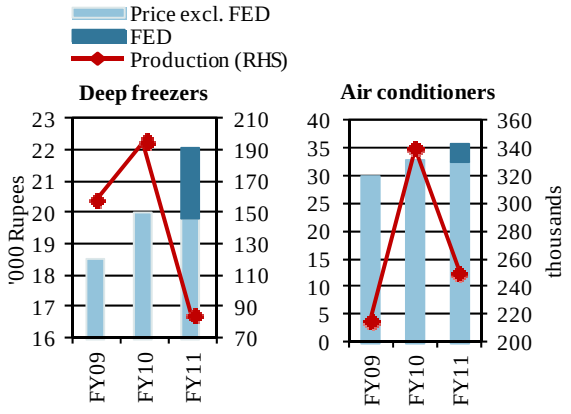
Some industries are facing a more uneven playing field

In overall terms, economic conditions have not been supportive for industries during the past few years. Continued strain on the fiscal accounts has left little room for supporting intervention, and the desperation to increase revenue generation has only grown. As a response, taxation has

increased over the past few years particularly amongst industries which are well audited and hence make for easy tax targets (e.g., POL products, cars, cement, and more recently electronics, fertilizers, tractors, and imported raw material). Occasionally, such policies have turned out to be short-sighted, only to be later withdrawn; prominent cases include imposition of duties on cars and home electronics in FY09 and FY11, respectively, which were abolished only a year later.

Federal excise duty on deep freezers and air conditioners imposed in the FY11 budget invariably translated into higher consumer prices, which dampened product demand (**Figure 2.4**). Unfortunately, this increase coincided with a sharp rise in global industrial metal prices as well as higher withholding duty on raw material imports, which translated into higher production costs. Interestingly, producers bore the additional cost burden, taking the hit on their profit margins in order to salvage some business in the prevailing low demand environment. In response, the FY12 budget abolished the duty, which bodes well for the industry's future.

Figure 2.4: Impact of FED on Home Electronics



Source: Federal Bureau of Statistics

While the immediate damage may stop with policy reversal, uncertainty in the business environment serves to make manufacturers risk averse, discouraging investment in the long run. In FY11, real investment in the manufacturing sector fell by 32.1 percent, the lowest in 16 years. Likewise, capital goods production also took a hit, declining by 20.8 percent.

The government also struggled to meet some of its commitments to the industrial sector. These include regularizing gas supply to fertilizer manufacturers, continuous power supply to textile and steel melting, resolving the circular debt issue (which forced the POL sector to operate below capacity), and resuming public construction projects (which were delayed and thus worsened the slump in building material industries).

Going forwards, the growth outlook is uncertain. With the economy still not on the path of a recovery, new investments initiated during the boom years (2003-2006) are not yielding the returns originally expected. Therefore, these are either being put off, as in the case of steel (Tuwairiqi) and petroleum refining (Byco), or are operating under much uncertainty, as in the case of fertilizer and cement. In this scenario, it is difficult to see major investments in the industrial sector in the foreseeable future.

Having said this, the government is trying to revive the business sector. Tax policies are friendly this year; the FY12 budget included duty reductions on cement, beverages, electronics, and cars, and a percentage point reduction in sales tax. Nevertheless, no major reduction has been observed in retail prices so far, indicating that the tax benefits have not been passed on to consumers that would help demand. If this trend continues, we expect more profitability for the corporate sector, similar to that witnessed during FY11, but little growth in actual production volumes.

2.4 Services

While growth in the commodity producing sectors declined from 4.7 percent in FY10 to 0.5 percent in FY11, the services sector supported economic growth significantly. As the largest sector in the economy (with a share of more than half of GDP), this sector has a strong bearing on overall growth and development of the country (**Box 2.3**). However, a detailed review indicates that factors deterring commodity producing sector's performance – power shortages, rising inflationary pressures, etc – adversely impacted growth in various sub-sectors within services also e.g., whole sale & retail trade and businesses. In addition to these factors, deteriorating financials of transport sector (i.e., Pakistan Railways and PIA), further squeezed growth during FY11. Apparently, the overall increase observed in services during FY11, was an outcome of one-off factors e.g., a significant increase in the salaries of public sector employees and war-on-terror related defense spending, and did not represent an improvement in real economic activity.[33]

Table 2.8: Contribution in Services Sector Growth
percent

	Growth			Contribution	
	FY10	FY11	FY11[T]	FY10	FY11
Growth in Services	**2.9**	**4.1**	**4.7**	**2.9**	**4.1**
Wholesale & retail trade	4.6	3.9	5.1	1.5	1.2
Transport, storage & communication	2.8	1.3	4.6	0.5	0.2
Finance and insurance	-11.3	-6.3	3.0	-1.2	-0.6
Ownership of dwellings	3.5	1.8	3.6	0.2	0.1
Public administration & defense	2.5	13.2	5.0	0.3	1.5
Community, social & personal services	7.8	7.1	5.0	1.7	1.6

T: Target

Source: Federal Bureau of Statistics

The actual growth in services was not only lower than the annual plan target for FY11, but was also narrow-based: just two sectors – public administration & defense and community, social and personal services – contributed over 75 percent of the growth in the services (**Table 2.8**). The notable performance of public administration & defense during FY11 stemmed from a hefty 50 percent increase in the salaries of public employees and rise in defense related activities.[34] As regards community social and personal services, flood related social activities had a significant contribution in the growth recorded during FY11. Interestingly, while floods severely impacted country's overall economic performance due to a widening fiscal deficit, deterioration in the performance of commodity producing sector and slackened domestic trade activity, the consequent rehabilitation activities bolstered services performance during FY11.

Table 2.9: Railway's Financial Summary
billion rupees; growth in percent

	FY07	FY08	FY09	FY10	FY11[P]
Revenue	**19.0**	**20.2**	**23.2**	**22.1**	**17.5**
growth	*3.8*	*6.7*	*14.6*	*-4.6*	*-20.7*
Expenditure	**24.8**	**27**	**36.9**	**36.8**	**41.1**
growth	*14.5*	*8.8*	*35.8*	*0.3*	*11.6*
Operating deficit	**-5.9**	**-6.8**	**-10.7**	**-14.7**	**-23.6**
Total debt servicing	8.8	9.6	11.8	10.3	7.5
Net loss	-15.2	-16.9	-23.0	-25.0	-31.1

P: Provisional

Source: Ministry of Railways

[33] As the FBS does not publish supporting tables for different sectors of national accounts, it becomes difficult to analyze the underlying factors in the performance of sub-sectors. For example, in case of community, social & personal services, the FBS does not share value addition by different components such as business, health, education, recreation, real estate, etc. This non-transparency in official data makes interpretation more challenging.

[34] The value addition to GDP by public administration & defense is based on wages & salaries, etc, of government employees at all levels – federal, provincial, and district and *tehsil* municipal administration. In addition it also includes the expenditure on defense related activities.

Worryingly, the value addition in transport, storage and communication was plagued by heavy losses of Pakistan Railways and weakening profitability of the telecommunication sector. This also overshadowed improvements in air and road transport sectors in FY11.

Pakistan Railways added negative value to the country's GDP for the second consecutive year during FY11. According to provisional figures, during FY11 the company's operational deficit registered a 60.5 percent YoY increase (**Table 2.9**). Poor management, rampant corruption, political intervention, and infrastructural bottlenecks have critically affected expense management and revenue generation over the years (see also **Box 2.4**).

Box 2.3: **Importance of Services Sector in Various Stages of Economic Development**

As theory suggests,[35] the contribution of various sectors of the economy (agriculture, manufacturing & services) towards GDP changes proportionately at various stages of economic development.

At a lower level of development, agriculture is the most important sector of the economy, capturing the highest share in national income. However, with an increase in per capita income, demand for food lags behind the demand for industrial goods, leading to a rise in the share of manufacturing sector in GDP. As incomes grow further, individual demand for goods starts to weaken, whereas the demand for services i.e., education, health, communication, transport, etc gains strength. Consequently, at very high level of economic development the share of services in GDP is greater than the combined share of manufacturing and agriculture sectors.

Table 2.10: Sectoral Composition in GDP (percent)

	UK 2007	US 2009	India FY11	Pakistan FY11
Services	**75.7**	**78.7**	**57.8**	**53.3**[1]
Whole sale & retail trade, hotels & restaurants	14.1	14	16.5	17.2
Transport, storage & communication	6.9	5.7	10.5	10.0
Finance, insurance, real estate & business services	31.8	33.6	17.4	9.8*
Community, social and personal services	22.9	25.6	13.4	13.6*
Commodity producing sectors	**24.3**	**21.2**	**42.2**	**46.7**

[1]Total services also include 2.7 percentage points share of ownership of dwellings.

*The share of business and real estate services is excluded from community, social and personal services and added in financial and insurance services to make it comparable with the international data.

Sources: OECD, RBI, FBS

It is important to note here that the rapid expansion of services sector requires: (a) accelerated expansion in modern services, namely business services, banking, etc.; and, (b) application of information technology to traditional services, such as wholesale and retail trade, transportation, public administration, etc. This can be evidenced from the sector-wise composition of value addition to GDP in advanced economies, where finance, insurance, real estate & business services along with community, social & personal services[36] alone contribute around 50 percent of GDP (**Table 2.10**). In case of Pakistan, the share of services has increased from about 40 percent in early years of the country to 53.3 percent in FY11. It shows while development process in the country continues, the level of development is still very low.

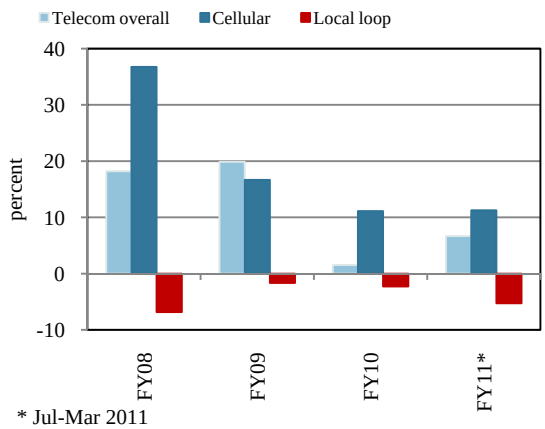
Similarly PIA is also adding to the fiscal burden, having incurred significant losses for the last several years. The company's operating performance is disappointing. Operational efficiency as measured by revenue earned per aircraft, available seat kilometers[37] per aircraft and passenger capacity utilization[38] is widely below established benchmarks (**Box 2.5** for further detail). In fact the inordinate delay in restructuring of these hemorrhaging PSEs is a glaring omission of the past several governments. In the current stringent fiscal scenario this is all the more important to address this issue for reducing the uncalled for fiscal burden caused by these loss making entities.

[35] Source: http://www.worldbank.org/depweb/beyond/beyondco/beg_09.pdf
[36] This sub-sector includes services namely computer related, education, health, recreation, etc.
[37] Available seat kilometer (ASK) is a measure of an airline flight's passenger carrying capacity. It is equal to the number of seats available multiplied by the number of kilometers flown.
[38] The passenger load factor that measures passenger capacity utilization (PLF) of an airline, is revenue passenger-kilometers flown as a percentage of seat-kilometers available.

Furthermore, the contribution of the telecom sector to GDP also declined during FY11. Profitability within the sector has been eroded on account of rising marketing expenditure in response to aggressive competition. Increase in operating costs has also tended to offset overall revenue growth witnessed in this sector FY11.[39] Consequently, both operating profits and margins of telecom companies registered declines during FY11.

Within the telecom sector, growth in revenues of cellular mobile companies showed some stability during FY11 after recording successive declines for the past three years. Part of this improvement is attributable to growth in Average Revenue per User (ARPUs) as well as the total cellular subscriber base (**Figure 2.5**). However, the revenues of Local Loop providers continued the falling trend observed since the past few years.

Figure 2.5: Growth in Telecom Revenues



* Jul-Mar 2011

Source: PTA

Meanwhile, cellular density in Pakistan has been increasing consistently, reaching 64.8 percent in April 2011 as compared to a level of 60.4 percent in June 2010. However, this level of mobile phone penetration is lower than most other regional countries, suggesting that growth potential in this sector is still strong.[40] Tapping this potential requires additional investments in infrastructure to increase the subscriber base further. Apparently telecom companies are more focused on expanding the range of services for improving revenues. This strategy has resulted in tough competition, leading to very high marketing costs and declining operating margins of the service providers. A continuation of this trend is likely to increase market saturation and further weakening of profitability. Therefore, in the absence of increase in network coverage the growth in telecom sector is likely to decelerate further.

The finance & insurance sector's value addition to GDP also registered decline in FY11. This was primarily due to fall in SBP profits as compared to their preceding year level. However, an improvement in profitability of banks and non-bank financial intermediaries this year stemmed an even larger decline in value addition in this sector. Improvement in the profitability of the banking sector was mainly due to increasing interest incomes and lower provisioning expenses.[41,42] As regards non-bank financial intermediaries, improvement in profitability has been mostly contributed by mutual funds, due to considerable improvement in stock market's performance during FY11 as compared to the previous year.

The wholesale & retail trade sector, which accounts for 32 percent of the total value added in services, was an important contributor to services growth during FY11.[43] Given the

[39] Telecom sector revenues recorded 6.7 percent YoY growth during FY11 as compared to the marginal 1.5 percent increase recorded in FY10.
[40] Cellular phone density in Pakistan is 65 while in Malaysia it is 106, Sri Lanka 81, and India 70.
[41] In November 2009 SBP relaxed provisioning requirements for banks by providing relaxation in the FSV for provisioning.
[42] A large component of the banking sector's interest income was in fact contributed by interest earned on government securities.
[43] Value addition in wholesale & retails trade sector recorded a modest 3.9 percent YoY growth as compared to the 5.6 percent growth target for FY11 and 4.6 percent YoY growth recorded during FY10.

disappointing performance of the commodity producing sectors, the increase in imports appear to be the main factor supporting growth in this sector.

Over the past few years, the number of retailers & wholesalers, hotels & restaurants and other small businesses included in this sector, have witnessed a steady increase (**Figure 2.6**). This growth has been led by a pervasive rise in consumption culture in the country for the past few years which is being fed by expansion in the size of informal economy. Although the current economic downturn has suppressed the profitability of the wholesale & retail trade sector, given the increase in both supply and demand for these businesses, this sector has substantial scope to grow.

Figure 2.6: Rising Number of Traders And Hotels*

* These are registered businesses for sales tax purpose. Actual numbers of traders and hoetsl & resturants will be significantly larger than this. **Source**: FBR

The current subdued growth trend witnessed in various sub-sectors is likely to continue. While wholesale & retails trade is likely to witness an improvement on the back of commodity producing sectors, the weaknesses in transport, storage and communication along with absence of one-off increase in public administration and defense is likely to partly neutralize these gains. Hence, overall services sector growth may fall short of the annual plan target for FY12 as well.

Box 2.4: A Comparison of Pakistan and Indian Railways

Whereas Pakistan Railways' expenditures (wages, salaries, allowances and pensions, etc.) have consistently recorded double digit growth for the past few years[44], revenues have posted negative growth since FY10.

A comparison of Pakistan Railways (PR) with Indian Railways provides a striking contrast (**Figure 2. 7 A & B**). In the case of Pakistan, 82 percent of PR revenues are used for salaries and staff benefits. By contrast, staff expenditures comprise 57 percent of the revenue base in Indian Railways. In terms of operating performance, the number of passengers handled per employee is also considerably lower in PR than its Indian counterpart.

Figure 2.7A: Staff Benefits As % of Revenues

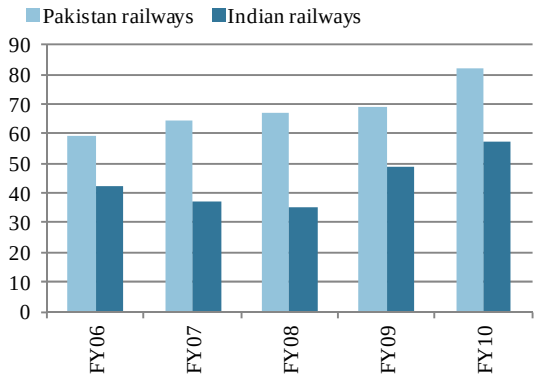
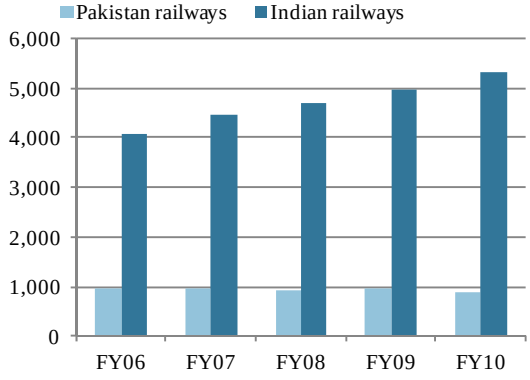


Figure 2.7 B: Number of Passengers handled per Employee



Source: Ministry of Railways, Indian Railways

The company's operational performance has been badly affected by a critical dearth of running locomotives during

[44] Deterioration in PR's financials during FY11 is also partly attributable to regularization of a large number of daily wagers working in the company for the last three years, as well as the increase in wages and salaries as announced in the budget for FY11.

the past few years (**Table 2.11**). To meet the demand for passenger services, PR has drastically curtailed its high yielding freight operations over time, resulting in sharp fall in freight revenues since FY10.

The current state of affairs within PR has generated additional burden on the fiscal accounts over time. During FY10 and FY11 alone, the government has provided funding to cover PR losses to the extent of 0.2 percent of GDP. [45] Notably, this amount does not include the substantial overdraft facility additionally granted to PR by SBP, which carries a penal interest rate.[46]

Table 2.11: PR's Locomotives Strength (numbers)

	FY09	FY10	FY11
Total owned	542	536	521
Passenger	192	187	169
Freight	117	95	40
Repairs	22	12	-
Purchases	-	-	-
Memorandum items:			
Passenger yield (Rs)	0.5	0.5	0.6
Freight yield (Rs)	1.2	1.4	1.6

Source: Pakistan Railways Headquarters

To help PR recover from the crisis it is mired in, the government has agreed to provide additional financial support amounting to around Rs. 10 billion during Q1-FY12.[47] However, in our view, in place of these temporary stop-gap measures, the government must focus on restructuring this loss making PSE on a fast track basis by introducing the wide scale reforms necessary at this point. Most important among these are restructuring of Railway Board which should include members from private sector, engaging a globally reputed audit firm to prepare credible financials, increasing focus on rolling stock management and engaging private investors willing to work as partners with PR either in management, operations and marketing of services (e.g. freight), etc. The operational efficiency of PR can be improved by rationalizing operations, e.g. closing non-profitable routes and stations, rehabilitation of existing rolling stock and locomotives and tariff adjustments according to market dynamics while government can subsidize uneconomic routes deemed strategic. In the absence of reforms there is a vast probability of misappropriation of the financial resources provided to this entity. This belief is also strengthened by a large number of monetary irregularities identified in the Auditor General of Pakistan's report on the accounts of PR for FY10.

[45] The grant provided to this entity during FY11 also exceeded the annual budget target by 49.5 percent.

[46] PR has been allotted a limit of Rs 4 billion as ways & means advances for obtaining financing from SBP. On this amount a 6-month average quarterly T-bills rate is charged. In case of overdraft, this entity has to pay a penal interest rate which is 4 percentage points higher than the above mentioned rate. In overall terms, the ways & means advances to railways cannot exceed Rs 40 billion. However, on account of the financial exigencies facing railways, ways & means advances hovered closed to this maximum limit throughout FY11.

[47] According to the Cabinet Committee decision (a) Rs 6.1 billion will be provided through a banking consortium for rehabilitation of locomotives; (b) Rs 4.0 billion will be provided through re-prioritization of PSDP of FY12 for improvement of tracks and rolling stock and (c) Line of credit from Pakistan State Oil (PSO) to PR will be increased to Rs 2 billion to ensure smooth supply of oil to PR.

Box 2.5 Airline Industry

Value addition by the air transport sector to real GDP recorded an increase of 40.9 percent during FY11 as compared to a 0.4 percent decline observed in FY10. In light of the fact that fuel costs have been increasing, rise in profitability for the airlines is a welcome development, which has been made possible due to higher demand for air travel, resulting from improvement in trade volumes and frequent upward adjustments in airfares so as to support revenues. Although detail data on this head is not available, this is reasonable to assume that a greater share of the increase in value addition is contributed by foreign airlines as the profitability of domestic airlines did not show a strong increase in FY11.

Table 2.12: PIA - Financial Summary

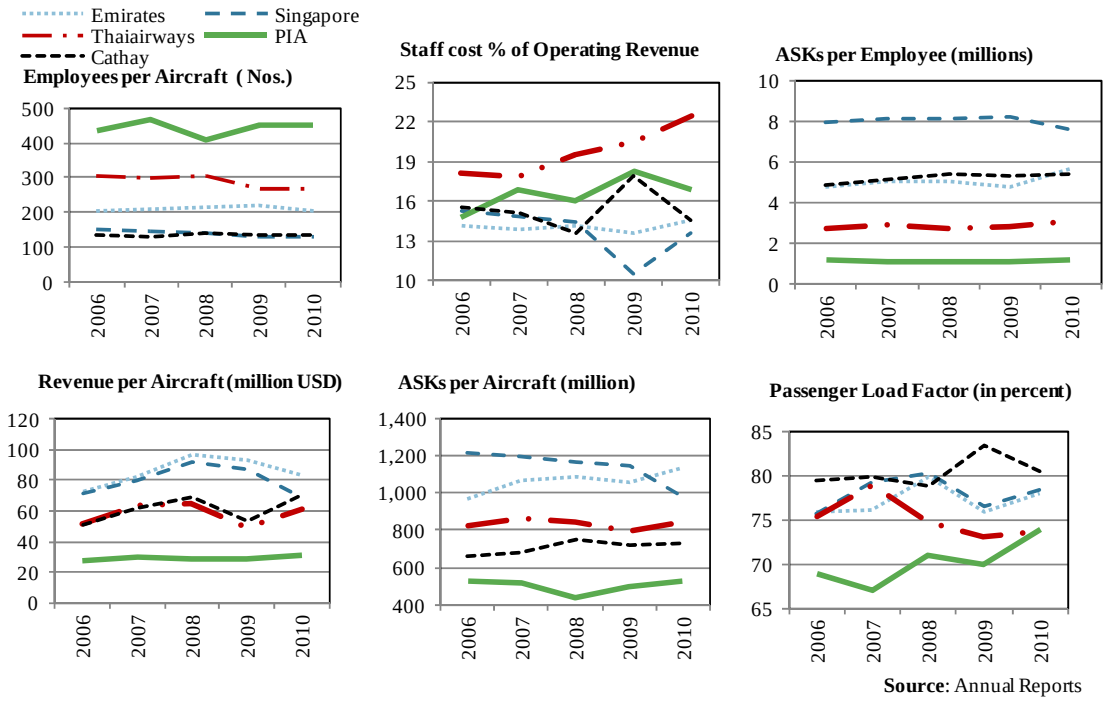
billion rupees; growth in percent

	2006	2007	2008	2009	2010
Revenues	**70.6**	**70.5**	**88.9**	**94.6**	**107.5**
growth	*10.2*	*-0.2*	*26.1*	*6.4*	*13.7*
Operating expenses	**79.2**	**76.4**	**120.5**	**98.6**	**106.8**
growth	*18.0*	*-3.5*	*57.7*	*-18.1*	*8.3*
Fuel	33.2	30.3	46.2	31.2	45.2
Non-fuel	46.0	46.1	74.3	67.4	61.6
Wages & salaries	10.4	11.9	14.2	17.2	18.1
Exchange loss	0.5	0.7	24.1	6.5	2.1
Operating balance	**-8.6**	**-5.9**	**-31.6**	**-4.1**	**0.7**
Finance cost	4.8	7.1	8.4	9.2	9.3
Profit/ (loss) before tax	**-13.2**	**-13.1**	**-40.0**	**-12.4**	**-8.6**
Tax	0.5	0.3	3.8	1.4	1.1
Profit/ (loss) after tax	**-12.8**	**-13.4**	**-36.1**	**-4.9**	**-20.8**
Memorandum item:					
Average fuel cost US$/barrel	67.1	72.4	90.1	62.5	79.9

Source: PIA Annual reports

In particular, the deteriorating financial position of Pakistan International Airlines presents enormous risks to its financial solvency (**Table 2.12**). Though in the year ending December 2010, PIA recorded a nominal operating surplus, the real impact of this improvement was minimal, as the airline is on the brink of insolvency and needs immediate financial support from the government. To improve the financial performance of PIA, the fundamental issues which have impaired profitability must be identified and corrected. In this context, a comparison of PIA performance with some other Asian airlines (i.e., Singapore airlines, Thai airways, Emirates, Cathay pacific) reveals some interesting findings (**Figure 2.8**):

Figure 2.8: PIA vs International Airlines - Operating Statistics



Source: Annual Reports

Huge workforce is the root cause of PIA's financial miseries. This is reflected from significantly higher employees per aircraft ratio for PIA as compared to other airlines. For instance, for Singapore airlines and Cathay pacific, this ratio stands below 200, whereas for Emirates and Thai airways it ranges from 200-300. By contrast, PIA hired more than 450 employees per aircraft, which indicates overstaffing in this organization. Consequently, a heavy wage bill eats

into a relatively large portion of PIA's operating revenues. For instance, during 2009 and 2010, on average, wages & salaries expenses of PIA claimed 17.5 percent operating revenues of this airline, whereas this ratio was significantly less for other airlines.

This is because of the fact that as compared to the size of its workforce; PIA's revenue operations are quite limited. The ASK per employee for PIA stand merely at around 1 million, whereas for other Asian airlines this ratios ranges between 3-8 million.

Operational efficiency of the domestic carrier is also widely below the mark because of limited flight operations. PIA's annual revenue per aircraft stands below US$ 30 million, whereas for other airlines the annual earnings are widely above US$ 50 million per aircraft. This is due to lower passenger capacity utilization i.e., 70 percent in the case of PIA, which is less than the international standards e.g., capacity utilization ranges around 78 percent for Singapore and Emirates airlines and 80 percent for Cathay pacific. Similarly the ASK per aircraft for PIA range around 500 million, whereas for other airlines this ratio stands fairly above 700 million.

The improvement in PIA's financials hinges upon better operational efficiency. This may be achieved by expanding flight operations, closing loss making routes and reducing the human resource base, thus enabling this airline to benefit from lower operational costs per unit. The presence of a large workforce has raised operating costs for PIA tremendously. Airfares are inflated to this effect, so as to recover operating expenses, which further deteriorates PIA's competiveness vis-à-vis other airlines. Politically motivated inductions have been the major cause of the significant increase in human resource burden in this organization. However, the situation has worsened to the extent of rendering this airline almost financially unviable, and cannot be corrected without taking drastic steps for right sizing and increasing operational efficiency of this airline.

Presently, PIA Corporation is negotiating another restructuring arrangement with the Ministry of Finance. These negotiations are based on a 5-year's business plan,[48] prepared by PIA, which outlines a number of revenue enhancing and cost cutting measures to improve PIA's profitability.[49] However, the foremost objective of PIA is to avoid imminent insolvency for which it is negotiating roll-over of long term loans or fresh equity injections from GoP. Both of these options will tend to increase the fiscal burden for the government, which already stood at 0.02 percent of GDP in FY11. Given the high opportunity cost to the government in terms of allocating scarce fiscal resources at this point, any financial support provided to this entity should be strictly linked to successful implementation of profitability enhancing measures as envisaged in its business plan.

[48] Currently the business plan is under consideration of MoF after being endorsed by the Ministry of Defense.
[49] The major revenue enhancing measures envisaged are increase in operational capacity of the airline through induction of new aircrafts & increase in utilization of the existing fleet, etc. Major cost cutting measures include savings generating by streamlining maintenance, human resource, fuel & meal costs and eliminating non-profitable routes.

3 Energy

3.1 Overview

The imporance of energy has now been widely recognised in relation to the traditional factors of production, namely land, labor, capital and entrepreneurship. With modernization, production processes have become heavily dependent on energy, and sustainable economic growth cannot be achieved without sufficient and uninterrupted supply of energy. Therefore, it is imperative for a developing country to explicitly concede the importance of energy in pursuit of sustainable growth.

In Pakistan's case, growth potemtial seems to have hit a ceiling imposed by insufficient energy supply. Whereas energy demand has increased significantly during the last ten year period, supply has failed to match this growth due to policy failures with respect to: (a) setting up viable new power projects to augment supply line; (b) increasing exploration of natural gas, crude oil and coal; (c) tapping regional markets and setting up infrastrucure for energy imports; and (d) incentivizing development of renewable energy sources.

While failure to articulate a consistent energy policy has affected the country's economic performance over an extended period, the recent resurgence of circular debt has presented new challenges. Circular debt has emerged due to nonpayment of electricity subsidies by the government, default on payments by energy consumers, and build-up of payables and receivables within the energy sector.[1] In May 2011, the government disbursed Rs 120 billion to PEPCO in lieu of outstanding subsidy payments; however, this amount was not sufficent to resolve the issue conclusively, and total circular debt had reached to Rs 251 billion by end-June 2011.

In addition to the circular debt issue, the shortage of natural gas intensified during FY11 which severely affected power generation as well as overall industrial production (particularly of textiles and fertilizer). The supply shortfall of natural gas ranged between 10 to 15 percent of demand. Curtailment of gas supply to KESC and a select number of IPPs affected generation during the winter season, whereas bottelnecks in furnace oil (FO) imports disrupted power generation at the onset of summer.

Similarly, domestic production of crude oil and POL products also fell short of demand, requiring imports of US$ 12.3 billion in FY11.[2] Nearly 70 percent of crude consumption and 55 percent of POL consumption is met via imports. This dependence on imported oil makes the economy vulnerable to price shocks in the international oil market.

Going forwards, energy requirements shall continue to increase if economic growth is to be sustained. Urgent efforts are being undertaken to set up infrastructure for import of natural gas as well as generation of electricity. However, the public sector's ability to finance and execute projects is constrained by low tax revenues, creating a gap which only participation from the private sector and international institutions can bridge.

[1] These entities include suppliers of primary energy (i.e., oil and gas exploration and distribution companies) and electricity generation and distribution companies.
[2] POL denotes Petroleum, Oil and Lubricants.

While augmenting energy supply is crucial, managing demand across economic agents in an inclusive manner has also become very necessary. At present, the household sector is prioritized in terms of both tariff and quantity supplied of electricity and natural gas. This balance needs to be changed in favour of businesses and industries in the interest of sustainable economic growth. Therefore, policy makers must urgently weigh the impact on the country's industrial base versus appeasing the common man in deciding allocation and pricing of domestic energy supplies.

3.2 Electricity

The power sector in Pakistan has been facing several challenges for many years. Despite institutional restructuring in the recent past, efficiency in the provision of electricity to end-users has not improved significantly. The main institution entrusted to manage the power sector in 1959 was the Water and Power Development Authority (WAPDA). In an attempt to remove inefficiencies in the sector, this entity was restructured in 2007. While WAPDA still controls hydropower development, thermal generation, transmission and distribution have since been transferred to Pakistan Electric Power Company (PEPCO). Presently, the Central Power Purchase Agency (CPPA) at PEPCO coordinates payments between four generation companies (GENCOs), a National Transmission and Dispatch Company (NTDC) and ten distribution companies.[3]

Table 3.1: Energy Balances in the Power Sector (GWh)

	FY06	FY07	FY08	FY09	FY10	5-Year CAGR (percent)
Installed Gross Capacity *(MW)*	**19,450**	**19,419**	**19,420**	**19,785**	**20,921**	**1.8**
WAPDA - Hydropower	6,499	6,479	6,480	6,481	6,481	-0.1
GENCOs	4,900	4,900	4,900	4,900	4,900	-
KESC	1,756	1,756	1,756	1,955	1,955	2.7
IPPs	5,833	5,822	5,822	5,987	7,123	5.1
Nuclear	462	462	462	462	462	-
Net Supply *(GWh)*	**90,109**	**94,624**	**92,142**	**89,765**	**93,304**	**0.9**
A. Total Generation	93,629	98,213	95,661	91,615	95,358	0.5
WAPDA - Hydropower	30,862	31,953	28,707	27,784	28,093	-2.3
GENCOs	22,508	21,597	20,427	19,521	19,593	-3.4
KESC	9,130	8,169	8,219	8,262	7,964	-3.4
IPPs	28,645	34,206	35,231	34,431	36,814	6.5
Nuclear	2,484	2,288	3,077	1,617	2,894	3.9
B. Auxiliary Consumption	-3,463	-3,623	-3,688	-2,067	-2,260	-10.1
C. Net purchases from PASMIC*	-203	-137	-30	-10	-43	-32.2
D. Imports	146	171	199	227	249	14.3
Consumption *(GWh)*	**67,603**	**72,712**	**73,400**	**70,372**	**74,349**	**2.4**
Agriculture	7,949	8,176	8,472	8,796	9,689	5.1
Bulk Supplies	3,985	4,246	4,342	4,177	4,418	2.6
Commercial	4,730	5,363	5,572	5,252	5,606	4.3
Domestic	30,720	33,335	33,704	32,282	34,272	2.8
Industry	19,803	21,066	20,729	19,330	19,823	0.0
Other	417	527	581	536	541	6.7
T&D Losses	**22,506**	**21,912**	**18,742**	**19,396**	**18,957**	**-4.2**
as % of Net Supply	*25.0*	*23.2*	*20.3*	*21.6*	*20.3*	-

* Pakistan Steel Mills Complex

Source: Hydrocarbon Development Institute of Pakistan

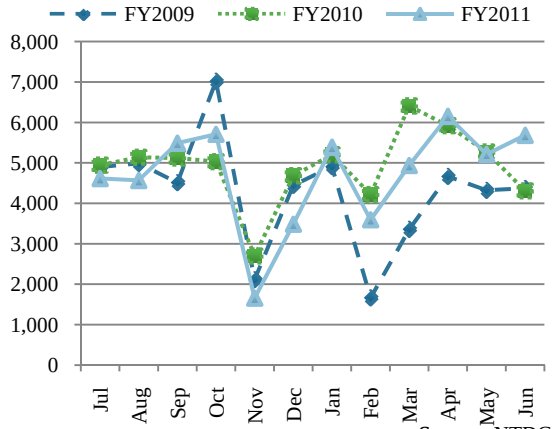
[3] GENCOs include Northern Power Generation Company, Central Power Generation Company, Jamshoro Power Generation Company and Lakhra Power Generation Company. Key distribution companies (DISCOs) are located in Karachi (KESC), Lahore (LESCO), Faisalabad (FESCO), Gujranwala (GEPCO), Hyderabad (HESCO), Islamabad (IESCO), Multan (MEPCO), Peshawar (PESCO), Quetta (QESCO) and Sukkur (SEPCO).

As of FY10, GENCOs accounted for 23 percent (4,900 MW) of gross installed capacity, and another 31 percent (6,481 MW) was being operated by WAPDA for hydropower generation (**Table 3.1**). However, output from hydropower generation fluctuates throughout the year, since majority of installed capacity is reservoir-based. Meanwhile, actual availability from GENCOs has declined substantially below rated capacity over time due to mismanagement of fixed capital and lack of investment in new power plants.

Participation by the private sector has been encouraged, but the generation mix has not been actively managed. Under the 1994 Power Policy, a large number of independent power producers (IPPs) entered the market, adding generation capacity that was based primarily on furnace oil. This trend continued over the past decade as additional incentives were provided to the power sector under the 2002 policy. The downside of this policy is that generation costs for thermal IPPs can be high, and their share in the generation mix now exceeds that of hydropower generation (34 percent). About 75 percent of these plants operate on furnace oil, whereas the remaining plants require natural gas for generation of electricity. Therefore, generation costs of electricity are now exposed to fluctuation in global oil prices, since dependence on imported furnace oil has increased over time.

Furthermore, distribution companies (DISCOs) have not been operated in a sustainable manner. Specifically, DISCOs have not been authorized to pass generation costs fully through to consumers; revenue collection from consumers (particularly from the public sector) has deteriorated over time; and, finally, electricity losses due to inadequate or ageing infrastructure as well as theft have increased unchecked. As of FY10, up to 20 percent of net electricity supply was being claimed by inefficiencies throughout the distribution sector, in the form of transmission and distribution (T&D) losses.

Figure 3.1: Monthly trend in peak load management (MW)



Source: NTDC

Due to these developments, peak load management has increased tremendously during recent years, from 2,645 MW in FY07 to a level of 6,151 MW recorded in FY11. Load management typically peaks annually with the onset of the summer season since electricity demand rises sharply (**Figure 3.1**). Electricity shortages also tend to increase during winters, despite low seasonal demand, since generation is affected by gas supply curtailments and low reservoir levels in large dams.

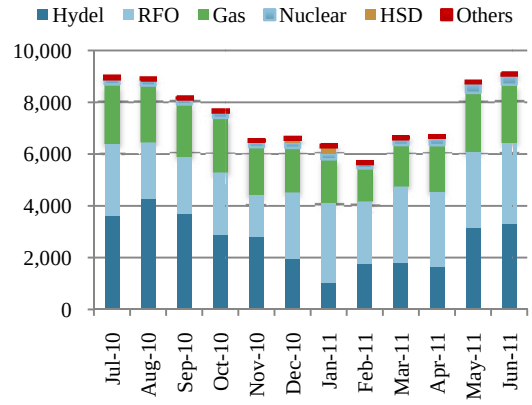
Table 3.2: Trend in Peak Electricity Demand, Generation and Load Management (MW)

	FY07	FY08	FY09	FY10	FY11	5-year CAGR (percent)
Peak Demand Load	15,838	17,398	17,852	18,467	18,511	4.0
Peak Generation Load	13,645	14,151	14,055	14,309	14,468	1.5
Peak Load Management	2,645	5,454	7,018	6,408	6,151	23.5
% of total demand	*16.7*	*31.3*	*39.3*	*34.7*	*33.2*	-

Source: PEPCO

Official figures suggest that the demand-supply gap for electricity decreased during FY11 (**Table 3.2**). This improvement, however, was only marginal. According to official figures,[4] the average shortfall during the off-peak season (August – February) stood at around 3,000 MW in FY10 versus 2,500 MW in FY11. The shortage during the peak season (March – July) stood at about 3,800 MW in FY10 as against 3,300 MW in FY11. To this effect, urban load shedding has averaged between 4-6 hours during FY11, and peaked at 10 hours on average during April 2011. The incidence of load shedding in rural areas has been substantially greater by comparison, with supply interruptions frequently exceededing 10 hours since March 2011.

Figure 3.2: Monthly electricity generation (GWh)



Source: PEPCO

These issues ultimately boil down to lack of incentives to be efficient in the public sector. Long term planning has been deficient whereas public sector generation, transmission and distribution infrastructure has not improved significantly.

Finally, the financial implications of these challenges have come to bear strongly in recent years in the form of circular debt. In our view, resolution of circular debt is inextricably linked with creating a culture of self-sustainability within DISCOs, for which public sector presence may need to be phased out in a gradual manner whilst strengthening the regulatory environment. Based on KESC's experience with labor unions during FY11, accomplishing this in practice may be extremely difficult, since vested interests must be overcome first.

Power generation during FY11

As of June 2011, total electricity generation stood at 90,489 GW, indicating that overall generation for the full year declined by 5 percent as compared to FY10 (**Figure 3.2**). Whereas hydropower generation for FY11 exceeded full year supply in FY10 by at least 14 percent, generation from thermal power plants operating on gas and furnace oil declined by 18 percent and 11 percent respectively, largely due to unavailability of primary energy supplies (gas and FO).

Supply side constraints

The primary cause of extended load management is the generation constraint. Specifically, whereas maximum generation capacity in the country stood at 21,591 MW in June 2011 (excluding KESC),[5] dependable generation capacity as determined in February 2011 by the Ministry of Water and Power was significantly lower, at around 10,184 MW as seen in (**Annex Table 3.11**). The main reasons for this difference are: (a) seasonal fluctuation in generation capability of hydropower plants – such as Tarbela (3,478 MW) and Mangla (1,000 MW); (b) insufficient supply of gas to thermal power plants from SNGPL / SSGC; (c) insufficient and

[4] Press reports paint a different picture. On 5th May 2011, official figures noted load management of 5,890 MW, while media reports noted a shortfall of 7,200 MW, due in large part to fuel shortages. Although the daily furnace oil requirement for power generation is in excess of 30,000 tons, oil companies were forced to ration 11,000 tons on a daily basis amongst power producers, since circular debt had affected POL imports at the time. Differences in reported versus official figures may arise depending on the time of day at which electricity generation is measured.

[5] Due to decommissioning of old plants, dependable capacity at KESC stood at 1,821 MW in June 2011.

irregular furnace oil supply to thermal power plants; (d) frequent forced outages for GENCOs due to capacity degradation; and (e) scheduled outages for inspection / maintenance of equipment and replacement of parts of existing plants.

The supply-side response to address electricity shortages has been to commission new power plants. To this end, 1,602 MW of new capacity was added by the private sector during FY11, of which 852 MW was based on gas. With this, total generation capacity directly or indirectly dependent on gas has increased to 7,221 MW, which requires 1,571 mmcfd of gas.[6] However, actual supply of gas to the power sector had dropped to 1,005 mmcfd by FY10, and has not improved appreciably this year.

Furthermore, new power plants also required furnace oil for operation, which had to be met through imports. However, imported supplies of furnace oil were disrupted in April 2011, when circular debt receivables reached unsustainable levels for OMCs. Based on anecdotal evidence, furnace oil supply may have declined to 30 percent of the daily requirement for thermal generation to this effect.[7]

It is therefore, clear that policy response to supply side issues were not well-conceived and large part of newly installed capacity remained idle, placing additional financial burden on the economy.

Proposed demand-side measures

The extent of seasonal variation in demand is fairly high in Pakistan since the domestic household and agriculture sectors together account for about 60 percent of total consumption. Demand from these two sectors is heavily dependent on seasonal requirements (**Table 3.3**). This also contributes considerably to the rising incidence of electricity shortages in summer. In FY11 alone, demand varied by over 7,400 MW, from a minimum level of 11,081 MW in November 2010 to a peak of 18,511 MW during June 2011.

Table 3.3: Consumption Mix of Electricity by Province and Sector – FY10 (percent)

Sector	Punjab	Sindh	KPK	Balochistan	AJK	Grand Total
Agriculture	6.8	1.2	0.5	4.5	0.0	13.0
Bulk Supplies	3.5	1.7	0.7	0.1	0.0	5.9
Commercial	4.7	2.0	0.7	0.1	0.1	7.5
Domestic	28.0	9.3	7.3	0.6	0.8	46.1
Industry	18.3	6.1	1.9	0.2	0.1	26.7
Other	0.3	0.3	0.0	0.0	0.1	0.7
Grand Total	61.7	20.6	11.1	5.5	1.1	74,349 GWh

Source: Ministry of Water and Power

Hence, the primary short-term response towards load management is to implement demand-reduction measures. In FY10, the government implemented an Energy Saving Plan to this end and was successfully able to reduce consumption by approximately 1,300 MW. Some of the key measures to feature in the plan were reduction of the work week, early closure of commercial areas and shifting towards daylight savings time. Similar demand-management steps were under consideration for FY11, resulting in potential savings of 1,000 - 1,100 MW (6 percent of total

[6] The unit mmcfd denotes gas flow of a million cubic feet per day.

[7] With the existing consumer base, the daily furnace oil requirement is approximately 30,000 MT as per the Ministry of Petroleum and Natural Resources. As against this requirement, daily supply allegedly declined to 11,000 MT in early May-2011. PSO's existing fuel supply agreements with power companies ensure supply availability for the next 5 to 10 years, but renegotiation may be affected due to non-clearance of circular debt.

demand in FY10), but consensus on implementation was only reached recently in October 2011, well after the peak demand period had passed.

3.2.2 Circular Debt

The stock position of circular debt receivables deteriorated considerably during FY11 (**Table 3.4**).[8] The impact of higher oil prices on electricity subsidies was somewhat muted, since fuel cost variations have been directly adjusted in consumer tariffs from August 2010 for ex-WAPDA distribution companies. However, generation costs increased considerably due to higher utilization of furnace oil in the generation mix, owing to gas shortages and low water availability during the winter season. Consequently, in the backdrop of poor revenue collection and operational inefficiencies in distribution companies, circular debt has also increased with severe ramifications for downstream energy sector companies. By end-June, it was estimated to have reached Rs 251 billion.

Impact on the energy sector

Receivables of electricity distribution companies falling under PEPCO crossed Rs 300 billion, but were passed completely through to upstream sectors. Therefore, as of end-April 2011, net receivables were unsurprisingly concentrated in the POL exploration, refining and distribution sectors. Companies with the greatest share of circular debt were OGDC, PSO and PARCO. Whereas accumulating interest payments eroded profitability across the board, the operational implications for POL distribution and power generation were more severe.[9]

In particular, PSO's ability to honor L/C payments was jeopardized as receivables reached unsustainable levels in April 2011, and imported supplies of HSD and furnace oil were temporarily choked. The resulting fuel shortfall for power generation companies could not be bridged in the short-term, leading to aggressive load management. Capacity utilization in GENCOs – which constitute 4,900 MW of installed capacity – subsequently declined to 23 percent in May 2011.[10]

Table 3.4: Distribution of Circular Debt Receivables (billion Rupees)

Company	Receivables	Payables	Net Position		Change
			30-Apr-11	30-Apr-10	
PSO	149	98	51	30	21
SSGCL	51	44	7	-1	8
SNGPL	11	25	-13	-9	-5
PEPCO	304	302	3	-40	42
OGDCL	116	0	116	80	36
PARCO	38	-	38	30	8
KESC	68	40	28	-24	51
GHPL	10	-	10	11	-1
PPL	22	-	22	26	-4
KW&SB	7	8	-1	0	-1
Grand Total	**775**	**517**	**259**	**104**	**155**

Source: Ministry of Finance

[8] Our estimates incorporate the difference between receivables and payables for companies in the energy sector that are fully or partially owned by Government of Pakistan. As such, figures quoted in parliament and the print media are much larger since they include private sector receivables as well.

[9] As companies are deprived of liquidity due to increasing receivables, reliance on short-term bank borrowing has increased tremendously. Secondly, interest is also accrued on overdue receivables from other companies.

[10] Anecdotal evidence suggests that the actual daily furnace oil supply dropped as low as 2,000 MT versus a requirement of approximately 30,000 MT, leaving furnace oil based plants to rely on inventories to meet deficit requirements or operate well below capacity.

Similarly, electricity generation from thermal IPPs also declined, extending the shortfall by another 2,000 MW. Private power producers in particular continue to be weighed by circular debt. As PEPCO's financial position deteriorates, delayed payments to private power companies have perpetuated the generation shortfall. To this effect, four furnace-oil based IPPs invoked sovereign guarantees in June 2011 for settlement of outstanding receivable claims against PEPCO. Whereas the required disbursement was subsequently made, the key issue of regularizing payments to private power producers is still outstanding. If this issue is not resolved urgently, other IPPs are likely to follow suit.

Issues that need to be addressed

Presently, key issues pending resolution are removal of electricity subsidies,[11] weak revenue collection and line losses amongst distribution companies. Furthermore, escalation in generation costs needs to be managed in the medium-term by inducting cheaper fuels into the generation mix.[12]

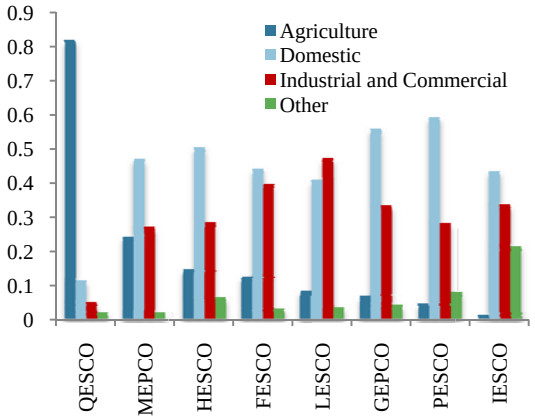
a) **Electricity subsidies:** Subsidies payable by the government during July-March FY11 had accumulated to Rs 119 billion, equivalent to a monthly increase of Rs 13 billion. As of March 2011, the subsidy paid by the government per unit of electricity consumed stood at Rs 1.99/kWh.[13]

   When the price paid by consumers for using electricity is less than the cost of generation, a subsidy equal to the difference must be paid to utility companies by the government. However, if these payments are not made regularly, the stock of circular debt increases.

   This subsidy varies for each distribution company, and for each category of consumer. Although consumer tariffs have been increased since July 2010, generation costs have also increased, and the subsidy element remains active in contributing towards circular debt.

b) **Revenue collection:** Another underlying issue giving rise to circular debt is insufficient revenue collection by distribution companies. As seen in **Table 3.5**, overall revenue is insufficient to cover the cost of electricity supplied to consumers. Revenue collection cannot be improved easily for companies where the sales mix is skewed towards the agriculture and domestic sectors, or to the government (Error! Reference source not found.Error! Reference source not found.**Figure 3.3**). Based on the annual revenues in FY10,

Figure 3.3: Sales-mix for distribution companies (FY10)



Source: DISCOs

[11] These subsidies amount to the differential between generation cost determined by NEPRA and consumer tariffs notified by the government.

[12] As generation costs increase, the gross payments to be made to fuel suppliers and IPPs for purchase of power by PEPCO increase proportionately, thereby leading to a growth in circular debt receivables. Secondly, in an environment where consumer tariffs are centrally administered, escalation in generation costs widens the tariff differential or subsidy on electricity as well.

[13] As quoted by the Ministry of Water and Power during the National Assembly Session held on 22nd April 2011.

estimates suggest that the monthly impact of weak revenue collection on circular debt stock is Rs 4 billion.

c) **Line losses:** As of FY10, Transmission and distribution (T&D) losses ranged between 11- 37 percent amongst public distribution companies (**Table 3.5**). T&D losses affect the payables and receivables for utility companies.[14] Estimates suggest that T&D losses contribute Rs 8 billion to circular debt on a monthly basis.
The severity of the problem may be gauged by examining non-technical distribution losses, which indicate that improving distribution infrastructure can only solve part of the problem. The larger issue of electricity theft is therefore likely to increase as subsidies are phased out, leading to an increase in circular debt. The challenge is greatest for QESCO where, as per official statements, there are around 5,000 illegal tube-well connections leading to an annual revenue loss of Rs 4 billion.

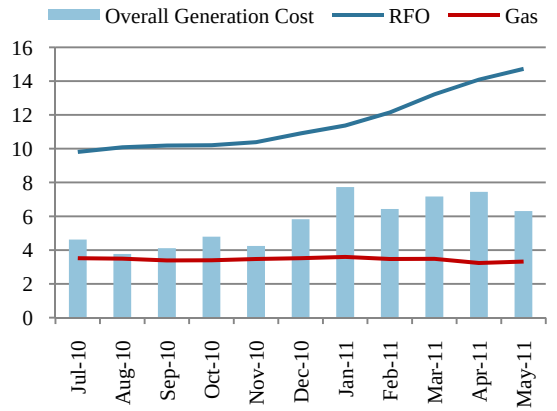
Table 3.5: Revenue Collection and Composition of T&D Losses for the Public Sector – FY10

Distribution Company	**Revenue Billed** (Rs mln)	**Collections Rate** (percent)			**T&D Losses** (percentage of sales)			
		Private Consumers	Government Clients	Overall	Non-Technical Loss	Total Distribution Loss	Transmission Loss	Overall
HESCO	45,945	59.8	72.5	18.2	22.2	31.2	3.6	34.8
QESCO	24,044	75.6	77.0	60.8	3.7	14.2	6.5	20.7
PESCO	38,016	85.4	84.2	53.8	19.2	32.6	4.5	37.1
LESCO	117,297	93.2	94.7	73.5	6.3	11.5	2.3	13.8
MEPCO	72,150	94.2	84.9	52.9	6.4	15.0	4.0	19.0
GEPCO	48,137	95.7	93.9	52.0	5.3	10.2	0.9	11.1
IESCO	60,433	95.9	98.4	83.2	0.9	7.8	2.0	9.8
FESCO	63,537	97.0	96.7	51.3	2.6	9.7	1.1	10.8

Source: Ministry of Water and Power, USAID

d) **Generation Costs:** The overall cost of generation depends heavily upon furnace oil prices, since furnace oil accounts for 35 percent of the monthly generation mix on average. During FY11, the overall cost of electricity generation has increased by roughly 36 percent since per unit furnace oil costs have increased this year, from Rs 9.81/KWh in July 2010 to Rs14.73/KWh by May 2011 (**Figure 3.4**). Escalation in generation costs exerts upward pressure on consumer tariffs, which may worsen revenue collection rates. Alternatively if consumer tariffs are held constant, electricity subsidies increase in proportion to generation costs. In either scenario, circular debt receivables tend to increase.

Figure 3.4: Generation costs during FY11 (Rs./KWh)



Source: PEPCO

[14] Transmission losses occur as electricity is purchased from power producers, resulting in payables exceeding the value of electricity available for sale to consumers. Distribution losses subsequently lead to lost revenue from consumers, resulting in an increase in receivables. These may be further subdivided into technical losses, which depend on the quality and scale of the distribution network, and non-technical losses arising from theft, poor administration and weak commercial oversight.

Management of circular debt during FY11

The policy response to circular debt during FY11 has been two-fold. In order to stem the monthly increase in circular debt stock, electricity subsidies for distribution companies were phased out. In this respect, notified tariffs were increased in October 2010 (30.7 percent) and November 2010 (2.1 percent).[15] Secondly, the consumer tariff notification mechanism was adjusted, empowering NEPRA to adjust consumer tariffs directly for any monthly variation in fuel costs incurred by generation companies.

The second aspect of the policy response pertains to the outstanding stock of circular debt receivables. The primary source of concern has been PEPCO's receivables for electricity subsidies from the government, and payments for electricity consumption from its customers, of which over Rs 300 billion have already been transferred to the Power Holding Company Limited.

Furthermore, Rs 120 billion in electricity subsidy payments to PEPCO was settled in May 2011. This amount was used primarily to clear dues of HUBCO (Rs. 60 billion) and KAPCO (Rs. 29 billion).[16] HUBCO and KAPCO subsequently retired Rs 89 billion to PSO, of which Rs 61 billion was paid onwards to refineries and Rs 10 billion in tax payments to the government. Therefore, of the total disbursement, only Rs 31 billion was available for PEPCO to clear dues to private power producers, which had increased to Rs 167 billion as of July 2011.

However, in addition to the accumulation of payables to IPPs, the issue of collections needs to be addressed urgently. As of July 2011, receivables from the public sector totaled Rs 106 billion whereas private consumers owed Rs 146 billion.[17] In this regard, some positive steps have been taken by completing operational audits of distribution companies in accordance with the Power Distribution Improvement Program (PDIP) being pursued in conjunction with USAID, but key deliverables shall not be realized before FY13.

3.3 Primary Energy Supplies

3.3.1 Hydropower

Despite being the primary clean, renewable energy source in the country, hydropower resources contributed 35 percent of the total electricity generated during FY11. Generation in FY11 showed substantial improvement over last year (up 14 percent YoY), primarily due to higher reservoir levels in the Tarbela and Mangla Dams with the passage of floods in August 2010.

Presently, about 6,720 MW of hydropower generation capacity is installed in the country, and is largely owned and operated by the Water and Power Development Authority (WAPDA). Electricity generated from this source is subject to a high degree of seasonality, primarily because 69 percent of installed capacity relies on reservoirs for electricity generation, as opposed to the run-of-the-river. Consequently, hydropower is primarily used to supplement the thermal electricity generation base during times of peak demand in summers, and to supply water for irrigation.

According to the Private Power Infrastructure Board, about 89 percent of Pakistan's hydropower potential was untapped by FY11 (**Table 3.6**). Hydro-electric generation is primarily

[15] Our calculation is based on tariff schedules for IESCO, which offer an indicative figure. In practice, tariffs determined by NEPRA vary for each distribution company whereas consumer tariffs notified by the government are fixed throughout the country.

[16] Outstanding receivables for HUBCO and KAPCO had reached Rs 108 billion and Rs 70 billion respectively by 3rd May 2011. As against these receivables, the payables to PSO stood at Rs 86 billion and Rs 40 billion respectively.

[17] The definition of public sector in this regard includes Federal/Provincial Government Departments/Agencies, AJK Government & KESC.

concentrated in KPK, with the remainder in Punjab, AJ&K and Gilgit-Baltistan. By comparison, identified hydropower resources of up to 53,076 MW are yet to be harnessed, of which 79 percent lie in Gilgit-Baltistan and KPK.

Table 3.6: Hydroelectric Potential of Pakistan (MW)

Province	**Projects in operation**	**Projects under implementation**		**Solicited Sites**	**Raw Sites**	**Total Hydropower Resources**
		Public	Private			
KPK	3,849	9,482	2,398	77	8,930	24,736
Gilgit-Baltistan	133	11,876	40	534	8,542	21,125
Punjab	1,699	720	1,028	3,606	238	7,291
Azad Jammu and Kashmir	1,039	1,231	3,264	1	915	6,450
Sindh	-	-	-	67	126	193
Balochistan	-	-	-	1	-	1
Total	**6,720**	**23,309**	**6,730**	**4,286**	**18,751**	**59,796**

Source: Private Power and Infrastructure Board

Whereas feasibility studies for a vast number of projects have been completed, the number of projects presently under construction is considerably limited. Specifically, nearly 6,176 MW of hydroelectric generation is expected to become available by 2019 from projects which are already under construction.[18] However, since majority of these projects are publicly funded, raising financing could prove to be a key obstacle in terms of implementation. Presently, assistance of up to US$15 billion is being sought in the form of soft loans and suppliers credit from Friends of Democratic Pakistan (FoDP) for implementation of identified hydropower projects. Based on the economic climate in key donor countries and domestic political outlook, funding may be delayed and only materialize in stages, depending largely upon the urgency accorded to hydropower development by the government.

[18] The construction cost is estimated at around Rs 1,056 billion. Key projects amongst these include the Diamer-Basha Dam, and the Neelum-Jhelum, Allai Khawar and Duber Khawar hydropower projects. The former two projects are expected to be commissioned around 2019, whereas the latter may become operational as early as 2012.

Table 3.7: Overview of Crude Oil Production, Imports and Consumption (million MT)

	FY06	FY07	FY08	FY09	FY10	5-Year CAGR (percent)
A. Production	**3.21**	**3.30**	**3.43**	**3.22**	**3.18**	**-0.2**
OGDC	1.54	1.78	2.03	1.98	1.78	3.7
BP	0.62	0.54	0.47	0.48	0.56	-2.5
PPL	0.18	0.24	0.25	0.23	0.26	9.6
Others	0.87	0.74	0.68	0.53	0.58	-9.6
B. Imports*	**8.60**	**8.22**	**8.42**	**8.06**	**6.89**	**-5.4**
PARCO	4.60	4.36	4.56	3.56	3.56	-6.2
NRL	2.39	2.37	2.22	2.32	1.71	-8.0
PRL	0.91	0.78	0.85	1.30	0.98	1.9
Byco	0.70	0.71	0.79	0.88	0.63	-2.6
Total Supplies (A + B)	**11.81**	**11.52**	**11.85**	**11.28**	**10.07**	**-3.9**
C. Demand (Crude Processed)	**11.35**	**11.24**	**11.69**	**10.74**	**9.87**	**-3.4**
PARCO	3.79	3.72	3.87	3.66	3.56	-1.6
NRL	2.77	2.79	2.73	2.42	2.14	-6.2
ARL	1.87	1.84	1.93	1.70	1.74	-1.8
PRL	2.14	1.98	2.18	1.89	1.60	-7.0
**** Others**	0.78	0.91	0.98	1.06	0.83	1.6

* As reported by DG Oil, Ministry of Petroleum.

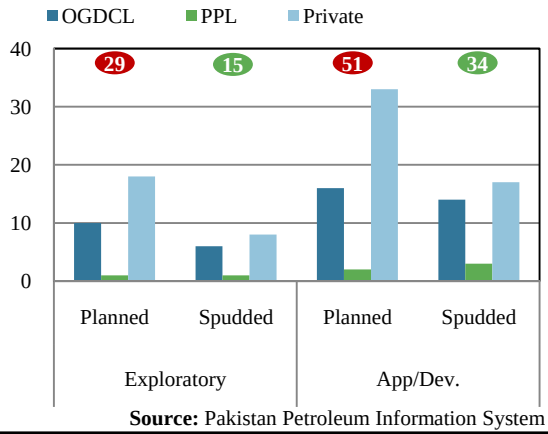
** These include Byco, ENAR, Dhodak.

Source: Hydrocarbon Development Institute of Pakistan

3.3.2 Crude Oil

Total supplies of crude oil available to refineries from imports and indigenous production increased to 10.1 million MT in FY11. Imports depicted an increase due to improvement in refining margins and marginal increase in processing capacity. Historically, local production has contributed 30 – 35 percent of total crude processed domestically, and stood at 3.3 million MT in FY11 (up marginally by 0.6 percent YoY). It is pertinent to mention here that domestic production is inelastic to changes in demand, and largely depends on the available reserve base as well as exploration and production activity in the upstream sector. The gap between domestic demand and production is therefore met via imports, which increased by 3.8 percent YoY in FY11 to 6.8 million MT.[19]

Figure 3.5: Drilling Activities during Jul-Jun FY11



Source: Pakistan Petroleum Information System

Exploration and production activity

Activity in the exploration sector remained subdued in the outgoing year. Up to 80 wells were targeted for exploration, development and appraisals in FY11.[20] However, work on 49 wells was in progress as of June 2011, of

[19] As reported by the Oil Companies Advisory Committee (OCAC), which includes most major refineries and POL distribution companies. This dataset is largely representative of the sector's performance.

[20] Wells drilled for exploration are used to determine whether crude oil reserves are present at a particular location. By contrast, appraisal wells are used to estimate the size of reserves, whereas development wells constructed to start production from a field with known reserves.

which 15 were earmarked for exploration, whereas the remainder had been identified for development/appraisal in previous years (**Figure 3.5**). The primary focus of exploration and production (E&P) companies therefore remained fixed on developing the existing resource base rather than investing in discovery of new fields.

Table 3.8: New Discoveries of Oil Reserves during FY11

Operator	Province	Development Status	Potential Production (bpd)
MOL	KPK	Started	3,029
POL	Punjab	Started	942
OGDC	Sindh	Started	100
Total			**4,071**

Source: Ministry of Petroleum & Natural Resources

Three significant discoveries of oil reserves were made during FY11 (**Table 3.8**), with a production potential of 4,071 bpd.[21] Once fully developed, these could contribute 6 percent to annual crude production. Furthermore, ongoing projects are expected to contribute 9,000 bpd or 14 percent to production over FY12-FY13.

Having said this, realizing the country's crude oil production potential remains a challenge due to the prevailing security situation, particularly in KPK and Balochistan. Several incidents of attacks on officials from E&P companies were reported during the year and operations on a few wells and fields suspended to this effect.

Crude processing

Demand for crude is capped to the extent of installed processing capacity, which stood at 14.3 million MT in FY11. Historically, growth in refining capacity has remained stagnant despite protection offered in the form of a deemed duty of 7.5 percent on HSD (**Box 3.**), and domestic refineries have tended to operate at capacity utilization levels of 85 percent on average during FY06-10. In a market with deficit POL production such as Pakistan, higher capacity utilization levels could reduce the POL import bill.

Crude oil processed by refineries continued to decline in FY11, to a level of 9.6 million MT,[22] due to the impact of supply side disruptions. The rate of decline, however, has been arrested substantially from 8.3 percent in FY10 to 1.0 percent in FY11. Several developments weighed heavily on demand for crude oil from refineries during FY11: (a) the closure of PARCO during Sep-Oct FY11 due to floods; (b) during May 2011, ARL was shut down due to a technical fault; and (c) activity at

Box 3.1: Pakistan's Refining Sector

Pakistan's POL refining sector consists of five refineries with a total capacity of 13.1 million MT per annum. These include Pak-Arab Refinery (PARCO, 4.5 million MT), National Refinery (NRL, 2.7 million MT), Pakistan Refinery (PRL, 2.1 million MT), Attock Refinery (ARL, 1.9 million MT) and Byco (1.7 million MT). Since the product slate is determined by the configuration of a refinery and demand for key POL products is capped by domestic consumption, capacity utilization in the sector is largely determined by the margin between individual POL product and crude prices.

Majority of the capacity in the sector is based on the hydro-skimming configuration, as a result of which the product slate includes a high proportion of furnace oil (typically sold at a discount to crude prices). Consequently, margins in the sector have been lower than otherwise possible, and refineries have been unable to invest towards improving technology. Tariff protection through deemed duty provided by the government for this purpose, and to meet more stringent Euro-II quality standards for POL products, has also been phased out from different products except HSD over the years **(Table 3.9)**.

Table 3.9: Deemed Duty Protection on POL Products
percent

Product	FY06	FY07	FY08	FY09	FY10
Kerosene	6.0	-	-	-	-
JP-4*	6.0	5.0	-	-	-
JP-8	6.0	5.0	-	-	-
HSD	10.0	10.0	10.0	7.5	7.5
LDO	6.0	-	-	-	-

***** JP denotes Jet Propellant; LDO denotes Light Diesel Oil
Source: OGRA

[21] The term bpd denotes barrels per day.
[22] For member companies of the OCAC.

Byco was temporarily suspended due to internal financial issues at the refinery, which had a marginal impact on overall crude procurement in May 2011.

The crude processing potential of the country, however, remains largely unrealized. Whereas total domestic consumption of POL products stood at 18.4 million MT in FY11, 49 percent of this requirement was imported. If POL imports were to be substituted completely for local production based on imported crude, additional processing capacity of up to 15.0 million MT would be required. Presently, new capacity of 5.0 million MT per annum is in the pipeline from Byco, and additions of up to 20.0 million MT are planned going forward; it remains to be seen how much of this capacity will actually be brought to market.[23] Meanwhile, existing refineries are presently focused on upgrading production configurations to reduce the share of furnace oil in the product-mix and meet Euro-II specifications for HSD.[24]

3.3.3 Natural Gas

Pakistan experienced some of the worst gas shortages in its history during FY11, and supply to the industrial, CNG and power sectors was significantly curtailed. The shortfall peaked during the winter season, when gas consumption for domestic heating increases, and demand reached 4,580 mmcfd versus supply of 3,878 mmcfd. Throughout the remainder of the year, shortfall in the system varied between 10 to 15 percent of demand (400-700 mmcfd), depending on supply availability from key fields.

Table 3.10: Curtailment of Gas due to Load Management (mmcfd)

	Industry	CNG	Power	Total
Punjab				
Oct-10	98	13	0	111
Nov-10	224	20	0	244
Dec-10	354	26	0	380
Jan-11	295	26	0	321
Feb-11	261	28	0	289
Mar-11	197	26	0	223
Sindh				
Oct-10	131	0	0	131
Nov-10	147	0	0	147
Dec-10	225	0	0	225
Jan-11	284	0	0	284
Feb-11	234	0	0	234
Mar-11	168	0	0	168
Balochistan				
Oct-10	0	0	3.8	3.8
Nov-10	0	0	10	10
Dec-10	0	0	10	10
Jan-11	0	0	10	10
Feb-11	0	0	10	10
Mar-11	0	0	10	10

Source: Ministry of Petroleum and Natural Resources

To rationalize consumption, a load management plan was therefore implemented in October 2010 (**Table 3.10**). According to the plan, gas supply to the industrial sector in Punjab and Sindh was curtailed for two days on a weekly basis,[25] whereas supply to the CNG sector was reduced to five days a week. The impact on textile production was particularly damaging (**Section 2.3.2**) and supply to fertilizer producers was curtailed by up to 20 percent vis-à-vis their allocation. Natural gas availability to the power sector also remained below requirement. In particular, gas availability to KESC averaged around 55 percent of official

[23] These include additions from Trans Asia (4.5 million MT), Indus (4.5 million MT) and Khalifa Coastal (11 million MT).

[24] Currently, four of the five refineries have hydro-skimming configuration while PARCO has CCR/ Diesel Max/ Visbreaker configuration. Hydro-skimming configurations yield products with high sulfur content (1.0 percent by weight), resulting in lower margins. Refineries need additional investment to install diesel desulfurization units so as to meet the Euro-II emission standards (i.e. 0.05 percent Sulfur by weight).

[25] The notified amount of curtailment varied throughout the year, increasing up to three days per week to the industrial sector depending on demand-supply conditions. In fact, actual curtailment to the textile sector was increased to 3.5 days per week from February-11 onwards (see **Section 2.3.2**).

allocation (276 mmcfd) whereas IPPs based on gas were forced to remain idle or operate below capacity.[26]

On the supply side, temporary disruptions (due to the floods and technical faults) from key fields have been largely responsible for short-term fluctuations in gas availability. Supply was also affected from time to time due to annual turnaround (ATA) of key fields for maintenance, which can take up to 30 days at a time.

Factors contributing to prevailing shortages of natural gas

Natural gas exploration in Pakistan has not been undertaken aggressively, and hence production has historically remained undiversified. As of FY10, natural gas was being produced from 98 fields, of which nine fields accounted for 80 percent of total daily supply. Exploration and production activity has been largely concentrated in Sindh (71 percent of total production in FY10, **Table 3.11**), and the most recent significant gas discovery dates back to 1998. Consequently, the reserve base has not witnessed significant expansion and, by FY11, 49 percent of original recoverable reserves (54 TCF) had been exhausted. The country now has sufficient reserves to last just over 20 years, under the increasingly unlikely scenario that current production rates are maintained throughout. In effect, Pakistan must aggressively explore alternatives to diversify supply of this precious commodity.

Table 3.11: Production and Consumption of Natural Gas (mmcfd)

	FY06	FY07	FY08	FY09	FY10	5-Year CAGR
Production	**3,836**	**3,873**	**3,984**	**4,002**	**4,063**	**1.4**
Sindh	2,691	2,741	2,830	2,870	2,877	1.7
Balochistan	904	872	876	837	790	-3.3
Punjab	186	188	197	209	190	0.6
KPK	55	72	81	86	205	38.9
Consumption	**3,347**	**3,345**	**3,494**	**3,478**	**3,501**	**1.1**
Power	1,343	1,185	1,178	1,107	1,005	-7.0
Gen. Industries	722	795	837	836	878	5.0
Fertilizer	543	530	549	551	603	2.7
Domestic	469	508	559	587	601	6.4
Other	271	326	371	397	413	11.1
Unaccounted for gas	**488**	**528**	**490**	**524**	**562**	**3.6**
% of production	*12.7*	*13.6*	*12.3*	*13.1*	*13.8*	-

Source: Hydrocarbon Development Institute of Pakistan

Part of the explanation for why gas exploration has remained subdued may be found in the pricing structure of the commodity. Exploratory prices of gas are linked to crude oil, but impact of changes in reference crude prices is not fully passed on to investors,[27] as benchmark prices for compensation are computed on a bi-annual basis only.[28] Furthermore, exploration and production companies accrue only 50 percent of any upside price movements in the price of gas with respect to the aforementioned base level, with the remainder collected by the government in the form of a windfall levy. Producer (well-head) prices of gas therefore do not particularly incentivize exploration of the commodity, and production companies receive prices below import parity levels.

[26] These include Orient Power, Saif Power, Sapphire Electric and Halmore Power, accounting for 908 MW.

[27] As per the Petroleum Policy (2009), the reference crude price is based on a basket of Arabian/Persian crude oils, but is capped at $100/bbl for calculation of domestic gas prices. Furthermore, a sliding scale discount is applied to the reference crude price if it exceeds $20/bbl, followed by a zonal discount based on the domestic region where gas is produced. Consequently, gas prices cannot exceed a level of $5.35/BTU when actual crude price is above $100/bbl. At current exchange rates, this price equates to approximately Rs 460/BTU.

[28] The reference crude price is averaged over a six-month period for calculation of gas prices, which means investors are not rewarded for intermediate upside price volatility in the commodity.

These features of domestic gas pricing may come across as peculiar at first, but are justifiable so long as the benefits accrue squarely to the country's industrial base. However, downstream pricing of the commodity has significantly subsidized residential consumers and fertilizer manufacturers at the expense of the industrial and power sectors for quite some time, which arguably leads to allocative inefficiencies. Secondly, gas prices are maintained at a uniform level throughout the country, for which the different costs of transmission and distribution are built into gas pricing notified by the ECC.[29]

For these reasons, the supply-demand position of natural gas has deteriorated significantly, and shortages of the commodity with reference to indigenous supply are projected to increase to 3,021 mmcfd by FY16 (48 percent of projected demand, **Table 3.12**). Nearly half of this deficit may be bridged by imports, if arrangements presently under consideration are implemented as scheduled. However, supply rationing of natural gas is inevitable in the near future, and meaningful steps must be taken to curtail residential consumption, while prioritizing supply to the fertilizer and power sectors.[30]

Table 3.12: Projected Demand, Supply and Shortfall of Natural Gas (mmcfd)

	FY12	FY13	FY14	FY15	FY16
Net Demand	**5,497**	**5,670**	**5,788**	**5,820**	**5,970**
SNGPL	2,374	2,486	2,556	2,542	2,576
SSGCL	2,132	2,193	2,255	2,279	2,343
Independent Systems	991	991	977	999	1,051
UFG and T&D Losses	279	307	320	322	330
Gas Consumed Internally (GIC)	49	55	57	54	54
Gross Demand	**5,825**	**6,032**	**6,165**	**6,196**	**6,354**
Committed Supply	3,124	2,933	2,663	2,417	2,249
Anticipated Supply	242	447	1,198	1,166	1,084
Import from Iran	-	-	263	487	750
LNG-I	300	500	500	500	500
Total Supplies	**3,667**	**3,880**	**4,623**	**4,570**	**4,583**
Gas shortfall					
w.r.t. indigenous supplies	**2,458**	**2,652**	**2,305**	**2,613**	**3,021**
w.r.t. imported & indigenous supplies	**2,158**	**2,152**	**1,542**	**1,626**	**1,771**

Source: OGRA; Ministry of Petroleum & Natural Resources

Bridging the supply-demand gap

According to the Ministry of Petroleum and Natural Resources, demand for gas is projected to increase steadily at 2 percent per annum from FY12 to reach 5,970 mmcfd by FY16. The most rapid increase in demand has already been factored in during FY11, due to commissioning of new gas-based IPPs with a capacity of 852 MW. With additional projects, overall gas

[29] Gas prices are determined based on annual revenue requirements submitted by SNGPL and SSGC. These calculations factor in the purchase cost of gas, transmission/distribution (T&D) costs, a benchmark level of unaccounted for gas (UFG) wastages, and lastly a fixed return on assets (17.5 percent for SNGPL; 17.0 percent for SSGC). Hence, companies have an incentive to expand the distribution network; but only a weak incentive to do so efficiently since T&D costs are included in gas pricing, and ultimate cost of breaching UFG benchmarks (4 percent for SNGPL; 5 percent for SSGC) must be borne by the exchequer.

[30] Presently, the Natural Gas Allocation Policy accords priority to the residential sector, followed by fertilizer and industrial sectors to the extent of production process requirements. Power producers with firm gas supply commitments are ensured supply for nine months, with the remainder supplied on a best efforts basis. Similarly, supply for captive power generation and to KESC, WAPDA and IPPs without gas supply agreements is conducted on a best efforts basis, and accorded fifth priority in terms of allocation.

requirement for power generation may climb to 1,731 mmcfd by FY13 (or 41 percent of anticipated production).

Demand growth is expected to outpace increase in supply, and gas shortages may intensify in the near future. Based on supply projections, domestic production of gas is likely to peak by FY14 at 3,860 mmcfd and is set to decline thereafter. Natural depletion in gas fields will ensure that committed supplies fall considerably short of demand, which is projected to reach 5,970 mmcfd by FY16. Production from fields presently indentified for development will therefore become critical in managing the demand-supply gap. Key projects scheduled to come online by FY14 will contribute 460 mmcfd to gas supplies.

Furthermore, since domestic production of gas will no longer be sufficient to meet consumption requirements, reliance on imports will increase. Between FY12 and FY16, the domestic gas shortfall is projected to increase from 2,458 mmcfd to 3,021 mmcfd, which may be reduced by 40 percent via imports (**Box 3.**).

If ongoing projects to import natural gas are delayed, gas shortages could worsen considerably. Strong interest has been shown by the private sector towards developing import infrastructure for LNG. However, imports from Iran could be set back if pipeline construction within Pakistan's border does not proceed as scheduled, due either to a deteriorating security situation in Balochistan or delays in securing financing. Nevertheless, in our view, the pipeline is unlikely to face significant delays, since financial support can be sought from China and Pakistan's foreign policy is likely to acquire a greater regional bias as US forces withdraw from Afghanistan.

Box 3.2: Projects for Natural Gas Import

The following projects are presently being undertaken to set up infrastructure for natural gas imports:

The Mashal LNG Project has been retendered in FY11 and received strong expression of interest from the private sector. With SSGC appointed as a facilitator, an offshore floating terminal is scheduled to be developed at a cost of $150 million for this project, with a supply capacity of 500 mmcfd. Shipments of up to 300 mmcfd may be imported through this project as early as FY12.

Imports from Iran are expected to commence by FY14, with first delivery of 264 mmcfd. Construction work for the pipeline is expected to commence from November 2011, at an expected cost of $1.5 billion, for which financing is being sought from China. The pipeline is capable of supplying 2,100 mmcfd gas up to Nawabshah, and gas import from Iran has recently been negotiated upwards from 750 mmcfd to 1,000 mmcfd.

Additionally, work on the Turkmenistan-Afghanistan-Pakistan-India (TAPI) project is also underway. An Inter Governmental Agreement (IGA) and Gas Pipeline Framework Agreement (GPFA) have been signed, and key impediments in the Gas Sales and Purchase Agreement (GSPA) are being worked out. The project is being coordinated by the Asian Development Bank (ADB) with a combined cost of $7.6 billion, and first gas flow is targeted by 2016. Pakistan's share of total supply from the pipeline is likely to be 1,365 mmcfd.

3.3.4 Coal

Coal is primarily used for cement (56 percent) and brick (37 percent) manufacturing in Pakistan (**Table 3.13**). Although measured reserves of coal were well in excess of medium-term consumption requirements as of FY10, production (3.1 million MT) was still insufficient to cover domestic consumption requirements (8.14 million MT). The gap has historically been bridged by imports, which have increased annually by 13 percent on average over FY06-10.

Presently, the key debate surrounding coal reserves is whether imported fuels may be substituted for domestic coal. Specifically, it is now generally acknowledged that coal reserves are present in sufficient quantities at Thar (176 billion MT), Thatta (4 billion MT) and adjoining areas in Sindh to meet long-term energy requirements. However, the quality of such known reserves may

not be sufficiently high. For instance, reserves discovered in Thar are lignite or brown coal, thus possessing a moisture content of up to 55 percent and a lower heating value.

Table 3.13: Overview – Consumption and Production of Coal (million MT)

	FY06	FY07	FY08	FY09	FY10	5-Year CAGR
Consumption*	**7.71**	**7.89**	**10.11**	**8.39**	**8.14**	**1.4**
Domestic	-	0.00	0.00	0.00	-	-
Brick-Kiln Industry	4.22	3.28	3.76	3.27	3.01	(8.1)
Cement / Other Industry	2.78	4.14	5.72	3.80	4.58	13.3
Pakistan Steel	0.56	0.31	0.47	1.20	0.43	(6.4)
Power (WAPDA)	0.15	0.16	0.16	0.11	0.13	(3.5)
Production	**4.87**	**3.64**	**4.12**	**3.74**	**3.48**	**(8.1)**
Sindh	2.01	1.00	1.06	0.84	1.20	(12.1)
Balochistan	1.96	1.83	2.27	2.06	1.50	(6.5)
Punjab	0.57	0.51	0.55	0.57	0.59	0.9
KPK/FATA	0.33	0.30	0.24	0.27	0.19	(12.9)
Imports	**2.84**	**4.25**	**5.99**	**4.65**	**4.66**	**13.2**
Reserves	**-**	**-**	**-**	**-**	**186,008**	**-**
Of Which:	-	-	-	-	-	-
Measured	-	-	-	-	*3,450*	-
Indicated & Inferred	-	-	-	-	*68,259*	-
Hypothetical	-	-	-	-	*114,298*	-

* Sector-wise consumption data for coal is not available and hence estimated

Source: Hydrocarbon Development Institute

Nevertheless, steps are being undertaken to expedite domestic production of coal, specifically for use in power generation. Specifically, the Thar Coal Authority has been formed with the Chief Minister of Sindh as Chairman, to work towards the development of indigenous resources.[31] Furthermore, the Sindh Coal Authority (SCA) and Thar Coal and Energy Board (TCEB) have also been constituted to encourage private sector participation.[32] In this regard, the Government of Sindh has signed a joint venture with Engro Power Generation to develop a coal mine in Thar Block-II which shall fuel a 1,000 MW power plant by 2016. Similarly, a memorandum of understanding has been signed with a UK-based company for mining and power generation, and development of infrastructure at Block-IV has commenced in this regard. Prospects for underground coal gasification (UCG) are also being explored in parallel. To this end, the Government of Sindh has awarded a mining concession to Cougar Energy under which Thar Block-III shall be developed for UCG, leading to commissioning of a 400 MW power project.

3.4 POL Products

The domestic market for petroleum, oil and lubricant (POL) products is characterized by overconsumption and underproduction, and Pakistan depends heavily on imports to bridge the deficit. In the five year period extending till FY11, consumption of POL products has grown at an average rate of 4.8 percent whereas domestic production – sufficient to meet only 50 percent of the domestic requirement – has actually declined by 3.8 percent on average. To bridge the demand supply gap, imports have increased sharply to 12.4 million tons as of FY11 from a level of 8.3 million tons in FY07 (**Table 3.14**).

[31] As per the Constitution, coal is a provincial subject. The Federal government has the mandate to generate basic geological data through surveys, which is presently undertaken under auspices of the Geological Survey of Pakistan.
[32] While these developments are commendable, there is a need to include professionals, who can understand the technicalities of the project and provide input for policy formulation. Moreover, there may be conflicts of interest amongst various regulatory agencies here.

The import bill for POL products increased to $8.3 billion in FY11 from $6.6 billion in the previous year, due to adverse movements in both volume and prices. Whereas the volume of imports increased to 12.4 million MT, regional oil prices crossed US$ 120/barrel as unrest in the Middle East intensified during April 2011.[33]

Table 3.14: Overview of POL Demand, Supply and Imports (million MT)

	FY07	FY08	FY09	FY10	FY11[1]	5-Year CAGR(%)
Consumption[2]	**16.85**	**18.08**	**17.91**	**19.13**	**20.33**	**4.8**
Transport	7.98	9.38	8.84	8.86	8.99	3.0
Power	6.74	7.08	7.57	8.81	8.15	4.9
Industry	1.60	1.07	0.97	0.98	1.52	-1.3
Other	0.53	0.54	0.53	0.47	1.67	33.2
Domestic Production	**10.86**	**11.31**	**10.34**	**9.54**	**9.32**	**-3.8**
Furnace Oil	3.19	3.32	3.09	2.48	2.41	-6.8
Motor Gasoline	1.22	1.34	1.29	1.35	1.25	0.6
HSD	3.24	3.56	3.26	3.14	3.23	-0.1
Aviation Fuels	1.17	1.01	0.96	0.94	0.82	-8.5
Others	1.50	1.52	1.23	1.08	1.12	-7.0
Non-Energy Products	0.55	0.56	0.51	0.54	0.49	-2.8
Imports	**8.33**	**9.03**	**9.97**	**11.18**	**12.41**	**10.5**
HSD	3.97	4.51	4.40	4.39	3.76	-1.3
Furnace Oil	4.31	4.27	5.08	5.60	6.79	12.0
Motor Gasoline	-	0.13	0.25	0.58	1.06	-
Others	0.05	0.12	0.25	0.61	0.80	100.0
Exports	**1.34**	**1.34**	**1.21**	**1.45**	**1.43**	**-**
Bunkering	**0.27**	**0.30**	**0.32**	**0.41**	**-**	**-**

[1] Indicative data from Federal Bureau of Statistics and the Oil Companies Advisory Committee.

[2] Based on OCAC data.

Source: Hydrocarbon Development Institute of Pakistan

More worryingly, the increase in POL demand is concentrated in the power sector and has lead to a permanent increase in domestic furnace oil requirements. Since domestic production of furnace oil was sufficient to meet only 27 percent of consumption in FY10, the remainder must be imported annually for electricity generation. Substitution away from furnace oil is urgently required in the power sector, for which options available to policy makers are limited.

The second product in deficit supply is High-Speed Diesel (HSD). In FY10, total consumption of HSD stood at 6.8 million MT, of which 90 percent was concentrated in the transportation sector. Consumption of HSD remains structurally high since road transport has historically received stronger patronage as compared to railroads. If Pakistan Railways were to operate efficiently, HSD consumption could arguably be reduced significantly, which would also result in substantial foreign exchange savings for the country.

Whereas consumption is more difficult to check, domestic production of HSD has long been incentivized by providing a fixed percentage margin (deemed duty) to refineries on sales of the product. However, profits accruing from deemed duty protection have not been invested towards technology up-gradation in the past, and have instead been accumulated as a buffer against volatility in refining margins resulting from massive oil price fluctuations. The present configuration of domestic refineries therefore features limited production of HSD and a high

[33] Import data is representative of OCAC member companies.

proportion of furnace oil in the product mix (**Box 3.**), and the benefits of incentivizing HSD production remain yet to be realized.

POL consumption in FY11

Consumption of POL energy products declined by 2.4 percent in FY11 as compared to an increase of 9.4 percent in the same period last year. The decline in annual consumption during FY11 was largely due to lower sales of FO (declined by 1.9 percent), which account for 45 percent of the energy product consumption mix.

Consumption of FO witnessed the greatest decline in August 2010 in particular, since widespread flooding affected product availability at the time. A second substantial reduction in sales was witnessed in April 2011, due to inventory management problems experienced by oil marketing companies (OMCs), resulting from circular debt.

Sales of non-energy products declined by 22.6 percent in FY11 as compared to an increase of 3.9 percent during FY10.[34] The overall decline in this group is primarily attributable to weaker consumption of asphalt (down 34.3 percent YoY),[35] which is used in road construction and accounts for about 65 percent of the non-energy product group. Meanwhile, lubricant sales increased marginally in FY11 as compared to sales growth of 11.1 percent in FY10.

POL production in FY11

Refinery production in FY11 saw a decline of 2.3 percent to 9.3 million tons.[36] The decline in production has slowed down as compared to FY10 largely due to improvement in refining margins especially during H2-FY11 in response to rising international oil prices.[37] Estimated gross margins for Attock and National refineries crossed the $5/bbl mark in April 2011, and were positive even for refineries with a higher percentage of furnace oil in the product mix.Changes in POL pricing & fiscal impact

The consumer impact of rising oil prices has been proactively managed during FY11, with some adverse implications for indirect tax revenues. Specifically, OMC margins on various POL products were fixed at lower levels,[38] whereas the petroleum development levy (PDL) built into the ex-depot pricing formula was reduced across the board.[39] Calculation of ex-refinery prices was also adjusted by OGRA to exclude the impact of shipping and incidental costs in deriving POL prices.

Furthermore, changes in the pricing mechanism for POL products have been notified by OGRA, which have become effective from FY12. Accordingly, the prices of MS, HOBC, LDO, and aviation fuel have been deregulated at the refinery and depot level, subject to a ceiling of import parity price plus incidentals for ex-refinery prices. Prices for HSD, however, are being

[34] Non-energy products include asphalt, lubrication oils, solvents and greases.
[35] Asphalt sales generally vary in tandem with allocations to PSDP, which were reduced substantially in FY11 due to fiscal constraints.
[36] Production data is representative of OCAC member companies.
[37] Gross refining margins are calculated on the basis of C&F prices notified by OGRA, and assuming a one month inventory holding period for Arab Light Crude.
[38] Previously, OMC margins were calculated as a percentage of ex-refinery prices plus an inland freight equalization margin, resulting in monthly variation in line with oil prices. However, margins were subsequently fixed to Rs 1.5 per liter for MS, Rs 1.35 per liter for HSD and Rs 1.72 for HOBC.
[39] Reduction in PDL has fiscal implications. In FY10, receipts from PDL fell short of target by Rs 10 billion, whereas this deficit is expected to widen to Rs 20 billion for FY11. Nevertheless, in our view, next year's PDL target of Rs 120 billion remains achievable, provided regional crude prices remain below $80/bbl for FY12, as was witnessed during FY09.

determined by OGRA at the refinery level, whereas the price of Kerosene is announced at both the refinery and depot level.

Although deregulation would ideally lead to lower prices in a competitive market, the impact of these changes is likely to be neutral for consumers in our view. The key component of ex-depot prices are OMC and dealer commissions, government taxes and the inland freight equalization margin (IFEM). Under the new framework, OMCs do not have control over either of these components, since commissions continue to remain fixed, taxes are determined by the government, and IFEM continues to remain in place despite recommendations to the contrary. Hence, the impact of price deregulation at the depot level on consumers remains neutral.

Box 3.3: Infrastructure for Import of Crude and POL Products

Pakistan meets majority of its crude oil imports from the Middle East, and the main suppliers include Saudi Arabia, UAE and Iran. Pakistan National Shipping Corporation (PNSC) maintains 3-4 dedicated tankers capable of delivering 600,000 MT of crude on average every month.

At present, crude oil and product imports can only be handled at two terminals: Keamari and FOTCO (Port Qasim). Both ports are located in Karachi and connected via a 25 km pipeline (capacity 2.0 million MT per month). The pipeline is primarily used for upcountry movement of imported POL products (particularly diesel), through linked pipelines at FOTCI. Majority stake in the pipeline is held by Pak-Arab Pipelines (51 percent) while PSO, Shell and Chevron hold the remaining shares. PARCO, PRL and NRL are linked with this pipeline.

Currently, the combined cargo handling capacity for POL products at ports is 33.0 million MT (24.0 million MT at Keamari and 9.0 million at FOTCO). However, handling capacity for crude is significantly lower (6.0 million MT at Keamari; 0.6 million MT at FOTCO). Furthermore, some crude handling capacity may become unavailable during 2013-2015 due to scheduled maintenance at KPT OP-I. Moreover, increase in POL product demand and refining capacity in the future is likely to exert stress on the existing cargo handling infrastructure.

To improve cargo handling capacity for crude imports, enhancements in infrastructure are urgently needed. Specifically, introducing night time navigation and increasing the draft of FOTCO can immediately improve cargo-handling capacity. The following options need to be explored:

- Single-Buoy Mooring[40] (SBM) at HUB connecting the Byco refineries for crude imports;
- White-oil pipeline link between KPT and FOTCO for effective utilization of KPT's three modern oil piers, to provide KPT access to PAPCO's product terminal, and reduce ship demurrages;
- Second berth at FOTCO to handle rising FO demand for power generation.

[40] SBM is a complete, self-contained single point offshore terminal facility which allows for both mooring and transferring cargo of very large crude oil carriers (VLCC) or floating offshore facilities. SBM systems are regarded as instant ports since they can be installed in deeper areas without any need for construction of jetties.

Annex Table 3.1: Status of Installed and Available Generation Capacity in February-2011 (MW)

S.No.	Project Name^	Fuel	Installed	Available	Reason
	GENCOs		**3,550**	**1,380**	
1	Lakhra	Coal	30	-	Complex F/O*.
2	GTPS Faisalabad	Gas	210	-	U-5 S/O**. Gas Quota NIL
3	Kotri	Gas	140	-	Gas Quota NIL.
4	Quetta	Gas	25	-	Gas Quota NIL.
5	Muzaffargarh	RFO	1,130	480	U-5,6 F/O, U-1 S/O.
6	SPS Faisalabad	RFO	100	-	U-1,2 Standby,
7	Guddu	RFO/Gas	1,155	620	U-1,2,4,5Ä, 8 F/O, U-7 S/O.
8	Jamshoro	RFO/Gas	700	280	U-1, 2 F/O
9	Multan	RFO/Gas	60	-	U-4 F/O, U-1 S/O, U-3 Standby
	IPPs		**7,487**	**3,915**	
1	Uch Power Limited	Gas	551	-	Complex F/O.
2	Engro Powergen	Gas	217	218	-
3	Orient Power Limited	Gas	213	-	Gas Quota Nil.
4	TNB Liberty Power	Gas	212	-	Complex S/O.
5	Saif Power Limited	Gas	210	-	Gas Quota Nil.
6	Sapphire Electric Company Ltd.	Gas	209	-	Gas Quota Nil.
7	Liberty Power Tech Limited	Gas	200	177	U-9 S/O.
8	Fauji Kabirwala Power Company	Gas	151	121	-
9	Habibullah Coastal	Gas	129	64	U-3,4 F/O.
10	Altern Energy	Gas	27	-	Complex F/O.
11	CHASHNUPP	Nuclear	300	304	-
12	Rousch Power Limited	RFO	395	205	Half Complex F/O.
13	AES Lalpir	RFO	348	342	-
14	AES Pak Gen	RFO	348	-	Complex F/O.
15	Atlas Power Limited	RFO	214	193	U-1 F/O.
16	Nishat Chunian Power Limited	RFO	195	195	-
17	Nishat Power Limited	RFO	195	196	-
18	Attock Gen Limited	RFO	156	102	U-3,5 F/O. U-8 S/O.
19	Saba Power	RFO	126	-	Complex F/O.
20	Kohinoor Energy Limited	RFO	120	92	U-1, 8 S/O.
21	Southern Electric	RFO	119	-	Shortage of Fuel.
22	Japan Power Generation	RFO	77	23	Less sharing due to Oil Shortage.
23	Gulf Rental	RFO	62	62	-
24	Techno Power	RFO	60	-	Complex F/O.
25	KAPCO	RFO/Gas	1,342	680	U-4, 10 F/O, U-1,3,7,8 S/O.
26	HUBCO	RFO/Gas	1,200	900	U-3 F/O. _
27	Malakand-III	Run-of-River	81	41	U-3 F/O
28	Jagran	Run-of-River	30	-	Complex F/O.
	WAPDA Hydropower		**6,444**	**4,889**	
1	Tarbela	Reservoir	3,478	2,345	R/L 1437.45 ft., U-4,10 S/O
2	Mangla	Reservoir	1,000	776	R/L 1109.35 ft, U-5 F/O
3	Chashma Hydro	Reservoir	184	128	U-7 S/O
4	Ghazi Barotha	Run-of-River	1,450	1,450	-
5	Warsak	Run-of-River	243	150	U-1, 4 S/O.
6	Small Hydel	Run-of-River	89	40	-
	Total		**17,481**	**10,184**	-

* Indicates forced outage (F/O) for entire complex.

** S/O indicates scheduled outage for maintenance. U indicates the affected power generating unit within the complex. R/L indicates reservoir level.

^ Capacity installed at KESC is not shown in this table.

Source: Ministry of Water and Power

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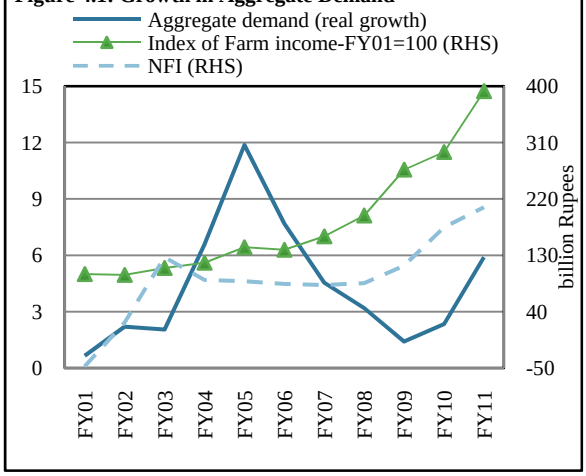
4 Aggregate Demand

4.1 Overview

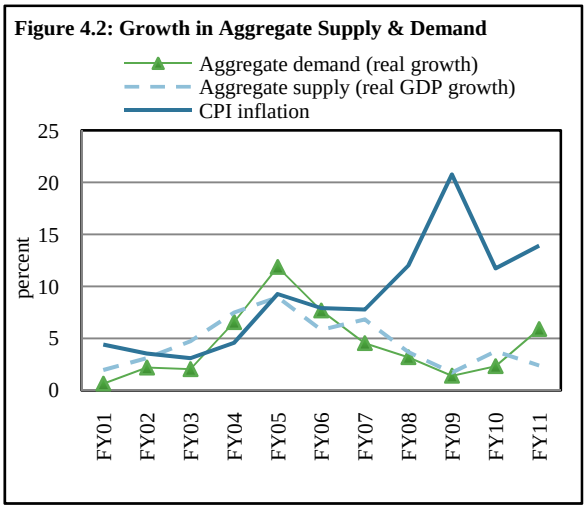
Real growth in aggregate demand picked up during the last two years after witnessing a sharp decline during FY05-09.[1] Three major factors contributed to this reversal of aggregate demand: (a) influx of remittances from abroad; (b) increase in farm income resulting from high agricultural commodity prices; and (c) substantial increase in wages of public sector employees (**Figure 4.1**).[2]

Figure 4.1: Growth in Aggregate Demand



During FY11, aggregate demand outgrew aggregate supply, which has been affected adversely due to acute energy shortages and the devastation caused by the floods. The adverse supply shocks like the floods have opposite implications for supply of and demand for basic commodities like food, clothing and shelter. Supply immediately drops due to damages to inventories and disruption in production process as well as supply chains, but demand for these basic commodities increases sharply. While demand is usually supported by charity funds from domestic and world donors, as well as remittances from abroad, supply takes time to recover.[3] As a result, an excess demand environment tends to prevail, which reinforces inflationary pressures throughout the economy (**Figure 4.2**).

Figure 4.2: Growth in Aggregate Supply & Demand



While excess demand – the difference between aggregate demand and aggregate supply – represents one aspect of the output gap, a second aspect is the gap between potential and actual output. Coincidentally, the economy of Pakistan is experiencing both these gaps with currently low real GDP growth. These gaps have adverse implications for overall macroeconomic stability. Excess demand leads to inflationary pressure in the economy, and the output gap implies accumulation of un-utilized capacities leading to declining investment and reduced employment opportunities. In such a scenario,

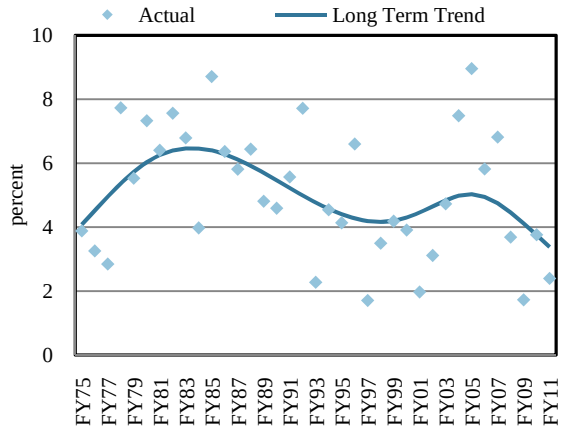
[1] Aggregate domestic demand is the sum of private consumption, government's general expenditure and investment. While imports are included in aggregate demand as per definition, exports are excluded as these represent demand of domestic goods by foreign consumers.
[2] In the budget announced for FY11, salaries of public sector employees were raised by 50 present.
[3] Shortage of certain commodities (food and clothing) is partially offset if foreign aid comes in kind.

formulation of macroeconomic policies becomes challenging: for example, policy prescriptions focused on curbing aggregate demand carry the risk of affecting investment sentiments and employment, thus affecting the supply side of the economy as well. It is, therefore, important to examine these aspects of the output gap in terms of the underlying factors and possible implications.

4.2 Output Gap

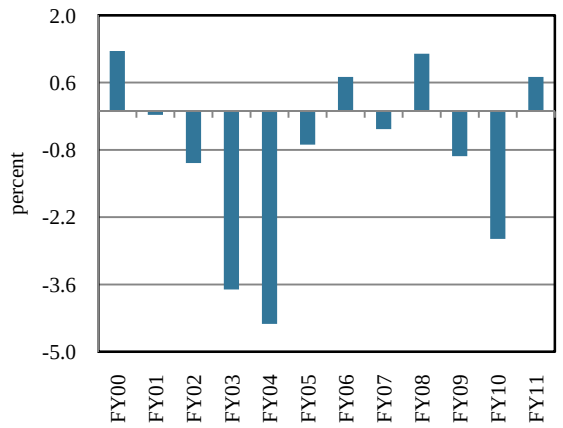
Prolonged energy shortages, heightened security concerns and a poor state of governance have weighed down economic activity in the country for the last several years. Devastating floods during the early months of FY11 contributed additional strain on the economy. Real GDP growth, which peaked at 9 percent in FY05, declined to below 3 percent during FY09-11. More alarmingly, the investment to GDP ratio declined by 9 percentage points in four years, and stood at only 13.4 percent in FY11 (the lowest since FY74). The capacity built up in the past is no longer being utilized due to constraints faced by entrepreneurs in managing day-to-day business activity. **Figure 4.3** shows that real GDP growth in recent years is consistently falling below the non-linear long term trend since FY08, which is an indication of prevailing output gap.[4]

Figure 4.3: GDP Growth-Actual Vs Long Term Trend



The timing of supply shocks is unfavorable, since the country has been experiencing inflationary pressures persistently over the last few years. Due to these pressures, inflation initially crossed the 25 percent level in 2008. Although it subsequently declined to 8.8 percent by December 2009 in response to a tight monetary policy stance, strong growth in private sector consumption (12.2 percent in FY09) and a continued slump in production activities brought about a revival of inflationary pressures in the economy. Inflation has yet to decline to the single digit level after December 2009. It seems that the economy has settled down in a low–growth, high-inflation environment known as stagflation. This situation entails difficult policy choices for the central bank. Specifically, policy makers must now choose from a set of difficult options requiring a trade-off between growth and inflation.

Figure 4.4: Demand-Supply Gap (% of GDP)



[4] Recessionary gap is defined as the amount by which actual GDP is less then potential GDP. It may be noted that there is no easy way to estimate potential GDP in the economy. We proxy potential GDP growth by non-liner trend extracted from actual GDP growth from FY75 to FY11 by using HP filter.

Mindful of the prevailing policy dilemma, the SBP cautiously adopted tight monetary policy stance during FY11. The policy rate was raised thrice during the first half of the fiscal year and then maintained at 14 percent during the second half. Monetary tightening was aimed at reducing aggregate demand in the economy, while the supply side was already affected by floods in early FY11. This policy stance therefore helped to contain the demand-supply gap to within 1 percent of GDP **(Figure 4.4)**. However, the cost of containing domestic demand is clearly visible in terms of negative growth in investment expenditures for the third successive year in a row. If a tight monetary stance had not been implemented, inflationary pressures stemming from a widening demand-supply gap would surely have been more pronounced.

Table 4.1: Contributions to Growth in Aggregate Demand (percent)

	Private consumption	Government	Investment
1960s	75.4	14.5	10.1
1970s	75.0	11.9	13.1
1980s	61.9	17.4	20.7
1990s	73.7	9.9	16.4
2001-08	69.0	11.2	19.8
FY09	108.2	-10.8	2.6
FY10	94.5	7.4	-1.9
FY11	88.3	8.0	3.7

The policy prescription for a low-growth and high-inflation scenario is to alleviate supply side constraints. Let's take the case of energy shortages. Would expansionary policies, monetary or fiscal, help in improving energy supply conditions in the economy? The most likely answer is no. Specifically, reduction in gas supplies which has undermined generation of electricity, production of fertilizer and activity in the textile sector is hard to improve by easing the monetary policy stance. On the other hand, expansionary fiscal policy – under the prevailing economic environment – would fuel domestic demand in the economy, which is an undesirable outcome. Therefore, a long-term strategy to address energy shortages within the economy is required, along with better coordinated monetary and fiscal policies so as to reduce the output gap and bring the economy back to its long-term growth path.

4.3 Composition of Aggregate Demand

Table 4.2. Marginal Propensities to Consume and Invest (percent)

	Consumption		Investment
	Private	Public	
1960s	72.5	11.8	16.5
1970s	75.8	11.2	13.8
1980s	63.0	16.4	19.3
1990s	77.7	10.7	17.2
2001-08	70.8	11.3	21.3
FY09	95.6	-9.5	2.3
FY10	81.8	6.4	-1.6
FY11	97.0	8.8	4.1

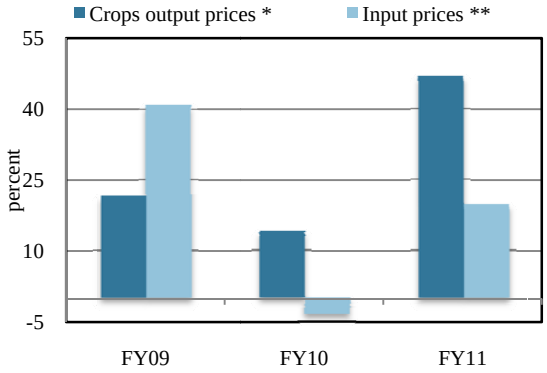
Private consumption is typically the largest component of aggregate demand. However, in the case of Pakistan, its contribution has increased alarmingly to 90 percent in recent years (**Table 4.1**). A significant behavioral shift at the consumer level seems to be developing, as marginal propensity to consume has also increased sharply (**Table 4.2**). During FY11, the average consumer allocated Rs 97 out of every Rs 100 to consumption expenditure. This implies a marginal saving rate of just 3 percent in FY11 compared with over 30 percent in FY01-08.

The low saving rate (i.e., inadequate in-house supply of investible funds) coupled with wary foreign investors lead historically low investment rate in the country. As a result the contribution of investment to aggregate demand declined sharply from an average of about 20 percent during 2001-08 to 3.7 percent in FY11. Meanwhile, the government – struggling with fiscal consolidation – has contributed less than 10 percent to the domestic aggregate demand.

4.3.1 Consumption

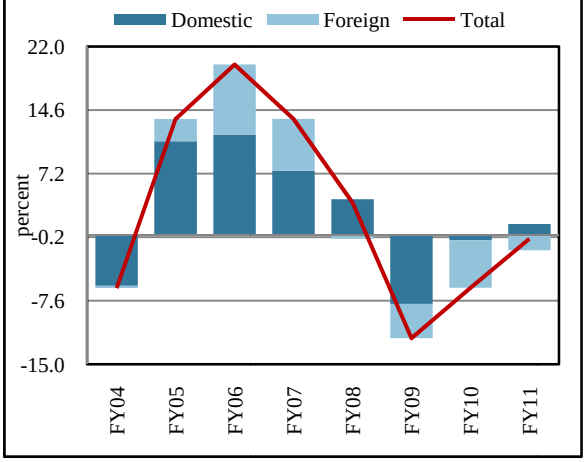
Private consumption has maintained average real growth of 7.7 percent during FY09-11 primarily on the back of sustained growth in home remittances which have become a regular part of recipients' income in Pakistan. Uncertainty arising from high inflation levels has also strengthened consumption demand. Moreover, since food has a higher share of total consumption expenditure, high food inflation (i.e. 20 percent on average) witnessed during the last three years also led consumers to allocate higher proportion of income to consumption (see also **Box 4.1** at the end of this chapter). As a result, growth in real per capita consumption increased tremendously from an average of 1.2 percent during 2001-08 to 5.5 percent in FY11.

Figure 4.5: Crops Output Prices vs. Input Prices (% change)



* Wholesale price index of cotton, wheat, rice and sugarcane
** Wholesale price index of fertilizers, pesticides and insecticides

Figure 4.6: Growth in Real Investment



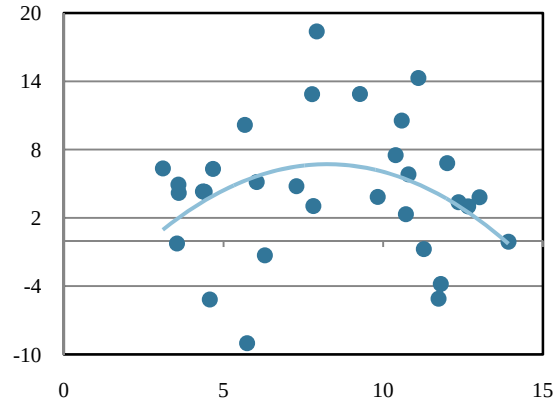
Strong rural incomes have lent further support to consumption demand, especially in the wake of higher wheat output and prices during FY09 to FY10 and a sharp increase in cotton prices (over 40 percent) during FY11. Although farm input prices also increased, it can be safely concluded that net farm income witnessed a strong growth in recent years due to significant increases in prices of key major crops (wheat, cotton, sugarcane, and rice)[5]. Specifically, the differential between crops output prices and input prices during the last two years has been about 20 percentage points (**Figure 4.5**).

4.3.2 Investment

Contrary to consumption demand, real investment in the country has declined for the third successive year. The decline in investment has been contributed by both domestic and foreign investment, though the former showed some revival in FY11 (**Figure 4.6**). Businesses have remained wary of augmenting capital stock, and this is a major source of concern for sustainable growth in the economy.

[5] However, in case of cotton the rural economy suffered from losses due to devastating floods in August 2010. While the quantity of cotton produced washed out by the floods was about 20 percent, the price of the cotton increased by more than 100 percent. Thus the net effect on aggregate farm income is still positive though the floods caused serious distributional consequences. That is, farmers who lost their cotton crop bore tremendous loss while who were lucky to pick the cotton bagged a lot of gain.

Figure 4.7: Real Investment Growth (x-axis) **and Inflation** (y-axis)



A number of factors can be identified for this reluctance, including (a) slow down in the global economy, which is not only affecting foreign direct investment in the economy but also limiting domestic businesses from expanding in the face of low external demand; (b) deteriorating security situation in the country; (c) lack of support from public sector investment, since PSDP as a percent of GDP has declined sharply in recent years (see Chapter 6 for detail); (d) serious energy shortages wherein businesses are finding it difficult to fully utilize existing production capacities; (e) serious institutional weaknesses and poor governance structure; and (f) high cost of capital in recent years. It is interesting to note that investment and inflation have non-linear relationship wherein a moderate inflation may encourage investment but high inflation that introduces uncertainties in the economy affects it negatively (**Figure 4.7**).

Looking at savings and investment rates in Pakistan, it is evident that Pakistan has extremely low savings and investment rates compared with world averages (**Table 4.3**).[6] Particularly, the investment rate has come down from an average of 19.1 percent during FY01-06 to 13.3 percent in FY11. Notwithstanding the structural issues discussed above, a tight monetary policy stance and crowding out by extensive government borrowing could also be important factors contributing towards low investment rates (Chapter 5 for more discussion on monetary policy and government borrowing).

Table 4.3: Comparison of Savings and Investment
percent of GDP

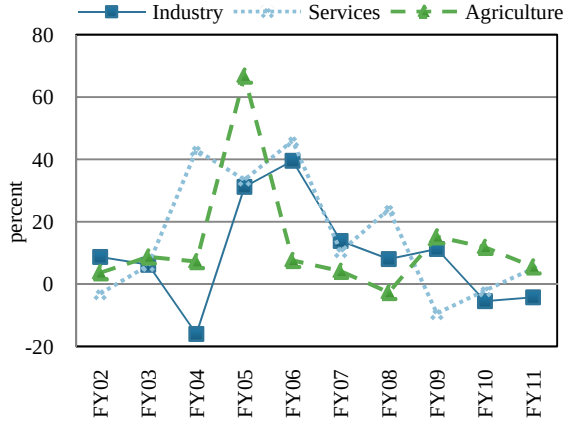
		2009	2010	2011
World	Saving	21.8	23.3	24.2
	Investment	21.7	22.9	23.6
Emerging and developing	Saving	31.9	33.0	34.2
	Investment	30.3	31.3	31.7
Newly Industrialized	Saving	31.6	33.4	32.4
	Investment	23.6	26.4	26.1
Pakistan	Saving	12.5	13.2	13.8
	Investment	18.2	15.3	13.3

Source: World Economic Outlook, September 2011.
Annual Plan (various issues), Planning Commission

Sector wise investment

The decline in investment growth has been largely broad-based, with all sectors of the economy depicting negative growth in FY11 (**Figure 4.8**). In the industrial sector, investment in all kinds of manufacturing and construction activity had declined as compared to the previous year. In textile manufacturing, spinning and finishing industries have witnessed steep declines mainly due to power and gas shortages. The oil refining sector also faces weak motivation to increase domestic capacity in the presence of competition from imports of refined

Figure 4.8: Investment Growth - Sector wise



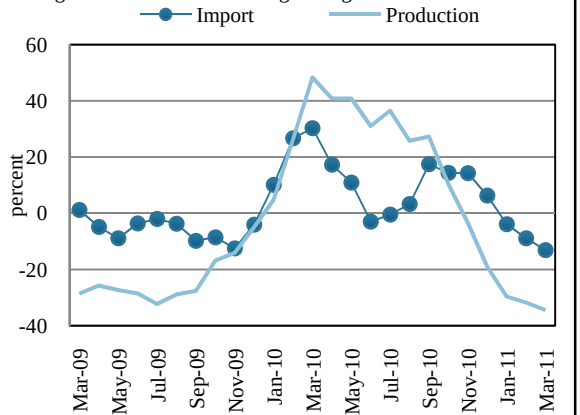
[6] See **Table 2.4** in Statistical Annexure published separately for detailed data on savings and investment in Pakistan.

products. Although investment in oil refineries has been weak, the energy sector witnessed increase in capacity during FY11 mainly due to investments by independent power producers (IPPs) and imports of other power generating equipment for industrial use.[7] Furthermore, the government of Pakistan signed MoUs with four multinational companies to produce 3,000 MVW electricity with the total investment of $12 billion in Thar coal power project.

Fixed investment in the construction sector declined by Rs 2 billion in FY11. This was the fourth consecutive decline in construction sector investment. A continued decline in the real estate market along with rising bank defaults amongst construction sector borrowers has overshadowed the positive impact of post flood construction activities.

If we examine demand for capital goods, the declining trend shows that investors are losing confidence in the economy (**Figure 4.9**). Construction and mining were the two larger segments among others where demand for capital goods fell sharply.

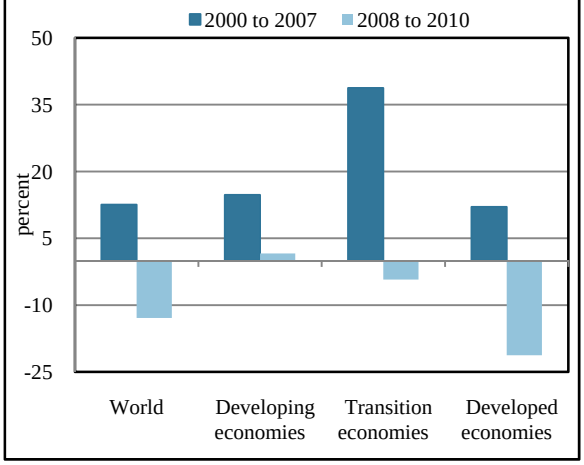
Figure 4.9: Demand for Capital Goods



Investment activity in the agriculture sector also remained subdued, and the investment to GDP ratio in this sector declined from 11.8 percent last year to just 5.5 percent in FY11. A lot of potential exists in areas such as grain storage, grain processing and dairy farming; however, a favorable public policy along with support from public investment is required to set up the necessary infrastructure first.

In the services sector, a large part of the decline in investments stemmed from telecommunications. Most of it was accounted for by decline in foreign investment as opportunities are limited in the telecommunication sector due to stiff competition and lack of technological moderation. However, with the introduction of 3G telecom technology, the country could have attracted significant amount of foreign investment.

Figure 4.10: FDI Growth in the World (%)



Foreign direct investment

Foreign investment, which can play an important role in supporting domestic investment and growth within a resource-constrained economy, continued to decline in Pakistan for the third successive year in FY11. Investors' concerns over governance issues, energy and the prevailing security situation prevented growth in foreign direct investment in Pakistan in conjunction with the impact of the global recession, which depressed FDI across the world (**Figure 4.10**).

[7] For details, please see Chapter 3 on **Energy**.

FDI inflows in Pakistan from advanced economies[8] have dropped to $604.0 million in FY11 from $1,026.0 million last year whereas; from emerging economies[9] FDI inflows have increased to $338.0 million from $105.0 million in FY10. FDI excluding privatization proceeds have declined by $577.2 million to $1.6 billion this year compared to $2.2 billion in FY10 and $5.3 billion in FY08. Unfortunately, privatization of public sector entities also could not be initiated (**Table 4.4a**).

With the exception of the financial services and power sectors, most sectors of the economy have witnessed a drop in foreign investment. The largest decline was observed in Telecom where profit repatriations have surpassed new investment by Rs 34.1 million down from a positive investment of Rs 291.0 million in FY10. As a developing market with a teledensity of only 60 percent, Pakistan offers great opportunities to investors in this sector, particularly in the auction of 3G licenses to telecom companies. However, this potential source of revenue is yet to be exploited as no well defined policy has been announced so far

Table 4.4a : FDI Inflows in Pakistan-Source wise (million US dollar)

	2006-07	2007-08	2008-09	2009-10	2010-11
USA	913.1	1,309.3	869.9	468.3	238.9
UK	860.1	460.2	263.4	294.6	208.1
U.A.E	661.5	589.2	178.1	242.7	284.2
Japan	64.4	131.2	74.3	26.8	3.2
Hong Kong	32.6	339.8	156.1	9.9	125.6
Switzerland	174.7	169.3	227.3	170.6	47.2
Saudi Arabia	103.5	46.2	-92.3	-133.8	6.5
Germany	78.9	69.6	76.9	53.0	21.2
Korea (South)	1.5	1.2	2.3	2.3	7.7
Norway	25.1	274.9	101.1	0.4	-48.0
China	712.0	13.7	-101.4	-3.6	47.4
Others	1,512.2	2,005.2	1,964.2	1,019.6	631.6
Total including Pvt. Proceeds	5,139.6	5,409.8	3,719.9	2,150.8	1,573.6
Privatization Proceeds	266.4	133.2	0.0	0.0	0.0
FDI Excluding Pvt. Proceeds	4,873.2	5,276.6	3,719.9	2,150.8	1,573.6

Source: SBP

Table 4.4b : FDI Inflows in Pakistan-Sector wise (million Rupees)

	2006-07	2007-08	2008-09	2009-10	2010-11
Oil & Gas	545.1	634.8	775.0	740.6	512.2
Financial Business	930.3	1,864.9	707.4	163.0	246.9
Textiles	59.4	30.1	36.9	27.8	25.0
Trade	172.1	175.9	166.6	117.0	53.0
Construction	157.1	89.0	93.4	101.6	60.8
Power	193.4	70.3	130.6	-120.6	155.8
Chemical	46.1	79.3	74.3	112.1	30.5
Transport	30.2	74.2	93.2	132.0	104.6
Communication (IT&Telecom)	1898.7	1,626.8	879.1	291.0	-34.1
Others	1,107.2	764.5	763.4	586.3	418.9
Total including Pvt. Proceeds	5,139.6	5,409.8	3,719.9	2,150.8	1,573.6
Privatization Proceeds	266.4	133.2	0.0	0.0	0.0
FDI Excluding Pvt. Proceeds	4,873.2	5,276.6	3,719.9	2,150.8	1,573.6

Source: SBP

[8] Include US, UK, Japan, Germany, Switzerland, Norway, S. Korea and Hong Kong.
[9] Include China, UAE and Saudi Arabia etc.

Box 4.1: Distribution of Incomes and Consumption Pattern

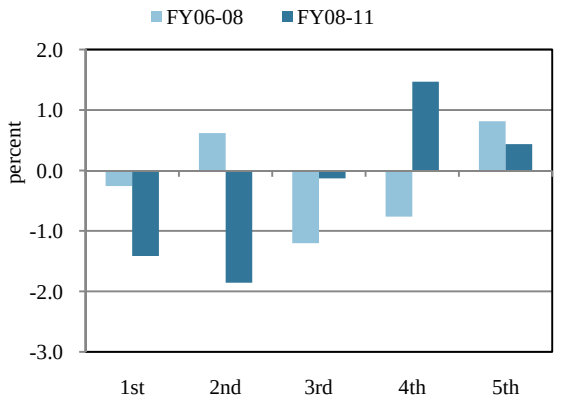
Household Integrated Economic Survey shows that since FY08 incomes of rich segments of the population have increased by a greater proportion than those of poor. **Figure 4.11** shows that income growth of poor families (i.e., 1st and 2nd quintiles covering 40 percent of population) during the last three years was significantly lower than average growth.[10] However, the rich families (i.e., 4th and 5th quintiles) witnessed higher than average growth. This pattern in growth is different than that during FY06-08. It indicates that the income inequality has increased in recent years.

The changes in income distribution have bearing on consumption pattern and composition of aggregate demand:

Because of the varying income elasticities of different goods and services, the changing inequality patterns affect the aggregate spending on various heads. For instance, food spending accounts for about 60 percent budget outlay of the lowest income groups while the highest income group allocates 40 percent of the outlay on food. The higher income class, in contrast, spends more money on house rent, transport, and education (**Figure 4.12**).

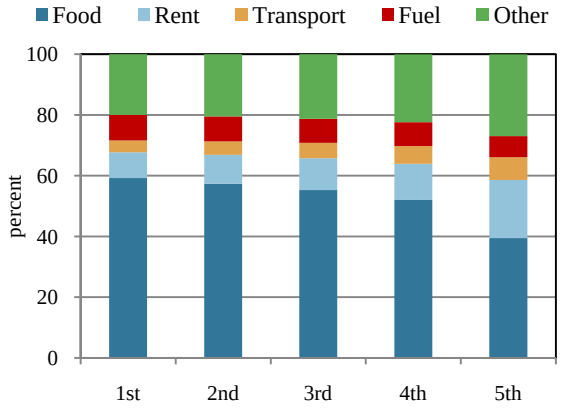
Inflation has changed consumption pattern: In line with the high food inflation during the past few years, spending on food has increased. Even the highest income group allocated higher proportion of its income on food (food expenditure for this group was 39.5 percent of income in FY11 compared with 33.1 percent in FY06).

Figure 4.11: Quintile-wise Annual Average Growth in Income - Deviation from mean



Source: HIES

Figure 4.12: Qunitile-wise Expenditure on Major Consumption Heads in FY11



Source: HIES

Table 4.5: Distribution of Expenditure – for Lowest and Highest Income Groups and Average (percent)

	FY06			FY08			FY11		
	Lowest	Highest	Average	Lowest	Highest	Average	Lowest	Highest	Average
Food	55.6	33.1	43.1	55.3	35.5	44.2	59.2	39.5	48.9
Clothing and footwear	7.0	4.8	5.7	6.8	4.7	5.5	5.7	4.5	5.1
Trans & comm..	4.2	7.9	6.2	3.9	7.8	6.2	3.9	7.5	6.0
Cleaning, laundry, etc.	4.0	3.1	3.6	4.1	3.4	3.6	4.0	3.6	3.7
Recreation	0.1	1.0	0.7	0.2	1.0	0.7	0.2	0.6	0.4
Education	1.3	5.5	3.7	1.4	5.8	3.9	1.5	5.3	3.5
Rent	8.2	21.3	15.2	9.2	19.7	15.1	8.5	19.1	13.9
Fuel & Lighting	9.0	7.1	8.0	8.6	6.6	7.6	8.4	7.0	7.6
Miscellaneous	10.6	16.2	14.0	10.6	15.4	13.2	8.6	12.8	10.8

Source: HIES

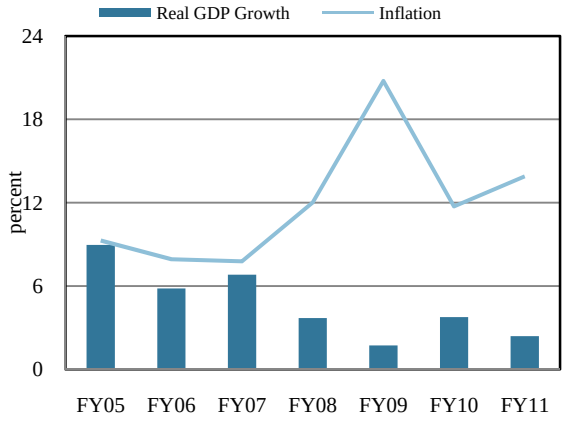
[10] Annual average compound growth rate in nominal income as per HIES was 8 percent during FY06 to FY08 and 14.8 percent during FY08 to FY11.

5 Inflation and Monetary Policy

5.1 Overview

In spite of active monetary management, FY11 turned out to be yet another year of double digit inflation, fueled by supply side factors including devastating floods at the beginning of the year, and strong global prices of oil and agriculture commodities. On the demand side, massive government borrowing from SBP especially during first quarter of the year added to inflationary expectations. After November 2010, the government switched its borrowing away from SBP towards commercial banks. While this is a welcome development for managing inflationary expectations, it does crowd out the private sector.

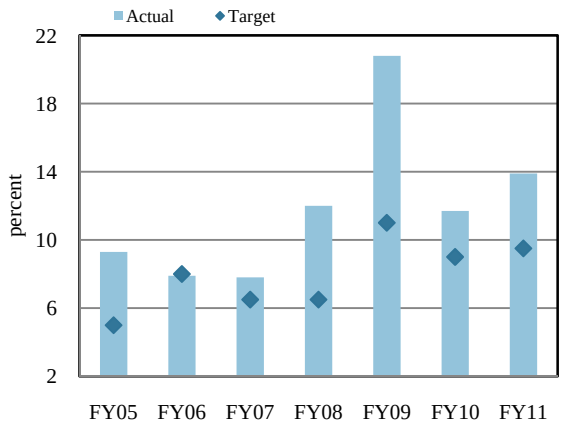
Figure 5.1: Inflation-Growth Nexus



Source: State Bank of Pakistan

The supply constraints not only kept inflation high, but also hurt growth (**Figure 5.1**). Economic activities were increasingly disrupted by persisting electricity and gas shortages, heightened security concerns, and increased cost of capital. Both inflation and real GDP growth targets were not met as shown in **Figure 5.2**. Actual annual inflation turned out to be well above the targeted level in FY11 as has been the case since FY06, and real GDP growth remained below the target for five out of the last seven years.

Figure 5.2: Inflation Targets Vs Actual



Source:: State Bank of Pakistan

Formulating monetary policy in this environment (i.e., low growth and high inflation) is especially demanding since policy measures to contain inflationary pressures entail the risk of further restricting economic activities.[1] Being mindful of these challenges, SBP has vigilantly made use of any possible room available to contain inflation and support economic activities in recent years. In addition to adjusting the policy rate, SBP has also been implementing measures to improve its monetary policy framework and to support business activities.

[1] Trade-off between growth and inflation is well documented in economic literature.

Economic environment ahead of FY11[2]

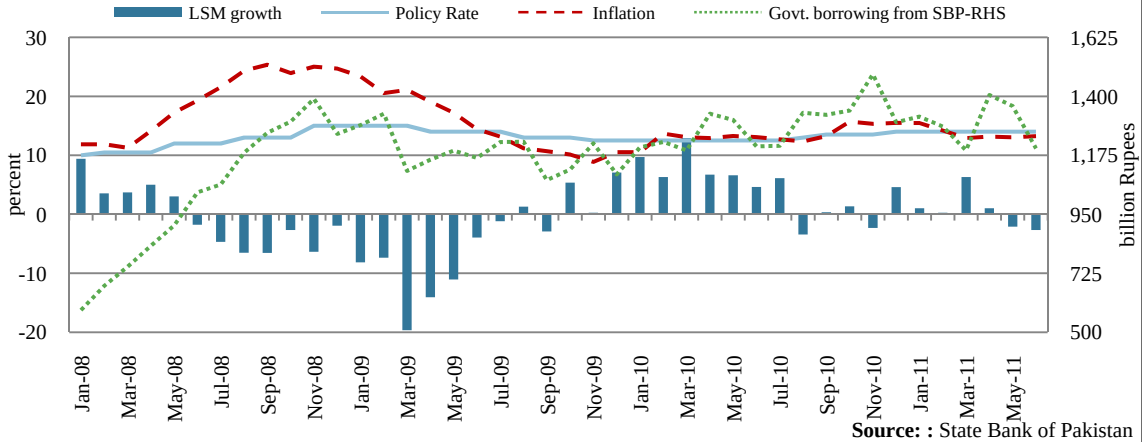
Before the beginning of FY11, headline inflation was gradually receding during the second half of FY10, while core inflation (non-food non-energy) was hovering at around 10.3 percent. Large scale manufacturing was growing at a modest pace. The current account balance was showing some improvement, supported by healthy exports and robust growth in workers' remittances. A sharp increase in cotton prices – an export commodity for Pakistan – was also observed in the fourth quarter of FY10. In contrast to these positives, fiscal developments proved to be inconsistent with earlier projections since the deficit for FY10 reached 6.3 percent of GDP against a target of 4.9 percent.

Inflation for FY10 turned out to be 11.7 percent against the target of 9.0 percent. Furthermore, the government was unable to meet its quarterly borrowing limits from SBP under IMF's Stand-By Arrangement (SBA) program for the third and fourth quarter of FY10. In view of these mixed developments, SBP kept its policy rate unchanged at 12.5 percent in all three monetary policy announcements during the second half of FY10 (**Figure 5.3**).

Monetary policy stance in H1-FY11

SBP's inflation projection at the beginning of FY11 was in the range of 11 to 12 percent for the year, compared to the government target of 9.5 percent. Inflationary pressures were on the higher side since there was no easing in government borrowing from SBP. The government net budgetary borrowing from SBP reached Rs 65.0 billion in first three week of July 2010, in addition to an increase of over Rs 100 billion during the second half of the previous year.

Figure 5.3: SBP Monetary Policy - Key Indicators for Consideration



Source: : State Bank of Pakistan

Containing the fiscal deficit for FY11 at the targeted level of 4 percent was clearly going to be very difficult. The possible impact of implementing a reformed GST, as agreed with the IMF, and upward revision in electricity tariffs worsened the inflationary outlook. Meanwhile, improvement in the external accounts was projected to remain modest. These developments necessitated adjustment in monetary policy to contain inflationary pressures; consequently, SBP increased its policy rate by 50 bps to 13.0 percent in its monetary policy announcement of July 2010. The minutes of the Monetary Policy Committee (MPC) reveal that an increase in the benchmark interest rate was unanimously recommended by all members of the committee.

[2] In this section, inflation numbers are based old base as the monetary policy decisions and inflation projections during FY11 were based on these numbers.

However, soon after the policy rate was increased, the country experienced devastating floods. A significant portion of agriculture land was impacted. Infrastructure (e.g., road network, railway tracks, canal system, communication, government buildings etc.) was seriously damaged, and over twenty million people were displaced. Consequently, food inflation increased sharply, surging to 21.2 percent in September 2010 compared to 12.8 percent in July. Headline inflation also saw a rise of 337 bps to 15.7 percent over the same period.

The floods also undermined government efforts to contain fiscal deficit. Expenditures of federal and provincial governments significantly increased, priorities were shifted from development expenditures towards rehabilitation of flood affectees, and the efforts to collect revenues suffered a major setback. The widening fiscal deficit was largely financed through short-term borrowing from the banking system. Specifically, government borrowing from SBP spiked to Rs 220.3 billion by 24th September 2010 from the beginning of the year. Reserve money also registered an expansion of 9.4 percent over the same period compared to 11.4 percent for the full year of FY10.

In these circumstances, SBP's inflation projections for the year were revised upward in the range of 13.5 to 14.5 percent. Moreover, the current account balance was also projected to deteriorate due to possible increase in imports of food items and slowdown in exports. Keeping the inflationary impact of these issues in mind, SBP revised its policy rate upward by 50 bps to 13.5 percent in its monetary policy statement of end September 2010.

Despite gradual monetary tightening, the inflationary outlook continued to worsen. Food inflation peaked at over 20 percent in Q2-FY11. Government borrowing from SBP followed a rising trend, reaching Rs 251.3 billion by 27th November 2010, just before the announcement of SBP's monetary policy statement on 29th November. The sharp increase in international commodity prices emerged as an added risk to the inflationary outlook. Specifically, the price of oil increased significantly during Sep-Nov FY11.[3] There was, however, a silver lining to these negatives, as the impact of rising international prices of cotton and textile related exports was markedly positive on the current account. However, the overall impact on the external sector was fairly uncertain at that point in time. Although the current account balance registered significant improvements in the months of September and October, it deteriorated once again in November 2010. Against this backdrop, the SBP increased its policy rate by another 50 bps to 14.0 percent in November 2010. Minutes of the MPC meetings reveal that six out of eight members voted for a 50 bps increase in the policy rate and one member voted for a 100 bps rise, whereas another member voted to maintain the policy rate at 13.5 percent. With this announcement, the cumulative rise in the policy rate reached 150 bps during the first half of the year.

Monetary policy stance from gradual tightening to Hold: H2-FY11

Although implementation of fiscal reforms to enhance tax collection was held in abeyance, the government made concerted efforts to shift its borrowing away from SBP towards commercial banks. The government started to gradually retire its debt to the central bank from mid-December 2010, the government actually retired Rs 214.1 billion to the central bank during one and half month (from 11th Dec-10 to 29th Jan-11). Moreover, risks to the external account position were subsiding, and inflationary pressures were also expected to ease off once the effect of supply side disturbances was dissipated. In addition to the lagged impact of monetary tightening in H1-FY11, these developments allowed the SBP to change its monetary policy

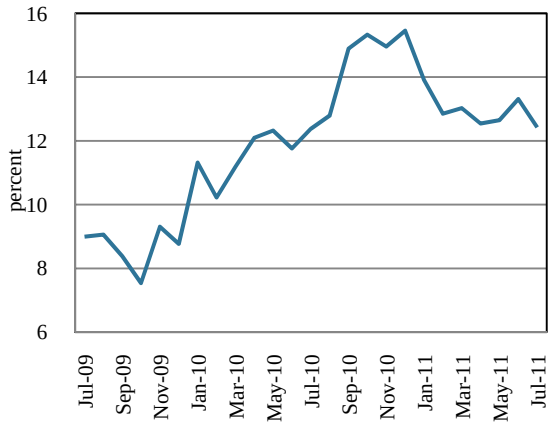
[3] Given the Pakistan's dependence on imported oil, changes in oil price have strong implication for inflationary outlook through both direct and indirect channels.

stance from gradual tightening to hold. Specifically, SBP kept its policy rate unchanged at 14.0 percent in its monetary policy announcement in January 2011.

It is pertinent to note here, that the MPC was fairly divided on the recommendation to hold the policy rate unchanged. In fact, three out of eight voting members were of the view that the policy rate should be increased since upside risks to inflation were high.[4] Specifically, reserve money supply saw an expansion of 16.5 percent during 1st July 2010 to 15th January 2011, compared to 11.4 percent over the same period last year.

With hindsight, the decision to hold the policy rate unchanged in January 2011 proved to be correct. The government adhered to its commitment to shift its borrowing from SBP towards commercial banks. However, implementation of much needed fiscal reforms (particularly for revenue generation) was delayed.[5] The real comfort came from improvement in the external sector. The current account balance improved significantly due to strong growth in exports and robust growth in workers' remittances. These positives allowed SBP to keep its policy rate unchanged in the next two monetary policy announcements (26th March and 21st May 2011).

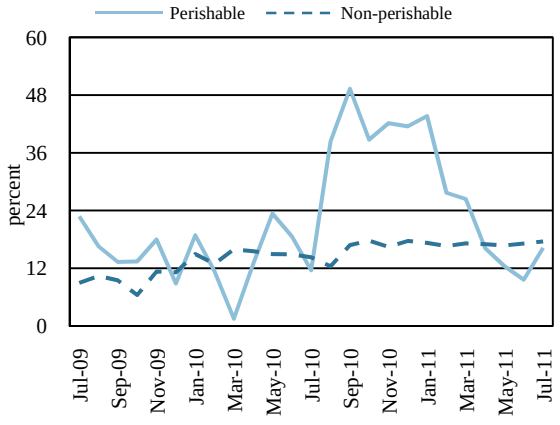
Figure 5.4: Trend in CPI inflation



Source: : State Bank of Pakistan

Headline inflation for FY11 turned out to 13.9 percent compared to 11.7 percent in the previous year (with CPI base year 2000-01). While it was largely in line with revised SBP projections of 14.0 to14.5 percent, stubborn inflation despite SBP's active monetary management, attracted some criticism from the print media and business communities.[6] Increasingly within SBP, there was a realization that activities are largely constrained by supply side factors like the energy shortage, security concerns, and socio-political uncertainty. There was a need to balance our policy formulation.

Figure 5.5: Food Inflation (YoY)



Source: : State Bank of Pakistan

[4] Five members voted for status quo, i.e., to keep interest rates unchanged.

[5] Specifically, the government was largely unmoved on key fiscal reforms including expanding tax net to agriculture sector, restructuring of loss making public sector enterprises (PSEs) and implementation of reformed general sales tax (GST). For details, please see Chapter on Public Finance.

[6] The response to this criticism can be found by turning attention towards the massive government borrowing from the SBP which took place during H1-FY11 and supply disruptions on account of devastating floods at the beginning of the year. If the SBP had not continued with monetary tightening during the first half of the year, annual inflation would have been significantly higher than the level observed in FY11.

Inflation target for FY12 and monetary easing at the beginning of the year

Based on the lagged impact of monetary tightening during H1-FY11, the gradual retirement of inflationary borrowing from the SBP (during H2-FY11) and a targeted fiscal deficit of 4 percent of GDP, SBP projected FY12 inflation to lie in the range of 11.5 to 12.5 percent. In addition to the continued improvement in the external front, this created some room for the SBP to change its monetary policy stance. Accordingly, the SBP reduced its policy rate by a cumulative 200 bps to 12.0 percent in its two successive monetary policy announcements.

Having said this, we are aware that weakness in the fiscal accounts poses a major risk to the inflationary outlook for this year. There is a dire need to implement key fiscal reforms, especially related to revenue generation measures and restructuring loss making PSEs. However, we remain confident that the government will continue to honor its commitment to stay below its borrowing limit from SBP and to aggressively seek non-traditional sources of external finance.

5.2 Inflation[7]

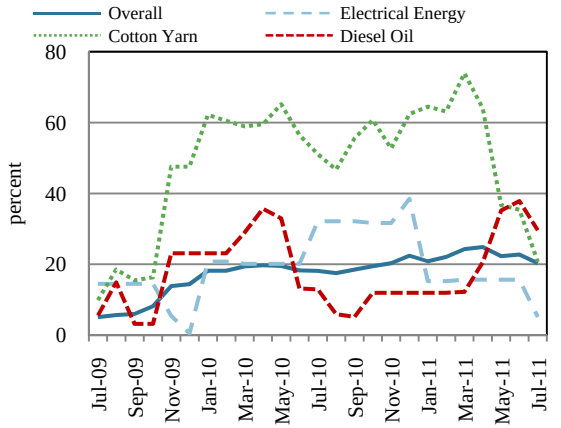
Average annual inflation for FY11 was 13.7 percent, compared to 10.1 percent in the preceding year. While the floods in the early part of FY11 are largely held responsible for the increase in inflation, we believe that a double-digit increase in prices was more or less inevitable.

The prices of perishable commodities were affected most by the floods, since their supply was severely restricted. Average inflation in perishable commodities stood at 29.8 percent in FY11 as compared to 15.0 percent in FY10. However, prices of other non-perishable food items, for which production and supply remained largely unaffected by the floods, also rose appreciably during the year.

To an extent, the rise in prices of non-perishable food items – and non-food commodities in general – was a consequence of rising international commodity prices. The higher global prices of edible oils, sugar, cotton, crude oil and petroleum products, and metals contributed significantly – directly and indirectly – towards maintaining upward pressures on domestic prices across the board.

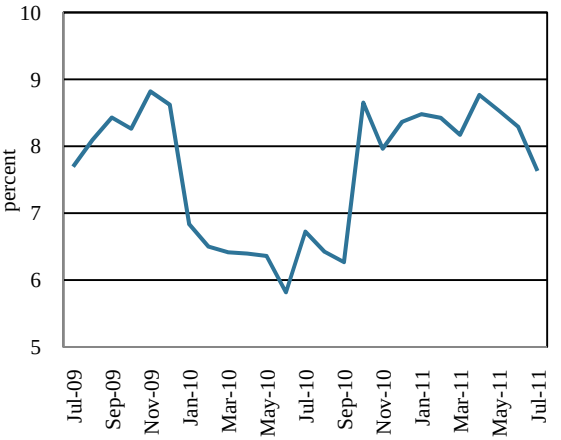
The trend in WPI, which averaged 21.1 percent in FY11, is a reflection of increases in international commodity prices. The

Figure 5.6:WPI Inflation and selected Components



Source: : State Bank of Pakistan

Figure 5.7: House Rent (YoY Growth)



Source: : State Bank of Pakistan

[7] This section is based on new CPI with base year 2007-08. For details on trends of different price indices, see monthly Inflation Monitor of SBP. http://www.sbp.org.pk/publications/Inflation_Monitor/index.htm

dramatic rise in cotton prices in the middle of FY11 and the steady increase in oil and petroleum product prices for most of FY11 were the major drivers of WPI inflation. However, as global commodity prices crashed at the end of FY11, domestic wholesale prices too have either stagnated or declined on a monthly basis.

While the contribution of global commodity prices in FY11 was significant, domestic policy decisions, such as the gradual phasing out of power subsidies and the encapsulation of more goods and services into the sales tax net, also played their part in maintaining price pressures. Simultaneously, house rents also rose due to the increase in construction costs. This trend contributed significantly to headline inflation due to its weight in CPI.[8]

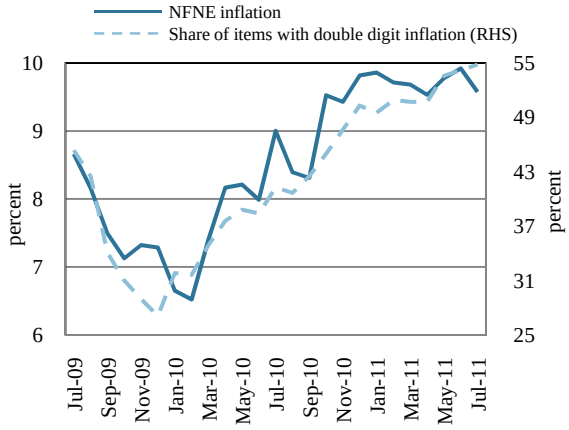
Most importantly, we believe that the perception that the government uses inflationary finance – such as borrowing from the central bank – reinforces self-fulfilling inflation expectations. So far, however, the government has managed to contain its level of borrowing from SBP at the end of the last two quarters of FY11, which will be important in anchoring expectations moving forward.

Such inflationary expectations are visible in the broad-based nature of inflation across commodities in the economy. The percentage of commodities exhibiting double-digit inflation has increased steadily from 29 percent in November 2009 to 55 percent in July 2011.[9] Non-food non-energy (NFNE) inflation, a measure of core inflation, increased steadily in FY11 and averaged 9.4 percent, reflecting persistence of inflationary pressures in the economy.

Inflation persistence has been corroborated by an internal survey that seems to indicate the backward-looking nature of inflation expectations.[10] Thus, the government's inflation target for FY12 of 12 percent appears to incorporate this persistence.

In fact, we believe that FY12 might bring about a slowdown in inflation as global commodity prices have and are expected to ease in the year. These prices are notoriously hard to predict, but with the euro-zone debt crisis; weak economic recoveries in the developed world; rising benchmark rates in developing countries seeking to rein in inflation; and rising agricultural output in response to high FY11 agriculture prices, we have reason to believe that commodity prices will recede in FY12. However, with the removal of subsidies in the domestic economy, the country will remain exposed to volatility in the commodities market and domestic price levels are expected to trend accordingly.

Figure 5.8: Core Inflation and Diffusion



Source: : State Bank of Pakistan

One of the key risks faced by the economy will be fluctuations in the price of crude oil and petroleum products. Even though the price of crude oil receded in May-July 2011, it may stage a

[8] House rent has a weight of 21.81 percent in the CPI.

[9] This means that since Nov-09, the number of commodities registering double-digit inflation has risen by an average of 6 each month.

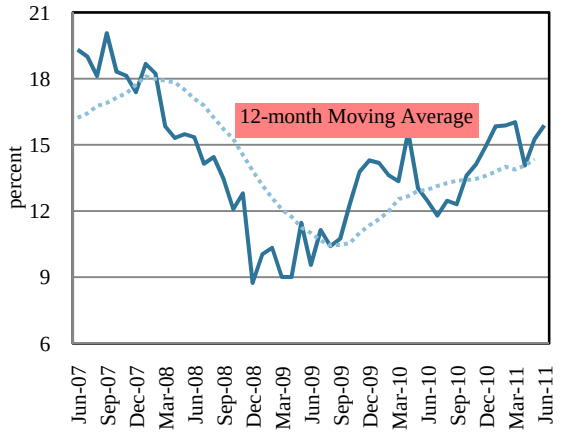
[10] Backward-looking expectations mean that consumers and producers forecast inflation using its past levels

comeback due to the expected increase in demand from non-OECD countries, which will likely be higher than the increase in output from OPEC countries. Implied volatility in oil prices remains fairly high and price forecasts are uncertain. In the absence of subsidies, the economy stands vulnerable to this volatility in oil markets. However, on the other hand, the removal of subsidies is necessary to control the country's fiscal gap and, in turn, inflationary expectations.

It is pertinent to note that inflation expectations may still persist even if greater fiscal discipline prevails. Supply constraints across the economy in the shape of power and natural gas shortages; inconsistency in changes in administered prices; and security concerns will not only contribute to inflation but also bolster perceptions of future price increases. An expansion in aggregate supply remains highly unlikely given the curtailment of development expenditures – due to the government's weak fiscal position – and the low level of fixed investment in the economy. The aggregate demand-supply gap is, therefore, expected to remain and contribute to inflationary pressures.

Despite the persistence in inflation and its expectations, we expect headline inflation to recede gradually over the next few months, as the high level of prices witnessed during last year's floods becomes the base for calculations. The decline in inflation may be also accelerated by falling global commodity prices and concrete steps towards fiscal consolidation to anchor inflation expectations and free up credit for the private sector to pursue capacity expansions.

Figure 5.9: YoY Growth in M2

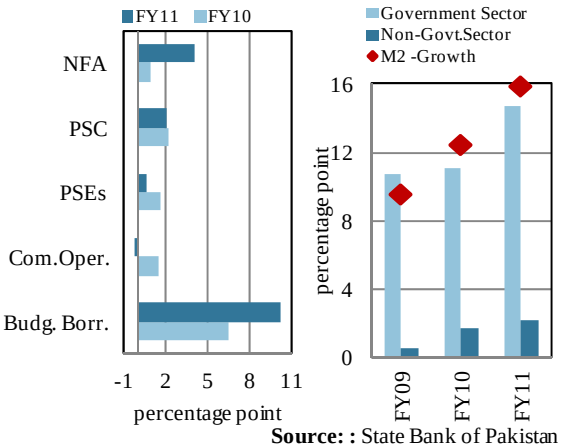


Source: : State Bank of Pakistan

5.3 Development in Monetary Aggregates

Growth in broad money supply (M2) gained traction for yet another year. Broad money increased by 15.9 percent in FY11 compared to 12.5 percent in the preceding year (**Table 5.1**). Monthly YoY growth in M2 depicts a rising trend since Dec 2008 after having a span of sharp deceleration during in H1-FY08 (**Figure 5.9**). A larger part of M2 growth in recent years was attributable to the government sector, which marginalized scope for private sector activities. Nearly 80.0 percent of banking resources in FY11 were used to finance budgetary requirements in the wake of growing fiscal slippages. Moreover, quasi -fiscal activities such as commodity operations and provision of credit to PSEs also took their toll on domestic banking resources (**Figure 5.10**).

Figure 5.10: Contribution in M2



Source: : State Bank of Pakistan

In FY11, the most striking feature of M2 growth was the sharp increase in Net Foreign Assets (NFA) of the banking system. This trend represents a stark contrast to the growth pattern observed in the previous three years, when NFA experienced a cumulative decline of Rs 439.6 billion. Another positive development was the containment of deficit

monetization via central bank borrowing. The government adhered to its borrowing limits agreed with SBP and retired Rs 100.4 billion to the central bank during Jan-Jun FY11. However, the limits were observed only at the quarter ends, whereas the government continued to borrow from central bank during the course of each quarter.

Table 5.1: Monetary Aggregates
flows in billion Rupees, growth in percent

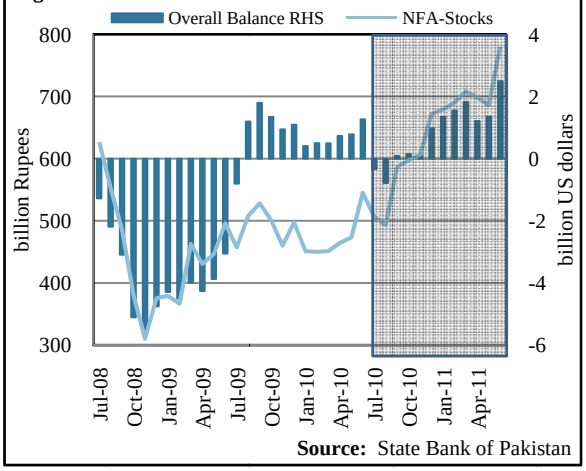
					% Growth	
	FY10	**FY11**	**H1-FY10**	**H1-FY11**	**FY10**	**FY11**
Broad money (M2)	640.0	918.0	300.4	399.5	12.5	15.9
NFA	49.4	235.0	47.5	108.2	10.0	43.1
SBP	75.9	235.3	57.8	131.1	25.0	62.1
Scheduled banks	-26.4	-0.3	-10.2	-22.8	-13.7	-0.2
NDA	590.6	682.9	252.8	291.3	12.7	13.1
SBP	86.4	48.7	-24.6	-81.7	9.6	4.9
Scheduled banks	504.2	634.2	277.4	373.0	13.5	14.9
of which						
Government borrowing	406.6	579.6	285.2	318.4	20.0	23.7
For budgetary support	330.4	590.2	199.6	281.7	19.7	29.3
SBP	44.0	-8.0	106.6	-100.4	3.8	-0.7
Scheduled banks	286.4	598.2	93.0	382.1	55.5	74.5
Commodity operations	77.0	-15.7	85.0	34.2	22.9	-3.8
Non government sector	198.8	158.5	-18.0	-21.3	6.2	4.7
Credit to private sector	112.9	121.3	-11.7	-42.0	3.9	4.0
Credit to PSEs	85.0	36.3	-8.0	20.6	31.9	10.3
Other items net	-14.9	-55.1	-14.5	-5.7	2.5	9.2

Source: State Bank of Pakistan

5.3.1 Net Foreign Assets (NFA)

Following improvement in the country's external accounts, pressure on NFA of the banking system gradually eased off. The NFA of the banking system witnessed an expansion of Rs 235.0 billion during FY11, considerably higher when compared with Rs 49.4 billion in FY10 (**Figure 5.11**).

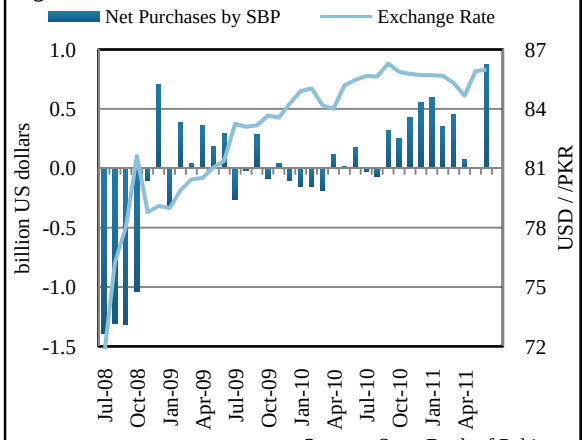
Figure 5.11: Stock of the NFA and Overall External Balance



Source: State Bank of Pakistan

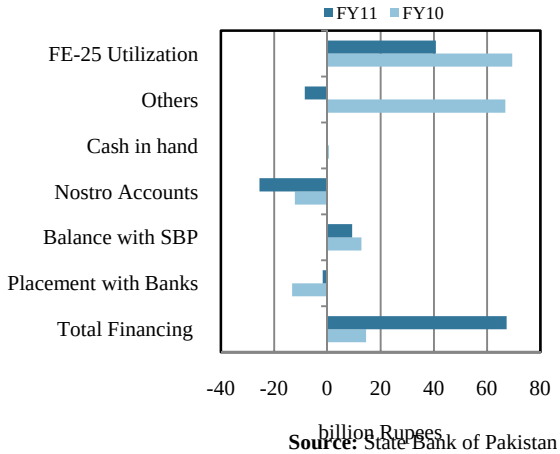
Within the banking system, expansion in NFA was primarily driven by accumulation of the SBP's foreign exchange reserves. Institutional flows from multilateral agencies, logistic support funds and other foreign grants supported this trend. The SBP NFA also gained impetus from net purchases in the foreign exchange market. Specifically, the SBP's active participation in the foreign exchange market helped to reduce excessive volatility in the exchange rate during the year (**Figure 5.12**).

Figure 5.12: Central Bank Intervention in the Forex Market



Source: State Bank of Pakistan

Figure 5.13: FE-25 Utilization



Source: State Bank of Pakistan

In contrast to the central bank's reserve assets, NFA of scheduled banks witnessed a contraction of Rs 0.3 billion during the year. Aside from the sale of foreign exchange to SBP, lower inflows from FE-25 deposits and a rise in foreign currency loans kept the NFA position of scheduled banks in check. In fact, the steady increase in the EFS rate over the last two years in addition to an all time low interest rate environment at the international level pushed up the interest rate differential between foreign currency loans and EFS financing. Together with a stable exchange rate, this development allowed traders (exporters and importers) to substitute EFS financing with low cost foreign currency loans. As a result, banks' placements of foreign currency assets in nostro accounts declined during FY11. This substitution in the utilization of FE-25 deposits further depleted scheduled banks' NFA (**Figure 5.13**).

5.3.2 Net Domestic Assets (NDA)

NDA of the banking system registered a growth of 13.1 percent during FY11, slightly higher than 12.7 percent in FY10. Among the causative factors, major contribution in NDA expansion came from budgetary financing, whereas share of commodity operations and credit to public sector enterprises declined during FY11 (**Table 5.2**).

Table 5.2: Contribution in NDA Growth

	FY09	FY10	FY11
NDA growth	15.4	12.7	13.1
Budgetary borrowing	7.9	7.1	11.3
Commodity operations	5.2	1.7	-0.3
PSC	0.4	2.4	2.3
PSEs	3.8	1.8	0.7
OIN	-1.9	-0.3	-1.0

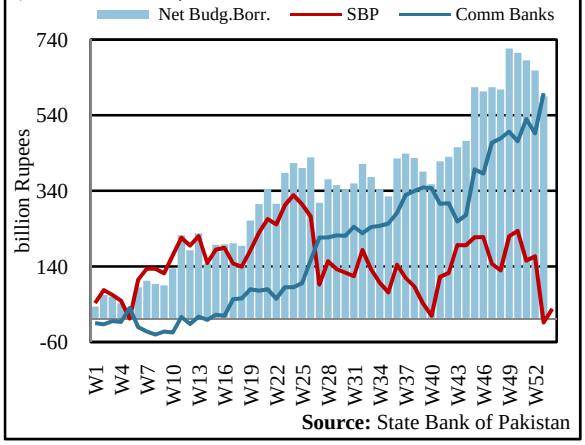
Source: State Bank of Pakistan

Government borrowings for budgetary support

Budgetary borrowings from the banking system reached a record high of Rs 590.2 billion during FY11 compared to Rs 330.4 billion in the previous year. In addition to this, the government also borrowed Rs 424.0 billion from other domestic sources of funding. Fiscal slippages and shortfall in external financing left the government with no option but to rely on domestic resources.

However, an important development during

Figure 5.14: Budgetary Borrowing from the Banking System
(Cumulative Flows)

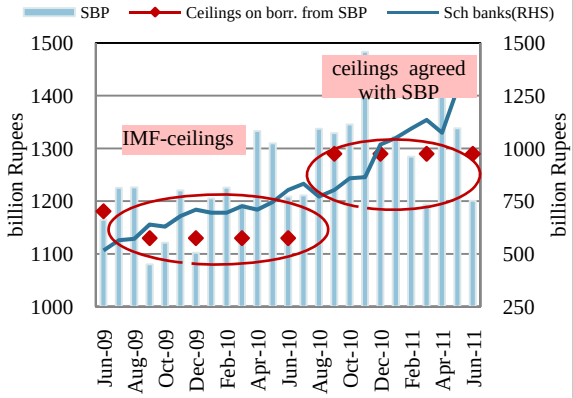


Source: State Bank of Pakistan

FY11was the welcome shift in the composition of budgetary borrowing from the SBP to scheduled banks. Specifically, the government retired Rs 8.0 billion to the central bank during FY11. It may be pertinent to note here that during Jul-Nov FY11, the burden of deficit financing remained concentrated on the SBP; it was only after November 2010 that the government altered its financing mix and eased its reliance on central bank borrowing because of an understating with the SBP (**Figure 5.14**). Retrospectively, the large fiscal deficit could not allow the government to remain within ceilings agreed under the IMF SBA program, and the limit on central bank borrowing was breached in the last two quarters of FY10 to this effect. The same trend continued in the Jul-Nov FY11, and SBP financing reached a level of Rs 274.7 billion, posing a considerable inflationary threat.

In view of the adverse implications of heavy central bank borrowing for the overall macro-economy and effective monetary management, the government and the SBP mutually agreed upon a ceiling on government borrowing.[11] The restraint on central bank borrowing after November 2010 continued to remain in line with ceilings agreed with the SBP. The government's compliance with ceilings at quarter-ends seems quite encouraging. However, these restrictions were not observed during the course of each quarter and, on average, the government borrowed Rs 133.5 billion in each month of the last two quarters in FY11(**Figure 5.15**). Over the same period, government borrowing from scheduled banks increased since there was no recipe for curtailing the overall size of the fiscal deficit.

Figure 5.15: Stock of Net Budgetary Borrowing from Banking System



Source: State Bank of Pakistan

Scheduled banks were able to finance budgetary requirements of Rs 598.2 billion during FY11. Retirement under commodity operation loans and low credit off-take to the PSEs allowed banks to fulfill government appetite for borrowing.

Advances to the public sector enterprises (PSEs) decelerated during FY11 and banks financed credit demand of Rs 36.3 billion during FY11, as compared to 85.0 billion in the previous fiscal year. Majority of the increase in credit to PSEs came from cash-strapped, publicly-owned oil and electricity distribution companies, whereas demand from Pakistan Steel Mills (PSM) and Pakistan International Airlines (PIA) also remained high. This again point to the urgent need to restructure loss making PSEs.

Commodity operations

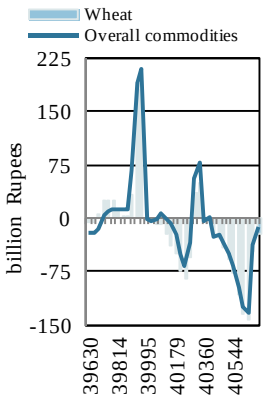
Net retirement in commodity finance loans was one of the few positives during the year.[12] Specifically, commodity finance loans registered a net retirement of Rs 15.7 billion in FY11 compared to net disbursements of Rs 77.0 billion in the preceding year (**Figure 5.16**).

[11] The government agreed to keep its outstanding stock of borrowing from the central bank at the September 2010 level of Rs. 1,155 billion (on cash basis).

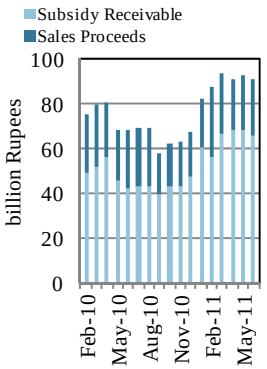
[12] In spite of self liquidating nature of commodity finance loans, the outstanding stock continued to pile up in recent years as the receivables on account of sale proceeds and subsidies of TCP, PASSCO and Provincial Foods departments jumped up.

Under commodity operations, a significant improvement was registered in the outstanding stock of wheat financing. The timely decision to export surplus wheat strengthened repayment capacity of procurement agencies, and created room for wheat procurement for FY11. Moreover, actual wheat procurement also remained lower than the targeted quantity. Consequently, demand of commodity loans remained subdued. The federal and provincial procurement agencies retired Rs 23.1 billion of wheat advances during FY11, which stands in contrast to an increase of Rs 48.4 billion in the previous year. A number of factors were responsible for hampering the wheat procurement drive during FY11 including: (1) lack of proper storage facilities since the agencies were already carrying wheat stock from the preceding year; (2) efforts to manage financial burden; and (3) non-materialization of subsidy receivables from the government (**Figure 5.16**).

Figure 5.16: Commodity Financing -cumulative flows)



Receivable of Procurement Agencies under Wheat Operation

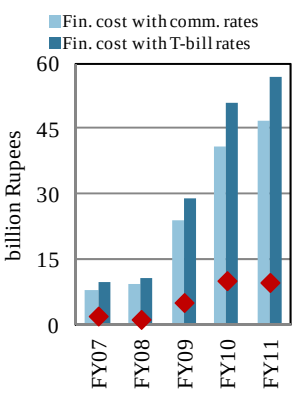


Source: State Bank of Pakistan

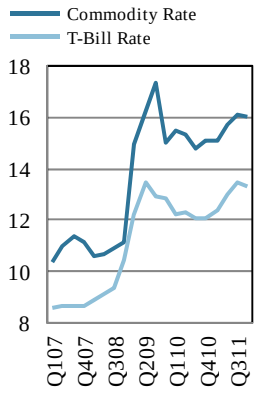
Aside from wheat, rice advances also experienced retirement during FY11. Procurement agencies made repayments by offloading rice stocks in the market. In addition to domestic procurement, banks also financed imports of sugar and fertilizer during FY11.

It may be important to note here that commodity loans are expensive for the government. Specifically, while the federal government borrows at t-bill yields, commodity loans are priced above KIBOR by a set margin. Any attempt to substitute expansive commodity financing with market-based borrowing would therefore reduce the government's financial burden on account of lower interest payments (**Figure 5.17**).

Figure 5.17: Financial Cost Associated with Commodity Operation



Comparison of Average Quarterly Rates (percent)

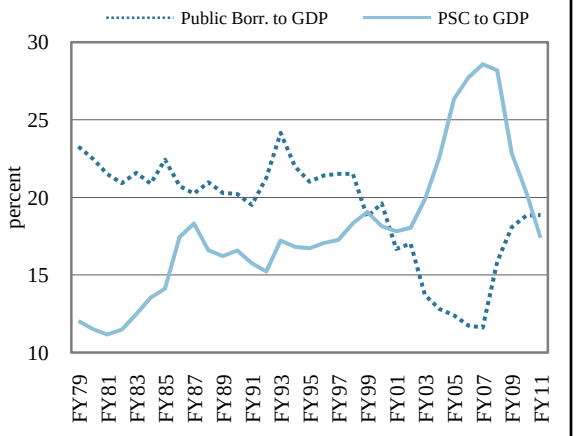


5.4 Private Sector Credit

Private sector credit registered a moderate growth of 4 percent during FY11, slightly higher than the growth rate experienced in FY10. This is a third consecutive year of low credit growth. To this effect, the credit to GDP ratio fell considerably in FY11 to 17.4 percent from 28.6 percent in FY08.

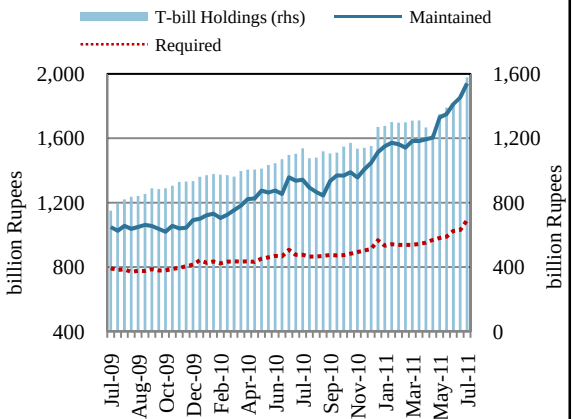
The composition of credit shows that credit expansion in FY11 was largely to meet working capital requirements as raw material prices continued to increase especially for textiles, sugar, edible oil and iron & steel industries. Specifically, 93.7 percent of the credit extended to corporate and SMEs was utilized for day-to-day business activity only.

Figure 5.18: Crowding Out of Private Sector Credit



Source: State Bank of Pakistan

Figure 5.19: Banking System Liquidity



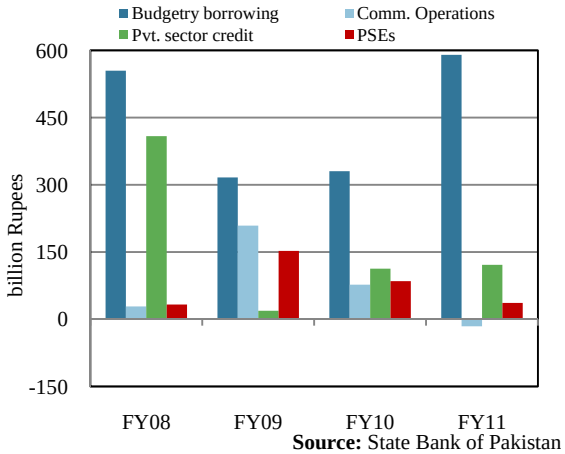
Source: State Bank of Pakistan

Credit expansion to SME sector as well as the number of SME borrowers experienced a decline during FY11. Both demand and supply side factors were at play. Credit demand from SMEs remained subdued due to high interest rates, continuous electricity and gas shortages, high collateral requirements for bank loans, and excessive documentation. On the supply side, scheduled banks were also reluctant to take exposure in this relatively riskier sector. However, compared to SME, corporate sector demand for credit increased significantly during FY11. Sharp increase in cotton and sugarcane prices and revival of business activities on account of strong demand for textile products from abroad (exports) created demand for loans from the corporate sector. Both the number of borrowers and credit to this sector increased during the year.

Compared to working capital loans, long-term borrowing for capacity enhancements remained passive. Specifically, fixed investment loans decelerated sharply during FY11 – a reflection of the weak socio-economic environment prevailing due to energy shortages, security concerns and escalating costs of doing business.

With regard to supply of loans, scheduled banks preferred to invest in liquid assets rather than extending credit to the private sector (**Figure 5.18 & 5.19**). Opportunity to invest in risk free government securities at high returns and increasing non-performing loans (NPLs) played a key role in encouraging banks to shift assets from advances towards investments.[13] This trend implies that massive government borrowing for budgetary finance is restricting flow of funds to the private sector (**Figure 5.20**).

Figure 5.20: Constraint to Private Sector Credit



Source: State Bank of Pakistan

[13] NPLs to loan ratio reached at a level of 15.4 percent in Jun FY11, considerably higher than 12.9 percent in corresponding period last year.

Table 5.3: Private Sector Advances (billion Rupees)

	Trade Finance		*Working Capital*		*Fixed Investment*	
	FY10	**FY11**	**FY10**	**FY11**	**FY10**	**FY11**
Private Sector (Advances)	23.1	56.7	20.8	105.3	62.1	11.0
A. Agriculture, hunting and forestry	-0.6	0.6	-1.0	9.8	8.7	0.6
B. Manufacturing	14.2	42.2	3.7	82.6	13.9	-3.0
Food Manufacturers	3.6	0.9	9.3	51.0	-2.1	9.1
Textile Manufacturers	1.7	29.9	-23.3	20.5	8.7	-5.9
Manufacturing Less Food and Textile	8.9	11.4	17.7	11.2	7.3	-6.2
C. Electricity, gas and water supply	1.1	1.8	8.5	37.6	51.5	14.5
D. Construction	-0.2	-0.5	-5.5	-1.7	1.8	2.8
E. Commerce and Trade	2.9	4.6	-1.6	-15.1	-5.1	-5.6
F. Transport, storage and communications	0.1	0.2	4.7	-3.8	3.0	4.6

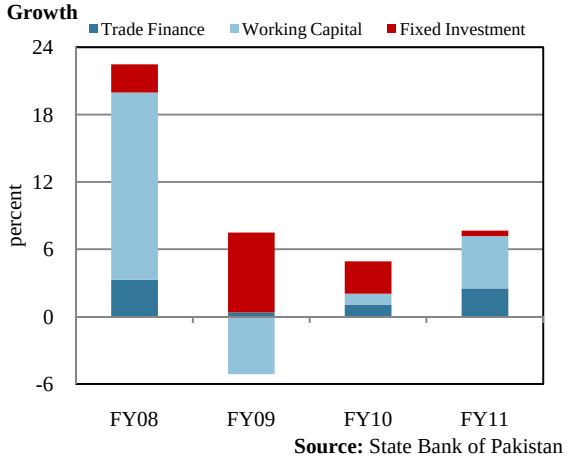
Source: State Bank of Pakistan

Private sector loans

Within credit, advances to the private sector during FY11 increased from 4.9 percent in FY10 to 7.7 percent in FY11 (**Table 5.3**).

Working Capital Loans: Increase in the operating costs of businesses due to higher commodity prices and the energy deficit supported demand for working capital loans during FY11. Furthermore, healthy export growth particularly during the second half of the year also contributed to higher demand for working capital loans. As a consequence, these loans recorded YoY growth of 9.5 percent in FY11 compared with 1.9 percent in the last year (**Figure 5.21**). In absolute terms, working capital loans rose by Rs 105.3 billion during FY11 as compared to an increase of Rs 20.8 billion.

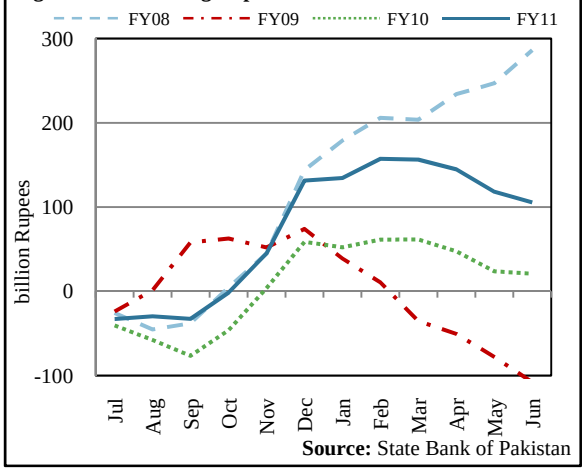
Figure 5.21: Private Sector Advances - Contribution in Growth



Source: State Bank of Pakistan

Another contributing factor towards growth in working capital loans was lower net retirement after the credit off-take cycle. Usually, loans taken under seasonal financing are mostly retired in the second half of the same year. This phenomena did not figure as prominently during FY11 as in previous years, with the exception of FY08 (**Figure 5.22**). The sector-wise break-up reveals that net credit expansion in working capital loans during H2-FY11 was concentrated in the sugar industry. In fact, huge disbursements were made to sugar manufacturers during Jan-Mar FY11 which were significantly higher than the monthly average disbursements during the last three years. As a result, the industry witnessed net credit expansion even during the retirement season. This unusual pattern

Figure 5.22: Working Capital Loans - Cumulative Flows

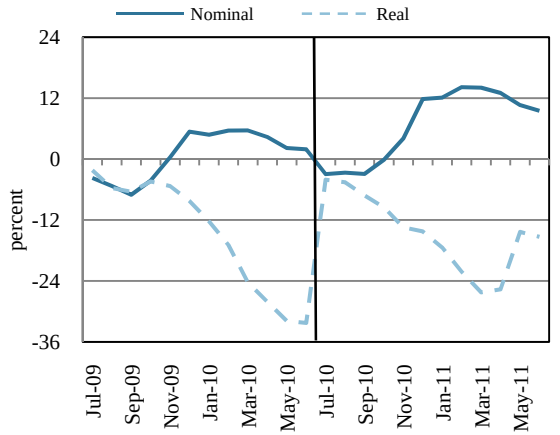


Source: State Bank of Pakistan

was primarily attributed to higher sugarcane prices as well as repayments of outstanding dues to the growers by sugar manufacturers.

The overall increase in working capital loans was concentrated in the manufacturing and power sectors. These two sectors jointly accounted for 114 percent of aggregate working capital loans. Most of the demand for running finance came from the sugar, textile and edible oil sectors. These sectors faced rising input prices such as those of cotton, sugarcane, edible oil, iron and steel. Working capital loans adjusted for higher prices of raw materials witnessed negative growth in FY11 (**Figure 5.23**).More importantly, excluding the food and textile sectors, demand for working capital loans remained largely unchanged as compared to the levels observed in FY10.

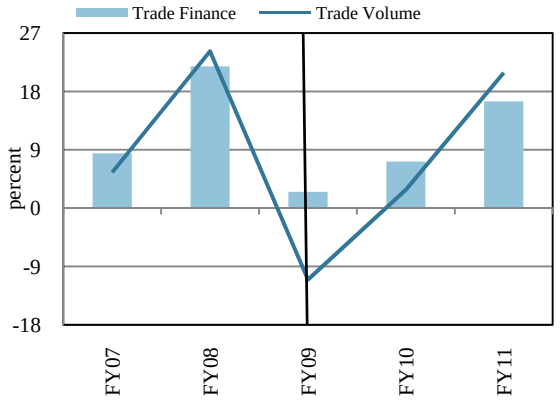
Figure 5.23: Working Capital Loans to Private Sector



Source: State Bank of Pakistan

Trade Finance: In line with increase in trade volume, trade financing accelerated during FY11 and posted strong growth of 16.5 percent compared with 7.2 percent in the preceding year (**Figure 5.24**). Both export and import finance contributed toward this acceleration during the period under discussion.

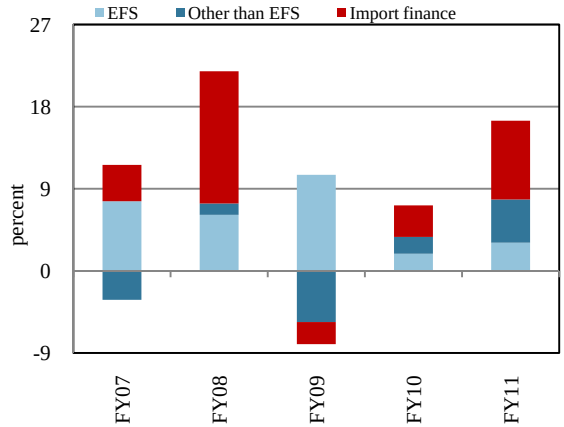
Figure 5.24: Co-Movement in Trade Finance and Trade Volume



Source: State Bank of Pakistan

Within overall export finance, concessional financing (EFS category) registered an increase of 5.4 percent in FY11, whereas loans other than EFS (FE-25 loans for exporters) witnessed remarkable growth of 40 percent during FY11 compared with 17 percent in FY10 (**Figure 5.25**). The increase in foreign currency loans availed by exporters was mainly due to the combined effect of a relatively stable exchange rate and the interest rate differential between domestic and foreign currency lending rates. Specifically, while domestic interest rate inched up, the weighted average foreign currency lending rate was declining continuously till Feb 2011. Exporters were naturally hedged against exchange rate risk in this regard, and availed this opportunity readily. However, as the foreign currency lending rate began to increase, exporters started to retire outstanding loans (**Figure 5.26**).

Figure 5.25: Composition of Trade Financing



Source: State Bank of Pakistan

Sector-wise distribution of trade loans reveals that textile sector remained the major beneficiary and availed nearly two-thirds of concessional lending (EFS) during the period under consideration. Moreover 58.6 percent of export loans other than concessional financing were also availed by the textile sector, which is in line with the sector's export performance during FY11.

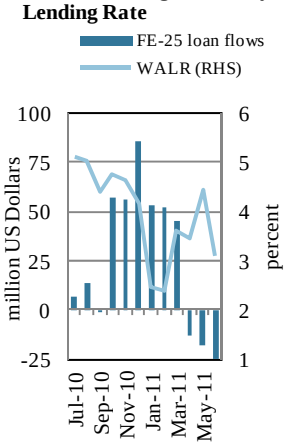
Within the trade loans category, manufacturing and commerce & trade sectors also utilized foreign currency loans for imports. While growth in credit to the commerce & trade sector was mainly caused by increase in imports of finished products, increase in import finance availed by the textile sector was concentrated towards cotton procurement, primarily due to soaring international prices of raw cotton. The impact of higher international commodity prices were also visible in basic iron & steel, edible oil and cement industries.

Fixed Investment: Unlike running finance and trade loans, fixed investment loans witnessed a sharp fall in FY11. Specifically, these capacity enhancement loans increased by only 1.4 percent – the lowest growth witnessed during the last five years.

Monthly trends in fixed investment loans indicate a marginal decline up to Jul-May (**Figure 5.27**). Large disbursements were made during the month of June to the power, fertilizer, basic metals, and electrical machinery, construction and telecom sectors due to which overall fixed investment loans depicted an end-year increase. Net credit expansion to this effect stood at Rs 15 billion in June 2011 against net retirement of Rs 4 billion in the first eleven months of FY11.

Despite a substantial increase in disbursements of fixed investment loans in Jun-11, overall disbursements in FY11 were well short of the average increase (Rs 45 billion) registered in the previous three years. As mentioned earlier, these disbursements were concentrated in a few sectors only.

Figure 5.26: FE-25 Loans vis-a-vis Foreign Currency Lending Rate



Export Financing

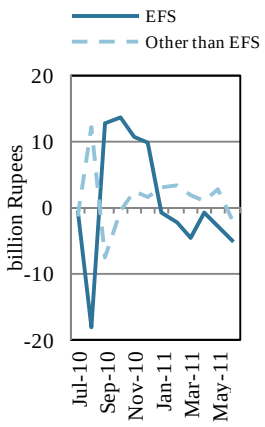
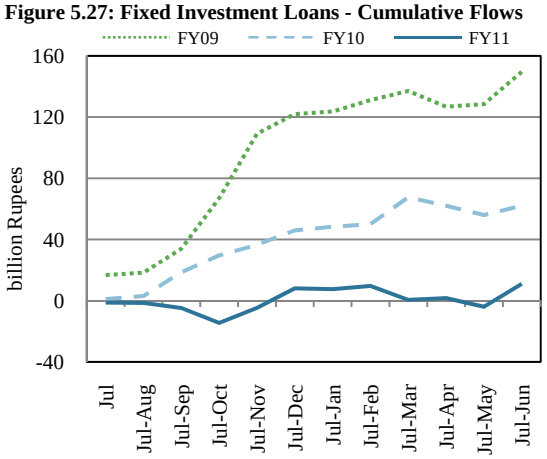
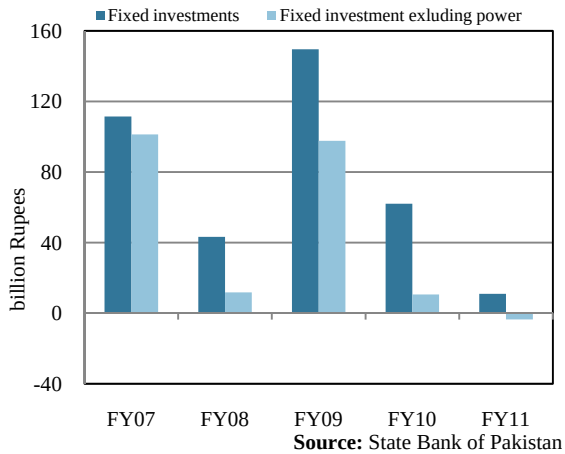


Figure 5.27: Fixed Investment Loans - Cumulative Flows



Source: State Bank of Pakistan

Figure 5.28: Fixed Investment Loans



Source: State Bank of Pakistan

Excluding the power sector, overall fixed investment loans witnessed net retirements of Rs 3.5 billion during FY11 (**Figure 5.28**).

Nonetheless, aggregate long term loans availed by the power sector were considerably lower in FY11 compared to FY10 since the sector also received inflows through foreign private investment. Similarly, the cement and beverages industries also relied on foreign inflows for capacity enhancements instead of borrowing from domestic resources (**Table 5.4**).

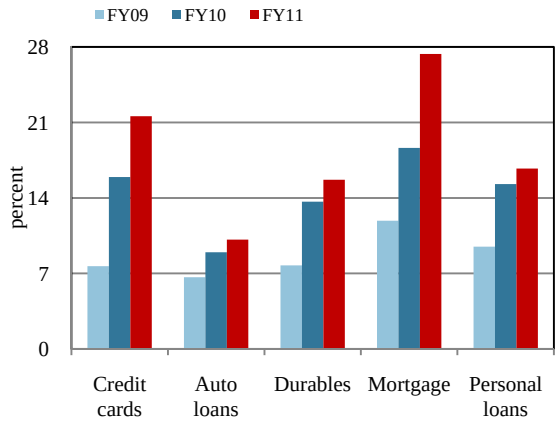
Table 5.4: Investment Flows - Major Sectors
million Rupees

	Fixed Investment	Foreign Inflows	Total
Power	14,459.0	23,681.9	38,141.0
Cement & ceramics	-4,866.4	6,572.5	1,706.2
Sugar	8,526.8	401.2	8,928.0
Beverages	-394.0	662.0	268.0

Source: State Bank of Pakistan

Other sectors which witnessed an increase in fixed investment loans – such as textile, electrical machinery apparatus and telecom - also witnessed an increase in the imports of their respective machinery and apparatus. However, significant declines in fixed investments for the spinning and textile finishing sub-sectors overshadowed investment activities within weaving, made-ups, knitwear and other textile manufacturing sub-sectors. The sugar sector also witnessed an increase of Rs 8.5 billion under fixed investment loans during FY11.

Figure 5.29: Consumer Loans - NPLs to Loan Ratio



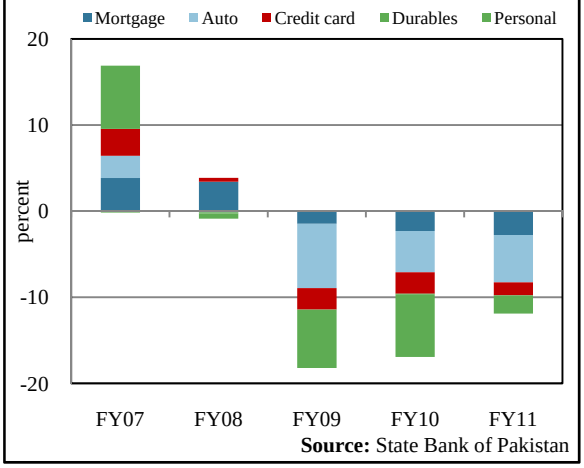
Source: State Bank of Pakistan

Consumer loans

Consumer financing continued to decline for the third successive year, by 11.9 percent in FY11 compared with 16.9 percent in the previous year. Whereas higher interest rates kept demand for consumer loans in check, banks were conservative in lending to this risky business segment in light of mounting NPLs on the consumer loan portfolio (**Figure 5.29**) – particularly in the presence of opportunities to invest in risk free government paper.

Each category within the consumer finance segment has registered a persistent increase in the loan infection ratio for the last three years. This increase has been a combination of rising NPLs and declining credit to each category with the exception of consumer durables. Consumer durables were the only category under consumer financing which recorded positive growth rate during FY11. However, its share is very nominal in terms of the overall portfolio, and impact on overall consumer loans remained muted.

Figure 5.30: Consumer Loans - Contribution



Source: State Bank of Pakistan

Major contribution towards net retirement of consumer financing came from the auto sector (**Figure 5.30**). Despite an increase in

auto sales, significant retirements indicate increasing prominence of cash-based sales. However, data on disbursements suggests some improvement took place in consumer financing during FY11. Amongst the large privatized banks, one bank in particular is aggressively involved in auto financing, encouraged by the decline in non-performing loans within this category during the last two years. Nonetheless, the overall impact of retirements in outstanding stock of loans exceeded total disbursements during the period under consideration.

Box 5.1: Rebasing of Price Indices

In September 2011, the Federal Bureau of Statistics (FBS) developed a new set of price indices with FY08 as the base year. The weights of consumer items in the new basket have been derived from a Family Budget Survey conducted by the FBS in FY08 that covered above 50 thousand households in 65 cities. The salient features of new base data are given below:

Consumer Price Index

- The number of commodities included in new CPI basket is 487; earlier it was 374. These commodities have been classified into 12 groups according to a scheme developed by United Nations, i.e. "Classification of Individual Consumption According to Purpose (COICOP) (**Table 5.5**).
- In the new basket of consumer goods, the weight of the foods group is lower. This implies that headline inflation will be more resilient to food price shocks in the future. On the other hand, the share of transport and communication has increased, which means that increases in the price of petrol and diesel will have a larger effect in the new measure of CPI inflation.
- The new index covers 40 cities compared with 35 cities in old index. The number of income groups has also been increased from 4 to 5: the first group contains consumers with incomes upto Rs 8000 per month; the second income group is Rs 8001-12000; the third group is Rs 12001-18000; the fourth group is Rs 18001-35000 and the last group of consumers has incomes above Rs 35000 per month.
- In the old CPI, the rent index was estimated indirectly using the price of building materials and the wages of the labor; however, in the new series, it is based on an actual rent survey conducted on a quarterly basis.

Table 5.5: Changes in the CPI Basket

Commodity Groups in FY01 Basket	Weight	Commodity Groups in FY08 Basket	Weight
Food Beverages & Tobacco	40.3411	Food & Non-Alcoholic Beverages	34.8343
		Alcoholic Beverages & Tobacco	1.4135
		Restaurant & Hotels	1.2286
	40.3411		**37.4764**
Apparel, Textile & Footwear	**6.0977**	Clothing & Footwear	**7.5708**
House Rent	23.4298	Housing	21.81
Fuel & Lighting	7.2912	Water, Electricity, Gas & Other Fuels	7.60
	30.721	Housing &Water, Electricity, Gas & Other Fuels	**29.41**
Household Furniture & Equipment	**3.2862**	Furnishing & Household Maintenance Equipment	**4.2082**
Transport & Communication	7.3222	Transport	7.2023
		Communication	3.2198
	7.3222		**10.4221**
Recreation & Entertainment	**0.8259**	Recreation & Culture	**2.0227**
Education	**3.4548**	Education	**3.9431**
Cleaning, Laundry & Personal Appearance	**5.8788**	Miscellaneous Goods & Services	**2.755**
Medicare	**2.0728**	Health	**2.1868**

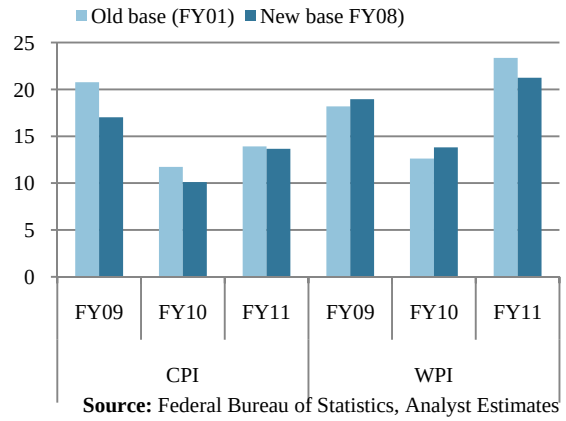
Source: Federal Bureau of Statistics

Since inflation in the recent past has been driven to a large extent by food prices, the new measure of CPI demonstrated lower year-on-year inflation compared with old series (**Figure 5.31**).

Wholesale Price Index (WPI)

For the WPI, the number of items has been increased to 463 from 425; the number of cities covered has been increased to 21 from 18; and the commodity groups have also been reclassified according to the scheme developed by United Nations (**Table 5.6**). As the weights allocated to different groups have also been changed, the overall inflation calculated according to the groups of commodities is different.

Figure 5.31 Comparison of YoY Inflation in Old and New Base Data



Source: Federal Bureau of Statistics, Analyst Estimates

Table 5.6: Changes in the WPI Basket

Commodity Groups in FY01 Basket	Weight	Commodity Groups in FY08 Basket	Weight
Food	42.12	Agriculture, Forestry and Fishery Products	25.77
Raw Material	7.99	Food Products, Beverages & Tobacco, Textiles, Apparel & Leather Products	31.11
Fuel, Lighting & Lubricants	19.29	Ores & Minerals, Electricity, Gas & Power	12.04
Manufactures	25.87	Other Transportable Goods except Metal Products, Machinery & Equipment	22.37
Building Material	4.73	Metal Products, Machinery & Equipment	8.71

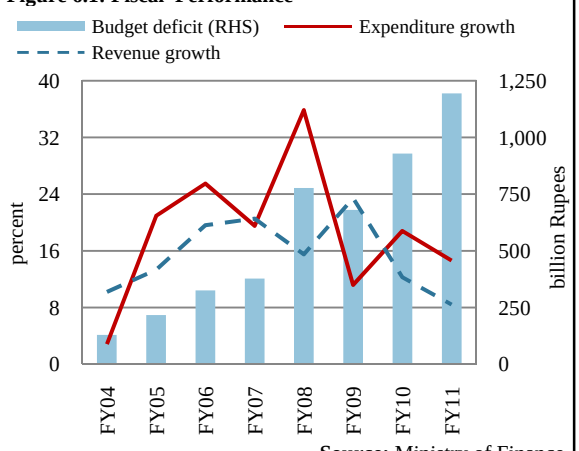
Source: Federal Bureau of Statistics

6 Fiscal Policy

6.1 Overview

While the government restricted growth in its total expenditure during FY11, growth in revenues declined more sharply (**Figure 6.1**). Resultantly, the budget deficit to GDP ratio increased to 6.6 percent in FY11 compared with a target of 4 percent.[1]

Figure 6.1: Fiscal Performance



Source: Ministry of Finance

At the time of setting budgetary targets for FY11, the government envisaged not only a considerable containment in its expenditures but also a sharp increase in tax revenues (26.2 percent) on the back of a promising set of tax reforms. However, it faced serious setbacks to its budgetary plans due to two unfavorable events:

a) The Federal Board of Revenue (FBR) could not introduce the Value Added Tax (VAT) due to opposition from the business community, and reservations of the provinces. Later, FBR came up with a new proposal, the Reformed General Sales Tax (RGST); however, this too could not be legislated by the parliament.
b) The country faced unprecedented floods in July and August 2010, which called for unplanned allocation of resources for the rescue and rehabilitation of flood victims.

Moreover, lower than expected inflows under the Coalition Support Fund and lower SBP profit exacerbated the fiscal stress. On the expenditure side, although overall expenditure was controlled, the government was unable to rationalize subsidies as planned in the budget: actual outlays for subsidies were three times higher than the target of Rs 126.7 billion set for FY11. Perhaps even more troubling is the fact that these subsidies primarily compensate the cost of inefficiencies of public sector enterprises, and their beneficiaries are not necessarily the poor. Although the government started raising electricity tariffs, this was not sufficient to bridge the gap between generation cost and revenue from consumers.[2] The process of phasing out subsidies was too slow to have a meaningful impact on the fiscal position.

The fiscal stress was felt throughout the year – even after the introduction of a number of austerity measures and additional revenue generating strategies during Q4-FY11. The budget deficit in the last quarter of FY11 was 2.3 percent of GDP,3 compared with an average of 1.5 percent during the first three quarters.

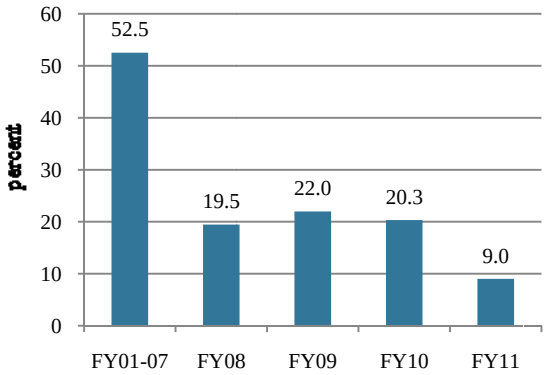
While a large budget deficit was one issue, its financing was another challenge. The government received Rs 107.7 billion in external financing, but this was only 58 percent of the target of Rs.

[1] The original target of deficit in the budget was 4 percent of GDP; however, it was subsequently revised upward during the year.
[2] See **Chapter 3** on energy for details.
[3] Budget deficit in Q4-FY11 was also higher than the average deficit of 2 percent in last quarters of past five years.

185.8 billion that had been set for the year. It is interesting to note that before the global financial turmoil of 2007-08, the share of external funds in total deficit financing was more than 50 percent; since then however, this has declined steadily and stood at only 9.0 percent for FY11 (**Figure 6.2**). The onus of budgetary financing thus fell upon domestic sources, particularly the banking system, which accounted for over half of total deficit financing.

It is encouraging to note that within the banking system, budget financing from the central bank was negative during the year, i.e. the government actually retired its earlier debt with SBP. However, heavy borrowing from commercial banks is also undesirable as it not only crowds out private sector borrowing, but has adverse implications for the maturity profile of government debt as banks primarily lacked funds in short-term T-bills (see detail in **Chapter 7** on Domestic and External Debt).

Figure 6.2: Share of External Sources in Budget Financing



* FY04 is excluded from the average as there was negative financig in this year.

Source: Ministry of Finance

Going forward

The government announced fiscal deficit target of 4 percent of GDP in the budget for FY12. However, without credible policy measures to support fiscal consolidation, it seems less likely that budget target would be achieved. The floods in Sindh and a prolonged wave of dengue fever in Punjab have already put pressure on fiscal resources. Moreover, both provincial and federal governments are less likely to be frugal in the year ahead as elections get closer. Also the non-tax revenue are expected to remain below target as: (a) inflows under Coalition Support Fund are uncertain due to strained relations with US; (b) SBP's profit could be lower than expected due to expectation of low discount rate; and (c) no progress on the auction of 3-G licenses.

6.2 Key Features of Fiscal Operations

Key fiscal indicators including the fiscal balance, revenue balance and primary balance, all deteriorated during FY11 (**Table 6.1**). While the overall budget deficit increased to 6.6 percent of GDP during FY11, the revenue deficit, i.e., the gap between current expenditure and total revenue increased sharply from 2.1 percent of GDP in FY10 to 3.6 percent in FY11. This implies that the government had to borrow to finance not only its investment expenditure but also a part of current expenditure. While such excess borrowing adds to the government's debt burden, it contributes nothing to the debt repayment capacity of the economy.[4] It is alarming that the primary balance is also negative, i.e., the government is unable to generate enough revenue to meet its non-interest outlays.[5]

[4] If this continues, Pakistan will be caught in a debt trap.

[5] The primary balance excludes interest payments on loans acquired in the past from the overall balance and thus presents the picture of current fiscal activities.

On the revenue side, both tax and non tax revenues in FY11 were lower than projected. Furthermore, the government was unable to meet even its revised FBR tax collection targets.[6] The outcome for non-tax revenues was similar. While in FY10, the transfer of SBP profits – which were above target – compensated for the shortfall in other non-tax revenues, but this was not the case in FY11 as SBP profit was lower than estimated.

On the expenditure side, flood related expenses at the start of the fiscal year, continued law & order related pressure, and greater than budgeted subsidies, all led to slippages in the targeted budget deficit. The target for subsidies was set at Rs 126.7 billion, while actual disbursement was Rs 395.8 billion.[7]

Table 6.1: Summary of Consolidated Public Finance (billion Rupees)

	FY08	FY09	FY10	FY11	FY11 BE	FY12 BE
Total revenue	**1,499.4**	**1,850.9**	**2,078.2**	**2,252.9**	**2,574.4**	**2,870.5**
Tax revenue	1,065.2	1,316.7	1,472.80	1,699.3	1,858.70	2,151.2
Non-tax receipts	434.2	534.2	605.3	553.5	715.6	719.3
Total expenditure	**2,276.5**	**2,531.3**	**3,007.2**	**3,447.3**	**3,259.3**	**3,721.2**
Current	1,857.6	2,041.6	2,386.0	2,900.8	2,519.1	2,976.3
Development and net lending	423.4	455.7	652.8	514.0	740.1	744.9
Unidentified	-4.4	34.0	-31.6	32.5	0.0	0.0
Overall deficit	**777.2**	**680.4**	**929.1**	**1194.4**	**684.9**	**850.6**
Financing through:						
External resources	151.3	149.7	188.9	107.7	185.8	134.5
Internal resources	624.2	530.2	740.2	1,086.7	499.1	716.1
Banking system	519.9	305.6	304.6	615.1	166.5	303.5
Non-bank	104.3	223.8	435.6	471.6	332.6	412.6
Privatization proceeds	1.7	1.3	-	-	-	-
As % of GDP						
Overall Fiscal Balance	-7.6	-5.3	-6.3	-6.6	-4.0	-4.0
Revenue Balance	-3.5	-1.5	-2.1	-3.6		
Primary Balance	-2.8	-0.3	-2.0	-2.7		

BE: Budget estimate **Source:** Ministry of Finance

In order to curtail the budget deficit, the government announced a large cut in development spending and adopted austerity measures in March 2011 to save Rs 120 billion total expenditure. These measures included fifty percent cut in expenses on stationary, travelling, and POL entitlements; and ban on new recruitments and purchase of durable goods. However, despite these efforts, the fiscal deficit rose to Rs 1,194.4 billion; 74.4 percent higher than the target for the year, and 28.6 percent higher than actual deficit for the last year. The fiscal position has been worsening, and this can only be rectified by taking tough measures to increase revenues through capturing more people in tax net.

6.3 Revenues

In line with the trend in previous years, revenue collection fell short of its target in FY11. The government originally set a revenue target of Rs 1,858.7 billion, 90 percent of which was to be

[6] It has become a regular feature of Pakistan's fiscal operations that at the time of budget planning, quite an ambitious target is set for FBR tax collection; then it is revised several times during the year and at the end of the year, this revised target is also missed.

[7] See Federal Budget in Brief 2011-12, Table 27; column revised 2010-11.

collected by FBR.[8] Even though the target for FBR tax collection was subsequently revised from Rs 1,667.0 billion to Rs 1,588.0 billion, this too could not be met. A comparative analysis with the previous year also portrays a gloomy picture. Last year, the target for tax revenue was missed, while that of the non-tax revenue was successfully met. During FY11, however, both the tax revenue and non-tax revenues were below their targets.

An analysis of tax revenues shows that collection of direct taxes, sales tax and the petroleum development levy (PDL) was lower than initially estimated; with PDL even lower than the previous year's collection (**Table 6.2**). In order to mitigate the effect of a rise in international prices of high speed diesel (HSD) and motor spirit, the government cut the rate of PDL on them during the second half of FY11. While this maintained domestic prices at a lower level, it also slowed growth in PDL collection. In case of income tax and sales tax, a narrow tax base and tax evasion in the country continued to pose challenges for revenue collection. Total tax revenue thus reached Rs 1,699.3 billion with a growth rate of 15.4 percent over the previous year.

Table 6.2: Composition of Tax and Non-Tax Revenue (billion Rupees)

	FY10	FY11				
		Q1	*Q2*	*Q3*	*Q4*	Overall
Tax revenue	**1472.8**	**317.3**	**404.3**	**396.0**	**581.8**	**1699.3**
Direct taxes	528.6	94.4	144.7	135.1	220.5	594.7
Taxes on property	5.7	2.1	1.7	-0.1	0.1	3.8
Taxes on goods and services	641.5	156.9	182.8	178.4	256.3	774.4
Taxes on international trade	161.5	36.5	44.1	47.1	57.8	185.4
Petroleum levy	88.7	15.3	20.1	21.2	26.1	82.7
Other taxes	46.8	12.0	11.0	14.3	20.9	58.2
Non-tax revenue	**605.3**	**82.9**	**185.2**	**109.6**	**175.8**	**553.5**
Interest	10.5	0.5	4.6	1.7	4.6	11.3
Dividend	52.8	0.5	17.0	12.1	21.1	50.6
Transfer of SBP profits	233	40.0	40.0	45.0	56.0	181.0
Defense	115.6	1.4	65.5	1.6	2.2	70.7
Development surcharge on Gas	25.9	5.0	12.3	4.5	8.5	30.4
Discount retained on crude Oil	12.5	3.0	7.5	6.4	19.0	35.9
Royalties on gas and oil	33	19.6	7.0	14.3	18.2	59.1
Miscellaneous	122	12.9	31.2	24.0	46.3	114.4
Total revenue	**2078.2**	**400.1**	**589.5**	**505.6**	**757.6**	**2252.9**

Source: Ministry of Finance

FBR taxes

For the third consecutive year, the FBR failed to achieve its annual tax collection target. The FBR needed a growth of 19.6 percent in tax collection during FY11 to achieve the target; however, actual growth in tax collection was 16.8 percent (**Table 6.3**). It may be noted that this was 6 percentage points lower than nominal GDP growth indicating a low buoyancy of taxes.[9] It implies tax collection during FY11 could not keep pace with the growth in tax base due to large-scale exemptions, leakages, lax enforcement of tax laws, and distrust between the taxation authority and tax payers.

In order to achieve its target, the FBR planned a number of tax reforms including introduction of value added tax (VAT), removing exemptions and increasing documentations. However, due to significant pressure from various interest groups, it had to almost abandon its drive towards tax

[8] Although provinces also have the authority to tax economic activities, especially services, they face serious capacity constraints. Therefore, the country effectively relies on the FBR for tax collection.

[9] There was a unit buoyancy of total FBR taxes (on average) during the previous decade (2000-10), i.e. tax collection was growing with the same rate as that of tax base.

reforms. Although value added tax was rebranded as the Reformed General Sales Tax, it could not be implemented. Faced with a shortfall in revenues, the FBR took some ad hoc measures to raise revenue in the last quarter of the year. Despite these efforts, it failed to achieve year-end tax collection targets.

Table 6.3: FBR Tax Collection (Net) during Jul-Jun (billion Rupees)

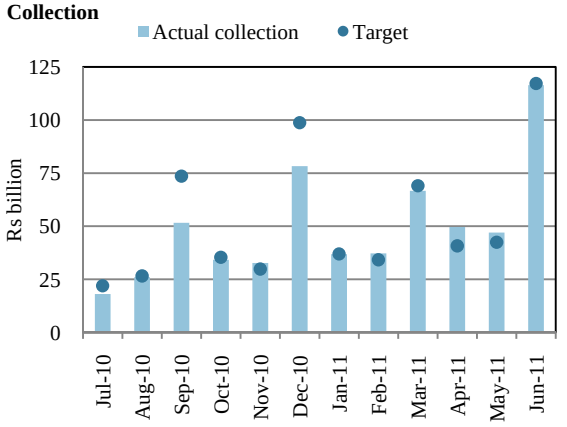
	Annual target		Net collection		% of annual target		% change YoY	
	FY10	**FY11R**	**FY10**	**FY11**	**FY10**	**FY11**	**FY10**	**FY11**
Direct taxes	565.6	626.9	526.0	602.5	93.0	96.1	19.5	14.5
Indirect taxes	814.4	960.8	801.4	955.6	98.4	99.5	11.6	19.2
Sales tax	499.9	654.6	516.3	633.4	103.4	96.8	14.2	22.7
FED	152.8	132.9	124.8	137.4	81.7	103.4	6.2	10.1
Customs	162.2	173.3	160.3	184.9	98.8	106.7	8.0	15.3
Total collection	**1,380.0**	**1,587.7**	**1,327.4**	**1558.0**	**96.2**	**98.1**	**14.6**	**17.4**

Source: Federal Board of Revenue

Direct tax collection

With the exception of September and December, monthly targets for direct tax collection were successfully achieved during FY11. However, the shortfall in these two months was large enough to cause a slippage in the full year target (**Figure 6.3**). To raise receipts in terms of direct taxes, the FBR administration resorted to frequent postponement of deadlines for income tax returns and introduced a onetime flood surcharge applicable on income and withholding taxes payable at the rate of 15 percent during the March 15 to June 30, 2011 period. Nonetheless, annual collection remained short of target by Rs 24.4 billion.

Figure 6.3: Month-wise Direct Tax Targets and Actual Collection



Source: Ministry of Finance

Indirect tax collection

The annual collection of indirect taxes was Rs 955.6 billion in FY11, which was 19.6 percent higher than the previous year. Although the domestic commodity producing sector remained under stress due to floods and energy constraints, a surge in imports supported growth in indirect tax collection (**Table 6.4**).

While collection under the head of federal excise duty (FED) and customs duty surpassed the target by Rs 16.4 billion, sales tax collection fell short of target by Rs 21.8 billion. However, growth in sales tax for FY11 was higher than that in FY10;

Table 6.4: Indirect Tax Collection (Net) during Jul-Jun billion Rupees

	Collection		% growth	
	FY10	**FY11**	**FY10**	**FY11**
Imports	**421.1**	**513.0**	**15.0**	**21.8**
Sales tax	247.2	308.6	21.6	24.8
FED	13.6	19.5	-5.7	44.0
Customs duty	160.3	184.9	8.0	15.3
Domestic	**380.3**	**442.5**	**8.0**	**16.4**
Sales tax	269.1	324.7	8.1	20.7
FED	111.2	117.8	7.9	5.9
Total collection	**801.4**	**955.6**	**11.6**	**19.2**

Source: Federal Board of Revenue

it missed the target simply because of too high a target set at the beginning of the year and failure to introduce planned reforms during the year.

The import component of sales tax collection grew by 24.8 percent on the back of stronger growth in the rupee value of imports. Petroleum products and edible oil remained the top revenue source of sales tax on imports. Within the domestic component of sales tax collection, the largest contributions came from POL products, telecom, services, natural gas, sugar and cigarettes. Domestic sales tax collection also benefited from the revenue measures announced in March 2011; when sales tax was applied on the market price of sugar.[10] Moreover, exemptions for sales tax on fertilizers, pesticides and tractors, and zero rating on plants, machinery and equipment including parts were also withdrawn.

Federal excise duty (FED) contributed Rs 137.2 billion which was Rs 4.3 billion above the target. During March 2011, the FBR increased the rate of special excise duty from 1 percent to 2.5 percent; this boosted FED collection. Of the total domestic collection of FED, cigarettes & tobacco, cement and services were the biggest contributors.

The growth in rupee value of imports resulted in above target collection also supported collection under customs duty. In particular, POL Products, edible oil and vehicles (non-railway) stood out as the major heads contributing to collection of customs duty during FY11.

Non-tax revenues, on the other hand, were Rs 553.5 billion in FY11 which was not only less than previous year but also below the target for FY11. The largest component of non-tax revenue is SBP profit which was Rs 4.0 billion less than the target of Rs 185.0 billion for the year. The second major source was Coalition Support Fund (CSF); the receipts under CSF were Rs 70.7 billion against a target of 133.5 billion. Owing to volatility in Pak-US relations and US domestic fiscal constraints, Pakistan did not get a single penny after December 2010 as payments for logistic support provided to coalition forces. The other heads of non-tax revenue, like profits from Pakistan Telecommunication Authority and dividend from OGDCL, Pak Arab Refinery Ltd, and PSO also were less than their target.

6.4 Expenditures

Total expenditure witnessed 14.6 percent growth during FY11, driven exclusively by an increase in the current component. With 21.6 percent growth, consolidated current expenditures surpassed the FY11 target set in the budget by 15.2 percent. Development spending, on the other hand, declined by 21.2 percent over the previous year, and fell short of the budget target by 30 percent (**Table 6.5**).

Within the current expenditure, the largest increase was in subsidies which were 70 percent higher in FY11 than the previous year. The government set a target of total subsidies at Rs 126.7 billion at the beginning of the year. However, actual subsides given were Rs 395.8 billion during the year, i.e., three times higher than the target. More than 80 percent of this subsidy was given to the power sector, which includes a onetime payment of Rs 120 billion in May 2011 to partially settle the circular debt issue.

While subsidies – which are 13.6 percent of the total current expenditures – can potentially be rationalized, other heads of current outlays, including interest payments and expenditure on defense are rigid and hard to adjust. Together, these two capture more than 40 percent of current expenditures in Pakistan. The rigidity in current expenditure renders fiscal consolidation challenging; as a result the burden of adjustment usually falls on development expenditure.

[10] Previously, the sales tax on sugar was applicable at the rate of 8 percent, assuming a price of Rs 28.9 per kg.

Table 6.5: Break-up of Expenditures (billion Rupees)

				Absolute change over	
	FY10	**FY11**	**FY11 BE**	**FY10**	**FY11 BE**
Current	**2,386.0**	**2900.8**	**2519.1**	***514.8***	***381.7***
General public service	1,200.4	1434	1159	233.6	275
Interest payments	642.3	698	698.6	55.7	-0.6
Pension	74.7	106.6	90.7	31.9	15.9
Grants to non-govt.*	250.5	232.1	172.8	-18.4	59.3
Other general public service**	232.9	397.3	196.9	164.4	200.4
Defense	375	451	442.2	75.6	8.4
Public orders & safety affairs	49.5	64.2	51.3	14.7	12.9
Provincial	627.2	812.7	750.0	185.5	62.7
Others	133.9	139.2	116.6	5.3	22.6
Development	**613.4**	**506.1**	**733.5**	**-107.3**	**-227.4**
PSDP	517.9	461.5	610	-56.4	-148.5
Federal***	259.5	215.9	270	-43.6	-54.1
Provincial	258.4	245.6	340	-12.8	-94.4
Others	95.5	44.6	123.5	-50.9	-78.9

*This head also includes expenditure on war-on-terror
**This head includes spending on current subsidies.
***Net excluding development grants to provinces

Source: Ministry of Finance

This was exactly the case in FY11. Since the government lacked the fiscal space to deal with the exogenous shock caused by the floods of 2010, and external support was insufficient, it had to re-allocate funds from development projects to flood related activities. While this strategy helped the government in addressing rehabilitation efforts, development outlays witnessed a sharp reduction of 17.5 percent from Rs 613.4 billion in FY10 to Rs 506.1 billion in FY11.

6.5 Provincial Fiscal Operations

Driven by the acceleration in revenue growth, the consolidated fiscal balance of the provinces registered a surplus of Rs 134.5 billion. This pickup in revenue growth was the result of the 7th NFC award that raised the share of provinces in total revenue from 45 percent in FY10 to 56 percent in FY11. The provinces' own tax revenue also grew 17.9 percent compared with 18.9 percent in the previous year.

Sindh outperformed other provinces in terms of revenue generation, mobilizing Rs 27.5 billion in taxes during FY11 with an addition of Rs 5.9 billion over the previous year. It was followed by Punjab, with additional tax revenue of Rs 2.7 billion.

The growth in provincial expenditures in FY11 was contained to 19.0 percent in FY11, slightly above the previous year. This containment was, however, due to the reduction in development expenditures that showed a negative growth 5.0 percent. Otherwise, growth in current expenditure almost doubled compared with last year.

A province-wise analysis shows that Balochistan experienced the biggest increase in current expenditure in percentage terms; while in absolute terms Punjab stood out. The analysis of development expenditure shows that Khyber Pukhtunkwa (KPK) and Balochistan spent larger amounts than the previous year under this head, while the other two provinces allocated lower funds for development purposes than in the previous year. The devastating floods in Punjab and Sindh during the middle of 2010 forced these provinces to re-allocate development funds to flood related activities.

Table 6.6: Provincial Finance (billion Rupees)

	Punjab		Sind		KP		Balochistan	
	FY10	FY11	FY10	FY11	FY10	FY11	FY10	FY11
Total revenue	**401.7**	**531.0**	**241.0**	**330.7**	**152.3**	**223.8**	**81.0**	**125.9**
Provincial share in federal revenue	325.1	460.8	188.4	279.9	80.1	157.9	40.0	100.7
Provincial taxes	29.9	32.6	21.6	27.5	2.3	3.5	1.0	1.0
Provincial nontax	28.3	24.0	13.2	11.5	24.1	25.1	2.3	1.7
Federal loans and transfers	18.4	13.6	17.8	11.9	45.8	37.2	37.8	22.5
Total expenditure	**435.5**	**482.9**	**251.5**	**310.2**	**142.0**	**173.4**	**75.6**	**110.3**
Current expenditure	303.2	375.5	184.6	248.0	102.3	121.7	56.1	85.9
Development expenditure	132.3	107.4	66.9	62.2	39.7	51.7	19.5	24.3
Overall balance	**-33.8**	**48.1**	**-10.5**	**20.5**	**10.3**	**50.3**	**5.4**	**15.6**

Source: Ministry of Finance

Coming to the fiscal balance, KPK ended up with the highest budget surplus among all the provinces, followed by Punjab. The surplus registered by KPK reflects considerable restraint on current expenditure by the provincial government. The current expenditure in KPK increased by 19 percent compared with an average increase of 37.1 percent in other three provinces.

6.6 Devolution of Fiscal Responsibilities to Provinces[11]

The 18th Amendment of the Constitution of Pakistan was passed in April 2010, which entailed that a number of fiscal, administrative and legislative powers were transferred from the federal government to provinces in an attempt to enhance provincial autonomy. Following the passage of the Amendment, multi-party Implementation Commission was formed to plan and implement the devolution of different ministries and department to provinces.

Table 6.7: Distribution of Power between Centre and Provinces

	Federal Legislative List		Concurrent Legislative List
	Part I	Part II	
Power to Legislate	Only the Centre is entitled to Legislate	Joint control by the Centre and Provinces	Both Centre and Provinces can legislate but Federal Law Prevails
	Before the 18th Amendment		
Number of Items	59	8	47
	After the 18th Amendment		
Number of Items	53	18	0

Prior to the 18th amendment, the division of legislative powers between the centre and provinces were enshrined in two lists of the 1973 Constitution i.e. the Federal List (Part I and II) and the Concurrent List (**Table 6.7**). Any subject not enumerated in either of these lists was considered a residual subject, and left to the provinces.

The 18th amendment abolished the concurrent list and deleted certain items from the Federal List Part I, making them residuary subjects. Furthermore, it moved some items from Part I to Part II, thereby reducing the number of subjects in the exclusive domain of the central government. The end result is that the provinces now have to deal with more subjects on their own, with the federal government responsible for fewer policy decisions.

This enhanced provincial autonomy is also significant in terms of economic development. The provinces are now in a position to take a lead in growth and stabilization policies. In this context, it is important to understand some details of the devolutionary process, particularly the impact on

[11] ***Disclaimer***: This section reflects views of the Analyst who authored it; and it should not be considered as SBP's point of view.

the financial position of the provinces, as they grapple the responsibilities handed over to them. Some of these are discussed below.

Financial burden on the provinces is expected to increase

With the abolition of the concurrent list, 17 ministries have come under the control of the provinces (**Table 6.8**). Consequently, the provinces would now face higher wage bills, pension liabilities and operations and maintenance costs. The resulting increase in provincial current expenditure may leave ewer resources for developmental projects – at least in the short run.

Table 6.8: List of Ministries Devolved to Provinces

	Phase I
1	Local Government and Rural Development
2	Population and Welfare
3	Special Initiatives
4	Youth Affairs
5	Zakat and Ushr
	Phase II
6	Culture
7	Education
8	Livestock and Dairy Development
9	Social Welfare and Special Education
10	Tourism
	Phase III
11	Environment
12	Health
13	Labour and Man power
14	Minorities Affairs
15	Sports
16	Women Development
17	Food and Agriculture

Source: Federal Budget documents

The Federal government, on the other hand, is left with 31 ministries to run its business, freeing up fiscal space in devising and implanting its budgets. The federal government's actual expenditure on average for the last four years on the devolved ministries amounted to Rs 65.1 billion, against Rs 77.9 billion budget allocation (**Table 6.9**). This implies that the federal government has achieved fiscal space of around Rs 75 billion for the budget 2011-12 due to the transfer of 17 ministries to the provinces.

The devolved subjects also provide the provinces an opportunity to develop the revenue potential in their areas, as they are empowered to levy any fees for these subjects. Potential revenue sources devolved to the provinces are:

- State lotteries;
- Duties in respect of succession to property;
- Estate duty in respect of property; and
- Taxes on capital value of immovable property

Table 6.9: Federal Government Expenditure* on Devolved Ministries (billion Rupees)

	Current		Development		Total	
	BE	**RE**	**BE**	**RE**	**BE**	**RE**
FY08	21.6	24.3	49.0	43.1	70.6	67.4
FY09	24.4	19.7	58.5	43.8	82.9	63.5
FY10	24.5	19.9	66.9	50.2	91.4	70.1
FY11	21.5	29.8	45.1	29.6	66.6	59.4
Average	23.0	23.4	54.9	41.7	77.9	65.1

*Expenditure on HEC has not been included.

Source: Federal Budget Documents

In addition, the 18th Amendment has endorsed the right of the provinces to collect GST on services. It would thus put an end to the disagreement between the government of Sindh and the federal government on this issue.

The Amendment further stipulates that Federal Excise Duty levied on the well-heads of both gas and oil shall not form part of the Federal Consolidated Fund, and shall be paid to the province in which the well-head is situated. Previously, the federal government was obliged to give excise duty only on gas, not on oil, to the concerned province. This change is expected to significantly improve provincial revenues. Another important development relates to the ownership of the

mineral resources in a province, or in the territorial waters adjacent to the province. Earlier mineral resources in a province were regarded as the property of the federal government. Now the centre and province will enjoy an equal share (50/50).

Regarding the NFC award, the 18th Amendment adds that the share of the provinces in each of the NFC award will not be less than the share of the provinces in the previous award. In addition, the frequency of monitoring of the award will be increased to biannually from the previous once in five years.

Furthermore, provinces are now authorized to borrow directly from development partners against their provincial consolidated fund. This would lower the interest rates they pay, compared to when loans were disbursed by the federal government, and carried a higher interest rate than that decided by the donor agency.

The role of provinces in policy making and national planning stands enhanced

The involvement of provinces in economic and other policy making at national level has been enhanced as Council of Common Interest (CCI) has become more active after the 18th Amendment. CCI is constitutional body consisting of Prime Minister as head, and four chief ministers and three representatives of federal government as members. According to the constitution (section 154), the CCI is not only responsible for formation and regulation of policies in matters coming under its purview but also exercise supervision and control over related institutions.[12]

Furthermore, policymaking in the areas where provinces have gained control such as health, education, population welfare, labor and social safety nets, is now a provincial responsibility. Allocation of development expenditure in these sectors carries significant importance for the development of the economy. Therefore, the provinces, now in a position to steer economic development, are required to distribute the resources for development projects optimally and need to build up their expertise in the field.

Some risks

Although the 18th amendment is an important step towards the devolution of power to the provinces, skeptics warn that the provinces lack the requisite capacity and experience in the subjects devolved upon them. With the devolution of the ministries, the professional competence and institutional memory developed in the federal government may be lost. On the other hand, the provinces would take time to develop the skills required to efficiently run these ministries and divisions. In the interim period, failure in terms of service delivery to the public is possible; it must be avoided if the devolution is to take root.

Another serious downside is that Pakistan may face challenges in the enforcement of international conventions (and treaties) in respect to some economic and social dealings that had been signed with the federal government. For example, in case of labor rights, there is a need to develop some mechanism that all province comply with procedures and principles laid down in different ILO conventions and declarations, to which Pakistan as a federation is a signatory.

Similarly, if federal government enters into some agreement with the IMF, it would be challenging to ensure that IMF conditionalities (like fiscal targets) are met by provinces as well. Experience of the past two years highlights this risk, when the federal government announced a target of budget deficit assuming that provinces would comply to ensure that the consolidated accounts meet the IMF targets, but the actual provincial budgets were not in line.

[12] Matters mentioned in Part II of Federal Legislative List come under purview of CCI.

7 Domestic and External Debt

7.1 Overview

Despite a sharp improvement in current account balance in FY11, the rise in Pakistan's total debt and liabilities (TDL) of Rs 1.8 trillion during the year to Rs 12.1 trillion, is a reflection of deteriorating fiscal imbalances (**Figure 7.1**). Changes in the Rupee value of external debt due to revaluation changes and increased borrowing of loss making Public Sector Enterprises (PSEs) also contributed to the rise in the debt burden. These accumulating TDL impose large costs on the productive resources of the economy; debt servicing of TDL reached Rs 1.0 trillion in FY11, which was 5.8 percent of GDP.[1]

Figure 7.1: Macro Imbalances and Stock of Debt & Liabilities

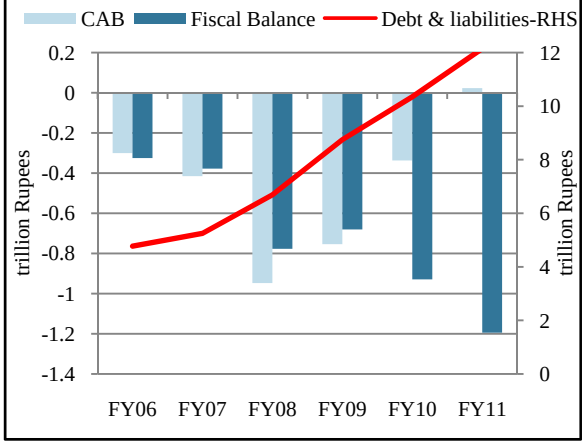
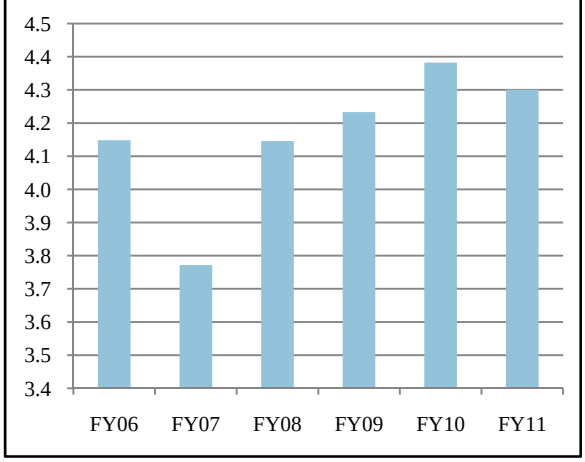


Figure 7.2: Public Debt to Revenue Ratio



Within TDL, public debt accounted for 90.5 percent as of end FY11, and its servicing eats up 43.7 percent of government revenues for the year. This limits the government's ability to use fiscal policy as a countercyclical tool. The composition of government expenditure reveals that expenditure on public sector development programs are less than the interest payments on public debt. This, along with the revenue deficit leaves little room for the government to use fiscal policy to support slowing economic growth at this critical juncture.

While there is no doubt that debt burden is limiting the fiscal space, absolute debt numbers seem manageable when seen in terms of nominal GDP; which is often used as a proxy for the repayment capacity of the country. An annual increase of 17.4 percent in the stock of

[1] It is important to note that schedule banks' debt servicing of external borrowing is excluded from this analysis. In fact, scheduled banks' external debt is included in Pakistan's external debt and liabilities (EDL) from Q1-FY10. While this inclusion has little impact on the outstanding amount of Pakistan's EDL (0.4 percent of EDL), it has strong implications for Pakistan's servicing of EDL. Scheduled banks' external borrowing is very short term in nature, and is primarily for managing their nostro accounts. Scheduled banks' repayment of principal on account of external borrowing stood at US$ 4.9 billion in FY11 (1.7 times of repayments of principal on EDL). In sharp contrast to this, scheduled banks interest payments on external debt were only 0.6 percent of overall interest payments on EDL. Against this backdrop, inclusion of scheduled banks' debt servicing on external borrowing will clearly distort the analysis of external debt servicing.

TDL was outpaced by 21.7 percent growth in nominal GDP for the year. As a result the TDL to GDP ratio fell by 2.5 percentage points to 67.2 percent during the year (**Table 7.2**). Within TDL, the public debt to GDP ratio stood at 60.9 percent, which is close to the 60 percent debt burden limit (to be achieved by FY13) under the Fiscal Responsibility and Debt Limitation Act (FRDL) 2005. In the context of looming sovereign debt crises at the international level, it is also a source of comfort to note that - at least on face value - Pakistan's debt to GDP ratio is nowhere close to heavily indebted European countries, especially Italy and Greece (**Table 7.1**). In fact, Pakistan's debt to GDP ratio is almost half of the European countries and around one-third of Japan's equivalent ratio.

Table 7.1: Central Government Debt as percent of GDP

	2006	2007	2008	2009
US	46	47	55	67
Japan	151	150	158	174
UK	47	48	58	73
France	68	67	73	84
Italy	110	105	108	119
Greece	127	123	125	140
Ireland	29	28	49	71
Portugal	70	68	72	84
Spain	34	30	34	46
India	59	56	56	53
Pakistan*	56	60	61	61

* SBP calculations

Source: World Development Indicators 2011

Table 7.2: Profile of Pakistan's Debt and Liabilities

	billion Rupees			*percent of GDP*		
	FY09	**FY10**	**FY11**	**FY09**	**FY10**	**FY11**
Total Debt & Liabilities	8,746.1	10,346.1	12,146.1	68.7	69.7	67.2
Govt./Public Debt[1]	7,835.3	9,232.2	10,995.5	61.6	62.2	60.9
Total Debt	8,306.4	9,710.7	11,524.5	65.3	65.5	63.8
Govt. Domestic Debt[2]	3,860.7	4,654.0	6,017.0	30.3	31.4	33.3
PSEs Domestic Debt	290.0	375.0	411.5	2.3	2.5	2.3
External Debt	4,155.7	4,681.6	5,096.0	32.7	31.6	28.2
Govt. External Debt	3,452.1	3,667.1	3,987.8	27.1	24.7	22.1
IMF loans	419.0	690.3	768.7	3.3	4.7	4.3
PSEs External Debt	87.0	106.5	91.1	0.7	0.7	0.5
Private Sector External Debt	197.6	217.8	248.4	1.6	1.5	1.4
Total Liabilities	439.9	510.5	485.5	3.5	3.4	2.7
Domestic liabilities	336.2	414.6	399.5	2.6	2.8	2.2
External Liabilities	103.7	220.8	220.0	0.8	1.5	1.2
Total Debt & Liabilities Servicing	969.6	1014.3	1,050.0	7.6	6.8	5.8
Interest Payment	687.5	714.4	805.8	5.4	4.8	4.5
Domestic Debt	570.6	577.7	649.9	4.5	3.9	3.6
External Debt[3]	89.4	82.3	89.6	0.7	0.6	0.5
Domestic Liabilities	25.8	52.1	65.0	0.2	0.4	0.4
External Liabilities	1.7	2.3	1.3	0.0	0.0	0.0
Repayment of Principal (Foreign)	282.1	299.9	244.2	2.2	2.0	1.4

1 Public debt include Govt. Domestic Debt, Govt. External Debt & IMF loans

2. Domestic debt also includes Rupee value of FEBCs, FCBCs, DBCs and Special US Dollar Bonds holds by the residents

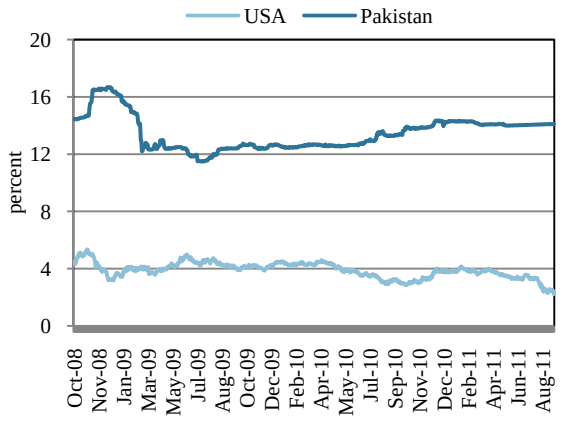
3. Interest payment and repayment of scheduled bank is excluded for the analysis.

Source: State Bank of Pakistan

However, further analysis suggests that there is little room for complacency. Firstly, the government was unable to contain its revenue deficit (gap between revenues and current

expenditures) for yet another year. The FRDL act requires the government to maintain a revenue surplus from FY08 onwards. The persistence of a revenue deficit means that the government is not only borrowing for its development expenditures, but also for the financing of its current expenditures. Secondly, real GDP growth was only 2.4 percent in FY11. This implies that the strong growth in nominal GDP was driven primarily by inflationary pressures in the economy. Thirdly, the stock of public debt is a direct charge on government revenues. The rising burden of public debt on the exchequer is visible from the ratio of public debt to government revenues for recent years (**Figure 7.1**). This ratio is well above the level achieved in FY07, before the onset of the economic downturn.

Figure 7.3: 10-Year Sovereign Bond Yields



Source: Bloomberg

As for international comparison is concerned, Pakistan still have the opportunity to manage its debt burden without having significant implications for overall economic management. This is particularly true in case of external debt as various indicators of external debt sustainability improved in FY11. Compared to this, the debt ridden European countries mentioned earlier are left with little room to maneuver policy in managing their economies.[2] While the relative ease in managing debt is a source of comfort for Pakistan, there is need for caution, as: (a) more than 80 percent of debt crisis at international level came at a debt to GDP ratio of less than 60 percent; (b) debt crises around the globe are inextricably linked to a loss of confidence - already low in Pakistan's case; and (c) the composition of debt and debt management strategy of the government can seriously undermine the significance of debt sustainability indicators such as the debt to GDP ratio. Cross-country differences are already clear from Pakistan's sovereign rating. Pakistan is assigned a lower rating compared to other regional countries.[3] Low confidence of international investors in Pakistan's case is also evident from the large differential in 10-year sovereign bond yields of Pakistan and the USA (**Figure 7.3**). The spread between US and Pakistani bonds is essentially a reflection of high country risk for Pakistan.

While the discussion on overall debt is instructive, the government requires different debt management policies to deal with domestic and external debt. The broad composition of Pakistan's TDL indicates that domestic debt and liabilities (DDL) reached Rs 6.8 trillion by end FY11, compared to Rs 5.4 trillion last year.[4] This sharp increase in DDL during the year is

[2] Heavily indebted European countries are in the process of debt crisis management. These countries are unable to resolve their issues without the help of their creditors. The IFIs and EU have linked their bailout packages to drastic fiscal consolidation. The short term pain of these measures which deal with debt crisis is now clear. . Compared to these countries, Pakistan has sometime to manage its debt problems. There is no immediate risk of default. However, failure to deal with underlying structural weakness (low tax revenues, fiscal slippages and weak governance) in this year will potentially expose the country to debt problems in the future.

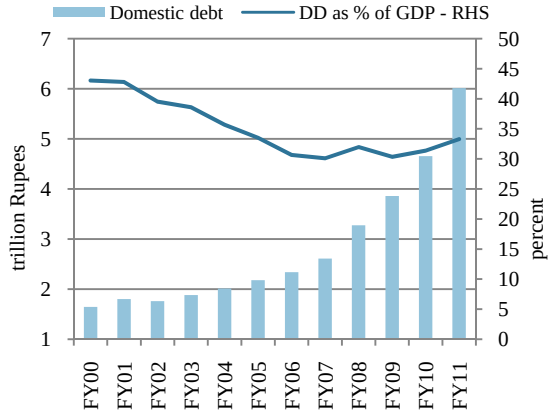
[3] Pakistan's sovereign rating is 'B negative', which is lower than 'BBB negative' for India; 'BB negative' for Bangladesh; and 'B plus' for Sri Lanka.

[4] Domestic debt and liabilities comprise government domestic debt, borrowing of PSE and loans for commodity operations.

attributed to a deceleration in foreign exchange inflows for budgetary finance,[5] suspension of IMF's SBA program, and increased demand for funds to finance the widening fiscal deficit in absolute terms. This situation forced the government to rely on domestic resources for the financing of its fiscal and quasi-fiscal activities. As a result, the DDL to GDP ratio reached 37.8 percent of nominal GDP by end FY11. Further details of DDL suggest that the government's reliance on short term borrowing has increased significantly over the last three years; exposing it to rollover and re-pricing risks.

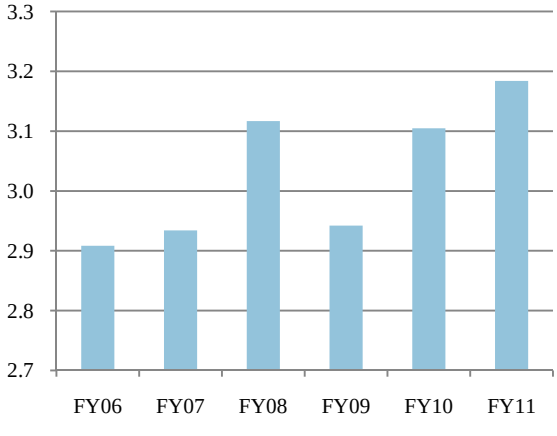
Compared to the sharp increase in DDL, external debt and liabilities (EDL) saw an expansion of Rs 415.6 billion (YoY increase of 8.5 percent) during the year to reach Rs 5.3 trillion. Among causal factors, the impact of exchange rate movements (especially depreciation of US$ against other major currencies) explains more than 90 percent of the change in EDL. Specifically, exchange losses on loans held by the Paris Club, multilateral creditors and the IMF were a significant factor. Further details reveal that Pakistan's EDL comprise mainly of long term debt from international financial institutions (IFIs), multilateral and bilateral. The share of short-term external debt (less-than-one-year maturity) was only 1.5 percent in total EDL. While this situation bodes well for the management of EDL from a market risk point of view, it leaves the country vulnerable to external creditors. Specifically, the role of IFIs in economic management of the country grows. The various conditionalities under the IMF's SBA program, and demands for a 'letter of comfort' by other IFIs and creditors are an indication of their role in the economic management of Pakistan.

Figure 7.4: Domestic Debt



Source: Bloomberg

Figure 7.5: Domestic Debt to Tax Revenue Ratio



7.2 Domestic Debt

A sharp reduction in external financing of the fiscal deficit in FY11 exerted significant pressure on domestic sources of funding. Data show that only 9 percent of fiscal deficit in FY11 was financed through external borrowing. In absolute terms, the government borrowed Rs 1.4 trillion from the domestic sources in FY11. As a result, the stock of domestic debt reached Rs 6.0 trillion (**Figure 7.4**), indicating YoY increase of 29.3 percent during the year. This expansion in government borrowing is not only a drag on private economic activities, but also has strong implications for the use of fiscal policy as a macroeconomic stabilization tool.

Firstly, the pace of increase in domestic debt is unsustainable, as the outstanding amount has witnessed an average annual growth of

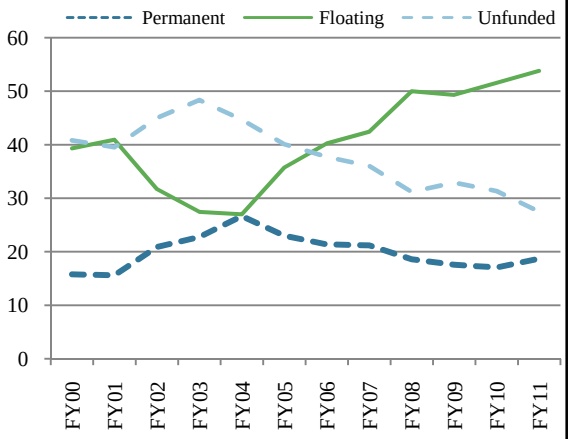
[5] The net external financing for FY11 budgetary gap stood at Rs 107.7 billion compared, which was only 9.0 percent of the deficit for the year.

23.3 percent during the last four years. This stock of debt has to be serviced primarily by government revenue receipts, which have been growing at an average rate of 17.6 percent over the same period. The rise in the domestic debt to tax revenue ratio demonstrates these concerns (**Figure 7.5**).

Secondly, large-scale government borrowing from domestic sources entails crowding out of private sector activities. Government borrowings from commercial banks increased by Rs 590.2 billion during FY11 compared to an increase in private sector credit of Rs 121.3 billion. While demand for credit by the private sector is understandably lower due to persistent energy shortages, security concerns and overall uncertainty in the economy; there is little doubt that government borrowing is distorting credit conditions for the private sector. In a sense, the government is a captive borrower for the banks. This leaves little incentive for the banks to deal with private sector, where risks are already high on account of prevailing economic downturn.[6] In these settings, banks have become excessively risk averse, while their nature of business is to deal with risks.

While it is important to analyze changes in overall domestic debt to evaluate the burden on government revenues; changes in the composition of debt further complicates debt management. **Figure 7.6** depicts that the government's reliance on short-term debt—known as floating debt—has significantly increased in recent years. Specifically, floating debt now accounts for 53.8 percent of total outstanding debt as of end FY11. This implies the government is heavily exposed to rollover and interest rate risks.

Figure 7.6: Major Components of Domestic Debt



Rollover risk: The composition of domestic debt indicates that the government has borrowed Rs 3.2 trillion through t-bills, which have a maximum maturity of one-year. Without getting into details, this implies the government will have to rollover its entire stock of floating debt at least once in FY12. Furthermore, the ownership structure of floating debt reveals that the SBP's t-bill holdings, stood at Rs 1.4 trillion, account for 40.8 percent of total floating debt, this complicates monetary management for the SBP.[7] The rollover of t-bills amounting to Rs 1.8 trillion held by scheduled banks could also pose challenges. The gross borrowing requirement for FY12 will increase further as the government will require funds to finance its budgetary gap for the year as well. Any squeeze in liquidity conditions such as those experienced in Sep-Oct 2008, or a slowdown in growth of bank's deposits (a prime source of funding for the banking system in Pakistan) will disrupt the smooth flow of funds towards the government sector; and could also pose risks to financial stability. Under normal circumstances, possible increase in private sector credit especially for working capital in FY12 could complicate liquidity management.

Interest rate Risk: In addition to rollover risk, the government's reliance on short-term borrowing exposes it to considerable interest rate or re-pricing risk. Specifically, the entire stock

[6] It is pertinent to mention here that continued government borrowing from the banking system will seriously undermine financial stability in the years to come. In particular, the facility to earn double-digit returns from risk free avenue would seriously impair the risk-management ability of the banking system.
[7] See Chapter on Inflation and Monetary Policy for details.

of t-bills must be re-priced at least once in a year. While a reduction in interest rates will reduce interest payments for the government; the reverse is the case when interest rates rise (more on this issue later). Simple arithmetic shows that the government's interest payments on floating debt (as of end June 2011) will change by approximately Rs 30 billion in response to a100 bps change in interest rate over a period of two years.

7.2.1 Medium to Long-Term Domestic debt

A notable development during FY11 was the rise of Rs 330.2 billion in the stock of permanent debt, against an increase of Rs 116.2 billion in FY10 (**Table 7.3**). Details show that around 89.5 percent of this increase came from medium to long term marketable government securities (Ijara Sukuk & PIBs). This is a welcome development, and will not only help in increasing the average maturity of domestic debt, but also help in the development of a domestic bond market.

Another significant change in permanent debt is related to the increase of Rs 41.1 billion in the stock of prize bonds during the year to Rs 277.1 billion. An important feature of prize bonds is the implicit 'put option' attached to this financial instrument. Therefore, investors have the right to redeem this instrument at their will. While proceeds from prize bond make a significant contribution towards financing of deficit, their use complicates, both, government debt management, and liquidity management by the SBP.

7.2.2 Unfunded Debt

This component of domestic debt largely comprises financial instruments known as National Savings Schemes (NSS). The government was able to mobilize Rs 193.9 billion through NSS (excluding Prize bonds), which accounts for 14.2 percent of the increase in domestic debt during the year. An upward revision in profit rates from 120 to 160 bps on major savings schemes in FY11, along with lower returns on bank deposits, attracted investors to place their funds in these schemes. As a result, the stock of unfunded debt reached Rs 1,655.8 billion by end FY11, which was 27.5 percent of outstanding domestic debt (**Table 7.3**).

A disaggregated analysis of fund mobilization shows that the three major schemes (Special Savings Certificates, Regular Income Certificates, Bahbood Savings Certificates) account for 78.1 percent of investments in NSS during FY11; compared to a 60.1 percent share of these schemes in outstanding amount. In particular, the Bahbood Savings Certificate (BSC) is the most attractive scheme; it yields tax and Zakat free monthly returns to widows and senior citizens. Currently, a BSC of Rs 100,000/- offers a monthly return of Rs 1,200 (14.48 percent per annum).

While good profit and the risk-free nature of NSS help the government in financing its budgetary requirements, the use of these instruments entails negative implications for the economy as a whole. Firstly, NSS is a costly source of funding for the government. Profit rates on major NSS are generally higher than on market-based government debt securities of similar tenor. Secondly, NSS is not a stable source of funding for the government; early encashment facility on NSS further complicates debt management for the government. Finally, reliance on NSS undermines the development of a domestic bond market by providing high risk-free returns to investors.

Being cognizant of these issues, the government has implemented various institutional reforms in the previous decade. The most important was to link the returns on major NSS instruments with the interest rate paid on market based debt instruments of the same tenor. However, this link has weakened with the passage of time as, mobilization through BSC and Pensioner's Benefit Accounts has increased. These two schemes jointly account for 34.8 percent of unfunded debt and have no link to market based debt instruments. It is important to note that institutions are not

allowed to invest in these two schemes. On these lines, one of the possible ways to restructure the NSS is to ring fence all of its instruments from the regular financial markets by restricting institutional investments. Specifically, participation in all schemes should be restricted to widows, senior citizens, and disabled persons.

Table 7.3: Position of Domestic Debt
billion Rupees

Debt Instrument	Outstanding Stock			Interest Payments		
	FY09	FY10	FY11	FY09	FY10	FY11
A. Permanent Debt	678.0	794.3	1,124.4	57.0	74.3	91.8
Of which						
GOP Ijara Sukuk 3yrs	27.8	42.2	224.6	0.9	4.4	11.2
Pakistan Investment Bonds (PIBs)	441.0	505.3	618.5	41.3	50.3	57.3
Prize Bonds	197.4	236.0	277.1	14.0	18.8	22.8
B. Floating Debt	1,904.0	2,399.1	3,235.4	227.2	241.1	361.4
Of which						
Market Treasury Bills	796.1	1,227.4	1,817.6	71.8	101.1	191.9
Market Related Treasury Bills	1,107.9	1,124.9	1,317.5	155.4	140.0	169.5
C. Unfunded Debt	1,270.5	1,457.5	1,655.8	286.0	262.1	194.7
Of which						
Defense Saving Certificates	257.2	224.7	234.3	207.1	146.9	55.0
S. Savings Certificates - Registered	288.8	350.6	394.7	16.7	20.7	24.3
Regular Income Certificates	91.1	135.6	182.6	6.8	14.3	19.3
Behbood Savings Certificates	307.5	366.8	428.5	33.8	52.8	61.0
Pensioners' Benefit Account	109.9	128.0	146.0	12.8	18.9	21.4
D. Foreign Currency Instruments *	8.1	3.1	1.4	0.4	0.2	0.1
Total Domestic Debt (A+B+C+D)	3,860.8	4,654.0	6,017.0	570.6	577.7	648.0

* These include FEBCs, FCBCs, DBCs and Special US Dollar Bonds held by the residents.

Source: State Bank of Pakistan

7.2.3 Interest Payments on Domestic Debt

Interest payments on domestic debt rose to Rs 649.9 billion in FY11 compared to Rs 577.7 billion in the previous year. This increase was largely due to the sharp increase in short term government borrowing during FY11 discussed earlier, and a re-pricing of the accumulated stock of floating debt as of end FY10. The entire of stock of Rs 2.4 trillion at the beginning of the year was rolled over during FY11 on higher interest rates, as the SBP policy rate rose by150 bps during H1-FY11. Specifically, the interest on floating debt jumped to Rs 361.4 billion; this represents YoY growth of 49.9 percent (**Table 7.3**).

Interest payments on permanent debt also grew by 23.6 percent in FY11, on account of both volume and price effects. As mentioned earlier, the governments' permanent debt increased following the various auctions of marketable government securities (PIBs/Sukuk). Prevailing high interest rates also contributed to increase in interest payments.

Despite the increase in the stock of unfunded debt, interest payments on NSS (net of prize bonds) declined for the second year in a row. This seems surprising, at least on face value, as the profit rates on key NSS were revised upward in FY11. Details suggest that this is explained by the nature of NSS. In particular, the maturity of costly bullet bonds (namely Defense Savings Certificates issued in second half of the 1990s) kept the debt servicing on overall unfunded debt high in recent years. Furthermore, funds mobilized by DSCs in FY10 & FY11 entail no

immediate interest payment due to the bullet nature of these certificates. Cash based accounting system and profit disbursement pattern (annual or six monthly) on other savings schemes also play an important role in shifting interest payments from one year to another year.

7.3 External Debt and Liabilities

Pakistan's total external debt and liabilities (EDL) witnessed a rise of US$4.5 billion during the year to reach US$ 61.8 billion by end FY11.[8] Factors contributing to this increase in FY11 were the cross-currency movement of exchange rates and government loans to deal with devastating floods at the beginning of the year. The external debt adjusted for revaluation losses shows an increase of just US$ 1.1 billion (YoY increase of 2.0 percent) in FY11. This implies that foreign currency loans in FY11 were used largely for repayments of maturing external loans. Specifically, the ratio of principal repayments of the government loans for budgetary support to disbursements stood at 72.3 percent for FY11. It is worth noting that the higher principal repayments to disbursement ratio was primarily due to low disbursements; as principal repayments for FY11 were also lower compared to the previous two years. Among other factors, a suspension of the IMF's SBA played a key role in lower disbursement for FY11.

7.3.1 Sustainability of External Debt and Liabilities

Regardless of the underlying factors, changes in EDL have important implications for the sustainability of external debt. A moderate rise in EDL, along with a marked improvement in external accounts in FY11 exerted a favorable impact on key indicators of external debt sustainability (**Table 7.4**).

Table 7.4: Indicators of External Debt Sustainability

	FY08	FY09	FY10	FY11
TED/GDP	26.9	30.7	29.8	27.5
EDL/GDP	27.7	31.5	31.2	28.7
IP/FEE	3.4	3.3	2.7	2.2
EDS/FEE	8.7	13.4	12.0	8.2
IP/XE	6.1	6.1	5.2	4.2
EDS/XE	15.6	24.8	23.3	15.5
STD/TED	4.3	3.6	3.5	2.6
STD/RES	16.5	14.4	11.2	8.2
(STD+CAB)/RES	136.5	86.6	31.9	6.8
WoM	17.0	21.0	28.2	27.9

TED: Total External Debt; EDL: External Debt and Liabilities; IP: Interest Payments; EDS- External Debt Servicing; IP- Interest Payments; STD; Short Term Debt; CAB- Current Account Balance; WoM- Weeks of Imports; FEE- Foreign Exchange Earnings; XE- Exports Earnings; RES- Foreign Exchange Reserves.

Source: Analyst Estimates

- An ease in the overall debt burden is visible from the 2.5 percentage point decline in the EDL-to-GDP ratio to 28.7 percent: a level observed before the onset of the current economic downturn.
- Improvement in the debt bearing capacity of the economy is also evident from indicators like foreign exchange earnings (FEE). Both, interest payment to FEE, and external debt servicing to FEE ratios improved in FY11. All time high workers' remittances and strong growth in export proceeds were catalyst to over 20 percent YoY growth in FEE.
- External debt sustainability indicators in terms of foreign exchange reserves also improved in FY11. Specifically, short-term debt, interest payments and debt servicing to reserve ratios improved in FY11. Given the suspension of the IMF program (an important source of a strengthening of the reserve position); an improvement in the reserve ratios is a welcome development. Data on reserves show that SBP reserve saw an expansion of US$ 2.5 billion during the year due to: (1) a marked improvement in

[8] It may be noted that changes in EDL in PKR and US$ terms paint a slightly different picture. Specifically, the PKR value of EDL indicates deceleration in growth from 15.1 percent in FY10 to 8.5 percent in FY11. On the other hand, US$ value of EDL shows a deceleration in growth from 9.6 percent in FY10 to 7.8 percent in FY11. These difference in growth rates are the upshot of movement in PKR against US$. Exchange rate movements reveal that PKR depreciated around 5 percent against US$ in FY10 compared to less than 1 percent in FY11.

current account balance; and (2) SBP FX purchases in a bid to contain excessive volatility in the FX market.

Changes in underlying structure of EDL also point to an improvement in debt sustainability and ease in external debt management. First, Pakistan's EDL are of medium to long-term maturity. The share of short-term EDL in the total further declined in FY11 (**Table 7.4**). Second, Pakistan's EDL are dominated by long term loans from IFIs, multilateral and Paris Club. On the other hand, the share of sovereign bonds (market-based external debt) in public debt was only 2.7 percent as of end FY11. These characteristics of EDL along with improvements in various debt indicators reflect the sustainability of the EDL at least in the short run. However, there is a need to diversify the source of external borrowings, as the heavy reliance on few multilateral and bilateral donors provides leverage to creditors for intervening in economic management of the recipient countries.

Disbursements in FY11

While the government's funding requirements increased substantially due to the devastating floods in Q1-FY11, disbursements of foreign assistance (including both foreign grants and foreign loans) declined when compared to the previous year. Specifically, disbursements of foreign assistance for FY11 stood at US$ 2.5 billion against disbursements of US$ 3.7 billion in FY10 (**Table 7.5**).

Table 7.5: Disbursement of Foreign Assistance
million US dollars

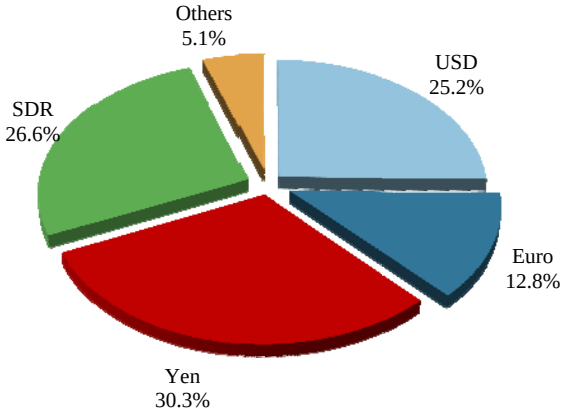
	Grants	Loans	Total
FY09			
Commitments	594.4	5,394.3	5,988.7
Disbursement	570.1	4,092.2	4,662.3
FY10			
Commitments	1,606.4	5,137.0	6,743.5
Disbursement	648.0	3,015.0	3,663.0
FY11			
Commitments	1,841.6	2,738.2	4,579.8
Disbursement	625.9	1,922.1	2,548.0

Source: State Bank of Pakistan

Within foreign assistance, disbursements of grants in FY11 were only 34 percent of commitments, while loan disbursements stood at 70.2 percent of commitments. A donor-wise composition of grants shows that bilateral grants were 87.8 percent of total grants in FY11: a reflection on bilateral relations. In particular, bilateral grants were largely provided by the USA and UK, which together accounted for 78 percent of total grants disbursements.

In sharp contrast to grants, loan disbursements from multilateral sources were 71.5 percent of total loan disbursements in FY11. Donor-wise data show that loans by Asian Development Bank (ADB), International Development Association (IDA) and Islamic Development Bank (IDB) for project financing, floods related activities and balance of payment, accounted for 68.1 percent of loan disbursements in FY11.

Exchange rate movement and changes in EDL



The importance of currency composition of external debt has significantly increased in recent years; as foreign currency markets remained volatile following the financial crisis of 2008. The currency composition reveals that 94.9 percent of Pakistan's EDL are denominated in four major currencies i.e. US$, Yen, Euros and SDRs (**Figure 7.7**). Exchange rate movements (appreciation/depreciation) of the US$ against other major currencies (Yen, Euro & SDR) have a significant effect on the stock of EDL, as it is used as a base currency. An impact analysis of exchange rate movements indicates that 97 percent of increase in public debt during FY11 was due to *transactional losses*.[9,10] In absolute terms, *transactional losses* for FY11 stood at US$ 3.3 billion (**Table 7.6**). The depreciation of US$ against Japanese Yen alone inflated public debt by US$ 3.1 billion.

Non-guaranteed external debt (NGE debt)

Despite low international interest rates and stable exchange rate, the private sector external borrowing for investment activities remained subdued. The YoY growth in NGE debt continued to decelerate as the outstanding stock of NGE debt grew marginally by 2.3 percent in FY11 to US$ 3.7 billion.[11] This was considerably lower than the YoY increase of 8.7 percent in the previous year. Moreover, almost half the growth in FY11 came from increased short-term borrowing of scheduled banks to manage their nostro accounts. It appears that lackluster domestic economic activities, heightened security concerns, persistent energy shortages and excess capacity in the manufacturing sector has kept the corporate sector away from undertaking new investments in recent years.

Table 7.6: Impact of Exchange Rate Variation on EDL
million US dollars

	Japanese	Euro	SDRs	Overall
FY08	1,327	873	676	3,113
FY09	1,347	-625	-505	36
FY10	985	-776	-542	-303
FY11	1,314	896	938	3349

Source: Analyst Estimates

IMF loans

The outstanding stock of IMF loans increased by US$ 0.8 billion in FY11 to reach US$ 8.9 billion (**Table 7.7**). This increase in IMF loans during FY11 was substantially lower than the US$ 2.9 billion rise in the previous year. This reduction in inflows was primarily the result of a suspension of IMF SBA due to delays in implementing fiscal reforms. Moreover, IMF loan disbursements during FY11 were essentially for meeting emergency requirements of the government in the wake of devastating floods in first quarter of the year. The final tranche of the SBA loan is still pending with the IMF and unlikely to be disbursed.

[9] This also explains the government's heavy reliance on domestic resources for financing its deficit in FY11.
[10] A change in the external debt stock on account of converting EDL denominated in different currencies to a base currency (US$ in case of Pakistan) is known as Transactional changes (gains/losses).
[11] It may be noted that foreign private loans generally constitutes a small fraction of Pakistan's EDL. In recent past, the mobile network companies borrowed from abroad to benefit from low interest rates at internationally.

Although IMF loans constitute only 14.9 percent of Pakistan's EDL as of end FY11, the real value of the IMF program for Pakistan is that a number of other multilateral and IFI program loans are implicitly linked to the IMF's endorsement as discussed earlier. This was the major reason for low debt & non-debt creating inflows during FY11.

Table 7.7: Pakistan's External Debt and Liabilities
billion US dollars

	FY06	FY07	FY08	FY09	FY10	FY11
1) Public debt (a+b+c)	35.3	37.8	43.1	48.8	53.6	57.9
a) Government Debt	33.0	35.6	40.4	42.4	42.9	46.4
i). Medium and long term (>1 year)	32.8	35.6	39.7	41.8	42.1	45.8
of which						
Paris club	12.8	12.7	13.9	14.0	14.0	15.5
Multilateral	16.6	18.5	21.4	23.0	23.7	25.8
Other bilateral	0.7	0.9	1.1	1.4	1.8	1.9
Euro/Sukuk global bonds	1.9	2.7	2.7	2.2	1.6	1.6
ii). Short term (<1 year)	0.2	0.0	0.7	0.7	0.8	0.6
b. From IMF	1.5	1.4	1.3	5.1	8.1	8.9
c. Foreign exchange liabilities	0.8	0.8	1.3	1.3	2.6	2.6
2. PSE guaranteed debt	0.3	0.2	0.2	0.2	0.2	0.1
3. PSE non-guaranteed debt[1]	0.6	1.0	1.0	0.9	1.1	1.0
4.Scheduled banks' borrowing[2]	-	-	-	-	0.2	0.4
5. Private non-guaranteed debt (M & LT > 1year)	1.0	1.0	1.6	2.3	2.2	2.4
6. Private non-guaranteed bonds[3]	-	0.3	0.3	0.1	0.1	0.1
Total external debt (1+2+3+4+5+6)	37.2	40.3	46.2	52.3	57.4	61.8

[1] Data revised from July09 due to enhanced coverage of PSEs

[2] Scheduled banks' borrowing captured from July-Sep 09.

[3]Local currency bonds of public sector and private non-guaranteed bonds have been captured from third and fourth quarter of FY07 respectively.

Source: State Bank of Pakistan

Foreign exchange liabilities

Outstanding amount of foreign exchange liabilities (excluding allocation of SDR) continued to decline for the 4th year in a row. The stock of FX liabilities (net of SDRs) was US$ 1.0 billion by end FY11, with a share of only 1.7 percent in overall EDL. Currently, FX liabilities only comprise deposits of various central banks and allocation of SDRs.

7.3.2 External Debt Servicing

Despite modest increase in Pakistan's external debt & liabilities (EDL) in FY11, debt servicing on EDL declined for the second year in a row. Specifically, debt servicing fell by US$ 0.7 billion during the year to US$ 3.9 billion.[12] A bifurcation of this aggregate number into repayment of principal and interest on EDL reveals that the entire reduction was attributed to a decline in repayment of principal, while the latter saw a rise of US$ 55.2 million (YoY growth of 5 percent) during the year (**Table 7.8**).

[12] Please see foot note 2.

Table 7.8: External Debt Servicing
million US dollars

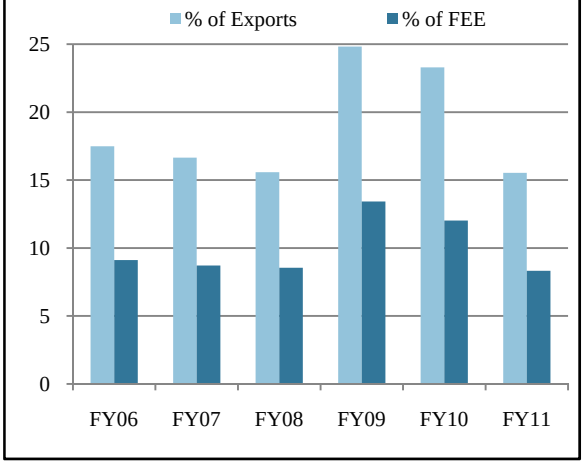
	FY06	FY07	FY08	FY09	FY10	FY11
I. Public Debt (a+b+c)	**2,368.4**	**2,223.3**	**2,445.1**	**3,881.7**	**3,671.8**	**3,153.0**
Principal	1,569.4	1,312.8	1,440.7	2,913.9	2,795.0	2,206.8
Interest	799.0	910.5	1,004.4	967.9	876.9	946.2
a. Govt. Debt	2,149.4	2,025.3	2,196.1	3,573.7	3,134.0	2,574.4
Principal	1,404.4	1,170.8	1,245.7	2,681.9	2,403.3	1,816.6
Interest	745.0	854.5	950.4	891.9	730.7	757.8
b. IMF loans	159.0	143.0	191.0	264.0	359.4	441.8
Principal	143.0	120.0	173.0	210.0	239.8	268.2
Interest	16.0	23.0	18.0	54.0	119.6	173.6
c. FX Liabilities	60.0	55.0	58.0	44.0	178.4	136.9
Principal	22.0	22.0	22.0	22.0	151.9	122.0
Interest	38.0	33.0	36.0	22.0	26.5	14.9
II. PSEs Debt	**174.5**	**270.1**	**252.7**	**236.9**	**454.0**	**448.3**
Principal	144.0	200.7	171.0	176.8	392.5	401.3
Interest	30.6	69.3	81.7	60.1	61.4	47.1
III. Private Sector Debt	**351.6**	**382.7**	**484.8**	**628.6**	**457.0**	**316.1**
Principal	275	271.6	323	497.8	388.17	247.0
Interest	76.6	111.1	161.8	130.8	68.1	69.1
External Debt (I+II+III)	**2,894.6**	**2,876.0**	**3,182.6**	**4,747.2**	**4,582.8**	**3,917.4**
Principal	1,988.4	1,785.1	1,934.7	3,588.4	3,575.7	2,855.1
Interest	906.1	1,090.9	1,247.8	1,158.8	1,007.1	1,062.3

Source: State Bank of Pakistan

Distribution of repayments by borrowers indicates that the government repaid US$ 1.8 billion of its external loans in FY11 to multilateral, bilateral, Paris club and the IDB. These accounted for over 92.7 percent of government debt repayments during the year. Compared to the previous year, a major difference was the absence of any repayment on account of marketable sovereign Pakistani bonds (Euro/Sukuk bounds) and commercial banks. This was the major reason for a decrease in repayment of principal in FY11.

Another important point to note is the impact of rescheduling or rollover of external debt on the debt servicing. In FY11, central banks of friendly countries rolled over their deposits worth US$ 1.1 billion. The IDB also rolled over a maturing loan of 0.6 billion. This re-profiling eased the country's debt servicing burden by US$ 1.7 billion. In the absence of this rescheduling or rollover the debt servicing on external debt would have been US$ 5.6 billion, against actual payments of US$ 3.9 billion.

Figure 7.8: External Debt Servicing



Following the decline in debt servicing, key indicators of the debt servicing burden on Pakistan's economy improved in FY11. Specifically, overall debt servicing as a percentage of exports, and foreign exchange earnings, declined to levels last seen in FY06 and FY07 (**Figure 7.8**). While this is a notable development for FY11, the continuation of this impressive improvement in FY12 faces significant risks. First, there is likely to be an increase in overall debt servicing for FY12 due to repayment of IMF

SBA loans starting from second half of the year (**Table 7.9**). Secondly, growth in FEE is expected to decelerate in FY12 to more sustainable level compared to the YoY increase of 25.1 percent seen in FY11.

Table 7.9: Repayments of IMF Loans
million US dollars

	Principal	Interest	Total
FY12	1,203.0	188.5	1,391.5
FY13	2,955.6	138.8	3,094.3
FY14	3,383.7	55.9	3,439.5
FY15	1,338.9	15.8	1,354.7
FY16	59.4	1.0	60.4

Note: The projected payments are based on Stock of June 2011.
The June end conversion rate for SDR into US$ is used.

Source: State Bank of Pakistan

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8 Balance of Payments

8.1 Overview

Pakistan's external account registered an unexpected improvement during FY11, providing much needed breathing space to the economy. However, this improvement was attributable more to favorable developments in the global market than to domestic business environment. Specifically, it was the increase in the demand and prices of Pakistani exports along with robust growth in remittances that contributed the most to the improvement in country's external position.

Table 8.1: Summary of External Accounts
billion US dollars

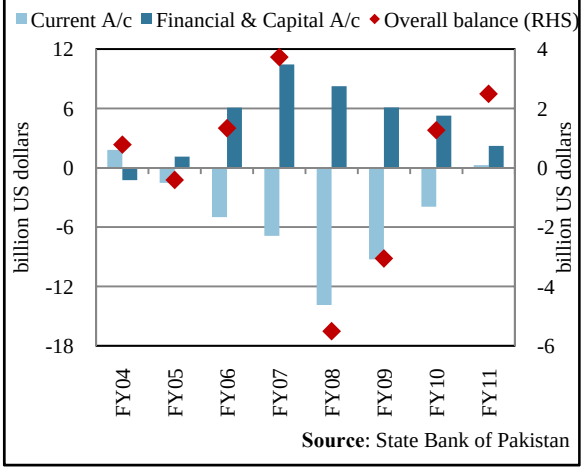
	FY10	FY11	Abs. Change	% Change
A. C/A Balance	**-3.9**	**0.3**	**-4.2**	**-107.7**
i) Trade Balance	-11.5	-10.5	-1.0	-8.7
Exports	19.7	25.3	5.6	28.4
Imports	31.2	35.8	4.6	14.7
ii) Invisible Balance	7.6	10.7	3.1	40.8
Remittances	8.9	11.2	2.3	25.8
B. Financial/Capital Balance	**5.2**	**2.2**	**-3.0**	**-57.4**
i) FDI	2.2	1.6	-0.6	-26.8
ii) FPI	-0.06	0.3	0.4	639
iii) Other Investment	3.1	-0.1	-3.2	-104.7
C. Errors & Omissions	-0.01	0.01	0.0	-281.3
D. Overall Balance	**1.3**	**2.5**	**1.2**	**96.9**

Source: State Bank of Pakistan

The absolute increase in exports during FY11 was higher than the corresponding increase in imports **(Table 8.1)**. As a result, the trade deficit, which had been a major factor in the deterioration of the external account in the past, remained in check, and contracted by 8.7 percent as compared to the preceding year. This was complemented by a 25.8 percent increase in remittances to an overall sum of US$ 11.2 million, which is an unprecedented high. Consequently, Pakistan's current account posted a surplus of US$ 0.3 billion after six consecutive years of deficits.

The financial account surplus, on the other hand, declined in FY11 compared to the previous year owing to the drying up of loans and foreign private investments. Nevertheless, improvement in the current account was large enough to offset the decline in the financial account surplus. Resultantly, Pakistan's overall external account improved in FY11, recording a surplus of US$ 2.5 billion compared to US$ 1.3 billion in the previous year **(Table 8.1)**.

Figure 8.1: External Account



Source: State Bank of Pakistan

The rise in the external account surplus manifested itself in the buildup of foreign exchange reserves, which reached a record-high of US$ 18.2 billion at the end of June 2011 compared to US$ 16.9 billion at the same time last year. With external account

position remaining comfortable through most of the year; pressure on the rupee was distinctively lower in FY11. Consequently, the rupee depreciated by just 0.7 percent during the year.

Despite an appreciable performance of the external sector in FY11, structural rigidities – with no change in the production mix and the destination of exports – still make it vulnerable. A continuous decline in capital and financial flows is also worrying. The financial account surplus declined for the fourth consecutive year in FY11 and the projections for FY12 show that this trend is likely to continue **(Figure 8.1).** Inflows - under foreign direct investment (FDI), equity securities and loans - remained lower than last year. Given the poor macroeconomic conditions and the deteriorating law and order situation, an improvement in either FDI or equity securities flows seems unlikely in the near future. Moreover, the suspension of the IMF program will also keep inflows from IFIs low. Thus, if the current account deteriorates, support from the financial account will not be available as was the case in 2006-2008. On the contrary, financial account itself would be under pressure if for nothing else, then due to the repayment of the IMF loan **(Table 8.2)**.

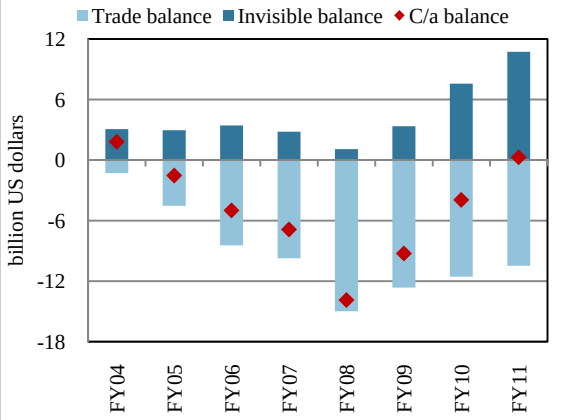
Table 8.2: Estimated Scheduled Repayment to the IMF

million US dollar (using 1 SDR = 1.5755 US$)

Period	Repayment	Total repayment for the year
Q3-FY12	407	
Q4-FY12	519	**926**
Q1-FY13	407	
Q2-FY13	670	
Q3-FY13	821	
Q4-FY13	821	**2719**
Q1-FY14	972	
Q2-FY14	972	
Q3-FY14	564	
Q4-FY14	564	**3,072**

Source: IMF

Figure 8.2: Composition of Current Account



Source: State Bank of Pakistan

8.2 Current Account Balance

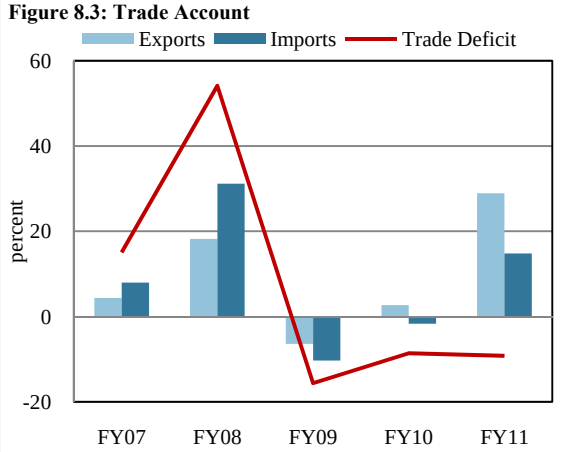
The improvement in the current account witnessed during the past two years continued in FY11 as well, with the current account posting a small surplus of US$ 0.3 billion after recording deficits for six consecutive years **(Figure 8.2)**.

8.2.1 Trade Account

Pakistan's trade deficit continued to contract for the third consecutive year in FY11. Unlike the previous year, when a fall in imports caused a contraction in the trade deficit, this year, it was sharp rise in exports that contracted the trade deficit. Although imports have also increased by 14.7 percent, the growth in exports outpaced the growth in imports **(Figure 8.3)**.

The surge in exports was primarily a result of

Figure 8.3: Trade Account



Source: State Bank of Pakistan

higher international cotton prices. Better unit prices of textile related products supported textile exporters. Although the quantum of textile exports also recorded a marginal rise, prominent factor was the price impact. Apart from textiles, exports of engineering goods, chemicals & pharmaceuticals, leather products, fruits and fish also posted positive growth.

In the case of imports, both petroleum and non-petroleum imports increased. As with exports, the prominent factor in inflating the import bill was the rise in the prices of international commodities, especially the rise in the prices of petroleum products, palm oil and sugar **(Section 8.4** for detail discussion on Trade**).**

8.2.2 Invisible Account

The invisible account, which is comprised of services (like travel, insurance, communication, etc.), income from abroad and current transfers, posted a surplus of US$ 10.7 billion in FY11 with a growth of more than 40.8 percent over last year.

Table 8.3: Current Transfers (million US dollars)

	FY09	FY10	FY11
Current Transfers (net)	11,154	12,562	15,683
Private transfers	10,991	12,006	14.863
Workers remittance	7,811	8,906	11,201
Of which: Exchange Cos.	*2,019*	*1,504*	*1,243*
FCA - residents	-271	629	367
Others	3,451	2,471	3,295
Of which: Exchange Cos.	*247*	*101*	*331*
Official transfers	163	556	821
Cash grants	142	491	512
Others	21	65	309

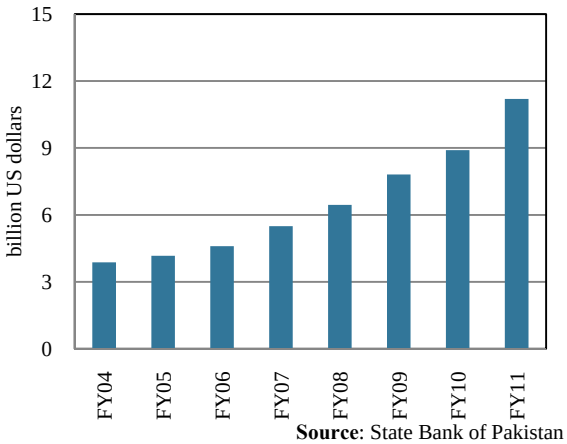
Source: State Bank of Pakistan

Current transfers increased by 24.8 percent in FY11 compared with an increase of 12.6 percent last year. The persistent increase in workers' remittances, which reached a historic high, was the main driving force behind the increase in current transfers. In fact 60 percent of increase in invisible account was due to the rise in remittances (**Table 8.3**).

Workers' remittances

The rising trend in remittances continued for the sixth consecutive year in FY11 as remittances for the year totaled US$ 11.2 billion (**Figure 8.4**). A number of factors can be attributed to this growth in remittances which include: (1) lack of investment opportunities abraod; (2) SBP and government efforts to channelize remittances through the banking system;[1] (3) a reduction in the kerb market premium; (4) an increase in the skill level of workers[2]; and (5) support from expatriates for flood-affected households.

Figure 8.4: Worker's Remittances



Source: State Bank of Pakistan

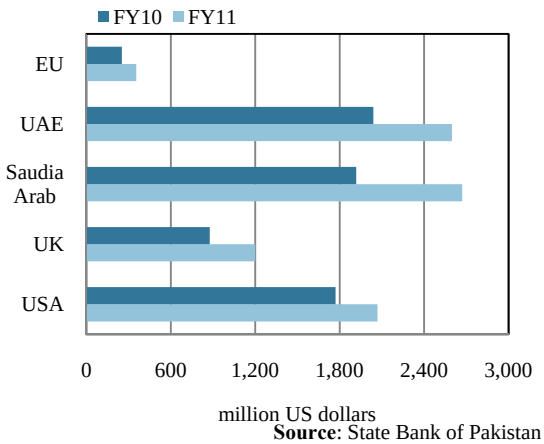
In contrast to FY10, remittances from all the major expatriate countries increased in FY11 **(Figure 8.5).**

[1] Initiatives under PRI such as Xpress money, incentives in the form of interbank transfer facility and Easy-paisa by Telenor Pakistan has helped in increasing the remittances through formal *channels.*

[2] *IMF Working Paper, Remittances in Pakistan - Why have they gone up, and w*hy aren't they coming down? August 2011

It may be pointed out that the entire increase in remittances was due to the rise in inflows through the banking system whereas inflows through exchange companies declined significantly during this period.[3] The rise in inflows through the banking channel is a result of a host of factors including: (1) a decrease in the cost of sending funds due to incentives offered by the government; [4] (2) a decrease in the time taken to send funds due to the collaboration of domestic banks with foreign entities; and (3) the crackdown on some of the exchange companies.

Figure 8.5: Country-wise Remittances



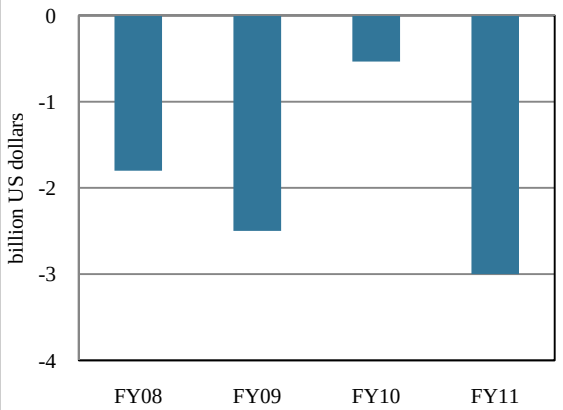
Source: State Bank of Pakistan

Among the other components of the invisible account, the services account deficit increased by 13.9 percent during FY11 as compared to a contraction of 50.0 percent in FY10. This contraction in services account deficit is due to lower inflows under the coalition support, which fund fell sharply by 42.5 percent from US$ 1.3 billion in FY10 to US$ 0.7 billion in FY11.

The deficit in the investment income account declined for the second consecutive year in FY11 as inflows increased by US$ 143.0 million on account of rising investment income. A major part of this rise was due to the increase in interest earned on reserves, and interest income earned by banks on their investments abroad.[5] [6]

Although outflows on account of IMF charges and interest on official and private external debt increased (not principal repayments), it was more than offset by the decrease in outflows on account of both foreign direct and portfolio investment. Resultantly, overall outflows declined by US$ 110 million in FY11.

Figure 8.6: Fall in Financial Account Surplus



Source: State Bank of Pakistan

8.3 Financial Account

The financial account surplus declined for the fourth consecutive year in FY11. In absolute terms, the financial account surplus decreased by US$ 3.0 billion in FY11 - the highest fall recorded during the past four

[3] Remittances through exchange companies declined by 15.5 percent in FY11.
[4] The average share of remittances through banks increased from 83 percent in FY10 to 89 percent in FY11.
[5] Investment income covers receipts and payments associated with resident's holdings of external financial assets and liabilities. SBP's reserves were also higher by US$ 2.6 billion on average during F11.
[6] SBP's reserves, part of which is invested were higher by US$ 2.6 billion on average during F11.

years **(Figure 8.6).** While foreign direct investment declined due to lingering issues such as terrorism, energy shortages, corruption etc., portfolio investment registered a relative improvement **(Figure 8.7).**[7]

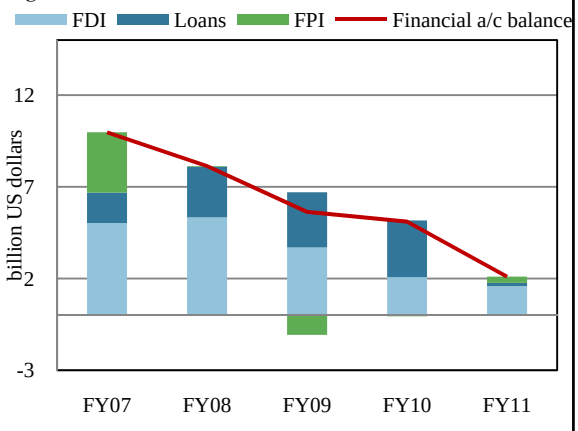
The disbursement of loans also declined sharply in FY11 in contrast to the rise in FY10. This fall is attributed to the suspenion of the IMF stand-by agreement in May 2010, which also impacted inflows from other IFIs and bilateral donors. The amortization of loans, on the other hand, increased, which put further pressure on the financial account.

Going forward keeping in view the uncertainty surronding the global economy and governemnt's exit from the IMF program, presures on the financial account are likely to continue.

Net foreign investment

The net inflow of foreign investment into Pakistan fell by 8.1 percent during FY11. The main contributing factor behind this decline was a substantial fall of US$ 800.6 million in foreign private investment which more than offset an increase of US$ 632 million in foreign public investment (**Table 8.4**).

Figure 8.7: Source of Financial A/C Balance



Source: State Bank of Pakistan

Table 8.4: Net Inflow of Foreign Investment

million US dollars

	FY10	FY11	Absolute	%age
Foreign Private Investment	2,738	1,938	-800	-29
Direct Investment	2,150	1,595	-577	-27
Portfolio Investment	588	364	-223.4	-38
Equity Securities	601	364	-236.4	-39
Debt Securities	-13	-	13	100
Foreign Public Investment	-652	-20	632	97
Portfolio Investment	-652	-20	632	97
Debt Securities	-652	-20	632	97
Total	**2,086**	**1,918**	**-168**	**-8**

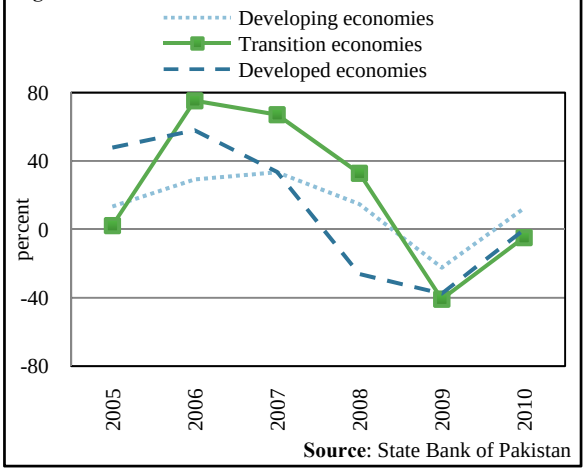
Source: State Bank of Pakistan

Foreign direct investment

The decline in foreign direct investment continued for the third consecutive year. A year-on-year decline of 26.8 percent in foreign direct investment was contributed to by a decline in both equity capital and in reinvested earnings. Equity capital recorded a fall of 22.6 percent whereas reinvested earnings declined by 83.7 percent during FY11 **(Table 8.4).**

It is important to mention here that global economic conditions improved in 2010 compared to 2009. Foreign direct investment flows to developed, developing and transition economies rebounded sharply in 2010

Figure 8.8: YoY Growth in FDI Inflows

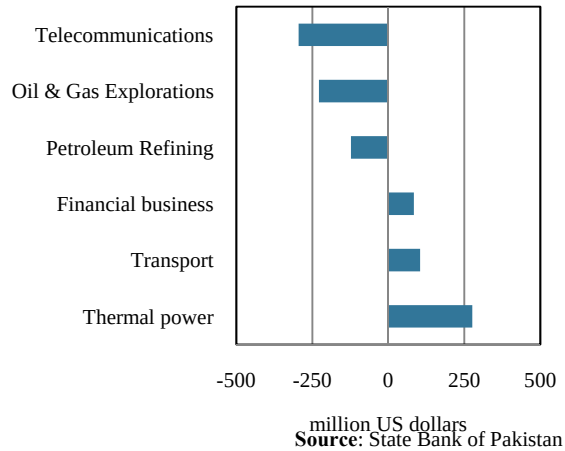


Source: State Bank of Pakistan

[7] Global Competitiveness Index 2010-11 shows that Pakistan is the second worst place in the world (ranked 138 out of 139) as far as business cost of terrorism is concerned.

(Figure 8.8). Despite better global economic conditions, FDI flows to Pakistan declined further in 2010 owing to a number of domestic issues that substantially increased the cost of doing businesses in Pakistan. Sector-specific issues such as saturation in the telecom sector and acute energy shortages also deterred the investment flows.

Figure 8.9: Abs. Change in FDI Inflows



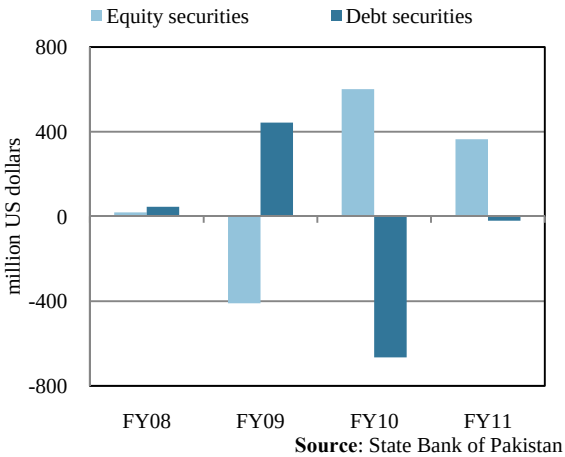
Source: State Bank of Pakistan

Sector-wise data on FDI shows that the major fall in investment was registered in the telecommunication and oil & gas exploration sectors, whereas FDI flows to the power and financial sectors recorded a modest rise **(Figure 8.9)**. The decline in the telecommunication sector probably reflects saturation in this sector. Moreover, stiff competition, rising advertisement costs, utilities costs and energy costs have squeezed the profits of telecommunication companies. On the other hand, the law & order situation (increased incidents of attacked on gas pipelines & oil fields in Baluchistan and KP) is a major hurdle in attracting fresh FDI in the oil & gas exploration sector as this issue is proving to be the major constraint on companies looking to expand their operations.

Foreign portfolio investment

The overall position of portfolio investment improved in FY11 as outflows in debt securities remained much lower than in FY10. However, the investment in equity securities declined in FY11 **(Figure 8.10).** This decline of US$ 222.0 million is a function of weak economic prospects and investors' bleak view of listed Pakistani companies. Regarding debt securities, payments worth US$ 21.0 million were made in FY11 compared to US$ 652.4 million in FY10, which was made on account of maturing Sukook bonds.

Figure 8.10: Investment in Equity & Debt Securities



Source: State Bank of Pakistan

Foreign long-term loans (net)

Foreign long-term loans (net) declined substantially by 61.7 percent in FY11 in contrast to a modest rise of 1.5 percent in FY10. This sharp fall was the outcome of a 30.2 percent drop in overall disbursements. Moreover, amortization of official loans increased by 15.4 percent, which further deteriorated the position of loans (net). The ratio of realized to pledged loans declined considerably since the suspension of the IMF program. The World Bank and the ADB pledged more than US$ 1.0 billion each, however only US$0.5 and US$0.4 billion respectively have been realized so far.

Outstanding export bills (OEB)

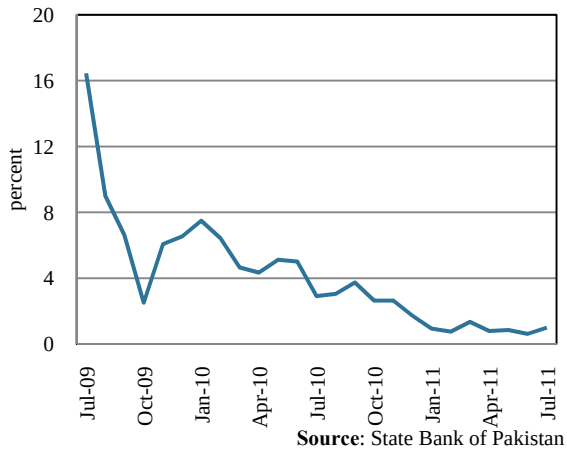
In line with the historic level of export earnings, the stock of aggregate outstanding export bills increased by US$ 793 million in FY11 as compared to an increase of US$ 422 million in FY10. OEB's are generally 2.0-3.0 percent of total merchandise exports. In FY11, OEB's were 3.2

percent of total exports. Stock of OEBs held by both exporters and commercial banks led to this increase.

Exchange rate

As discussed earlier, Pakistan's external account position remained comfortable through most of FY11, with inflows matching outflows though most of the year. This comfort in the inter-bank market was reflected in the relative stability of the Pak rupee/US$ exchange rate during FY11. The Pak rupee depreciated nominally by 0.7 percent during FY11 against 4.7 percent in FY10. A monthly analysis also reveals the absence of any episode of a sharp depreciation in the exchange rate during FY11 **(Figure 8.11)**.[8]

Figure 8.11: Depreciation of Pak Rupee

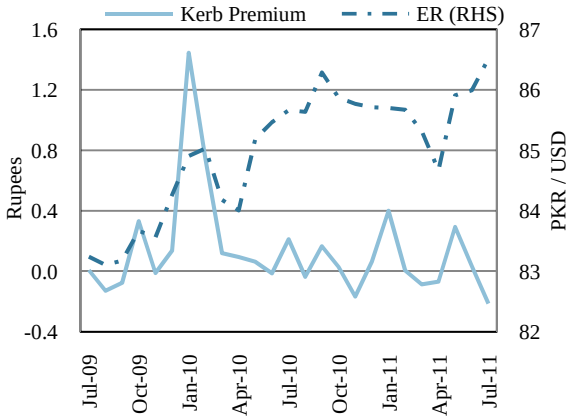


Source: State Bank of Pakistan

Kerb premium and exchange rate

The comfort in the external sector, the improvement in foreign exchange reserves and the relative stability in Pak rupee also aided in keeping the kerb premium much lower in FY11 compared to FY10. The average kerb premium in FY11 remained Rs 0.07 against the average premium of Rs 0.23 in FY10. There were also no episodes of sharp rises in the kerb premium as was witnessed in FY10 **(Figure 8.12)**.

Figure 8.12: Kerb Premium and Exchange Rate

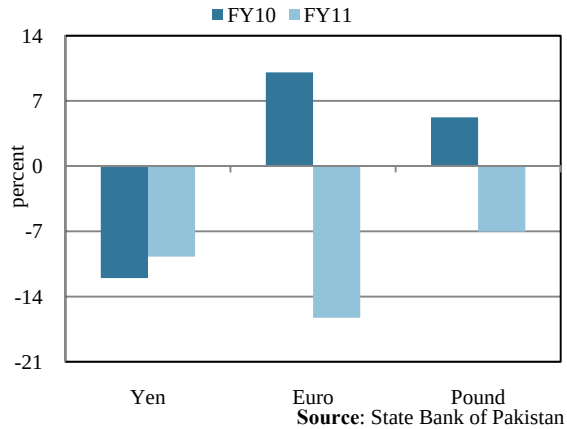


Source: State Bank of Pakistan

Pak rupee versus other major currencies

Although the Pak rupee remained relatively stable against the US dollar, it depreciated by 9.7, 16.3 and 7.0 percent against the Yen, the Euro and the Pound Sterling. This depreciation of the Pak rupee was in line with the movement of these currencies in the global foreign exchange market. The Yen, the Euro and the Pound Sterling appreciated against the US$ by 5.2, 6.6 and 4.0 percent respectively during FY11**(Figure 8.13)**. Prospects of slower recovery in the US along with delays in resolution of US public debt limit were the the main underlying factors for the weakness of US$.

Figure 8.13: App (+)/ Dep (-) of Pak Rupee Against Major Currencies



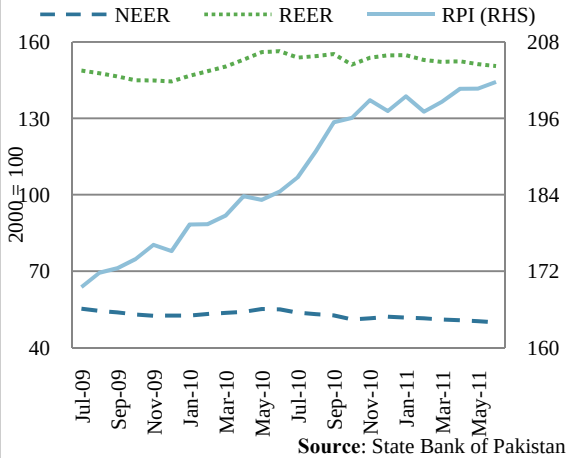
Source: State Bank of Pakistan

[8] Though some pressures in the inter-bank market were noticeable in Sep-10 due to increased demand for foreign exchange by oil marketing companies.

Effective exchange rate

Although the rupee-dollar parity was relatively stable, the nominal effective exchange rate (NEER) depreciated by 9.2 percent in FY11 – significantly higher than the depreciation of 2.1 percent in FY10 - highlighting the weakening of the rupee against other major currencies. The real effective exchange rate, on the other hand, depreciated by 0.76 percent in FY11 against an appreciation of 8.3 percent in FY10, **(Figure 8.14)** showing some gain in competitiveness.

Figure 8.14: Movements in NEER, RPI & REER



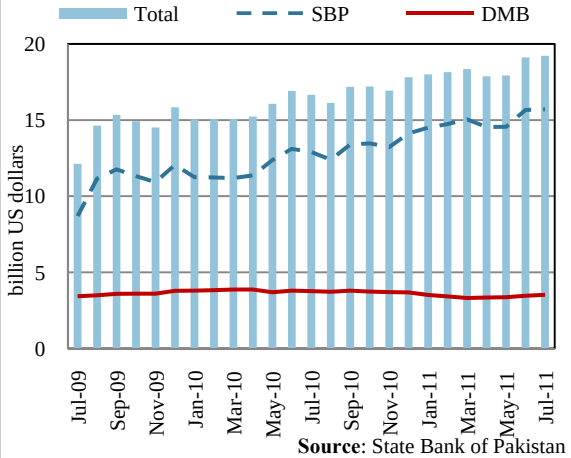
Source: State Bank of Pakistan

Foreign exchange reserves

The improvement in the overall external balance despite the contraction in financial account surplus helped build up foreign exchange reserves during FY11. Thus, by the end of June 2011, Pakistan's overall foreign exchange reserves stood at a record level of US$ 18.2 billion.

The breakup of total reserves shows that the rise in country's reserves was entirely due to the increase in SBP reserves as the reserves held by commercial banks declined by US$ 333 million during FY11. SBP reserves on the other hand registered a substantial increase of US$ 2.6 billion and stood at US$ 15.7 billion by end June 2011 **(Figure 8.15)**.

Figure 8.15: Foreign Exchange Reserves



Source: State Bank of Pakistan

It is pertinent to mention here that both the inflows and outflows in SBP reserves remained lower in FY11 compared to FY10. Fortunately, weak inflows in FY11 were offset by significantly lower outflows. A surplus in the current account and the postponement of oil payments limited the need to inject foreign currency into the inter-bank market. As a result, SBP remained a net purchaser from the interbank market almost throughout the period under review.

In contrast to SBP reserves, reserves held by commercial banks witnessed a net outflow and stood at US$ 3.5 billion by end June FY11. The decline in commercial bank reserves is mainly due to the increased demand for foreign currency loans and the decline in FE-25 deposits **(Figure 8.16).** The increase in trade financing reflects both the rise in trade volume and the stability of exchange rate during the period under review. Trade financing thus rose by US$ 778 million during FY11 and FE-25 deposits increased by only US$ 367 million in the same period. Out of the US$ 778 million used for trade financing, the proportion used by importers (US$ 415 million) is more than that utilized by exporters (US$ 313 million). It is important to mention that trade financing improves dollar liquidity in domestic market and thus supports the exchange rate.

Reserve adequacy

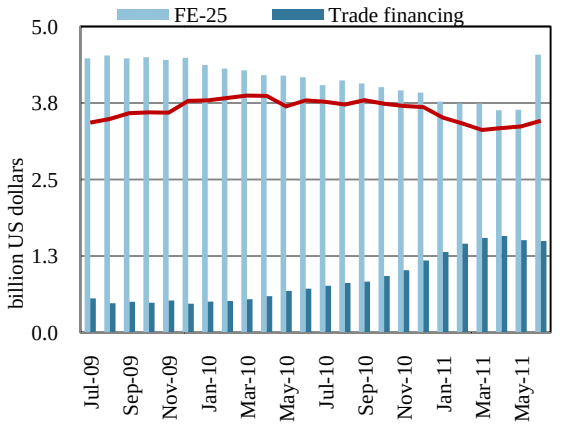
The reserve to import ratio - widely used to measure reserve adequacy and a reflection of the financial soundness of the country – remained comfortably at 27.9 weeks of imports in FY11. This was almost the same as in FY10. A monthly analysis of the reserve adequacy ratio indicates that import coverage remained relatively higher in FY11 compared to FY10 **(Figure 8.17)**. This improvement is commendable given the sharp rise in the import bill during FY11.

8.4 Trade Account[9]

As per the *FBS* data, Pakistan's trade deficit widened by 0.9 percent in FY11 after contracting during the previous two years. This deterioration in trade account was due to relatively large increase in imports compared to exports, which otherwise posted a decent growth of 28.9 percent. While the growth in exports was concentrated in the H2-FY11, that in imports was more pronounced in the H1-FY11 **(Figure 8.18)**.

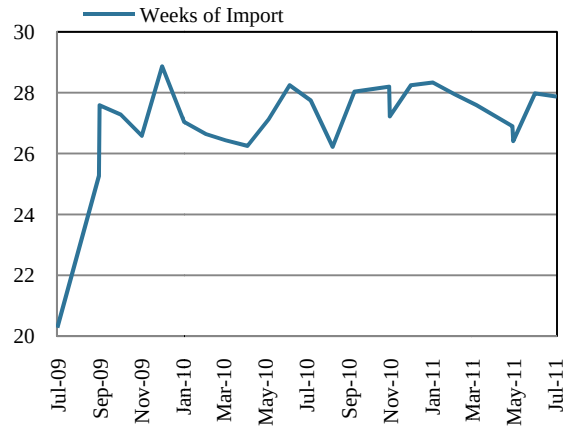
The16.4 percent rise in imports during FY11

Figure 8.16: FE-25 Deposits and Trade Financing



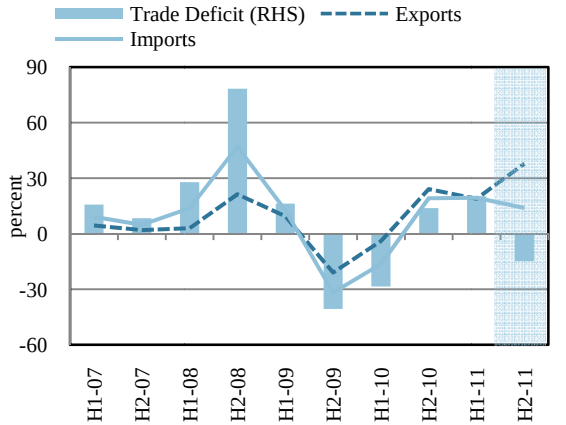
Source: State Bank of Pakistan

Figure 8.17: Reserve Adequacy ratio



Source: State Bank of Pakistan

Figure 8.18: Trade Account (YoY Growth)



Source: State Bank of Pakistan

[9] The discussion on this section is based on custom data provided by the Federal Bureau of Statistics (FBS) which may vary from trade numbers compiled by the SBP.

was driven by increase in international prices as quantum of imports actually declined; reflecting sluggish domestic demand. Exports, however, benefited from the rise in international prices as 66.0 percent of the increase in exports was due to higher prices while the remaining was due to the increase in quantum. The major impetus to exports came from cotton and textile; other groups such as: food group, petroleum group, Leather, footwear, medical & surgical instruments, cutlery and chemicals & pharmaceuticals etc also registered substantial growth.

Although performance of exports was quite encouraging during FY11, structural rigidities, energy shortages and concerns over the law and order situation continue to plague the country's exports potential. These issues have been a major hurdle in export diversification, both, in terms of commodities and destinations and have eroded country's competitiveness overtime.

In 2010-2011 (World Economic Forum's) Global Competitiveness report **(Table 8.5)**, Pakistan's ranking has dropped to 123 from 101 last year. In the region, its overall competiveness ranking is lower than that of India's (51), Bangladesh's (107) and Sri Lanka's (62). All major determinants of competitiveness - such as macroeconomic stability, health and primary education, higher education and training and labor market efficiency - are lower in Pakistan as compared to other regional countries.

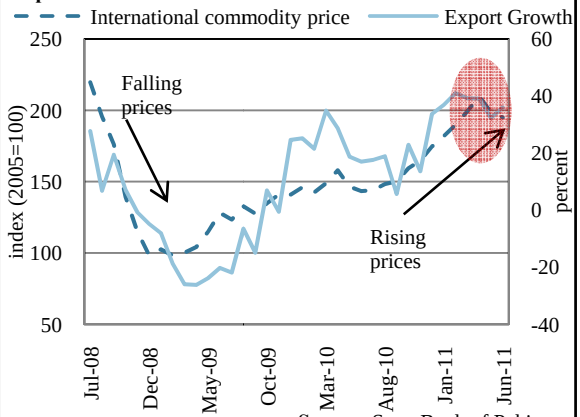
Going forward, the trade deficit is likely to increase due to the slowdown in exports particularly, textiles and cotton exports. This assessment is based on a number of factors such as: (1) the easing of international commodity prices especially cotton **(Figure 8.19)** and; (2) concerns over the recovery in advanced economies. [10] On the other hand, the overall import bill could be higher in FY12 due increase in both quantum and average prices of petroleum products.

Table 8.5: Global Competiveness Rankings

	2009-10	2010-11
Pakistan	101	123
India	49	51
Bangladesh	106	107
Sri Lanka	79	62
Nepal	125	130
Malaysia	24	26
Thailand	36	38
Philippines	87	85

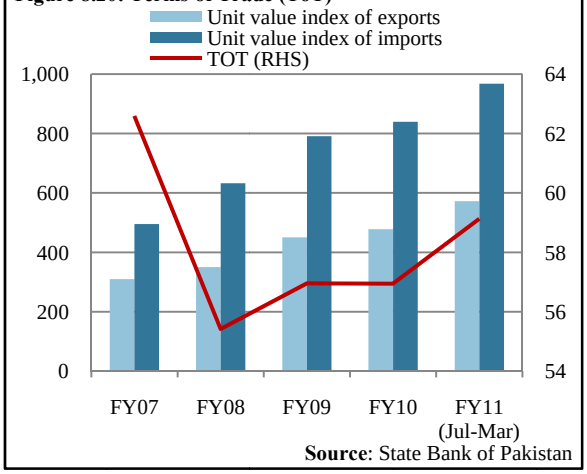
Source: The Global Competiveness Report 2010-11

Figure 8.19: International Commodity Price Index and Export Growth



Source: State Bank of Pakistan

Figure 8.20: Terms of Trade (ToT)



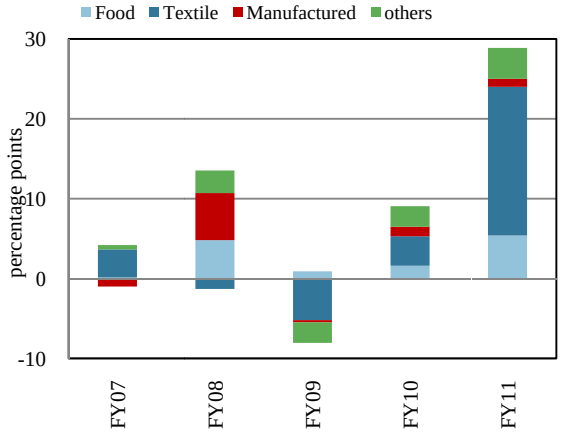
Source: State Bank of Pakistan

[10] Cotton prices are expected to decline significantly due to the expected increase in cotton production in Pakistan, India, China and Brazil. A part of the rise in cotton prices in FY11 was also due to speculation which has been dampened following a positive outlook about the future cotton crop.

Terms of trade

Since commodity prices started rising in FY09, Pakistan's terms of trade (ToT) have continuously improved. This has been due to a larger increase in the unit value index of exports than the increase in unit value index of imports **(Figure 8.20)**. Pakistan's main exports are low value added manufactured products whose prices have registered substantial increase in international markets during the past couple of years. On the other hand, Pakistan's imports mainly consist of oil and raw materials for consumer goods, whose prices have increased only moderately during this period.

Figure 8.21: Contribution in Exports Growth

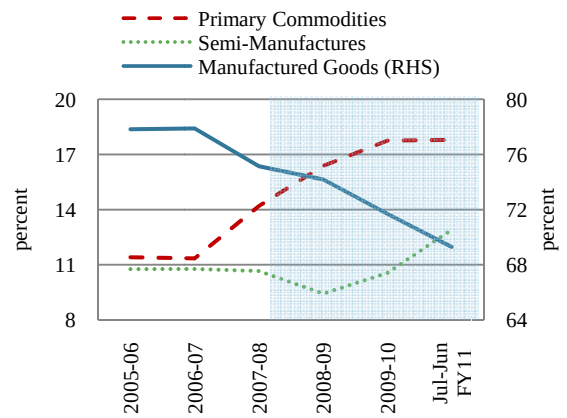


Source: State Bank of Pakistan

8.4.1 Exports

Exports recorded a sharp rise of 28.9 percent during FY11 against 9.1 in FY10. In absolute terms, exports of US$ 24.9 billion were the highest ever in the history of the country. This mile stone was achieved on the back of 35.2 percent rise in cotton and textiles related exports that were supported by impressive growths in other major groups including food, textile, leather products, chemicals & pharmaceuticals etc. **(Figure 8.21)**.

Figure 8.22: Composition of Exports



Source: State Bank of Pakistan

Monthly analysis reveals that a large part of the rise in exports occurred during H2-FY11on account of: (1) the rise in international commodity prices; and (2) 2.08 percent depreciation in the real effective exchange rate.

Notwithstanding improved export performance during FY11, it is disconcerting that the composition of Pakistan's exports is regressing from manufactured to semi-manufactured and primary commodities **(Figure 8.22)**. According to latest available figures, the share of manufactured goods in total Pakistani exports is around 71 percent compared to 88 percent in Bangladesh. In India and Sri Lanka the share of manufactured goods in exports is 67 percent.[11]

Food exports recorded strong growth

An analysis of food exports reveals that the main impetus for export growth in this category came from wheat, fish, meat, fruits, and vegetables exports with improved production and higher prices of these commodities playing an important role **(Table 8.6).**

Wheat exports accounted for more than 55 percent in of the growth in food exports, followed by vegetables (9.0 percent), fish (6.7 percent) and meat (5.1 percent). The exceptional rise in wheat exports during FY11 is attributed to; (1) higher international prices due to production losses in

[11] World Development Report 2011.

Russia, USA and Canada; and (2) the availability of an exportable surplus from last year's carryover stocks and strong expectations of a bumper crop in FY12.[12]

Exports of ***meat*** continued to grow strongly for the fifth year and have increased by almost four-fold since FY07. This growth was due to both an increase in quantity and in prices. The rise in meat and meat preparation exports is on account of higher demand from Saudi Arabia after the Saudi government banned meat imports from some African countries.

Table 8.6: Food Exports (million US dollars)

	Abs. Change	Quantum Impact	Price Impact
Food Group	**1,050.9**		
Rice	-45.7	-188.4	142.6
a) Basmati	79.2	-230.6	105.7
b) Others	-124.9	55.0	15.4
Fish and Fish preparations	70.3	55.0	15.4
Fruits	26.0	-10.7	36.7
Vegetables incl. roots and Tubers	95.1	48.1	47.0
Tobacco Raw	12.6	-2.4	15.0
Wheat	580.9	340.7	240.2
Spices	9.1	-1.3	10.5
Oil Seeds & Nuts etc.	0.5	3.0	-2.5
Sugar	0	0	0
Meat and Meat Preparations	53.8	42.5	11.2
All Other Food items	248.4		

Source: Federal Bureau of Statistics

Realizing the potential in the Halal meat industry, which has worldwide sales of over US$ 1 trillion, the Sindh Board of Investment (SBI) took a number of initiatives for the promotion of the Halal meat industry in Pakistan at the start of FY11. Their efforts resulted in higher production and exports of meat, despite the floods that severely affected livestock in Sindh and Punjab. The production of meat and its exports are likely to rise further in FY12.

After declining during FY10, ***fish and fish preparation*** exports increased to US$297 million in FY11 despite the loss of Europe as an export destination[13]. Pakistan managed to fetch higher prices for its shrimp exports from Egypt and other markets such as China, UAE, Thailand, Korea, Saudi Arabia and Indonesia which not only nullified the loss – approximately $30-40 million per annum – of Europe as an export market but also increased export earnings. Overall, fish and related exports during FY11 rose to 131,700 tons ($297.3 million) compared to 106,000 tons ($227.0 million) last year. A number of initiatives are under way to further increase the exports of fish & fish preparation, including: (1) the expansion of the existing laboratory infrastructure to provide testing and certification facilities acceptable to destination markets; (2) the provision of financial support to revamp fish jetties at Gaddani, Dam, Pasni and Jewani; (3) ensuring the provision of facilities such as landing stations/jetties/ports along the Makran coast in partnership with the provincial government of Balochistan; and (d) support Korangi seafood processing companies in developing a traceability system for smoked, canned, fresh and frozen fish products. Pakistan will not be able to resume seafood exports to the EU next year since the EU mission did not include Pakistan in the list of countries to be visited in 2011 for the assessment of the country's production facilities.

Despite higher prices in the international market, rice exports, on the other hand, declined during FY11 due to production losses – around 1.7 million tons of paddy – caused by the floods. Rice production was only 4.82 million tons in FY11 compared to 6.61 million tons in FY10. The decline in rice exports was entirely due to the lower export volume of non-basmati rice, whereas basmati rice recorded an increase in quantity exported.

[12] According to latest official estimates, the wheat production is expected to remain at 25 million tons during FY12 compared to 24.214 million tones production realized in FY11.

[13] The EU imposed a ban on seafood imports from Pakistan in April 2007 for not complying with quality requirements.

Textile exports demonstrated a broad based increase during FY11[14]

Textile exports increased sharply by 35.2 percent during FY11 compared to a 6.8 percent increase last year. This sharp acceleration emanated largely from: (1) higher prices of cotton and textile products; (2) increase in textile and clothing demand in the EU and US; and (c) Depreciation in nominal effective and real effective exchange rate.

Table 8.7: Quantum and Price Impacts (FY11)
million US dollars

	Quantum Impact	Price Impact
Raw Cotton	-30.1	171.1
Cotton Yarn	-217.5	948.6
Hosiery	398.1	138.8
Cotton Fabric	489.8	273.1
Readymade Garments	409.2	106.8
Bed wear	-84.1	425.1
Towels	-43.3	135.4
Total Effect	**1,471.1**	**2,905.3**

Source: Federal Bureau of Statistics

It is also important to mention that not only low value-added textile products such as cotton yarn and cotton fabrics show greater than 20 percent growth in FY11, but high value added products such as bed wear, towels and readymade garments also recorded strong growth. Although the price impact in all textile items remained dominant, the quantum impact in hosiery, cotton fabric and readymade garments also contributed significantly to the rise in exports **(Table 8.7)**.

Moreover, it appears that frequent disruptions in manufacturing process has limited Pakistan's ability to cater for bulk byres, to counter this, Pakistani exports are now increasingly targeting relatively smaller importers. This strategy makes sense as India, Bangladesh, Sri Lanka are catering for bulk buyers while China is shifting to provide established brands. This leaves relatively small importers whose orders could be processed with existing constraints.

Non-food, non-textile export increased by 16.0 percent during FY11 compared with a 13.3 percent rise last year. The contribution to growth came from petroleum products, leather raw and manufactured, footwear, medical and surgical instruments, chemicals and pharmaceuticals, and engineering goods. A fall in the exports of fertilizer, jewelry, cement and molasses, however, partially offset the increase in the rest of the non-food non-textile exports.

Chemicals & pharmaceutical exports posted a growth of 21.8 percent during FY11despite the fall in fertilizer and pharmaceutical exports. Other sub-sectors, such as, plastic materials and other chemicals were the main contributors to the chemicals and pharmaceutical group's export earnings. Export earnings from plastic material grew by 50.4 percent and from other chemicals increased by 20.5 percent during FY11. This rise can be attributed to an increase in import demand from India for chemicals like polyethylene and pure terepthalic acid (PTA).

Leather manufactures grew by 17.3 percent during FY11. The largest contribution came from exports of leather garments followed by leather gloves. During FY11, the export of footwear also increased by 16.5 percent. Among footwear products, the exports of leather footwear increased 26.4 percent, and that of canvas footwear by 51.0 percent. The higher export of leather manufactures and footwear is mainly due to rise in demand in traditional markets and relatively better export prices.

Pakistan's ***cement*** exports declined for the second consecutive year. This decline was on account of: (1) low demand from United Arab Emirates (UAE); (2) qualitative barriers from India on cement imports; (3) imposition of higher import duty in Afghanistan; and (4) increased production capacities in Middle East and India.

[14] See section 2.3.2 for more discussion on textile exports.

8.4.2 Imports

After declining for the last two years, imports grew by 16.4 percent in FY11 against a marginal decline of 0.3 percent in the previous year. The rise was due to increase in food, petroleum, textile and agricultural & chemical group imports, while imports of machinery, transport goods, and metals fell **(Table 8.8).** A host of factors are responsible for the increase in imports including: (1) the increase in international commodity prices, particularly that of petroleum products and Palm oil; (2) the domestic shortage of pulses, sugar and cotton due to floods in August 2010.

Table 8.8: Contribution in Import Growth
percent

	FY08	FY09	FY10	FY11
Food & Agri.	9.6	-1.6	0.1	5.3
Petroleum	13.5	-4.9	1.5	5.9
Textile	2.6	-1.7	0.6	3.0
Machinery, Transport & Metal	2.3	-3.8	-2.2	-0.6
Others	2.9	-0.9	-0.3	2.9
Total	**30.9**	**-12.9**	**-0.3**	**16.4**

Source: Federal Bureau of Statistics

Major commodities recording increase

The import of *petroleum crude* posted a growth of 51.6 percent during FY11in sharp contrast to last year when it declined by 20.6 percent. The import of *petroleum products* recorded a moderate growth of 6.1 percent which was almost entirely due to the increase in prices. The reason behind the lower import quantity of petroleum products is the increase in domestic production of high speed diesel (HSD), furnace oil (FO) and motor gasoline (MS).

Table 8.9: Share in Overall Import Increase (FY11)
million US dollars

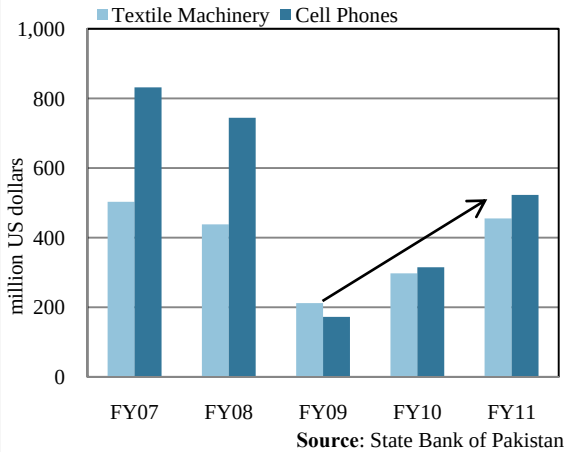
	Abs. Δ in %	Quantum impact	Price impact
Petroleum crude	28.7	581.2	1,054.6
Palm oil	12.2	186.0	516.4
Other chemicals	8.5	N.A	N.A
Petroleum products	7.3	-1,040.7	1457
Sugar	6.9	312.2	78.7
Raw Cotton	6.5	3.1	368.8
Plastic Material	5.1	295.6	-3.5
Other Textile items	5.0	N.A	N.A
Telecom	4.6	N.A	N.A
Synthetic Fiber	3.0	95.3	74.7
Total	**87.9**	**-34.3**	**4,208.9**

Source: Federal Bureau of Statistics

In the *food group*, the import of *palm oil* and *sugar* contributed to around 72 percent of overall growth in food imports. While the rise in prices was the main reason for the increase in Palm Oil import bill, higher quantum may have been influences by reduction in import duty on this commodity earlier in the year. The increase in *sugar* imports was due to domestic shortages. Sugar import is anticipated to decline in FY12 due to the expected rise in sugar cane production after the floods and favorable weather conditions in Punjab and Sindh.

The rise in the import of raw cotton was primarily due to higher prices in the international market, although a slight increase was recorded in quantity imported as well **(Table 8.9)**. Pakistan imports long fiber strand cotton and it is expected that the import of raw cotton will decline in FY12 following decline in cotton prices from their peak level in March, 2011. [15]

Figure 8.23: Textile Machinery and Cell Phone Imports



Source: State Bank of Pakistan

[15] Prices of cotton have dropped from 229.67 US cents per Pound in March 2011 to 116.65 cents per Pound in September 2011: Cotlook 'A Index', Middling 1-3/32 inch staple, CFR Far Eastern ports.

In tandem with last year, imports in the *telecom* sector posted sharp growth during FY11. This was mainly due to the rise in the import of mobile phones after the government allowed the import of low-priced Chinese mobile phone brands into the country.

Although imports in the machinery group as a whole registered a decline during FY11, the import of textile machinery continued to improve. Imports of textile machinery rose by 53.0 percent in FY11 compared with 41.3 percent rise last year. Higher import of textile machinery was the result of (a) replacement of old machinery mainly in the weaving sector, and (b) imports of new machinery in spinning and stitching sectors **(Figure 8.23).**

Table 8.10: CBU Imports

		Value (million US dollars)		YoY Growth (percent)	
	Age Limit	CBU	Motor Cars	CBU	Motor Cars
FY06	10 Years	563.0	371.7	-	-
FY07	5 Years	453.5	312.0	-19.5	-16.1
FY08	3 Years	444.8	237.4	-1.9	-23.9
FY09	3 Years	173.8	81.8	-60.9	-65.5
FY10	3 Years	211.3	103.1	21.6	25.9
FY11		219.4	145.8	3.8	41.5
FY11					
(Jul-Dec)	3 Years	87	48.6	-	-
(Jan-Jun)	5 Years	132.4	97.2	52.2	100.0

Source: Federal Bureau of Statistics

Similarly while imports from the ***transport group*** declined by 3.9 percent in FY11, the import of motor cars and motor cycles increased sharply. In particular, the import of CBU units of motor cars grew by 41.5 percent growth in FY11 compared with 29.5 percent last year. This growth was expected after the government's decision to increase the age limit of imported cars from 3 to five years in December 2010.[16] The imports of CBUs are directly proportional to the age limit **(Table 8.10)**. However, the impact of this decision was much lower than expected because of the exchange rate depreciation, higher interest rates and the deterioration in macroeconomic situation.

Major commodities recording fall in imports

A major fall was recorded in the import of other transport equipment, wheat, agricultural machinery, fertilizer manufactured; construction & mining machinery, and power generating machinery **(Table 8.11)**.

Table 8.11: Items Recorded YoY Fall in Imports
percent

	FY09	FY10	FY11
Other Transport equipments	-69.7	464.3	-88.6
Wheat Un-milled	25.4	-96.2	-87.3
Agricultural Machinery	-18.1	77.1	-50.3
Fertilizer Manufactured	-38.4	73.6	-43.5
Construction and Mining Machinery	7.6	-41.7	-29.9
Power Generating Machinery	48.5	-17.9	-29.4
Gold	50.1	274.2	-21.0
Aircrafts, Ships and Boats	-45.5	58.9	-19.1
Iron and Steel	5.6	-7.8	-6.6
Other Machinery	10.6	-28.6	-5.0

Source: Federal Bureau of Statistics

In case of *other transport equipment*, 88.6 percent decline in FY11 was due to the absence of one-off imports related to railway (rail maintenance vehicles and other parts for locomotives) that had inflated the import bill last year.

Wheat imports continued to decline for the second consecutive year, dropping by 87.3 percent during FY11. The fall in wheat imports was the result better domestic production and carryover stocks from FY10.

As far as imports of fertilizer ***manufacture*** group is concerned, a significant decline was recorded entirely due to the lower quantity imported as the unit value increased by 20 percent. The decline in quantum was mainly due to the enhanced production capacity of fertilizer,

[16] Increase in the age limit reduces the cost of vehicle as importers can claim higher depreciation allowance. Importer can now claim 60 percent depreciation allowance against previous 36 percent.

particularly that of urea, in the country. Pakistan has been able to increase fertilizer production capacity by 1.4 million tons in FY11.[17]

The decline in the imports of *construction & mining machinery, and iron and steel* is perhaps a reflection of lower construction activities on the back of lower domestic demand. In the case of *power generating machinery*, inventories carried forward from previous years is the main reason behind the decline in imports during FY11.

[17] During FY11, Engro added 1.3 million tons while Fatima Fertilizer added 0.1 million tons to total production capacity.

9 Sector Studies

This chapter focuses on some key industrial sectors including textile, fertilizers, automobiles, and construction. These sectors have a direct contribution of more than 12 percent in the GDP of Pakistan, and have extensive backward and forward linkages with other economic activities in the country. The study of these sectors focuses on the demand and supply situation, policy environment, implications for exports and imports, and other sector specific issues.

9.1 Textile Sector

The economic activities in Pakistan are influenced considerably by the textile sector as evident in its direct contribution to domestic production, financial services and foreign exchange earnings (**Table 9.1**). In addition, the sector has strong implications on socio-economic conditions of the country given its role in employment generation.

Table 9.1 Contribution of Textile in Pakistan's Economy
at end FY11 (in percent)

GDP	7.4	Market capitalization	3.2
LSM	32.6	FDI	1.6
Employment	38*	Private loans	20.2
Exports	55.6	EFS	62.7

*Of total manufacturing labor force.

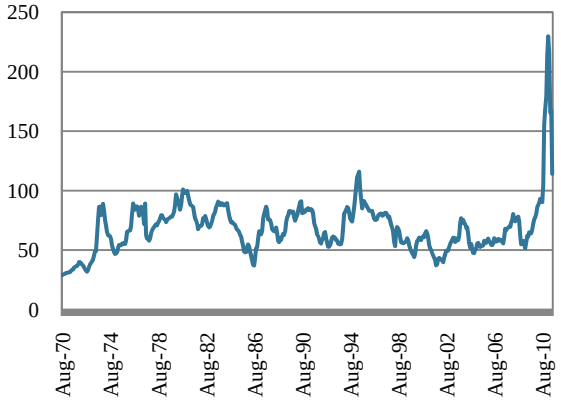
Source: Economic Survey 2011; State Bank of Pakistan

Although outlook for textile was fairly positive at the beginning of FY11, the sector had to face privation with intensified power outages and gas shortages. Moreover, devastating floods also affected textile production in H1-FY11. However, during the second half of the year, surge in global cotton prices provided earning opportunities in the form of unprecedented high export prices, which in turn induced production activities. Consequently, the textile manufacturing witnessed a growth in 10.9 percent in H2-FY11 compared with a YoY decline by -6.5 percent in the first half.

Benefitting from record increase in cotton prices

Cotton prices started rising sharply in October 2010 and touched a 150-year record level in February 2011 on the back of both supply and demand factors (**Figure 9.1**). From the supply side, major factors are crop loss due to flooding in Pakistan and Australia; unfavorable weather in China, declining US inventories and export cap by India. On the demand side, China's renewed commitment to build up cotton reserves; panic buying; as well as speculative positions in futures contracts pushed the cotton prices up.

Figure 9.1: Cotlook A Index



Source: Cotlook

This rise in cotton prices lead to a broad-based increase in textile products across the globe, which helped Pakistan earning record US $ 13.8 billion of foreign exchange through textile exports. The price impact was so strong that earnings from textile exports grew by 44.7 percent in H2-FY11 despite the quantum export

of key items like bed-wear, towels and cotton yarn declined during this period.[1] Nonetheless, there were other textile products, including cotton fabrics, hosiery, and silk and synthetic items, that witnessed rise in both quantum and value terms – driven mainly by relatively stable unit prices and competitiveness losses for Chinese products (**Table 9.2**).[2]

Table 9.2: Export Performance of Textile Sector (YoY growth**)**

	FY10			FY11		
	Quantity	**Value**	**Unit price**	**Quantity**	**Value**	**Unit price**
Textile group		6.8			35.2	
Raw cotton	104.7	124.0	9.4	-15.4	72.1	103.3
Cotton yarn	19.4	28.6	7.7	-15.2	51.0	78.0
Cotton fabrics	-5.8	-7.9	-2.2	27.2	42.4	11.9
Hosiery (knitwear)	0.0	1.4	1.4	22.6	30.4	6.4
Bed-wear	-0.7	0.5	1.2	-4.8	19.6	25.6
Towels	12.0	3.9	-7.2	-6.5	13.8	21.7
Tarpaulin and other canvas goods	4.0	9.4	5.2	-30.5	-19.5	15.7
Readymade garments	-3.4	3.2	6.9	32.2	40.7	6.4
Art silk and synthetic textiles	35.2	60.3	18.6	34.7	50.1	11.4

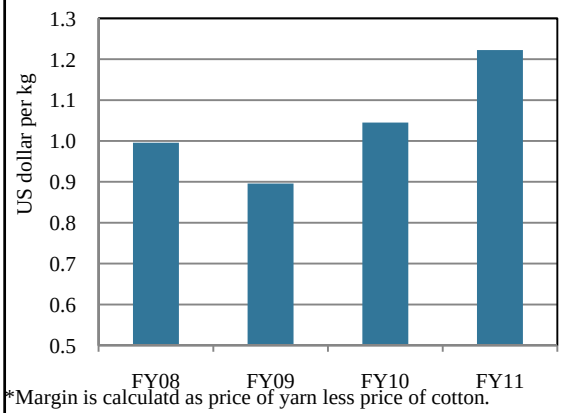
Source: Federal Bureau of Statistics

Despite this unprecedented increase in exports, we believe that Pakistan's export performance could have been better if; (a) energy supply were smoother – Pakistani exporters had to cancel a large number of booked orders due to fear of failure in on-time delivery; (b) textile manufacturer had also focused synthetic items – as substitutes to cotton; and (c) there were market mechanism in place for exporters to hedge against fluctuating yarn prices. The recent fluctuation in cotton market has accentuated the importance of some mechanism available in the country through which the exporters can hedge themselves in uncertain situations.[3]

Healthy margins boosting spinning sector

Despite a decline in cotton crop, spinning activities improved during FY11 on the back of fewer cotton exports, stronger cotton imports and healthy margins. During the first half the year, the spinning activities was depressed due to lower availability of cotton; however, in H2-FY11 production increased significantly when India lifted restrictions on cotton export enabling Pakistani manufacturers to bridge demand-supply gap.[4,5] The increase in yarn production in H2-FY11 is also explained by improvement

Figure 9.2: Yarn Margins in Pakistan



*Margin is calculatd as price of yarn less price of cotton.

Source: Emerging Textiles

[1] While the decline in quantity export of cotton and cotton yarn is due to lower availability of exportable surpluses; the decline in home textile products (bed-wear and towels) is a combined factor of inventory built-up with importing retailers, lackluster home furnishing market, and global buyers switching to high-end products from India.
[2] Chinese textile products are losing ground in US and EU market mainly due to rising labor cost.
[3] Securities and Exchange Commission of Pakistan has recently allowed Pakistan Mercantile Exchange Limited (PMEX) for futures trading in cotton. However, it is yet to be seen how different stakeholders go along with this setup.
[4] Pakistan imported 188 thousand MT of cotton during H2-FY11 compared with 157 thousand MT in H1-FY11.
[5] Cotton yarn production increased by 7.6 percent YoY during H2-FY11 compared with 1.6 percent YoY during H1-FY11.

in spinning margins – for the second consecutive year (**Figure 9.2**). The healthier margins not only improved production in the sector but also attracted investments – the import of spinning machinery increased by 23.3 percent in FY11.

Risks ahead for fabrics

A large part of fabrics export growth in FY11 was temporary and is less likely to sustain in FY12. Specifically, detailed export data suggests that the increase in fabric export during H2-FY11 was mainly to Turkey.[6] However, fabrics demand by Turkey may not continue going forward after imposition of safeguard restrictions on textile inputs by Turkish government in July 2011.

On the other hand, fabrics export to Bangladesh may continue to support this sector in Pakistan. In January 2011, European Union eased rules of origin for textile import from Bangladesh: according to revised rules garment manufacturers in Bangladesh can avail generalized system of preferences (GSP) benefits even if they use Pakistani fabrics as input.[7] This caused an increase in fabrics export to Bangladesh in H2-FY11 onward.

Problems in apparel and home textile sectors

Although Pakistan's exports of apparel (both knitwear and woven garments) increased sharply in FY11, it could not raise its share in the world markets. While China has lost some part of apparel market due to rising wage pressures and Yuan appreciation, the market was captured by countries like Bangladesh and Cambodia. The Pakistani manufacturers – struggling with energy shortages and law and order situation – could only uphold their existing market share (**Table 9.3**).

Table 9.3: Share (%) in Apparel Markets (in quantity)

	US		EU	
	FY10	**FY11**	**FY10**	**FY11**
China	41.7	40.8	50.3	49.9
Bangladesh	6.4	6.7	12.0	13.0
Cambodia	3.6	4.1	0.9	1.0
Vietnam	7.6	8.9	2.1	2.2
Pakistan	2.9	2.8	2.7	2.8
India	4.1	3.9	5.7	5.2

Source: Eurostat and OTEXA

Besides adverse business conditions, Pakistan's concentration in cotton apparel market was another factor that hindered in increasing the market share. Due to sharp increase in cotton prices, buyers were more attracted towards non-cotton apparel (including man-made fiber, wool, etc.). However, Pakistan's exports of non-cotton apparel are almost minimal due to a protected synthetic fiber market over the years and inability of textile manufacturers to equip for synthetic textile processing.

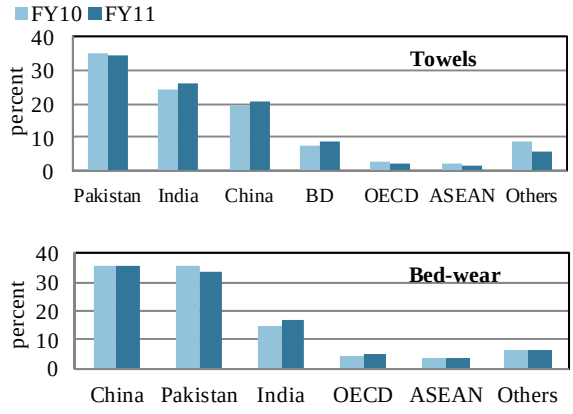
Similarly, Pakistan has also lost its share in world market of home textile. While the home textile market in world remained under pressure in general due to weaker than expected recovery in US and EU economies and surge in prices, the impact on Pakistan's export was more pronounced. The export of bed ware and towel (having share of more than 20 percent in total textile export from Pakistan) declined in quantum during FY11. Particularly, Pakistan lost its share in US market against India in bed-wear category as buyers switched to import higher-end products. This was a surprise yet understandable switch, as buyers preferred higher-end Indian products over low to medium-end Pakistani products by paying a smaller premium than before.

[6] Around 12 percent of Pakistan's total fabric exports are destined for Turkey.

[7] Bangladesh is a recipient of least developed countries' (LDC) preferential access to EU market under the GSP. Accordingly, textile exports from Bangladesh duty free access to EU under Everything but Arms (EBA) scheme (duty free access is available to only LDCs). This makes textile products of Bangladesh more competitive compared with non-recipients of EBA (including Pakistan).

In towels category, Pakistan lost its share against low cost Bangladesh, India and China (**Figure 9.3**).

Figure 9.3: Shares (%) in US Home Textile Market



Source: OTEXA

It is therefore, safe to conclude that textile sector in Pakistan is going to face stiffer competition from neighboring economies and it would become difficult for it to survive if there is no modernization in production process and new marketing strategies are not adopted.

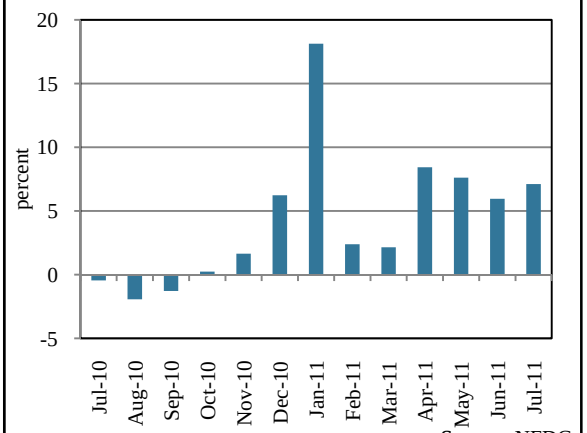
The favorable price shock observed in FY11 is less likely to be repeated going forward. For FY12, improved cotton outlook in Pakistan, India and China may provide some supply side ease to the textile sector, [8] but the ongoing problem of energy shortages and fears of global economic slowdown put serious question mark on export performance of local textile industry.

[8] Despite loss of cotton crop in Sindh due to floods, the overall estimate for the crop in Pakistan is still above 12 million bales.

9.2 Fertilizer

Ensuring the timely availability of urea (domestic or imported) should remain the government's overarching policy objective in light of the sector's importance as an essential input for the entire agriculture sector. And the issue at the heart of the country's urea shortage – and associated spillovers on the economy – is the national natural gas shortage. Unless, the government creates and communicates a credible gas allocation policy – and does not resort to ad-hoc measures – there will always be the sort of speculation, shortages and hoarding in the urea market that characterized the latter half of FY11.

Figure 9.4: MoM Growth in Urea Prices



Source: NFDC

Inconsistent gas allocation policies

Although the fertilizer industry is given priority after domestic consumers in the National Gas Allocation and Management Policy 2005, recent policy decisions have not reflected the precedence laid out in the policy. Whether it makes sense economically to divert gas to the fertilizer sector (the industry's estimates clash with the numbers of a report authored by a USAID-sponsored consultancy) is another debate, but these back-and-forth decisions serve to reinforce the perception that government allocation policies are inconsistent, and hence discouraging for future investment decisions.[9] Fertilizer manufacturers do have contracts guaranteeing gas supply for nine months of the year and at least one of them has previously gone to court to force the government to supply gas to its plant. It remains to be seen if such a course of action will be considered once again by the fertilizer manufacturers.

However, as things stand now, fertilizer manufacturers will be subject to a gas load management schedule that will constrict production. Our estimates indicate that urea production for the rabi season in FY12 – if this schedule is adhered to – will be 2.1 million tons, leading to a deficit of 1.2 million tons, according to our own assessment of a demand for 3.3 million tons in the rabi season. However, manufacturers will likely not raise their prices beyond Rs1600 per bag unless there is additional curtailment. Since plants on the SNGPL network are expected to be the worst affected under this gas load management schedule, the informal price of urea will probably be higher in the northern part of the country.

Encouraging hoarding

Inconsistent policies will always provide incentives for significant hoarding of urea and further unofficial price increases. Since the government is still reliant on imports of urea to fulfill domestic demand, there will always be a question mark regarding the timely availability of urea in the market. If the government fails to time its import of the commodity precisely, and ensure that stocks are distributed systematically throughout the country, dealers will want to hold on to their stocks in anticipation of future price increases; and apprehensions of future availability. Buffer stocks will dwindle and the market will create self-fulfilling expectations of a shortage. In fact, the mere announcement of the current gas management framework and the expected rise in natural gas tariffs for the fertilizer industry raised unofficial market prices and incentivized hoarding as traders foresaw a rise in urea prices.

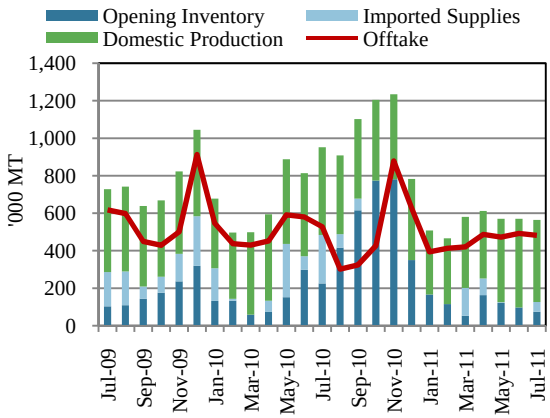
[9] Our own calculations indicate that the fertilizer-power allocation problem for natural gas is too close to call on the basis of dollar value per unit of gas alone

Falling consumption

The shortage of urea and the resultant price hikes and the floods meant that urea consumption remained suppressed in FY11.

Consequently, urea off-take fell by 11.9 percent in FY11 compared to the preceding year (**Figure 9.6**).[10] The decrease in urea off-take was disproportionately more during the kharif months as compared to the rabi season. Thus, the effect on yield for the year's wheat crop was marginal.

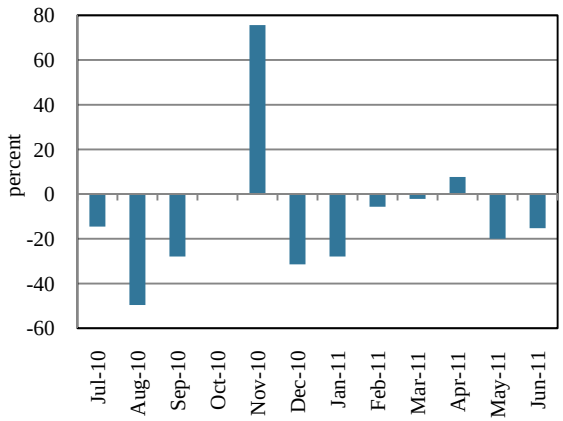
Figure 9.5: Urea Availability and Consumption



Source: NFDC

The decrease in urea off-take in the last two months of the fiscal year, despite the rise in farmer incomes due to a bumper wheat crop, indicates that the issue at hand was the unavailability of urea in the market. Gas shortages to plants on the SNGPL network led to a substantial under-utilization of domestic capacity. With no plan for urea imports in sight at the start of the kharif season, and the expected rise in urea prices as producers sought to conserve profits following gas shortages, incentives to hoard the commodity materialized and further squeezed out urea from the market.

Figure 9.6: YoY Urea Offtake Growth



Source: NFDC

Shortages to persist in the short-run

With demand expected to peak in December, we believe that another urea shortage is around the corner with urea imports likely to be too little, too late for the wheat crop.[11] Anecdotal evidence reveals that urea shortages seemed to be more severe in the northern parts of the country. Since the plants that have borne the brunt of gas outages are on the SNGPL network, and transport costs make it lucrative for manufacturers to supply urea to areas closest to their production facilities first, the southern parts of the country may be better off in terms of urea availability than the north.

Required: A consistent gas allocation policy

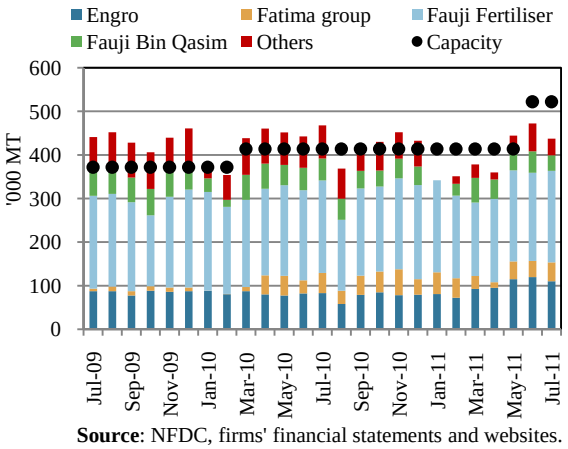
It was also unfortunate that the ECC's decision – taken on May 7 – to divert gas to fertilizer plants at the expense of IPPs was not implemented. Fertilizer manufacturers were supposed to bear two-thirds of the incremental cost of running the power plants on diesel as opposed to natural gas. We believe that the decision was a viable framework in the short-run since fertilizer manufacturers were both willing and able to pay the cost of gas shortages. The price of urea would probably have increased since the manufacturers would have passed on this extra cost, but

[10] The spike in urea consumption in Nov-10 was due to flood-relief activities and the distribution of free fertilizer by the government.

[11] For a urea import requirement of 1.2 million metric tons, the time to offload vessels carrying 50,000 MT tons each is around 24 weeks or more than 5 months – assuming one vessel takes only a week to offload.

domestic production would also have met demand and a price war could have ensued. Moreover, the price of urea has increased anyway in the wake of natural gas curtailment to plants. The framework would have also eliminated the import of, and the resultant subsidy on urea. Ultimately, expensive urea is better than no urea for agricultural productivity.

Figure 9.7: Monthly Urea Production



Source: NFDC, firms' financial statements and websites.

Therefore, the need for a definite and consistent natural gas allocation policy is the need of the hour for the fertilizer sector to address the uncertainty surrounding domestic production. A consistent policy – whether it is based around imported urea or domestically produced urea – can also manage market expectations and reduce price volatility. If the country does decide to move towards importing its fertilizer requirements, then we believe the role of the government needs to be minimized to let the market ensure the availability of fertilizer. If, however, fertilizer is to be produced using domestic capacity, then the government needs to rationalize gas allocation and tariffs while ensuring that the sector's domestic gas requirements are met. The policy needs to be set in stone to anchor market expectations and set a roadmap for ensuring the supply of fertilizer to the agriculture sector.

The question of imports

Since the natural gas shortfall will not be resolved in the short-term, it is safe to assume that the government will have to import urea in the new fiscal year. The government will also have to subsidize imported urea because the international price of the commodity is higher than the current domestic price. If the load management schedule highlighted earlier is followed, then we believe urea import requirements for the rabi season will be 1.2 million metric tons, which will cost the country around $620-640 million in foreign exchange and cost the government Rs 42 billion in subsidies (**Box 9.1** for a detailed discussion on subsidies).

Box 9.1. A Flawed Subsidy Transmission Mechanism

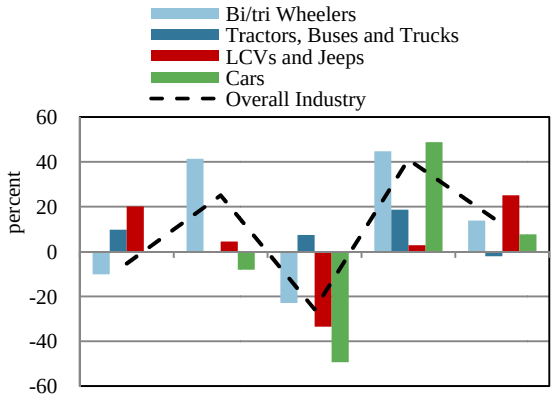
The amount of subsidy granted by the government per bag is more than the international-domestic price differential per bag. This is a consequence of the subsidy transmission mechanism. Urea is imported by the Trading Corporation of Pakistan (TCP) at (or slightly above) the international market price and sold to the National Fertilizer Corporation (NFC) at Rs528 per bag. This price has been set by the Economic Coordination Committee of the Cabinet. NFC then distributes the fertilizer through its marketing arm, National Fertilizer Marketing Limited (NFML), across the country. Unfortunately, this creates ample opportunity for various creative methods of corruption. The subsidy is, therefore, untargeted. Press reports regarding an FIA investigation into a "urea scam" at NFC/NFML are strong indications that the mechanism for the distribution of imports is defective.

In summary, it is important to reiterate that the problems in the fertilizer sector are solely a consequence of the ad-hoc policies deployed to manage the natural gas shortage. Apart from reassessing the role of NFC and NFML in importing and distributing urea, the government needs to set out and stick to a clear gas allocation framework to manage market expectations and halt speculative activity.

9. 3 Automobile Industry

Despite a host of global and domestic challenges, a recovery in the local automobile sector seen last year continued in FY11. Cash-driven consumer demand[12] provided an impetus to production, even as the local industry weathered setbacks from floods at the start of the year; changes in government import policy for the auto sector; and a disruption to global supply-chains of auto parts from the Japanese earthquake and tsunami. Automobile production for FY11 was 10.3 percent higher than the previous year[13]; this was despite consumers holding off on new buying in June 2011 to benefit from a reduction in sales taxes for the new fiscal year.[14]

Figure 9.8: Automobile Industry Production



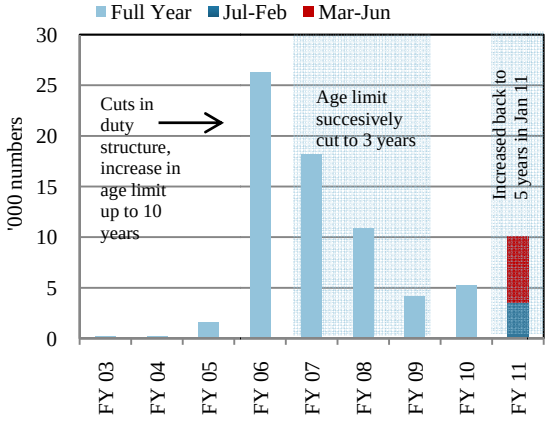
Source: PAMA

Consumer demand led growth

While the production of cars, jeeps, bi/tri-wheelers[15] and light commercial vehicles (LCVs) increased; vehicles used for commercial purposes such as tractors, buses and trucks witnessed a decline (**Figure 9.8**).

Manufacturers attribute this to a fall in demand in these segments. In the case of tractors, demand has been hurt by the government's decision to impose sales tax on tractors in March 2011. [16] As a result, producers claim that new tractor purchases are no longer viable for small-scale farmers – a key source of demand. In addition, lower availability of credit from banks-particularly ZTBL- also provides an explanation for the contraction in demand. Consequently, manufacturers have responded by cutting-back on production.

Figure 9.9: Changes in Import Policy for Used Cars



Source: All Pakistan Motor Dealers' Association

Changes in government policy

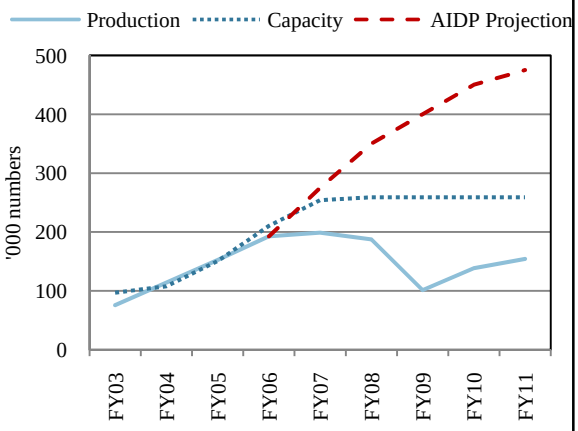
Imports of used cars: the most significant shift in the government's policy for the sector was the easing of restrictions on imports of used cars. In a renewed attempt to foster price-competition in the sector, the government increased the

[12] Anecdotal evidence suggests that demand for cars continued to be led by cash-buying; despite improvements over the last couple of years, the role of consumer financing remains limited.
[13] In FY10 it grew by 36.4 percent, although this reflected the low base of FY09 when the industry faced a downturn due to the collapse in banks' consumer financing for automobiles. Source: Federal Bureau of Statistics (FBS) LSM Index.
[14] The government announced a reduction in sales tax on new vehicles from 17 percent to 16 percent for FY12 at the end of FY11.
[15] This category includes motorcycles.
[16] Tractor sales were previously exempt from sales tax.

age limit for used cars from 3 to 5 years[17]; and increased the maximum depreciation charge for import duty purposes from 50 percent to 60 percent of the car's value. Subsequently, imports of used Completely Built Units (CBUs) rose over 85 percent compared to the previous year (**Figure 9.9**). This represents a significant increase in supply to the local automobile market; although the degree to which it provides direct competition to established local assemblers with strong brand loyalty remains to be seen.

Original Equipment Manufacturers (OEMs) argue that encouraging imports-while the local industry is operating around half of its installed capacity-is detrimental for long-term growth prospects of the local industry (**Figure 9.10**).

Figure 9.10: Capacity Utilization in the Auto Industry *



* includes cars, jeeps, vans and LCVs

Source: Firms, PAMA, SBP calaculations

We feel the existence of excess capacity in the local car industry - in the face of strong demand for imports - is surprising, particularly if the two are close substitutes. That is, the existence of a demand-supply gap in the domestic market (that the government seeks to address by a liberal import policy) should have prompted local assemblers to increase production to cater to this demand.[18] However this would be the case only if imported used cars and locally assembled new cars were indeed close substitutes and competed in a *single market*.

In our opinion, the current situation points to the existence of multiple markets for cars; whereby imported used cars may not pose direct competition to segments served by local assemblers. Indeed, the data suggest that the strongest growth in imports–as a result of policy changes-appears to be in the price-sensitive end of the market where Pak Suzuki operates (rather than manufacturers of larger cars) [19] It is perhaps this segment where smaller imported used cars are able to compete with locally assembled cars; rather than the market for new cars as a whole.

While the case for a uniformed import scheme has merits, any further increase in the age limit of used cars, however, must be seen in the other costs to the local economy; particularly the potential negative environmental externalities from old engines and technologies of used cars. Therefore, considerations of increased consumer choice must be balanced against these broader economic costs.

New entrant policy: the government and OEMs are also at loggerheads over incentives to be offered to foreign firms willing to set up production facilities in Pakistan. Essentially, the disagreement is centered around the tariff rate on imports of Completely Knocked Down (CKD)

[17] The government had previously eased restrictions on used car imports in FY06; allowing imports aged up to 10 years. However this was lowered to 3 years by FY09. The recent relaxation in the age limit for cars was later extended to include buses.

[18] Assuming that local production has a cost advantage to imports, consumers should prefer locally produced cars to imported used cars if the two are close substitutes. This would eliminate the possibility of excess capacity in the local industry and strong demand for imports. However in the current situation local firms face excess capacity, while demand for imports is robust. This casts doubt on the existence of a single market for locally assembled new cars and imported used cars, and supports the premise of dual markets.

[19] Cars with engines below 1300 cc accounted for 63.1 percent of used cars imports in FY11.

kits. The government appears inclined to offer tariff and duty concessions for the first few years of operation on such imports of parts, to attract foreign investment in the industry. This has met with resistance from incumbent firms who claim that such measures are against the spirit of the Auto Industry Development Program (AIDP) – the five year tariff framework due to expire next year. They argue that the proposed incentives would provide an unfair cost advantage to the new entrants; and that instead the government could offer alternative concessions e.g. on land for production facilities.

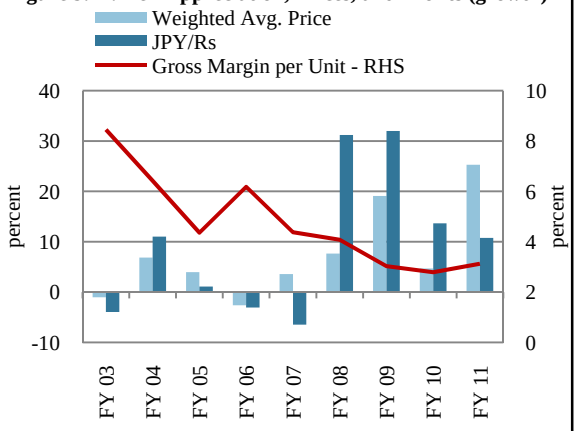
In our view, policies that add to price-distortions in product markets are less desirable to ones that foster a competitive playing field for all firms. While, it is clear the local industry would benefit from increased competition, price-competition in particular should not solely be the result of a government policy that favors some firms over others. Therefore, while short-term concessions to attract foreign investment may be necessary, we feel that a medium-term policy that encourages competition based on efficiency of production, both, from within and outside the local economy is preferable to one that inhibits market-based outcomes.

Budgetary measures for FY12: a reduction in sales tax from 17 percent to 16 percent, and the elimination of special excise duty (SED) incentivized consumers to hold-off on buying in June 2011 to benefit from the reduction at the start of the new fiscal year. As a result, sales of new cars fell around 56 percent for the month of Jun over the previous year.[20] As expected, this decline reversed at the start of the new fiscal year as the tax relief set in.

Car prices and pass-through of Yen appreciation

Assuming that the bulk of CKD imports for the manufacturers are imported from Japan, we analyze the pass-through of changes in the value of the Japanese yen (JPY) as a possible explanation for the recent rise in car prices. For FY11, our analysis of weighted-average prices[21] of locally assembled cars shows an increase of nearly 25 percent, outpacing the approximately 10 percent JPY appreciation against the Pakistani Rupee (PKR) (**Figure 9.11**).

Figure 9.11: Yen Appreciation, Prices, and Profits (growth)



Source: State Bank of Pakistan, firms' financial statements

Unsurprisingly, this has attracted considerable criticism of the local industry; even prompting government attempts to convince manufacturers to lower prices, and culminated in a relaxation of restrictions on imports of used cars discussed above.

Despite, the disproportionate increase in prices vis-à-vis appreciation of the yen, a look at profitability of the local assemblers shows that gross margins per unit have remained largely unchanged over the last couple of years. This observation points to a broader increase in production costs, such as the rise in costs of key inputs e.g. steel, polypropylene, aluminum and copper over this period. Therefore, we feel changes in local car prices must be seen in this

[20] Source: Pakistan Automobile Manufacturers Association (PAMA)

[21] This includes the three largest car manufacturers operating in Pakistan; Pak Suzuki, Indus Motors and Honda Atlas. Prices are derived as the ratio of sales revenue to unit sales, and are weighted by the firm's market share of unit sales. Source: firms' financial statements; PAMA; and SBP calculations.

broader context - rather than merely as a function of changes to input costs as a result of developments in foreign exchange markets.

Supply-shock from the Japanese earthquake and tsunami

The disruption to supply-chains of auto parts from the devastation Japan experienced in March 2011 caused considerable direct and indirect production losses to the global auto industry. However, the impact on the local industry was not as severe as originally feared; Indus motors suspended bookings temporarily, but these resumed in around three weeks. While overall production for the year was lower as a result, anecdotal evidence suggests that delivery times for most models have subsequently improved.

Outlook for FY12

The performance of the industry is likely to be influenced by the recent changes in government policy over the course of the new fiscal year.

Taxes and impact on car prices: a reduction in sales tax and elimination of SED in the new budget for FY12 provided an impetus to sales at the start of the year. However, the net impact on sales for the full year will depend on the extent to which the final cost to the consumer declines in response to lower taxes- or alternatively how far the increase in producer prices offsets this benefit to consumers. Anecdotal evidence so far suggests that the reduction in taxes has not lead to a proportionate fall in consumer prices.

Government demand: The Government of Punjab plans to provide 20,000 'yellow cabs' to the unemployed youth of the province. In this regard, an agreement has been reached with Pak Suzuki to supply these cars, and bodes well for the firm's capacity utilization levels. It may be recalled that a similar 'yellow cab' scheme was implemented in the 1990s with Daewoo and Hyundai cars as taxis.

Import policy: The depreciation rate for the calculation of customs duty has been increased from 1 percent to 2 percent. This was a key demand of importers and dealers in order for used car imports to provide meaningful competition to locally assembled cars. This is particularly relevant since the cap on depreciation has also been raised from 50 to 60 percent (as discussed above).

In this backdrop we expect strong imports of used cars to continue in the new fiscal year. Our outlook is based on an improving logistics situation in Japan – the main source of imports - and the possibility of additional measures in the new trade policy to liberalize imports e.g. the possibility of further increases in the maximum age limit; lowering of duties and perhaps even allowing the commercial import of used cars.

9. 4 Construction and Building Materials

In FY11, the construction industry posted the lowest growth in a decade, a marginal 0.8 percent.[22] This number was particularly distressing in the backdrop of the 59-year high growth posted in FY10 (28.4 percent). Although last year's construction drivers were not expected to sustain for very long – given the anticipated financing constraints in both the public and private sectors and dull activity in real estate markets – but performance of the industry in FY11 did not even come up to the low expectations. Growth fell short by 3 percentage points of the target set by the Planning Commission at the outset of the year.

Two developments during the course of the year explain this underperformance. Firstly, floods and heavy rainfall in Jul-Aug 2010:[23] while this led to higher reconstruction demand on the one hand, transporting bulky construction material during the monsoon became difficult due to damaged road networks. Moreover, a prolonged monsoon and early winter shortened the peak construction period. Secondly, production declined in many building material industries, which led to higher cost of construction.

Table 9.4 Construction Indicators Summary
Growth in percent unless otherwise stated

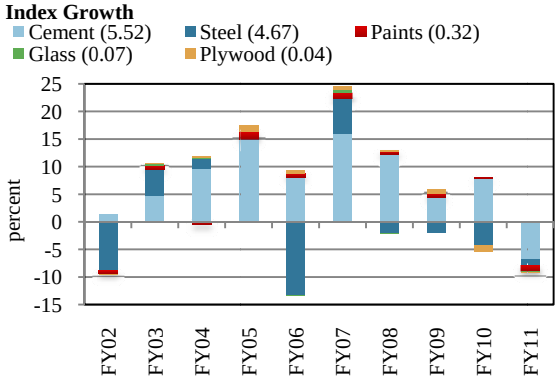
	FY09	FY10	FY11
Construction real GVA	-11.2	28.4	0.8
Share in GDP	2.1	2.6	2.5
Building materials production	4.0	2.7	-9.1
Building materials prices	20.2	-5.4	12.5
Construction GFCF	-6.9	-34.9	-20.9
Credit to construction	-10.9	-5.5	0.9
Construction FDI	4.6	9.8	-40.2
Employment share	6.6	6.7	7.0

Source: Federal Bureau of Statistics, Labor Force Survey, and State Bank of Pakistan

9.4.1 Building Material Shortages

The building materials index (BMI)[24] of production turned negative for the first time in five years, recording a decline of 9.2 percent during FY11, compared to 2.7 percent growth last year. This was also the first time that production declined across the board in the BMI. While low demand was one of the reasons for lower production, we believe that an inverse feedback loop may have existed: i.e. supply shortage led to higher prices which weakened construction demand, especially when expected returns on real estate were low (**Box 9.2**).

Figure 9.12: Contribution to Building Materials Production Index Growth



*Values in parantheses are percent shares in LSM index. Total share of BMI is 8.4 percent.

Source: Federal Bureau of Statistics

Interestingly, two factors independent of demand also significantly influenced production: energy shortages and prices, and lack of competition. In some cases, a combination of both these factors was at work.

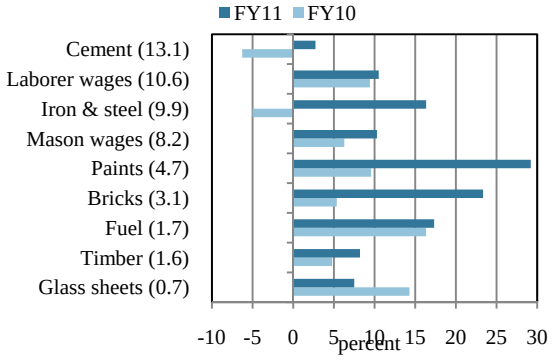
[22] This is an estimate for the first nine months only, and anecdotal evidence suggests that construction slightly picked up in the last quarter. We therefore expect some upward revision in construction GDP estimate for FY11.
[23] According to National Disaster Management Authority (NDMA) estimates, 1.9 million houses, 12,516 school buildings, and 579 medical health facilities were destroyed. Moreover, river embankments along the Indus were breached and two major headworks, Munda and River Swat, were also damaged. The resulting inundation caused widespread damage to infrastructure. (NDMA floods website: http://www.pakistanfloods.pk/pakistan-flood-2010)
[24] The building materials index is the sum of sub-indices of cement, steel, paints, glass, and plywood constructed by the Federal Bureau of Statistics. Together, these five industries have 10.6 percent share in the LSM index.

Box 9.2 Do Higher Costs Hurt Construction?

For the construction industry, the last two fiscal years have been reverse replicas. In FY10, building material prices declined by 5.4 percent and construction grew by 28 percent. In the following year, prices rose by 12.5 percent while construction growth dropped to 0.8 percent. Is there a negative causality between construction growth and inflation?

To determine that, it is important to have an idea of exactly how much prices of building materials affect the budget outlay of a contractor or builder. A survey of the construction industry carried out by the Federal Bureau of Statistics in 2003 showed that around 85 percent of construction costs comprise of building materials and labor payments, while the share of financial, insurance, depreciation, and other running costs etc. was negligible (**Figure 9.13**).

Figure 9.13: Inflation in Construction Costs



*Values in parentheses are average shares in total construction cost based on FBS's Study on Construction (2003).

Source:Study on Construction", Federal Bureau of Statistics .

A rise in building material prices immediately slows down construction work because it necessitates renegotiation between contractors/builders and the clients. Delaying negotiations has opportunity costs, such as the cost of retaining labor on site, storing the building material procured so far, and calling or holding off deals that are yet to be realized. Although most construction contracts contain a clause to adjust for cost escalation, anecdotal evidence shows that renegotiations can be difficult. At times when builders have a significant stake in the project, they may have to compromise their own margins to keep it running. In the longer term, new projects could be put off or shelved if construction costs are persistently high. Based on these arguments, one would expect a negative relationship between the price and value addition in construction.

Table 9.5: Granger Causality Test Results (FY82-FY11, two lags included)

Null Hypothesis	F-Stat	Prob.	Conclusion
Inflation does not Granger cause GDP growth	5.17	0.01	Reject
GDP growth does not Granger cause inflation	2.94	0.07	Reject

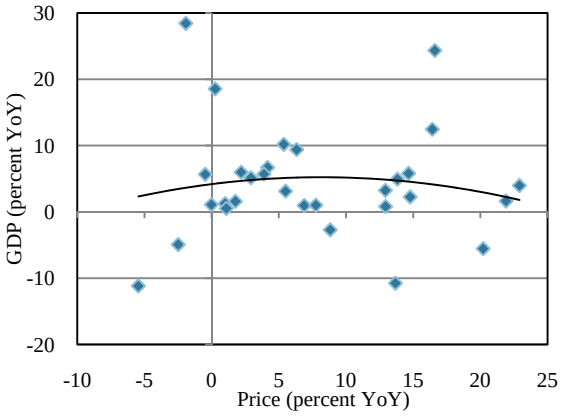
On the other hand, the causality can also be reverse: that inflation in building material prices is driven by construction demand, and not vice versa (assuming that demand is strong enough to sustain cost inflation). This argument finds support in anecdotal evidence: builders and contractors hold that raw material shortages in building material and construction labor markets instantly lead to higher prices.

Empirical evidence suggests that the causality might run both ways (**Table 9.5**). Granger tests for construction GDP growth and building materials price inflation concluded that for the period under review, inflation and growth had two-way Granger causality. While the hypothesis of demand-driven inflation was weakly held, there was stronger evidence of inflation Granger- causing GDP growth.

Interestingly however, the inflation-to-GDP Granger-causality was direct. That is, for the period under study, inflation was positively linked with growth in the construction industry. This is contrary to the expectation that high inflation could retard growth.

Another measure, the price elasticity of demand, however indicated no meaningful relationship between the two variables (**Figure 9.14**). However, it appeared that for the period under study, construction has been largely inelastic to changes in costs.

Figure 9.14: Price Elasticity of Construction GDP



Source: Federal Bureau of Statistics

To summarize, activity in the construction industry and inflation are at best weak predictors of each another. This points to the presence of another variable, or a set of variables, which influence how GDP and inflation behave.

It is most likely that the variables are highly inter-connected. A key to these predictors perhaps lies in the investment nature of construction. Like all investments, costs are relevant only in the context of expected returns. The returns, or the price at which the property can be sold in the future, again depends upon a number of factors, such as activity in the capital and real estate markets, market risk and risks arising from law and order problems, expectations regarding changes in tax regime, etc. Interestingly, the trend in building material prices might give a good insight into demand, and is perhaps important in shaping real estate market expectations. Bullish real estate markets may in turn spur construction activity.

The building industries face several energy-related problems. Firstly, irregular supply of gas and electricity affected industries which require constantly heat to keep the raw material malleable; such as glass, steel re-rolling (gas-based), and steel melting (electricity-based). Secondly, rising fuel prices added to costs of transportation of both inputs and outputs: glass became more expensive in the south as the entire industry is north-based. Similarly, relatively cheaper steel scrap from ship-breaking at Gaddani as well as imported scrap became costlier upcountry due to the higher transport expenses.

Coal prices also increased, pushing up cement production cost. However, the cement industry bore the price shock much better as this industry has invested a lot in energy efficient processes in the recent past; such as waste heat recovery plants and the increasing use of alternate fuel in kilns (rice husks, refused dried fuel, used tires, etc.). Unfortunately, regulatory glitches are preventing a more aggressive replacement of imported coal.[25]

However, despite the rise in costs and low demand, some industries were able to conserve their margins by lowering production levels. This behavior was enabled by the fact that little or no import competition exists in some building material markets. For example, in the cement industry, imports are not feasible because of the low price to volume ratio of cement: transport costs would add up significantly, bringing the price of imported cement above the local price, even when local prices are very high.

In fact, there is evidence that low domestic demand was not the primary reason for production decline in some industries. Apparently, a couple of industries purposely lowered their exports despite the fact that higher exports could have improved scale economies. For example, some cement manufacturers openly declared that they will reduce exports because higher prices can be fetched in the local markets. A similar market behavior was apparent in soda ash industry (input for glass), which reportedly increased prices by 20 percent during the year while exports volume declined sharply.

Lastly, interior paints were the only industry in which lower volumes reflect a structural change. Many of the large paint companies are now shifting towards color customization technology, through which customers can have paint of any shade prepared in no time. However, this technology is expensive and has a limited, high-end market. Apparently the paint companies are finding it more profitable. Resultantly, while paint prices in the formal sector increased by as much as 30 percent in FY11, production declined by 25 percent. Anecdotal evidence suggests that demand of low-end consumers is now being catered by small-scale factories in the informal sector.

9.4.2 The Struggle for Funds

Lack of funds was one of the key themes underlining construction growth in FY11 in both the private and public sectors. Coupled with a sharp rise in building costs, real flows were curtailed

[25] The Thar coal development project is taking off very slowly and high custom duties on imported tires are preventing a more widespread use of the same in cement kilns.

even further. Lastly, bearish sentiments prevailed in real estate markets which led to decline in both domestic and foreign investment.

Allocated Public Sector Development Program (PSDP) funds were cut back significantly during the year, [26] partly necessitated by immediate relief requirements in flood affected areas. However we believe fiscal over-runs would have existed even without this added spending burden. Freeze in public funds resulted in a number of ongoing and planned projects being shelved. In addition to this, some foreign donors also held back lending, which led to stalling of construction at least one major dam site.

In the private sector, although demand was not very strong to begin with, cash flow constraints became a problem for the few running projects. Bank lending to the construction sector increased only marginally by 0.9 percent in FY11, on top of decline posted in the previous two years. This was mainly due to high default rates in the sector. Mortgage financing default rates crossed 25 percent in FY11, a record high.

Moreover, anecdotal evidence showed that builders of community housing projects (which typically do not avail bank loans) also faced defaults on monthly installments paid by the clients. Lastly, re-negotiating installment payments in the wake of high inflation also became difficult as prospective homeowners refused to accept cost escalation adjustments.

On a positive note, the State Bank of Pakistan is taking measures to facilitate bank financing to the construction and housing sector. These include, revised infrastructure financing guidelines (August 2010); promoting finance for housing construction through the establishment of Pakistan Mortgage Refinance Company (to be launched in H1-FY12) and by helping banks develop large-scale builder finance products (an ongoing project); and inclusion of glass sector for concessionary bank loans (under the Long Term Finance Facility in January 2011). It is hoped that these measures will lead to easier availability of funds to facilitate future growth.

A moderate pick-up in construction is expected in the year ahead

Going forward, we expect the availability of financing for the sector is likely to improve if easy monetary policy stance goes on. Moreover, specific measures for the housing finance (as mentioned above) will support growth in the sector by facilitating the supply of necessary liquidity.

Moreover, planned public investment in post-flood rehabilitation, infrastructure and power sector, including the IP gas pipeline and construction of a number of dams will also support the sector. Encouragingly, the PSDP expenditure numbers for Q1-FY12 show that funds for major dams and infrastructure are being timely released this year.

To materialize this growth opportunity, support will be needed from the allied building material industries. However, growth in these industries is harder to forecast. As we have seen in the past, factors other than demand have been hampering production.

A slight setback might result from a 16 percent sales tax on bricks and concrete blocks in Budget FY12. These industries were hitherto exempted from taxation. While the new levy will bring down demand to some extent, we believe that taxing the brick industry is a step in the right

[26] Current expenditure allocation for housing and community amenities sector was Rs. 1.8 billion in Budget FY11. This was later revised down to Rs. 1.7 billion, a decline of 9.8 percent. The development budget for the housing and works sector was Rs. 3.6 billion, which was later brought down to Rs. 1.5 billion, by (-)57.3 percent.

direction. Brick making is a huge industry of Pakistan but is almost completely undocumented.[27] Unfortunately, past drives to document and tax this industry were prematurely thwarted after vehement resistance by kiln owners. It is only hoped that the government resolutely follows through the recent effort.

[27] Pakistan is the world's third largest producer of bricks, after China and India. According to an estimate, Pakistan's annual brick production is 100 billion per year. Source: Ellen Baum, "Black Carbon from Brick Kilns", Clean Air Task Force, presentation April 7, 2010. www.iiasa.ac.at/rains/meetings/.../Day2/Chaisson_brickkilns.pdf

List of Acronyms

A	
ADB	Asian Development Bank
AIDP	Auto Industry Development Program
AJK	Azad Jammu and Kashmir
APCMA	All Pakistan Cement Manufacturers Association
ARPU	Average Revenue per User
ARL	Attock Refinery Limited
ASEAN	Association of South East Asian Nations
ASK	Available seat kilometer
ATA	Annual Turnaround
B	
BD	Bangladesh
BE	Budget Estimate
BMI	Building Materials Index
BOP	Balance of Payment
BP	British Petroleum
BSC	Bahbood Saving certificates, Benazir Smart Cards
Bt	Bacillus thuringiensis
BTU	British Thermal Units
C	
CAD	Current Account Deficit
CAB	Current Account Balance
CAGR	Compound Annual Growth Rate
CBU	Completely Built Unit
CBOT	Chicago Board of Trade
CCI	Council of Common Interest
CCR	Continuous Catalytic Reformer
CFR	Cost and Freight
CHASNUPP	Chashma Nuclear Power Plant
CKD	Completely Knocked Down
CLCV	Cotton Leaf Curl Virus
CNG	Compressed Natural Gas
CPI	Consumer Price Index
CPPA	Central Power Purchase Agency
CSF	Coalition Support Fund, Cash Settled Futures
CY	Calendar Year
D	
DBC	Dollar Bearer Certificate
DDL	Domestic Debt and Liabilities

DISCOs	Distribution Companies
DMB	Deposit Money Banks
DSCs	Defense Saving Certificates

E

EBA	Everything but Arms
ECC	Economic Coordination Committee
ECB	European Central Bank
EDB	Engineering Development Board
EDL	External Debt and Liability
EDS	External Debt Servicing
EFS	Export Finance Scheme
ER	Exchange Rate
E&P	Exploration and Production
EU	European Union

F

FATA	Federal Administered Tribal Areas
FBR	Federal Bureau of Revenue
FBS	Federal Bureau of Statistics
FCAs	Foreign Currency Accounts
FCBCs	Foreign Currency Bearer Certificates
FDI	Foreign Direct Investment
FE/FX	Foreign Exchange
FED	Federal Excise Duty
FE-25	Foreign Exchange Circular No. 25 dated 20th June 1998
FEBC	Foreign Exchange Bearer Certificate
FEE	Foreign Exchange Earnings
FESCO	Faisalabad Electric Supply Company
FIA	Federal Investigation Agency
FO	Furnace Oil
FOTCO	Fauji Oil Terminal and Distribution Company Ltd.
FoDP	Friends of Democratic Pakistan
FPI	Foreign Portfolio Investment
FRDL	Fiscal Responsibility and Debt Limitation Act, 2005
FSV	Forced Sale value
FY	Financial/Fiscal Year

G

GCC	Gulf Cooperation Council
GDP	Gross Domestic Product
GENCOs	Generation Companies
GEPCO	Gujranwala Electric Power Company
GFCF	Gross Fixed Capital Formation
GHPL	Government Holding Private Ltd
GIC	Gas Consumed Internally
GM	Genetically Modified

GoP	Government of Pakistan
GPFA	Gas Pipeline Framework Agreement
GSP	Generalized System of Preference
GSPA	Gas Sales and Purchase Agreement
GST	General Sales Tax
GVA	Gross Value Addition

H

H1	First Half of the Fiscal Year
HEC	Higher Education Commission
HESCO	Hyderabad Electric Supply Company Limited
HOBC	High Octane Blending Component
HP	Hodrick-Prescott
HRI	House Rent Index
HSD	High Speed Diesel

I

ICAC	International Cotton Advisory Committee
IDA	International Development Association
IDB	Islamic Development Bank
IESCO	Islamabad Electric Supply Company
IFEM	Inland Freight Equalization Margin
IFIs	International Financial Institutions
IFPRI	International Food Policy Research Institute
IGA	Inter Governmental Agreement
ILO	International Labor Organization
IMF	International Monetary Fund
IP	Interest Payment
IPI	Iran Pakistan India
IPP	Independent Power Producers
IT	Information Technology

J

JP	Jet Petroleum
JPY	Japanese Yen

K

KAPCO	Kot Addu Power Company Limited
KANUPP	Karachi Nuclear Power Plant
KCA	Karachi Cotton Association
KESC	Karachi Electric Supply Corporation
KIBOR	Karachi Inter Bank Offer Rate
KPK	Khyber Pakhtoonkhawa
KWh	Kilowatt Hour
KW&SB	Karachi Water & Sewerage Board

L

LBOD	Left Bank Outfall Drain
LC	Letter of Credit
LCVs	Light Commercial Vehicles
LDC	Least Developed Countries
LDO	Light Diesel Oil
LESCO	Lahore Electric Supply Company
LNG	Liquefied Natural Gas
LSM	Large Scale Manufacturing

M

M2	Money Supply
ME	Middle East
MEPCO	Multan Electric Power Company)
MGCL	Mari Gas Company Limited
MOF	Ministry of Finance
MoU	Memorandum of Understanding
MPC	Monetary Policy Committee
MS	Motor Gasoline
MT	Metric Tonnes
MVW	Medium Voltage Inverter
MW	Mega Watts

N

NDA	Net Domestic Asset
NDMA	National Disaster Management Authority
NEER	Nominal Effective Exchange Rate
NEPRA	National Electric Power Regulatory Authority
NFA	Net Foreign Asset
NFC	National Finance Commission, National Fertilizer
NFDC	National Fertilizer Development Centre
NFML	National Fertilizer Marketing Limited
NFNE	Non Food Non Energy
NFI	Net Foreign Investment
NGE	Non-guaranteed External Debt
NPLs	Non Performing Loans
NRL	National Refinery Limited
NSS	National Savings Scheme
NTDC	National Transmission and Dispatch Company

O

OCAC	Oil Companies Advisory Committee
OEBs	Outstanding Export Bills
OECD	Organization for Economic Cooperation and Development
OEM	Original Equipment Manufacturers
OGDCL	Oil and Gas Development Company Ltd
OGRA	Oil & Gas Regulatory Authority

OIN	Other Items Net
OMCs	Oil Marketing Companies
OPEC	Organization of Petroleum Exporting Countries
OPII	Orient Petroleum International, Inc.
OTEXA	Office of Textiles and Apparel

P

PAMA	Pakistan Automotive Manufacturers Association
PASMIC	Pakistan Steel Mills Complex
PASSCO	Pakistan Agriculture Storage and Supply Corporation
PARCO	Pak Arab Refinery Ltd.
PDL	Petroleum Development Levy
PDIP	Power Distribution Improvement Program
PEMA	Pakistan Electronics Manufacturers Association
PEPCO	Pakistan Electric Power Company
PESCO	Peshawar Electricity Supply Company
PFMA	Pakistan Flour Mill Association
PIA	Pakistan International Airline
PIB	Pakistan Investment Bond
PKR	Pakistani Rupee
PLF	Passenger Load Factor
PMEX	Pakistan Mercantile Exchange Limited
PNSC	Pakistan National Shipping Corporation
POL	Petroleum, Oil and Lubricants
PPL	Pakistan Petroleum Limited
PR	Pakistan Railway
PRI	Pakistan Remittance Initiative
PRL	Pakistan Refinery Limited
PRI	Pakistan Remittance Initiative
PSDP	Public Sector Development Program
PSC	Private Sector Credit
PSEs	Public Sector Enterprises
PSF	Polyester Staple Fiber
PSM	Pakistan Steel Mills
PSMA	Pakistan Sugar Mills Association
PSO	Pakistan State Oil
PTA	Pakistan Telecommunication Authority, Pure Terepthalic
PVMA	Pakistan Vanaspati Manufacturers Association

Q

Q2	Second Quarter
Q4	Fourth Quarter
QESCO	Quetta Electric Supply Company

R

RES	Foreign Exchange Reserves
REER	Real Effective Exchange Rate

RFO	Residual Fuel Oil
RGST	Reformed General Sales Tax
RHS	Right Hand Side
RPI	Relative Price Index
RPPs	Rental Power Projects

S

SBA	Stand-By Arrangement
SBI	Sindh Board of Investment
SBP	State Bank of Pakistan
SBM	Single-buoy Mooring
SCA	Sindh Coal Authority
SDRs	Special Drawing Rights
SECP	Securities and Exchange Commission of Pakistan
SED	Special Excise Duty
SMEs	Small and Medium Enterprises
SNGPL	Sui Northern Gas Pipelines Limited
SSGC	Sui Southern Gas Company
STD	Short Term Debt

T

TAPI	Turkmenistan-Afghanistan-Pakistan-India
T-Bill	Treasury Bills
TCEB	Thar Coal and Energy Board
TCP	Trading Corporation of Pakistan
TDAP	Trade Development Authority of Pakistan
TDL	Total Debt and Liabilities, Time & Demand Liabilities
TED	Total External Debt
TOT	Terms of Trade
T&D	Transmission and Distribution
TV	Television

U

UAE	United Arab Emirates
UCG	Underground Coal Gasification
UFG	Unaccounted For Gas
UK	United Kingdom
USA	United States of America
UAE	United Arab Emirites
USA/US	United States of America
USAID	United States Agency for International Development
USDA	US Department of Agriculture

V

VVLC	Very Large Crude Oil Carriers
VAT	Value Added Tax

W		
	WALR	Weighted Average Lending Rates
	WAPDA	Water and Power Development Authority
	WOM	Weeks of Imports
	WPI	Wholesale Price Index
X		
	XE	Export Earning
Y		
	YoY	Year on Year
Z		
	ZTBL	Zarai Taraqiati Bank Limited